

TENTATIVE AGENDA STATE WATER CONTROL BOARD MEETING

November 18, 2025

IN PERSON ONLY – General Assembly Building, Senate Room C, 3rd floor
201 North 9th Street, Richmond, VA 23219

Meeting will be Live-Streamed. Go to: www.deq.virginia.gov
Any Updates To Details/Final Arrangements To Be Announced on Virginia Regulatory Town Hall

Convene – 10:00 A.M

Agenda Item	Presenter	Tab
Minutes (August 20, 2025)	Porterfield	A pg 5
Final Regulations- Virginia Erosion and Stormwater Management Regulation (9VAC-25-875) - change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly	Robb	B pg 18
Water Quality Management Planning Regulation (9VAC25-720) - Amendment to add 24 new or revised TMDL wasteload allocations in the Potomac-Shenandoah River Basin (9VAC25-720-50 A), James River Basin (9VAC25-720-60 A), and Tennessee-Big Sandy River Basin (9VAC25-720-90 A))	Williams	C pg 77
Reissuance of Virginia Water Protection General Permit Regulations	Winn	
• Virginia Water Protection General Permit for Impacts Less Than One-Half Acre (9VAC25-660)		D pg 226
• Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670)		E pg 266
• Virginia Water Protection General Permit for Linear Transportation Projects (9VAC25-680)		F pg 306
• Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690)		G pg 347
Proposed Regulations Water Quality Standards – (9VAC25-260)- 2024 Triennial Review Rulemaking to adopt new, update, or cancel existing water quality standards as required by § 62.1-44.15 of the Code of Virginia and the Federal Clean Water Act, 33 U.S.C. §§ 1251	Robertson	H pg 391
Other Business		
FY 2026 Virginia Clean Water Revolving Loan Fund Final Authorizations	Mayfield	I pg 524

Agenda Item	Presenter	Tab
Report to the Board Regarding Controversial Permits- • Synagro Central LLC – Essex County - VPA00831 • Synagro Central LLC – Orange County VPA00075 • Surface Water Withdrawal Permit issuance, Caroline County VWP No. 20-0514 • Waterford Sewage Treatment Plant, Loudoun County Sanitation Authority – VPDES permit VA0060500 • Arlington County Water Pollution Control Facility - VPDES permit VA0025143 • Transcontinental Gas Pipe Line Company (Transco) Southeast Supply Enhancement Project (SSEP) -Upland 401 Water Quality Certification • Transcontinental Gas Pipe Line Company (Transco) Southeast Supply Enhancement Project (SSEP) - Individual Virginia Water Protection Permit - Number 25-1277 • Mountain Valley Pipeline, LLC Southgate Amendment Project - Individual Virginia Water Protection Permit - Number 25-0752	Thomas/ Davenport	
Report on Groundwater supply in the Commonwealth east of Interstate 95 Mountain Valley Pipeline - Update Future Meeting date- to be determined Public Forum <i>(time not to exceed 45 minutes- no public comment on agenda items or pending regulatory actions during public forum)</i>	Campbell Davenport Porterfield	

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Melissa S. Porterfield at (804) 698-4238.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions made by the Department of Environmental Quality (Department). These procedures establish the times for the public to provide appropriate comment to the Board for regulatory action and the Department for case decisions for consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (e.g., issuance and amendment of permits and enforcement orders), the Board adopts public participation procedures in the individual regulations which establish the permit programs. (Note: as of July 1, 2022, the Department takes final action on all case decisions.) As a general rule, public comment is accepted on a draft permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may be an additional comment period during which a public hearing is held, usually 45 days.

In light of these established procedures, the Board accepts public comment on regulatory actions as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Also, public comment will be accepted for certain final exempt actions where there has been no public comment period. Persons are allowed up to 3 minutes to address the Board on the emergency regulation and final exempt actions under consideration.

POOLING MINUTES ON REGULATORY ACTIONS: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION ON A REGULATORY ACTION will not be accepted at the meeting. The Board expects comments and information on a regulatory action to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. Should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda or pending regulatory actions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less. Note, there is no pooling of minutes during the public forum.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Melissa S. Porterfield, Policy Analyst,
Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond,
Virginia 23218, phone (804) 698-4238, e-mail: Melissa.porterfield@deq.virginia.gov

Additional Meeting Information:

- No food or beverages allowed in meeting space.
- Attendees may not erect any signage inside or outside the meeting room or building.
- Attendees are not entitled to be disorderly or disrupt the meeting from proceeding in an orderly, efficient, and effective fashion. Disruptive behavior may result in a recess or removal from the meeting.
- Possession or use of any device that may disrupt the conduct of business is prohibited, including but not limited to: voice-amplification equipment; bullhorns; blow horns; sirens, or other noise-producing devices; as well as signs on sticks, poles or stakes; or helium-filled balloons.
- All attendees are asked to be respectful of all speakers.
- Rules will be enforced fairly and impartially not only to ensure the efficient and effective conduct of business, but also to ensure no interference with the business of the complex, its employees and guests.
- Attendees wishing to record the proceedings are welcome to do so; however, you may not interfere with the business of the meeting, nor impede the view or participation of other meeting attendees and staff.
- No smoking is allowed unless in a designated outside space. This includes tobacco & e-cigarettes.
- No alcohol, fireworks, pyrotechnics, weapons, or any substances/items controlled by law are allowed.
- No firearms are allowed in the State's contracted spaces except for firearms carried by law-enforcement officers or authorized security personnel.
- All violators may be subject to removal from the meeting facility.
- Anyone removed from the facility may not reenter.
- Anyone who fails to comply with removal may be charged with trespass.

TAB A



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

MEMORANDUM

To: Members of the State Water Control Board

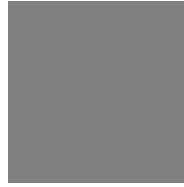
From : Melissa S. Porterfield *msp*

Date: October 31, 2025

Subject: Minutes

Attached are the minutes from your meeting on August 20, 2025. Staff will seek your approval of the minutes at your next meeting.

If you have any questions, please contact me at (804) 698-4238 or melissa.porterfield@deq.virginia.gov.



Commonwealth of Virginia

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Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

STATE WATER CONTROL BOARD MEETING

General Assembly Building, House South Subcommittee Room (#210), Second Floor
201 North 9th Street, Richmond, VA 23219

WEDNESDAY AUGUST 20, 2025

Board Members Present:

Lou Ann Jessee-Wallace, Chair
Scott Cameron, Vice-chair
Marc Aveni
Tommy Branin
Michelle Johnson
Jerry Kilgore
Steve Yob

Board Members Absent:

none

Department of Environmental Quality:

Michael Rolband, Director
Melissa Porterfield
Jill Hrynciw

Office of the Attorney General:

Ross Phillips, Assistant Attorney General/Chief

1. The attached minutes summarize activities that took place at this Board Meeting.
2. The meeting convened at 10:02 a.m. and adjourned at 10:52 a.m.



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Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD
AT ITS MEETING ON AUGUST 20, 2025**

Minute No. 1- Approval of meeting minutes

The Board unanimously approved the minutes of the meeting held June 30, 2025.



Melissa S. Porterfield



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE
WATER CONTROL BOARD AT ITS MEETING ON AUGUST 20, 2025**

MINUTE NO. 2 – General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9VAC25-820) – 2026 Amendment and reissuance of the existing regulation

Prior to the meeting the Board was provided materials including a briefing memo to the Board, the regulation showing proposed amendments, and the Town Hall Agency Background Document. Laura Galli, from the Office of VPDES Permits, presented a summary of the proposed amendments being made to the regulation.

Board member Steven Yob submitted to DEQ staff a signed transactional disclosure statement pursuant to the Virginia State and Local Government Conflict of Interests Act before participating in/voting on this agenda item. He indicated he has a personal interest affected by the transactions being considered because of his employment as Deputy County Manager for Community Operations by Henrico County. Henrico County, like other Virginia localities, is subject to 9 VAC 25-820 and 9 VAC 25-151. He indicated he was able to participate in this agenda item fairly, objectively, and in the public interest.

Board member Marc Aveni submitted to DEQ staff a signed transactional disclosure statement pursuant to the Virginia State and Local Government Conflict of Interests Act before participating in/voting on this agenda item. He indicated he has a personal interest affected by the transactions being considered because of his employment as Assistant Director of General Services by Loudoun County. Loudoun County, like other Virginia localities, is subject to 9 VAC 25-820 and 9 VAC 25-151. He indicated he was able to participate in this agenda item fairly, objectively, and in the public interest.

Board Decision

Based on the briefing material and the staff presentation, a vote was taken and the Board approved by a vote of seven to zero the staff recommendations to:

- 1) Authorize a public comment period and public hearing for amendments to the General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation

for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, 9VAC25-820.

- 2) Authorize DEQ staff to serve as hearing officer at the public hearing.



Bryant Thomas
Water Resources Division Director



Commonwealth of Virginia

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Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD AT
ITS MEETING ON AUGUST 20, 2025**

Minute No. 3 - Proposed Amendments to the Virginia Pollution Abatement (VPA) Permit Regulation: Implementation of Chapter 209 of the 2024 Acts of Assembly (HB 870) – Procedures for Emergency Management of Biosolids to Protect Against the Release of Biosolids into State Waters, and to Account for Increased Intensity, Frequency, and Duration of Storm Events

Prior to the meeting the Board was provided materials showing the proposed amendments to the regulation. Neil Zahradka, Manager of the Office of Land Application Programs in the Water Division, presented a summary of the proposed changes to the regulation.

Board Decision

Based on the Board Book briefing material and the staff presentation, the Board voted unanimously (7-0, Aveni, Branin, Cameron, Johnson, Kilgore, Wallace, Yob) to authorize a public comment period for the proposed regulation.

A handwritten signature in blue ink, reading "Bryant Thomas", positioned above a horizontal line.

Bryant Thomas
Water Resources Division Director



Commonwealth of Virginia

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**EXCERPT FROM THE PROCEEDINGS OF THE STATE
WATER CONTROL BOARD AT ITS MEETING ON AUGUST 20, 2025**

MINUTE NO. 4 – Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity 9VAC25-151 - Technical corrections for consistency with stormwater regulations

Prior to the meeting the Board was provided materials including a briefing memo to the Board, the regulation showing proposed amendments, and the Town Hall Agency Background Document. Joseph Bryan, from the Office of VPDES Permits, presented a summary of the technical corrections being made to the regulation.

Board member Steven Yob submitted to DEQ staff a signed transactional disclosure statement pursuant to the Virginia State and Local Government Conflict of Interests Act before participating in/voting on this agenda item. He indicated he has a personal interest affected by the transactions being considered because of his employment as Deputy County Manager for Community Operations by Henrico County. Henrico County, like other Virginia localities, is subject to 9 VAC 25-820 and 9 VAC 25-151. He indicated he was able to participate in this agenda item fairly, objectively, and in the public interest.

Board member Marc Aveni submitted to DEQ staff a signed transactional disclosure statement pursuant to the Virginia State and Local Government Conflict of Interests Act before participating in/voting on this agenda item. He indicated he has a personal interest affected by the transactions being considered because of his employment as Assistant Director of General Services by Loudoun County. Loudoun County, like other Virginia localities, is subject to 9 VAC 25-820 and 9 VAC 25-151. He indicated he was able to participate in this agenda item fairly, objectively, and in the public interest.

Board Decision

Based on the briefing material and the staff presentation, a vote was taken and the Board approved by a vote of seven to zero the staff recommendations to:

- 1) Authorize DEQ to promulgate the proposal for public comment using the fast-track process established in § 2.2-4012.1 of the Administrative Process Act for regulations expected to be non-controversial. The Board's authorization constitutes its adoption of the regulation at the end of the public comment period provided that (i) no objection to use of the fast-

track process is received from 10 or more persons, or any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, and (ii) DEQ does not find it necessary, based on public comments or for any other reason, to make any changes to the proposal.

- 2) Authorize DEQ to set an effective date 15 days after close of the 30-day public comment period provided (i) the proposal completes the fast-track rulemaking process as provided in § 2.2-4012.1 of the Administrative Process Act and (ii) DEQ does not find it necessary to make any changes to the proposal.



Bryant Thomas
Water Resources Division Director



Commonwealth of Virginia

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Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD AT
ITS MEETING ON AUGUST 20, 2025**

Minute No. 5 - Report to the Board Regarding Controversial Permits: Synagro Central LLC – Essex County, VPA00831; Surface Water Withdrawal Permit issuance, Caroline County, VWP No. 20-0514, and U. S. Army Garrison – Fort Belvoir VA0092771.

In accordance with § 10.1-1184.1.B of the Code of Virginia, Bryant Thomas provided the Controversial Permit Report to the Board. The report included each permit number, location of the activities, a summary of events prior to the Board meeting and the schedule for the remaining actions to be taken by the Department. The Board was provided the opportunity to respond to the Department's presentation and provide commentary regarding the permits.

A handwritten signature in blue ink, reading "Bryant Thomas", positioned above a horizontal line.

Bryant Thomas
Water Resources Division Director



Commonwealth of Virginia

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Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD
AT ITS MEETING ON AUGUST 20, 2025**

Minute No. 6: Mountain Valley Pipeline – Update

Ms. Davenport presented an update on the status of the project. She reported that the project continues in the post-restoration phase and the ongoing activity for this quarter involves achieving permanent vegetation and maintaining erosion and sediment controls until ground cover is uniform and mature enough to survive. Controls are also being removed where they are no longer needed. She provided an overview of compliance activities from June 20, 2025, to August 18, 2025 and noted that for the period March 11, 2025 to June 10, 2025 DEQ assessed \$7000 in stipulated penalties.

A handwritten signature in blue ink that reads "Melanie D. Davenport".

Melanie D. Davenport



Commonwealth of Virginia

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Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD AT
ITS MEETING ON AUGUST 20, 2025**

Minute No. 7- Future Meeting Date

No future meeting dates for the Board were confirmed at this meeting.

A handwritten signature in blue ink, reading "Melissa Porterfield", with a stylized flourish at the end.

Melissa S. Porterfield



Commonwealth of Virginia

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Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

**EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD AT
ITS MEETING ON AUGUST 20, 2025**

Minute No. 8- Public Forum

No members of the public addressed the Board during the public forum.



Melissa S. Porterfield

TAB B



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Stefanie K. Taillon
Acting Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

MEMORANDUM

TO: State Water Control Board Members

FROM: Jaime Robb, Water Operations Division Director *Jaime B. Robb*

DATE: November 6, 2025

SUBJECT: 9VAC25-875 – Amend the regulations to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly

At the November 18, 2025, meeting of the State Water Control Board (Board), the Board will consider final amendments to the Virginia Erosion and Stormwater Management (VESM) Regulation (9VAC25-875). The substance of this regulatory action is to amend or modify language in the VESM Regulation to meet the requirements in Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly. The amendments revise the existing statewide permit fee schedules such that the fees for the VPDES Permit for Discharges of Stormwater from Construction Activities, MS4 permits, associated permit modification, and permit maintenance are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits. The effective date of the amendments shall be no earlier than July 1, 2026.

Changes to the existing regulation include revising the fee schedules in Sections 1380 through 1420 to cover 60-62% of the program costs, as well as the inclusion of a consumer price index (CPI) annual adjustment factor, in new section 1375, to provide a mechanism to ensure that fees keep pace with the costs of doing business. In addition, revisions to section 9VAC25-875-1360 change the portion of the total permit fee paid to the Department by local VESM Program authorities from 28% to 30%, as allowed per § 62.1-44.15:28 of the Code of Virginia.

Background

Chapter 2 of the 2024 Special Session I Acts of Assembly (Budget Bill, Item 363 J) directs the Board to amend the existing permit fee schedule such that the fees for the VPDES Permit for Discharges of Stormwater from Construction Activities and MS4 permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits.

The proposed amendments were published in the *Virginia Register of Regulations* on August 11, 2025, initiating a 60-day public comment period that ended October 10, 2025. Five persons submitted comments through the Townhall Comment Forum. Three comments were received via email. In addition, a public hearing was held on Tuesday, September 23, 2025, to receive comments. One commenter made verbal comments during the public hearing and also submitted comments in writing that summarized their oral comments. A summary of the comments received and the Department's responses to those comments are included in the attached Agency Background Document, the Form TH-03.

Final Amendments

Final amendments to the VESM Regulation include revising the fee schedules in sections 9VAC25-875-1380, -1390, -1400, -1410, and -1420 so that, based on fiscal year 2024 revenue, fees will cover 60 percent to 62 percent of the program costs. In addition, revisions to section 9VAC25-875-1360 change the portion of the total permit fee paid to the department by local Virginia Erosion and Stormwater Management Program (VESMP) authorities from 28 percent to 30 percent, as allowed per § 62.1-44.15:28 of the Code of Virginia. A new section, 9VAC25-875-1375, allows fees to be adjusted annually based on changes in the Consumer Price Index (CPI). The annual adjustment factor provides a mechanism to ensure that fees keep pace with inflation and the Department's costs to administer and enforce the erosion and stormwater management program, as required by the Budget Bill. Detailed changes to the VESM Regulation are listed in the TH-03.

Amendments Since Proposed Stage

Based on the comments the Department received, the final amendments include changes to 9VAC25-875-1375 to address concerns about the fee adjustment schedule and make the CPI usage consistent with other Department regulations. The final amendments state that (i) the Department will use the CPI from the 12-month period ending on June 30 of the year before the fee is due to calculate the fee adjustment; (ii) the Department will determine fees for each year by January 1 of the year the fee is due; and (iii) the fee adjustment will not be effective until July 1 of each year. These changes address concerns commenters raised about localities and project owners having notice of the fees far enough in advance for planning and budgeting purposes. The amendments provide at least 6 months notice of the fees for a new coverage under the construction general permit; at least 8 months notice of the maintenance fees for an MS4 permit, and over 12 months notice of the annual maintenance fees for a construction general permit.

The final amendments also include changes to 9VAC25-875-1400, -1410, and -1420 to clarify that the Department serves as both a VESMP authority and a Virginia Stormwater Management Program authority, clarifying an omission in the current regulatory language. None of the amendments since the proposed stage are substantive and the effective date shall be no earlier than July 1, 2026.

More information about the amendments and reasons the Department did not make additional changes to address other comments are provided in the TH-03.

Attorney General Certification

The Office of the Attorney General will be requested to certify the Board's authority to adopt the amendments to this regulation.

Staff Recommendation

The Department recommends that the Board adopt the final amendments the Virginia Erosion and Stormwater Management Regulation (9VAC25-875) to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly as presented. The effective date of the amendments shall be no earlier than July 1, 2026.

Presenter Contact Information

Name: Jaime B. Robb, Water Operations Division Director
Phone: (804) 527-5086
Email: jaime.robbs@deq.virginia.gov

Attachments

Attachment A: Text of Final Regulatory Amendments
Attachment B: Agency Background Document (TH-03)
Attachment C: Office of Regulatory Management Economic Review Form

Regulatory Advisory Panel Membership

Amend or Modify Provisions of the Virginia Erosion and Stormwater Management Regulation
(9VAC25-875) to Change the Permit Fee Schedule

Andrew Clark (Primary)

Vice President of Government Affairs
Home Builders Association of Virginia
1051 E. Cary Street, Suite 603, Richmond, VA
23219
Phone: 978-460-1331
Email: aclark@hbav.com

Kristen Carter, P.E. (Primary)

Associate Director for Environmental Resources
University of Virginia
PO Box 400726, Charlottesville, VA 22904-
4726
The Bay Companies, Inc.
Phone: 434-982-5034
Email: kma4z@virginia.edu

Jeff Blackford, P.E. (Primary)

Executive Director
Engineers & Surveyors Institute
4795 Meadow Wood Lane, Suite 115 East,
Chantilly, VA 20151
Phone: 703-263-2232
Email: jblackford@esinova.org

Sohaila Shekib (Alternate)

Phone: 703-615-6785
Email: sshekib@esinova.org

Lisa Ochsenhirt, Esq. (Primary)

Vice-President
AquaLaw, PLC (representing Virginia
Municipal Stormwater Association)
6 South 5th Street, Richmond, VA 23219
Phone: 804-303-5894
Email: Lisa@Aqualaw.com

Chris Pomeroy, Esq. (Alternate)

Phone: 804-303-5890
Email: Chris@Aqualaw.com

Philip Abraham (Primary)

Director and General Counsel
The Vectre Corporation (representing Virginia
Association of Commercial Real Estate)
707 East Main Street, Suite 1800 Richmond, VA
23219
Phone: 804-644-6600

Email: pabraham@vectrecorp.com

Chris Soldan, P.E. (Primary)

Principal Environmental Engineer
Arcadis U.S., Inc.
9954 Mayland Drive Suite 2400, Richmond, VA
23233 Phone: 804-665-1095
Email: Chris.Soldan@arcadis.com

Jillian Sunderland (Primary)

Senior Water Resources Planner
Hampton Roads Planning District Commission
723 Woodlake Drive, Chesapeake, VA 23320
Phone: 757-420-8300
Email: jsunderland@hrpdca.gov

Jessica Lassetter (Primary)

Senior Environmental Specialist / CE III
City of Alexandria, Virginia
Transportation & Environmental Services
Alexandria City Hall, 301 King Street,
Alexandria, VA 22314
Phone: 703-746-4127
Email: jessica.lassetter@alexandriava.gov

Gavin Pellitteri (Alternate)

Phone: 703-746-4071
Email: gavin.pellitteri@alexandriava.gov

Chris Swanson, P.E. (Primary)

Environmental Division Director
Virginia Department of Transportation
1401 East Broad Street, Richmond, VA 23219
Phone: 804-786-6839
Email: chris.swanson@vdot.virginia.gov

J. Alex Forasté, P.E. (Alternate)

Phone: 804-786-2548
Email: alex.foraste@vdot.virginia.gov

Mitchell Smiley (Primary)

Policy Manager for Transportation and Natural
Resources
Virginia Municipal League
P.O. Box 12164, Richmond, VA 23241
Phone: 804-401-7425
Email: msmiley@vml.org

Joe Lerch (Primary)

Director of Local Government Policy
Virginia Association of Counties
1207 E Main St #300, Richmond, VA 23219
Phone: 804-343-2506
Email: jlerch@vaco.org

State Water Control Board

Amend the regulations to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly

9VAC25-875-1360. Deposit and use of fees.

A. All fees collected by the department pursuant to this chapter shall be deposited into the Virginia Stormwater Management Fund and shall be used and accounted for as specified in § 62.1-44.15:29 of the Code of Virginia. Fees collected by the department shall be exempt from statewide indirect costs charged and collected by the Department of Accounts.

B. All fees collected by a VESMP authority pursuant to this chapter shall be subject to accounting review and shall be used solely to carry out the VESMP authority's responsibilities pursuant to the VESMA, Article 3 (9VAC25-875-100 et seq.) of Part II (9VAC25-875-40 et seq.) and Part V (9VAC25-875-470 et seq.) of this chapter, local ordinances, or standards and specifications.

Pursuant to subdivision A 9 of § 62.1-44.15:28 of the Code of Virginia, whenever the department has authorized the administration of a VESMP by a VESMP authority, ~~28%~~ 30% of the total revenue generated by the statewide stormwater management fees collected in accordance with 9VAC25-875-1400 shall be remitted on a schedule determined by the department to the State Treasurer for deposit in the Virginia Stormwater Management Fund unless otherwise collected electronically. If the VESMP authority waives or reduces any fee due in accordance with 9VAC25-875-1400, the VESMP authority shall remit the ~~28%~~ 30% portion that would be due to the Virginia Stormwater Management Fund if such fee were charged in full. Any fee increases established by the VESMP authority beyond the base fees established in this part shall not be subject to the fee distribution formula.

9VAC25-875-1375. Fee calculation.

A. Fees set forth in sections 9VAC25-875-1380, 9VAC25-875-1400, and 9VAC25-875-1420 shall be adjusted annually by the change in the Consumer Price Index (CPI). The Consumer Price Index, [is as used for this adjustment, refers to] the [average] Consumer Price Index for all-urban consumers [(CPI-U)] for the 12-month period ending on [~~April~~ June] 30 of the calendar year preceding the year the fee is due. The Consumer Price Index for all-urban consumers is published by the U.S. Department of Labor, Bureau of Labor Statistics, U.S. All items, CUUR0000SA0. [The department shall calculate the adjusted fees using the CPI by January 1 each year and the adjusted fees shall be effective beginning July 1 of the same year.]

B. The permit fee due shall be calculated according to the following formulas:

$$F = B \times C$$

$$C = 1 + \Delta CPI$$

**Editor's note- removing the following equation:

$$\Delta CPI = \frac{(CPI - U - 314.54)}{314.54}$$

**Editor's note- updated formula is as follows:

$$\Delta CPI = \frac{(CPI - 309.57)}{309.57}$$

Where:

F = the permit fee due (in \$)

B = the base fee rate for the type of MS4 or Construction General Permit

C = the Consumer Price Index adjustment factor

ΔCPI = the difference between [$CPI - UCPI$] and [$314.54 - 309.57$], expressed as a proportion of [$314.54 - 309.57$] (the reference base is 1982-84 = 100; [$314.54 - 309.57$] is the unadjusted [12-month] average CPI for all urban consumers for July [2023 through June] 2024)

[$CPI - UCPI$] = the [average of the] Consumer Price Index for all-urban consumers [(CUUR0000SA0)] for the 12-month period ending on [April June] 30 of the calendar year preceding the year the fee is due [; CUUR0000SA0] .

For example, if calculating the hypothetical [2026 2027] permit fee (F) for a General / Stormwater Management – Large Construction Activity/Land Clearing permit (> 5 acres < 10 acres):

[$CPI - UCPI$] = 317.67 (hypothetical [$CPI - UCPI$] for [the 12-month period ending on April June] 30, [2025 2026] , which would be used for the [2026 2027] permit fee calculation).

ΔCPI = [$0.04 - 0.03$] for the [2026 2027] permit fee calculation (i.e., $(317.67 - [314.54 - 309.57]) / [314.54 - 309.57] = [(3.13) - 8.10] / [314.54 - 309.57] = [0.04 - 0.03]$).

C = [$1.04 - 1.03$] for the [2026 2027] permit fee calculation (i.e., $1 + [0.04 - 0.03] = [1.04 - 1.03]$).

B = \$5,100 (i.e. the fee for a General / Stormwater Management – Large Construction Activity/Land Clearing permit (> 5 acres < 10 acres), taken from subsection A of 9VAC25-875-1400).

F = [$\$5,151 - \$5,253$] for the hypothetical [2026 2027] permit fee calculation for this General / Stormwater Management – Large Construction Activity/Land Clearing permit (i.e., $\$5,100 \times [1.04 - 1.03] = [\$5,150.75 - \$5,253.00]$).

C. Permit fees (F) calculated for each facility or permitted land-disturbing activity shall be rounded to the nearest dollar.

D. The total amount of permit fees collected by the department (permit application fees plus permit maintenance fees) shall not exceed 62% of direct costs for administration, compliance, and enforcement of MS4 permits and VPDES Permits for Discharges of Stormwater from Construction Activities. The director shall take whatever action is necessary to ensure that this limit is not exceeded.

9VAC25-875-1380. Fee schedules for municipal separate storm sewer system new permit issuance.

A. The following fee schedule applies to permit applications for issuance of a new individual municipal separate storm sewer system permit or coverage under a MS4 General Permit. All regulated MS4s that apply for joint coverage under an individual permit or general permit registration shall each pay the appropriate fees set out in the following table.

Municipal Stormwater / MS4 Individual (Large and Medium)	\$16,000 <u>\$25,000</u>
Municipal Stormwater / MS4 Individual (Small)	\$8,000 <u>\$13,000</u>

Municipal Stormwater / MS4 General Permit (Small)	\$4,000 ~~\$6,500~~

B. The amount of the permit fee due for a MS4 permit for a specified year as required by subsection A of this section shall be calculated according to the formulas in 9VAC25-875-1375 B.

9VAC25-875-1390. Fee schedules for major modification of MS4 individual permits requested by the operator.

The following fee schedule applies to applications for major modification of an individual MS4 permit requested by the permittee:

Municipal Stormwater / MS4 Individual (Large and Medium)	\$5,000 ~~\$8,000~~
Municipal Stormwater / MS4 Individual (Small)	\$2,500 ~~\$4,000~~

9VAC25-875-1400. Fees for individual permit or coverage under the General Permit of for Discharges of Stormwater from Construction Activities.

A. The following total fees to be paid by an applicant apply to any operator seeking coverage under a General VPDES Permit for Discharges of Stormwater from Construction Activities or a state agency or federal entity that does not file standards and specifications or an individual permit issued by the department. On and after approval by the department of or a VESMP authority for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities, no more than 50% of the total fee to be paid by an applicant set out in this part shall be due at the time that a stormwater management plan or an initial stormwater management plan is submitted for review in accordance with 9VAC25-875-530. The remaining total fee balance to be paid by an applicant shall be due prior to the issuance of coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.

When a site is purchased for development within a previously permitted common plan of development or sale, the applicant shall be subject to fees ("total fee to be paid by applicant" column) in accordance with the disturbed acreage of the applicant's site according to the following table.

Fee type	Total fee to be paid by applicant (includes both VESMP authority and department portions where applicable)	Department portion of "total fee to be paid by applicant" (based on ~~28%~~ 30% of total fee paid*)
Land-Disturbing Activity in a Chesapeake Bay Preservation Area (not subject to General Permit coverage; sites within designated areas of Chesapeake Bay Act localities with land-disturbance acreage equal to or greater than 2,500 square feet and less than one acre)	\$290	\$0
General / Stormwater Management - Small Construction Activity/Land-Disturbing Activity in a Chesapeake Bay Preservation Area (not subject to General Permit coverage)/Land Clearing (Single-family detached residential structures within or outside a common plan of development	\$209	\$0

or sale with land-disturbance acreage less than five acres)		
General / Stormwater Management - Small Construction Activity/Land Clearing (Areas within common plans of development or sale with land-disturbance acreage less than one acre, except for single-family detached residential structures)	~~\$290~~ <u>\$450</u>	~~\$81~~ <u>\$135</u>
General / Stormwater Management - Small Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than one acre and less than five acres)	~~\$2,700~~ <u>\$4,100</u>	~~\$756~~ <u>\$1,230</u>
General / Stormwater Management - Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than five acres and less than 10 acres)	~~\$3,400~~ <u>\$5,100</u>	~~\$952~~ <u>\$1,530</u>
General / Stormwater Management - Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 10 acres and less than 50 acres)	~~\$4,500~~ <u>\$6,800</u>	~~\$1,260~~ <u>\$2,040</u>
General / Stormwater Management - Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 50 acres and less than 100 acres)	~~\$6,100~~ <u>\$9,100</u>	~~\$1,708~~ <u>\$2,730</u>
General / Stormwater Management - Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 100 acres)	~~\$9,600~~ <u>\$14,300</u>	~~\$2,688~~ <u>\$4,290</u>
Individual VPDES Permit for Discharges of Stormwater from Construction Activities (This will be administered by the department)	~~\$15,000~~ <u>\$24,000</u>	~~\$15,000~~ <u>\$24,000</u>
[*] If the project is completely administered by the department such as may be the case [<u>where the department is the VSMP authority, the VESMP authority</u>] for a state or federal project [_] or projects covered by individual permits, the entire applicant fee shall be paid to the department.		

The following fees apply to coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities issued by the department for a state agency or federal entity that has standards and specifications approved by the department.

General / Stormwater Management - Phase I Land Clearing (Large Construction Activity - Sites or common plans of development equal to or greater than five acres)	\$750 <u>\$1,200</u>
General / Stormwater Management - Phase II Land Clearing (Small Construction Activity - Sites or common plans of development equal to or greater than one acre and less than five acres)	\$450 <u>\$700</u>

B. The amount of the permit fee due for a General VPDES Permit for Discharges of Stormwater from Construction Activities for a specified year as required by subsection A of this section shall be calculated according to the formulas in 9VAC25-875-1375 B.

9VAC25-875-1410. Fees for the modification or transfer of individual permits or of registration statements for the General VPDES Permit for Discharges of Stormwater from Construction Activities.

The following fees apply to modification or transfer of individual permits or of registration statements for the General VPDES Permit for Discharges of Stormwater from Construction Activities issued by the department. If the permit modifications result in changes to stormwater management plans that require additional review by the VESMP authority [or the department as the VSMP or VESMP authority] , such reviews shall be subject to the fees set out in this section. The fee assessed shall be based on the total disturbed acreage of the site. In addition to the permit modification fee, modifications resulting in an increase in total disturbed acreage shall pay the difference in the initial permit fee paid and the permit fee that would have applied for the total disturbed acreage in 9VAC25-875-1400. No modification or transfer fee shall be required until such department-approved programs exist. These fees shall only be effective when assessed by a VESMP authority [, including or] the department [~~when acting in that capacity, that has been approved by the department as the VSMP or VESMP authority~~]. No modification fee shall be required for the General VPDES Permit for Discharges of Stormwater from Construction Activities for a state agency or federal entity that is administering a project in accordance with approved standards and specifications but shall apply to all other state or federal agency projects.

General / Stormwater Management – Small Construction Activity/Land Clearing (Areas within common plans of development or sale with land-disturbance acreage less than one acre, except for single-family detached residential structures)	\$20 <u>\$30</u>
General / Stormwater Management – Small Construction Activity/Land-Disturbing Activity in a Chesapeake Bay Preservation Area (not subject to General Permit coverage)/Land Clearing (Single-family detached residential structures within or outside a common plan of development or sale with land-disturbance acreage less than five acres where the locality is the VESMP authority)	\$20
General / Stormwater Management – Small Construction Activity/Land Clearing (Single-family detached residential structures within or outside a common plan of development or sale with land-disturbance acreage less than five acres where the department is the VSMP authority)	\$0
General / Stormwater Management – Small Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than one and less than five acres)	~~\$200~~ <u>\$320</u>

General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than five acres and less than 10 acres)	\$250 <u>\$400</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 10 acres and less than 50 acres)	\$300 <u>\$480</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 50 acres and less than 100 acres)	\$450 <u>\$720</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 100 acres)	\$700 <u>\$1,120</u>
Individual VPDES Permit for Discharges of Stormwater from Construction Activities	\$5,000 <u>\$8,000</u>

9VAC25-875-1420. Permit maintenance fees.

A. The following annual permit maintenance fees apply to each permit identified below, including expired permits that have been administratively continued. With respect to the General VPDES Permit for Discharges of Stormwater from Construction Activities, these fees shall apply until the permit coverage is terminated and shall only be effective when assessed by a VESMP authority [~~including or~~] the department [~~when acting in that capacity that has been approved by the department as the VSMP or VESMP authority~~]. No maintenance fee shall be required for the General VPDES Permit for Discharges of Stormwater from Construction Activities for a state agency or federal entity that is administering a project in accordance with approved standards and specifications but shall apply to all other state or federal agency projects. All regulated MS4s that are issued joint coverage under an individual permit or general permit registration shall each pay the appropriate fees set out in the following table:

Municipal Stormwater / MS4 Individual (Large and Medium)	\$8,800 <u>\$14,100</u>
Municipal Stormwater / MS4 Individual (Small)	\$6,000 <u>\$9,600</u>
Municipal Stormwater / MS4 General Permit (Small)	\$3,000 <u>\$4,800</u>
Land-Disturbing Activity in a Chesapeake Bay Preservation Area (not subject to General Permit coverage; sites within designated areas of Chesapeake Bay Act localities with land-disturbance acreage equal to or greater than 2,500 square feet and less than one acre)	\$50 <u>\$80</u>
General / Stormwater Management – Small Construction Activity/Land Clearing (Areas within common plans of development or sale with land-disturbance acreage less than one acre, except for single-family detached residential structures)	\$50 <u>\$80</u>

General / Stormwater Management – Small Construction Activity/Land-Disturbing Activity in a Chesapeake Bay Preservation Area (not subject to General Permit coverage)/Land Clearing (Single-family detached residential structures within or outside a common plan of development or sale with land-disturbance acreage less than five acres where the locality is the VESMP authority)	~~\$50~~ <u>\$80</u>
General / Stormwater Management – Small Construction Activity/Land Clearing (Single-family detached residential structures within or outside a common plan of development or sale with land-disturbance acreage less than five acres where the department is the VSMP authority)	\$0
General / Stormwater Management – Small Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance equal to or greater than one acre and less than five acres)	~~\$400~~ <u>\$650</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than five acres and less than 10 acres)	~~\$500~~ <u>\$800</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 10 acres and less than 50 acres)	~~\$650~~ <u>\$1,050</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater than 50 acres and less than 100 acres)	~~\$900~~ <u>\$1450</u>
General / Stormwater Management – Large Construction Activity/Land Clearing (Sites or areas within common plans of development or sale with land-disturbance acreage equal to or greater 100 acres)	~~\$1,400~~ <u>\$2,250</u>
Individual VPDES Permit for Discharges from Construction Activities	~~\$3,000~~ <u>\$4,800</u>

B. The amount of the annual permit maintenance fee due for a MS4 permit or permit for discharges of stormwater from construction activities for a specified year as required by subsection A of this section shall be calculated according to the formulas in 9VAC25-875-1375 B.



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Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-875
VAC Chapter title(s)	Virginia Erosion and Stormwater Management Regulation
Action title	Amend the regulations to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly
Date this document prepared	October 30, 2025

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19, the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This regulatory action is required by Chapter 2 of the 2024 Special Session I Acts of Assembly (Budget Bill, Item 363 J). Chapter 2 directs the Board to amend the permit fee schedule so the fees for the Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities and municipal separate storm sewer system (MS4) permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of those permits.

The intent of this regulatory action is to amend provisions of the Virginia Erosion and Stormwater Management (VESM) Regulation (9VAC25-875) to increase fees for an individual Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities, a VPDES General Permit for Discharges of Stormwater from Construction Activities, municipal separate

storm sewer system (MS4) permits, permit modification fees, and permit maintenance fees so they collectively provide 60 percent to 62 percent of the direct costs for the administration, compliance and enforcement of the Department of Environmental Quality's (department) erosion and stormwater management program. The effective date of the amendments shall be no earlier than July 1, 2026.

The last regulatory action to modify most of the department's fees was in 2010 (26:9 VA.R.1220-1229 January 4, 2010) and, except for the General / Stormwater Management – Phase I and Phase II Land Clearing permit, they have not changed since 2010.

Permit fees are being increased for the following:

- New MS4 permit coverage;
- MS4 permit major modifications;
- New individual VPDES Permits for Discharges of Stormwater from Construction Activities;
- New coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (Construction General Permit or CGP);
- Modifications and/or transfers of individual VPDES Permits for Discharges of Stormwater from Construction Activities or CGPs; and
- Annual permit maintenance fees for MS4 permits and VPDES Permits for Discharges of Stormwater from Construction Activities.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

"AS&S" - Annual Standards and Specifications
"Board" – State Water Control Board
"CGP" – Construction General Permit
"CPI" – Consumer Price Index
"DEQ" or "department" – Department of Environmental Quality
"FY2024" – Fiscal year 2024 (July 1, 2023, through June 30, 2024)
"HBAV" – Home Builders Association of Virginia
"HRPDC" – Hampton Roads Planning District Commission
"MS4" – Municipal Separate Storm Sewer System
"NOIRA" – Notice of Intended Regulatory Action
"RAP" – Regulatory Action Panel
"S&S" – Standards and Specifications
"VAC" – Virginia Administrative Code
"VACRE" – Virginia Association for Commercial Real Estate
"VAMSA" – Virginia Municipal Stormwater Association
"VDOT" – Virginia Department of Transportation
"VESM Regulation" – the Virginia Erosion and Stormwater Management Regulation, 9VAC25-875
"VESMP" – Virginia Erosion and Stormwater Management Program
"VPDES" – Virginia Pollutant Discharge Elimination System
"VSMP" – Virginia Stormwater Management Program

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) that the agency has "adopted final amendments" to the regulation; 3) the name of the agency taking the action; and 4) the title of the regulation. A suggested statement is, "On [insert date] the Board/Department of [insert name] adopted final amendments to the [title of regulation(s)]."

On November 18, 2025, the State Water Control Board adopted the final amendments to 9VAC25-875 to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly. The effective date of the amendments shall be no earlier than July 1, 2026.

Mandate and Impetus

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding the mandate for this regulatory change, and any other impetus that specifically prompted its initiation. If there are no changes to previously reported information, include a specific statement to that effect.

Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly directs the Board to amend the existing permit fee schedule such that the fees for the VPDES Permit for Discharges of Stormwater from Construction Activities and MS4 permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits.

Legal Basis

Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

Section 62.1-44.15:28 of the Code of Virginia (effective July 1, 2024) authorizes the Board to adopt regulations that establish requirements for the effective control of soil erosion, sediment deposition, and stormwater, including nonagricultural runoff, that shall be met in any Virginia Erosion and Stormwater Management Program (VESMP) to prevent the unreasonable degradation of properties, stream channels, waters, and other natural resources; subsection 9 requires the Board's regulations to include a statewide fee schedule to cover all costs associated with the implementation of a VESMP related to land-disturbing activities where permit coverage is required, and for land-disturbing activities where the Board serves as a VESMP authority or Virginia Stormwater Management Program (VSMP) authority.

In addition, Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly directs the Board to amend the existing permit fee schedule such that the fees for the VPDES Permit for Discharges of Stormwater from Construction Activities and MS4 permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits.

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety, or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

This regulatory action is required by Chapter 2 of the 2024 Special Session I Acts of Assembly (Budget Bill, Item 363 J). Chapter 2 directs the Board to amend the permit fee schedule so the fees for the VPDES

Permit for Discharges of Stormwater from Construction Activities and MS4 permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of those permits.

This regulatory action is essential to protecting the water quality in the Commonwealth of Virginia, which is essential to the health, safety, and welfare of Virginia's citizens and is needed in order to effectively administer an erosion and stormwater management program in Virginia. Controlling erosion and stormwater runoff from land-disturbing activity and its impacts is a serious issue throughout the Commonwealth and its local governments. Numerous studies have documented the cumulative effects of urbanization on stream and watershed ecology. Research has established that as impervious cover in a watershed increases, stream stability is reduced, water quality becomes degraded, and biological diversity decreases largely due to stormwater runoff. Impervious areas are documented to decrease the natural stormwater purification functions of watersheds and increase the potential for water quality impacts in receiving waters. Additionally, runoff from managed turf is recognized as a significant source of pollutants to the local tributaries and the Chesapeake Bay.

The erosion and stormwater management program is funded through the fees established pursuant to the VESMP Regulation and is necessary to address water quality within the Commonwealth. Based on FY2024 data, the current fee revenue collected from permit fees and applications only covers approximately 38-39% of the overall program costs. The current fees have been in effect since January 2010 (see 26:9 VA.R.1220-1229 January 4, 2010) and, except for the General / Stormwater Management – Phase I and Phase II Land Clearing permit, they have not changed since 2010.

Regulatory amendments are necessary to conform the VESMP Regulation (9VAC25-875) to Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly. Per the Budget Bill, the fees need to be set at a level not less than 60%, but not more than 62% of the program costs, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's erosion and stormwater management permit program, including: plan review, permit review and issuance, inspections, compliance assistance, enforcement, program administration, permit termination, guidance development, and local program assistance and auditing. The program costs also include costs associated with department oversight functions and database management.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The substance of this regulatory action is to amend or modify language in the VESMP Regulation (9VAC25-875) to meet the requirements in Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly. The amendments revise the existing statewide permit fee schedules such that the fees for the VPDES Permit for Discharges of Stormwater from Construction Activities, MS4 permits, permit modification, and permit maintenance are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits.

Changes to the existing regulation include revising the fee schedules in sections 1380 through 1420 to cover 60-62% of the program costs, as well as the inclusion of a consumer price index (CPI) annual adjustment factor, in a new section 1375, to provide a mechanism to ensure that fees keep pace with inflation and the costs of doing business. In addition, section 1360 was updated to reflect the portion of the total permit fee paid to the department by local VESMP authorities which was increased from 28% to 30%, as allowed per § 62.1-44.15:28 of the Code of Virginia.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The primary advantage of this regulatory change for the public is an enhanced statewide erosion and stormwater management program that will be properly funded and administered. This will result in improved compliance and consistency with the VESMP Regulation and thus improved water quality. The regulated community will also benefit from properly funded and staffed stormwater management programs because the department uses program funds to provide support and assistance to local program authorities, develop guidance to assist local authorities and the regulated community with how to comply with state law and regulations, and operate as the program authority for localities that chose to opt out of adopting a program. By developing the fee structure based upon the actual costs of administering the erosion and stormwater management program, there is not expected to be any disadvantage to localities or to the department from the fees associated with permits for construction activities or MS4s.

The primary disadvantage of the amendments to this regulation will be increased permit fees for the regulated community. However, the existing fees for permits associated with construction activities are set at levels insufficient to support the vast majority of responsibilities associated with administering an erosion and stormwater management program. The amended fees in this regulatory action will allow for proper funding of permit oversight and administration.

The fees imposed by this regulatory action for MS4 permits are, like the CGP fees, based on the actual cost of permit administration. The primary disadvantage is an increase to the annual maintenance fee for existing localities and state entities that are existing MS4 permittees. However, the increase is needed to provide adequate permit issuance and administration, annual review, program assistance, and permit compliance.

Requirements More Restrictive than Federal

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously reported information, include a specific statement to that effect.

There are no applicable federal requirements related to fees for stormwater management permits. Section 402 of the federal Clean Water Act (33 USC 1251 et seq.) authorizes states to administer the National Pollutant Discharge Elimination System permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the U.S. EPA. This Memorandum of Understanding was modified on May 20, 1991, to authorize the Commonwealth to administer a VPDES Permit Program, which includes both the permit for discharges from construction activities and MS4 permits. The amended fee schedules in this regulatory action are necessary to properly fund the implementation of the statewide stormwater and MS4 programs and comply with Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

Other State Agencies Particularly Affected

The Virginia Department of Transportation (VDOT) is particularly affected because of the amount of land disturbing activities that the agency undertakes requiring a CGP. In addition, other state entities that perform land-disturbing activities which require a CGP would be affected by the increased CGP permit fees. Furthermore, VDOT and 36 other state entities (colleges, universities, etc.) currently have an MS4 permit and would be affected by the increase to the annual maintenance fees for their MS4 permit.

Localities Particularly Affected

The regulations are not intended to have a disproportionate impact upon any locality. There are currently 93 localities throughout the Commonwealth of Virginia that operate a Virginia Erosion and Stormwater Management Program (VESMP). Other localities have opted to have the department administer a stormwater management program within their jurisdiction. As such, the amended fees in this regulatory action may be received by either a locality administering a VESMP or the department, as may be applicable. Fees are calculated to fund the costs of program administration; thus, no locality should bear a fiscal burden under either program administration scenario. The increased revenue would also support the local VESMPs in the administration, compliance, and enforcement of the land-disturbing activities which require a CGP within their locality.

In addition, there are currently 59 localities in the Commonwealth that have an MS4 permit. These localities would be affected by the increase in MS4 permit fees.

Other Entities Particularly Affected

The increased stormwater fee schedules would affect all developers that perform land-disturbing activities that require a CGP. During discussions with the Regulatory Advisory Panel (RAP), an option was investigated to only raise fees in localities where the department administers the stormwater program (i.e., the department is the VSMP authority). This was not identified as the preferred approach. Several members of the RAP thought that this could lead to competitive disadvantages within those localities who do not operate a local VESMP program. Thus, the fee schedule has been set to be applied equally across the Commonwealth.

Furthermore, there are 26 federal entities and one airport authority that currently have an MS4 permit. These entities would be affected by the increase to MS4 permit fees.

Periodic Review and Small Business Impact Review Report of Findings

If you are using this form to report the result of a periodic review/small business impact review that is being conducted as part of this regulatory action, and was announced during the NOIRA stage, indicate whether the regulatory change meets the criteria set out in EO 19 and the ORM procedures, e.g., is necessary for the protection of public health, safety, and welfare; minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and is clearly written and easily understandable. In addition, as required by § 2.2-4007.1 E and F of the Code of Virginia, discuss the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or

comments received concerning the regulation; (3) the complexity of the regulation; (4) the extent to the which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, discuss why the agency's decision, consistent with applicable law, will minimize the economic impact of regulations on small businesses.

No periodic review or small business impact review was announced during the NOIRA stage.

Public Comment

Summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency's response. Include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency. If no comment was received, enter a specific statement to that effect.

A public comment period ran from August 11, 2025, through October 10, 2025. A public hearing was held on Tuesday, September 23, 2025. A total of 9 comment submittals were received during the comment period through the Town Hall Comment Forum, email, and the public hearing. Below is a summary of the comments received, grouped by topic.

No	Commenter	Comment	Agency Response
General Comments about the Regulatory Action			
1	Virginia Municipal Stormwater Association (VAMSA)	VAMSA appreciates the opportunity to submit comments on the Department of Environmental Quality's (DEQ's or Department's) Proposed Regulation 9VAC25-875. Virginia Erosion and Stormwater Management Regulation (amending 9VAC25-875-1360, 9VAC25-875-1380 through 9VAC25-875-1420; adding 9VAC25-875-1375) (published in the August 11, 2025, Virginia Register) (Proposed Fee Regulation). VAMSA's membership is comprised of cities, counties, and towns across Virginia from Hampton Roads to Northern Virginia to Southwest Virginia and all areas in between. VAMSA supports clean water, safe and vibrant communities, and a strong state economy by seeking to align clean water goals, smart stormwater management practices, and affordable programs, practices, and infrastructure. In promoting abundant clean water in this manner, VAMSA helps maintain Virginia's U.S.-leading business climate ranking. VAMSA is interested in the Proposed Fee Regulation because many of VAMSA's	DEQ appreciates VAMSA's strong interest in and comments about the amendments to 9VAC25-875. DEQ has changed the proposed regulation as described in the response to Comment 5 to address specific concerns VAMSA raised in Comment 5 below.

		members: (1) own or operate regulated municipal separate storm sewer systems (MS4s) and are subject to permit fees under Part VIII of the Virginia Erosion and Stormwater Management (VESM) Regulation; (2) serve as VESMP authorities and collect fees from General VPDES Permit for Discharges of Stormwater from Construction Activities (CGP) applicants; and (3) have active construction programs and must pay CGP coverage fees. Thus, VAMSA has a strong interest in this regulatory action.	
2	Hampton Roads Planning District Commission (HRPDC)	The Hampton Roads Planning District Commission (HRPDC) appreciates the opportunity to provide comments on the proposed changes to the statewide permit fee schedule for the municipal separate storm sewer system (MS4) permits and construction general permits (CGP). The Department of Environmental Quality (DEQ) has proposed two major amendments to the existing fee schedule: 1) an initial fee increase designed to collect between 60 and 62 percent of their estimated FY2024 costs to administer the MS4 and CGP programs and 2) a fee calculation to adjust the MS4 and CGP fees annually based on the Consumer Price Index (CPI). While increasing the statewide permit fee schedule by approximately 60 percent across-the-board in a single year is a significant lift, HRPDC recognizes that the fees have remained static for 15 years and increases were anticipated. However, HRPDC has the following concerns with the proposed fee calculation in 9VAC25-875-1375: 1) adjusting the fee schedule annually is unnecessary and burdensome and 2) fee increases should not be based on the CPI. HRPDC respectfully requests DEQ's consideration of the following comments and the recommended alternative for future fee adjustments.	DEQ appreciates HRPDC's recognition that the statewide permit fee schedule has remained static for 15 years and that fee increases were anticipated. DEQ also recognizes the concerns HRPDC has expressed in its comments about adjusting the fee schedule annually (Comment 6) and basing increases on the CPI (Comment 9). DEQ has addressed those concerns in detail below. Please see responses to Comments 5 and 9 respectively.
3	Virginia Association for Commercial Real Estate (VACRE) and the Home Builders Association of Virginia (HBAV)	The Virginia Association for Commercial Real Estate (VACRE) and the Home Builders Association of Virginia (HBAV) submit the following comment regarding the Department of Environmental Quality's (DEQ) proposed permit fee increases. Both organizations recognize and support the General Assembly's directive to the	DEQ appreciates the recognition and support VACRE and HBAV have for the General Assembly's directive to DEQ to improve cost recovery through permit fees.

		Department to improve cost recovery through permit fees and reduce reliance on general fund appropriations. Ensuring adequate funding for timely, thorough permit reviews is critical to maintaining program quality, protecting natural resources, and providing predictable timelines for the regulated community. The Department's permitting programs have faced longstanding resource constraints that have affected review timelines and staff capacity. Over the past several years, the Department has made notable progress in improving permitting efficiency through process enhancements and other initiatives. The revised fee structures will further build on this progress by sustaining adequate staffing, expanding technical expertise, and supporting continued improvements that advance both environmental protection and regulatory performance. Revised fee structures will allow the agency to maintain appropriate staffing, enhance technical expertise, and implement process improvements that strengthen environmental protection and regulatory efficiency. Adequate resources are essential for the Department to fulfill its responsibility to protect Virginia's natural resources while providing timely, reliable services that critical support economic development projects	DEQ has addressed concerns VACRE and HBAV raised (Comment 10) in response to Comment 9.
4	City of Richmond	The City of Richmond is generally supportive of the Virginia Department of Environmental Quality's proposed fee increase. The Virginia Department of Environmental Quality proposes to increase stormwater permit fees by 60-61% to comply with legislative mandate requiring fees to cover 60-62% of program costs. These increases represent the first fee adjustment since 2010. The proposed single-year implementation of a 60% increase deviates from standard utility ratemaking practices. The Virginia State Corporation Commission has consistently emphasized gradualism in rate adjustments to avoid rate shock and maintain stable utility planning. A 60% single-year increase disrupts multi-year capital planning, affects bond covenant calculations, and complicates budget forecasting. The Department of Environmental Quality should be congratulated on achieving	DEQ appreciates the City of Richmond's support for the fee increase and acknowledges the approach the General Assembly took to increase fee revenue to support the MS4 and stormwater programs deviates from standard utility ratemaking processes followed by entities subject to regulation by the State Corporation Commission. As explained in responses below, the amended regulations will include a CPI adjustment to allow fees to keep up with inflation. The CPI

		remarkable operational gains, including a 70% reduction in processing times and \$124 million in documented business savings, achieved largely through technology-driven improvements such as the PEEP platform, which has enhanced workload distribution and program efficiency. <i>(The City of Richmond also provided oral comments at the September 23, 2025, public hearing on the proposed amendments to 9VAC25-875. The City's oral comments were substantively the same as the comments noted here and below at Comments 8 and 14.)</i>	adjustment prevents the situation DEQ finds itself in now – going 15 years without asking the State Water Control Board to approve regulatory amendments to increase fees. Please see responses to Comment 5 and 13 respectively.
Fee Adjustment Schedule, 9VAC25-875-1375			
5	Virginia Municipal Stormwater Association (VAMSA)	DEQ Should Not Require Annual CGP Fee Changes Because Doing So Would Be Disruptive and Impractical for Localities DEQ proposes to adjust MS4 and CGP fees each year based on changes in the CPI. 9VAC25-875-1375. Although VAMSA understands the impetus for this approach, adjusting CGP fees each year based on CPI would be difficult for permittees to manage. Increasing CGP fees annually is too frequent. Many VAMSA members have these fees embedded in their local codes. Going through the legislative process every year would be burdensome. Passing a local ordinance takes, at a minimum, 12-18 months from start to finish. Local employees would be in a constant cycle of writing and rewriting ordinances to keep up with the changes. Many localities recently struggled adopting the consolidated regulations. VAMSA Members would far prefer focusing limited staffing resources on permit implementation and environmentally beneficial projects and not on the bureaucracy and paperwork associated with DEQ's proposal. Additionally, DEQ's proposal to increase fees annually would confuse the development community. As noted above, many VAMSA members are VESMP authorities. Having to explain frequently changing fee increases to developers, especially in busy VESMP localities, would be onerous. Localities will have to continuously check whether they are using the most up-to-date fee schedules for private	DEQ appreciates the concerns commenters raise about adjusting fees annually and the impact that this may have on budgeting processes for localities and others. To make planning easier, 9VAC25-875-1375 of the proposed regulation has been amended so that the final regulation states that (1) DEQ will use the CPI from the 12-month period ending on June 30 of the year before the fee is due to calculate the fee adjustment; (2) DEQ will determine fees for each year by January 1 of the year the fee is due; and (3) the fee adjustment will not be effective until July 1 of each year. Further, the effective date of the amendments shall be no earlier than July 1, 2026. As amended, localities and project owners will have notice of the fees for a new construction general permit at least 6-months in advance of

	development and the locality's own construction projects. This CPI proposal was not fully vetted by the RAP that advised DEQ on the Proposed Fee Regulation. Although the RAP talked about and supported more frequent fee adjustments to avoid significant increases like the one proposed in this proceeding, the RAP did not carefully deliberate the concept of changing the fee each year based on the CPI. Parenthetically, the RAP did discuss whether the fees paid by VESMP authorities are subsidizing localities that have opted out of running a local program, but no conclusions were reached on this point either. Annual MS4 Maintenance Fees Should be Coordinated with Local Budgeting Processes. DEQ has proposed to increase MS4 maintenance fees each year based on CPI increases for the year prior ("The Consumer Price Index is the Consumer Price Index for all urban consumers (CPI-U) for the 12-month period ending April 30 of the calendar year preceding the year the fee is due.") As noted above, VAMSA members not only act as VESMP authorities and collect CGP fees, but they are also MS4 permittees that must take their own stormwater budgets through an approval process. Adopting a budget for a locality or a non-traditional MS4 (for example, a large university) takes months. VAMSA is concerned that CPI-based fee increases will not align with permittee budgeting processes. Many permittees begin budgeting for the following fiscal year in the fall (for example, discussions begin in October 2025 for Fiscal Year 2027). If permit maintenance fees (9VAC25-875-420) are due on October 1, 2026, the permittee would need to know what the expected fee will be in 2025. The regulation does not make it clear whether the permittee or the Department will calculate the fee level for each year (if the permittee, VAMSA foresees each permittee having a slightly different but likely inconsistent approach to the calculation process). However, if DEQ does not calculate fees and communicate those to permittees until the spring of 2026, a	the change, notice of the maintenance fees for an MS4 permit at least 8-months in advance (DEQ sends invoices on/about September 1 each year), and notice of the maintenance fees for a construction general permit 15-months in advance (DEQ sends invoices on/about April 1 each year, since this is before the effective date of the fee adjustment, July 1, it will be the fee that is effective July 1 of the preceding calendar year). DEQ is not changing the fee-adjustment schedule to coincide with reissuance of the General VPDES Permit for Discharges of Stormwater from Construction Activities, which would be a 5-year interval, because this would be inconsistent with other DEQ permits that have a CPI adjustment. One example is the Fees for Permits and Certificates (9VAC25-20), which adjusts maintenance fees for VPDES and Virginia Pollution Abatement permits annually (see 9VAC25-20-142). The fees for stationary sources of air pollution, 9VAC5-80-2282, are another example of the annual fee adjustment based on the CPI. An annual adjustment minimizes the increment of change. If DEQ used

	permittee may need to amend its proposed budget at the tail end of the process. VAMSA Phase I MS4 Committee members report that they just received bills for 2025 maintenance fees in early September 2025. Although this is acceptable because the fees do not change from year to year, it would not work under the proposed CPI approach. If DEQ moves forward with a CPI-based fee schedule instead of VAMSA's alternative proposal below, VAMSA requests that bills be sent out before the budgeting process is in its final stages. If DEQ sends bills for Fiscal Year 2027, for example, by December 2025, this would assist permittees in processing the increased fees as a part of their overall budget. This issue extends not only to MS4 permit maintenance fees but to fees for local construction projects covered by the CGP. It would be beneficial to know annual increases sooner rather than later during project development. DEQ Should Charge Increased Fees Beginning in 2026 With a Planned Regular Review of Costs with Each CGP Reissuance. The Proposed Fee Regulation is based on a snapshot in time, Fiscal Year 2024. Program requirements, staffing needs, and costs change over time, meaning DEQ could be over recovering or under-recovering in a few years as compared to the General Assembly's mandate. The Proposed Fee Regulation does not explain how the Director will conduct a formal review of costs as compared to CGP and MS4 fee revenues (the language that the Director will "take whatever action is needed to ensure that this limit is not exceeded" lacks detail). VAMSA offers an alternative suggestion. We recommend DEQ increases fees by the proposed 60-60.23% levels for calendar years 2026, 2027, and 2028 (the fees would be the same for these three years), but then eliminates the CPI-based increase and develops a procedure to assess whether existing fees are adequate to cover program costs as directed by the General Assembly with each reissuance of the CGP. VAMSA strongly supports this more simplified approach because it would allow	a longer interval between adjustments, such as a 5-year interval, the cumulative change would be greater. At current inflation rates, this could result in a 20-25% increase in fees. Annual changes of 2-3%, based on current inflation rates, are both easier to predict and easier to budget for. They also provide better, more continuous support to localities and DEQ for program implementation and oversight. To this end, localities, like DEQ will have access to CPI data as soon as it is released by the Bureau of Labor Statistics. DEQ acknowledges localities may not know the exact fees when developing budgets but planners will be able to see trends and accurately estimate budget needs shortly after the CPI data for June of a given year is released. (The Bureau of Labor Statistics publishes a Schedule of Releases which is typically 10-15 days after the end of each month. See www.bls.gov) If projected fee revenue will exceed 62% of program costs, the regulation requires the DEQ Director to take action to adjust fees so they do not result in revenue that exceeds 62%. The broad

		permittees to know and budget well in advance for increased fees. The Department would have a significant fee increase for the next three years to support its stormwater program and then the potential for additional fee adjustments every five years with the CGP reissuance. VAMSA urges DEQ to consider this alternative to satisfy the General Assembly mandate while saving local governments from nearly continuous changes in the fee levels and the effort associated with local ordinances and communications with the development community. <i>(VAMSA also provided suggested regulatory text for 9VAC25-875-1375 that would remove the annual adjustment, tie adjustment to reissuance of the General VPDES Permit for Discharges of Stormwater from Construction Activities, if needed, and, following review of the Department's costs and fee revenue, require initiation of a regulatory action to adjust fees.)</i>	language in the regulation gives the Director discretion to comply with the statutory limit of 62% of program costs. However, given that the base fees in the amendments were calculated using fiscal year 2024 revenue and expenditures, and the fees will not be adjusted before July 1, 2026, DEQ is already 2 years behind in recovering the specified amount of program costs. Further, under current economic trends of 2-3% inflation per year, it is reasonable to expect that DEQ will routinely be below the 62% limit. Should there be a change that results in excess fee revenue, DEQ may initiate a regulatory action to adjust fees accordingly. A CPI adjustment provides predictability for DEQ and the regulated community, and more certainty than a full process regulatory action to adjust fees because of the time required to complete a regulatory action.
6	Hampton Roads Planning District Commission (HRPDC)	Annual Adjustments to the Fee Schedule are Too Frequent Adjusting the statewide permit fee schedule on an annual basis is too frequent and burdensome for localities. First, many localities have the fee schedule embedded in their local ordinances, and it is not an efficient use of resources to initiate ordinance updates each year, when each	Please see the response to Comment 5. In addition, DEQ acknowledges the effort required to update local ordinances and that VESMP authorities have recently gone

		round can take several months to complete. Second, local Authorities would have an added responsibility of communicating the frequent changes in CGP fees to the development community and ensuring the most current fee schedule is used. We understand that DEQ does not want to go another 15 years without adjusting the statewide permit fee schedule; however, an annual adjustment creates a continuous cycle of changes. HRPDC encourages DEQ to adopt the recommended frequency of once every five years to coincide with the CGP reissuance. Recommendation: Evaluate the Fee Schedule During CGP Reissuance Regulatory Process To address the concerns above and for DEQ to meet the directive from the General Assembly, HRPDC recommends a simplified approach. The regulations should be revised to include an approximate 60 percent across-the-board increase to the statewide permit fee schedule as proposed. Then, the statewide permit fee schedule should remain consistent for calendar years 2026, 2027, and 2028, which will allow localities and the development community to avoid continuous changes in fees, while still providing significant additional revenue for DEQ. During the 2029 CGP reissuance regulatory process, DEQ should evaluate whether the initial increase in fees covered between 60 to 62 percent of their administrative costs for the MS4 and CGP programs. If the evaluation indicates that it does not meet those criteria, changes to the statewide permit fee schedule should be proposed through regulatory action at that time. DEQ should then reevaluate the fee schedule and their administrative costs every five years in conjunction with subsequent CGP reissuance cycles. This approach avoids unpredictable yearly increases and still provides for a significant increase in revenue for DEQ to administer the stormwater programs.	through that process with the Virginia Erosion and Stormwater Management Act becoming effective July 1, 2024. However, The Virginia Erosion and Stormwater Management Act only requires localities with VESMPs to include provisions in their ordinance “charging each applicant a reasonable fee to defray the cost of program administration” which “may be in addition to any fee charged pursuant to the statewide fee schedule established in accordance with subdivision 9 of § 62.1-44.15:28[.]” § 62.1-44.15:27 H of the Code of Virginia. Localities do not have to embed the fee schedule in their ordinances; they could include the CPI adjustment or reference the fees DEQ will be required to provide by January 1 of each year in accordance with 9VAC25-875-1375 A.
7	K.Settle	The proposed fee increases are out of step with the Construction General Permit and MS4 permit issuance. The Department should propose and then implement fee increases at the time of permit issuance.	Please see the response to Comments 5 and 6.

		The proposed increases, if implemented, will require municipalities to update ordinances that were just revised as part of the ESC and SWM consolidation effort less than 18 months ago. Additional ordinance revisions to incorporate the newly proposed fee schedule mid-permit cycle will be a hardship to local municipal staff. The fee increases should not be evaluated at the current time and should be implemented as part of the next permit issuance.																																																		
8	City of Richmond	Based on the program improvements efficiencies, the need for planning to ensure economic development projects are not impacted, and to ensure that utilities have adequate time to prepare for rate changes, the City of Richmond is recommending that the Virginia Department of Environmental Quality phase the changes over multiple years, a proposed implementation schedule is below for consideration. Proposed Five-Year Implementation Schedule* <table><thead><tr><th><u>Year</u></th><th><u>/</u></th><th><u>Annual ↑</u></th><th><u>/</u></th><th><u>Cumulative ↑</u></th><th><u>/</u></th><th><u>MS4 Fee</u></th></tr></thead><tbody><tr><td>Current</td><td>/</td><td>---</td><td>/</td><td>---</td><td>/</td><td>\$6,000</td></tr><tr><td>Year 1</td><td>/</td><td>15%</td><td>/</td><td>15%</td><td>/</td><td>\$6,900</td></tr><tr><td>Year 2</td><td>/</td><td>15%</td><td>/</td><td>32.25%</td><td>/</td><td>\$7,935</td></tr><tr><td>Year 3</td><td>/</td><td>10%</td><td>/</td><td>45.48%</td><td>/</td><td>\$8,729</td></tr><tr><td>Year 4</td><td>/</td><td>10%</td><td>/</td><td>60.02%</td><td>/</td><td>\$9,601</td></tr><tr><td>Year 5</td><td>/</td><td>Adj.</td><td>/</td><td>60-62%</td><td>/</td><td>Final Adj.</td></tr></tbody></table> The schedule achieves the mandated cost recovery while allowing gradual adjustment of municipal budgets and rate structures.	<u>Year</u>	<u>/</u>	<u>Annual ↑</u>	<u>/</u>	<u>Cumulative ↑</u>	<u>/</u>	<u>MS4 Fee</u>	Current	/	---	/	---	/	\$6,000	Year 1	/	15%	/	15%	/	\$6,900	Year 2	/	15%	/	32.25%	/	\$7,935	Year 3	/	10%	/	45.48%	/	\$8,729	Year 4	/	10%	/	60.02%	/	\$9,601	Year 5	/	Adj.	/	60-62%	/	Final Adj.	Please see the response to Comment 5. * DEQ abbreviated some of the text in the Proposed Five-Year Implementation Schedule to show the comment in this form. The abbreviations are: ↑ = “increase” MS4 Fee = “MS4 Maintenance Fee” Adj. = “Adjustment”
<u>Year</u>	<u>/</u>	<u>Annual ↑</u>	<u>/</u>	<u>Cumulative ↑</u>	<u>/</u>	<u>MS4 Fee</u>																																														
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Year 5	/	Adj.	/	60-62%	/	Final Adj.																																														
Fee Calculation based on CPI, 9VAC25-875 1375																																																				
9	Hampton Roads Planning District Commission (HRPDC)	Fee Adjustments Should Not Be Based on the CPI. It is inappropriate to recalculate the statewide permit fee schedule based on the CPI. The CPI is too variable from year-to-year, which creates uncertainty in budgeting processes for MS4 permit fees and for local projects covered under CGPs. Localities need to know what their MS4 permit maintenance fees will be a year in advance to avoid budget amendments. Additionally, the proposed text does not indicate whether	DEQ disagrees with the commenters’ concerns about using the CPI for fee adjustments. CPI data is readily available and widely used to adjust costs and fees for numerous programs, organizations, and entities nationwide. Using a CPI adjustment																																																	

		DEQ would publish a new permit fee schedule each year. There are concerns that rather than establish a statewide permit fee schedule, each locality could end up with slightly different results using the CPI calculation.	benefits localities and the agency by providing a mechanism to adjust fee revenue so that it keeps up with program costs, including salaries, training, and materials that change, generally increasing, over time. Further, using a CPI adjustment is consistent with other DEQ permit programs, including the VPDES and VPA permit programs (see 9VAC25-20-142), permits for stationary sources of air pollution (see 9VAC5-80-2282), and landfills (see 9VAC20-90-114). Please see the response to Comment 5 about changes in the final amendments that address concerns about advance notice of fees and having the department calculate fees by January 1 to ensure consistency among programs statewide. In addition, the effective date of the amendments shall be no earlier than July 1, 2026.
10	Virginia Association for Commercial Real Estate (VACRE) and the Home Builders Association of Virginia (HBAV)	We do, however, share the concerns expressed by the Hampton Roads Sanitation District (HRSD) regarding automatic annual fee adjustments tied to the Consumer Price Index (CPI). Codifying automatic CPI-based adjustments could limit future agency and stakeholder review and may increase fees at a pace that exceeds actual program needs. The VACRE and HBAV respectfully request the Department consider alternatives or provide for periodic reassessments of whether the fee structure continues to meet program needs and whether the CPI adjustment produces appropriate results.	Please see the response to Comments 5 and 9.

		Our members would hope this significant increase could support the program for a reasonable period of time at which time the facts and dollars generated can be considered and reevaluated.	
Amount of Fee Increase, 9VAC25 875 1420			
11	City of Norfolk	While the city understands that there has not been a fee increase from DEQ for 15 years, the City of Norfolk opposes this large fee increase. DEQ has proposed a nearly 60% increase in MS4 permit administrative fees. The city is currently required to pay a \$16,000 application fee in addition to \$8,800 annual administrative fees for a 5-year MS4 permit totaling \$60,000. The city objects to the proposed increase of the permit fees. Under the new proposed fee schedule, the city will pay more than \$100,000. This funding comes directly from the stormwater utility collected from the fiscally challenged Norfolk residents to improve water quality, ensure regulatory compliance, address flooding, and perform maintenance on essential stormwater infrastructure. The more money that goes to the state in administrative fees, the less money that the city may use to complete essential work on the system that directly impacts the residents. Therefore, the city requests an annual cost breakdown demonstrating how the current and proposed fees support the MS4 program, specifically. This breakdown would ensure the fees are being used to support the MS4 programs and not to subsidize the other statewide regulatory programs that should be funded by the General Fund. The city also objects to the proposed increase to the construction general permit fees that would cause budgetary constraints for the builder communities that the city seeks to attract. The City of Norfolk prides itself on being a forward-thinking community with builder friendly initiatives and fears that the substantial increase in fees may cause hardships to the building community. This	DEQ's MS4 program and the MS4 programs localities, universities, VDOT, federal entities, and others implement have many requirements from the stormwater program and requirements for both stormwater programs and MS4 programs are contained in the Virginia Erosion and Stormwater Management Regulations, 9VAC25-875. Because of the common requirements, some DEQ staff support both programs and funds from both support the programs. Accordingly, the fee increase is being applied equally to both MS4 permits and VPDES construction permits. With respect to the fees the City of Norfolk cites for its MS4 Individual (Large and Medium) permit, the \$16,000 fee for new permit issuance (9VAC25-875-1380) is a one-time fee that Norfolk has already paid. It is not recurring. The City will be billed annually for the maintenance fee which will increase from

		increase for developers will also increase the cost of building during a time when the cost of construction and materials are ever increasing. The city also fears that this could cause additional burdens on developers who are striving to build affordable housing in the communities. Developers are already challenged financially in meeting environmental regulatory mandates. The city does not believe DEQ should further add to this financial burden with additional administrative fees.	\$8,800 to \$14,100, plus the CPI adjustment. Over the course of the next five years, the City will be billed an additional \$26,500 to roughly \$32,000 (depending on inflation). DEQ appreciates this is a significant amount, but it is not as extreme as suggested in the comment. Further, the City will receive additional revenue from fee increases in the stormwater program. Regarding the impact City-owned projects and developers, the fee increases are effective statewide. DEQ is not targeting any specific sector or group of developers. The additional fee revenue benefits developers through improved permitting process, updated guidance, training programs, and more onsite presence. The HBAV and VACRE, who were represented on the RAP, support the General Assembly's directive to improve cost recovery through permit fees. See Comment 3. No changes have been made to the regulation in response to this comment.
12	Virginia Municipal Stormwater Association (VAMSA)	Proposed Fee Increases Are Significantly Higher Than Expected VAMSA supports DEQ having adequate funding to administer the State's stormwater program and we appreciate DEQ's diligent oversight of stormwater management, which benefits the natural environment and local citizens. However, we are disappointed at the level of increase requested given our	Please see the response to Comment 11. The statement, "as provided below," at the end of this comment refers to the suggested regulatory text summarized in

		specific understanding of fee revenues from the 2021 General Assembly Session. During the 2021 Session, the General Assembly directed DEQ to increase stormwater permit fees to 60% to 62% of direct costs to oversee the program and to avoid DEQ staff layoffs; the General Assembly also provided approximately \$1.1 Million in general funds to ensure that the program would remain financially viable. VAMSA's understanding was that the MS4 increase would be very modest because it was explained to VAMSA during the legislative process that MS4s were already paying 54.6% of program costs. Therefore, a maximum increase of 9.8% would bring the MS4 fees up to 60% of program costs. The 2024 General Assembly included similar language in the budget bill requiring the State Water Control Board (Board) to increase fees to cover 60% to 62% of DEQ's costs for CGP and MS4 permits. DEQ issued the NOIRA in this regulatory proceeding on September 9, 2024. After meeting with a Regulatory Advisory Panel (RAP) in February, DEQ subsequently proposed increasing the MS4 permit maintenance fees between 60-60.23%, CGP permit fees between 49.18-60%, and CGP permit maintenance fees between 60-62.5%. VAMSA acknowledges it has been more than 15 years since fees were increased. That said, it will be challenging for MS4 localities to explain an approximate 60% increase in fees to local leadership and other governing entities when other local fees (for example, local utility fees) rarely, if ever, increase at this rate. Given this, VAMSA requests that DEQ make other changes to the Proposed Fee Regulations to make these changes more palatable, as provided below.	Comment 5 above. Please see Comment 5 regarding the suggested regulatory text.
Fee Allocation, 9VAC25 875 1360 B			
13	City of Norfolk	DEQ has proposed to increase their portion of the permit fees from 28% to 30% from the VESMP Authority for program oversight. The city objects to this increase. The city completes site plan reviews, construction inspections, permit compliance reviews, and	DEQ calculated the fee increase that would be required to recover 60% to 62% of program costs, based on revenues and

		post-construction inspections for the life of the BMPs. The state issues the permit and provides minor oversight of the construction sites. Again, the city would request a cost breakdown to show how 28% is used and how the 30% will be used to fund the administrative oversight of the local VESMP authority programs. This breakdown will ensure that the local authority fees are not subsidizing the non-VESMP localities programs. Those localities chose to opt-out of the program and are not required to take on any of the financial burden of administering those programs, relying solely on the state to fulfill this task. Therefore, the non-VESMP authority localities and contractors who develop in those localities need to fund the full expense of DEQ's portion of the programs.	expenditures from fiscal year 2024, using both the current 28% from VESMP authorities, and 30%, the limit allowed in the Virginia Erosion and Stormwater Management Act (§ 62.1-44.15:28 9 a of the Code of Virginia). At 30%, DEQ receives more fee revenue from VESMP authorities, therefore the adjusted fees can be lower than they would be if DEQ received a lower percentage from VESMP authorities. In other words, if the Department expects to receive \$300 from a hypothetical permit fee, at 28%, the hypothetical permit fee would need to be \$1,071; at 30%, the hypothetical permit fee would be \$1,000. Lower fees benefit any entity that needs permit coverage, including local governments. Further, VESMP authorities will receive additional revenue from the overall fee increases, more than offsetting the additional 2% that they will provide to DEQ. No changes have been made to the regulation in response to this comment
14	City of Richmond	The proposed regulation also modifies the revenue-sharing formula for VESMP authorities. DEQ's portion increases from 28% to 30%, reducing VESMP Authorities' retention from 72% to 70% of collected fees. The City of Richmond does not support reducing the VESMP Authorities' portion, many of these VESMP Authorities programs are operating on tight budgets, similar to the issues experienced by DEQ, and every	Please see the response to Comment 13.

		dollar taken from these programs has a significant impact at the local level. With additional CPI adjustments in the future, the adjustment to the revenue-sharing formula may not be needed to cover program cost. This is especially true considering the program efficiencies gained by DEQ in recent years. It is recommended that the 2% remain allocated to the VESMP Authorities to ensure the programs remain highly effective at the local level, if additional revenue is needed, it is recommended that it be incorporated into year 5 of the above proposed implementation schedule to minimize impact to the regulated community as much as possible.	
Fee Rates for State Subcontractors, 9VAC25-875-1410			
15	Kristin Carter, UVA on behalf of AS&S – Organization of Eight Public Colleges/Universities	I am writing on behalf of a group of annual standards and specifications (AS&S) holders affiliated with Virginia's public colleges and universities. Collectively, we have a strong interest in this action, particularly the fees associated with the construction general permit (CGP), since our schools are all state agencies with active construction programs. The lower fee schedule is not currently provided to the private contractors working on behalf of state agencies with board approved AS&S. As a result, state agencies are indirectly paying these higher fees as the contractors pass along these costs directly to our schools. We believe that since these contractors are working directly on behalf of a state agency with a board approved AS&S, the lower fee should be applicable to them. The undersigned schools require the general contractor or a member of the construction team to hold the CGP coverage since they contractually control and are responsible for the activity that occurs within the limits of disturbance. The CGP registration process includes submittal of a signed AS&S Entity Information Sheet that clearly links the private contractor's registration statement to the corresponding state agency. The level of effort for DEQ's oversight of construction activity on state property covered by AS&S is no different whether the AS&S entity themselves or their private contractor is the permit holder. We believe this change in invoicing could simply be addressed through different	These comments were originally submitted in October 2021 in response to the NOIRA DEQ issued for 9VAC25-870. Because Chapter 870 was repealed on July 1, 2024, when 9VAC25-875 became effective, DEQ issued a new NOIRA for this regulatory action. The commenter did not update the comments to reflect changes between 9VAC25-870 and 9VAC25-875. However, the concerns expressed in 2021 remain the same. DEQ acknowledges the commenter's concerns about the fees that contractors, who work on projects for entities that have approved standards and specifications (S&S), pay if they, instead of the S&S holder, seek coverage under the CGP. If state agencies get CGP coverage, provide oversight of their contractors, and

		implementation practices by DEQ staff. If you feel that modifying the regulatory text is necessary to implement this change, we propose the following text addition [<i>which is underlined</i>]: Within 9VAC25-870-820: "The following fees apply, on or after July 1, 2014, to coverage under the General Permit for Discharges of Stormwater from Construction Activities issued by the board for a state or federal agency that has annual standards and specifications approved by the board <u>or contractors working on behalf of such state or federal agency.</u>" Within 9VAC25-870-825: "No modification fee shall be required for the General Permit for Discharges of Stormwater from Construction Activities for a state or federal agency that is administering a project in accordance with approved annual standards and specifications <u>or contractors working on their behalf</u> but shall apply to all other state or federal agency projects." Within 9VAC25-870-830: "No maintenance fee shall be required for the General Permit for Discharges of Stormwater from Construction Activities for a state or federal agency that is administering a project in accordance with approved annual standards and specifications <u>or contractors working on their behalf</u> but shall apply to all other state or federal agency projects."	oversee work done within the scope of approved S&S, they pay the reduced fees specified in 9VAC25-875-1400 A. Because the requested objective of paying reduced fees is already an alternative for state agencies that either conduct land-disturbing activities under approved S&S themselves or obtain CGP coverage for their contractors to conduct land-disturbing activities for the state agencies under provisions established pursuant to § 62.1-44.15:27 D, no changes have been made to the regulation in response to this comment.
Maintenance Fee Exemptions for MS4 Permits, 9VAC25-875-890			
16	David Ward	Clarification is needed for the following code concerning annual permit maintenance fees assessed to a VPDES facility issued a general permit. Chapter 890. Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) 9VAC25-20-50. <i>B.1 Exemptions below – to whom does this apply?</i> <i>Section B. 1 B. No permit maintenance fees will be assessed to:</i> <i>1. VPDES and VPA facilities operating under a general permit.</i> Part VII. Virginia Pollutant Discharge Elimination System (VPDES) Permits	DEQ acknowledges the commenter's request for clarification about annual permit maintenance fees for MS4s. However, 9VAC25-20-50 B 1 is not applicable because well-established rules of statutory construction in Virginia say that a specific regulation or statute prevails over a conflicting general one. 9VAC25-875-1420 establishes a \$3,000 annual maintenance fee for the MS4 General Permit (Small).

	Article 1; Definitions 9VAC25-875-850. Definitions. <i>"Facility or activity" means any VPDES point source or treatment works treating domestic sewage or any other facility or activity, including land or appurtenances thereto, that is subject to regulation under the VPDES program.</i> <i>Facilities designated as MS4 Operators are required to obtain an MS4 General Permit. The MS4 General Permit is derived from the EPA NPDES and also State VPDES Program. MS4s are VPDES Point Source facilities meeting the definition of "Facility and activity" in 9VAC25-875-850 above. These VPDES MS4 General Permits are issued pursuant to 9VAC25-890-40 not 9VAC25-875. 9VAC25-875 is only applicable to those localities electing to be a VESCP or VESMP, otherwise it is not entirely applicable.</i> Laws State Water Control Law authorizes DEQ to implement a variety of laws and regulations pertaining to water quality and water supply to improve and protect Virginia's streams, rivers, bays, wetlands and ground water for aquatic life, human health and other beneficial water use. The U.S. Environmental Protection Agency (EPA) under the federal Clean Water Act enables states to implement certain EPA responsibilities. EPA has authorized Virginia to issue National Pollutant Discharge Elimination System permits under the Virginia Pollutant Discharge Elimination System Permit (VPDES) Program. These permits carry the weight of federal and state laws and regulations, and are enforceable under state and federal authority. Regulations The State Water Control Board promulgates Virginia's water regulations, including permits, permit fees, ground water management areas, ground water withdrawals and petroleum storage tanks. A report on specific regulations can be obtained from the following link to the Legislative Information System database, for	Further, the Small MS4 General Permit Regulation, 9VAC25-890, clearly sets out the link between the general permit and the Virginia Erosion and Stormwater Management Regulation in the general permit ("Any MS4 operator whose registration statement is accepted by the department will receive coverage under the following general permit and shall comply with the requirements in this general permit and be <u>subject to all applicable requirements of the Virginia Erosion and Stormwater Management Regulation (9VAC25-875)</u> and the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulations (9VAC25-31)." 9VAC25-890-40 (emphasis added). No changes have been made to the regulation in response to this comment.

		each of the pertinent chapters listed in the Virginia Administrative Code. Summaries to federal requirements can be found at EPA water regulations.	
Other Comments			
17	VESM	Enforcement of VESM State Laws by Locality Ordinances The City of Virginia Beach has failed to enforce VESM locality ordinances subject to state laws concerning land disturbances over 2500 ft and has given itself unlawful exceptions related to a 13 acre wetlands project that is using a natural park on the Lynnhven (sic.) for a mitigation bank. The (sic.) activities there have violated state laws under VESM.	This comment is not related to the amendments that are part of this regulatory action.

Detail of Changes Made Since the Previous Stage

*List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

The final amendments to Chapter 875 contain (1) changes made in response to comments received during the 60-day public comment period, (2) corrections to the CPI adjustment, and (3) clarifications to DEQ's role as both a VESMP authority for state agencies and federal entities and entities with approved standards and specifications, and a VSMP authority for localities that have a Virginia Erosion and Sediment Control Program instead of a VESMP. None of the changes are substantive.

Current chapter-section number	New chapter-section number, if applicable	New requirement from previous stage	Updated new requirement since previous stage	Change, intent, rationale, and likely impact of updated requirements
9VAC25-873-1375 A		The Consumer Price Index is the Consumer Price Index for all-urban consumers (CPI-U) for the 12-month period ending on April 30 of the calendar year preceding the year the fee is due.	The Consumer Price Index, <u>as used for this adjustment, refers to the average</u> Consumer Price Index for all-urban consumers for the 12-month period ending on <u>June 30</u> of the calendar year preceding the year the fee is due... <u>The department shall calculate the</u>	The updated requirement adds clarifying language, "as used for this adjustment," and changes the end of the 12-month period to June 30 so that the adjustment uses the average CPI for the period that ends one year before the adjusted fees become effective. The last sentence of the subsection provides clarity

			<u>adjusted fees using the CPI by January 1 each year and the adjusted fees shall be effective beginning July 1 of the same year.</u>	to localities and the regulated community by specifying the department will calculate fee adjustments, when these will be done, by January 1, and when the adjustments will be effective, July 1. This addition addresses concerns stakeholders raised about notice of fee changes and ensuring fees are consistent statewide. The change also allows localities to estimate fees as much as 11 months in advance of their effective date. This benefits localities when developing budgets for the next fiscal year because they can use the June CPI data as soon as it is released.
9VAC25-873-1375 B		ΔCPI = the difference between CPI-U and 314.54, expressed as a proportion of 314.54 ... the unadjusted average CPI for all urban consumers for July 2024.	ΔCPI = the difference between CPI and <u>309.57</u>, expressed as a proportion of <u>309.57</u> ... the unadjusted <u>12-month</u> average CPI for all urban consumers for July <u>2023 through June 2024</u>.	Changed the CPI index value from 314.54, which was the value for the month of July 2024, to 309.57, which is a 12-month average CPI for the period July 1, 2023, through June 30, 2024. The 12-month average more accurately reflects the change in prices over the adjustment period. Using the 12-month average is consistent with other DEQ programs that use a CPI adjustment for fees (e.g., 9VAC25-20-142, 9VAC5-80-2282, 9VAC20-90-114). Updated equations and calculations to reflect the revised CPI.

9VAC25-875-1400		If the project is completely administered by the department such as may be the case for a state or federal project or projects covered by individual permits, the entire applicant fee shall be paid to the department	* If the project is completely administered by the department such as may be the case <u>where the department is the VSMP authority, the VESMP authority</u> for a state or federal project, or projects covered by individual permits, the entire applicant fee shall be paid to the department	The change clarifies that, consistent with § 62.1-44.15:28 9 of the Code of Virginia, the department receives the full permit fee when the department is the VSMP or VESMP authority for a land-disturbing activity. Where a locality is the VESMP authority, the locality is responsible for remitting 30% of the fee to the State Treasurer for deposit in the Virginia Stormwater Management Fund. The asterisk (*) links the information at the bottom of the table to the header in the third column, clarifying an omission in Chapter 875.
9VAC25-875-1410		If the permit modifications result in changes to stormwater management plans that require additional review by the VESMP authority, such reviews shall be subject to the fees set out in this section... These fees shall only be effective when assessed by a VESMP authority, including the department when acting in that capacity, that has been approved by the department...	If the permit modifications result in changes to stormwater management plans that require additional review by the VESMP authority <u>or the department as the VSMP or VESMP authority</u> , such reviews shall be subject to the fees set out in this section... These fees shall only be effective when assessed by a VESMP authority <u>or the department as the VSMP or VESMP authority</u> ...	Pursuant to § 62.1-44.15:27 B of the Code of Virginia, the department serves as the VSMP authority for localities that do not operate a regulated MS4 and choose not to adopt and administer a VESMP. The existing regulatory language only acknowledges the department as a VESMP authority. The changes clarify that the department may serve as either a VSMP or VESMP authority and state that the fees are effective when the department serves in either role. This clarifies an omission in Chapter 875.

9VAC25-875-1420		... these fees shall apply until the permit coverage is terminated and shall only be effective when assessed by a VESMP authority, including the department when acting in that capacity, that has been approved by the department...	... these fees shall apply until the permit coverage is terminated and shall only be effective when assessed by a VESMP authority <u>or the department as the VSMP or VESMP authority...</u>	Pursuant to § 62.1-44.15:27 B of the Code of Virginia, the department serves as the VSMP authority for localities that do not operate a regulated MS4 and choose not to adopt and administer a VESMP. The existing regulatory language only acknowledges the department as a VESMP authority. The changes clarify that the department may serve as either a VSMP or VESMP authority and state that the fees are effective when the department serves in either role. This clarifies an omission in Chapter 875.

Detail of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Changes to Existing VAC Chapter(s)

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of updated requirements
9VAC25-875-1360 B		...Pursuant to subdivision A 9 of § 62.1-44.15:28 of the Code of Virginia, whenever the department has authorized the administration of a VESMP by a VESMP authority, 28% of the total revenue generated by the statewide stormwater management fees collected in accordance with 9VAC25-875-1400 shall be remitted on a schedule determined by the department to the State Treasurer for deposit in the Virginia Stormwater Management Fund	The portion of the total permit fee paid to the department by local VESMP authorities pursuant to § 62.1-44.15:28 of the Code of Virginia is being increased from 28% to 30%. ...Pursuant to subdivision A 9 of § 62.1-44.15:28 of the Code of Virginia, whenever the department has authorized the administration of a VESMP by a VESMP authority, ~~28%~~ 30% of the total revenue generated by the statewide stormwater management fees ... If the VESMP authority waives or reduces any fee due in accordance

		unless otherwise collected electronically. If the VESMP authority waives or reduces any fee due in accordance with 9VAC25-875-1400, the VESMP authority shall remit the 28% portion that would be due to the Virginia Stormwater Management Fund if such fee were charged in full. Any fee increases established by the VESMP authority beyond the base fees established in this part shall not be subject to the fee distribution formula.	with 9VAC25-875-1400, the VESMP authority shall remit the ~~28%~~ <u>30%</u> portion that would be due to the Virginia Stormwater Management Fund ... Increasing the percentage of the fee VESMP authorities pay to the department from 28% to the statutory maximum, 30%, results in a lower overall fee increase in sections 9VAC25-875 1380, -1390, -1400, -1410, and -1420 for the department to cover the 60% to 62% of program costs required by the Budget Bill. In other words, if the Department expects to receive \$300 from a hypothetical permit fee, at 28%, the hypothetical permit fee would need to be \$1,071; at 30%, the hypothetical permit fee would be \$1,000.
	9VAC25-875 1375	None	The change adds a section that sets out the requirement to adjust fees annually based on changes to the Consumer Price Index (CPI), provides formulae to calculate the adjustment, and includes an example calculation. The annual adjustment factor provides a mechanism to ensure that fees keep pace with inflation and the department's costs to administer and enforce the erosion and stormwater management and MS4 programs, as required by Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly. <u>Adjusting fees on an annual basis is</u> consistent with other DEQ programs that use a CPI adjustment to maintain sufficient program revenue (e.g., 9VAC25-20-142, 9VAC5-80-2282, 9VAC20-90-114). 9VAC25-875-1375 consists of 4 subsections, A through D: Subsection A specifies that the department will calculate fees by January 1 each year and that the adjusted fees will become effective on July 1 of the same year. This clarifies the department will calculate the fee adjustments and provides at least 6-months notice before adjusted fees

			become effective, addressing concerns raised by stakeholders about their need to budget for future fee increases. Subsection B contains the formula the department will use to calculate fee adjustments and an example calculation. It also contains information about the CPI and specifies the time period that will be considered for each adjustment. Subsection C requires fees to be rounded to the nearest dollar. Subsection D ensures the fees are adjusted to remain within the limits specified in the budget bill and gives the agency director authority to take action to adjust fees if they will exceed 62% of program costs.
9VAC25-875-1380	9VAC25-875-1380 A	Fee schedules for municipal separate storm sewer system new permit issuance	Revised the permit fee schedule for MS4 new permit issuances to cover at least 60%, but no more than 62%, of the program costs. This regulatory amendment is necessary to conform the VESM Regulation to the Budget Bill which requires the fees to be set at a level not less than 60%, but not more than 62%, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's stormwater management permit program.
	9VAC25-875-1380 B	None	<u>B. The amount of the permit fee due for a MS4 permit for a specified year as required by subsection A of this section shall be calculated according to the formulae in 9VAC25-875-1375 B.</u> Added a reference to new subsection 9VAC25-875-1375 B. The annual adjustment factor provides a mechanism to ensure that fees keep pace with inflation and the department's costs to administer and enforce the MS4 and erosion and stormwater management programs, as required by the Budget Bill.

9VAC25-875-1390		Fee schedules for major modification of MS4 individual permits requested by the operator	Revised the permit fee schedule for major modifications of MS4 individual permits requested by the operator to cover at least 60%, but not more than 62%, of the program costs. This regulatory amendment is necessary to conform the VESM Regulation to the Budget Bill which requires the fees to be set at a level not less than 60%, but not more than 62%, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's stormwater management permit program.
9VAC25-875-1400		Fees for individual permit or coverage under the General Permit of Discharges of Stormwater from Construction Activities	Fees for individual permit or coverage under the General Permit of Discharges of Stormwater from Construction Activities The change corrects the section catchline.
9VAC25-875-1400	9VAC25-875-1400 A	Fees for individual permit or coverage under the General Permit of Discharges of Stormwater from Construction Activities	Replaced "of" with "or" in the second sentence to correctly state the Department or a VESMP authority approves coverage. Revised the permit fee schedule for individual permit or coverage under the General CGP to cover at least 60%, but not more than 62%, of the program costs. In addition, the portion of the total permit fee paid to the department by local VESMP authorities was increased from 28% to 30%, as allowed per § 62.1-44.15:28 of the Code of Virginia. Added a clarification to the note following the fee allotment table noting that the entire applicant fee shall be paid to the department "<u>where the department is the VSMP authority, the VESMP authority</u> for a state or federal project, or projects covered by individual permits..." This is consistent with § 62.1-44.15:28 9 and clarifies an omission in the section. This regulatory amendment is necessary to conform the VESM Regulation (9VAC25-875) to the Budget Bill, Item 363 J. Per the Budget Bill, the fees need to be set at level not

			less than 60%, not more than 62%, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's stormwater management permit program. The department's portion was raised from 28% to 30% as allowed by state code to reduce increasing the total fee but still provide the department with sufficient fee revenue to support the stormwater program operating costs.
	9VAC25-875 1400 B	None	<u>B. The amount of the permit fee due for a General VPDES Permit for Discharges of Stormwater from Construction Activities for a specified year as required by subsection A of this section shall be calculated according to the formulae in 9VAC25-875-1375 B.</u> Added a reference to new subsection 9VAC25-875-1375 B. The annual adjustment factor provides a mechanism to ensure that fees keep pace with the department's costs to administer and enforce the erosion and stormwater management program, as required by the Budget Bill.
9VAC25 875 1410		Fees for the modification or transfer of individual permits or of registration statements for the General VPDES Permit for Discharges of Stormwater from Construction Activities	Revised the permit fee schedule for the modification or transfer of individual permits or of registration statements for the CGP to cover at least 60%, but not more than 62%, of the program costs. Added "or the department as the VSMP or VESMP authority" in 2 places to clarify the department may serve as the VSMP or the VESMP authority. The existing regulatory language only acknowledges the department as a VESMP authority. Pursuant to § 62.1-44.15:27 B of the Code of Virginia, the department serves as the VSMP authority for localities that do not operate a regulated MS4 and choose not to adopt and administer a VESMP. This regulatory amendment is necessary to conform the VESM Regulation to the Budget Bill, Item 363 J. Per the Budget Bill, the fees need to be set at level not less than 60%, but

			not more than 62%, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's stormwater management permit program.
9VAC25-875-1420	9VAC25-875-1420 A	Permit maintenance fees	Revised the permit fee schedule for permit maintenance fees to cover at least 60%, but not more than 62%, of the program costs. Added "or the department as the VSMP or VESMP authority" to clarify the department may serve as the VSMP or the VESMP authority. The existing regulatory language only acknowledges the department as a VESMP authority. Pursuant to § 62.1-44.15:27 B of the Code of Virginia, the department serves as the VSMP authority for localities that do not operate a regulated MS4 and choose not to adopt and administer a VESMP. This regulatory amendment is necessary to conform the VESM Regulation to the Budget Bill, Item 363 J. Per the Budget Bill, the fees need to be set at level not less than 60%, not more than 62%, to sufficiently to cover expenses associated with all portions of the administration of the Commonwealth's stormwater management permit program.
	9VAC25-875-1420 B	None	<u>B. The amount of the annual permit maintenance fee due for a MS4 permit or permit for discharges of stormwater from construction activities for a specified year as required by subsection A of this section shall be calculated according to the formulae in 9VAC25-875-1375 B.</u> Added a reference to new subsection 9VAC25-875-1375 B. The annual adjustment factor provides a mechanism to ensure that fees keep pace with the department's costs to administer and enforce the erosion and stormwater management program, as required by the Budget Bill.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

Several fee schedule options were provided to the RAP for review and consideration, including one option to only raise fees in localities where the department administers the stormwater program. This was not determined to be the preferred approach as it was thought that this could lead to competitive disadvantages within those localities who do not operate a local program. Many small businesses are located in more rural localities where the department administers the stormwater program. Increasing the fees in those areas only would have a negative impact on these small businesses. The final regulation includes fee schedules that are set to be applied equally across the Commonwealth.

This analysis has been reported on the ORM Economic Impact Form in Table 1b and Table 4.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficient, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-875
VAC Chapter title(s)	Virginia Erosion and Stormwater Management Regulation
Action title	Amend the regulations to change the statewide permit fee schedule in accordance with Chapter 2 of the 2024 Special Session I Acts of Assembly
Date this document prepared	February 21, 2025; Revised November 6, 2025 – The changes between the proposed and final stages of the regulation do not impact the analysis in the form dated February 21, 2025.
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: Section 62.1-44.15:28 of the Code of Virginia (effective July 1, 2024) authorizes the State Water Control Board (Board) to adopt regulations that establish requirements for the effective control of soil erosion, sediment deposition, and stormwater, including nonagricultural runoff, that shall be met in any Virginia Erosion and Stormwater Management Program (VESMP) to prevent the unreasonable degradation of properties, stream channels, waters, and other natural resources; subsection 9 requires the Board's regulations to establish a statewide fee schedule to cover all costs associated with the implementation of a VESMP related to land-disturbing activities where permit coverage is required, and for land-disturbing activities where the Board serves as a VESMP authority or Virginia Stormwater Management Program (VSMP) authority. In addition, Item 363 J of the 2024-2026 budget, as introduced during the 2024 General Assembly Session in HB 6001 / SB 6001 and enacted in Chapter 2 of the 2024 Special Session I Acts of Assembly (Budget Bill), directs the State Water Control Board (Board) to amend the existing permit fee schedule such that the fees for the Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities and municipal storm sewer system (MS4) permits are set at an amount representing no less than 60 percent, not to exceed 62 percent, of the direct costs for the administration, compliance, and enforcement of such permits. Direct Costs: Based on Fiscal Year (FY) 2024 data, the current fee revenue collected from permit fees and applications only covers approximately 38-39% of the overall program costs. Therefore, an approximate 61% increase in all stormwater permit fees is needed to generate sufficient fee revenue to cover 60% to 62% of the stormwater program costs, as directed in the Budget Bill. The existing permit fee for owners to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (Construction General Permit or CGP) ranges from \$290 to \$9,600 based on the total acreage of land disturbance. The permit fee for owners to obtain coverage under an individual VPDES Permit for Discharges of Stormwater from Construction Activities permit is currently \$15,000. The proposed permit fee for new permittees to obtain cover under the CGP ranges from \$450 to \$14,300, and to obtain coverage under an individual permit is \$24,000. Proposed fees for modification, transfer, and annual maintenance would increase by approximately 61%.

	Likewise, the fee for new permit coverage under a MS4 permit would increase approximately 61% from \$4,000 for a general permit to \$6,000; from \$8,000 for an individual (small) permit to \$13,000; and from \$16,000 for an individual (large and medium) permit to \$25,000. Permit fees for major modifications of MS4 individual permits and annual maintenance fees for MS4 individual and general permits would also increase by approximately 61%. In order for the fee schedule to continue to cover inflationary costs associated with the administration, compliance, and enforcement of the stormwater program, the proposed amendments also include an annual adjustment based on the change in the Consumer Price Index for all urban consumers. Indirect Costs: There are no indirect costs of the proposed change. Direct Benefits: The stormwater management program is funded through the fees authorized pursuant to the Virginia Erosion and Stormwater Management (VESM) Regulation and is necessary to ensure land-disturbing activities and post-construction stormwater management in the Commonwealth do not result in excessive runoff, flooding, or other negative impacts on public health, water quality, and the environment. In addition to issuing permits, ensuring compliance, and enforcing state law and regulations, the Department uses program funds to: provide support and assistance to local VESMP authorities; develop guidance to assist local authorities and the regulated community with how to comply with state law and regulations; and operate as the program authority for state and federal projects, standards and specifications projects, and localities that chose to opt out of adopting a VESMP. The additional revenue generated by the increased permit fees will result in an enhanced statewide stormwater management program that will be properly funded and administered. Indirect Benefits: A sufficiently funded statewide stormwater program will result in improved compliance and consistency with the VESM Regulation and thus improved water quality in the Commonwealth of Virginia, which is essential to the health, safety, and welfare of Virginia’s citizens. The regulated community will also benefit from properly funded and staffed stormwater management programs.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) Based on the department's FY2024 stormwater program operating costs and revenue generated by permit and application fees, a 61% increase in permit fees for both the VPDES Permit for Discharges of Construction Activity and MS4 permits is needed to sufficiently cover 62% of the program costs.	(b) Unable to monetize direct and indirect benefits.
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	NA	
(5) Information Sources	NA	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: The regulatory amendments are in response to Chapter 2 (Budget Bill, Item 363 J) of the 2024 Special Session I Acts of Assembly. Direct Costs: The regulated community would continue to pay current permit fees established in regulation, resulting in an inadequately funded statewide stormwater management fund. Indirect Costs: There are no indirect costs to the department, local VESMP authorities, or the regulated community with retaining the status quo. Direct Benefits: There is no direct benefit to the department, local VESMP authorities, or the regulated community with retaining the status quo. Retaining the status quo would result in an inadequately funded statewide stormwater

	management fund, which would continue to require additional general funds to support the costs of operating the existing program. In addition, localities that operate a VESMP would also need to continue to supplement their stormwater program administration costs with additional local fees and/or general funds. Indirect Benefits: There is no indirect benefit to the department with retaining the regulation as currently written.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Unable to determine monetized direct or indirect costs associated with the status quo.	(b) None.
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	NA	
(5) Information Sources	NA	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: The department presented four different fee schedule options to the Regulatory Advisory Panel for discussion and consideration. The proposed amendments reflect feedback and recommendations from the Regulatory Advisory Panel. Direct Costs: The direct costs of all of the fee schedule options are an increase in overall permit fees. Indirect Costs: There are no indirect costs of the proposed change.

	Direct Benefits: The direct benefits are the same as outlined in Table 1a. Indirect Benefits: One option was investigated to only raise fees in localities where the department administers the stormwater program. This was not determined to be the preferred approach as members of the Regulatory Advisory Panel thought that this could lead to competitive disadvantages within those localities who do not operate a local program. Thus, the fee schedule has been set to be applied equally Commonwealth-wide.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Unable to monetize direct and indirect benefits.	(b) Unable to monetize direct and indirect benefits.
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	NA	
(5) Information Sources	NA	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: The regulations are not intended to have a disproportionate impact upon any locality. There are currently 93 localities throughout the Commonwealth of Virginia that operate a Virginia Erosion and Stormwater Management Program (VESMP). Other localities have adopted ordinances to have the department administer a stormwater management program within their jurisdiction. As such, the fees proposed by this action may be received by either a locality administering a VESMP or the department, as may be applicable. Fees are calculated to fund the costs of program administration; thus, no

	locality should bear a fiscal burden under either program administration scenario. Direct Costs: The increased revenue generated by the increased permit fees would also support the local VESMPs in the administration, compliance, and enforcement of the land-disturbing activities which require a CGP within their locality. There are currently 59 localities in the Commonwealth that have a MS4 permit. These localities would be directly affected by the proposed increase in MS4 permit fees. Indirect Costs: There are no indirect costs of the proposed change. Direct Benefits: The additional revenue generated by the increased permit fees will result in an enhanced statewide stormwater management program that will be properly funded and administered. The regulated community will also benefit from properly funded and staffed stormwater management programs throughout the Commonwealth, as well as more consistency between the administration of the statewide stormwater program and the administration of local VESMPs. Direct benefits are outlined in Table 1a. Indirect Benefits: A sufficiently funded statewide stormwater program will result in improved compliance and consistency with the VESMP Regulation and thus improved water quality in the Commonwealth of Virginia, which is essential to the health, safety, and welfare of Virginia's citizens.				
(2) Present Monetized Values	<table> <tr> <th>Direct & Indirect Costs</th><th>Direct & Indirect Benefits</th></tr> <tr> <td>(a) Unable to monetize the direct and indirect costs. The increased CGP permit fees would result in revenue for 93 local VESMP authorities; however, the increased MS4 permit fees would result in an increased cost to the 59 localities that have MS4 permits and are also VESMP authorities.</td><td>(b) Unable to monetize direct and indirect benefits.</td></tr> </table>	Direct & Indirect Costs	Direct & Indirect Benefits	(a) Unable to monetize the direct and indirect costs. The increased CGP permit fees would result in revenue for 93 local VESMP authorities; however, the increased MS4 permit fees would result in an increased cost to the 59 localities that have MS4 permits and are also VESMP authorities.	(b) Unable to monetize direct and indirect benefits.
Direct & Indirect Costs	Direct & Indirect Benefits				
(a) Unable to monetize the direct and indirect costs. The increased CGP permit fees would result in revenue for 93 local VESMP authorities; however, the increased MS4 permit fees would result in an increased cost to the 59 localities that have MS4 permits and are also VESMP authorities.	(b) Unable to monetize direct and indirect benefits.				

(3) Other Costs & Benefits (Non-Monetized)	NA
(4) Assistance	NA
(5) Information Sources	NA

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: There are no direct costs that impact families associated with the proposed changes. Indirect Costs: There are no indirect costs that impact families associated with the proposed changes. Direct Benefits: There are no direct benefits that impact families associated with the proposed changes. Indirect Benefits: The indirect benefits for families associated with the proposed changes is the improved local water quality that may result from improved pollutant discharge controls.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) NA	(b) Unable to monetize direct and indirect benefits.

(3) Other Costs & Benefits (Non-Monetized)	NA
(4) Information Sources	NA

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	Small businesses would have the same impact as described in Table 1a. Direct Costs: The existing permit fee for owners to obtain coverage under the Construction General Permit ranges from \$290 to \$9,600 based on the total acreage of land disturbance. The permit fee for owners to obtain coverage under an individual VPDES Permit for Discharges of Stormwater from Construction Activities permit is currently \$15,000. The proposed permit fee for new permittees to obtain cover under the CGP ranges from \$450 to \$14,300, and to obtain coverage under an individual permit is \$24,000. Proposed fees for modification, transfer, and annual maintenance increase by approximately 61%. Indirect Costs: There are no indirect costs of the proposed change. Direct Benefits: The stormwater management program is funded through the fees authorized pursuant to the VESM Regulation and is necessary to address water quality within the Commonwealth. The addition revenue generated by the increased permit fees will result in an enhanced statewide stormwater management program that will be properly funded and administered. Direct benefits are outlined in Table 1a. Indirect Benefits: A sufficiently funded statewide stormwater program will result in improved compliance and consistency with the VESM Regulation and thus improved water quality in the Commonwealth of Virginia, which is essential to the health, safety, and welfare of Virginia's citizens. The

	regulated community will also benefit from properly funded and staffed stormwater management programs.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See Table 1a.	(b) See Table 1a.
(3) Other Costs & Benefits (Non-Monetized)	NA	
(4) Alternatives	NA	
(5) Information Sources	NA	

Changes to Number of Regulatory Requirements**Table 5: Regulatory Reduction**

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-875-1360	(M/A):	2	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	0	0	0
	(D/R):	0	0	0	0
9VAC25-875-1375	(M/A):	0	0	0	0
	(D/A):	0	1 ^A	0	+1
	(M/R):	0	0 ^A	0	0
	(D/R):	0	0	0	0
9VAC25-875-1380	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	1	0	0	0 ^B
	(D/R):	0	0	0	0
9VAC25-875-1390	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-875-1400	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	3	0	0	0 ^B
	(D/R):	0	0	0	0
9VAC25-875-1410	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-875-1420	(M/A):	0	0	0	0
	(D/A):	0	0	0	0

	(M/R):	1	0	0	0 ^B
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): 0
					(D/A): +1
					(M/R): 0
					(D/R): 0

^A The fee adjustment set out in 9VAC25-875-1375 is necessary to ensure that fee revenue continues to meet the requirement in the Budget Bill (60% to 62% of program costs) as costs change over time. The section specifies how fees will be adjusted each year to account for inflation, based on changes in the Consumer Price Index. It does not create additional requirements for permittees or permit applicants – each continues to be required to pay a new permit fee, or annual maintenance fee for an existing permit. The new requirement for the agency, requiring the department to calculate the adjusted fees by January 1, is a benefit for localities and the regulated community because both will have notice of changes at least 6 months before they become effective. The department added this requirement in response to comments received during the public comment period on the proposed stage.

^B 9VAC25-875-1380, 9VAC25-875-1400, and 9VAC25-875-1420 each contains a new subsection, B, which directs applicants for new permits and existing permit holders to 9VAC25-875-1375. The new subsection does not add-to or change the primary requirement to pay a fee for a new permit, or an annual permit maintenance fee.

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-875-1380	Fee schedules for MS4 new permit issuance	\$4,000 to \$16,000	\$6,500 to \$25,000	Approximately 61% increase
9VAC25-875-1390	Fee schedules for major modification of	\$2,5000 to \$5,000	\$4,000 to \$8,000	Approximately 61% increase

	MS4 individual permits			
9VAC25-875 1400	Fees for individual coverage under the CGP	\$290 to \$15,000	\$450 to \$24,000	Approximately 61% increase
9VAC25-875 1410	Fees for modification or transfer of CGPs	\$20 to \$5,000	\$30 to \$8,000	Approximately 61% increase
9VAC25-875 1420	Permit maintenance fees	\$50 to \$8,800	\$80 to \$14,100	Approximately 61% increase

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA	NA	NA

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
NA			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB C



Commonwealth of Virginia
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

Memorandum

TO: State Water Control Board Members

FROM: Elizabeth McKercher
Director, Water Planning Division

A handwritten signature in black ink, appearing to read "Elizabeth McKercher".

DATE: October 28, 2025

RE: Approval of amendment to the Water Quality Management Planning Regulation (9VAC25-720) to include 24 wasteload allocations from four Total Maximum Daily Load reports.

Executive Summary

Staff will ask the State Water Control Board (the Board) to approve amendments to Virginia's Water Quality Management Planning regulation (9VAC25-720) to add wasteload allocations (WLAs) from four Total Maximum Daily Load (TMDL) reports. As of July 1, 2014, TMDL WLAs must receive Board approval prior to U.S. Environmental Protection Agency (EPA) approval of TMDL reports due to amendments outlined in § 2.2-4006 A 14 of the Code of Virginia. The TMDL reports were developed using public engagement, consistent with DEQ's "Public Participation Procedures for Water Quality Management Planning" guidance GM-23-2005. The TMDL reports have been submitted to EPA for review.

I. Background

Under the Clean Water Act (CWA) and the EPA Water Quality Management and Planning Regulation (40 CFR §130), states are required to identify water bodies that violate water quality standards and list them on the state's 303(d) List of Impaired Waters. This list includes and designates as "impaired" all waters that fail to meet the standards established by the CWA. Additionally, the CWA and EPA regulations require the development of a TMDL for impaired waters. The Code of Virginia, (§ 62.1-44.19:7 C) also requires the Board to develop TMDLs for impaired waters. A TMDL is a determination of the amount of a specific pollutant that a water body can receive without violating water quality standards. A TMDL must identify all pollutant sources and calculate the pollutant load reductions necessary from each source to achieve compliance with water quality standards.

Every TMDL consists of three basic components. They are the point source component called the WLA, the nonpoint source component called the load allocation (LA), and the margin of safety component (MOS). The TMDL is equal to the sum of these three components.

The EPA's Water Quality Management and Planning Regulation 40 CFR §130.7(d)(2) directs the states to incorporate TMDLs in the state's Water Quality Management Plan. Also, EPA's Water Quality Management and Planning Regulation 40 CFR §122.44(d)(1)(vii)(B) requires that new or reissued Virginia Pollution Discharge Elimination System (VPDES) permits be consistent with the TMDL WLA. Consequently, the WLA component of the TMDL will be implemented through the requirements specified in the VPDES permits, for example through numeric water quality-based effluent limitations or in certain cases best management practices (BMPs). Virginia implements the LA component using existing voluntary, incentive, and regulatory programs such as the Virginia Agricultural Cost-Share Program and Federal Section 319(h) TMDL

implementation funding. Specific management actions addressing the LA component are compiled in a TMDL implementation plan.

II. Proposed Actions

Staff will propose the following Board actions:

Amendment of Water Quality Management Planning Regulation to incorporate 24 new WLAs (Attachment II)

Attachment I includes specific portions of the TMDL reports in which DEQ developed the WLA's including the TMDL itself and all the TMDL allocation components: the pollutant reduction scenarios, implementation strategies, reasonable assurance that the TMDL can be implemented, and a summary of the public participation process.

1. The TMDL Report titled "Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia" proposes sediment reductions for Crooked Run, Stony Creek and Pughs Run and provides sediment WLAs of 12,291 lb/yr, 431,000 lb/yr, and 22,960 lb/yr, respectively.
2. The TMDL Report titled "Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia." proposes sediment reductions for Black Creek and Hat Creek and provides sediment WLAs of 30,730 lb/yr and 45,461 lb/yr, respectively. This TMDL report also proposes phosphorus reductions in Black Creek and provides a total phosphorus WLA of 712 lb/yr.
3. The TMDL Report titled "Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond" proposes sediment and phosphorus reductions for several streams. Specifically, it provides sediment WLAs of 319,359 lb/yr for Deep Run, 140,916 lb/yr for Stony Run, 32,745 lb/yr for Stony Run UT, 38,769 lb/yr for Dover Creek, 372,238 lb/yr for Upham Brook, 363,179 lb/yr for North Run, and 88,183 lb/yr for Jordans Branch. This TMDL report also proposes total phosphorus WLAs of 121.6 lb/yr for Stony Run, 41.6 lb/yr for Dover Creek, and 2,693.8 lb/yr for Upham Brook.
4. The TMDL report titled "Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties" proposes sediment reductions for several streams. The study resulted in removing existing TMDL WLAs for Middle Fork Holston, Hall/Byers Creeks, Hutton Creek, and Cedar Creek. These WLAs were developed in two previous TMDL studies from 2003 and 2009. The updated TMDL addresses the continued benthic impairments, adjusts for future growth, accounts for the installation of Best Management Practices in the watersheds, and the expansion of a Wastewater Treatment Plant. New WLA's are being added to replace the four removed. Hall/Byers is being replaced with WLAs for Tattle Branch, Hall Creek, and Byers Creek. Middle Fork Holston is being replaced with WLAs for Upper Middle Fork Holston River, Lower Middle Fork Holston (upstream of Route 91), Lower Middle Fork Holston (Route 91 to Edmondson Dam). Hutton Creek WLA is being replaced by the Lower Middle Fork Holston (upstream of Route 91). The Cedar Creek WLA is being revised. A new WLA is added to reduce sediment discharges into the impaired section of Greenway Creek.

Specifically, the TMDL study provides sediment WLAs of 29,851 lb/yr for Tattle Branch, 133,680 lb/yr for Hall Creek, 36,679 lb/yr for Byers Creek, 12,926 lb/yr for Cedar Creek, 53,403 lb/yr for the Upper Middle Fork Holston River, 1,464,062 lb/yr for the Lower Middle Fork Holston upstream of Route 91, 46,798 lb/yr for Greenway Creek, and 963,597 lb/yr for the Lower Middle Fork Holston from Route 91 to Edmondson Dam.

The process for amending the Water Quality Management Planning Regulation is specified in § 2.2-4006 A 14 and §2 .2-4006 B of the Code of Virginia. The amendments consist of adding 24 new WLAs that are included in the TMDL reports, which have been submitted for review by EPA. Staff will therefore propose

that the Board, in accordance with § 2.2-4006 A 14 and § 2.2-4006 B of the Code of Virginia, adopt the amendments to the Water Quality Management Planning Regulation (9 VAC 25-720) as provided in Attachment II. The associated Virginia Regulatory Town Hall document is included as Attachment III.

III. Public Participation

The TMDL reports listed in Attachment I were developed in accordance with Federal Regulations (40 CFR §130.7). The TMDL reports were subject to the public participation process contained in § 2.2-4006 A 14 of the Code of Virginia and DEQ's "Public Participation Procedures for Water Quality Management Planning" guidance GM23-2005. TMDL reports are also made available to the public on DEQ's web site under <https://www.deq.virginia.gov/water/water-quality/total-maximum-daily-load-development/draft-tmdls>

The Black Creek and Hat Creek TMDL study included an initial public meeting held on January 25, 2023, with 32 attendees and no comments received during the 30-day public comment period. Additionally, six Community Engagement meetings were held on March 1, 2023; May 17, 2023; January 10, 2024; February 27, 2024; September 9, 2024; and December 3, 2024, which had 24, 18, 18, 9, 11, and 12 attendees, respectively. A final public meeting was held on March 5, 2025, with 13 attendees and no comments received during the public comment period.

The Crooked Run, Stony Creek, and Pughs Run TMDL study included an initial public meeting held on June 18, 2024, with 40 attendees and no comments received during the 30-day public comment period. Additionally, three Community Engagement meetings were held on August 19, 2024; December 16, 2024; and February 4, 2025, which had 17, 13, and 18 attendees, respectively. A final public meeting was held on April 9, 2025, with 34 attendees and no comments received during the public comment period.

The Deep Run, Dover Creek, and Upham Brook TMDL study included an initial public meeting held on May 2, 2023, with 16 attendees and no comments received during the 30-day public comment period. Additionally, three Community Engagement meetings were held on July 10, 2023; February 29, 2024; and February 21, 2025, which had 24, 24, and 18 attendees, respectively. A public meeting was held on May 8, 2025 with 16 attendees and no comments received during the public comment period. A third public meeting was held to present changes to the TMDL report on August 26, 2025 with 17 attendees and no comments were received during the public comment period.

The Middle Fork Holston and Tributaries TMDL study included an initial public meeting held on December 2, 2022, with 7 attendees and no comments received during the 30-day public comment period. Additionally, two Technical Advisory Committee meetings were held on September 8, 2022, and July 11, 2023, which had 15 and 21 attendees, respectively. A final public meeting was held on October 19, 2023, with 12 attendees and no comments received during the public comment period. To solicit comments on revisions to the study, two 30-day comment periods were held; one ending June 13, 2024 and a second ending September 29, 2025. No comments were received during either comment period.

The proposed final amendments to the Water Quality Management Planning Regulation are exempt from the provisions of Article II of the Administrative Process Act. The TMDL WLAs listed in Attachment II were published in the Virginia Register (Volume 42, Issue 3) on September 22, 2025, with a public comment period ending on October 22, 2025. Staff received no comments during the comment period.

IV. Presenter Contact Information:

Wasteload Allocation Changes to the Water Quality Management Planning Regulation

Contact: Justin Williams, Manager, Office of Watershed & Local Government Assistance
Phone Number: (804) 659-1125
E-mail: Justin.Williams@DEQ.Virginia.gov

V. Attachments

- **Attachment I** – Portions of four TMDL reports (with 24 new TMDL wasteload allocations) from which DEQ developed the WLAs
- **Attachment II** – Amended Water Quality Management Planning Regulation proposed for Board adoption
- **Attachment III** – Virginia Regulatory Town Hall Form TH-09 – Exempt Action Final Regulation

Attachment I – Portions of four TMDL reports, with the 24 wasteload allocations for approval by the Board

Affected Waterbodies and Localities for the 24 TMDL waste load allocations:

Potomac–Shenandoah River Basin (9VAC25-720-50)

TMDL Report: “Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia.”

- This TMDL report proposes sediment reductions for Crooked Run, Stony Creek and Pughs Run and provides sediment waste load allocations of 12,291 lb/yr, 431,000 lb/yr, and 22,960 lb/yr, respectively.

James River Basin (9VAC25-720-60):

TMDL Report: “Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia.”

- This TMDL report proposes sediment reductions for Black Creek and Hat Creek and provides sediment wasteload allocations of 30,730 lb/yr and 45,461 lb/yr, respectively.
- This TMDL report proposes phosphorus reductions in Black Creek and provides total phosphorus wasteload allocations of 712 lb/yr.

TMDL Report: “Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond”

- This TMDL report proposes sediment reductions for several streams and sediment wasteload allocations of 319,359 lb/yr for Deep Run, 140,916 lb/yr for Stony Run, 32,745 lb/yr for Stony Run UT, 38,769 lb/yr for Dover Creek, 372,238 lb/yr for Upham Brook, 363,179 lb/yr for North Run, and 88,183 lb/yr for Jordans Branch.
- This TMDL report proposes total phosphorus reduction and total phosphorus wasteload allocations of 121.6 lb/yr for Stony Run, 41.6 lb/yr for Dover Creek, and 2,693.8 lb/yr for Upham Brook.

Tennessee – Big Sandy River Basin (9VAC25-720-90):

TMDL report: “Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties”

- This TMDL report proposes sediment reductions and provides revised sediment wasteload allocations of 29,851 lb/yr for Tattle Branch, 133,680 lb/yr for Hall Creek, 36,679 lb/yr for Byers Creek, 12,926 lb/yr for Cedar Creek, 53,403 lb/yr for the Upper Middle Fork Holston River, 1,464,062 lb/yr for the Lower Middle Fork Holston upstream of Route 91, and 963,597 lb/yr for the Lower Middle Fork Holston from Route 91 to Edmondson Dam. In addition, it provides a new sediment wasteload allocation of 46,798 lb/yr for Greenway Creek.

**Benthic TMDL Development for Crooked Run, Stony
Creek and Pughs Run
Located in Shenandoah County, Virginia**



Prepared by:
Virginia Department of Environmental Quality

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Acknowledgements

Project Personnel

Virginia Department of Environmental Quality (VADEQ)

Karen Kline
Nesha McRae
Tara Wyrick

Community Engagement Partners

Alliance for the Shenandoah Valley: *Caitlin Worsham, Kim Woodwell*
Friends of the North Fork Shenandoah River: *Laura Bennett, Michelle Robinson*
Friends of the Shenandoah River: *Karen Andersen*
Georges Chicken Inc: *Justin Bridges*
Landowners: *Rob Arner, Phil Daley, Jeff Dalke, Vito Gentile, Keith and Hilde Knupp, Barry Shaffer*
Lord Fairfax Soil and Water Conservation District: *Joan Comanor, Dana Gochenour, Sabrina Hetzel*
Shenandoah County: *McKenzie Allen, Patrick Felling, Tyler Hinkle*
Shenandoah Riverkeeper: *Mark Frondorf*

For additional information, please contact:

Virginia Department of Environmental Quality

Valley Regional Office, Harrisonburg: Nesha McRae, 540-217-7173

Executive Summary

Background

The Crooked Run, Stony Creek and Pughs Run watersheds are located in Shenandoah County, Virginia, and drain a predominantly rural watershed with some isolated developed areas. Stony Creek and Pughs Run drain directly to the North Fork Shenandoah River, while Crooked Run drains to Mill Creek, a tributary of the North Fork Shenandoah River. The North Fork Shenandoah River flows north into the Shenandoah River, which is part of the Potomac/Shenandoah River basin that ultimately flows into the Chesapeake Bay.

Crooked Run, Stony Creek and Pughs Run are listed as impaired on Virginia's 2022 Section 305(b)/303(d) Water Quality Assessment Integrated Report due to water quality violations of the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 0-1**. The watersheds of the impaired streams are shown in **Figure 0-1**.

Table 0-1. Impaired segments addressed in this TMDL study.

Waterbody Name	Assessment Unit	Impairment description	Length (miles)	Listing Date
Crooked Run	VAV-B48R_CKD01A00	Crooked Run from its headwaters downstream to its confluence with Mill Creek.	4.08	2008
Stony Creek	VAV-B49R_STY01A00	Stony Creek from the Route 682 (Wakemans Grove Road) bridge crossing downstream to its confluence with the North Fork Shenandoah River.	4.59	2008
Stony Creek	VAV-B49R_STY02A00	Stony Creek from the Georges Chicken discharge downstream to the Route 682 (Wakemans Grove Road) bridge crossing.	1.27	2008
Stony Creek	VAV-B49R_STY03A00	Stony Creek from its confluence with Yellow Spring Run downstream to the Georges Chicken discharge.	3.44	2016
Pughs Run	VAV-B50R_PGH01A00	Pugh's Run from the headwaters downstream to its confluence with the North Fork Shenandoah River.	7.00	2012

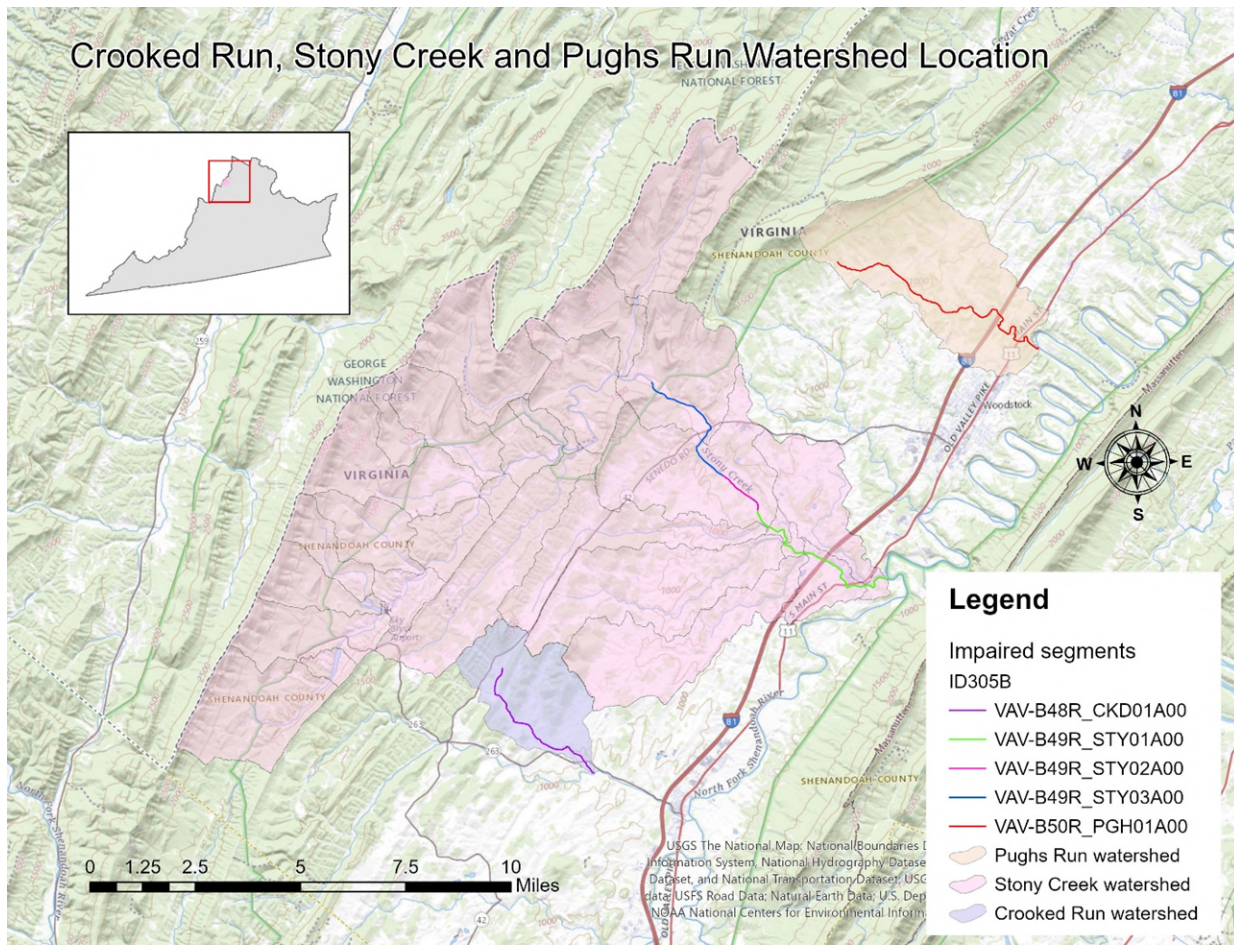


Figure 0-1. Location of the Crooked Run, Stony Creek and Pughs Run watersheds and impaired segments.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia sets standards for all the waters in the state. One of those standards is the expectation that every stream will support a healthy and diverse community of bugs and fish (the aquatic life standard). The Virginia Department of Environmental Quality (VADEQ) determines whether this standard is met by measuring the diversity of benthic macroinvertebrates (bugs that live on the bottom of the stream). The health and diversity of these bugs are assessed on a scale from 0 to 100, with scores greater than 60 being acceptable. **Figure 0-2** shows the various monitoring stations throughout the watersheds, color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of aquatic life. This shows that the various impaired streams in this study fail the aquatic life standard, and pollutants within the watershed need to be reduced.

A stressor identification analysis study was completed in August 2023 to figure out the reason for the benthic impairments in the watersheds. The study found that the main cause of the impairments was too much sediment.

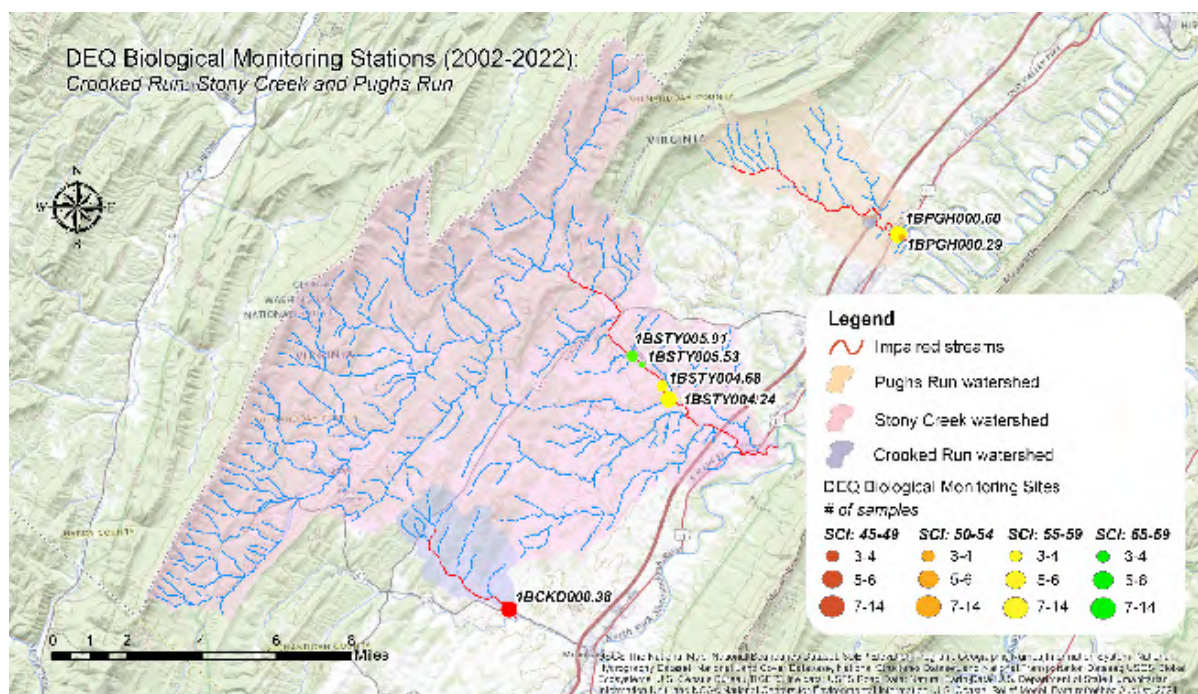


Figure 0-2. Stream health score summaries in the Crooked Run, Stony Creek and Pughs Run watersheds.

Too Much Sediment

Excess sediment was identified as the primary stressor in Crooked Run, Stony Creek and Pughs Run. When it rains, sediment is washed off of the land surface into nearby creeks and rivers. The amount of dirt that is washed off depends upon how much it rains and the type of land that the rain falls on. Some land types, like a freshly plowed farm field or a construction site lacking sufficient controls, can yield a lot of sediment when it rains, while other land types, like forests and well-maintained pasture, yield only a little. When that dirt gets into nearby streams, it falls to the bottom as sediment and can smother certain bugs that live on the bottom of the stream, limiting the diversity of aquatic life.

The Study

To study the problem of excess sediment in the Crooked Run, Stony Creek and Pughs Run watersheds, a combination of monitoring data and computer modeling was utilized. Monitoring was used to tell how much sediment is in the streams at any given time and how aquatic life conditions have changed over time. The computer model was used to estimate where the sediment

is coming from and make predictions about how stream conditions would change if those sources were reduced.

For this purpose, a computer model called the Generalized Watershed Loading Function model (or GWLF) was used. This model incorporates monitoring data and considers the slope, soils, land cover, erodibility, and runoff to estimate the amount of soil eroded in the watershed and deposited in the stream. Although one study recommends hydrologic calibration to improve runoff simulation estimates (Dai et al., 2000), absence of flow data in Crooked Run, Stony Creek and Pughs Run, as well as in the many comparison watersheds in this study led to the decision to simulate loads in a non-calibrated model. GWLF was originally developed as a planning tool for estimating nutrient and sediment loadings in ungauged watersheds and was designed to be implemented without calibration.

This report summarizes the study and sets goals for a clean-up plan. The study is called a Total Maximum Daily Load (TMDL) Study because it determines the maximum amount of sediment that can get into a certain stream without harming the stream or the creatures living in it. A TMDL allocates allowable contributions of a specific pollutant from point sources, called the wasteload allocation, and nonpoint sources, called the load allocation. It also provides a margin of safety to account for potential differences between the stream environment and the computer model.

Current Conditions

For this report, the 2016 Virginia Geographic Information Network (VGIN) dataset was used to represent the current land use with minor modifications. The land cover distribution for each impaired watershed is shown in **Figure 0-3** through **Figure 0-5**. All three of the watersheds are largely forested with the majority of agricultural lands being in pasture or hay rather than cropland. Urban/suburban land uses comprise less than 10% of land cover in Crooked Run, Stony Creek and Pughs Run.

This land cover dataset combined with an accounting of the permitted discharges represent the major pollutant sources in the watershed. The GWLF model was used to figure out where the sediment in the impaired watersheds was currently coming from. **Figure 0-3** through **Figure 0-5** show the distribution of sediment contributions from various sources in the watersheds. The permitted sources include construction permits, water treatment plants, industrial stormwater permits, and other permitted point sources. Cropland, hay and pasture covers a greater extent of the three watersheds than urban areas, and as such most of the sediment loads are derived from agricultural land uses. In addition, Stony Creek has a larger

Definition:



Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Non-point Source – pollution that does not come out of a pipe but comes generally from the landscape (usually as runoff).

network of streams, making stream bank and bed erosion a significant portion of the overall sediment load.

DRAFT

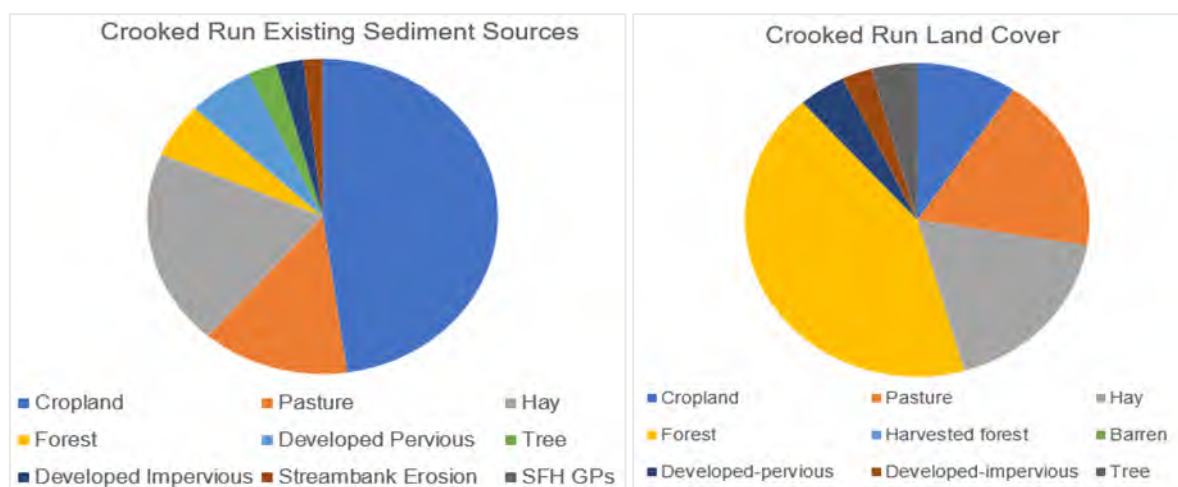


Figure 0-3. Land cover and existing source load distributions in the Crooked Run watershed.

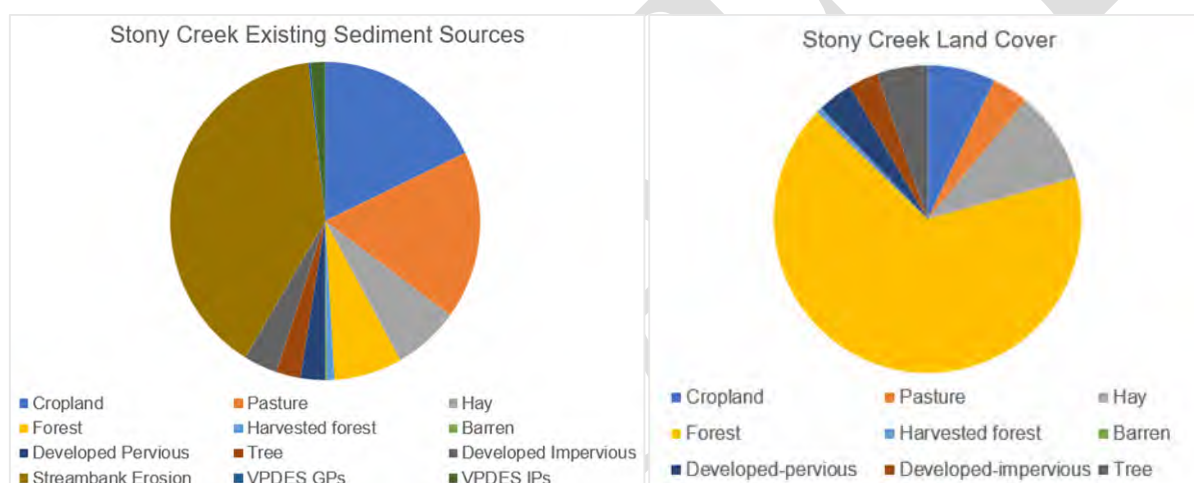


Figure 0-4. Land cover and existing source load distributions in the Stony Creek watershed.

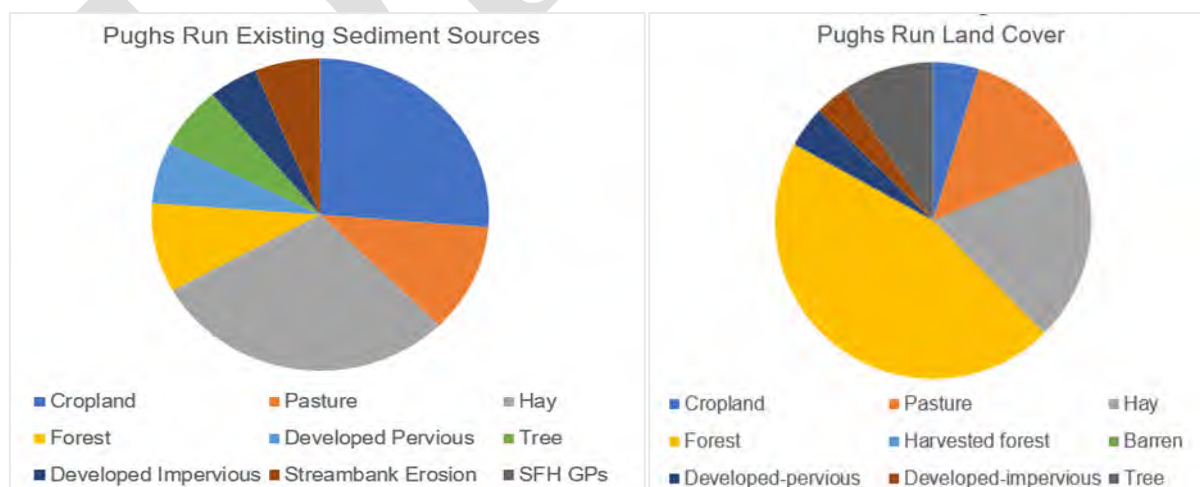


Figure 0-5. Land cover and existing source load distributions in the Pughs Run watershed.

Future Goals (the TMDL)

After figuring out where the sediment in the impaired streams is currently coming from, a computer model was used to figure out how much sediment loads need to be reduced to clean up each stream. The ultimate goal for these streams is to have sediment levels that allow for diverse and abundant aquatic life. A series of potential sediment reduction scenarios were developed for the impaired watersheds and evaluated by participants at a community engagement meeting (**Section 6.4**). The preferred reduction scenarios for each watershed are shown in **Table 0-2**.

Table 0-2. Reductions in sediment needed to clean up the impaired waters.

Category	Percent Reduction in Sediment Loads Needed		
	Crooked Run	Pughs Run	Stony Creek
Cropland	56%	32%	24%
Pasture	54%	32%	24%
Hay	36%	20%	10%
Forest/Tree	0%	0%	0%
Harvested forest	0%	0%	5%
Barren	0%	0%	0%
Developed Pervious	40%	15%	18%
Developed Impervious	40%	20%	25%
Streambank	30%	20%	25%
Permitted sources	0%	0%	0%

In order to obtain healthy sediment levels in the impaired streams, reductions are needed from several sediment sources. Sediment loads from agricultural sources such as cropland, pasture, and hay need to be reduced between 10 to 56% in Crooked Run, Stony Creek and Pughs Run. Sediment reductions from urban and suburban land uses of 15 to 40% are called for in the impaired watersheds. The total amount of sediment per year that would be entering each of these streams after the recommended reductions are made represent the total maximum daily load of sediment for each stream (**Table 0-3**). If sediment loads are reduced to these amounts, healthy aquatic life should be restored in these streams. Calculated values have been rounded to five significant figures.

Table 0-3. Annual Total Maximum Daily Load of sediment that will meet the water quality standard.

Stream (Assessment Unit ID)	Existing Load (lbs/yr)	Allocated Permitted Point Sources (WLA) (lbs/yr)	Allocated Nonpoint Sources (LA) (lbs/yr)	Margin of Safety (MOS) (lbs/yr)	Total Maximum Daily Load (lbs/yr)	Overall % Reduction (%)
Crooked Run (VAV-B48R_CKD01A00)	921,410	12,291	504,120	57,379	573,790	37.7%
Stony Creek (VAV-B49R_STY01A00, VAV-B49R_STY02A00, VAV-B49R_STY03A00)	11,965,000	431,000	9,313,300	1,082,700	10,827,000	9.5%
Pughs Run (VAV-B50R_PGH01A00)	1,197,900	22,960	945,620	107,620	1,076,200	10.2%

The final average annual sediment loads allocated in the TMDL are presented in **Table 0-4** through **Table 0-6**. GWLF output data, being in monthly increments, is most logically presented as annual aggregates. Calculated totals of model results were rounded to 5 significant figures.

Table 0-4. Annual average sediment TMDL components for Crooked Run.

Impairment	WLA	LA	MOS	TMDL	Existing Load	Percent Reduction
	Sediment Load (lbs/yr)					
Crooked Run - TSS (VAV-B48R_CKD01A00)	12,291	504,120	57,379	573,790	921,410	37.7%
<i>Construction Permits</i>	632					
<i>Domestic Sewage Permits</i>	183					
<i>Future Growth (2% of TMDL)</i>	11,476					

Table 0-5. Annual average sediment TMDL components for Stony Creek.

Impairment	WLA	LA	MOS	TMDL	Existing Load	Percent Reduction
	Sediment Load (lbs/yr)					
Stony Creek - TSS	431,000	9,313,300	1,082,700	10,827,000	11,965,000	9.5%
(VAV-B49R_STY01A00)						
(VAV-B49R_STY02A00)						
(VAV-B49R_STY03A00)						
Construction Permits	26,181					
Industrial Stormwater Permits	9,033					
Domestic Sewage Permits	3,383					
Potable Water Treatment Plant Permits	1,462					
Individual VPDES Permits						
VA0020508	15,992					
VA0028380	54,829					
VA0077402	103,570					
Future Growth (2% of TMDL)	216,550					

Table 0-6. Annual average sediment TMDL components for Pughs Run.

Impairment	WLA	LA	MOS	TMDL	Existing Load	Percent Reduction	
	Sediment Load (lbs/yr)						
Pughs Run - TSS	22,960	945,620	107,620	1,076,200	1,197,900	10.2%	
(VAV-B50R_PGH01A00)							
Construction Permits							893
Domestic Sewage Permits							549
Future Growth (2% of TMDL)							21,518

In 1991, the USEPA released a technical support document for controlling water quality-based toxics, which includes guidance on developing maximum daily loads (MDLs) for TMDLs (USEPA, 1991). A methodology detailed therein was used to determine the MDLs for the watersheds. The long-term average (LTA) daily loads, derived by dividing the average annual loads in **Table 0-4** through **Table 0-6** by 365.24, are converted to MDLs using the following equation:

$$MDL = LTA * \exp(z\sigma - 0.5\sigma^2)$$

where $\sigma^2 = \ln(CV^2 + 1)$, with CV = coefficient of variation of the data,
 $z = 1.645$ for 95th percentile occurrence probability, and
 $z = 2.326$ for 99th percentile occurrence probability

The variable *z* was set to 1.645 for this TMDL development. The CV values and final calculated multipliers to convert LTA to MDL values are summarized in **Table 0-7**.

Table 0-7. “LTA to MDL multiplier” components for TMDLs.

Watershed	CV of Average Annual Loads	“LTA to MDL Multiplier”
Crooked Run	0.566	2.071
Stony Creek	0.397	1.744
Pughs Run	0.560	2.060

The daily WLA for non-stormwater permits and stormwater permits is calculated differently because stormwater permits may vary with precipitation whereas non-stormwater permits typically have more consistent discharge flows. Therefore, non-stormwater permits (such as domestic sewage and potable water treatment plants) are calculated by dividing the annual WLA by 365.24. Stormwater permits (such as industrial stormwater and construction) are calculated by dividing the annual WLA by 365.24 and then multiplying by the LTA multiplier to account for greater variation in discharge from storm events. The calculation of Future Growth also uses the LTA multiplier to calculate a daily load. The daily MOS was estimated as 10% of the MDL. Finally, the daily LA was estimated as the MDL minus the daily MOS minus the daily WLA. These results are shown in **Table 0-8** through **Table 0-10**.

Table 0-8. Maximum ‘daily’ sediment loads and components for Crooked Run.

Impairment	WLA	LA	MOS	MDL
	Sediment Load (lbs/day)			
Crooked Run - TSS (VAV-B48R_CKD01A00)	69	2,860	325	3,254
<i>Construction Permits</i>	3.5			
<i>Domestic Sewage Permits</i>	0.5			
<i>Future Growth (2% of TMDL)</i>	65.0			

Table 0-9. Maximum ‘daily’ sediment loads and components for Stony Creek.

Impairment	WLA	LA	MOS	MDL
	Sediment Load (lbs/day)			
Stony Creek - TSS (VAV-B49R_STY01A00) (VAV-B49R_STY02A00) (VAV-B49R_STY03A00)	1,693	44,832	5,169	51,694
<i>Construction Permits</i>	125.0			
<i>Industrial Stormwater Permits</i>	43.1			
<i>Domestic Sewage Permits</i>	9.3			

<i>Potable Water Treatment Plant Permits</i>	4.0
<i>Individual VPDES Permits</i>	477.6
<i>Future Growth (2% of MDL)</i>	1,034.0

Table 0-10. Maximum ‘daily’ sediment loads and components for Pughs Run.

Impairment	WLA	LA	MOS	MDL
	Sediment Load (lbs/day)			
Pughs Run - TSS	128	5,335	607	6,070
(VAV-B50R_PGH01A00)				
<i>Construction Permits</i>	5.0			
<i>Domestic Sewage Permits</i>	1.5			
<i>Future Growth (2% of TMDL)</i>	121.5			

Allocation Scenarios

There are many ways to reduce pollutants to reach TMDL goals. Several versions of these reduction plans, or allocation scenarios, were developed. The first scenario focuses the greatest reductions on the largest non-point sources of the pollutant. The second scenario assigns equal reductions to all non-point sources. The third scenario focuses all reductions on agricultural sources and the fourth scenario focuses all reductions on urban/residential sources. In Stony Creek, development and streambank erosion were recognized as growing issues with respect to water quality, and stakeholders recommended increasing reductions for these sources during their review of initial reduction scenarios. Meeting participants felt that stream walks could be used to identify and prioritize stream reaches experiencing the greatest degree of erosion. Additionally, participants felt that targeting restoration would provide additional assurance that sediment reduction goals were reasonable and could be achieved cost effectively. Only scenarios one through three developed for Crooked Run and Pughs Run met their established TMDL endpoints. Even if all residential and urban pollutant sources in the watersheds were eliminated, the endpoints could not be reached. These scenarios were presented to stakeholder meeting members who determined that Scenario 1 was preferred for each watershed. All scenarios evaluated for each watershed are shown in **Table 0-11** through **Table 0-13**. Calculated values shown in tables were rounded to five significant figures.

Table 0-11 Allocation scenarios for Crooked Run.

<i>Crooked Run Sediment</i>		Scenario 1 (preferred)		Scenario 2		Scenario 3		Scenario 4	
Source	Existing	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation
	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)
Cropland	439,770	56%	193,500	49.4%	222,520	55.6%	195,260	0%	439,770
Pasture	125,200	54%	57,594	49.4%	63,353	55.6%	55,591	0%	125,200
Hay	185,040	36%	118,430	49.4%	93,631	55.6%	82,158	0%	185,040
Forest	51,251	0%	51,251	0%	51,251	0%	51,251	0%	51,251
Developed Pervious	55,837	40%	33,502	49.4%	28,253	0%	55,837	100%	0
Tree	24,365	0%	24,365	0%	24,365	0%	24,365	0%	24,365
Developed Impervious	23,315	40%	13,989	49.4%	11,797	0%	23,315	100%	0
Streambank Erosion	15,820	30%	11,074	49.4%	8,005	0%	15,820	100%	0
Domestic Sewage General Permits	183	0%	183	0%	183	0%	183	0%	183
Construction Stormwater General Permits	632	0%	632	0%	632	0%	632	0%	632
Margin of Safety (10%)	-	-	57,379	-	57,379	-	57,379	-	57,379
Future Growth Set Aside (2%)	-	-	11,476	-	11,476	-	11,476	-	11,476
TOTAL	921,410	37.8%	573,370	37.8%	572,850	37.8%	573,260	2.8%	895,300*

* Scenario does not meet target sediment reduction goal

Table 0-12. Allocation scenario for Stony Creek sediment loads.

<i>Stony Creek Sediment</i>		Scenario 1 (preferred)		Scenario 2		Scenario 3		Scenario 4	
Source	Existing	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation
	<i>TSS (lbs/yr)</i>	%	<i>TSS (lbs/yr)</i>	%	<i>TSS (lbs/yr)</i>	%	<i>TSS (lbs/yr)</i>	%	<i>TSS (lbs/yr)</i>
Cropland	2,147,700	24%	1,632,300	23.1%	1,651,600	48.7%	1,101,800	0%	2,147,700
Pasture	2,047,200	24%	1,555,900	23.1%	1,574,300	48.7%	1,050,200	0%	2,047,200
Hay	819,930	10%	737,940	23.1%	630,530	48.7%	420,620	0%	819,930
Forest	849,080	0%	849,080	0%	849,080	0%	849,080	0%	849,080
Harvested Forest	91,808	5%	87,217	23.1%	70,600	0%	91,808	0%	91,808
Barren	21,631	0%	21,631	0%	21,631	0%	21,631	0%	21,631
Developed Pervious	308,740	18%	253,160	23.1%	237,420	0%	308,740	44.6%	171,040
Tree	302,230	0%	302,230	0%	302,230	0%	302,230	0%	302,230
Developed Impervious	423,390	25%	317,540	23.1%	325,590	0%	423,390	44.6%	234,560
Streambank Erosion	4,739,900	25%	3,554,900	23.1%	3,645,000	0%	4,739,900	44.6%	2,625,900
Domestic Sewage General Permits	3,383	0%	3,383	0%	3,383	0%	3,383	0%	3,383
Construction Stormwater General Permits	26,181	0%	26,181	0%	26,181	0%	26,181	0%	26,181
Industrial Stormwater General Permits	7,453	0%	9,033	0%	9,033	0%	9,033	0%	9,033
Potable Water Treatment Plant General Permits	1,462	0%	1,462	0%	1,462	0%	1,462	0%	1,462
VPDES Individual Permits									
VA0020508	15,992	0%	15,992	0%	15,992	0%	15,992	0%	15,992
VA0028380	54,829	0%	54,829	0%	54,829	0%	54,829	0%	54,829
VA0077402	103,570	0%	103,570	0%	103,570	0%	103,570	0%	103,570
Margin of Safety (10%)	-	-	1,082,700	-	1,082,700	-	1,082,700	-	1,082,700
Future Growth (2%)	-	-	216,550	-	216,550	-	216,550	-	216,550
TOTAL	11,965,000	9.52%	10,826,000	9.56%	10,822,000	9.54%	10,823,000	9.53%	10,825,000

Table 0-13. Allocation scenario for Pughs Run sediment loads.

<i>Pughs Run Sediment</i>		Scenario 1 (preferred)		Scenario 2		Scenario 3		Scenario 4	
Source	Existing	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation
	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)	%	TSS (lbs/yr)
Cropland	314,650	32%	213,960	25%	235,990	32%	213,960	0	314,650
Pasture	134,610	32%	91,536	25%	100,960	32%	91,536	0.0%	134,610
Hay	352,050	20%	281,640	25%	264,030	32%	239,390	0.0%	352,050
Forest	110,630	0%	110,630	0.0%	110,630	0.0%	110,630		110,630
Developed Pervious	75,617	15%	64,274	25%	56,712	0.0%	75,617	100.0%	0
Tree	77,486	0%	77,486	0.0%	77,486	0.0%	77,486	0.0%	77,486
Developed Impervious	56,612	20%	45,290	25%	42,459	0.0%	56,612	100.0%	0
Streambank Erosion	74,761	20%	59,809	25%	56,071	0.0%	74,761	100.0%	0
Domestic Sewage General Permits	549	0%	549	0%	549	0%	549	0%	549
Construction Stormwater General Permits	893	0%	893	0%	893	0%	893	0%	893
Margin of Safety (10%)	-	-	107,620	-	107,620	-	107,620	-	107,620
Future Growth Set Aside (2%)	-	-	21,524	-	21,524	-	21,524	-	21,524
TOTAL	1,197,900	10.24%	1,075,200	10.26%	1,074,900	10.63%	1,070,600	6.50%	1,120,000

* Scenario does not meet target sediment reduction goal

Public Participation

Throughout this study, DEQ asked for the help of local residents and knowledgeable stakeholders – those who have a particular interest in or may be affected by the outcome of the project. This public participation keeps people informed about the project, and it provides local input from stakeholders to make sure that information in the study is accurate. While the computer model was being developed, DEQ held a series of three Community Engagement Meetings (CEM) to get stakeholder input. Participants in these meetings included representatives from Shenandoah County, Lord Fairfax Soil and Water Conservation District (SWCD), Natural Resource Conservation Service (NRCS), and several local landowners. All three CEMs were held at the Shenandoah County Library in Edinburg, VA. The first CEM was held on August 19, 2024 (17 attending) to discuss land cover estimates for the watersheds and point and nonpoint sediment sources. Participants provided feedback on areas of growth in the watersheds and projected development patterns in the future. The second CEM (13 attendees, December 16, 2024) discussed updates to sediment load estimates, particularly loads coming from streambank erosion. Participants also discussed the methodology used to establish sediment endpoints for the impaired streams (AllForX) and reviewed a series of sediment allocation scenarios for the watersheds. The third and final CEM (18 attendees) was held on February 4, 2025. During this meeting, participants reviewed the updated allocation scenarios for the impaired watersheds and discussed plans for the final public meeting.

A public meeting was held on June 18, 2024 to share information about the health of the streams and discuss the TMDL process, including opportunities for public participation (40 attending). The meeting was held at the Shenandoah County Library in Edinburg VA at 5:30 pm. A second and final public meeting was held on April 9, 2025 at the Shenandoah County Government Complex in Woodstock to present the draft TMDL document. The public meeting marked the beginning of the official public comment period and was attended by 34 watershed residents and other stakeholders. The public comment period ended on May 9, 2025.

Reasonable Assurance

Public participation in the development of the TMDL and implementation plans, follow-up monitoring, permit compliance, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented, and water quality will be restored in the Crooked Run, Stony Creek and Pughs Run watersheds.

What Happens Next

This report sets the clean-up goals for the Crooked Run, Stony Creek and Pughs Run, but the next step is a clean-up plan (or Implementation Plan) that lays out how those goals will be reached. Clean-up plans set intermediate goals and describe actions that should be taken to improve water quality in the impaired streams. Some of the potential actions that could be included in an implementation plan for the Crooked Run, Stony Creek and Pughs Run watersheds are listed below:

- Fence out cattle from streams and provide alternative water sources
- Implement conservation tillage practices on cropland
- Conduct stream bank restoration projects in areas where banks are actively eroding
- Leave a band of 35 – 100 ft along the stream natural so that it buffers or filters out sediment from farm or residential land (a riparian buffer)
- Reduce runoff by increasing green spaces and reducing hardened spaces (asphalt or concrete)

These and other actions that could be included in a clean-up plan are identified in the planning process along with associated costs and the extent of each practice needed. The clean-up plan also identifies potential sources of money to help in the clean-up efforts. Most of the money utilized to implement actions in the watersheds to date has been in the form of cost-share programs, which share the cost of improvements with the landowner. Additional funds for urban stormwater practices have been made available through various grants, including a grant from the National Fish and Wildlife Foundation. Please be aware that the state or federal government will not fix the problems with Crooked Run, Stony Creek and Pughs Run. It is primarily the responsibility of individual landowners and local governments to take the actions necessary to improve these streams. The role of state agencies is to help with developing the plan and find money to support implementation, but actually making the improvements is up to those that live in the watershed. By increasing education and awareness of the problem, and by working together to each do our part, we can make the changes necessary to improve the streams.

DEQ will continue to sample aquatic life in these streams and monitor the progress of clean-up. This sampling will let us know when the clean-up has reached certain milestones listed in the plan. To begin moving towards these clean-up goals, DEQ recommends that concerned citizens come



Frequently Asked Question:

How will the TMDL be implemented? TMDL reductions are not proposed for point sources and the TMDL will be implemented through discharge permits and future growth. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help defer the cost of BMP installation.

together and begin working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the problem and promote those activities and programs that improve stream health.

DRAFT

**Benthic TMDL Development for Black Creek and
Hat Creek Watersheds
Located in Nelson County, Virginia**



Prepared by:
Wetland Studies and Solutions, Inc.
Virginia Department of Environmental Quality

Prepared for:
Virginia Department of Environmental Quality

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Acknowledgements

Project Personnel

Virginia Department of Environmental Quality (DEQ)

Nesha McRae
Tara Wyrick

Wetland Studies and Solutions, Inc.

Katie Shoemaker, PE, CFM, Environmental Engineer
Jeremy Bradley, CFM, GIS Specialist
Stephen Dombroski, EIT, Project Engineer

Community Engagement Meeting Participants

Rob Campbell – James River Association
Ernie Reed – Nelson County Board of Supervisors
Robert McSwain, George Miller, Bryon Mowyer – Nelson County Service Authority
Emily Hjulstrom – Nelson County
David Collins, Luke Longanecker, Mike Yager, Courtney Harlow-Humphries – Thomas
Jefferson Soil and Water Conservation District (SWCD)
Isabella O'Brien – Thomas Jefferson Planning District Commission
Wendy Kelly, Anne Witt – Virginia Department of Energy
Mark Campbell – Virginia Farm Bureau
Emma Martin – Nelson County Times
Michelle Clark, Reid Copeland, Heather Coiner, Justin Crandall, Heidi Crandall, Christian
Giles, Hal Loken, Trygve Loken, Jimmy Massie, Coty Painter, Connie Roussos,
Robert Saunders, Yvette Stafford, Tamara Tomlin, Dick Whitehead – Citizens

For additional information, please contact:

Virginia Department of Environmental Quality

Valley Regional Office, Harrisonburg: Nesha McRae, (540) 217-7173

Executive Summary

Background

The Black Creek and Hat Creek watersheds are located in Nelson County, Virginia. Black Creek drains portions of the community of Colleen, and Hat Creek drains portions of the communities of Bryant and Jonesboro. Both Black and Hat Creek are largely rural and forested, and are direct tributaries of the Tye River, which flows southeast to the James River and on to the Chesapeake Bay and the Atlantic Ocean.

Definition:

Watershed – All of the land area that drains to a particular point or body of water.



Black Creek and Hat Creek are listed as impaired on Virginia's 2022 305(b)/303(d) Integrated Report (DEQ, 2022a) due to their failure to meet the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 1-1**. The watersheds of the impaired streams are shown in **Figure 1-1**.

Table 1-1. Impaired segments addressed in this TMDL study.

TMDL Watershed	305(b) Segment ID	Cause Group Code 303(d) Impairment ID	Listing Station	Year Initially Listed
Black Creek	VAV-H09R_BKC01A14 (1.96 mi)	H09R-05-BEN	2-BKC001.43/ 2-BKC001.55	2014
Hat Creek	VAV-H09R_HAT01A04 (9.52 mi)	H09R-02-BEN	2-HAT000.14	2012

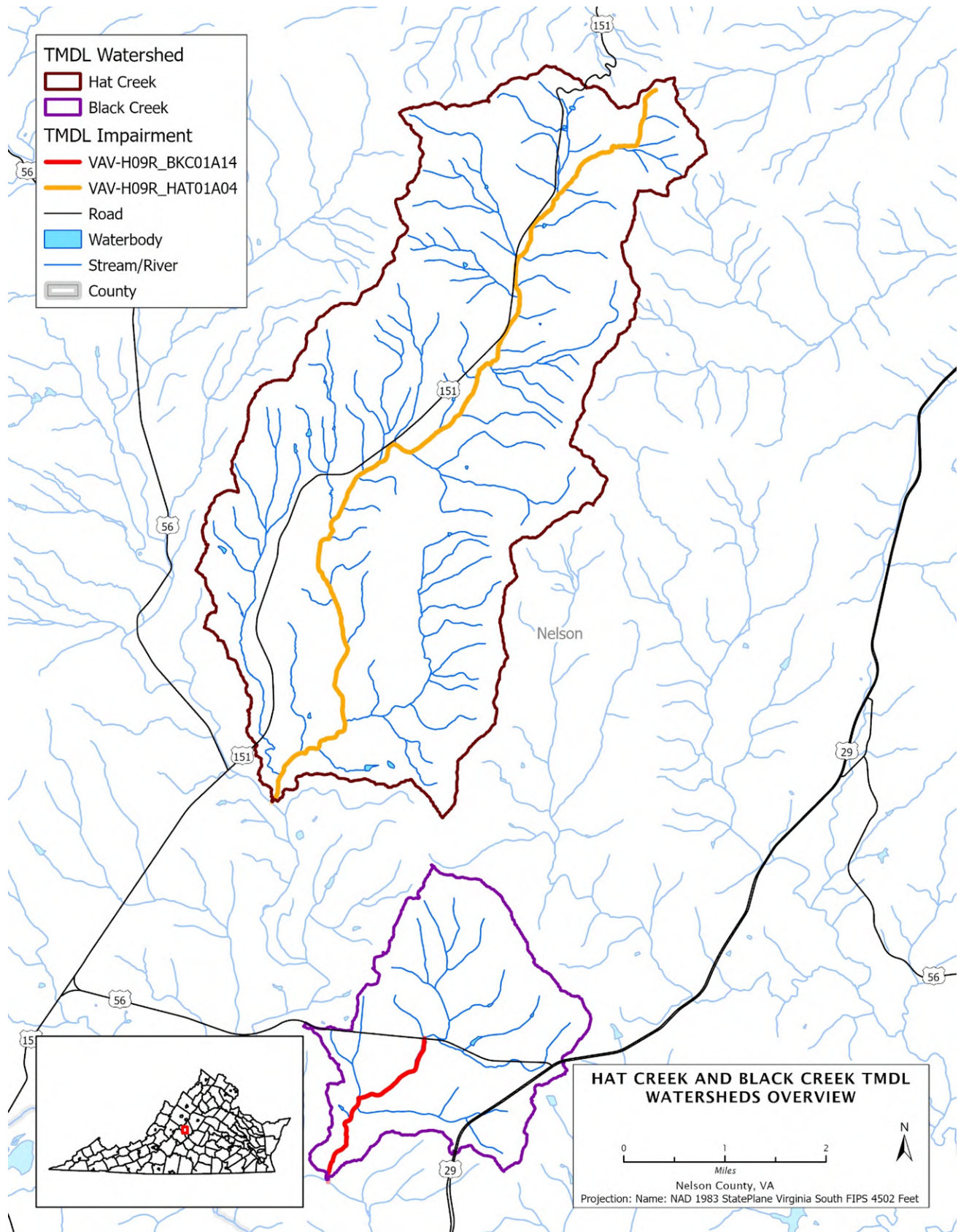


Figure 1-1. Location of the Black Creek and Hat Creek watersheds and impairments.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia establishes designated uses for all the waters in the state. Some of these uses include recreation, fishing, wildlife, and aquatic life. Water quality standards have been developed to ensure that some of these uses are met, while others are assessed using narrative criteria. One of those standards is the expectation that every stream will support a healthy and diverse community of bugs and fish (the aquatic life standard). The Virginia Department of Environmental Quality (DEQ) determines whether this standard is met by monitoring the benthic macroinvertebrate community (bugs that live on the bottom of the stream) in our waterways. The health and diversity of these bugs are assessed using the Virginia Stream Condition Index (VSCI). The VSCI is a multimetric index used to derive stream health scores ranging from 0 to 100. Scores below 60 are categorized as impaired. **Figure 1-2** shows the various monitoring stations throughout the watershed, color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of aquatic life. This shows that the various impaired streams in this study fail the aquatic life standard, and pollutants within the watershed need to be identified and reduced.

A benthic stressor analysis study was conducted in 2022 to determine the cause(s) of benthic impairment in the Black Creek and Hat Creek watersheds (DEQ, 2022b). DEQ employed the Causal Analysis/Diagnosis Decision Information System (CADDIS) to complete this analysis (USEPA, 2018). Available physical, chemical, and biological data collected throughout the watersheds, published water quality standards and threshold values, and available literature from other cases were used to investigate the potential causes of impairment in each stream. Based on the weight of evidence supporting each potential candidate, stressors were then separated into the following categories: non-stressor(s), possible stressor(s), and probable stressor(s). The study found that the most probable cause of the impairments in Hat Creek and Black Creek was excess sediment. Additionally, excess phosphorus was found to be a probable stressor causing the impairment in Black Creek.

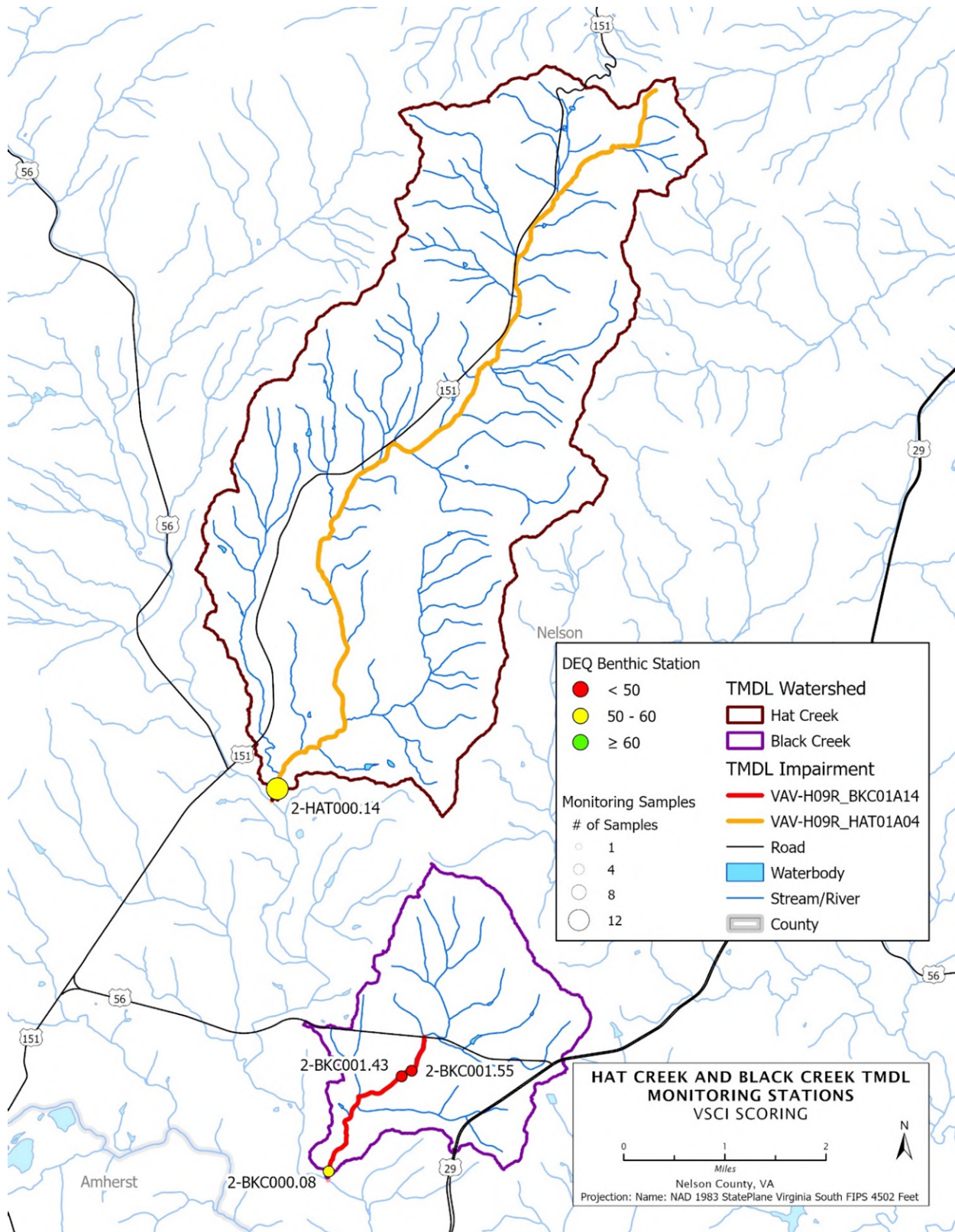


Figure 1-2. DEQ biological monitoring stations and average VSCI scores in the Black Creek and Hat Creek watersheds.

Too Much Sediment

Excess sediment was identified as the primary stressor in both Black Creek and Hat Creek. When it rains, sediment is washed off the land surface into nearby creeks and rivers. The amount of soil that is washed off depends upon how much it rains and the characteristics of the surrounding watershed. Rain falling on a construction site lacking sufficient controls or highly tilled cropland without a cover crop may carry a large amount of sediment to a stream. Other land types, like forests and well-maintained pasture, contribute much less sediment to waterways during rainfall events. When that soil gets into nearby streams, it falls to the bottom as sediment where it can destroy valuable habitat for aquatic macroinvertebrates that live underneath and between the rocks and gravel of the streambed. Without this valuable habitat, the diversity of aquatic life in a stream may be severely limited.

Too Much Phosphorus

In addition, total phosphorus was identified as a primary stressor in Black Creek. Phosphorus is a nutrient that helps plants grow. It is primarily found in fertilizers and manures. Much like soil, phosphorus contained in fertilizers or manures that are applied to lawns or farm fields can wash off the land surface into nearby streams. In a stream, phosphorus makes algae grow, and that algae reduces oxygen levels in the water when it dies and decomposes. This limits the diversity of bugs and fish, which need oxygen to survive.

The Study

To study the problem of excess sediment and phosphorus in the Black Creek watershed and excess sediment in the Hat Creek watershed, a combination of stream monitoring data and computer modeling was utilized. Monitoring was used to tell how much sediment and phosphorus is in the streams at any given time and how aquatic life conditions have changed over time. The computer model incorporates monitoring data and was used to estimate where the sediment and phosphorus are coming from and to make predictions about how stream conditions would change if those sources were reduced.

For this purpose, a computer model called the Generalized Watershed Loading Function model (GWLf) was used. This model considers the slope, soils, land cover, erodibility, and runoff to estimate the amount of soil eroded in the watershed and deposited in the stream. The model was calibrated against real-world flow measurements taken from the stream in order to ensure that it is producing accurate results. The calibrated model was then used to estimate the



Frequently Asked Question:

Why use a computer model?
Sampling and testing tell you a lot about the present and the past, but nothing about the future. A computer model is a tool that can help you make predictions about the future. This is necessary to figure out how much effort is needed to clean up a stream.

sediment reductions that would be needed to completely restore healthy aquatic life to the impaired streams in the watershed.

Definition:



TMDL – Total Maximum Daily Load. This is the amount of a pollutant that a stream can receive and still meet water quality standards. The term TMDL is also used more generally to describe the state’s formal process for cleaning up polluted streams.

This report summarizes the study and sets goals for a clean-up plan. The study is called a Total Maximum Daily Load (TMDL) study because it determines the maximum amount of a pollutant that can get into a certain stream without harming the stream or the creatures living in it. A TMDL allocates allowable contributions of a specific pollutant from point sources, called the wasteload allocation, and nonpoint sources, called the load allocation. It also provides a margin of safety to account for potential differences between the stream environment and the computer model.

Current Conditions

For this report, the Virginia Geographic Information Network (VGIN) 2016 Virginia Land Cover Dataset (VLCD) was used to represent the current land use with minor modifications (discussed in **Section 3.3**). The land cover distribution for each impaired watershed is shown in **Figure 1-3** and

Figure 1-4. Both Black Creek and Hat Creek watersheds are largely forested (67% and 75% respectively) with most agricultural lands being in pasture or hay.

This land cover dataset combined with an accounting of the permitted discharges represent the major pollutant sources in the watersheds. The GWLF model was used to figure out the relative contribution of sources of sediment in the impaired watersheds.

Figure 1-3 and **Figure 1-4** show the distribution of sediment contributions from various sources in the watersheds. The permitted sources include one Virginia Pollutant Discharge Elimination System (VPDES) individual permit and one domestic sewage general permit, in Black and Hat Creek, respectively. The sediment and phosphorus loads from permitted sources were calculated based on the permit language, reported discharge data, and land cover type and area (detailed in **Section 4.3.2**). In both Black Creek and Hat Creek, hay and pasture cover a greater extent than urban areas, and, as such, the majority of the nonpoint source pollutant loads are derived from hay and pasture lands.

Definition:



Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Nonpoint Source – pollution that does not come out of a pipe but comes generally from the landscape (usually as runoff).

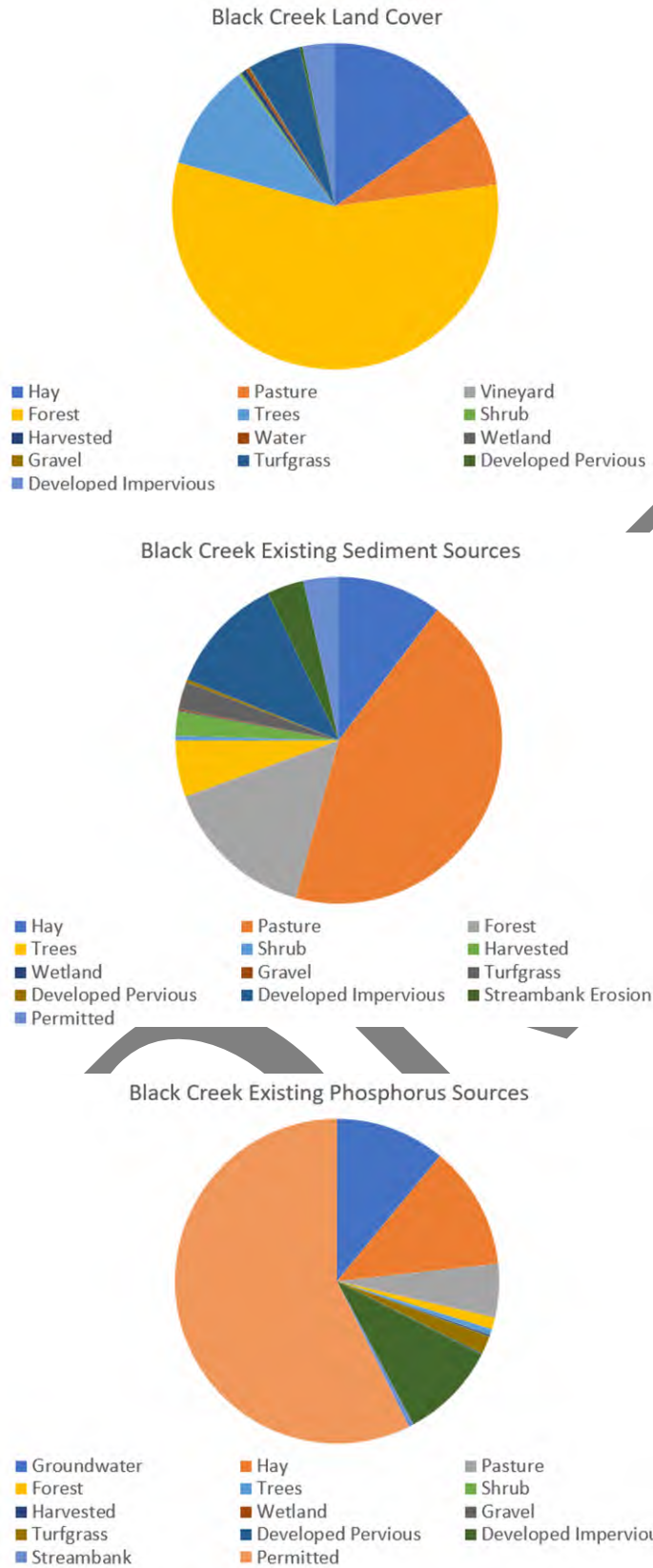


Figure 1-3. Land cover and existing source load distributions in the Black Creek watershed.

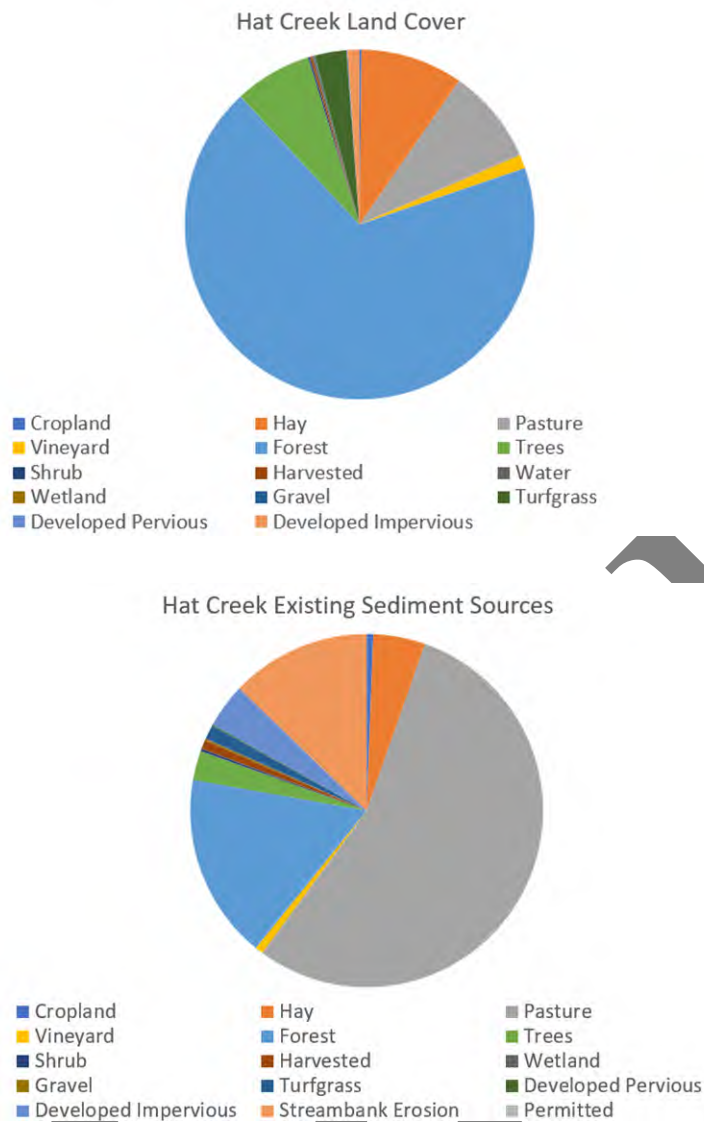


Figure 1-4. Land cover and existing source load distributions in the Hat Creek watershed.

Future Goals (the TMDL)

After figuring out where the sediment in the impaired streams is currently coming from, a computer model was used to figure out how much sediment and/or phosphorus loads need to be reduced to clean up Hat and Black Creeks. The ultimate goal for these streams is to have sediment and, where applicable, phosphorus levels that allow for diverse and abundant aquatic life. The reductions in sediment and/or phosphorus needed to meet these goals are shown in **Table 1-2** and **Table 1-3**. These scenarios were selected by community engagement participants in an effort to balance reductions across all source sectors while also considering cost effectiveness of associated best management practices and the likelihood of implementation.

Table 1-2. Percent reductions in sediment needed for Hat and Black Creeks.

Source Category	% Reduction	
	Black Creek	Hat Creek
Cropland	-	3.5%
Hay	15%	3.5%
Pasture	30%	11%
Vineyard	-	3.5%
Forest, Trees, Shrubs, Harvested, Wetland	0%	0%
Gravel and Turfgrass	10%	1%
Developed Pervious	5%	1%
Developed Impervious	30%	1%
Streambank Erosion	20%	6%
Permitted	0%	0%

Table 1-3. Percent reductions in phosphorus needed for Black Creek.

Source Category	% Reduction
Groundwater	0%
Hay, Pasture	30%
Forest, Trees, Shrubs, Harvested, Wetland	0%
Gravel and Developed Pervious	5%
Turfgrass	25%
Developed Impervious	30%
Septic Systems	0%
Streambank Erosion	25%
Permitted	22%

In order to obtain healthy sediment levels in the impaired streams, significant reductions are needed from several sediment sources. Sediment loads from pasture within the Black Creek watershed need to be reduced by 30%, and sediment loads from hayland and streambank erosion would need to be reduced by 15% and 20%, respectively. Loads from developed impervious areas in Black Creek will need to be reduced by 30%, while sediment from gravel roads and turfgrass will need to be reduced by 10%. For Hat Creek, an 11% reduction in sediment loads from pasture and a 3.5% reduction in sediment loads from cropland, hay and vineyards is needed. Reductions in sediment loads from urban and suburban land covers and streambank erosion need to be reduced by 1% and 6%, respectively. Phosphorus loads from agricultural sources and urban impervious land cover in Black Creek will need to be reduced by 30%. Loads from turfgrass and streambank erosion will need to be reduced by 25%. Permitted phosphorus loads in the watershed will need to be reduced by 22% to meet the TMDL. This reduction was calculated based on the average discharge rate and concentration of the permitted facility. The total maximum daily load, or TMDL, is equal to the annual pollutant load entering these streams after the recommended reductions are made (Table 1-4 through Table 1-6). This load includes permitted sources as well as a future growth allocation to account for potential future permitted sources. These annual loads are converted to daily maximum loads, as described in Section 6.3 (Table 1-7 through Table 1-9). If sediment and phosphorus loads are reduced to these amounts, healthy aquatic life should be restored in Hat and Black Creeks.

Table 1-4. Annual sediment loads that will meet the water quality standard in Black Creek. (For proposed loadings and percent reductions, see Scenario 1 in Table 1-10 or Table 6-9)

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Black Creek (VAV-H09R_BKC01A14)	30,730	446,796	53,058	530,584
VA0089729	20,118			
Future Growth (2% of TMDL)	10,612			

Table 1-5. Annual sediment loads that will meet the water quality standard in Hat Creek. (For proposed loadings and percent reductions, see Scenario 1 in Table 1-11 or Table 6-10)

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Hat Creek (VAV-H09R_HAT01A04)	45,461	1,996,179	226,849	2,268,489
Domestic Sewage General Permits	91			
Future Growth (2% of TMDL)	45,370			

Table 1-6. Annual phosphorus loads that will meet the water quality standard in Black Creek. (For proposed loadings and percent reductions, see Scenario 1 in Table 1-12 or Table 6-11)

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr TP)	Allocated Nonpoint Sources (LA) (lb/yr TP)	Margin of Safety (MOS) (lb/yr TP)	Total Maximum Daily Load (TMDL) (lb/yr TP)
Black Creek (VAV-H09R_BKC01A14)	712	519	137	1,368
VA0089729	685			
Future Growth (2% of TMDL)	27			

Table 1-7. Maximum daily sediment loads for Black Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)	Maximum Daily Load (MDL) (lb/day TSS)
Black Creek (VAV-H09R_BKC01A14)	84	2,413	278	2,775
VA0089729	55			
Future Growth (2% of TMDL)	29			

Table 1-8. Maximum daily sediment loads for Hat Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)	Maximum Daily Load (MDL) (lb/day TSS)
Hat Creek (VAV-H09R_HAT01A04)	124	10,720	1,205	12,049
Domestic Sewage General Permits	0.25			
Future Growth (2% of TMDL)	124			

Table 1-9. Maximum daily phosphorus loads for Black Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day TP)	Allocated Nonpoint Sources (LA) (lb/day TP)	Margin of Safety (MOS) (lb/day TP)	Maximum Daily Load (MDL) (lb/day TP)
Black Creek (VAW-L19R_RAB01A00)	1.95	3.98	0.66	6.59
VA0089729	1.88			
Future Growth (2% of TMDL)	0.07			

Allocation Scenarios

There are many ways to reduce pollutants to reach TMDL goals. Several versions of these reduction plans, or allocation scenarios, were developed. The summation of the allocated point source and nonpoint source reduced loads including future growth and the margin of safety in each

scenario is less than the TMDL. This conservative approach provides additional assurance that implementation of the TMDL will result in restoration of designated uses for impaired waterbodies. The first scenario focuses the greatest reductions on the largest nonpoint sources of the pollutant. The second scenario assigns equal reductions to all nonpoint sources. The third scenario focuses all reductions on agricultural sources and the fourth scenario focuses all reductions on urban/residential sources. In Hat Creek, development and streambank erosion were recognized as growing issues with respect to water quality, and stakeholders recommended increasing reductions for these sources during their review of initial reduction scenarios. Meeting participants felt that stream walks could be used to identify and prioritize stream reaches experiencing the greatest degree of erosion. Additionally, participants felt that targeting restoration would provide additional assurance that sediment reduction goals were reasonable and could be achieved cost effectively. Only three scenarios were developed for sediment and phosphorus reductions in Black Creek because TMDL endpoints could not be met even if all residential and urban pollutant sources were eliminated. These scenarios were presented to stakeholder meeting members who determined that Scenario 1 was preferred for each watershed (see **Table 1-10** through **Table 1-12**). Meeting participants felt that this scenario was the most likely to be implemented while also balancing reductions between pollutant sources.

Table 1-10. Allocation scenarios for Black Creek sediment loads.

<i>Black Creek Sediment (2-BKC000.08)</i>		Scenario 1 (preferred)		Scenario 2		Scenario 3	
Source	Existing	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Hay	59,587	15	50,649	26.4	43,856	33.1	39,863
Pasture	253,951	30	177,766	26.4	186,908	33.1	169,893
Forest	87,308	-	87,308	-	87,308	-	87,308
Trees	32,305	-	32,305	-	32,305	-	32,305
Shrub	2,666	-	2,666	-	2,666	-	2,666
Harvested	14,012	-	14,012	-	14,012	-	14,012
Wetland	453	-	453	-	453	-	453
Gravel	908	6	854	26.4	669	-	908
Turfgrass	15,476	6	14,547	26.4	11,390	-	15,476
Developed pervious	1,789	6	1,681	26.4	1,317	-	1,789
Developed impervious	67,858	30	47,501	26.4	49,943	-	67,858
Streambank Erosion	21,197	20	16,957	26.4	15,601	33.1	14,180
VA0089729*	20,118	-	20,118	-	20,118	-	20,118
Margin of Safety (10%)	-	-	53,058	-	53,058	-	53,058
Future Growth Allocation (2%)	-	-	10,612	-	10,612	-	10,612
TOTAL w/o MOS and FG	577,629	19.2	466,818	19.2	466,547	19.2	466,832
TOTAL	577,629	-	530,489	-	530,217	-	530,502
TMDL (Target Load)⁺	-	-	530,584	-	530,584	-	530,584

*Existing conditions and TMDL scenarios show permitted TSS load calculated using permitted design flow and TSS concentration. Load calculations using average flow and concentration data reported in discharge monitoring data from facility result in a TSS load of 1,613 lbs/yr.

+ The summation of the allocated PS and NPS reduced loads including FG and the MOS, 'TOTAL,' is less than the TMDL (Target Load).

Table 1-11. Allocation scenarios for Hat Creek sediment loads.

<i>Hat Creek Sediment (2-HAT000.14)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3		Scenario 4	
Source	Existing	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation	Reduction	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Cropland	12,919	3.5	12,467	8.9	11,769	9.5	11,692	-	12,919
Hay	102,647	3.5	99,055	8.9	93,512	9.5	92,896	-	102,647
Pasture	1,173,980	10.9	1,046,016	8.9	1,069,495	9.5	1,062,452	-	1,173,980
Vineyard	15,794	3.5	15,241	8.9	14,389	9.5	14,294	-	15,794
Forest	364,328	-	364,328	-	364,328	-	364,328	-	364,328
Trees	57,301	-	57,301	-	57,301	-	57,301	-	57,301
Shrub	5,220	-	5,220	-	5,220	-	5,220	-	5,220
Harvested	17,614	-	17,614	-	17,614	-	17,614	-	17,614
Wetland	176	-	176	-	176	-	176	-	176
Gravel	3,028	1.0	2,998	8.9	2,759	-	3,028	38	1,878
Turfgrass	28,358	1.0	28,074	8.9	25,834	-	28,358	38	17,582
Developed pervious	2,191	1.0	2,169	8.9	1,996	-	2,191	38	1,358
Developed impervious	87,040	1.0	86,169	8.9	79,293	-	87,040	38	53,965
Streambank Erosion	275,435	6.0	258,909	8.9	250,921	9.5	249,268	38	170,770
<i>Domestic Sewage General Permits</i>	91	-	91	-	91	-	91	-	91
Margin of Safety (MOS) (10%)	-	-	226,849	-	226,849	-	226,849	-	226,849
Future Growth Allocation (FG) (2%)	-	-	45,370	-	45,370	-	45,370	-	45,370
TOTAL w/o MOS and FG	2, 146,121	7.0	1,995,828	7.1	1,994,697	7.0	1,995,948	7.0	1,995,622
TOTAL	2,146,121	-	2,268,047	-	2,266,916	-	2,268,167	-	2,267,841
TMDL (Target Load)*	-	-	2,268,489	-	2,268,489	-	2,268,489	-	2,268,489

* The summation of the allocated PS and NPS reduced loads including FG and the MOS, 'TOTAL,' is less than the TMDL (Target Load).

Table 1-12. Allocation scenarios for Black Creek phosphorus loads.

Black Creek Watershed		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
Source	Existing TP (lb/yr)	Reduction (%)	Allocation TP (lb/yr)	Reduction (%)	Allocation TP (lb/yr)	Reduction (%)	Allocation TP (lb/yr)
Groundwater	168.0	-	168.0	-	168.0	-	168.0
Hay	188.6	30.0	132.0	30.0	132.0	50.0	94.3
Pasture	81.4	30.0	57.0	30.0	57.0	50.0	40.7
Forest	17.9	-	17.9	-	17.9	-	17.9
Trees	8.6	-	8.6	-	8.6	-	8.6
Shrub	0.4	-	0.4	-	0.4	-	0.4
Harvested	2.5	-	2.5	-	2.5	-	2.5
Wetland	0.1	-	0.1	-	0.1	-	0.1
Gravel	0.4	5.0	0.4	30.0	0.3	-	0.4
Turfgrass	27.7	25.0	20.8	30.0	19.4	-	27.7
Developed Pervious	1.2	5.0	1.2	30.0	0.8	-	1.2
Developed Impervious	149.3	30.0	104.5	30.0	104.5	-	149.3
Streambank	7.4	25.0	5.6	30.0	5.2	-	7.4
VA0089729*	914	25.1	685.0	25.1	685.0	25.1	685.0
Margin of Safety (MOS) (10%)	-	-	137	-	137	-	137
Future Growth Allocation (FG) (2%)	-	-	27	-	27	-	27
TOTAL w/o MOS and FG	1,568	23.2	1,204	23.4	1,202	23.2	1,204
TOTAL	1,568	-	1,368	-	1,366	-	1,368
TMDL (Target Load)⁺	-	-	1,368	-	1,368	-	1,368

* Since permit coverage for this facility does not include a TP concentration limit, the existing TP load shown for VA0089729 is based on an average discharge rate 0.12 MGD and an average TP concentration of 2.5 mg/L.

+ The summation of the allocated PS and NPS reduced loads including FG and the MOS, 'TOTAL,' is less than the TMDL (Target Load).

Public Participation

Public participation was solicited at every stage of the TMDL study in order to receive input from stakeholders and to apprise the stakeholders of progress made. A series of two public meetings and six community engagement meetings took place during the TMDL development process. Since a TMDL implementation plan was being developed concurrently with the TMDL study, implementation actions were also discussed at several of these meetings. Public meetings and community engagement meetings included representatives from the James River Association, Nelson County Board of Supervisors, Nelson County Service Authority, Thomas Jefferson SWCD, Thomas Jefferson Planning District Commission, Virginia Department of Energy, Virginia Farm Bureau, the Nelson County Times, as well as many residents of the watersheds.

The first public meeting (32 attendees, January 25th, 2023) was held at the Nelson Memorial Library in Lovingson, VA. This meeting introduced attendees to DEQ's water quality planning process, described the TMDL purpose and process, reviewed benthic monitoring data collected in the study watersheds, discussed the impairments, reviewed the preliminary results of the stressor analysis, and solicited input on the benthic stressors identified in the benthic stressor analysis study. This meeting was followed by a 30-day public comment period, which closed on February 24, 2023. No comments were received during this time.

The first community engagement meeting (24 attendees, March 1st, 2023) was held at the Nelson Memorial Library in Lovingson, VA to discuss the TMDL process and the benthic stressor analysis. In addition, the group discussed land cover estimates and loading rates assigned to each land cover type. The group also discussed the method used to account for future permitted land disturbance and how the AllForX method will be used to develop target pollutant loads for the watersheds.

The second community engagement meeting (18 attendees, May 17th, 2023) was held at the Nelson Memorial Library. Participants in this meeting discussed the changes in landcover distributions that were made based on the input from the members of the first stakeholder meeting, revisited a previous discussion about establishing a set aside for construction stormwater permits in the watershed, discussed the future growth allocation and margin of safety, reviewed the pollutant sources and BMPs in the impaired watersheds, and gathered input on the preferred sediment allocation scenario.

The third community engagement meeting was held on January 10, 2024, at the Nelson Memorial Library (18 attending). This meeting was focused on developing a phosphorus endpoint for Black Creek. The group discussed TMDL alternatives and agreed to change paths and shift to developing an advance restoration plan to address sediment and phosphorus targets in Hat and Black Creeks.

The fourth community engagement meeting was held on February 27, 2024, at the Nelson Memorial Library (9 attending). Participants prioritized a series of agricultural best management practices for inclusion in the advance restoration plan. Streambank restoration practices were also discussed and agreed on as a high priority for local stakeholders.

The fifth community engagement meeting was held on September 9, 2024, at the Nelson Memorial Library (11 attending). During this meeting, participants discussed the decision to pivot back to developing a traditional TMDL. The group also discussed the new path forward for the project and revisions to existing loads and reduction scenarios for the two watersheds.

The sixth and final community engagement meeting was held on December 3, 2024, at the Nelson Memorial Library (12 attending). During this meeting, the group reviewed implementation scenarios for best management practices in Hat and Black Creek. Participants reviewed cost estimates and assisted with development of a timeline for implementation efforts. Plans for the final public meeting were also discussed.

A final public meeting was held on March 5, 2025, at The Nelson Center in Lovingson to present the draft TMDL document. The public meeting marked the beginning of the official 30-day public comment period and was attended by 13 watershed residents and other stakeholders. The public comment period ended on April 4, 2025. No comments were received.

Reasonable Assurance

Public participation in the development of the TMDL and implementation plan, follow-up monitoring, permit compliance, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented, and water quality will be restored in the impaired watersheds.

What Happens Next

This report sets the clean-up goals for Black Creek and Hat Creek, but the next step is a clean-up plan (or Implementation Plan) that lays out how those goals will be reached. Clean-up plans set intermediate goals and describe actions that should be taken to improve water quality in the impaired streams. Some of the potential actions that could be included in an implementation plan for the Black Creek and Hat Creek watersheds are listed below:

- Fence out cattle from streams and provide alternative water sources
- Implement conservation tillage practices on cropland
- Conduct stream bank restoration projects in areas where banks are actively eroding
- Leave a 35 – 100 ft band of natural buffer along the stream so that it slows overland flow and filters out sediment from adjacent land (a riparian buffer)
- Encourage timely septic system maintenance and repair.
- Reduce runoff by increasing green spaces and reducing hardened spaces (asphalt or concrete)

These and other actions that could be included in a clean-up plan are identified in the planning process along with associated costs and the extent of each practice needed. The clean-up plan also identifies potential sources of money to help in the clean-up efforts. Most of the money utilized to implement actions in the watersheds to date has been in the form of cost-share programs, which share the cost of improvements with the landowner. Additional funds for urban stormwater practices have been made available through various grant programs, including an annual funding opportunity through the National Fish and Wildlife Foundation's Chesapeake Bay Stewardship Fund program. Please be aware that the state or federal government will not fix the problems with the impaired streams. It is primarily the responsibility of individual landowners and local governments to take the actions necessary to improve these streams. The role of state agencies is to help with developing the plan and find money to support implementation, but actually making the improvements is up to those that live in the watershed. By increasing education and awareness of the problem, and by working together to each do our part, we can make the changes necessary to improve the streams.



Frequently Asked Question:

How will the TMDL be implemented?

For point sources, TMDL reductions will be implemented through discharge permits. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help defer the cost of BMP installation.

DEQ will continue to sample aquatic life in these streams and monitor the progress of clean-up. This sampling will let us know when the clean-up has reached certain milestones listed in the plan. To begin moving towards these clean-up goals, DEQ recommends that concerned citizens come together and begin working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the problem and promote those activities and programs that improve stream health.

DRAFT

**Benthic TMDL Study on Deep Run, Dover Creek, and Upham
Brook Watersheds in Henrico County, Goochland County, and the
City of Richmond**



Prepared by:
Wetland Studies and Solutions, Inc.
and
James Madison University

Prepared for:
Virginia Department of Environmental Quality

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Acknowledgements

Project Personnel

Wetland Studies and Solutions, Inc.

Katie Shoemaker, PE, CFM, Environmental Engineer

Jeremy Bradley, CFM, GIS Specialist

Stephen Dombroski, EIT, Project Engineer

James Madison University (JMU)

Dr. Robert Brent, Associate Professor

Virginia Department of Environmental Quality (VADEQ)

Denise Moyer, TMDL Modeling Coordinator

Craig Lott, TMDL Modeling Coordinator (Central Office)

Jennifer Palmore, Water Quality Planning Supervisor

Kelley West, Environmental Planner

Mike Shaver, Biologist

Shawn Weimer, Water Planning & Permit Manager

For additional information, please contact:

Virginia Department of Environmental Quality

Piedmont Regional Office, Glen Allen: Denise Moyer, Phone: (804) 712-9538,

Email: Denise.Moyer@deq.virginia.gov

Executive Summary

Background

This TMDL study covers the Deep Run, Stony Run, Stony Run Unnamed Tributary (UT), Dover Creek, Upham Brook, North Run, and Jordans Branch watersheds, which are located in Henrico and Goochland Counties and the City of Richmond, Virginia. For the purposes of this report, these watersheds will be referred to as the TMDL study watersheds or the TMDL watersheds. Deep Run and its tributaries (including the Stony Run and Stony Run UT TMDL study watersheds) are located in a predominantly developed suburban area. The upper unnamed tributary of Stony Run, referred to as Stony Run UT, drains portions of West Broad Village and the Church Run neighborhood and connects with Stony Run directly to the north of the Church Run neighborhood. Stony Run drains portions of Short Pump, West Broad Village, and Crown Grant south to Deep Run at the confluence downstream of Gregorys Pond. Deep Run drains portions of Westbriar, Wedgewood, Deep Run Park, and Raintree south to Canterbury Pond, which is located along the confluence of Deep Run Creek. Dover Creek drains a predominantly rural area south of Broad Street Road and west of Hermitage Country Club south to Dover Lake and is largely rural. Upham Brook and its tributaries (including the North Run and Jordans Branch TMDL study watersheds) are located in a predominantly developed area comprised of urban and dense suburban areas. North Run drains portions of Glen Allen and Laurel south to a confluence with Upham Brook just upstream of Brook Road. Jordans Branch drains, among other Richmond areas, portions of Windsor Farms, Westhampton, and Willow Lawn north to Youngs Pond in Bryan Park where Jordans Branch has a confluence with Upham Brook. Upham Brook drains portions of Crestview, Dumbarton, Lakeside, Brook Hill, and Chamberlayne, east to the Chickahominy River. Deep Run and its tributaries flow into Tuckahoe Creek which flows into the James River. Dover Creek flows into Little River which then flows into the James River. Upham Brook and its tributaries flow into the Chickahominy River which flows southeast into the James River which drains into the Chesapeake Bay, and ultimately into the Atlantic Ocean.

Definition:

Watershed – All of the land area that drains to a particular point or body of water.



Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordans Branch are listed as impaired on Virginia's 2022 Section 305(b)/303(d) Water Quality Assessment Integrated Report due to water quality violations of the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 1-1**. The watersheds of the impaired streams are shown in **Figure 1-1**.

Table 1-1. Impaired segments addressed in this TMDL study.

TMDL Watershed	305(b) Segment ID	Cause Group Code 303(d) Impairment ID	Listing Station	Year Initially Listed
Deep Run	VAP-H39R_DPR01A00 (4.17 mi)	H39R-27-BEN	2-DPR003.75	2016
Stony Run	VAP-H39R_SNJ01A04 (1.01 mi)	H39R-13-BEN	2-SNJ001.77	2008
	VAP-H39R_SNJ02A04 (1.36 mi)	H39R-28-BEN	2-SNJ000.19	2016
Stony Run UT	VAP-H39R_XYT01A08 (1.27 mi)	H39R-15-BEN	2-XYT000.04 2-XYT000.29	2008
Dover Creek	VAP-H39R_DOV01A00 (4.77 mi)	H39R-26-BEN	2-DOV003.55	2020
Upham Brook	VAP-G05R_UPM01A02 (10.99 mi)	G05R-16-BEN	2-UPM003.12	2016
	VAP-G05R_UPM01B08 (1.16 mi)		2-UPM005.26	2016
North Run	VAP-G05R_NTR01A00 (4.24 mi)	G05R-09-BEN	2-NTR000.23	2014
	VAP-G05R_NTR02A06 (3.66 mi)		2-NTR005.53	2008
Jordans Branch	VAP-G05R_JOP01A14 (2.19 mi)	G05R-14-BEN	2CJOP000.34	2016

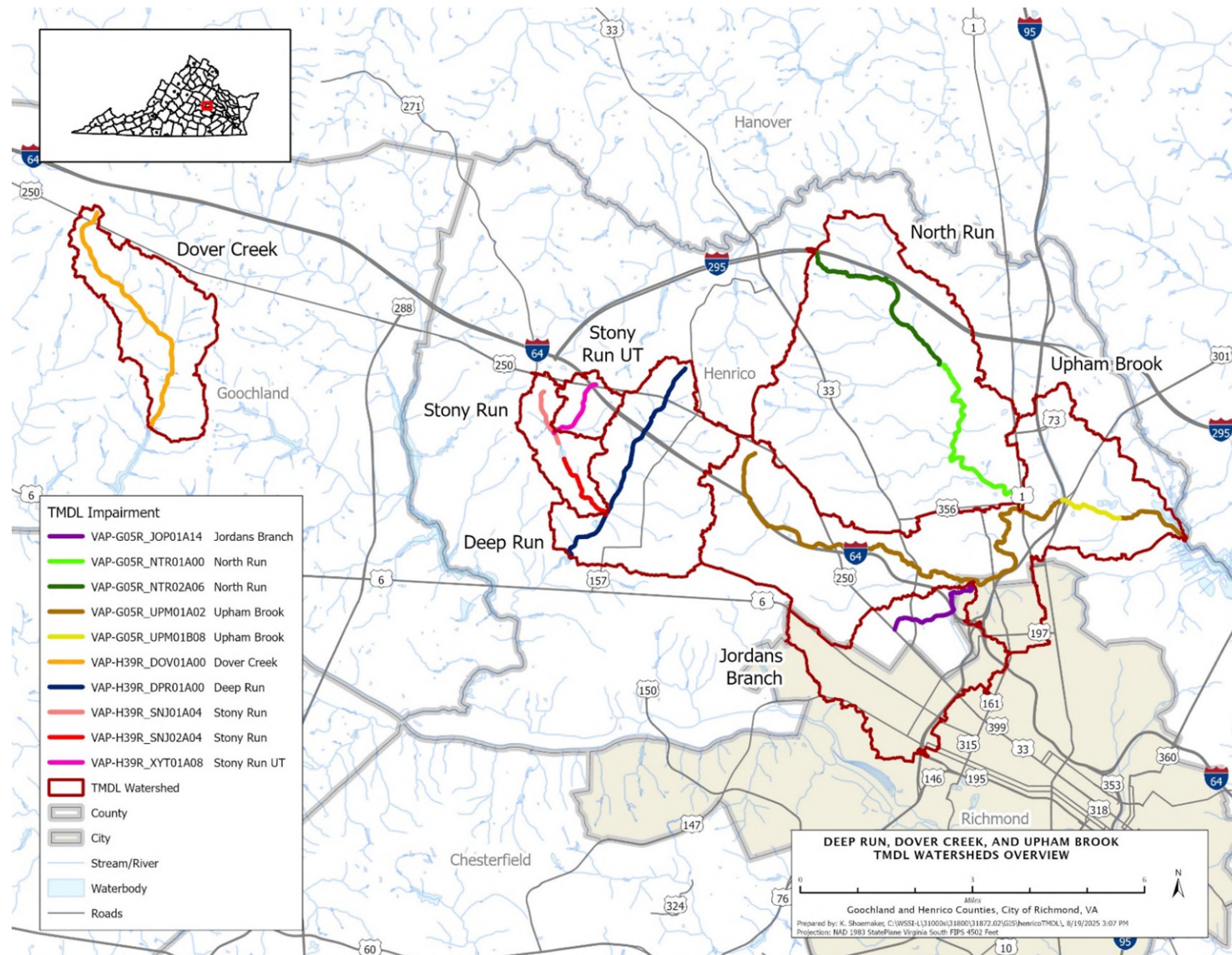


Figure 1-1. Location of impaired segment IDs, all seven TSS TMDL watersheds, and three TP TMDL watersheds 1) Stony Run including the Stony Run UT watershed; 2) Dover Creek; 3) Upham Brook including the North Run and Jordans Branch watersheds.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia establishes designated uses for all waters in the state and has developed water quality standards to ensure those uses are met. One of those standards is the expectation that every stream will support a healthy and diverse community of bugs and fish (the aquatic life standard). The Virginia Department of Environmental Quality (VADEQ) determines whether this standard is met by monitoring the benthic macroinvertebrate community (bugs that live on the bottom of the stream) in our waterways. The health and diversity of these bugs are assessed using the Virginia Stream Condition Index (VSCI). The VSCI is a multimetric index used to derive stream health scores ranging from 0 to 100. Scores below 60 are categorized as impaired. **Figure 1-2** shows the various monitoring stations throughout the watershed, color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of aquatic life. This shows that the various impaired streams in this study fail the aquatic life standard, and pollutants within the watershed need to be identified and reduced.

A benthic stressor analysis study was conducted in 2022 to determine the cause(s) of benthic impairment in the TMDL watersheds. The study found that sediment was the primary stressor to aquatic life in Deep Run, Stony Run UT, North Run, and Jordans Branch, and that both sediment and phosphorus were the primary stressors to aquatic life in Stony Run, Dover Creek, and Upham Brook (VADEQ, 2022b). The total phosphorus (TP) TMDLs for the Stony Run and Upham Brook watersheds have subwatersheds that also have benthic impairments - namely Stony Run UT, North Run & Jordans Branch. Although TP was not identified as a probable stressor in the subwatersheds, non-point source runoff and permitted discharges from those areas still contribute to the pollutant loads in the larger watershed. These subwatershed areas are added to the Stony Run & Upham Brook TP TMDLs.

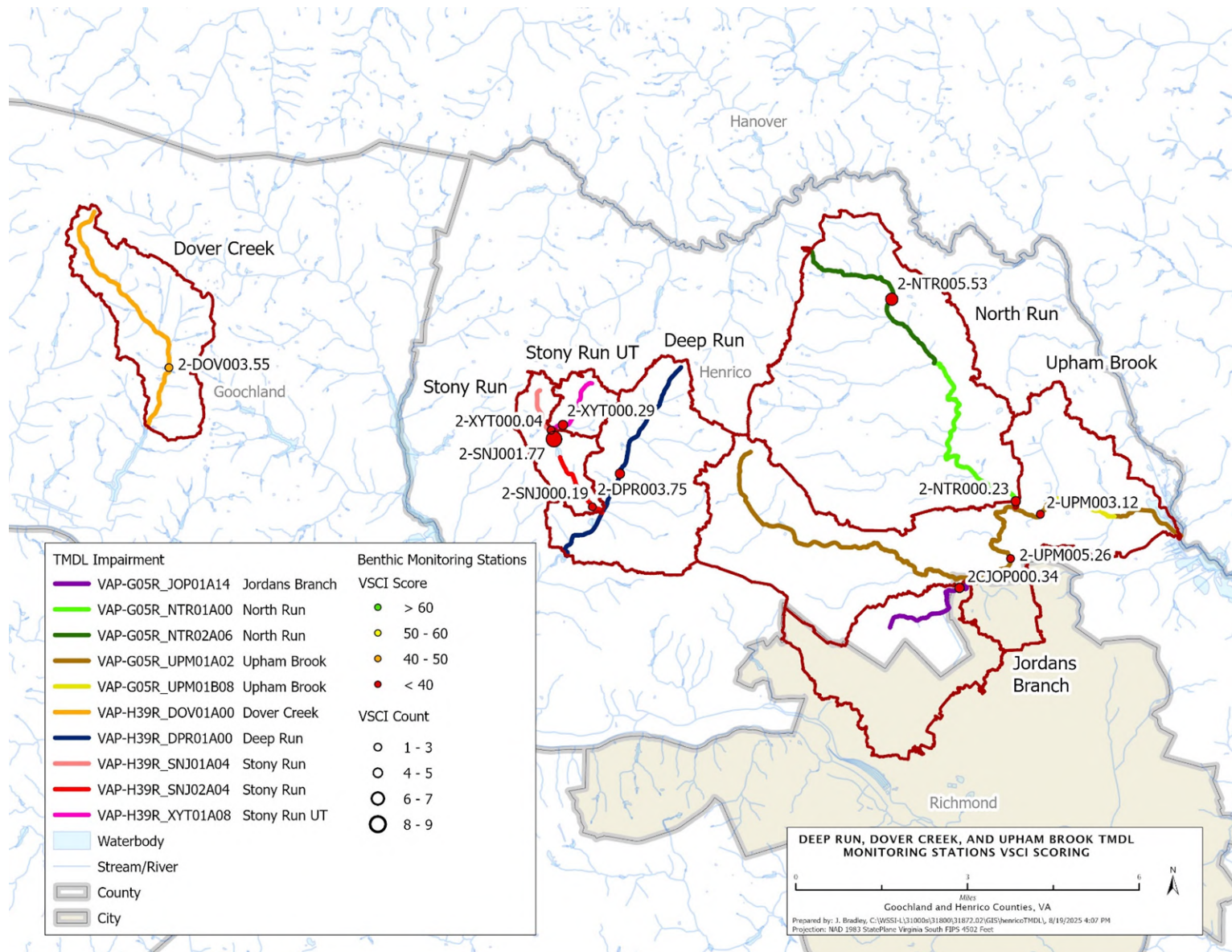


Figure 1-2. Stream health score summaries in the Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordans Branch watersheds.

Too Much Sediment

Excess sediment was identified as a primary stressor in Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordans Branch. When it rains, sediment is washed off of the land surface into nearby creeks and rivers. The amount of soil that is washed off depends upon how much it rains and the characteristics of the surrounding watershed. Rain falling on a construction site lacking sufficient controls or highly tilled cropland without a cover crop may carry a large amount of sediment to a stream. Other land types, like forests and well-maintained pasture, contribute much less sediment to waterways during rainfall events. When that soil gets into nearby streams, it can destroy valuable habitat for aquatic macroinvertebrates that live underneath and between rocks and gravel on the bottom of the stream. Without this valuable habitat, the diversity of aquatic life in a stream may be severely limited.

Too Much Phosphorus

In addition, phosphorus was identified as a primary stressor in Stony Run, Dover Creek, and Upham Brook. Phosphorus is a nutrient that helps plants grow. It is primarily found in fertilizers and manures. Just as sediment can wash off the land surface into nearby creeks, phosphorus contained in fertilizers or manures that are applied to lawns or farm fields can also wash off. In a stream, phosphorus makes algae grow, and that algae reduces oxygen levels in the water when it dies and decomposes. This limits the diversity of bugs and fish, which need oxygen to survive.

The Study

To study the problem of excess sediment and phosphorus in the Stony Run, Dover Creek, and Upham Brook watersheds and excess sediment in the Deep Run, Stony Run UT, North Run, and Jordans Branch watersheds, a combination of monitoring data and computer modeling was utilized. Monitoring was used to tell how much sediment and phosphorus is in the streams at any given time and how aquatic life conditions have changed over time. The computer model incorporates monitoring data and was used to estimate where the sediment and phosphorus are coming from and to make predictions about how stream conditions would change if those sources were reduced.

Frequently Asked Question:

Why use a computer model?

Sampling and testing tell you a lot about the present and the past, but nothing about the future. A computer model is a tool that can help you make predictions about the future. This is necessary to figure out how much effort is needed to clean up a stream.

For this purpose, a computer model called the Generalized Watershed Loading Function model (or GWLF) was used. This model considers the slope, soils, land cover, erodibility, and runoff to estimate the amount of soil eroded in the watershed and deposited in the stream. The model was calibrated against real-world flow measurements taken from the stream in order to ensure that it was producing accurate results. The calibrated model was then used to estimate the sediment and

phosphorus reductions that would be needed to completely restore a healthy aquatic life to the impaired streams in the watershed.

The modeling analysis (TMDL study) develops an equation called a Total Maximum Daily Load (TMDL) because it determines the maximum amount of a pollutant that can get into a certain stream without harming the stream or the creatures living in it. A TMDL allocates allowable contributions of a specific pollutant from point sources, called the wasteload allocation, and nonpoint sources, called the load allocation. It also provides a margin of safety to account for potential differences between the stream environment and the computer model. This TMDL report summarizes the TMDL study and sets goals for a clean-up plan.

Definition:

TMDL – Total Maximum Daily Load. This is the amount of a pollutant that a stream can receive and still meet water quality standards. The term TMDL is also used more generally to describe the state's formal process for cleaning up polluted streams.

Current Conditions

The Chesapeake Bay Program (CBP) 2017/2018 land use/land cover (LULC) dataset was used to determine the current land use within the study watersheds, with minor modifications (discussed in **Section 3.4**). The land cover distribution for each impaired watershed is shown in **Figure 1-3** through **Figure 1-11**.

With the exception of Dover Creek, the TMDL study watersheds are all significantly developed, with more than 50% of the watersheds comprised of developed pervious/impervious land and turf grass, which are associated with residential and commercial land uses. The Jordans Branch watershed is the most developed, with 80.0% combined developed pervious/impervious land and turf grass land cover. The Dover Creek watershed is largely forested and agrarian, with 59.2% forested land and 25.9% agricultural land. Only 7.1% of the land cover is considered developed pervious/impervious.

This land cover dataset combined with an accounting of the permitted discharges represents the major pollutant sources in the watershed. The GWLF model was used to figure out the relative

Definition:

Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Nonpoint Source – pollution that does not come out of a pipe but comes generally from the landscape (usually as runoff).



contribution of sources of sediment in the impaired watersheds. **Figure 1-3** through **Figure 1-11** show the distribution of sediment and phosphorus contributions from various sources in the watersheds. The permitted sources include four Municipal Separate Storm Sewer System (MS4) entities: City of Richmond, Henrico County, J. Sargeant Reynolds Community College, and Virginia Department of Transportation (VDOT). Additionally, the watersheds include six industrial stormwater (ISW) general permits, two concrete products facility general permits, one potable water treatment plant (PWTP) general permit, and construction general permits (CGP). The sediment and phosphorus loads from permitted sources were calculated based on the permit language, reported discharge data, and land cover type and area (detailed in **Section 4.3.2**).

Due to the developed nature of Deep Run, Stony Run, Stony Run UT, Upham Brook, North Run, and Jordans Branch watersheds, sediment and phosphorus sources are driven by developed impervious land, permitted sources, and streambank erosion. Since Dover Creek has a greater extent of forested and agrarian land cover, the sediment sources are driven by cropland, developed impervious land, and pasture; and the phosphorus sources are driven by developed impervious land, groundwater, hay and pasture. A substantial portion of the nonpoint source sediment load in the Deep Run, Upham Brook, and North Run watersheds is resulting from stream bank and bed erosion.

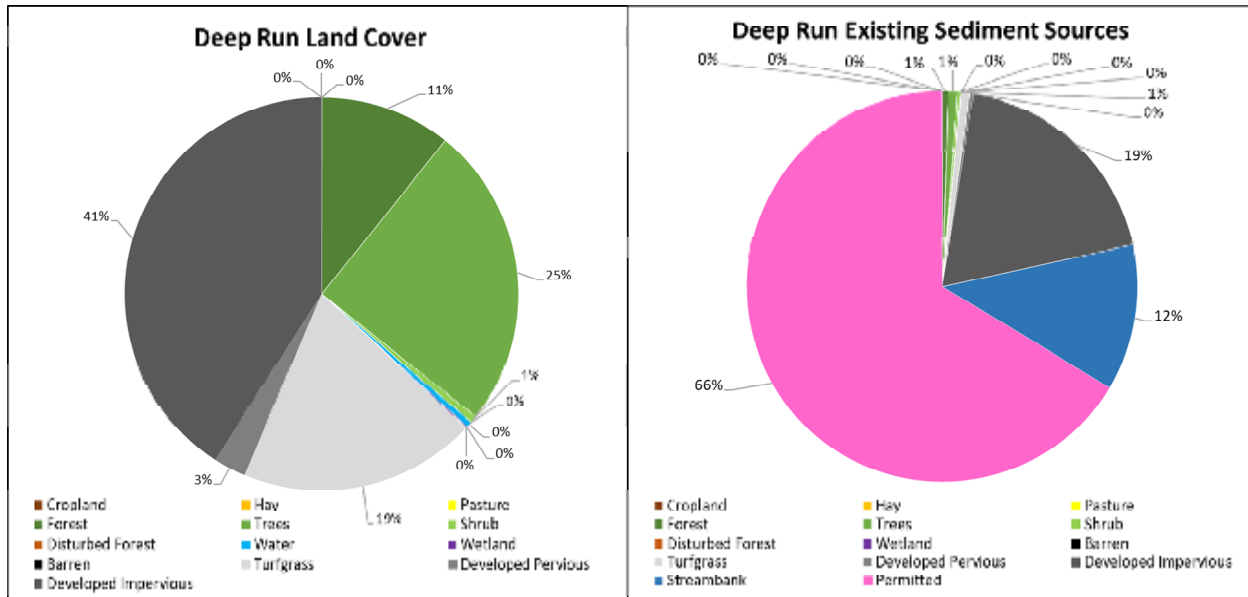


Figure 1-3. Land cover and existing source load distributions in the Deep Run watershed. Note that this data does not include the data from the upstream TMDL watersheds Stony Run and Stony Run UT.

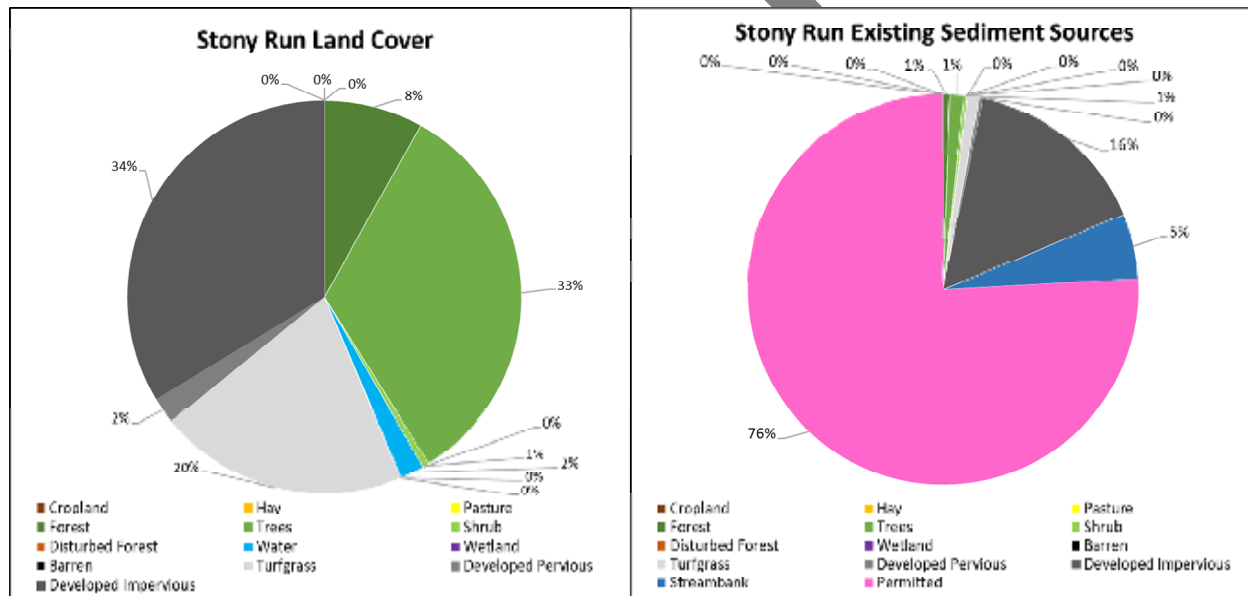


Figure 1-4. Land cover and existing sediment source load distributions in the Stony Run watershed. Note that this data does not include the data from the upstream Stony Run UT TMDL watershed.

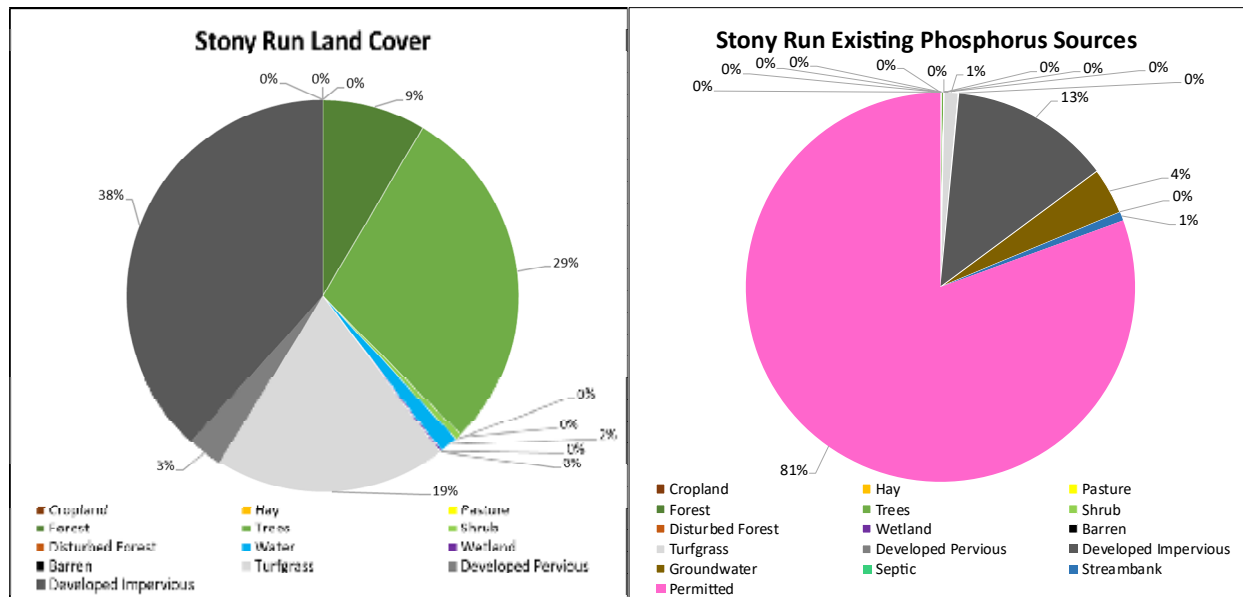


Figure 1-5. Land cover and existing phosphorus source load distributions in the Stony Run watershed. Note that this data includes the area from the Stony Run watershed and the upstream Stony Run UT TMDL watershed.

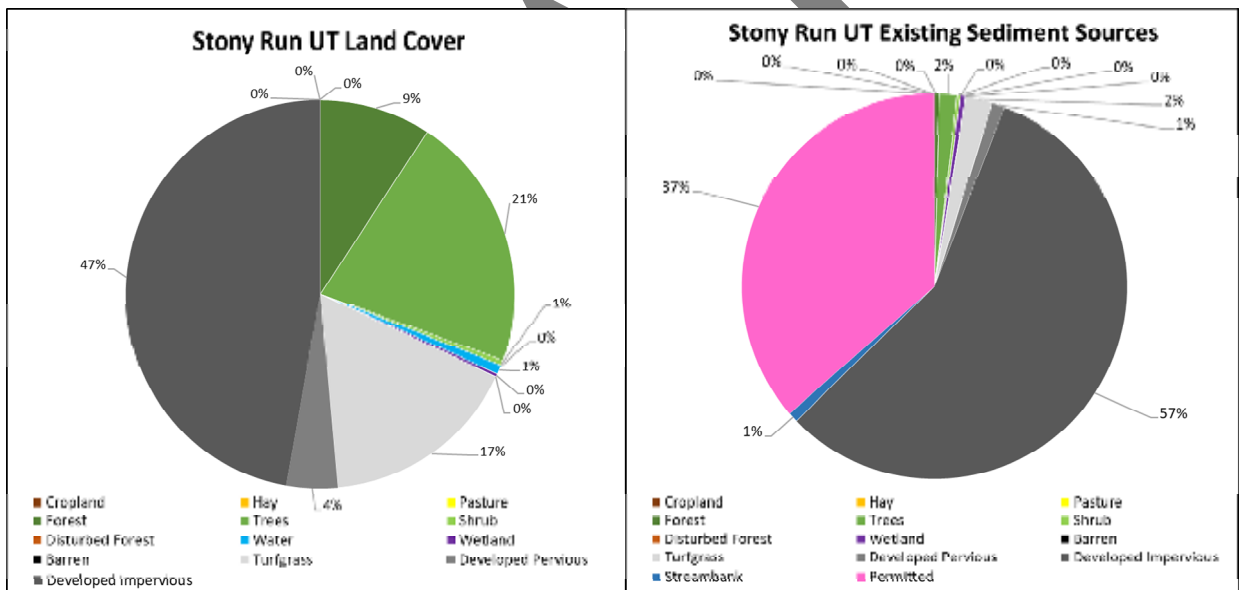


Figure 1-6. Land cover and existing source load distributions in the Stony Run UT watershed.

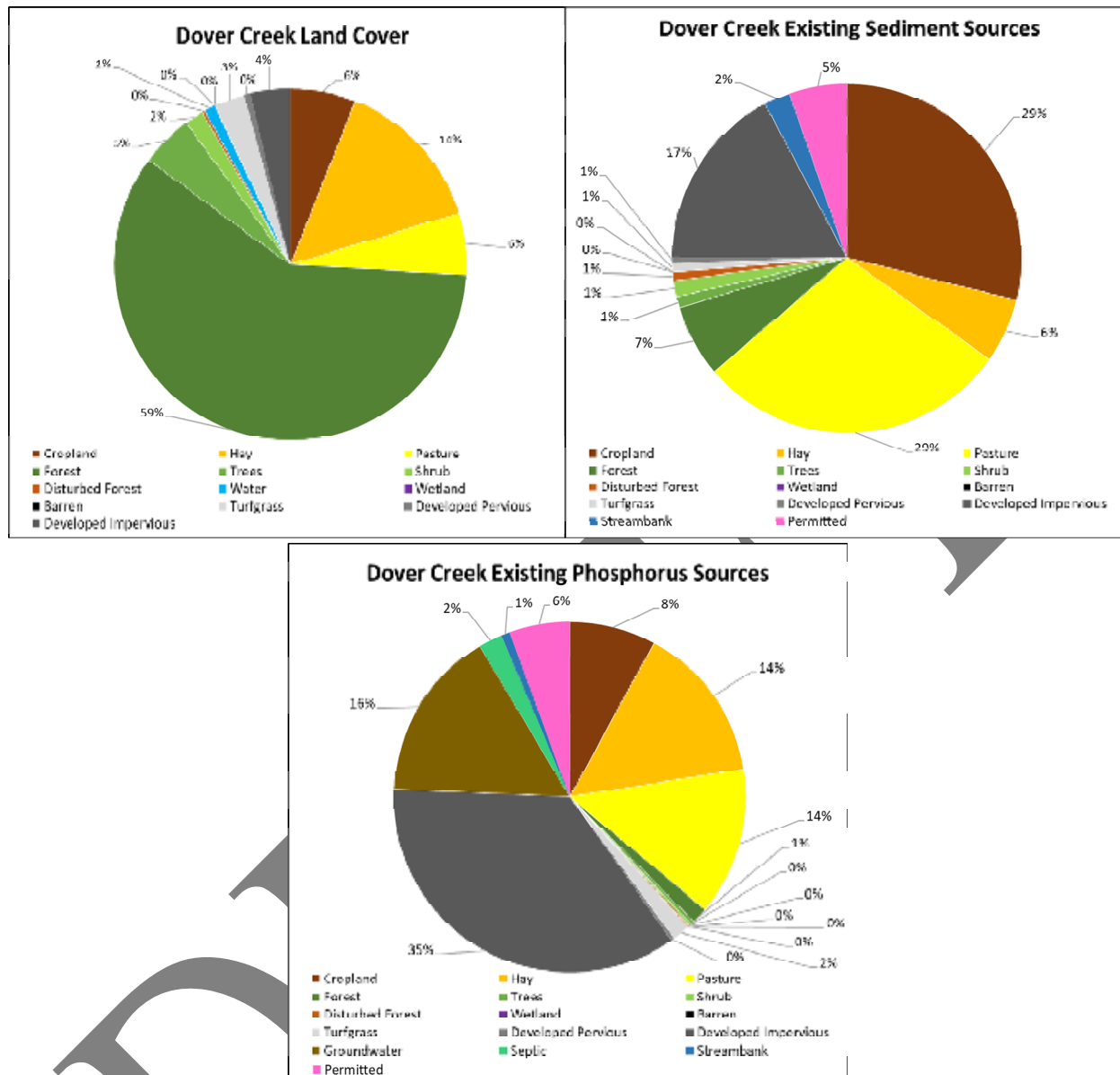


Figure 1-7. Land cover and existing source load distributions in the Dover Creek watershed. Note that the Dover Creek TMDL watershed does not have another TMDL watershed as an upstream tributary. The Land Cover Pie chart is the same for both the sediment TMDL and the phosphorus TMDL.

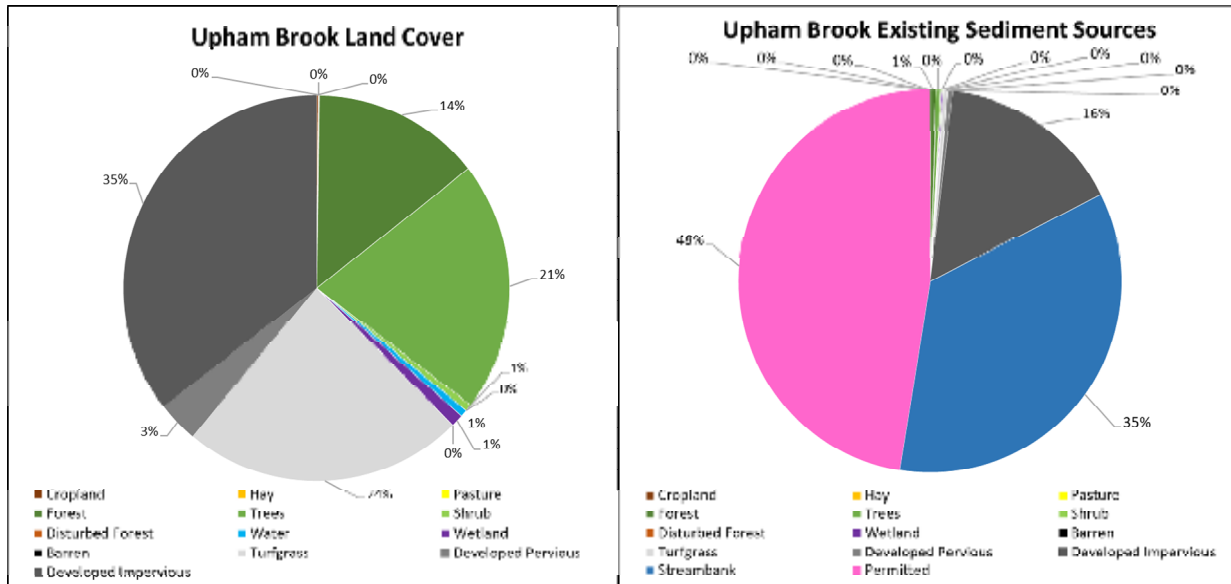


Figure 1-8. Land cover and existing sediment source load distributions in the Upham Brook watershed. Note that this data does not include the data from the upstream TMDL watersheds North Run and Jordans Branch.

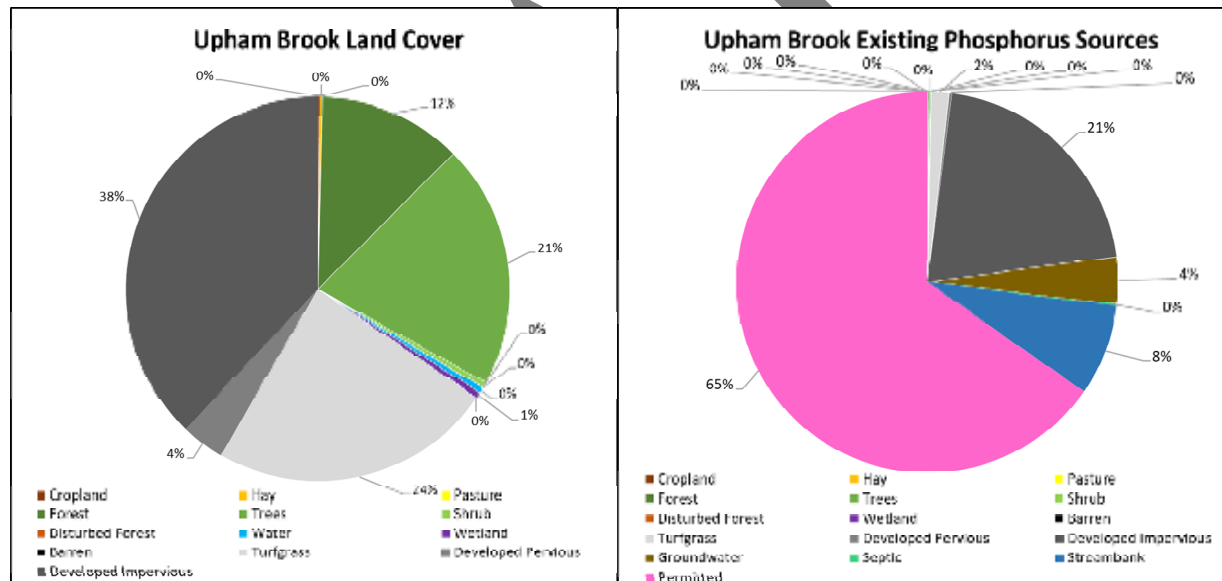


Figure 1-9. Land cover and existing phosphorus source load distributions in the Upham Brook watershed. Note that this data includes the area from the upstream North Run and Jordans Branch TMDL watersheds.

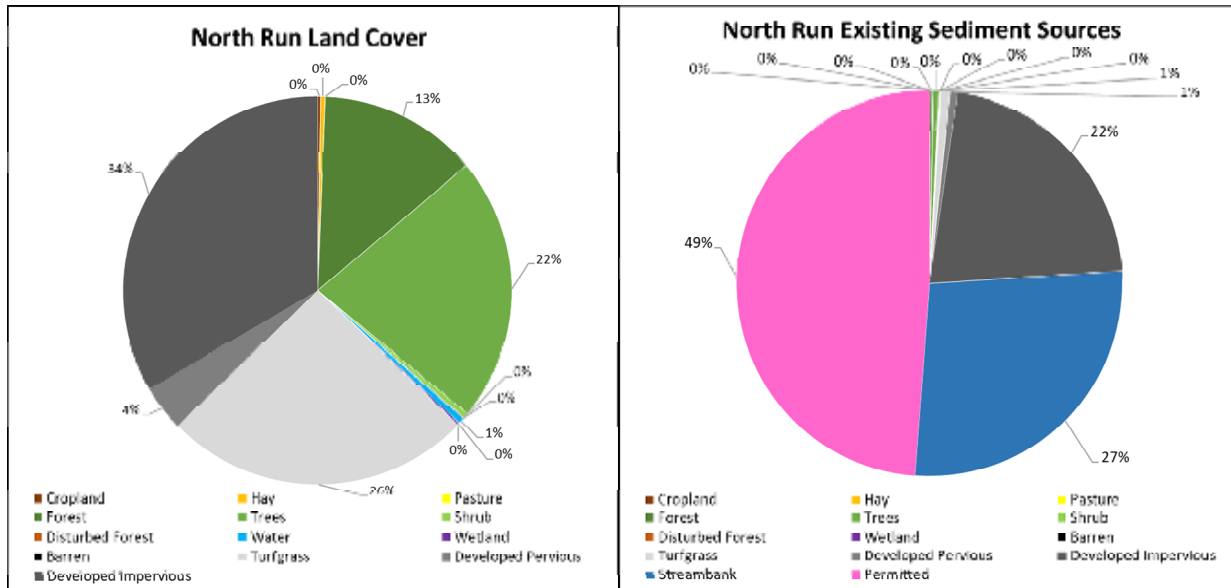


Figure 1-10. Land cover and existing sediment source load distributions in the North Run watershed.

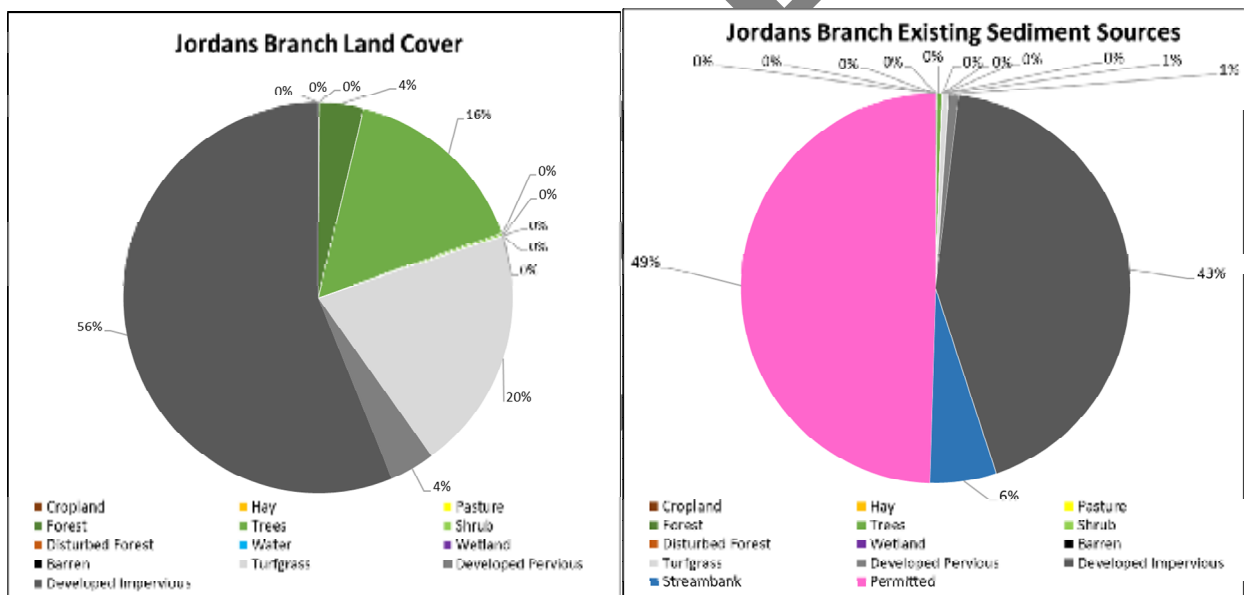


Figure 1-11. Land cover and existing sediment source load distributions in the Jordans Branch watershed.

Future Goals (the TMDL)

After figuring out where the sediment in the impaired streams is currently coming from, a computer model was used to figure out how much sediment and/or phosphorus loads need to be reduced to clean up each stream. The ultimate goal for these streams is to have sediment and phosphorus levels that allow for diverse and abundant aquatic life. The reductions in sediment and/or phosphorus needed to meet these goals are shown in **Table 1-2** and **Table 1-3**.

Table 1-2. Percent reductions in sediment needed to clean up the impaired waters.

Watershed	Crop, Pasture, Hay	Forest, Trees, Shrubs, Wetland	Developed Pervious and Impervious, Turfgrass*	Streambank Erosion
Deep Run	72.6%	0.0%	72.6%-72.7%	72.6%
Stony Run	N/A	0.0%	43.9%-44.0%	43.9%
Stony Run UT	N/A	0.0%	68.9%-69.0%	68.9%
Dover Creek	25.3%	0.0%	25.2%	25.2%
Upham Brook	86.1%	0.0%	86.1%-86.2%	86.1%
North Run	85.9%	0.0%	85.8%-85.9%	85.8%
Jordans Branch	94.3%	0.0%	94.3%-94.4%	94.3%

*Including MS4 permitted areas.

Table 1-3. Percent reductions in phosphorus needed to clean up the impaired waters.

Watershed	Crop, Pasture, Hay	Forest, Trees, Shrubs, Wetland	Developed Pervious and Impervious, Turfgrass, Septic*	Streambank Erosion
Stony Run	N/A	0.0%	83.9%-84.0%	84.0%
Dover Creek	36.7%-36.8%	0.0%	36.7%-36.8%	36.7%
Upham Brook	77.2%	0.0%	77.2%-77.3%	77.3%

*Including MS4 permitted areas.

In order to obtain healthy sediment and phosphorus levels in the impaired streams, significant reductions are needed from several sediment sources and several phosphorus sources. Community stakeholders agreed that uniform reductions of nonpoint-source anthropogenic loads were the best fit for the study watersheds, as such preferred reduction scenarios present uniform levels of reduction for developed urban/residential sources as well as agricultural sources. The recommended sediment reductions range from 25.2% in Dover Creek to 94.4% in Jordans Branch. Recommended phosphorus reductions range from 36.7% in Dover Creek to 84.0% in Stony Run. Recommended streambank erosion reductions were generally matched with the reductions of the other categories.

All these benthic impaired watershed segments dependent on the reduction of sediment load from streambank erosion and can benefit from streambank and instream restoration projects. Stream walks can be used to identify and prioritize stream reaches experiencing the greatest degree of erosion. Additionally, participants agreed that targeting sediment loads from streambank erosion would provide additional reasonable assurance that sediment reduction goals were reasonable and could be achieved cost effectively.

The total maximum daily load, or TMDL, is equal to the total amount of sediment per year that would be entering each of these streams after the recommended reductions are made (**Table 1-4**

through **Table 1-13**). This load includes permitted sources as well as future growth to account for potential future permitted sources. These annual loads are converted to daily maximum loads as well, as described in **Section 6.3** (**Table 1-14** through **Table 1-23**). If sediment loads are reduced to these amounts, healthy aquatic life should be restored in these streams.

Annual and daily sediment loads were rounded to the nearest whole number, and annual phosphorus loads were rounded to the nearest tenth place due to the phosphorus loads having a smaller magnitude than the sediment loads. Daily phosphorus permit loads were rounded to the thousandths place and the phosphorus WLA (Wasteload Allocation), LA (Load Allocation), and MDL (Maximum Daily Load) was rounded to the hundredths place. The Future Growth and Margin of Safety are calculated for each TMDL watershed as a percent of that watershed's TMDL target load, so the potential issue of double counting the Margin of Safety and Future Growth from upstream TMDL watersheds to downstream TMDL watersheds is not associated with this methodology.

Table 1-4. Annual average sediment TMDL components for Deep Run.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Deep Run (VAP-H39R_DPR01A00)	319,359	162,331	53,521	535,211
<i>Construction General Permits</i>	30,283			
<i>Potable Water Treatment Plant General Permits</i>	3			
<i>MS4</i>	278,369			
<i>Future Growth (2% of TMDL)</i>	10,704			

Table 1-5. Annual average sediment TMDL components for Stony Run.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Stony Run (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04)	140,916	45,602	20,724	207,242
<i>Construction General Permits</i>	5,345			
<i>MS4</i>	131,426			
<i>Future Growth (2% of TMDL)</i>	4,145			

Table 1-6. Annual average sediment TMDL components for Stony Run UT.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Stony Run UT (VAP-H39R_XYT01A08)	32,745	48,817	9,062	90,624
<i>Construction General Permits</i>	<i>7,475</i>			
<i>MS4</i>	<i>23,458</i>			
<i>Future Growth (2% of TMDL)</i>	<i>1,812</i>			

Table 1-7. Annual average sediment TMDL components for Dover Creek.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Dover Creek (VAP-H39R_DOV01A00)	38,769	397,718	48,499	484,986
<i>Construction General Permits</i>	<i>29,069</i>			
<i>Future Growth (2% of TMDL)</i>	<i>9,700</i>			

Table 1-8. Annual average sediment TMDL components for Upham Brook.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Upham Brook (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)	372,238	357,685	81,103	811,026
<i>Construction General Permits</i>	<i>100,111</i>			
<i>MS4</i>	<i>255,906</i>			
<i>Future Growth (2% of TMDL)</i>	<i>16,221</i>			

Table 1-9. Annual average sediment TMDL components for North Run.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
North Run (VAP-G05R_NTR01A00, VAP-G05R_NTR02A06)	363,179	304,493	74,186	741,858
<i>Industrial Stormwater General Permits</i>	<i>3,235</i>			
<i>Construction General Permits</i>	<i>98,108</i>			
<i>MS4</i>	<i>246,999</i>			
<i>Future Growth (2% of TMDL)</i>	<i>14,837</i>			

Table 1-10. Annual average sediment TMDL components for Jordans Branch.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Jordans Branch (VAP-G05R_JOP01A14)	88,183	57,194	16,153	161,530
<i>Industrial Stormwater General Permits</i>	6,597			
<i>Construction General Permits</i>	29,848			
<i>Concrete Products Facility General Permits</i>	3,485			
<i>MS4</i>	45,022			
<i>Future Growth (2% of TMDL)</i>	3,231			

Table 1-11. Annual average phosphorus TMDL components for Stony Run.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Stony Run (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04, VAP-H39R_XYT01A08)	121.6	119.9	26.8	268.3
<i>Construction General Permits</i>	14.2			
<i>MS4</i>	102.0			
<i>Future Growth (2% of TMDL)</i>	5.4			

Table 1-12. Annual average phosphorus TMDL components for Dover Creek.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Dover Creek (VAP-H39R_DOV01A00)	41.6	383.0	47.2	471.8
<i>Construction General Permits</i>	32.2			
<i>Future Growth (2% of TMDL)</i>	9.4			

Table 1-13. Annual average phosphorus TMDL components for Upham Brook.

Impairment	WLA (lb/yr)	LA (lb/yr)	MOS (lb/yr)	TMDL (lb/yr)
Upham Brook (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)	2,693.8	2,451.2	571.7	5,716.7
<i>Industrial Stormwater General Permits</i>	<i>18.5</i>			
<i>Construction General Permits</i>	<i>252.6</i>			
<i>Concrete Products Facility General Permits</i>	<i>26.6</i>			
<i>MS4</i>	<i>2,281.8</i>			
<i>Future Growth (2% of TMDL)</i>	<i>114.3</i>			

Table 1-14. Maximum ‘daily’ sediment loads and components for Deep Run.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Deep Run (VAP-H39R_DPR01A00)	1,093	556	183	1,832
<i>Construction General Permits</i>	<i>104</i>			
<i>MS4</i>	<i>953</i>			
<i>Future Growth (2% of TMDL)</i>	<i>36</i>			

Table 1-15. Maximum ‘daily’ sediment loads and components for Stony Run.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Stony Run (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04)	494	159	73	726
<i>Construction General Permits</i>	<i>19</i>			
<i>MS4</i>	<i>461</i>			
<i>Future Growth (2% of TMDL)</i>	<i>14</i>			

Table 1-16. Maximum ‘daily’ sediment loads and components for Stony Run UT.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Stony Run UT (VAP-H39R_XYT01A08)	112	167	31	310
<i>Construction General Permits</i>	<i>26</i>			
<i>MS4</i>	<i>80</i>			
<i>Future Growth (2% of TMDL)</i>	<i>6</i>			

Table 1-17. Maximum ‘daily’ sediment loads and components for Dover Creek.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Dover Creek (VAP-H39R_DOV01A00)	177	1,819	222	2,218
<i>Construction General Permits</i>	133			
<i>Future Growth (2% of TMDL)</i>	44			

Table 1-18. Maximum ‘daily’ sediment loads and components for Upham Brook.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Upham Brook (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)	1,275	1,223	278	2,776
<i>Construction General Permits</i>	343			
<i>MS4</i>	876			
<i>Future Growth (2% of TMDL)</i>	56			

Table 1-19. Maximum ‘daily’ sediment loads and components for North Run.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
North Run (VAP-G05R_NTR01A00, VAP-G05R_NTR02A06)	1,243	1,042	254	2,539
<i>Industrial Stormwater General Permits</i>	11			
<i>Construction General Permits</i>	336			
<i>MS4</i>	845			
<i>Future Growth (2% of TMDL)</i>	51			

Table 1-20. Maximum ‘daily’ sediment loads and components for Jordans Branch.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Jordans Branch (VAP-G05R_JOP01A14)	287	186	53	526
<i>Industrial Stormwater General Permits</i>	22			
<i>Construction General Permits</i>	97			
<i>Concrete Products Facility General Permits</i>	11			
<i>MS4</i>	147			
<i>Future Growth (2% of TMDL)</i>	10			

Table 1-21. Maximum ‘daily’ phosphorus loads and components for Stony Run.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Stony Run (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04, VAP-H39R_XYT01A08)	0.42	0.40	0.09	0.91
<i>Construction General Permits</i>	<i>0.049</i>			
<i>MS4</i>	<i>0.349</i>			
<i>Future Growth (2% of TMDL)</i>	<i>0.018</i>			

Table 1-22. Maximum ‘daily’ phosphorus loads and components for Dover Creek.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Dover Creek (VAP-H39R_DOV01A00)	0.19	1.71	0.21	2.11
<i>Construction General Permits</i>	<i>0.144</i>			
<i>Future Growth (2% of TMDL)</i>	<i>0.042</i>			

Table 1-23. Maximum ‘daily’ phosphorus loads and components for Upham Brook.

Impairment	WLA (lb/day)	LA (lb/day)	MOS (lb/day)	MDL (lb/day)
Upham Brook (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)	9.20	8.41	1.95	19.56
<i>Industrial Stormwater General Permits</i>	<i>0.063</i>			
<i>Construction General Permits</i>	<i>0.865</i>			
<i>Concrete Products Facility General Permits</i>	<i>0.076</i>			
<i>MS4</i>	<i>7.809</i>			
<i>Future Growth (2% of TMDL)</i>	<i>0.391</i>			

Allocation Scenarios

There are many ways to reduce pollutants to reach water quality (TMDL) goals. Several versions of these reduction plans, or allocation scenarios, were developed. These were presented to local stakeholders who determined that Scenario 1 was preferred for each watershed (see **Table 1-24** through **Table 1-33**).

Sediment loads were rounded to the nearest whole number, and phosphorus loads were rounded to the nearest tenth place due to the phosphorus loads having a smaller magnitude than the sediment loads. All load totals are summations of the rounded values. Any apparent differences in the sums of the allocation percentages are due to rounding. The “TOTAL” summation of the reduced nonpoint source loads, reduced permitted source loads, margin of safety, and future growth in each allocation scenario table is less than the TMDL (Target Load). This conservative approach provides additional assurance that implementation of the TMDL will result in restoration of designated uses for the impaired waterbodies.

Table 1-24. Allocation Scenarios for Sediment Loading in the Deep Run Watershed

<i>Deep Run Sediment (VAP-H39R_DPR01A00)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused on Urban Sources		Scenario 2, but with Less focus on Streambank Erosion	
Source	Existing <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>
Cropland	0	72.6	0	20.0	0	20.0	0
Hay	32	72.6	9	20.0	26	20.0	26
Pasture	270	72.6	74	20.0	216	20.0	216
Forest	7,719	-	7,719	-	7,719	-	7,719
Trees	12,262	-	12,262	-	12,262	-	12,262
Shrub	3,903	-	3,903	-	3,903	-	3,903
Wetland	223	-	223	-	223	-	223
Turfgrass	11,306	72.6	3,098	72.6	3,098	75.0	2,826
Developed Pervious	4,616	72.7	1,260	72.6	1,265	75.0	1,154
Developed Impervious	298,682	72.7	81,540	72.6	81,839	75.0	74,671
Streambank Erosion	190,650	72.6	52,238	72.6	52,238	56.2	83,505
Construction General Permits	30,283	-	30,283	-	30,283	-	30,283
Potable Water Treatment Plant General Permits	0*	-	3**	-	3**	-	3**
MS4s	1,015,944	72.6	278,369	72.7	277,353	75.0	253,986
MOS (10%)			53,521		53,521		53,521
Future Growth (2%)			10,704		10,704		10,704
TOTAL	1,575,890	66.0	535,206	66.1	534,653	66.1	535,002
TMDL (Target Load)	535,211						
Percent Reduction Needed	66.0%						

* The Henrico County PWTP (VAG640064) is permitted to discharge but has reported zero flows on a discharge monitoring report.

** The Henrico County PWTP permit contains a discharge concentration limit but does not have a restriction on the flow rate. For WLA calculations, an estimated annual flow rate of 11,000 gal/yr and the TSS concentration permit limit of 30 mg/L were used to determine the load allocation scenarios for this outfall.

Table 1-25. Allocation Scenarios for Sediment Loading in the Stony Run Watershed

<i>Stony Run Sediment</i> (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04)		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Scenario 1 with a Higher focus on Streambank Erosion		Scenario 1 with a Lower focus on Streambank Erosion	
Source	Existing <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>	Red. %	Allocation <i>TSS (lb/yr)</i>
Forest	1,730	-	1,730	-	1,730	-	1,730
Trees	3,764	-	3,764	-	3,764	-	3,764
Shrub	838	-	838	-	838	-	838
Wetland	22	-	22	-	22	-	22
Turfgrass	3,156	43.9	1,771	42.5	1,815	45.0	1,736
Developed Pervious	945	43.9	530	42.5	543	45.0	520
Developed Impervious	48,966	43.9	27,470	42.5	28,156	45.0	26,931
Streambank Erosion	16,841	43.9	9,448	70.0	5,052	26.4	12,395
Construction General Permits	5,345	-	5,345	-	5,345	-	5,345
MS4s	234,689	44.0	131,426	42.5	134,946	45.0	129,079
MOS (10%)			20,724		20,724		20,724
Future Growth (2%)			4,145		4,145		4,145
TOTAL	316,296	34.5	207,213	34.5	207,080	34.5	207,229
TMDL (Target Load)	207,242						
Percent Reduction Needed	34.5%						

Table 1-26. Allocation Scenarios for Sediment Loading in the Stony Run UT Watershed

<i>Stony Run UT Sediment (VAP-H39R_XYT01A08)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Scenario 1 with a Lower focus on Streambank Erosion		Scenario 2 with a Lower focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Forest	977	-	977	-	977	-	977
Trees	3,426	-	3,426	-	3,426	-	3,426
Shrub	601	-	601	-	601	-	601
Wetland	998	-	998	-	998	-	998
Turfgrass	4,802	68.9	1,493	69.1	1,484	69.5	1,464
Developed Pervious	2,353	69.0	730	69.1	727	69.5	718
Developed Impervious	128,982	69.0	39,984	69.1	39,856	69.5	39,340
Streambank Erosion	1,905	68.9	593	50.0	953	10.0	1,715
Construction General Permits	7,475	-	7,475	-	7,475	-	7,475
MS4s	75,427	68.9	23,458	69.2	23,232	69.5	23,005
MOS (10%)			9,062		9,062		9,062
Future Growth (2%)			1,812		1,812		1,812
TOTAL	226,946	60.1	90,609	60.1	90,603	60.1	90,593
TMDL (Target Load)	90,624						
Percent Reduction Needed	60.1%						

Table 1-27. Allocation Scenarios for Sediment Loading in the Dover Creek Watershed

<i>Dover Creek Sediment (VAP-H39R_DOV01A00)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused Solely on Agricultural Sources		Reduction Focused on Agricultural Sources, but including Urban Sources	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Cropland	157,018	25.3	117,293	32.4	106,144	28.7	111,954
Hay	32,055	25.3	23,945	32.4	21,669	28.7	22,855
Pasture	157,199	25.3	117,427	32.4	106,266	28.7	112,083
Forest	36,087	-	36,087	-	36,087	-	36,087
Trees	5,425	-	5,425	-	5,425	-	5,425
Shrub	8,135	-	8,135	-	8,135	-	8,135
Disturbed Forest	4,094	-	4,094	-	4,094	-	4,094
Wetland	111	-	111	-	111	-	111
Turfgrass	4,345	25.2	3,250	-	4,345	13.0	3,780
Developed Pervious	3,294	25.2	2,464	-	3,294	13.1	2,863
Developed Impervious	93,132	25.2	69,663	-	93,132	13.1	80,932
Streambank Erosion	13,111	25.2	9,807	32.3	8,876	28.7	9,348
Construction General Permits	29,069	-	29,069	-	29,069	-	29,069
MOS (10%)			48,499		48,499		48,499
Future Growth (2%)			9,700		9,700		9,700
TOTAL	543,075	10.7	484,969	10.7	484,846	10.7	484,935
TMDL (Target Load)	484,986						
Percent Reduction Needed	10.7%						

Table 1-28. Allocation Scenarios for Sediment Loading in Upham Brook Watershed

<i>Upham Brook Sediment (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused on Urban Sources		Scenario 2, but with Less focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Cropland	644	86.1	90	20.0	515	20.0	515
Hay	66	86.1	9	20.0	52	20.0	52
Forest	21,497	-	21,497	-	21,497	-	21,497
Trees	16,252	-	16,252	-	16,252	-	16,252
Shrub	5,230	-	5,230	-	5,230	-	5,230
Wetland	5,046	-	5,046	-	5,046	-	5,046
Turfgrass	18,159	86.1	2,524	86.1	2,524	91.8	1,489
Developed Pervious	18,087	86.2	2,496	86.2	2,496	91.8	1,483
Developed Impervious	702,375	86.2	96,928	86.2	96,928	91.8	57,595
Streambank Erosion	1,482,626	86.1	206,085	86.1	206,085	76.3	351,382
Construction General Permits	100,111	-	100,111	-	100,111	-	100,111
MS4s	1,854,395	86.2	255,906	86.1	255,906	91.8	152,060
MOS (10%)			81,103		81,103		81,103
Future Growth (2%)			16,221		16,221		16,221
TOTAL	4,224,488	80.8	809,498	80.8	809,966	80.8	810,036
TMDL (Target Load)	811,026						
Percent Reduction Needed	80.8%						

Table 1-29. Allocation Scenarios for Sediment Loading in North Run Watershed

North Run Sediment (VAP-G05R_NTR01A00, VAP-G05R_NTR02A06)		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused on Urban Sources		Scenario 2, but with Less focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	TSS (lb/yr)	%	TSS (lb/yr)	%	TSS (lb/yr)	%	TSS (lb/yr)
Cropland	1,976	85.8	281	20.0	1,581	20.0	1,581
Hay	260	85.8	37	20.0	208	20.0	208
Forest	9,552	-	9,552	-	9,552	-	9,552
Trees	17,793	-	17,793	-	17,793	-	17,793
Shrub	3,160	-	3,160	-	3,160	-	3,160
Disturbed Forest	2,413	-	2,413	-	2,413	-	2,413
Wetland	930	-	930	-	930	-	930
Turfgrass	29,719	85.8	4,220	85.9	4,190	88.2	3,507
Developed Pervious	23,871	85.9	3,366	85.9	3,366	88.3	2,793
Developed Impervious	817,793	85.9	115,309	85.9	115,309	88.3	95,682
Streambank Erosion	1,034,329	85.8	146,875	85.9	145,840	80.0	206,866
Industrial Stormwater General Permits *	1,220	-	3,235	-	3,235	-	3,235
Construction General Permits	98,108	-	98,108	-	98,108	-	98,108
MS4s	1,751,763	85.9	246,999	85.9	246,999	88.3	204,956
MOS (10%)			74,186		74,186		74,186
Future Growth (2%)			14,837		14,837		14,837
TOTAL	3,792,887	80.5	741,301	80.4	741,707	80.5	739,807
TMDL (Target Load)	741,858						
Percent Reductions Needed	80.4%						

* One of the ISW permits (Hankins and Johann Incorporated) was closed 10/2018. The facility was permitted to discharge during the monitoring and assessment phases of the process and is accounted for in the existing condition, but it is not given a WLA in the TMDL model due to the permit being closed.

Table 1-30. Allocation Scenarios for Sediment Loading in the Jordans Branch Watershed

<i>Jordans Branch Sediment (VAP-G05R_JOP01A14)</i>		Scenario 1 (<i>Preferred</i>)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused on Urban Sources		Scenario 2, but with Less focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>	%	<i>TSS (lb/yr)</i>
Cropland	5	94.3	0	20.0	4	20.0	4
Hay	89	94.3	5	20.0	71	20.0	71
Forest	1,980	-	1,980	-	1,980	-	1,980
Trees	6,813	-	6,813	-	6,813	-	6,813
Shrub	218	-	218	-	218	-	218
Wetland	9	-	9	-	9	-	9
Turfgrass	9,224	94.3	526	94.3	526	94.8	480
Developed Pervious	14,015	94.4	785	94.4	785	94.8	729
Developed Impervious	730,367	94.4	40,901	94.4	40,901	94.8	37,979
Streambank Erosion	93,873	94.3	5,351	94.3	5,351	87.1	12,110
Industrial Stormwater General Permits *	2,821	-	6,597	-	6,597	-	6,597
Construction General Permits	29,848	-	29,848	-	29,848	-	29,848
Concrete Products Facility General Permits	2,983	-	3,485	-	3,485	-	3,485
MS4	803,967	94.4	45,022	94.3	45,826	94.8	41,806
MOS (10%)			16,153		16,153		16,153
Future Growth (2%)			3,231		3,231		3,231
TOTAL	1,696,212	90.5	160,924	90.5	161,798	90.5	161,513
TMDL (Target Load)	161,530						
Percent Reduction Needed	90.5%						

* One of the ISW permits (AMF Bakery Systems) was closed 10/2023. The facility was permitted to discharge during the monitoring and assessment phases of the process and is accounted for in the existing condition, but it is not given a WLA in the TMDL model due to the permit being closed.

Table 1-31. Allocation Scenarios for Phosphorus Loading in the Stony Run Watershed including the watershed of Stony Run UT

<i>Stony Run Phosphorus (VAP-H39R_SNJ01A04, VAP-H39R_SNJ02A04)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Scenario 1 with a Lower focus on Streambank Erosion		Scenario 2 with a Lower focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>
Forest	1.0	-	1.0	-	1.0	-	1.0
Trees	2.7	-	2.7	-	2.7	-	2.7
Shrub	0.3	-	0.3	-	0.3	-	0.3
Wetland	0.1	-	0.1	-	0.1	-	0.1
Turfgrass	21.7	83.9	3.5	84.5	3.4	84.5	3.4
Developed Pervious	1.8	84.0	0.3	84.4	0.3	84.6	0.3
Developed Impervious	392.5	84.0	62.8	84.4	61.2	84.6	60.4
Groundwater	46.9	-	46.9	-	46.9	-	46.9
Septic	0.9	83.9	0.2	84.4	0.1	84.5	0.1
Streambank Erosion	11.9	83.9	1.9	50.0	6.0	30.0	8.3
Construction General Permits	14.2	-	14.2	-	14.2	-	14.2
MS4s	637.2	84.0	102.0	84.4	99.4	84.6	98.1
MOS (10%)			26.8		26.8		26.8
Future Growth (2%)			5.4		5.4		5.4
TOTAL	1,131.2	76.3	268.1	76.3	267.8	76.3	268.0
TMDL (Target Load)	268.3						
Percent Reduction Needed	76.3%						

Table 1-32. Allocation Scenarios for Phosphorus Loading in the Dover Creek Watershed

<i>Dover Creek Phosphorus (VAP-H39R_DOV01A00)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3		Scenario 4	
		Uniform Reduction		Reduction Focused Solely on Agricultural Sources		Reduction Focused Solely on Urban Sources		More Balanced Reductions with a Focus on Agricultural Sources	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>
Cropland	46.0	36.7	29.1	74.0	11.9	-	46.0	53.9	21.2
Hay	83.8	36.8	52.9	74.1	21.7	-	83.8	53.8	38.7
Pasture	78.9	36.8	49.8	74.1	20.4	-	78.9	53.8	36.5
Forest	8.5	-	8.5	-	8.5	-	8.5	-	8.5
Trees	1.8	-	1.8	-	1.8	-	1.8	-	1.8
Shrub	1.3	-	1.3	-	1.3	-	1.3	-	1.3
Disturbed Forest	0.8	-	0.8	-	0.8	-	0.8	-	0.8
Wetland	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Turfgrass	9.6	36.7	6.1	-	9.6	71.6	2.7	20.0	7.7
Developed Pervious	1.8	36.8	1.1	-	1.8	71.6	0.5	20.0	1.4
Developed Impervious	204.9	36.8	129.5	-	204.9	71.6	58.2	20.0	163.9
Groundwater	91.1	-	91.1	-	91.1	-	91.1	-	91.1
Septic	12.6	36.7	8.0	36.7	8.0	36.7	8.0	36.7	8.0
Streambank Erosion	4.6	36.7	2.9	74.0	1.2	71.6	1.3	53.8	2.1
Construction General Permits	32.2	-	32.2	-	32.2	-	32.2	-	32.2
MOS (10%)			47.2		47.2		47.2		47.2
Future Growth (2%)			9.4		9.4		9.4		9.4
TOTAL	577.9	18.4	471.7	18.4	471.8	18.4	471.7	18.4	471.8
TMDL (Target Load)	471.8								
Percent Reduction Needed	18.4%								

Table 1-33. Allocation Scenarios for Phosphorus Loading in the Upham Brook Watershed including the watersheds of North Run and Jordans Branch

<i>Upham Brook Phosphorus (VAP-G05R_UPM01A02, VAP-G05R_UPM01B08)</i>		Scenario 1 (Preferred)		Scenario 2		Scenario 3	
		Uniform Reduction		Reduction Focused on Urban Sources		Scenario 2, but with Less focus on Streambank Erosion	
Source	Existing	Red.	Allocation	Red.	Allocation	Red.	Allocation
	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>	%	<i>TP (lb/yr)</i>
Cropland	2.9	77.2	0.7	20.0	2.3	20.0	2.3
Hay	5.5	77.2	1.3	20.0	4.4	20.0	4.4
Forest	13.2	-	13.2	-	13.2	-	13.2
Trees	27.2	-	27.2	-	27.2	-	27.2
Shrub	1.1	-	1.1	-	1.1	-	1.1
Harvested	0.5	-	0.5	-	0.5	-	0.5
Wetland	0.4	-	0.4	-	0.4	-	0.4
Turfgrass	380.3	77.2	86.7	77.3	86.3	80.0	76.1
Developed Pervious	49.1	77.3	11.1	77.4	11.1	80.1	9.8
Developed Impervious	4,841.6	77.3	1,099.0	77.4	1,094.2	80.1	963.5
Groundwater	662.5	-	662.5	-	662.5	-	662.5
Septic	16.4	77.3	3.7	77.3	3.7	80.0	3.3
Streambank Erosion	2,390.5	77.3	542.6	77.3	542.6	60.0	956.2
Industrial Stormwater General Permits	15.5	-	18.5	-	18.5	-	18.5
Construction General Permits	252.6	-	252.6	-	252.6	-	252.6
Concrete Products Facility General Permit	28.8	-	26.6	-	26.6	-	26.6
MS4s	10,051.9	77.3	2,281.8	77.4	2,271.7	80.1	2,000.3
MOS (10%)			571.7		571.7		571.7
Future Growth (2%)			114.3		114.3		114.3
TOTAL	18,740.0	69.5	5,715.5	69.5	5,704.9	69.6	5,704.5
TMDL (Target Load)	5,716.7						
Percent Reduction Needed	69.5%						

Public Participation

Public participation was elicited at every stage of the TMDL study in order to receive input from community members and to apprise the community of progress made. A series of three Community Engagement Meetings (CEM) and three public meetings took place during the TMDL development process. Throughout the process over 50 community members participated in the meetings representing Arcadis; Commonwealth Commercial; Goochland County; Henrico County; Henricopolis Soil and Water Conservation District; James Madison University; James River Association; Monacan Soil and Water Conservation District; Residents; Reynolds Community College; Sabot Hill Owners Association; Schnabel Engineering; Virginia Department of Forestry; Virginia Department of Transportation; Stantec representing Virginia Department of Transportation; Virginia Department of Wildlife Resources; Virginia Department of Environmental Quality; Virginia Master Naturalist Resident; Vulcan Materials; Wetland Studies and Solutions, Inc.; Whitman, Requardt, and Associates; Williams Mullen.

The preliminary public meeting held May 2, 2023, at the DEQ Piedmont Regional Office in Henrico, Virginia, had 16 attendees. This meeting introduced attendees to DEQ's water quality planning process, discussed the TMDL purpose and process, and reviewed the seven TMDL study watersheds.

The first CEM held July 10, 2023, at the DEQ Piedmont Regional Office in Henrico, Virginia, had 24 attendees. This meeting discussed the impaired streams, the benthic stressor analysis approach, and reviewed the land cover in the TMDL study watersheds.

The second CEM held February 29, 2024, at the DEQ Piedmont Regional Office in Henrico, Virginia, had 24 attendees. This meeting discussed land cover data, residential septic systems, permitted sources, estimated existing pollutant loads, best management practices, and the AllForX methodology.

The third CEM held February 21, 2025, at the DEQ Piedmont Regional Office in Henrico, Virginia, had 18 attendees. Updates were made to the landcover and septic system data due to comments from the second CEM meeting. The AllForX methodology was also updated between the second and third CEM, and the new methodology of splitting the regressions was presented in the meeting. The allocation scenarios, the target TMDL values, and TMDL equation were also discussed. The CEM came to a consensus on the preferred allocation scenario.

A second public meeting to present a draft TMDL document was held May 8, 2025, at the DEQ Piedmont Regional Office in Henrico, Virginia. The public meeting was attended by 16 community members. Sediment allocation loads were presented but phosphorus loads were held in reserve to present at a later date due to future updates.

A third public meeting to present the final draft TMDL document was held August 26, 2025, at the DEQ Piedmont Regional Office in Henrico, Virginia. The public meeting was attended by 17 community members and marked the beginning of the official 30-day public comment period that ended on September 25, 2025. No comments were received (documented in **Appendix D**).

Reasonable Assurance

Public participation in the development of the TMDL and implementation plans, follow-up monitoring, permit action plans developed and implemented by MS4 permit holders, other permit compliance, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented and water quality will be restored in the impaired watersheds.

What Happens Next

This report sets the clean-up goals for Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordans Branch. The next step is developing a clean-up plan, also known as an Implementation Plan, that lays out how the nonpoint source (load allocation) goals will be reached. Clean-up plans set goals and interim milestones to implement actions to improve water quality in the impaired streams. Some of the potential actions that could be included in an implementation plan for the Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordans Branch watersheds are listed below:

- Conduct stream bank restoration projects in areas where banks are actively eroding.
- Establish riparian buffers with a width of 35 – 100 ft along the stream so that it filters out sediment from a variety of land uses across the watershed. These buffers can also provide much needed shade to impaired waterbodies.
- Expand street sweeping programs in urban areas.
- Retrofit and/or maintain urban stormwater management practices.
- Reduce runoff by increasing green spaces and reducing hardened spaces (asphalt or concrete).
- Fence out cattle from streams and provide alternative water sources.
- Implement conservation tillage practices on cropland.

Frequently Asked Question:

How will the TMDL be implemented? For point sources, TMDL reductions will be implemented through discharge permits. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help defer the cost of BMP installation.

These and other non-structural actions (e.g. education and outreach) that could be included in a clean-up plan are identified in the planning process along with associated costs and the extent of each practice needed. The clean-up plan also identifies potential partners and funding sources necessary for goals to be achieved and implementation to be successful. To date, grant and cost-share programs have been the most utilized financial resources in clean-up plan implementation. Cost-share programs work by splitting the fiduciary responsibility of implementing a best management practice between federal, state and/or local funding and the individual landowners. This framework allows for buy-in at the individual level and provides for economy of resources as a whole.

In order to determine the effectiveness of implementation over time, water quality monitoring will continue. A water quality monitoring schedule is outlined in the clean-up plan and may be performed by DEQ, other state entities or by volunteers. In summary, a clean-up plan is Virginia's planning method to improve water quality impaired by nonpoint source pollution. To begin moving towards these clean-up goals, DEQ recommends that concerned citizens come together and begin working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the problem and promote activities (including implementation plan development) and programs that improve stream health.

Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties



Prepared by:
Wetland Studies and Solutions, Inc.
and
James Madison University

Prepared for:
Virginia Department of Environmental Quality

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Acknowledgements

Project Personnel

Wetland Studies and Solutions, Inc.

Katie Shoemaker, PE, CFM, Environmental Engineer
Jeremy Bradley, CFM, GIS Specialist
Jacob Bellinger, EIT, Environmental Engineer

James Madison University

Dr. Robert Brent, Associate Professor

Virginia Department of Environmental Quality (VADEQ)

Craig Lott
Kelly Miller

Technical Advisory Committee

Hunter Wyatt, Wayne Turley, Audrey Root, Caleb Rector – Holston River SWCD
Laura Hainsworth – Emory and Henry College
Leroy Sullivan, Ron Seay, Randall Sullivan, Baxter Rolen, Ryan Kiser – Washington
County Service Authority
Aaron Sizemore – Mt. Rogers Planning District Commission, also representing Smyth
County Administrator
Bill Moss – NRCS
Tim Lane – Virginia Department of Wildlife Resources
Mike Horne, Jeana Waddle – Evergreen SWCD
Bill Miller – Virginia Department of Forestry
David Nichols – US Fish and Wildlife Service

For additional information, please contact:

Virginia Department of Environmental Quality

Southwest Regional Office, Abingdon
Kelly Miller, Stormwater and Watershed Planning Manager
(276) 676-4879

Executive Summary

Background

This TMDL study covers the Middle Fork Holston River and several tributaries (collectively referred to herein as MF Holston and Tribs), which are in Smyth, Washington, and Wythe Counties. Cedar Creek, Greenway Creek, Byers Creek, Hall Creek, and Tattle Branch are all located within Washington County and drain to the MF Holston. The headwaters of the MF Holston begin in Wythe County and the MF Holston then flows through Smyth County and Washington County. The MF Holston flows through the towns of Marion and Chilhowie and the Hutton Creek tributary flows through the town of Glade Springs to the MF Holston before entering the South Holston Lake. From there, the flow continues to the Holston River before joining the Tennessee River, followed by the Ohio River and then the Mississippi River, ultimately entering the Gulf of Mexico.



Definition:

Watershed – All of the land area that drains to a particular point or body of water.

Lengths of the Middle Fork Holston and several tributaries are listed as impaired on Virginia's 2024 Section 305(b)/303(d) Water Quality Assessment Integrated Report due to water quality violations of the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 1-1**. The watersheds of the impaired streams are shown in **Figure 1-1**. All but one of the segments in this study were addressed in either of two previous benthic TMDL projects, Cedar Creek, Hall/Byers Creek, and Hutton Creek (developed by contractor TetraTech, 2004) or the Middle Fork Holston River (developed by contractor Engineering Concepts, Inc, 2009). The benthic aquatic life use impairments addressed by the original sediment TMDLs are being superseded by the new sediment TMDL equations in this project. Previous TMDL equations addressing bacteria impairments in these segments are not addressed nor superseded in this TMDL project. Greenway Creek is also addressed in this project but does not have a previous TMDL equation.

Table 1-1. Impaired segments addressed in this TMDL study as included in the 2020 Section 305(b)/303(d) Water Quality Assessment Integrated Report.

TMDL Watershed	305(b) Segment ID (length)	Cause Group Code 303(d) Impairment ID	Included in Previous TMDL*	TMDL watershed this project (Superseding/New)	Listing Station	Year Initially Listed
Byers Creek	VAS-O05R_BY01A94 (0.49 mi)	O05R-01-BEN	Cedar/Hutton	Byers (superseding)	6CBYS000.08	2004
Hall Creek	VAS-O05R_HAL01A94 (6.91 mi)	O05R-01-BEN	Cedar/Hutton	Hall (superseding)	n/a	2004
Cedar Creek	VAS-O05R_CED01A94 (5.61 mi)	O05R-01-BEN	Cedar/Hutton	Cedar (superseding)	6CCED000.14	2004
Greenway Creek	VAS-O05R_GRW01A02 (5.02 mi)	O05R-02-BEN	n/a	Greenway (new)	6CGRW002.31	2010
Tattle Branch	VAS-O05R_TAT01A02 (2.77 mi)	O05R-01-BEN	Middle Fork Holston	Tattle (superseding)	6CTAT000.50	2004
Middle Fork Holston	VAS-O03R_MFH05A04 (3.42 mi)	O03R-01-BEN	Middle Fork Holston	Upper MF Holston (superseding)	6CMFH055.88	2010
Middle Fork Holston	VAS-O05R_MFH04A00 (9.19 mi)	O05R-05-BEN	Middle Fork Holston	Lower MF Holston above Rt 91 (superseding)	6CMFH023.41	2008
Middle Fork Holston	VAS-O05R_MFH05A04 (3.80 mi)	O05R-05-BEN	Middle Fork Holston	Lower MF Holston below Rt 91& above dam (superseding)	6CMFH011.31	2006
Hutton Creek	VAS-O05R_HTO01A94	No longer impaired for aquatic life	Cedar/Hutton	MF Holston above Rt 91 (superseding)	No longer impaired for aquatic life use	2004

*Cedar/Hutton is an abbreviation for the *Total Maximum Daily Load (TMDL) Development for Cedar Creek, Hall/Byers Creek, and Hutton Creek TMDL (2004)*. Middle Fork Holston is an abbreviation for the *Bacteria and Benthic Total Maximum Daily Load Development for Middle Fork Holston River TMDL (2009)*.

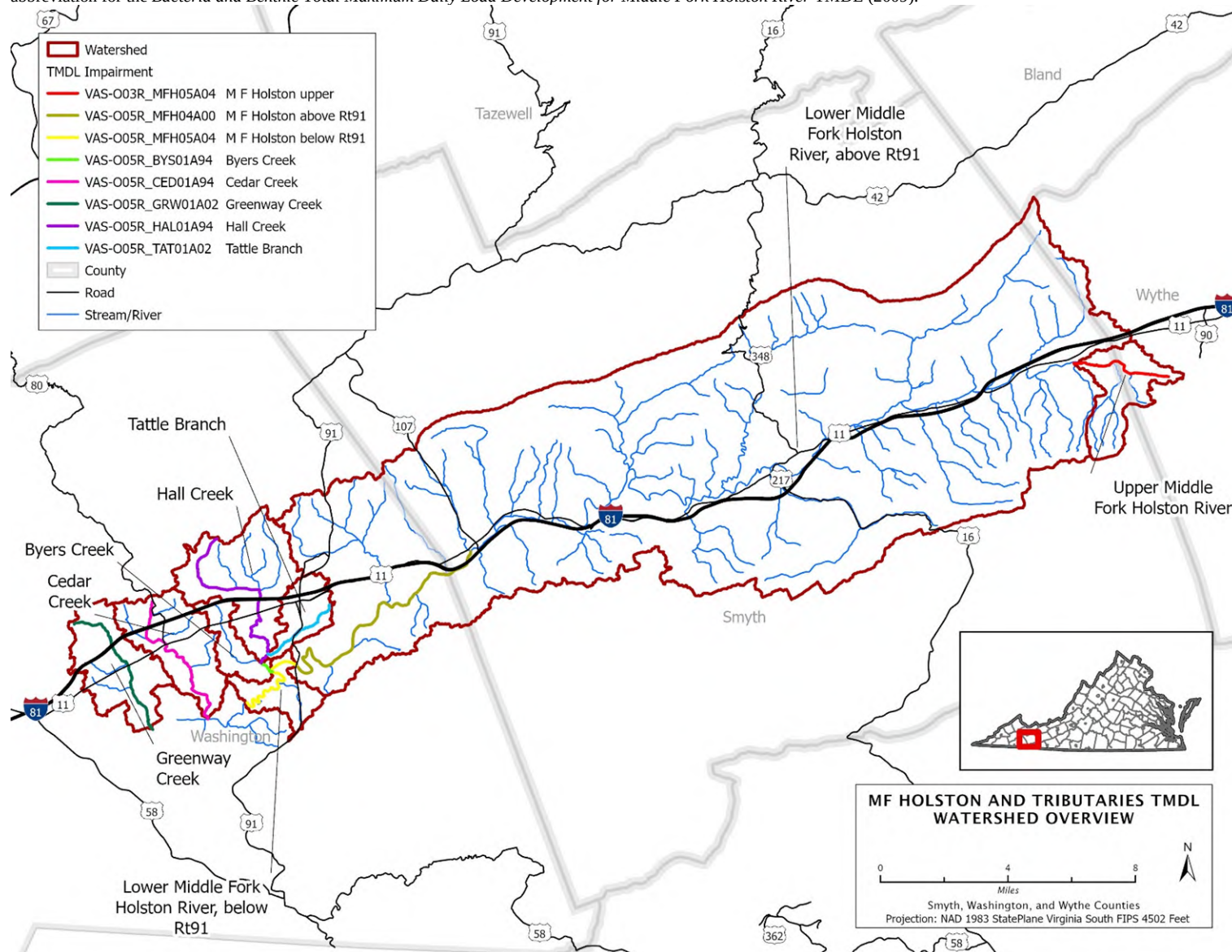


Figure 1-1. Location of the Middle Fork Holston and tributaries watersheds, impairments, and segmentation.

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The impairment levels, and thus the reductions required have changed as well as a few other things, in large part as a result of implementing the earlier TMDL Implementation Plans for the impairments and also using a different approach to developing a TMDL endpoint. The old TMDL development approach used a single unimpaired reference watershed for comparison and the new approach uses several (usually a mix of both impaired and unimpaired local) watersheds for comparison to determine how much allocation was the appropriate TMDL endpoint. The new approach is considered more accurate.

VAS-O05R_HTO01A94, Hutton Creek, was first listed for the aquatic life use in 2004. Hutton Creek was one success story highlighted by DEQ and EPA when it was delisted for aquatic life use in the 2014 IR. This delisting followed development of the Cedar Creek, Hall/Byers Creek, and Hutton Creek TMDL (TetraTech, 2004) and implementation of the benthic TMDL Implementation Plan to address it and several other tributaries and the middle fork of the Holston River. Currently, the formerly impaired segment is listed as current Category 4A, impaired for one or more uses, but is fully supporting for Aquatic Life use, and not in need of a TMDL at this time. The original 2004 TMDL equation for Hutton Creek is being replaced. This project uses a downstream equation to address a larger area, which includes Hutton Creek drainage area, and whose TMDL endpoint location is the mainstem of the Lower Middle Fork of the Holston River, above State Route 91, see map Figure 1-1. Location of the Middle Fork Holston and tributaries watersheds, impairments, and segmentation.

Greenway Creek (305b list ID VAS-O05R_GRW01A02) was originally listed for benthic aquatic life use in 2010. It was not included in either of the earlier TMDLs and so has no explicit equation to address it, until now and is developed as a separate TMDL equation in this project.

Tattle Branch (305b list ID VAS-O05R_TAT01A02) was originally listed as impaired (2004) and inherently included in the original TetraTech TMDL project dated 2004, as part of the Hall Creek TMDL equation. Tattle Branch was a part of the Cause Group Code VAS-O05R_01; 305(b) Segment ID VAS-O05R_TAT01A02, but DEQ did not have a clear description of the TMDL, and related Cause Group Codes being addressed then. Tattle Branch is developed as a separate TMDL equation in this project.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia establishes designated uses for all the waters in the state. Some of these uses include recreation, fishing, wildlife, and aquatic life. Water quality standards have been developed to ensure that some of these uses are met, while others are assessed using narrative criteria. One of those standards is the expectation that every stream will support a healthy and diverse community of bugs and fish (the aquatic life standard). The Virginia Department of Environmental Quality (VADEQ) determines whether this standard is met by monitoring the benthic macroinvertebrate community (bugs and worms that live on the bottom of the stream) in our waterways. The health and diversity of these bugs and worms are assessed using the Virginia Stream Condition Index (VSCI). The VSCI is a multimetric index used to derive stream health scores ranging from 0 to 100. Scores below 60 are categorized as impaired. **Figure 1-2** shows the various monitoring stations throughout the watershed, color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of aquatic life. This shows that the various impaired streams in this study fail the aquatic life standard, and pollutants within the watershed need to be identified and reduced. At some monitoring stations (e.g. 6CGRW002.31 on Greenway Creek impairment VAS-O05R_GRW01A02), the average is just above the threshold of 60 and shown in green on **Figure 1-2**, but the segment remains impaired due to samples frequently reported below 60.

A benthic stressor analysis study was conducted in 2021 to determine the cause(s) of benthic impairments in the Middle Fork Holston and Tribs Watersheds. The study found that the primary stressor to aquatic life in each of the impaired streams was sediment. This correlates with the findings of previous stressor analyses which also determined sediment to be the most probable stressor in Cedar Creek, Hall/Byers Creek, and Hutton Creek (TetraTech, 2003) and in the Middle Fork Holston River (Engineering Concepts, Inc, 2009) in support of previous TMDL development efforts that are partially superseded in this study (**Section 2.5**).

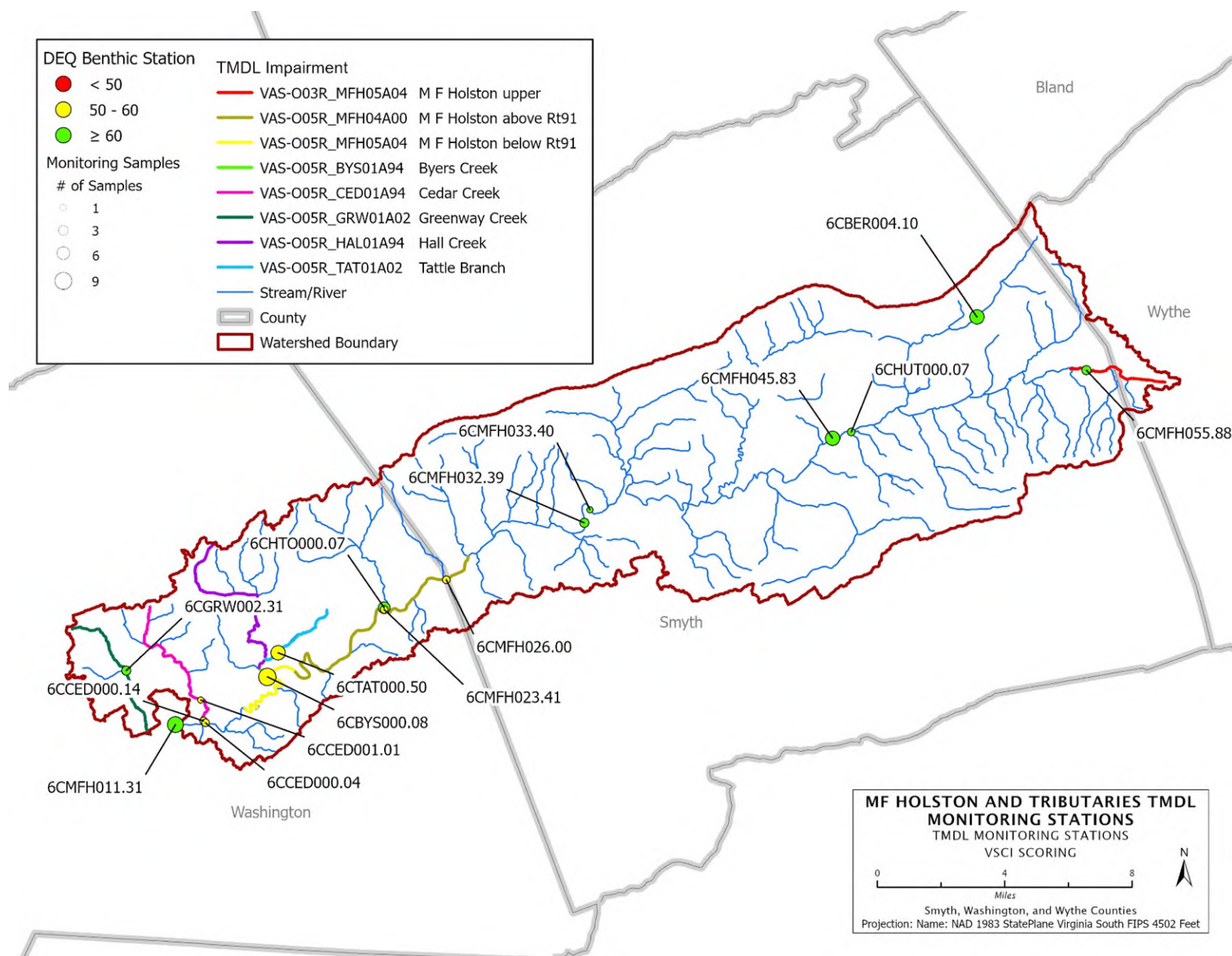


Figure 1-2. Average stream health score summaries in the Middle Fork Holston watersheds.

Too Much Sediment

Excess sediment was identified as the primary stressor in each of the MF Holston and Tribs watersheds. When it rains, sediment is washed off the land surface into nearby creeks and rivers. The amount of soil that is washed off depends upon how much it rains and the characteristics of the surrounding watershed. Rain falling on highly tilled cropland without a cover crop or a construction site lacking sufficient controls may carry a large amount of sediment to a stream. Other land types, like forests and well-maintained pasture, contribute much less sediment to waterways during rainfall events. The presence of adequate streamside ‘buffers’ of healthy forest cover can serve to protect stream banks, provide shade, and filter pollutants such as sediment out of surface runoff before it reaches the stream. When that soil gets into nearby streams, it can destroy valuable habitat for aquatic macroinvertebrates that live underneath and between rocks and gravel on the bottom of the stream. Without this valuable habitat, the diversity of aquatic life in a stream may be severely limited.

The Study

To study the problem of excess sediment in the MF Holston and Tribs, a combination of monitoring data and computer modeling was utilized. Monitoring was used to tell how much sediment is in the streams at any given time and how aquatic life conditions have changed over time. The computer model incorporates monitoring data and was used to estimate where the sediment is coming from and make predictions about how stream conditions would change if those sources were reduced.

For this purpose, a computer model called the Generalized Watershed Loading Function model (or GWLF) was used. This model considers the slope, soils, land cover, erodibility, and runoff to estimate the amount of soil eroded in the watershed and deposited in the stream.

Definition:



TMDL – Total Maximum Daily Load. This is the amount of a pollutant that a stream can receive and still meet water quality standards. The term TMDL is also used more generally to describe the state’s formal process for cleaning up polluted streams.

Frequently Asked Question:

Why use a computer model?



Sampling and testing tell you a lot about the present and the past, but nothing about the future. A computer model is a tool that can help you make predictions about the future. This is necessary to figure out how much effort is needed to clean up a stream.

The model was calibrated against real-world flow measurements to ensure that it produced accurate results. The calibrated model was then used to estimate the sediment reductions that would be needed to completely restore a healthy aquatic life to the impaired streams in the watershed.

The modeling analysis (TMDL study) develops an equation that is called a Total Maximum Daily Load (TMDL) because it determines the maximum amount of a pollutant that can get into a certain stream without

harming the stream or the creatures living in it. A TMDL budgets allowable contributions of a specific pollutant from point sources, called the wasteload allocation, and nonpoint sources, called the load allocation. It also provides a margin of safety to account for potential differences between the stream environment and the predicted future load. This TMDL report summarizes the TMDL study and sets goals for a clean-up plan.

Current Conditions

For this report, the Virginia Geographic Information Network (VGIN) 2016 Virginia Land Cover Dataset (VLCD) (VGIN, 2021) was used to represent the current land use with minor modifications (discussed in **Section 3.4**). The primary landcover in each watershed in this study is hay/pasture followed by forest/trees and urban/suburban development. Cropland is only a small percent of the land cover in each watershed. The land cover distribution for each impaired watershed is shown in **Figure 1-3** through **Figure 1-10**.

This land cover dataset combined with an accounting of the permitted discharges represent the major pollutant sources in the watershed. The GWLF model was used to figure out the relative contribution of sources of sediment in the impaired watersheds. **Figure 1-3** through **Figure 1-10** show the distribution of sediment contributions from various sources in the watersheds under what is called ‘existing conditions’ (approximating when the monitoring was done). The permitted sources in the watersheds include four Virginia Pollutant Discharge Elimination System (VPDES) individual permits, one potable water treatment plant general permit, two nonmetallic mineral mining general permits, one vehicle wash facility general permit, 13 domestic sewage general permits, 22 industrial stormwater general permits, and 18 active construction general permits in the Middle Fork Holston watersheds. The sediment loads from permitted sources were calculated based on the permit language, reported discharge data, and land cover type and area (detailed in **Section 4.3.2**). In the Upper MF Holston, Cedar Creek, Byers Creek, and Hall Creek the land cover is predominantly hay, pasture, and forest land and as such a significant amount of the sediment loads are derived from hay and pasture lands. Tattle Branch and Greenway Creek are predominantly hay/pasture and their sediment load is primarily from hay/pasture, but they also have a higher urban/suburban sediment contribution due to their higher level of urban/suburban land cover. In the Lower MF Holston watersheds, having a larger network of streams makes the stream bank and bed erosion a significant portion of its sediment load.

Definition:



Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Nonpoint Source – pollution that does not come out of a pipe but comes generally from the landscape (usually as runoff).

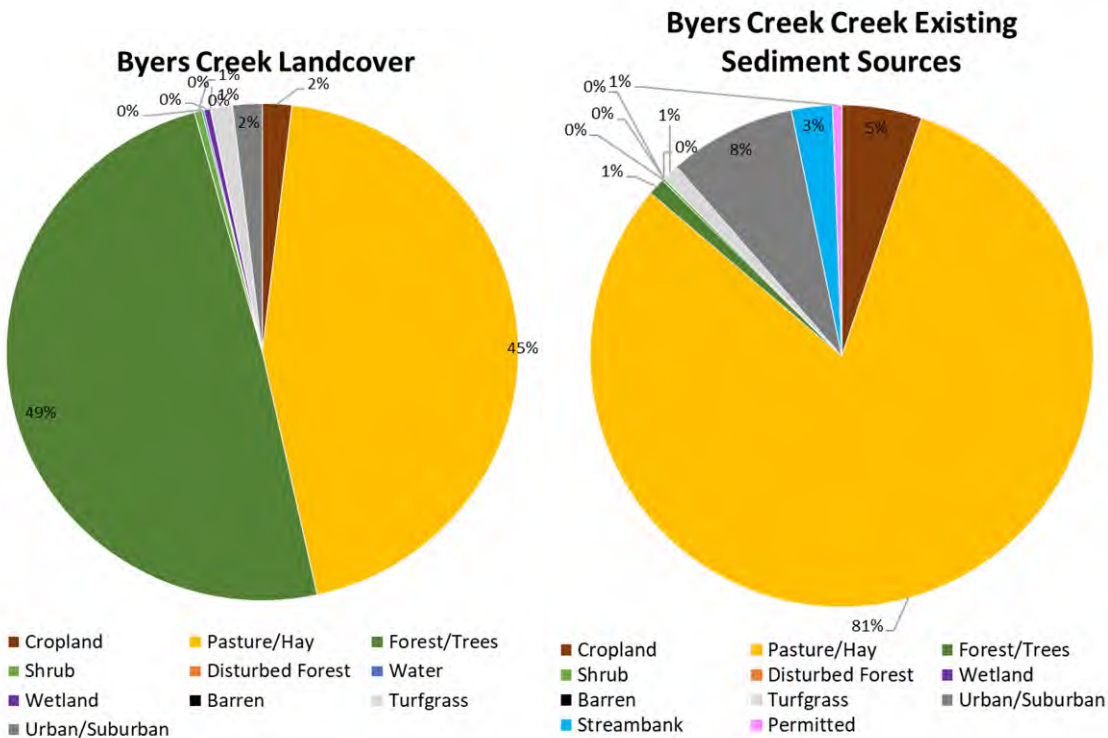


Figure 1-3. Land cover and existing source load distributions in the Byers Creek watershed (excluding Hall Creek and Tattle Branch watersheds).

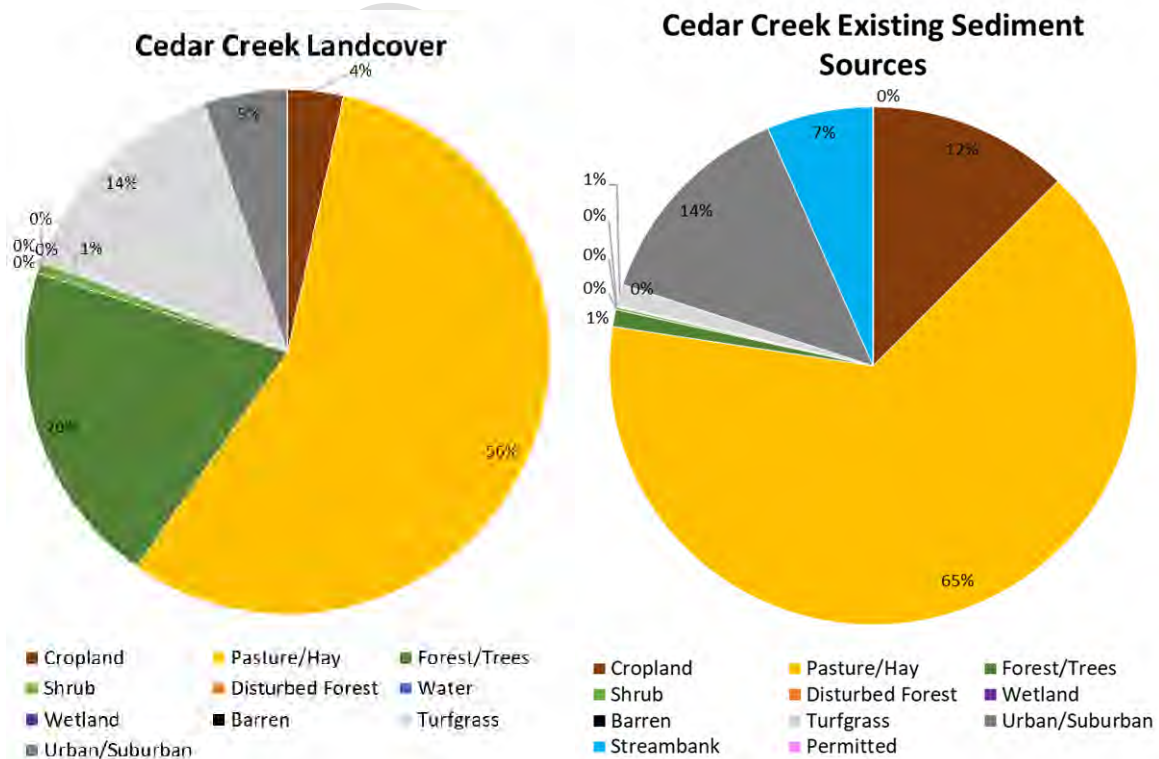


Figure 1-4. Land cover and existing source load distributions in the Cedar Creek watershed.

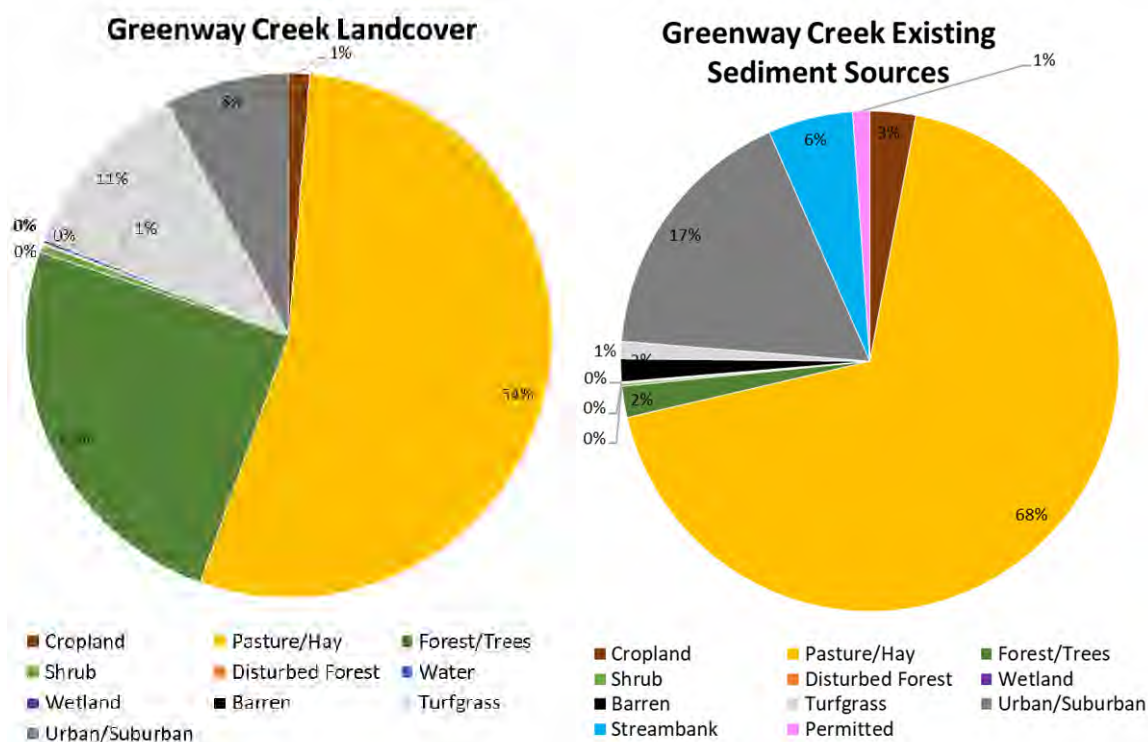


Figure 1-5. Land cover and existing source load distributions in the Greenway Creek watershed.

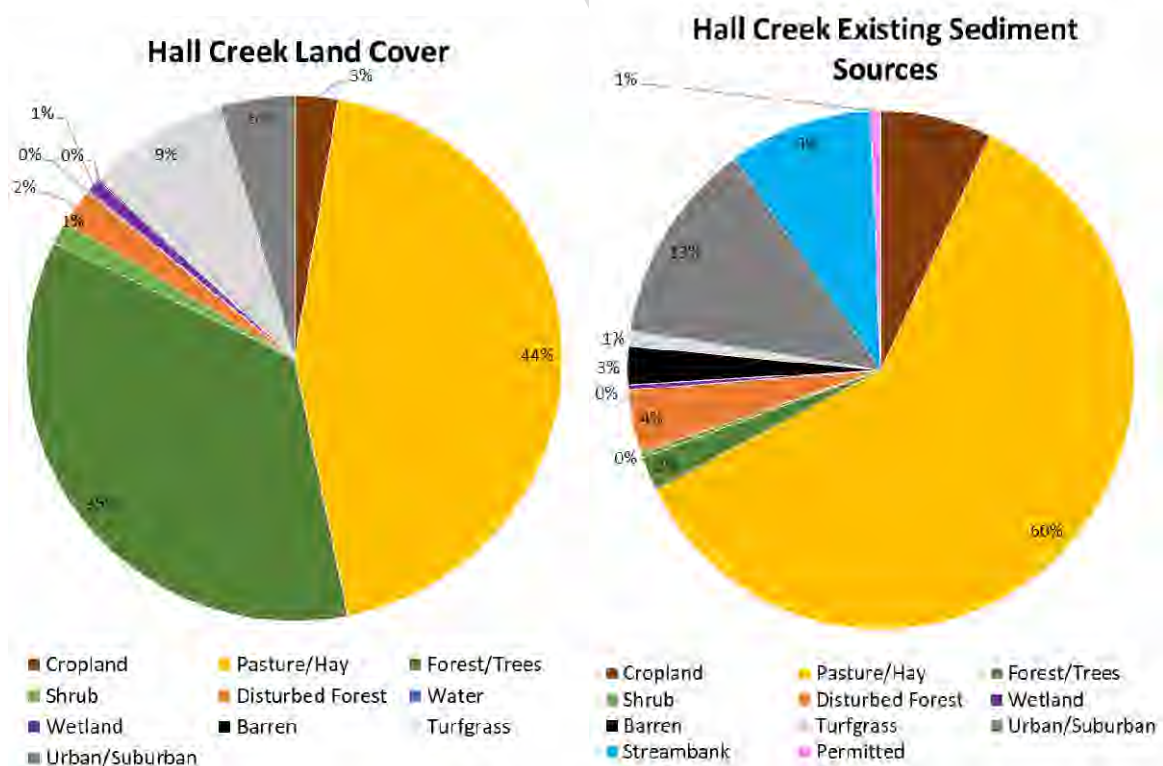


Figure 1-6. Land cover and existing source load distributions in the Hall Creek watershed (excluding Tattle Branch watershed).

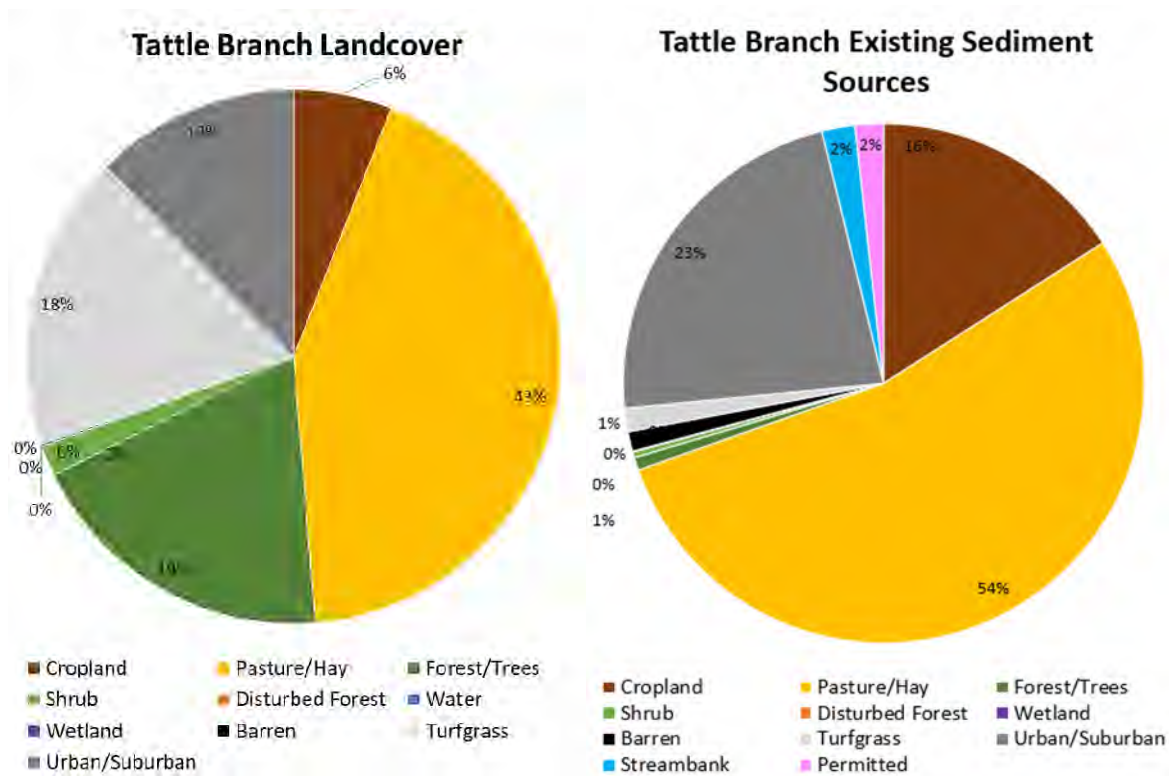


Figure 1-7. Land cover and existing source load distributions in the Tattle Branch watershed.

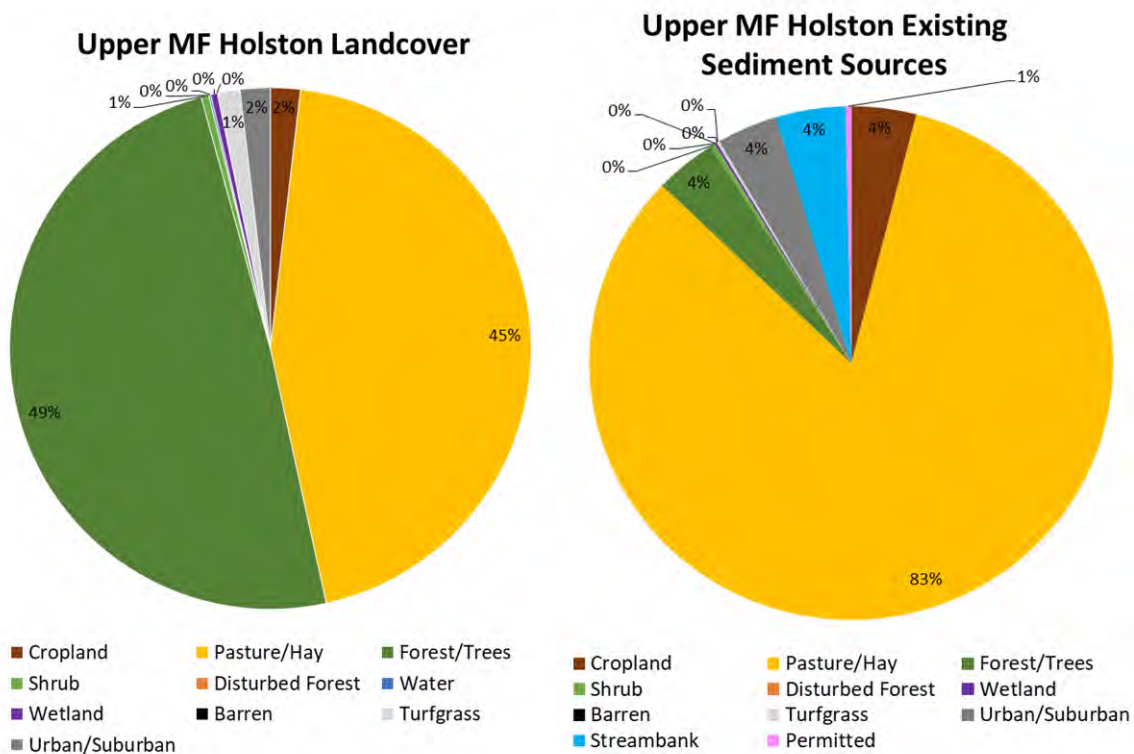


Figure 1-8. Land cover and existing source load distributions in the Upper MF Holston watershed.

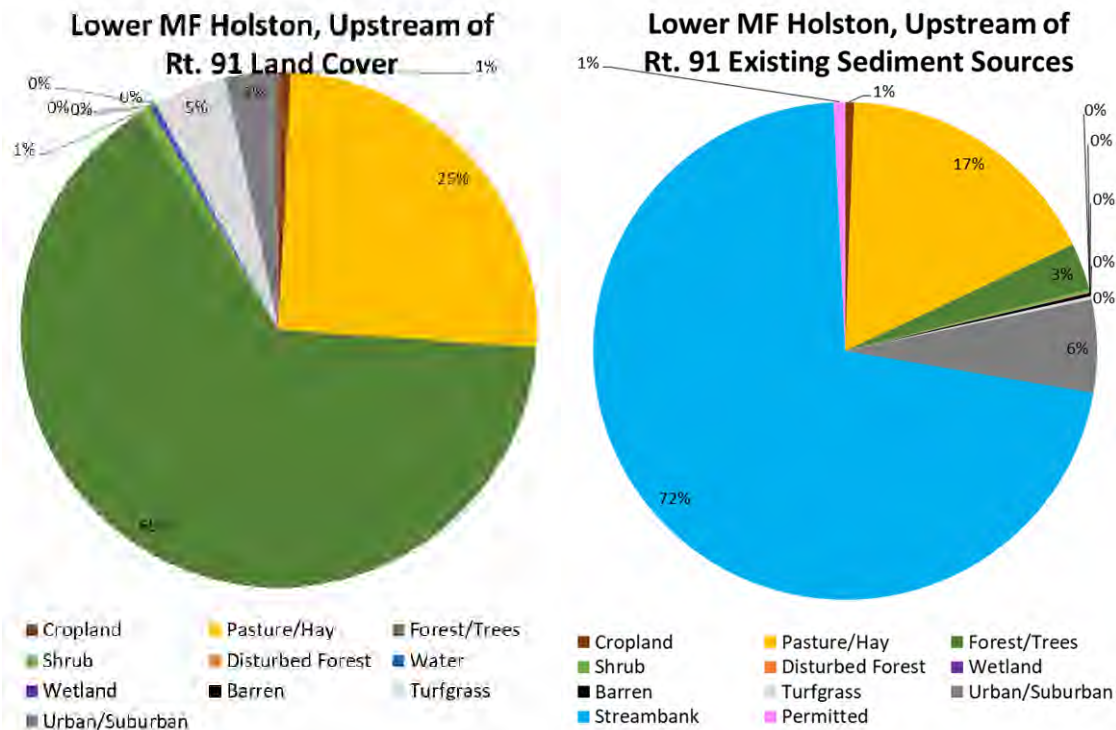


Figure 1-9. Land cover and existing source load distributions (excluding Upper MF Holston) in the Lower MF Holston, Upstream of Rt. 91 watershed.

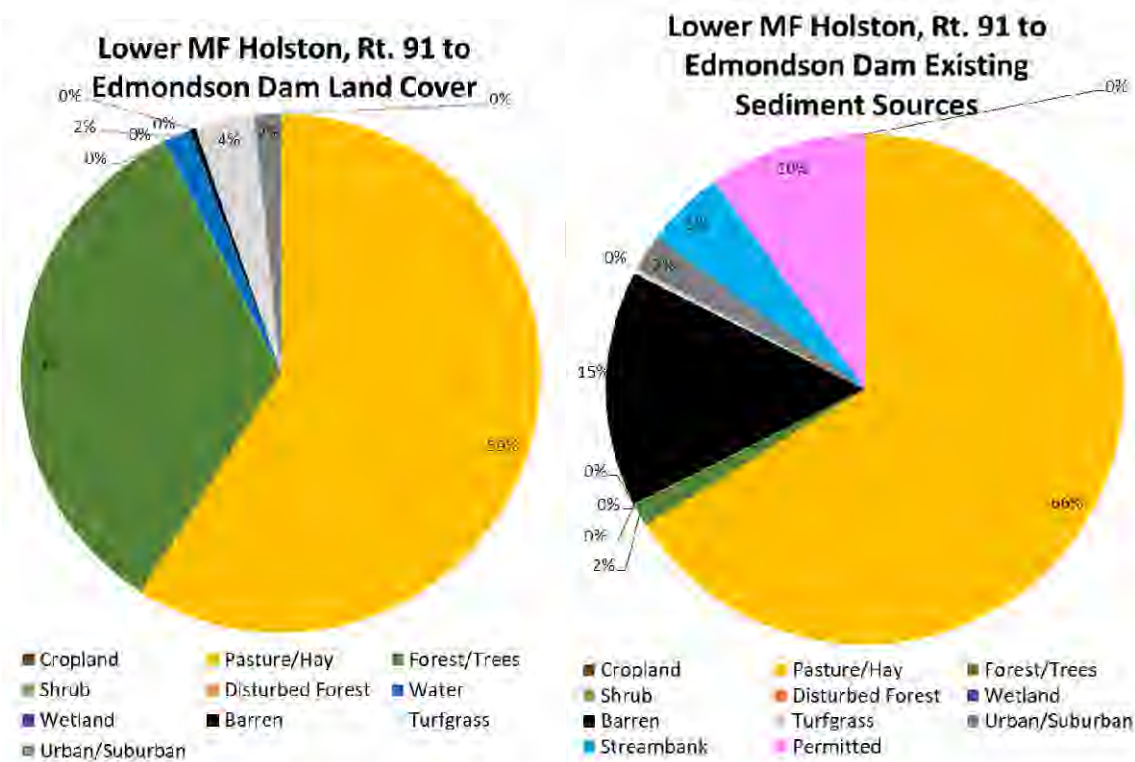


Figure 1-10. Land cover and existing source load distributions in the Lower MF Holston, Rt. 91 to Edmondson Dam watershed (excluding Lower MF Holston, Upstream of Rt. 91, Upper MF Holston, Byers Creek, Hall Creek and Tattle Branch Watersheds).

Future Goals (the TMDL)

After figuring out where the sediment in the impaired streams is currently coming from, a computer model was used to determine how much sediment loads need to be reduced to clean up each stream. The ultimate goal for these streams is to have sediment levels that allow for diverse and abundant aquatic life. The reductions in sediment needed to meet these goals are shown in **Table 1-2**.

Table 1-2. Percent reductions in sediment needed to clean up the impaired waters.

Watershed	Crop, Pasture, Hay	Forest, Trees, Shrubs, Wetland	Developed Pervious and Impervious Areas, Turfgrass	Streambank Erosion	Overall Reductions
Tattle Branch	68.2%	0%	11.7%	11.5%	49.5%
Hall Creek	66.0%	0%	24.1%	24.1%	44.4%
Byers Creek	62.6%	0%	24.2%	62.6%	57.9%
Cedar Creek	68.6%	0%	25.2%	68.5%	61.1%
Greenway Creek	19.0%	0%	9.9%	19.0%	15.9%
Upper MF Holston	4.6%	0%	1.8%	1.8%	3.0%
Lower MF Holston, upstream of Rt. 91	21.5%	0%	5.8%	21.6%	18.7%
Lower MF Holston, Rt.91 to Edmondson Dam	1.0%	0%	1.0%	1.0%	0.9%

In order to obtain healthy sediment levels in the impaired streams, significant reductions are needed from several sediment sources. Sediment loads from agricultural land cover need to be reduced by between 68.6% in Cedar Creek and 4.6% in the Upper Middle Fork Holston watershed. Sediment loads from urban/suburban land cover need to be reduced by between 25.2% in Cedar Creek and 1.8% in upper Middle Fork Holston watershed. Recommended streambank erosion reductions were generally matched with the reductions of the other categories. The reductions applied to upstream impairments mathematically indicate that no further reductions from the Lower MF Holston, Rt. 91 to Edmondson Dam, would be needed. However, DEQ recommends including 1% reduction to anthropogenic nonpoint sources. Stakeholders discussed the importance of addressing this segment's impairment locally instead of relying solely on upstream load reductions. This small reduction provides reasonable assurance that this stream segment aquatic life use will achieve delisting by increasing the BMP funding opportunities.

All these benthic impaired watershed segments, not just the high volume and downstream mainstem segments, are dependent on the reduction of sediment load from streambank erosion and can benefit from streambank and instream restoration projects. Stream walks can be used to identify and prioritize stream reaches experiencing the greatest degree of erosion. Additionally, participants agreed that targeting sediment loads from streambank erosion would provide

additional reasonable assurance that sediment reduction goals were reasonable and could be achieved cost effectively.

The total maximum daily load, or TMDL, is the total amount of sediment per year that would be entering each of these streams after the recommended reductions are made (**Table 1-3** through **Table 1-10**). This load includes permitted sources as well as future growth to account for potential future permitted sources. These annual loads are converted to daily maximum loads as well, as described in **Section 6.3** (**Table 1-11**. Maximum ‘daily’ sediment loads and components for Tattle Branch. Reduction scenarios to achieve this TMDL are presented in Table 1-3 and

Table 1-19 (Scenario 2).

through **Table 1-18**). If sediment loads are reduced to these amounts, healthy aquatic life is expected to be restored in these streams.

TMDL equations were developed for several segments which are hydrologically connected (i.e. directly upstream or downstream of other segments for which TMDL equations were developed.) Tables shown in Section 1.5.1 reflect the fact that upstream loads are included as part of the total downstream loads and therefore impact the downstream TMDL equations. These connections are depicted in Figures 1-1 and 1-2 and can be summarized as follows:

Upstream to downstream:

Tattle Creek flows into Hall Creek

Hall Creek flows into Byers Creek

Byers Creek flows into Lower MF Holston from Rt. 91 to Edmondson Dam.

Upstream to downstream:

Upper MF Holston flows into Lower MF Holston upstream of Rt. 91

Lower MF Holston upstream of Rt. 91 flows into Lower MF Holston from Rt. 91 to Edmondson Dam.

Greenway and Cedar Creeks do not directly flow into other segments for which a benthic TMDL equation was developed.

The TMDL values in Section ‘1.5.1. Annual Average Loads’ tables are the modeled TMDL target load values rounded to whole numbers. The WLA components are based on annual permitted loads which are also rounded to whole numbers. Permits identified in Tables 1-3 through 1-26 are described, including their Waste Load Allocations, in Section 4.3.2. Point Sources, and in the *Industrial Stormwater General Permits’ Technical Memo, Middle Fork Holston River Benthic TMDL Redevelopment* (2025), and were discussed during public meetings with the Technical Advisory Committee and at public engagement meetings.

As noted above, several TMDL watersheds for which an equation has been developed in this project are hydrologically connected to upstream TMDL watersheds for which an equation has also been developed in this project. In those cases, upstream allocated loads are included in the downstream allocated loads as follows:

- All nonpoint source (NPS) allocated loads from upstream TMDL watersheds are included in the downstream NPS allocated loads
- All point source allocated loads from upstream TMDL watersheds are included in the downstream NPS allocated loads with two exceptions:
 - Construction General Permits (CGP) and Future Growth (FG) allocated loads are calculated as a percentage of the TMDL target load for each TMDL watershed and included in the wasteload allocation (WLA) component of the TMDL equation. Therefore, including upstream CGP and FG allocated loads in the downstream NPS allocated loads would result in an overallocation to CGP and FG allocated loads in the downstream TMDL watershed. The TMDL equation tables provide a delineation within the WLA for CGP and FG allocations in each upstream watershed as well as the downstream watershed. This provides a more accurate representation of the CGP and FG loads allocated to each individual watershed.

Annual Average Loads

Table 1-3. Annual average sediment TMDL components for Tattle Branch. Reduction scenarios to achieve this TMDL are presented in Table 1-19 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Tattle Branch (VAS-O05R_TAT01A02)	29,851	349,112	42,107	421,070
<i>ISW Permits</i>	17,241			
<i>Construction Permits</i> (0.2% of TMDL)	842			
<i>NMMM Permits</i>	3,347			
<i>Future Growth</i> (2% of TMDL)	8,421			

**MOS is 10% of the TMDL target load.

Table 1-4. Annual average sediment TMDL components for Hall Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-20 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Hall Creek (VAS-O05R_HAL01A94)	133,680	1,126,038	139,969	1,399,687
<i>VPDES Permits</i>	86,870			
<i>ISW Permits</i>	16,017			
<i>Construction Permits</i> (0.2% of TMDL)	2,799			
Components of construction permits Tattle Branch Hall Crk (excluding Tattle Br)	842 1,957			

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
<i>Future Growth</i> (2% of TMDL)	27,994			
Components of Future Growth				
Tattle Branch	8,421			
Hall Crk (excluding Tattle Br)	19,573			

* Hall Creek LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Tattle Branch.

**MOS is 10% of the TMDL target load.

Table 1-5. Annual average sediment TMDL components for Byers Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-21 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Byers Creek (VAS-O05R_BY01A94)	36,679	1,463,832	166,724	1,667,235
<i>Construction Permit</i> (0.2% of TMDL)	3,334			
Components of construction permits				
Tattle Branch	842			
Hall Crk (excluding Tattle Br)	1,957			
Byers Crk (excl Tattle & Hall)	535			
<i>Future Growth</i> (2% of TMDL)	33,345			
Components of Future Growth				
Tattle Branch	8,421			
Hall Crk (excluding Tattle Br)	19,573			
Byers Crk (excl Tattle & Hall)	5,351			

* Byers Creek LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Tattle Branch and Hall Creek.

**MOS is 10% of the TMDL target load.

Table 1-6. Annual average sediment TMDL components for Cedar Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-22 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Cedar Creek (VAS-O05R_CED01A94)	12,926	471,005	53,770	537,701
VWFGP	914			
<i>Construction Permits</i> (0.2% of TMDL)	1,075			
<i>Domestic Sewage Permit</i>	183			
<i>Future Growth</i> (2% of TMDL)	10,754			

**MOS is 10% of the TMDL target load.

Table 1-7. Annual average sediment TMDL components for Greenway Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-23 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Greenway Creek (VAS-O05R_GRW01A02)	46,798	1,055,279	122,453	1,224,530
<i>ISW Permits</i>	18,892			
<i>Construction Permits</i>	3,232			
<i>Domestic Sewage</i>	183			
<i>Future Growth</i> (2% of TMDL)	24,491			

**MOS is 10% of the TMDL target load.

Table 1-8. Annual average sediment TMDL components for Upper MF Holston. Reduction scenarios to achieve this TMDL are presented in Table 1-24 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Upper MF Holston (VAS-O03R_MFH05A04)	53,403	1,171,079	136,054	1,360,536
<i>PWTP Permit</i>	6,853			
<i>ISW Permits</i>	2,721			
<i>Construction Permits</i> (0.2% of TMDL)	16,618			
<i>Future Growth</i> (2% of TMDL)	27,211			

**MOS is 10% of the TMDL target load.

Table 1-9. Annual average sediment TMDL components for the Lower MF Holston, upstream of Rt. 91. Reduction scenarios to achieve this TMDL are presented in Table 1-25 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Lower MF Holston, upstream of Rt. 91 (VAS-O05R_MFH04A00)	1,464,062	33,760,224	3,913,810	39,138,096
<i>VPDES</i>	472,360			
<i>Construction Permits</i> (0.2% of TMDL)	78,276			
Components of construction permits				
Upper MF Holston R	2,721			
Lower MFHR, upstream of Rt. 91	75,555			
<i>ISW Permits</i>	123,836			
<i>NMMM Permits</i>	6,096			
<i>Domestic Sewage Permits</i>	732			

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
<i>Future Growth</i> (2% of TMDL)	782,762			
Components of Future Growth				
Upper MF Holston R	27,211			
Lower MFHR, upstream of Rt. 91	755,551			

* Lower MF Holston, upstream of Rt. 91, LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Upper MF Holston River.

**MOS is 10% of the TMDL target load.

Table 1-10. Annual average sediment TMDL components for the Lower MF Holston, Rt. 91 to Edmondson Dam. Reduction scenarios to achieve this TMDL are presented in Table 1-26 (Scenario 1).

Impairment	Allocated Point Sources (WLA) (lb/yr TSS)	Allocated Nonpoint Sources (LA) (lb/yr TSS)*	Margin of Safety (MOS) (lb/yr TSS)**	Total Maximum Daily Load (TMDL) (lb/yr TSS)
Lower MF Holston, Rt. 91 to Edmondson Dam (VAS-O05R_MFH05A04)	963,597	38,452,555	4,379,573	43,795,725
<i>Domestic Sewage Permit</i>	91			
<i>Construction Permits</i> (0.2% of TMDL)	87,591			
Components of construction permits				
Tattle Branch	842			
Hall Crk (excluding Tattle Br)	1,957			
Byers Crk (excl Tattle & Hall)	535			
Upper MF Holston R	2,721			
Lower MF Holston R, Rt. 91 (excluding Upper MF Holston)	75,555			
Lower MF Holston R, to Dam (excluding Upper MF Holston & Lower MF Holston, Rt 91)	5,981			
<i>Future Growth</i> (2% of TMDL)	875,915			
Components of Future Growth				
Tattle Branch	8,421			
Hall Crk (excluding Tattle Br)	19,573			
Byers Crk (excl Tattle & Hall)	5,351			
Upper MF Holston R	27,211			
Lower MF Holston R, Rt. 91 (excluding Upper MF Holston)	755,551			
Lower MF Holston R, to Dam (excluding Upper MF Holston & Lower MF Holston, Rt 91)	59,808			

* Lower MF Holston, Rt. 91 to Edmondson Dam, LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Upper MF Holston River, Lower MF Holston River, upstream of Rt. 91, Tattle Branch, Hall Creek and Byers Creek.

**MOS is 10% of the TMDL target load.

Maximum Daily Loads

Table 1-11. Maximum ‘daily’ sediment loads and components for Tattle Branch. Reduction scenarios to achieve this TMDL are presented in Table 1-3 and Table 1-19 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Tattle Branch (VAS-O05R_TAT01A02)	147.1	1,720.4	207.5	2,075
ISW Permits	85.0			
Construction Permits (0.2% of MDL)	4.1			
NMMM Permits	16.5			
Future Growth (2% of MDL)	41.5			

**MOS is 10% of the MDL target load.

Table 1-12. Maximum ‘daily’ sediment loads and components for Hall Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-4 and Table 1-20 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)*	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Hall Creek (VAS-O05R_HAL01A94)	489.0	6,270.9	751.1	7,511
VPDES Permits	237.8			
ISW Permits	86.0			
Construction Permits (0.2% of MDL)	15.0			
Future Growth (2% of MDL)	150.2			

*Hall Creek LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Tattle Branch.

**MOS is 10% of the MDL target load.

Table 1-13. Maximum ‘daily’ sediment loads and components for Byers Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-5 and Table 1-21 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)*	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Byers Creek (VAS-O05R_BY01A94)	204.8	8,176.0	931.2	9,312
Construction Permit (0.2% of MDL)	18.6			
Future Growth (2% of MDL)	186.2			

* Byers Creek LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Tattle Branch and Hall Creek.

**MOS is 10% of the MDL target load.

Table 1-14. Maximum ‘daily’ sediment loads and components for Cedar Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-6 and Table 1-22 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Cedar Creek (VAS-O05R_CED01A94)	66.5	2,530.0	288.5	2,885
<i>VWFGP Permit</i>	<i>2.5</i>			
<i>Domestic Sewage Permit</i>	<i>0.5</i>			
<i>Construction Permits (0.2% of MDL)</i>	<i>5.8</i>			
<i>Future Growth (2% of MDL)</i>	<i>57.7</i>			

**MOS is 10% of the MDL target load.

Table 1-15. Maximum ‘daily’ sediment loads and components for Greenway Creek. Reduction scenarios to achieve this TMDL are presented in Table 1-7 and Table 1-23 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Greenway Creek (VAS-O05R_GRW01A02)	260.9	5,894.2	683.9	6,839
<i>ISW Permits</i>	<i>105.5</i>			
<i>Domestic Sewage</i>	<i>0.5</i>			
<i>Construction Permits (0.2% of TMDL)</i>	<i>18.1</i>			
<i>Future Growth (2% of the MDL)</i>	<i>136.8</i>			

**MOS is 10% of the MDL target load.

Table 1-16. Maximum ‘daily’ sediment loads and components for Upper MF Holston. Reduction scenarios to achieve this TMDL are presented in Table 1-8 and Table 1-24 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Upper MF Holston (VAS-O03R_MFH05A04)	278.8	6,560.3	759.9	7,599
<i>PWTP Permit</i>	<i>18.8</i>			
<i>Construction Permits (0.2% of MDL)</i>	<i>15.2</i>			
<i>ISW Permits</i>	<i>92.8</i>			
<i>Future Growth (2% of MDL)</i>	<i>152.0</i>			

**MOS is 10% of the MDL target load.

Table 1-17. Maximum ‘daily’ sediment loads and components for the Lower MF Holston, upstream of Rt.91. Reduction scenarios to achieve this TMDL are presented in Table 1-9 and Table 1-25 (Scenario 2).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)*	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Lower MF Holston, upstream of Rt. 91 (VAS-O05R_MFH04A00)	5,366.1	139,296.3	16,073.6	160,736
<i>VPDES</i>	<i>1,293.3</i>			
<i>NMMM Permits</i>	<i>25.0</i>			
<i>Domestic Sewage Permits</i>	<i>3.0</i>			
<i>Construction Permits (0.2% of MDL)</i>	<i>321.5</i>			
<i>ISW Permits</i>	<i>508.6</i>			
<i>Future Growth (2% of MDL)</i>	<i>3,214.7</i>			

* Lower MF Holston, upstream of Rt. 91, LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Upper MF Holston River.

**MOS is 10% of the MDL target load.

Table 1-18. Maximum ‘daily’ sediment loads and components for Lower MF Holston, Rt. 91 to Edmondson Dam. Reduction scenarios to achieve this TMDL are presented in Table 1-10 and Table 1-26 (Scenario 1).

Impairment	Allocated Point Sources (WLA) (lb/day TSS)	Allocated Nonpoint Sources (LA) (lb/day TSS)*	Margin of Safety (MOS) (lb/day TSS)**	Maximum Daily Load (MDL) (lb/day TSS)
Lower MF Holston, Rt. 91 to Edmondson Dam (VAS-O05R_MFH05A04)	5,540.0	221,089.0	25,181.0	251,810
<i>Domestic Sewage Permit</i>	<i>0.2</i>			
<i>Construction Permits (0.2% of MDL)</i>	<i>503.6</i>			
<i>Future Growth (2% of MDL)</i>	<i>5,036.2</i>			

* Lower MF Holston, Rt. 91 to Edmondson Dam, LA includes the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Upper MF Holston River, Lower MF Holston River, upstream of Rt. 91, Tattle Branch, Hall Creek and Byers Creek.

**MOS is 10% of the MDL target load.

Allocation Scenarios

There are many ways to reduce pollutants to reach water quality (TMDL) goals. Several versions of these reduction plans, or allocation scenarios, were developed. These were presented to the Technical Advisory Committee which determined the preferred scenarios for each watershed (see **Table 1-19** through **Table 1-26**). These scenarios focused greater recommended reductions on the greater loads associated with agricultural sources in the watersheds, while still maintaining some recommended reductions on urban sources to balance the responsibility and available funding. Model TSS pollutant and calculated totals of those results were rounded, to maintain values to the ‘ones’ place. The summation of the allocated point and nonpoint source reduced loads including future growth and the Margin of Safety in each scenario is slightly less than the TMDL target load.

This conservative approach provides additional assurance that implementation of the TMDL will result in restoration of designated uses for the impaired waterbodies.

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Table 1-19. Allocation scenarios for Tattle Branch sediment loads.

Tattle Branch Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	116,749	52.2	55,806	68.2	37,126	38.1	72,267	26.1	86,277
Hay	12,884	52.2	6,159	68.2	4,097	38.1	7,975	60.2	5,128
Pasture	380,904	52.2	182,072	68.2	121,127	38.1	235,780	60.2	151,600
Forest	2,008	0.0	2,008	0.0	2,008	0.0	2,008	0.0	2,008
Trees	3,869	0.0	3,869	0.0	3,869	0.0	3,869	0.0	3,869
Shrub	2,665	0.0	2,665	0.0	2,665	0.0	2,665	0.0	2,665
Harvested	-	0.0	-	0.0	-	0.0	-	0.0	-
Wetland	327	0.0	327	0.0	327	0.0	327	0.0	327
Barren	8,968	52.3	4,278	11.5	7,937	87.8	1,094	19.7	7,201
Turfgrass	10,685	52.3	5,097	11.7	9,434	88.0	1,282	19.7	8,580
Developed Pervious	2,232	52.3	1,065	11.7	1,971	88.0	268	58.4	928
Developed Impervious	164,437	52.3	78,566	11.7	145,198	88.0	19,732	58.4	68,406
Streambank Erosion	15,061	52.3	7,184	11.5	13,329	87.8	1,837	19.7	12,094
NMMM Permits	856		3,347		3,347		3,347		3,347
Construction Permits (0.2%)	842		842		842		842		842
ISW Permits	11,289		17,241		17,241		17,241		17,241
Future Growth (2%)			8,421		8,421		8,421		8,421
MOS (10%)			42,107		42,107		42,107		42,107
TOTAL (w/o FG & MOS)	733,774		370,525	49.5	370,518		370,535		370,513
TMDL (TARGET Load)			421,070		421,070		421,070		421,070
TOTAL *	733,774		421,053		421,047		421,064		421,041

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

Table 1-20. Allocation scenarios for Hall Creek sediment loads.

Hall Creek Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	109,879	54.5	49,995	65.9	37,469	44.9	60,543	31.4	75,377
Hay	31,389	54.6	14,251	65.9	10,704	44.9	17,295	61.9	11,959
Pasture	902,775	54.6	410,099	66.0	307,182	44.9	497,429	61.9	343,293
Forest	20,116	0.0	20,116	0.0	20,116	0.0	20,116	0.0	20,116
Trees	12,713	0.0	12,713	0.0	12,713	0.0	12,713	0.0	12,713
Shrub	4,986	0.0	4,986	0.0	4,986	0.0	4,986	0.0	4,986
Harvested	61,143	0.0	61,143	0.0	61,143	0.0	61,143	0.0	61,143
Wetland	4,968	0.0	4,968	0.0	4,968	0.0	4,968	0.0	4,968
Barren	37,106	54.5	16,883	24.1	28,164	80.3	7,310	31.4	25,455
Turfgrass	14,234	54.5	6,476	24.1	10,804	80.3	2,804	31.4	9,764
Developed Pervious	2,321	54.5	1,056	24.1	1,762	80.3	457	51.4	1,128
Developed Impervious	195,926	54.5	89,147	24.1	148,708	80.3	38,598	51.4	95,220
Streambank Erosion	141,734	54.5	64,489	24.1	107,576	80.3	27,922	36.4	90,143
Tattle Branch**	732,932		369,699		369,699		369,699		369,699
VPDES Permits	6,137		86,870		86,870		86,870		86,870
Construction Permits (0.2%)	2,799		2,799		2,799		2,799		2,799
ISW Permits	1,132		16,017		16,017		16,017		16,017
Future Growth (2%)	-		27,994		27,994		27,994		27,994
MOS (10%)	-		139,969		139,969		139,969		139,969
TOTAL (w/o FG & MOS)	2,282,292		1,231,708		1,231,680		1,231,670		1,231,652
TMDL (TARGET Load)			1,399,687		1,399,687		1,399,687		1,399,687
TOTAL *	2,282,292		1,399,670		1,399,643		1,399,633		1,399,615
TOTAL (without upstream inputs/re d'ns)	1,549,360		862,008	44.4	861,981		861,971		861,953

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

**Hall Creek NonPoint Source (NPS) loads (existing and allocated conditions) include the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Tattle Branch. Tattle Branch Construction Permits, FG, and MOS are included in Hall Creek Construction Permits, Future Growth, and MOS respectively.

Table 1-21. Allocation scenarios for Byers Creek sediment loads.

Byers Creek Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	29,138	58.9	11,976	62.6	10,898	57.4	12,413	48.4	15,035
Hay	15,575	58.9	6,401	62.6	5,825	57.4	6,635	61.1	6,059
Pasture	443,089	59.0	181,667	62.6	165,715	57.4	188,756	61.1	172,362
Forest	1,747	0.0	1,747	0.0	1,747	0.0	1,747	0.0	1,747
Trees	4,503	0.0	4,503	0.0	4,503	0.0	4,503	0.0	4,503
Shrub	950	0.0	950	0.0	950	0.0	950	0.0	950
Harvested	-	0.0	-	0.0	-	0.0	-	0.0	-
Wetland	-	0.0	-	0.0	-	0.0	-	0.0	-
Barren	-	0.0	-	0.0	-	0.0	-	0.0	-
Turfgrass	6,069	58.9	2,494	24.2	4,600	74.1	1,572	48.4	3,132
Developed Pervious	707	58.9	291	24.2	536	74.1	183	49.3	359
Developed Impervious	45,583	58.9	18,735	24.2	34,552	74.1	11,806	49.4	23,065
Streambank Erosion	14,873	58.9	6,113	62.6	5,563	57.4	6,336	48.4	7,675
Hall Creek**	2,279,492		1,228,925		1,228,925		1,228,925		1,228,925
Construction Permit (0.2%)	3,334		3,334		3,334		3,334		3,334
Future Growth (2%)	-		33,345		33,345		33,345		33,345
MOS (10%)	-		166,723		166,723		166,723		166,723
TOTAL (w/o FG & MOS)	2,845,062		1,467,137		1,467,150		1,467,161		1,467,146
TMDL (TARGET Load)			1,667,235		1,667,235		1,667,235		1,667,235
TOTAL *	2,845,062		1,667,205		1,667,218		1,667,229		1,667,214
TOTAL (without upstream inputs/red'ns)	565,570		238,211	57.9	238,224		238,236		238,221

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

** Byers Creek NonPoint Source (NPS) loads (existing and allocated conditions) include the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Hall Creek (which includes Tattle Branch). Hall Creek Construction Permits, FG, and MOS are included in Byers Creek Construction Permits, Future Growth, and MOS respectively.

Table 1-22. Allocation scenarios for Cedar Creek sediment loads.

Cedar Creek Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	150,738	62.1	57,130	68.5	47,483	58.2	63,009	53.9	69,490
Hay	32,532	62.1	12,330	68.6	10,215	58.2	13,599	66.1	11,029
Pasture	757,953	62.1	287,264	68.6	237,997	58.2	316,824	66.1	256,946
Forest	5,202	0.0	5,202	0.0	5,202	0.0	5,202	0.0	5,202
Trees	7,741	0.0	7,741	0.0	7,741	0.0	7,741	0.0	7,741
Shrub	1,949	0.0	1,949	0.0	1,949	0.0	1,949	0.0	1,949
Harvested	867	0.0	867	0.0	867	0.0	867	0.0	867
Wetland	288	0.0	288	0.0	288	0.0	288	0.0	288
Barren	-	62.1	-	0.0	-	76.6	-	55.0	-
Turfgrass	16,319	62.1	6,185	26.0	12,076	76.6	3,819	55.0	7,344
Developed Pervious	1,967	62.1	746	25.1	1,474	76.6	460	55.0	885
Developed Impervious	161,119	62.1	61,064	25.1	120,678	76.6	37,702	55.0	72,503
Streambank Erosion	79,405	62.1	30,095	68.5	25,013	76.6	18,581	54.9	35,812
VWFGP	14		914		914		914		914
Domestic Sewage Permit	183		183		183		183		183
Construction Permits (0.2%)	1,075		1,075		1,075		1,075		1,075
Future Growth (2%)	-		10,754		10,754		10,754		10,754
MOS (10%)	-		53,770		53,770		53,770		53,770
TOTAL (w/o FG & MOS)	1,217,353		473,032	61.1	473,155		472,212		472,228
TMDL (TARGET Load)			537,701		537,701		537,701		537,701
TOTAL *	1,217,353		537,556		537,679		537,650		537,666

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

Table 1-23. Allocation scenarios for Greenway Creek sediment loads.

Greenway Creek Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	38,011	17.2	31,473	9.2	34,540	9.5	34,400	10.3	34,096
Hay	37,188	17.2	30,792	9.1	33,804	9.5	33,655	17.6	30,643
Pasture	839,614	17.1	696,040	20.9	664,134	9.5	759,850	17.6	691,683
Forest	16,475	0.0	16,475	0.0	16,475	0.0	16,475	0.0	16,475
Trees	9,453	0.0	9,453	0.0	9,453	0.0	9,453	0.0	9,453
Shrub	1,895	0.0	1,895	0.0	1,895	0.0	1,895	0.0	1,895
Harvested	1,046	0.0	1,046	0.0	1,046	0.0	1,046	0.0	1,046
Wetland	681	0.0	681	0.0	681	0.0	681	0.0	681
Barren	18,888	17.2	15,639	9.2	17,150	47.0	10,011	7.3	17,509
Turfgrass	14,228	17.2	11,781	9.2	12,919	47.0	7,541	7.3	13,189
Developed Pervious	2,706	17.2	2,241	9.2	2,457	47.0	1,434	17.7	2,227
Developed Impervious	216,643	17.2	179,380	9.2	196,712	47.0	114,821	17.7	178,297
Streambank Erosion	70,498	17.2	58,373	9.2	64,012	9.5	63,801	17.7	58,020
Domestic Sewage	183		183		183		183		183
Construction Permits (0.26%)	3,232		3,232		3,232		3,232		3,232
ISW Permits	10,837		18,892		18,892		18,892		18,892
Future Growth (2%)			24,491		24,491		24,491		24,491
MOS (10%)			122,453		122,453		122,453		122,453
TOTAL (w/o FG & MOS)	1,281,578		1,077,575	15.9	1,077,586		1,077,370		1,077,522
TMDL (TARGET Load)			1,224,530		1,224,530		1,224,530		1,224,530
TOTAL *	1,281,578		1,224,519		1,224,530		1,224,314		1,224,466

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

Table 1-24. Allocation scenarios for Upper MF Holston sediment loads.

Upper MF Holston Watershed		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	49,144	4.3	47,031	4.6	46,884	3.0	47,670	1.7	48,309
Hay	33,122	4.3	31,697	4.6	31,598	3.0	32,128	4.6	31,598
Pasture	986,328	4.4	943,272	4.6	940,957	2.9	957,724	4.6	940,957
Forest	36,789	0.0	36,789	0.0	36,789	0.0	36,789	0.0	36,789
Trees	10,495	0.0	10,495	0.0	10,495	0.0	10,495	0.0	10,495
Shrub	3,316	0.0	3,316	0.0	3,316	0.0	3,316	0.0	3,316
Harvested	-	0.0	-	0.0	-	0.0	-	0.0	-
Wetland	1,811	0.0	1,811	0.0	1,811	0.0	1,811	0.0	1,811
Barren	-	0.0	-	0.0	-	0.0	-	0.0	-
Turfgrass	2,166	4.3	2,073	1.8	2,127	38.0	1,343	1.7	2,129
Developed Pervious	1,157	4.3	1,107	1.8	1,136	38.0	717	1.7	1,137
Developed Impervious	44,759	4.3	42,834	1.8	43,953	38.0	27,750	1.7	43,998
Streambank Erosion	52,900	4.3	50,625	1.8	51,948	3.0	51,313	4.6	50,467
PWTP Permit	1,608	-	6,853	-	6,853	-	6,853	-	6,853
Construction Permits (0.2%)	2,721		2,721		2,721		2,721		2,721
ISW Permits	7,421		16,618		16,618		16,618		16,618
Future Growth (2%)	-		27,211		27,211		27,211		27,211
MOS (10%)	-		136,054		136,054		136,054		136,054
TOTAL (w/o FG & MOS)	1,233,736		1,197,242	3.0	1,197,205		1,197,249		1,197,197
TMDL (TARGET Load)			1,360,536		1,360,536		1,360,536		1,360,536
TOTAL *	1,233,736		1,360,507		1,360,469		1,360,513		1,360,462

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

Table 1-25. Allocation scenarios for Lower MF Holston, upstream of Rt.91 sediment loads.

Lower MF Holston, upstream of Rt. 91		Scenario 1		Scenario 2 (preferred)		Scenario 3		Scenario 4	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	235,095	20.6	186,834	21.4	184,785	17.3	194,593	10.2	211,115
Hay	209,066	20.5	166,208	21.4	164,326	17.3	172,898	20.7	165,790
Pasture	6,906,172	20.5	5,485,611	21.5	5,421,345	17.3	5,709,293	20.7	5,476,594
Forest	1,128,014	0.0	1,128,014	0.0	1,128,014	0.0	1,128,014	0.0	1,128,014
Trees	122,570	0.0	122,570	0.0	122,570	0.0	122,570	0.0	122,570
Shrub	70,952	0.0	70,952	0.0	70,952	0.0	70,952	0.0	70,952
Harvested	17,902	0.0	17,902	0.0	17,902	0.0	17,902	0.0	17,902
Wetland	7,032	0.0	7,032	0.0	7,032	0.0	7,032	0.0	7,032
Barren	91,140	20.6	72,365	5.9	85,763	62.8	33,904	10.2	81,844
Turfgrass	80,828	20.6	64,178	5.9	76,059	62.8	30,068	10.3	72,503
Developed Pervious	14,703	20.6	11,674	5.9	13,836	62.8	5,470	20.7	11,660
Developed Impervious	2,451,784	20.6	1,947,621	5.8	2,310,485	62.9	909,612	20.7	1,944,265
Streambank Erosion	29,288,881	20.5	23,284,661	21.6	22,962,483	17.5	24,163,327	20.6	23,255,372
Upper MF Holston **	1,231,015		1,194,550		1,194,550		1,194,550		1,194,550
VPDES	131,743		472,360		472,360		472,360		472,360
NMMM Permits	6,096		6,096		6,096		6,096		6,096
Domestic Sewage Permits	732		732		732		732		732
Construction Permits (0.2%)	78,276		78,276		78,276		78,276		78,276
ISW Permits	71,709		123,836		123,836		123,836		123,836
Future Growth (2%)			782,762		782,762		782,762		782,762
MOS (10%)			3,913,810		3,913,810		3,913,810		3,913,810
TOTAL (w/o FG & MOS)	42,143,709		34,441,470		34,441,400		34,441,483		34,441,461
TMDL (TARGET Load)			39,138,096		39,138,096		39,138,096		39,138,096
TOTAL (without upstream inputs/red'ns)	40,912,694		33,246,920	18.7	33,246,850		33,246,933		33,246,910
TOTAL *	42,143,709		39,138,042		39,137,971		39,138,054		39,138,032

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

** Lower MF Holston, upstream of Rt. 91 NonPoint Source (NPS) loads (existing and allocated conditions) include the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Upper MF Holston River. Upper MF Holston Construction Permits, FG, and MOS are included in the Lower MF Holston, upstream of Rt. 91, Construction Permits, Future Growth, and MOS respectively.

Table 1-26. Allocation scenarios for Lower MF Holston, Rt. 91 to Edmondson Dam.

Lower MF Holston, Rt. 91 to Edmondson Dam		Scenario 1 (preferred)	
Source	Existing TSS (lb/yr)	Red. (%)	Allocation TSS (lb/yr)
Cropland	-	1.0	-
Hay	21,225	1.0	21,013
Pasture	562,676	1.0	557,049
Forest	8,338	0.0	8,338
Trees	4,162	0.0	4,162
Shrub	668	0.0	668
Harvested	-	0.0	-
Wetland	133	0.0	133
Barren	132,054	1.0	130,734
Turfgrass	2,809	1.0	2,781
Developed Pervious	168	1.0	166
Developed Impervious	20,339	1.0	20,136
Streambank Erosion	43,722	1.0	43,285
Lower MF Holston, upstream of Rt. 91 **	42,065,433		34,363,248
Byers Creek **	2,841,728		1,463,832
Domestic Sewage Permit	91		91
Construction Permits (0.2%)	87,591		87,591
Future Growth (2%)			875,915
MOS (10%)			4,379,573
TOTAL (w/o FG & MOS)	45,791,138		36,703,228
TMDL (TARGET Load)			43,795,725
TOTAL (without upstream inputs/red'ns)	883,977	0.9	876,147
TOTAL *	45,791,138		41,958,715

* The summation of the allocated PS and NPS reduced loads including MOS and FG, 'TOTAL,' is less than the TMDL (Target load).

** Lower MF Holston, Rt. 91 to Edmondson Dam, NonPoint Source (NPS) loads (existing and allocated conditions) include the upstream WLAs (excluding Construction Permits and Future Growth) and LAs from Lower MF Holston River, upstream of Rt. 91 (which includes the Upper MF Holston River) and Byers Creek. Lower MF Holston, upstream of Rt. 91 and Byers Creek's Construction Permits, FG, and MOS are included in the Lower MF Holston Rt. 91 to Edmondson Dam, Construction Permits, Future Growth, and MOS respectively.

Public Participation

Throughout this study, VADEQ asked for the help of local residents and knowledgeable stakeholders – those who have a particular interest in or may be affected by the outcome of the project. Public participation keeps stakeholders informed, and it allows for stakeholder input to ensure information in the study is accurate. While the project was progressing, VADEQ held two public meetings and two Technical Advisory Committee (TAC) meetings. The final public meeting was held on October 19th, 2023 to present the draft TMDL document and began the official public comment period. The 30-day public comment period ended Nov 20, 2023, and no comments were received. Additional edits were completed following this first public comment period and posted on DEQ's website to solicit additional public comments on May 14th, 2024 and distributed by email to all past attendees of public meetings. This public comment period ended on June 13th, 2024, with no comments being received.

The TAC included representatives from Holston River Soil and Water Conservation District, Evergreen Soil and Water Conservation District, Emory and Henry College, Washington County Service Authority, Mt. Rogers Planning District Commission, Smyth County Administrator, Natural Resources Conservation Services, Virginia Department of Wildlife Resources, U.S Fish and Wildlife Service, and Virginia Department of Forestry.

The first public meeting (7 attendees, December 2nd, 2022) was held at Emory & Henry College in the Van Dyke Center, Emory, VA. This meeting introduced attendees to DEQ's water quality planning process, the TMDL purpose and process, and then focused on reviewing the results of the benthic stressor analysis.

The first TAC meeting (15 attendees, September 8th, 2022) was held at the Southwest Virginia DEQ Regional office in Abingdon, VA. This meeting discussed the results of the benthic stressor analysis, the watershed modeling process, permitted sources in the watershed, and the initial results of the watershed model.

A second TAC meeting (21 attendees, July 11th, 2023) was also held in the Southwest Virginia DEQ Regional office. The meeting began with reviewing updates since the previous TAC meeting regarding stream network data source and updates to permit calculations. The group then discussed the target loading rates for the impaired watersheds developed using the AllForX regression



Frequently Asked Question:

How will the TMDL be implemented?

For point sources, TMDL reductions will be implemented through discharge permits. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help defer the cost of BMP installation.

methodology, reviewed the existing BMPs in the watershed, and gathered input on the preferred allocation scenarios for the final TMDL.

A final public meeting was held on October 19th, 2023 at Emory & Henry College in the Van Dyke Center, Emory, VA to present the draft TMDL document. The public meeting marked the beginning of the official public comment period and was attended by 12 watershed residents and other stakeholders. The public comment period ended on November 30th, 2023. No comments were received during the public comment period.

Additional edits were completed to address how pollutant loads, and associated reductions are transferred downstream and accounted for in the next downstream impaired segment following this first public comment period. The revised version of the report was posted on DEQ's website to solicit additional public comments on May 14th, 2024 and distributed by email to all past attendees of public meetings. The public comment period ended on June 13th, 2024, with no comments being received.

Following the public comment period that started May 10, 2024, additional edits were completed to address corrections needed in the ISW and permit pollutant loads. The public comment period ended on June 10th, 2024, with no comments being received.

EPA provided comments during a preliminary review. The revised version of the report, including those revisions, was posted on DEQ's website to solicit additional public comments on August 26th, 2025, and distributed by email to all past attendees of public meetings. The public comment period ended on September 26th, 2025, with no comments being received. [Note: This section was updated after the end of the public comment period.]

Reasonable Assurance

Public participation in the development of the TMDL and implementation plans, continued monitoring, federal and state regulations requiring permit compliance with TMDL WLAs, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented and water quality will be restored in the impaired watersheds.

What Happens Next

This report sets the clean-up goals for the Middle Fork Holston and Tributaries TMDL Update project area, and one of the common next steps is developing a clean-up plan, also known as an Implementation Plan (IP), that lays out how the nonpoint source (load allocation) goals will be reached. This report's watershed study area has two previously developed Implementation Plans from 2003 and 2014, respectively, for the Cedar Creek, Hall Creek, Byers Creek and Hutton Creek watershed and the Middle Fork Holston River and Wolf Creek watershed. The Cedar Creek, Hall Creek, Byers Creek and Hutton Creek IP was developed to address fecal coliform (bacteria), while the Middle Fork Holston River and Wolf Creek IP was developed to address both E.coli (bacteria) and sediment impairments.

Implementation Plans set goals and interim milestones based on water quality and best management practice (BMP) implementation in order to improve water quality in the associated impaired streams. While the aforementioned IPs are associated with this report's watershed area, these IPs may not include all currently needed actions or address all current impairments as the IPs are a snapshot in time. However, all Virginia Implementation Plans allow for adaptive management which can include, but is not limited to, implementation of new technologies, extending of the implementation schedule, and addressing changes in water quality standards. Adaptive management provides flexibility in the planning process necessary to improve water quality without undue burden. If extensive changes have occurred in a watershed, an update to an existing IP or a new IP may be needed.

Both structural and non-structural (e.g. education and outreach) actions recommended in the existing clean-up plans were identified during the planning process along with associated costs and extent of each practice needed. The clean-up plans also identify potential partners and funding sources necessary for goals to be achieved and implementation to be successful. To date, grant and cost-share programs have been the most utilized financial resources in clean-up plan implementation. Cost-share programs work by splitting the fiduciary responsibility of implementing a best management practice between federal, state and/or local funding and the individual landowners. This framework allows for buy-in at the individual level and provides for economy of resources as a whole.

In order to determine the effectiveness of implementation over time, water quality monitoring has been conducted. A water quality monitoring schedule is outlined in each clean-up plan and may be performed by DEQ, other state entities or by volunteers. In summary, a clean-up plan (or IP) is Virginia's planning method to improve water quality impaired by nonpoint source pollution. To address the updated Middle Fork Holston and Tributaries clean-up study goals, DEQ recommends that concerned citizens come together working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the evolving water quality problems in the watershed and promote those activities and programs that improve stream health.

DRAFT

Attachment II – Amended Water Quality Management Planning Regulation proposed for Board Adoption

9 VAC 25-720-50 A

Potomac–Shenandoah River Basin

9 VAC 25-720-60 A

James River Basin

9 VAC 25-720-90 A

Tennessee-Big Sandy River Basin

9VAC25-720-50. Potomac–Shenandoah River Basin.**A. Total Maximum Daily Load (TMDLs).**

TMDL #	Stream Name	TMDL Title	City/County	Waterbody Identification	Pollutant	WLA ¹	Units
<u>221.</u>	<u>Crooked Run</u>	<u>Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia</u>	<u>Shenandoah</u>	<u>B48R</u>	<u>Sediment</u>	<u>12,291</u>	<u>lb/year</u>
<u>222.</u>	<u>Stony Creek</u>	<u>Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia</u>	<u>Shenandoah</u>	<u>B49R</u>	<u>Sediment</u>	<u>431,000</u>	<u>lb/year</u>
<u>223.</u>	<u>Pughs Run</u>	<u>Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia</u>	<u>Shenandoah</u>	<u>B50R</u>	<u>Sediment</u>	<u>22,960</u>	<u>lb/year</u>

Notes:

¹The total WLA can be increased prior to modification provided that DEQ tracks these changes for bacteria TMDLs where the permit is consistent with water quality standards for bacteria.

9VAC25-720-60. James River Basin.

A. Total Maximum Daily Load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/County	Waterbody Identification	Pollutant	WLA ¹	Units
<u>198.</u>	<u>Black Creek</u>	<u>Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia</u>	<u>Nelson</u>	<u>H09R</u>	<u>Sediment</u>	<u>30,730</u>	<u>lb/yr</u>
<u>199.</u>	<u>Hat Creek</u>	<u>Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia</u>	<u>Nelson</u>	<u>H09R</u>	<u>Sediment</u>	<u>45,461</u>	<u>lb/year</u>
<u>200.</u>	<u>Black Creek</u>	<u>Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia</u>	<u>Nelson</u>	<u>H09R</u>	<u>Phosphorus</u>	<u>712</u>	<u>lb/year</u>
<u>201.</u>	<u>Deep Run</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico, Richmond City</u>	<u>H39R</u>	<u>Sediment</u>	<u>319,359</u>	<u>lb/year</u>
<u>202.</u>	<u>Stony Run</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico</u>	<u>H39R</u>	<u>Sediment</u>	<u>140,916</u>	<u>lb/year</u>
<u>203.</u>	<u>Stony Run UT</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico</u>	<u>H39R</u>	<u>Sediment</u>	<u>32,745</u>	<u>lb/year</u>
<u>204.</u>	<u>Dover Creek</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Goochland</u>	<u>H39R</u>	<u>Sediment</u>	<u>38,769</u>	<u>lb/year</u>
<u>205.</u>	<u>Upham Brook</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico, Richmond City</u>	<u>G05R</u>	<u>Sediment</u>	<u>372,238</u>	<u>lb/year</u>
<u>206.</u>	<u>North Run</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico</u>	<u>G05R</u>	<u>Sediment</u>	<u>363,179</u>	<u>lb/year</u>
<u>207.</u>	<u>Jordans Branch</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Richmond City</u>	<u>G05R</u>	<u>Sediment</u>	<u>88,183</u>	<u>lb/year</u>
<u>208.</u>	<u>Stony Run</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico</u>	<u>H39R</u>	<u>Phosphorus</u>	<u>121.6</u>	<u>lb/year</u>
<u>209.</u>	<u>Dover Creek</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Goochland</u>	<u>H39R</u>	<u>Phosphorus</u>	<u>41.6</u>	<u>lb/year</u>

TMDL #	Stream Name	TMDL Title	City/County	Waterbody Identification	Pollutant	WLA ¹	Units
<u>210.</u>	<u>Upham Brook</u>	<u>Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond</u>	<u>Henrico</u>	<u>G05R</u>	<u>Phosphorus</u>	<u>2,693.8</u>	<u>lb/year</u>

¹The total WLA can be increased prior to modification provided that DEQ track these changes for bacteria TMDLs where the permit is consistent with water quality standards for bacteria.

² GS means growing season.

9VAC25-720-90. Tennessee-Big Sandy River Basin.

A. Total Maximum Daily Load (TMDLs).

<u>TMDL #</u>	<u>Stream Name</u>	<u>TMDL Title</u>	<u>City/County</u>	<u>Waterbody Identification</u>	<u>Pollutant</u>	<u>WLA¹</u>	<u>Units</u>
2.	<u>Cedar Creek Reserved</u>	<u>Total Maximum Daily Load (TMDL) Development for Cedar Creek, Hall/Byers Creek and Hutton Creek</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>1,789.93</u>	<u>LB/YR</u>
3.	<u>Hall/Byers Creek Reserved</u>	<u>Total Maximum Daily Load (TMDL) Development for Cedar Creek, Hall/Byers Creek and Hutton Creek</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>57,533.49</u>	<u>LB/YR</u>
4.	<u>Hutton Creek Reserved</u>	<u>Total Maximum Daily Load (TMDL) Development for Cedar Creek, Hall/Byers Creek and Hutton Creek</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>91.32</u>	<u>LB/YR</u>
16.	<u>Middle Fork Holston River Reserved</u>	<u>Bacteria and Benthic Total Maximum Daily Load Development for Middle Fork Holston River</u>	<u>Washington, Smyth</u>	<u>O05R</u>	<u>Sediment</u>	<u>100.4</u>	<u>T/YR</u>
<u>82.</u>	<u>Tattle Branch</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>29,851</u>	<u>lbs/year</u>
<u>83.</u>	<u>Hall Creek</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>133,680</u>	<u>lbs/year</u>
<u>84.</u>	<u>Byers Creek</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>36,679</u>	<u>lbs/year</u>
<u>85.</u>	<u>Cedar Creek</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>12,926</u>	<u>lbs/year</u>
<u>86.</u>	<u>Upper Middle Fork Holston River</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Smyth, Wythe</u>	<u>O03R</u>	<u>Sediment</u>	<u>53,403</u>	<u>lbs/year</u>
<u>87.</u>	<u>Lower Middle Fork Holston (upstream of Route 91)</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Smyth, Washington, Wythe</u>	<u>O05R</u>	<u>Sediment</u>	<u>1,464,062</u>	<u>lbs/year</u>
<u>88.</u>	<u>Lower Middle Fork Holston (Route 91 to Edmondson Dam)</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>963,597</u>	<u>lbs/year</u>
<u>89.</u>	<u>Greenway Creek</u>	<u>Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties</u>	<u>Washington</u>	<u>O05R</u>	<u>Sediment</u>	<u>46,798</u>	<u>lbs/year</u>

Notes:

¹The total WLA can be increased prior to modification provided that DEQ tracks these changes for bacteria TMDLs where the permit is consistent with water quality standards for bacteria.


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Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-720
VAC Chapter title(s)	Water Quality Management Planning Regulation
Action title	Amendment to add 24 new or revised TMDL wasteload allocations in the Potomac-Shenandoah River Basin (9VAC25-720-50 A), James River Basin (9VAC25-720-60 A), and Tennessee-Big Sandy River Basin (9VAC25-720-90 A).
Final agency action date	
Date this document prepared	September 11, 2025

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*. 30, 2023

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The amendments to 9VAC25-720, Water Quality Management Planning Regulation (WQMPR), add three new Total Maximum Daily Load (TMDL) wasteload allocations (WLA) in the Potomac–Shenandoah River Basin (9VAC25-720-50), thirteen new WLAs in the James River Basin (9VAC25-720-60 A) and seven new and one revised WLA in the Tennessee – Big Sandy River Basin (9VAC25-720-90 A).

The TMDL WLAs were developed in accordance with Federal Regulations (40 CFR § 130.7) and are exempt from the provisions of Article II of the Virginia Administrative Process Act (§ 2.2-4006 A 14). The TMDL reports where WLAs are developed are subject to the TMDL public participation process, and the WLAs are adopted as part of 9VAC25-720 in accordance with the Department of Environmental Quality's

(DEQ) "Public Participation Procedures for Water Quality Management Planning" guidance (GM 23-2005).

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

The Clean Water Act (CWA) and the Environmental Protection Agency's (EPA) Water Quality Management and Planning Regulation (40 CFR §130) require states to identify waters that are in violation of water quality standards and to place these waters on the state's 303(d) list of Impaired Waters. Also, the CWA and EPA's enabling regulations require that a TMDL be developed for those waters identified as impaired. In addition, the Code of Virginia, § 62.1-44.19:7.C requires DEQ to develop TMDLs for impaired waters. A TMDL is a determination of the amount of a specific pollutant that a water body can receive without violating water quality standards for that pollutant. TMDLs are required to identify all sources of the pollutant and calculate the pollutant loads from each source that are necessary for the attainment of water quality standards.

The U.S. EPA's Water Quality Management and Planning Regulation 40 CFR §130.7(d) (2) directs the states to incorporate TMDLs in the state's WQMPR (9VAC25-720). Also, U.S. EPA's Water Quality Management and Planning Regulation 40 CFR § 122.44(d) (1) (vii) (B) requires that new or reissued Virginia Pollution Elimination Discharge System (VPDES) permits be consistent with the TMDL WLA. This means that the WLA component of the TMDL incorporated into the regulation will be implemented through the requirements specified in the VPDES permits, for example through numeric water quality-based effluent limitations or in certain cases best management practices (BMPs).

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

Allocation: That portion of a receiving water's loading capacity attributed to one of its existing or future pollution sources (nonpoint or point) or to natural background sources.

Best Management Practice (BMP): a schedule of activities, prohibition of practices, maintenance procedures and other management practices to prevent or reduce the pollution of state waters. BMPs include treatment requirements, operating and maintenance procedures, schedule of activities, prohibition of activities, and other management practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act (CWA): Clean Water Act 33 USC § 1251 et seq. as amended, as of 1987.

EPA: United States Environmental Protection Agency.

Domestic Sewage Discharges General Permit: General Permit issued for 9VAC25-110-110 et seq. (VPDES General Permit for Domestic Sewage Discharges of Less than or Equal to 1,000 Gallons per Day).

Industrial Stormwater General Permit (ISWGP): Industrial Stormwater General Permit issued for 9VAC25-151 et seq. (VPDES General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity).

Mixed Concrete General Permit: Concrete Products Facilities General Permit issued for 9VAC25-193 et seq. (VPDES General Permit Regulation for Concrete Products Facilities).

Municipal separate storm sewer (MS4): Network of drainage systems, including pipes, ditches, and other conveyances, designed to carry stormwater runoff directly to nearby streams, rivers, and other bodies of water owned or operated by a public body.

Mineral Mining General Permit: Nonmetallic mineral mining general permits issued for 9VAC25-110-190 et seq. (VPDES General Permit Regulation for Nonmetallic Mineral Mining).

Nonpoint source: Pollution not released through pipes but rather originates from multiple sources over a relatively large area. Nonpoint sources can be divided into source activities related to either land or water use including failing septic tanks, improper animal-keeping practices, forest practices, and urban and rural runoff.

Potable Water General Permit: Potable Water Treatment Plants General Permit issued for 9VAC25-860 et seq. (VPDES General Permit Regulation for Potable Water Treatment Plants).

Total Maximum Daily Load (TMDL): The sum of the individual wasteload allocations (WLA's) for point sources, load allocations (LA's) for nonpoint sources and natural background, plus a margin of safety (MOS). TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measures that relate to a state's water quality standard.

VDOT: Virginia Department of Transportation.

Vehicle Washing General Permit: Vehicle Wash Facilities and Laundry Facilities General Permit issued for 9VAC25-110-194 et seq. (VPDES General Permit Regulation for Vehicle Wash Facilities and Laundry Facilities).

Virginia Pollution Discharge Elimination System (VPDES) permit: A document issued by the board or the department, pursuant to 9VAC25-31, authorizing, under prescribed conditions, the potential or actual discharge of pollutants from a point source to surface waters.

Wasteload allocation (WLA): The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

Water quality standard: Law or regulation that consists of the beneficial designated use or uses of a water body, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular water body, and an anti-degradation statement.

Water Quality Management Planning Regulation (WQMPR): 9VAC25-720 et seq.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) that the agency has "adopted final amendments" to the regulation; 3) the name of the agency taking the action; and 4) the title of the regulation. A suggested statement is, "On [insert date] the Board/Department of [insert name] adopted final amendments to the [title of regulation(s)]."

At its meeting on November 18, 2025, the State Water Control Board (SWCB) adopted the final amendments to the Water Quality Management Planning Regulation (9VAC25-720 et seq.).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity's overall regulatory authority.

§62.1-44.15 of the State Water Control Law authorizes the State Water Control Board to promulgate regulations controlling water pollution to protect public health and welfare. The Code of Virginia § 62.1-44.19:7 directs the Board to develop plans to address impaired waters. The EPA's Water Quality Management and Planning Regulation 40 CFR § 130.7(d) (2) directs the states to incorporate TMDLs in the state's WQMPR (9VAC25-720). Changes to this chapter of the Virginia Administrative Code are exempt from provisions of Article II of the Virginia Administrative Process Act (§2.2-4006 A 14).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The regulatory changes are needed to meet the mandates of the federal Clean Water Act and the implementing Water Quality Management and Planning Regulation (40 CFR § 130) to protect public health and welfare by requiring states to identify waters that are in violation of water quality standards and to place these waters on the state's 303(d) List of Impaired Waters. Also, the CWA, EPA's enabling regulation, and the Code of Virginia, § 62.1-44.19:7.C require Virginia to develop a TMDL for impaired waters. The U.S. EPA's Water Quality Management and Planning Regulation (40 CFR §130.7(d) (2)) directs the states to incorporate TMDLs in the state's Water Quality Management Plan (9VAC25-720). This regulatory change contributes to achieving the pollution reductions needed from point source dischargers to remove a stream from the impaired waters list and improve water quality to the benefit of citizens to take advantage of all beneficial uses available from State Waters.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The amendments to the state's WQMPR (9VAC25-720) include adding three new WLAs in the Potomac-Shenandoah River Basin (9VAC25-720-50), thirteen new WLAs in the James River Basin (9VAC25-720-60 A) and seven revised and one new WLA in the Tennessee – Big Sandy River Basin (9VAC25-720-90 A).

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

Public: The regulatory change broadly benefits the public by improving the water quality of impaired waters by identifying the maximum amount of pollutant load a stream can assimilate and meet Water Quality Standards (9VAC25-260), to support all designated uses of waters, and ultimately be removed from Virginia's 303(d) list of impaired waters. Improved water quality will protect human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to

economic benefits from tourism, economic development, and commercial and recreational fishing industries.

Agency or Commonwealth: The agency and Commonwealth will benefit because the change to the regulation meets the legal mandate in state and federal law to incorporate the WLA into the WQMPR to meet State Water Control Law § 62.1-44.19:7. Additionally, this meets the Clean Water Act 40 CFR § 130.7 requirement to include the approved TMDL loads in the state's water quality management plans and VPDES permits.

Regulated entities could incur costs, such as installing new equipment, changing operational procedures, or undertaking best practices if they need to reduce pollution discharges. WLAs are not self-executing. They are implemented through new or modified VPDES permits issued by DEQ. Existing permit holders may be required to reduce pollutant discharges contributing to water impairment and meet the WLA. As a result, DEQ cannot currently quantify the costs. The WLAs from the TMDL studies could indirectly affect certain facility and locality expenses. The impact of a WLA, if any, depends on the amount of pollutant present, the entity's operations, and permit requirements. If a DEQ permit necessitates pollutant reductions to meet the overall WLA, each permittee would have distinct requirements and options to reduce sediment, or phosphorus based on their specific industrial processes or BMPs. These cannot be monetized at this time because of the variability in extent of pollutant present, varying industrial processes, BMPs, and the need to review a VPDES permittee to assess if an individual facility needs to reduce sediment or phosphorus discharges.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

This regulatory change has no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact, which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected:

This regulatory change may affect the DWR-Marion State Fish Hatchery which holds a VPDES Individual Permit for discharges to the impaired section of the Lower Middle Fork Holston upstream of Route 91 in Smyth County. However, no impacts are expected since the amount of sediment discharged by the facility is well below the Waste Load allocation provided in the TMDL report.

Additionally, the Virginia Department of Transportation (VDOT) and J. Sargeant Reynolds Community College each hold a Municipal Separate Storm Sewer System (MS4) permit in the Deep Run and/or Upham Brook watersheds in Henrico and the City of Richmond. As a result, they may incur some costs to reduce sediment and phosphorus discharges to comply with WLAs established for watersheds TMDL. Under their MS4 permit in the watershed, they must submit a TMDL action plan outlining the measures they will undertake to accomplish sediment and phosphorus reductions to meet the WLAs. MS4 permittees may incur costs, such as installing new equipment, changing procedures, or adopting best

practices. Exact costs are uncertain because of the variability in control measures identified in the action plans. The MS4 permittees in the watersheds do not have a specific individual reduction target. Instead, the TMDL report aggregates reductions across all MS4 permittees which provides flexibility for these permit holders to address their share of the pollutant load and necessary reductions.

Localities Particularly Affected:

Two localities (Henrico County and the City of Richmond) may be affected since they also hold MS4 permits and may incur costs to reduce sediment and phosphorus discharges to comply with the WLAs established. Under their MS4 permits, they must submit a TMDL action plan outlining measures they will undertake to accomplish sediment and phosphorus reductions to meet the WLAs. MS4 permittees may incur costs, such as installing new equipment, changing procedures, or adopting best practices. Exact costs are uncertain because of the variability in potential processes, BMPs, and the need to review control measures identified in the action plans. These localities, along with other MS4 permittees in the watersheds, do not have a specific individual reduction target. Instead, the TMDL report aggregates reductions across all MS4 permittees, which provides flexibility for these permit holders to address their share of the pollutant load and necessary reductions.

In total, six Municipal Wastewater/Sewage Treatment Plants and three Water Treatment Plants hold VPDES permits that may be affected by the adoption of the WLAs for sediment or phosphorus. No impacts are expected for sediment discharges since the sediment WLAs were calculated using each facilities currently permitted sediment discharge amount, so they are not expected to need reductions beyond what is necessary to meet their current permitted amount. Additionally, each is already discharging sediments in amounts well below the WLA provided in the TMDL report. Only the Nelson County Sewage Treatment Plant, from the Black and Hat Creek TMDL study, will be affected by needing to reduce their phosphorus discharges 25.1% to meet the allocated WLA. To make the phosphorus reductions, the facility may need to implement measures or modify the treatment plant to remove phosphorus from the discharged water. DEQ cannot fully quantify costs to this locality since the impact of a WLA, if any, depends on the facility operations and processes, permit requirements, and the amount of pollutant found.

Other Entities Particularly Affected:

The table below shows the number DEQ individual or general permits which may be affected in each TMDL report because the facility discharges sediment or phosphorus.

Number of individual and general permits by TMDL report

TMDL	Individual Permit	Industrial Stormwater General Permit	Domestic Sewage General Permit	Potable Water General Permit	Vehicle Washing General Permit	Mineral Mining General Permit	Mixed Concrete General Permit
Crooked Run, Stony Creek and Pughs Run	3	1	45	1	-	-	-
Black Creek and Hat Creek	1	-	1	-	-	-	-
Deep Run, Dover Creek, and Upham Brook	1	4	-	-	-	-	2
Middle Fork Holston and Tributaries	4	17	13	1	1	2	-

These facilities include wastewater and sewage treatment plants, water treatment facilities, industrial and manufacturing facilities, car washes, mining and residences. In total, 97 permittees occur within the watersheds of concern for each TMDL report. However, in most cases, the allocations are based on existing permitted discharge amounts, so the facilities are not expected to need to make reductions of sediment or phosphorus in their discharges beyond what is already required in their existing permit. If

facilities are found to exceed the amount of sediment or phosphorus allocated in the TMDL, then they may need to implement measures to reduce the pollutant discharge. The indirect costs for the facilities cannot be monetized at this time because the specific reductions for each facility are not known until permit issuance, and facilities have a variety of pollutant reduction options specific to their operations.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

The comment period for the regulation amendment with the TMDL wasteload allocations extended from September 22, 2025 – October 22, 2025. No comments were received.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
50A	N/A	The Potomac-Shenandoah River Basin section does not include WLAs for the impaired section of Crooked Run, Stony Creek, and Pughs Run	Adding three new TMDL WLAs in the Potomac-Shenandoah River Basin to reduce sediment discharges into these impaired sections of Crooked Run, Stony Creek, and Pughs Run. These changes are being made as part of the plan to improve water quality in these water bodies.
60 A	N/A	James River Basin section does not include WLAs for these impaired sections of Black Creek, Hat Creek, Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordan Branch	Adding 13 new TMDL WLA in the James River Basin to reduce sediment discharges into the impaired sections of Black Creek, Hat Creek, Deep Run, Stony Run, Stony Run UT, Dover Creek, Upham Brook, North Run, and Jordan Branch and to reduce phosphorus in Black Creek, Stony Run, Dover Creek, Upham Brook These changes are being made as part of the plan to improve water quality in these water bodies.
90 A	N/A	Tennessee – Big Sandy River Basin includes sediment WLAs for the Middle Fork Holston, Hall/Byers Creeks, and Cedar Creek. The Basin does not include a WLA for Greenway Creek.	The TMDL WLAs for Middle Fork Holston, Hall/Byers Creeks, Hutton Creek, and Cedar Creek are being removed. These WLAs were developed in two previous TMDL studies from 2003 and 2009. The updated TMDL addresses the continued benthic impairments, adjusts for future growth, accounts for the installation of Best Management Practices in the watersheds, and the expansion of a Wastewater Treatment Plant. New WLA's are being added to replace the four removed. Hall/Byers is being replaced

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
			with WLAs for Tattle Branch, Hall Creek, and Byers Creek. Middle Fork Holston is being replaced with WLAs for Upper Middle Fork Holston River, Lower Middle Fork Holston (upstream of Route 91), Lower Middle Fork Holston (Route 91 to Edmondson Dam). Hutton Creek WLA is being replaced by the Lower Middle Fork Holston (upstream of Route 91). The Cedar Creek WLA is being revised. A new WLA is added to reduce sediment discharges into the impaired section of Greenway Creek. These changes are being made as part of the plan to improve water quality in these water bodies.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

These regulation amendments meet the requirements of federal and state law and regulation. The regulatory amendment does not directly impose any compliance requirement, reporting requirement, or performance standard that could be lessened or substituted for small business. Any delays in adopting the standards or exemption of small businesses from these requirements will not meet the minimum requirements of federal law and regulation. No alternative approach to developing a TMDL and the associated WLA was considered since State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requires DEQ to develop a TMDL for each impaired water body to address pollutants of concern that may enter the water. The regulation only lists the TMDLs and WLA, along with the impaired streams where they apply, but does not identify any facilities affected or mandate any direct measures, compliance, reporting, or standard that facilities must take to meet the WLA. WLAs are implemented indirectly when they are incorporated into VPDES permits.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The amendment of the WQMPR is for the protection of public health, safety, and welfare and the Board does not anticipate any direct impact on the institution of the family and family stability. In total, 59 residences have treatment systems that require having a Domestic Sewage Discharge General Permit in the watersheds of three of the TMDL Studies. However, since the WLAs are developed based on the existing permit limits or benchmarks, it does not impose any additional requirements beyond those required in their existing permit.

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-720
VAC Chapter title(s)	Water Quality Management Planning Regulation
Action title	Amend 9VAC 25-720 to add 24 State Water Control Board adopted wasteload allocations (WLAs) for 4 total maximum daily load (TMDL) studies: 1) Crooked Run, Stony Creek and Pughs Run TMDL, and 2) Black Creek and Hat Creek Watersheds TMDL, 3) Deep Run, Dover Creek, and Upham Brook Watersheds TMDL, 4) Middle Fork Holston and Tributaries TMDL
Date this document prepared	September 15, 2025
Regulatory Stage (including Issuance of Guidance Documents)	Final Exempt Action

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	Introduction To address impaired waters, the State Water Control Board (Board) is amending 9VAC25-720, Water Quality Management Planning Regulation (WQMPR), to add total maximum daily load (TMDL) wasteload allocations (WLAs). A TMDL WLA is a calculation of the maximum amount of a pollutant that an impaired waterbody can receive from point sources while still maintaining Virginia Water Quality Standards (WQS) (9VAC25-260) and meeting its designated uses, such as recreational, aquatic life; wildlife; and producing edible and marketable natural resources. The Board adopted the following amendments at their meeting on November 18, 2025: 1. In the Potomac–Shenandoah River Basin, the Board adopted amendments to 9VAC25-720-50 A to incorporate three sediment WLAs developed for Crooked Run, Stony Creek and Pughs Run TMDL study in Shenandoah County. 2. In the James River Basin, the Board adopted amendments to 9VAC25-720-60 A to incorporate 13 sediment and phosphorus WLAs developed for the Black Creek and Hat Creek Watersheds TMDL study in Nelson County and for the Deep Run, Dover Creek, and Upham Brook Watersheds TMDL study in Henrico County, Goochland County, and the City of Richmond 3. In the Tennessee – Big Sandy River Basin, the Board adopted amendments to 9VAC25-720-90 A to incorporate seven revised and one new sediment WLA developed in the Middle Fork Holston and Tributaries TMDL study in Smyth, Washington, and Wythe Counties. Virginia’s 2022 Section 305(b)/303(d) Water Quality Assessment Integrated Report identified streams in the four TMDL studies as impaired for violating the general aquatic life (benthic) water quality standard. DEQ determined that elevated sediment was the cause of the impairments in each of the TMDLs, along with phosphorus in the Black Creek and Hat Creek Watersheds TMDL study. Elevated sediment and phosphorus in streams degrade water quality by promoting algae growth, reducing oxygen levels and hampering aquatic habitat. Consequently, State Water Control Law § 62.1-44.19:7 of the Code of Virginia and section 303(d) of the Clean Water Act (implemented through 40 CFR 130.7(c)) mandate that DEQ develop a TMDL for specific pollutants (e.g. sediment, phosphorus) causing impairment in each impaired water body. In each TMDL study, DEQ evaluated multiple scenarios to effectively reduce the pollutant levels. DEQ selected the scenarios based on stakeholder feedback. The Environmental Protection Agency (EPA) preliminarily approved the TMDLs and the associated WLAs included in this regulatory change.

	WLAs adopted, amended, or repealed by the Board pursuant to the State Water Control Law are identified as final exempt actions by the Administrative Process Act (APA) § 2.2-4006 A 14 of the Code of Virginia. To meet the requirements of the APA exemption for adding a WLA, DEQ invited the public, including impacted facilities, to participate in the rulemaking process through multiple stakeholder meetings, which included public meetings for each TMDL study with 30-day comment periods for the stakeholders to provide comments on the TMDL development and report. <u>Direct costs:</u> The WQMPR (9VAC 25-720) does not result in any direct monetizable costs. The regulation lists TMDL reports, WLAs, and the impaired streams to which they apply. However, it does not prescribe direct measures that facilities must implement to meet the WLA. Consequently, the regulation has no direct costs associated with compliance and does not identify any affected facilities, municipalities, or commercial entities. <u>Indirect Costs:</u> DEQ cannot monetize all the potential indirect costs due to the variability in pollutant amounts, industrial processes, and best management practices (BMPs) at facilities. DEQ implements WLAs indirectly through Virginia Pollution Elimination Discharge System (VPDES) permits. Facilities will need to review any permit limits associated with the WLA and determine through compliance monitoring if it's necessary to reduce sediment or phosphorus discharges to meet the permit requirements. Regulated entities could incur costs such as installing new equipment, changing operational procedures, or implementing BMPs if they needed to reduce pollution discharges. Further discussion of non-monetized indirect costs is provided in Table 1a (4) below. In total, 97 entities hold VPDES permits across the 4 TMDL studies. Only one, the Nelson County Sewage Treatment Plant, from the Black and Hat Creek TMDL study, may need to reduce their pollution discharge to meet the calculated WLA. This facility may need to reduce their phosphorus discharges by 25.1%. As stated earlier, DEQ cannot fully quantify costs to this facility since the impact of a WLA, if any, depends on the facility operations, permit requirements, and the amount of pollutant found. EPA's 2008 "Municipal Nutrient Removal Technologies Reference manual" finds that the costs to reduce phosphorus vary greatly, depending on the nature of the existing facility, the required upgrade, and other site-specific factors. The manual includes an estimate of the costs for modification that ranged from a low of \$0.20 to a high of \$5.25 gallons per day (gpd) capacity (not adjusted for inflation). This facility has a 200,000 gpd capacity, so estimated costs could range from \$44,000 to \$1,050,000, depending on the modifications made to reduce phosphorous. Thus, the agency cannot reasonably estimate the cost due to site-specific factors and since modifications may not occur until the next permit cycle, after the permit is reissued in 2028 and incorporates the WLA. As discussed below in Section 4 of this table, for the remaining 96 permittees, WLAs were developed using existing permit limits or benchmarks. Thus, these

	facilities are not expected to incur costs to make reductions of sediment or phosphorus beyond what is already required in their existing permit. Construction activities that require coverage under the VPDES Construction Stormwater General Permit (9VAC25-880-70) or involve the exchange of nutrient credits (9VAC25-900-91) may be affected by a Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) if stormwater is discharged. In such cases, permittees may need to implement additional best management practices (BMPs) in their Stormwater Pollution Prevention Plan (SWPPP) to address the specific pollutant of concern—typically sediment or nutrients. For construction projects located in the Potomac-Shenandoah and James River Basins, these additional requirements are already in place under the Chesapeake Bay TMDL. As a result, no new compliance obligations or costs are anticipated for projects in these areas. Similarly, the Middle Fork Holston and Tributaries TMDL, located in the Tennessee-Big Sandy River Basin, represents a revision to an existing TMDL. Projects within this watershed were already subject to the necessary pollutant control measures and therefore will not face new requirements. <u>Direct Benefits:</u> The amendment does not have any direct benefits that can be monetized since the regulation only lists TMDL reports, WLAs, and the impaired streams to which they apply and do not mandate any direct measures to meet the WLA. Adding the WLAs to the WQMPR benefits the water bodies by ensuring that permit limits will result in improved water quality and contribute to efforts to remove the streams from the impaired waters list. <u>Indirect Benefits:</u> DEQ cannot monetize the potential indirect benefits to implement the WLA at this time. Indirect benefits are incurred later, when VPDES permits incorporate the WLAs to manage sediment or phosphorus discharges to improve water quality. Improved water quality will protect human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as commercial and recreational fishing industries.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) One facility located in the Black and Hat Creek TMDL could incur costs to reduce phosphorus and cost estimates range widely from \$44,000 to \$1,050,000 depending on the modification necessary. The remaining 96 permitted facilities are not expected to incur cost because the WLA aligns with the existing permit condition.	(b) Not applicable

(3) Net Monetized Benefit	Not applicable																																														
(4) Other Costs & Benefits (Non-Monetized)	<u>Indirect Costs:</u> WLAs are not self-executing; their application primarily occurs when DEQ issues new or modified VPDES permits or asks existing permittees to address their discharges of the pollutant causing the impaired waters. As part of permits issued under the VPDES regulations (9VAC25-31) numeric water quality-based effluent limitations or, in certain cases, BMPs may be included in VPDES permits to meet the WLAs for an impaired water. As a result, DEQ cannot currently quantify indirect costs since the impact of a WLA, if any, depends on the facility operations, permit requirements, BMPs in place, and the amount of pollutant and reduction necessary. The WLAs developed in the TMDL studies could indirectly affect certain facility and municipality expenses. If a DEQ permit necessitates pollutant reductions to meet the overall WLA, that permittee would have distinct requirements and options to reduce sediment or phosphorus based on their specific processes or BMPs. Each TMDL study varies in the number of permittees that could be affected based on their presence in the watershed of the impaired water. These facilities include wastewater and sewage treatment plants, water treatment facilities, industrial and manufacturing, car washes, mining and residences. In total, 97 permittees occur within the watersheds of concern for all four TMDL reports. The table below shows the number of different types of permits issued by DEQ for each TMDL study. <table border="1"> <thead> <tr> <th>TMDL</th><th>Individual Permit</th><th>Industrial Stormwater General Permit</th><th>Domestic Sewage General Permit</th><th>Potable Water General Permit</th><th>Vehicle Washing General Permit</th><th>Mineral Mining General Permit</th><th>Mixed Concrete General Permit</th></tr> </thead> <tbody> <tr> <td>Crooked Run, Stony Creek and Pughs Run</td><td>3</td><td>1</td><td>45</td><td>1</td><td>-</td><td>-</td><td>-</td></tr> <tr> <td>Black Creek and Hat Creek</td><td>1</td><td>-</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr> <td>Deep Run, Dover Creek, and Upham Brook</td><td>1</td><td>4</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td></tr> <tr> <td>Middle Fork Holston and Tributaries</td><td>4</td><td>17</td><td>13</td><td>1</td><td>1</td><td>2</td><td>-</td></tr> </tbody> </table> In total, 97 entities hold VPDES permits across the 4 TMDL studies. As discussed earlier, only one, the Nelson County Sewage Treatment Plant, from the Black and Hat Creek TMDL study, may need to reduce their pollution discharge to meet the calculated WLA. For the remaining facilities, the WLA were developed using existing permit limits or benchmarks for the remaining facilities permits. Thus, the facilities are not expected to incur costs to make reductions of sediment or phosphorus beyond what is already required in their existing permit. In the future, if a facility is found to exceed the established WLA, they could incur indirect costs to reduce sediment or phosphorus discharges. However, the TMDL report aggregates allocations of those issued							TMDL	Individual Permit	Industrial Stormwater General Permit	Domestic Sewage General Permit	Potable Water General Permit	Vehicle Washing General Permit	Mineral Mining General Permit	Mixed Concrete General Permit	Crooked Run, Stony Creek and Pughs Run	3	1	45	1	-	-	-	Black Creek and Hat Creek	1	-	1	-	-	-	-	Deep Run, Dover Creek, and Upham Brook	1	4	-	-	-	-	2	Middle Fork Holston and Tributaries	4	17	13	1	1	2	-
TMDL	Individual Permit	Industrial Stormwater General Permit	Domestic Sewage General Permit	Potable Water General Permit	Vehicle Washing General Permit	Mineral Mining General Permit	Mixed Concrete General Permit																																								
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Middle Fork Holston and Tributaries	4	17	13	1	1	2	-																																								

	the same general permit, providing them with further flexibility in addressing their share of the pollutant load. WLAs also include a future growth buffer to allow for new facilities or development in an impaired watershed that discharges the specified pollutants. This buffer also accounts for any discharges inadvertently excluded during TMDL development. New or expanding facilities requiring a VPDES permit to discharging into the impaired water will also need to comply with the respective WLA. Since the WLAs were calculated using standard permit requirements, new facilities would be unlikely to require managing discharges beyond typical VPDES permit requirements. VPDES permits already require monitoring for sediment and phosphorus so new monitoring beyond typical requirements would be unlikely. <u>Direct Benefits:</u> This change to the regulation meets the legal mandate in state and federal law to incorporate the WLA into the WQMPR to meet State Water Control Law § 62.1-44.19:7 of the Code of Virginia. Additionally, this complies with § 303(d) of the Clean Water Act and requirements found in 40 CFR 130.7 to include the approved TMDL loads in the State’s waters quality management plans and VPDES permits. DEQ must adopt the WLA into the WQMPR to receive final EPA approval of the TMDL studies, which also addresses non-point sources of pollutants that need to be managed to remove the streams from the impaired waters list. The regulatory change broadly benefits the public through improving the water quality in impaired waters by identifying the maximum amount of pollutant load a stream can accommodate and still meet WQS (9VAC25-260), support all designated uses, and ultimately be removed from Virginia’s 303(d) list of impaired waters. <u>Indirect Benefits:</u> Implementing WLAs improves water quality and protects human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as commercial and recreational fishing industries.
(5) Information Sources	The report titled, “Benthic TMDL Development for Crooked Run, Stony Creek and Pughs Run Located in Shenandoah County, Virginia.” The report titled, “Benthic TMDL Development for Black Creek and Hat Creek Watersheds Located in Nelson County, Virginia.” The report titled, “Benthic TMDL Study on Deep Run, Dover Creek, and Upham Brook Watersheds in Henrico County, Goochland County, and the City of Richmond” The report titled, “Benthic TMDL Revision and Development for the Middle Fork Holston and Tributaries Located in Smyth, Washington, and Wythe Counties” Municipal Nutrient Removal Technologies Reference Document. 2008. EPA

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	DEQ could maintain the status quo by not drafting or implementing the TMDL studies or not incorporating the WLAs into the WQMPR. However, State Water Control Law § 62.1-44.19:7 of the Code of Virginia and section 303(d) of the Clean Water Act (implemented through 40 CFR 130.7(c)) mandates that DEQ develop TMDLs for pollutants entering impaired waters. DEQ must incorporate the WLA into the WQMPR to receive final approval from EPA for the TMDL study. The TMDL reports also address unregulated non-point sources of sediment and phosphorus which are not covered by the WQMRP, but crucial for removing streams from the impaired waters list. Also, maintaining the regulatory status quo could potentially degrade water quality in impaired stream segments, as, without a TMDL study, the pollution reductions necessary would be unknown and not be undertaken. <u>Direct Costs:</u> No direct economic costs arise from maintaining the status quo since the regulation does not directly mandate any requirements. <u>Indirect Costs:</u> Indirect costs cannot be monetized at this time. Without developing or implementing a TMDL study and WLA, DEQ will be unable to quantify the point and non-point source pollutant reductions needed to preserve and improve water quality. The economic costs stem from impaired waterbodies failing to provide the public beneficial uses, such as diminished recreation or fishing opportunities. The potential uses are too variable to estimate the monetary impact of the reduced water quality. <u>Direct and Indirect Benefits:</u> Under the status quo, certain permittees avoid costs associated with reducing sediment or phosphorus discharges to meet the WLAs. The cost savings cannot be monetized because the specific reductions needed, and the methods to make the reductions are not known until specific amounts and pollution reduction methods are determined through permit issuance or other plans to reduce pollution.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not applicable	(b) Not applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	Maintaining the status quo would not lead to improved water quality in the impaired water bodies. The status quo would not meet State Water Control Law § 62.1-44.19:7 of the Code of Virginia and section 303(d) the Clean Water Act (implemented through 40 CFR 130.7(c)) requirements to develop a TMDL of pollutants that may enter the water for each impaired water body. Failing to proceed with TMDLs to address	

	an impairment can also create the potential for legal action for failing to meet Clean Water Act requirements (see previous case American Canoe vs EPA). <u>Indirect Costs:</u> Without an approved TMDL study, the needed non-point source reductions, which make up a large majority of the pollutants causing the impairments, would also not be identified, and addressed. Lack of an approved TMDL may prevent the public from accessing funds to develop BMPs that would reduce sediment or phosphorus into these impaired waters. Values are not available due to the large variability in BMPs, system sizes, locations, and beneficial uses. Poor water quality may cause indirect costs on human health and aquatic life, resulting in poor fisheries, less reliable public water supplies, and negative economic costs to tourism, economic development, and commercial and recreational fishing industries.
(5) Information Sources	DEQ TMDL Program procedures, documents, and staff American Canoe vs EPA - https://law.justia.com/cases/federal/district-courts/FSupp2/30/908/2417146/

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	No alternative approach to developing TMDL studies and WLA amounts was considered because State Water Control Law § 62.1-44.19:7 of the Code of Virginia and section 303(d) of the Clean Water Act (implemented through 40 CFR 130.7(c)) requires DEQ to develop a TMDL study and incorporate WLAs into the WQMPR for each impaired water body to address point source discharges of pollutants into the water. However, DEQ has the flexibility to revisit a TMDL study to explore different WLA amounts. DEQ arrived at the proposed WLA amounts by analyzing alternative scenarios aiming to balance the pollutant levels among permitted point sources and unregulated non-point sources. <u>Direct Costs:</u> DEQ would incur direct costs to reevaluate and change the TMDL studies to evaluate alternate WLA amounts. These costs would likely resemble those incurred during the original creation of the TMDL study. The Deep Run, Dover Creek, and Upham Brook Watersheds TMDL study cost DEQ approximately \$93,500 to develop allocation scenarios, complete project coordination and draft the document. Similarly, developing the Black Creek and Hat Creek Watersheds TMDL cost DEQ \$61,117 in contractual costs. Middle Fork Holston and Tributaries TMDL contractual services were \$111,398. Crooked Run, Stony Creek and Pugh's Run TMDL was done in-house so it did not have contractual costs. These estimates do not include the cost of staff time and fringe benefits necessary to complete revisions. Revising the WLA could incur similar costs so the total to rewrite all TMDL reports

	could be approximately \$266,000 (excluding inflation adjustments) but would likely be lower considering that some parts of the TMDL reports would remain unchanged or could be completed in-house. DEQ would incur costs to repeat coordination with the public and obtain EPA approval of any revisions. <u>Indirect Costs:</u> The TMDL and WLA form a balanced equation, so allowing one source to have higher pollutant amounts shifts the cost burden of pollution controls to other permittees or non-point sources in the watershed. Any alternative scenario must still achieve the same overall pollution reduction required to meet the WQS, so a less stringent WLA is unlikely. A more stringent WLA amount could lead existing permittees to incur costs as facilities may need operational changes to further reduce pollution discharges. <u>Direct Benefits:</u> No direct monetizable benefit is expected from considering alternate WLA scenarios. Any alternative scenario must still achieve the same overall pollution reduction required to meet the WQS so other sources would need to incur the costs to reduce pollutants, even if some permittees experience cost savings. This cost shifting may affect other permittees, municipalities, or non-point sources, such as agriculture. <u>Indirect Benefits:</u> No indirect monetizable benefit from this alternative approach. Any alternative scenario would need to make the same overall pollution reduction to be consistent with the WQS.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) direct costs- \$266,000 (excluding inflation adjustments) and DEQ staff salary and fringe	(b) Not Applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	Considering less stringent alternative scenarios for point source pollution reduction could reduce costs and benefit permittees affected by the preferred scenario. However, those costs would be redistributed to other sources or permittees to achieve the pollution reductions necessary to meet WQS.	
(5) Information Sources	DEQ TMDL Program; scopes of work for the Deep Run, Dover Creek, and Upham Brook Watersheds TMDL study, Black Creek and Hat Creek Watersheds TMDL and Middle Fork Holston and Tributaries TMDL	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	Two localities (Henrico County and the City of Richmond) will be affected since they also hold Municipal Separate Storm Sewer system (MS4) permits and may incur costs to reduce sediment and phosphorus discharges to comply with the WLA established for the TMDL study. These are municipal regions that convey impervious surface stormwater runoff from within their boundary through permitted discharge points. MS4s will address the phosphorus and sediment load in their runoff that is discharged through their stormwater conveyance system. These localities do not have a specific individual reduction target. Instead, the TMDL report aggregates reductions across all MS4 permittees which provides flexibility for these permit holders to address their share of the pollutant load and necessary reductions, while achieving overall sediment and phosphorus reduction in the watershed. Under their requirements in their existing MS4 permits, Henrico and Richmond already have TMDL Action Plans to address the Chesapeake Bay TMDL and other local watershed TMDLs in their Jurisdictions. The localities will need to review and, if necessary, update their existing plans to address the new WLA. <u>Direct costs:</u> The WQMPR (9VAC 25-720) does not result in any direct monetizable costs to local partners. The regulation only lists the TMDLs and WLA, along with the impaired streams where it applies, but does not identify any facilities affected or mandate any measures that facilities must take to meet the WLA that would directly impose a cost. <u>Indirect Costs:</u> Their indirect costs cannot be precisely monetized at this time. DEQ cannot predict any specific permit reductions that will be determined later, or which pollution reduction options the localities may incorporate into their action plans for each watershed and pollutant. By aggregating the WLA for MS4s, the TMDL incorporates flexibility for these permit holders to address their share of the pollutant load and necessary reductions and achieve overall sediment or phosphorus reductions in the watershed. <u>Direct Benefits:</u> The proposed regulatory amendment does not have any monetizable direct benefits for local partners. The regulatory change broadly benefits the public by improving the water quality of impaired waters by identifying the maximum amount of pollutant load a stream can accommodate to meet WQS (9VAC25-260), support all designated uses, and ultimately be removed from Virginia's 303(d) list of impaired waters. <u>Indirect Benefits:</u> The proposed regulatory amendment does not have any monetizable indirect benefits. Implementing WLAs improves water

	quality and protects human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and producing edible and marketable natural resources, such as commercial and recreational fishing industries.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable
(3) Other Costs & Benefits (Non-Monetized)	Local partners and their citizens will benefit from improved water quality that protects human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as commercial and recreational fishing industries.	
(4) Assistance	N/A	
(5) Information Sources	DEQ TMDL Program procedures, documents, and staff	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	DEQ does not expect this regulation to impact the institution of the family and family stability. In total, 59 residences have treatment systems that require having a Domestic Sewage Discharge General Permit which would fall under the TMDL WLAs, most occurring in Crooked Run, Stony Creek and Pughs Run. However, since DEQ developed the WLA based on the existing permit limits, it does not impose any additional requirements beyond those already required in their existing permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable

(3) Other Costs & Benefits (Non-Monetized)	Improved water quality will protect human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as commercial and recreational fishing industries.
(4) Information Sources	DEQ TMDL Program procedures, documents, and staff

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	State Water Control Law § 62.1-44.19:7 of the Code of Virginia and the section 303(d) of the Clean Water Act (implemented through 40 CFR 130.7(c)) requires DEQ to develop a TMDL study and incorporate WLAs into the WQMPR for each impaired water body to address point source discharges of pollutants into the water. It appears that the majority of the permittees holding a DEQ Industrial Stormwater, Vehicle Washing, Mineral Mining, and Mixed Concrete General Permit, and one Individual Permittee meet the definition of a small business. As explained in section 1a, their WLA were developed using existing permit limits or benchmarks. Thus, the facilities are not expected to incur costs to make reductions of sediment or phosphorus beyond what is already required in their existing permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable
(3) Other Costs & Benefits (Non-Monetized)	Not Applicable	
(4) Alternatives	None	

(5) Information Sources	DEQ TMDL Program procedures, documents, and staff

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-720-50*	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-720-60*	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-720-90*	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
				Grand Total of Changes in Requirements:	(M/A):0
					(D/A):0
					(M/R):0
					(D/R):0

**This regulation sets the total amount of a pollutant that a waterbody can receive and still meet water quality standards. The existence of a TMDL by itself does not impose statutory or discretionary regulatory requirements on anyone. DEQ implements TMDLs by imposing discharge limitations in permits issued in accordance with the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation (9 VAC 25 - 31), not through the Water Quality Management Planning Regulation (9VAC25-720). Discharge limitations imposed on VPDES permits are included in the regulatory baseline for the VPDES Permit Regulation (9 VAC 25 - 31). Counting these requirements here would double count regulatory requirements.*

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
NA	0	0	0	0

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA	NA	NA

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
NA	NA	NA	NA

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB D



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

MEMORANDUM

TO: State Water Control Board Members

FROM: Brenda Winn, Manager, Office of Wetlands & Stream Protection *Brenda Winn*

DATE: November 3, 2025

SUBJECT: Virginia Water Protection (VWP) General Permit Regulations, Chapters 9VAC25-660, 9VAC25-670, 9VAC25-680, 9VAC25-690 Amendments and Reissuance of General Permits

At the November 18, 2025, meeting of the State Water Control Board (board), the board will consider final amendments to the VWP General Permit Regulations.

The current VWP General Permit Regulations listed below expire on August 1, 2026, and the regulations establishing these general permits are being amended to reissue these general permits for another ten-year term:

1. Chapter 660 (9VAC25-660) - Impacts Less Than One-Half Acre
2. Chapter 670 (9VAC25-670) - Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities
3. Chapter 680 (9VAC25-680) - Linear Transportation Projects
4. Chapter 690 (9VAC25-690) - Impacts from Development and Certain Mining Activities

The Virginia Department of Environmental Quality (DEQ) staff is bringing these final regulation amendments before the State Water Control Board (SWCB or Board) for approval. Amendments showing the final changes to each of the four current regulations and the accompanying Agency Background Documents (Virginia Regulatory Town Hall form TH-09), which include a summary of the amendments, are attached. No additional changes are being made to the regulations since the Proposed stage.

Background

Separate Notices of Intended Regulatory Action (NOIRA) for amendments to each of the four VWP General Permit Regulations were issued on October 21, 2024. DEQ did not receive comments on any of the NOIRAs.

The final regulations take into consideration the comments of a technical advisory committee formed for these regulatory actions. The technical advisory committee met on March 25, 2025, and consisted of representatives of the regulated community, environmental groups, industry, and the economic development community.

One public hearing was held on October 15, 2025, at DEQ's Piedmont Regional Office in Glen Allen, Virginia. No comments were received at the public hearing.

The public comment period closed on October 24, 2025. DEQ received one email on the reissuance of the VWP General Permits. The commenter asked how the board determined that there is reasonable assurance the general permits will protect instream beneficial uses and water quality standards and what relevant data had been evaluated. DEQ received a second comment on the reissuance of General Permit 9VAC25-690 via the Virginia Regulatory Town Hall. The comment supported the reissuance of the General Permit for Impacts from Development and Certain Mining Activities and encouraged DEQ to retain impact limits of less than two acres and the permit duration of ten years. DEQ's responses to these comments are in the agency background documents (TH-09s) for the general permits. No changes to the regulations were made as a result of these comments.

Final Amendments

No changes are being made to the final amendments since the proposed stage.

Because the general structure, content, and most requirements are identical in the VWP general permit regulations, the amendments to each are the same (except as noted in 9VAC25-690-30 and the Documents Incorporated by Reference in 9VAC25-690). The following changes are found in 9VAC25-660, 9VAC25-670, 9VAC25-680, and 9VAC25-690:

Section 25: Repeal Section 25 pertaining to transition of the general permit in 2006 to the reissued 2016 general permit. This section is obsolete and no longer relevant.

Section 27: Revise the section title to: "VWP general permit and coverage; expiration; transition; continuation" to clarify requirements. Subsections have been reorganized to clearly state the permit term, reapplication expectations, and incorporate the administrative continuance provision previously located in Section 35.

Section 30: Applicable to 9VAC25-690 only: remove reference to obsolete Virginia Stormwater Management Handbook in subsection 9VAC25-690-30.B.3.b(6).

Section 35: Repeal this section. Administrative continuance provisions have been moved to subsection C of Section 27.

Section 100: Replace references to outdated guidance, the “Virginia Erosion and Sediment Control Handbook, Third Edition, 1992,” in Part I B with a requirement to comply with the “Virginia Erosion and Stormwater Management Regulation, 9VAC25-875.” Reorganize Part I E by combining subdivisions 1 and 2, which are similar and reference the Virginia Erosion and Sediment Control Handbook, to a requirement to comply with the “Virginia Erosion and Stormwater Management Regulation, 9VAC25-875.” Part II E 7 – replace ‘substance’ with ‘substances’. Part III K – revise erroneous citations 9VAC25-210-180 and § 62.1-44.15:25 with correct citations 9VAC25-210, “this chapter,” and subdivision (5) of § 62.1-44.15. Replace ‘stream bank’ with ‘streambank’.

FORMS: Update to include forms associated with the regulation.

DOCUMENTS INCORPORATED BY REFERENCE: Deletion of reference to obsolete “Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation.” Update other references to current versions, correct titles, and revise document links. Applicable to 9VAC25-690 only: remove the “Virginia Stormwater Management Handbook, First Edition, 1999, Department of Conservation and Recreation.” Revise the title and date of the Joint Permit Application.

Attorney General Certification

The Office of the Attorney General has reviewed each of the regulations for certification of the board’s statutory authority.

Staff Recommendation

The Department recommends that the Board adopt the final amendments to the VWP General Permit Regulations, 9VAC25-660, 9VAC25-670, 9VAC25-680, and 9VAC25-690, as presented, to reissue these general permits for another 10-year term.

Presenter Contact Information

Name: Brenda Winn, Manager, Office of Wetlands & Stream Protection
Phone: 1-804-659-2675
Email: Brenda.winn@deq.virginia.gov

Attachments

Attachment A: Technical Advisory Committee (TAC) Member List
Attachment B: Text of Final Amendments to VWP General Permit Regulations
Attachment C: Agency Background Documents (TH-09s)
Attachment D: Office of Regulatory Management (ORM) Economic Review Forms

Attachment A

Reissuance of Virginia Water Protection (VWP) General Permits in regulations in
Chapters 9VAC25-660; 9VAC25-670; 9VAC25-680; and 9VAC25-690
of the Virginia Administrative Code

Technical Advisory Committee Members

Representative of the Regulated Community	Jean Bradford (Alternate: Todd Preuninger), Dominion Energy services, Inc.
Representatives of Environmental Groups	Daniel (Eli) Wright, Virginia Association of Wetland Professionals (VAWP) and W3 Environmental Solutions, LLC Karen Johnson, The Nature Conservancy
Representative of Economic Development Community	Phil Abraham (Alternate for Andrew Clark), The Vectre Corporation and Virginia Transportation Construction Alliance
State and Local Government	Taylor Parker, VDOT

Project 8056 - Exempt Final

State Water Control Board

2026 Reissuance of General Permit - 9VAC25-660

Chapter 660

Virginia Water Protection (VWP) General Permit for Impacts Less Than One-Half Acre

9VAC25-660-25. Authorization for coverage under VWP general permit effective August 1, 2006. (Repealed.)

A. All complete applications or notifications received by the department through 11:59 p.m. on August 1, 2016, shall be processed in accordance with the VWP general permit regulation in effect August 1, 2006, through August 1, 2016. If the application or notification is incomplete or if there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a completeness determination, the applicant shall reapply for coverage under the VWP general permit effective August 2, 2016, or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. VWP general permit authorizations granted through 11:59 p.m. on August 1, 2016, shall remain in full force and effect until 11:59 p.m. on the expiration date stated on the VWP authorization cover page, unless otherwise revoked or terminated or unless a notice of project completion is received by the department on or before that date. Any permittee that desires to continue an authorized activity beyond the stated expiration date must reapply for coverage under the VWP general permit effective August 2, 2016, pursuant to its terms, standards, and conditions, or apply for a VWP individual permit, including payment of any required permit application fee. This section shall only apply to permittees holding valid authorizations for coverage granted under the VWP general permit effective August 1, 2006, through August 1, 2016.

9VAC25-660-27. VWP general permit and coverage; expiration; transition; continuation.

A. The general permit in 9VAC25-660-100 is effective August 2, 2026, and expires August 1, 2036. All applications or notifications received on or after August 2, 2026, will be processed in accordance with the VWP general permit regulation effective August 2, 2026. If there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a permit coverage decision, the applicant shall reapply for coverage under the next consecutive VWP general permit or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. ~~The general permit in 9VAC25-660-100 is effective August 2, 2016, and expires August 1, 2026.~~ Any coverage that is granted pursuant to 9VAC25-660-30 shall remain in full force and effect until 11:59 p.m. on August 1, 2026 2036, unless the general permit coverage is terminated or revoked on or before this date. Where a permittee that has received general permit coverage desires to continue or complete the authorized activities beyond August 1, 2026 2036, the permittee shall reapply for new general permit coverage or for a VWP individual permit, including payment of any required permit application fee. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

C. In any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with this chapter, and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP

general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit. Application may be made at any time for a VWP individual permit in accordance with 9VAC25-210. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

9VAC25-660-30. Authorization to impact surface waters.

A. Any person granted coverage under the VWP general permit effective August 2, 2016 2026, may permanently or temporarily impact less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed, provided that:

1. The applicant submits notification as required in ~~9VAC25-660-50 and 9VAC25-660-60~~ this chapter using forms of application or notification.
2. The applicant remits any required permit application fee.
3. The applicant receives general permit coverage from the Department of Environmental Quality and complies with the limitations and other requirements of the VWP general permit; the general permit coverage letter; the Clean Water Act, as amended; and the State Water Control Law and attendant regulations.
4. The applicant has not been required to obtain a VWP individual permit under 9VAC25-210 for the proposed project impacts. The applicant, at ~~his~~ the applicant's discretion, may seek a VWP individual permit or coverage under another applicable VWP general permit in lieu of coverage under this VWP general permit.
5. Impacts, both temporary and permanent, result from a single and complete project, including all attendant features.
 - a. Where a road segment (e.g., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of surface waters (several single and complete projects), the department may, at its discretion, require a VWP individual permit.
 - b. For the purposes of this chapter, when an interchange has multiple crossings of surface waters, the entire interchange shall be considered the single and complete project.
6. The stream impact criterion applies to all components of the project, including structures and stream channel manipulations.
7. When required, compensation for unavoidable impacts is provided in accordance with § 62.1-44.15:23 of the Code of Virginia, 9VAC25-660-70, and the associated provisions of 9VAC25-210-116.

B. The board waives the requirement for coverage under a VWP general permit for activities that occur in an isolated wetland of minimal ecological value, as defined in 9VAC25-210-10. Upon request by the department, any person claiming this waiver shall demonstrate to the satisfaction of the department that he qualifies for the waiver.

C. Coverage under this VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

D. Coverage under a nationwide or regional permit promulgated by the U.S. Army Corps of Engineers (USACE), and for which the department has issued § 401 certification in accordance with 9VAC25-210-130 H as of August 2, 2016 2026, shall constitute coverage under this VWP general permit, unless a state program general permit (SPGP) is required and granted for the activity or impact.

E. When the department determines on a case-by-case basis that concerns for water quality and the aquatic environment so indicate, the department may require a VWP individual permit in accordance with 9VAC25-210-130 B rather than granting coverage under this VWP general permit.

9VAC25-660-35. Administrative continuance. (Repealed.)

~~Beginning on August 2, 2016, in any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit, in accordance with 9VAC25-660-50 and 9VAC25-660-60 and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit.~~

9VAC25-660-100. VWP general permit.

VWP GENERAL PERMIT NO. WP1 FOR IMPACTS LESS THAN ONE-HALF ACRE
UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE
WATER CONTROL LAW

Effective date: August 2, ~~2016~~ 2026

Expiration date: August 1, ~~2026~~ 2036

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP general permit, the board has not taken into consideration the structural stability of any proposed activities.

The permanent or temporary impact of less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general permit ~~set forth herein~~; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it.

Part I.

Special Conditions.

A. Authorized activities.

1. The activities authorized by this chapter shall not cause more than the permanent or temporary impacts to less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the department in the coverage letter, if any, shall be enforceable conditions of this permit.

2. Any changes to the authorized permanent impacts to surface waters shall require a notice of planned change in accordance with 9VAC25-660-80. An application or request for modification to coverage or another VWP permit application may be required.

3. Any changes to the authorized temporary impacts to surface waters shall require written notification to and approval from the Department of Environmental Quality in accordance

with 9VAC25-660-80 prior to initiating the impacts and restoration to preexisting conditions in accordance with the conditions of this permit.

4. Modification to compensation requirements may be approved at the request of the permittee when a decrease in the amount of authorized surface waters impacts occurs, provided that the adjusted compensation meets the initial compensation goals.

B. Overall conditions.

1. The activities authorized by this VWP general permit shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of the Code of Virginia.

2. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Pipes and culverts placed in streams must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless otherwise specifically approved by the Department of Environmental Quality on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters, unless the area is contained within a cofferdam and the work is performed in the dry or unless otherwise approved by the Department of Environmental Quality. Excess or waste concrete shall not be disposed of in flowing surface waters or washed into flowing surface waters.

4. All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

5. Erosion and sedimentation controls shall be designed ~~in accordance with~~ to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875). These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area is stabilized and shall then be removed.

6. Exposed slopes and streambanks shall be stabilized immediately upon completion of work in each permitted impact area. All denuded areas shall be properly stabilized in ~~accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875)~~.

7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways) and demolition activities associated with the project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this VWP general permit.

180 8. No machinery may enter flowing waters, unless authorized by this VWP general permit
181 or approved prior to entry by the Department of Environmental Quality.

182 9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats,
183 geotextile fabric, or other suitable material to minimize soil disturbance to the maximum
184 extent practicable. Equipment and materials shall be removed immediately upon
185 completion of work.

186 10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of
187 authorized activities and within the project or right-of-way limits shall be clearly flagged or
188 marked for the life of the construction activity at that location to preclude unauthorized
189 disturbances to these surface waters and compensatory mitigation areas during
190 construction. The permittee shall notify contractors that no activities are to occur in these
191 marked surface waters.

192 11. Temporary disturbances to surface waters during construction shall be avoided and
193 minimized to the maximum extent practicable. All temporarily disturbed wetland areas
194 shall be restored to preexisting conditions within 30 days of completing work at each
195 respective temporary impact area, which shall include reestablishing preconstruction
196 elevations and contours with topsoil from the impact area where practicable and planting
197 or seeding with appropriate wetland vegetation according to cover type (i.e., emergent,
198 scrub-shrub, or forested). The permittee shall take all appropriate measures to promote
199 and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation
200 through the second year post-disturbance. All temporarily impacted streams and
201 streambanks shall be restored to their preconstruction elevations and contours with topsoil
202 from the impact area where practicable within 30 days following the construction at that
203 stream segment. Streambanks shall be seeded or planted with the same vegetation cover
204 type originally present, including any necessary, supplemental erosion control grasses.
205 Invasive species identified on the Department of Conservation and Recreation's Virginia
206 Invasive Plant Species List, September 2024, shall not be used to the maximum extent
207 practicable or without prior approval from the Department of Environmental Quality.

208 12. Materials (including fill, construction debris, and excavated and woody materials)
209 temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately
210 stabilized to prevent entry into state waters, managed such that leachate does not enter
211 state waters, and completely removed within 30 days following completion of that
212 construction activity. Disturbed areas shall be returned to preconstruction elevations and
213 contours with topsoil from the impact area where practicable; restored within 30 days
214 following removal of the stockpile; and restored with the same vegetation cover type
215 originally present, including any necessary, supplemental erosion control grasses.
216 Invasive species identified on the Department of Conservation and Recreation's Virginia
217 Invasive Plant Species List, September 2024, shall not be used to the maximum extent
218 practicable or without prior approval from the Department of Environmental Quality.

219 13. Continuous flow of perennial springs shall be maintained by the installation of spring
220 boxes, french drains, or other similar structures.

221 14. The permittee shall employ measures to prevent spills of fuels or lubricants into state
222 waters.

223 15. The permittee shall conduct his activities in accordance with the time-of-year
224 restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia
225 Marine Resources Commission, or other interested and affected agencies, as contained,
226 when applicable, in a Department of Environmental Quality VWP general permit coverage
227 letter, and shall ensure that all contractors are aware of the time-of-year restrictions
228 imposed.

16. Water quality standards shall not be violated as a result of the construction activities.

17. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless otherwise authorized by the Department of Environmental Quality, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream channel can begin.

C. Road crossings.

1. Access roads and associated bridges, pipes, and culverts shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable. Access roads constructed above preconstruction elevations and contours in surface waters must be bridged, piped, or culverted to maintain surface flows.

2. Installation of road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions, or other similar structures.

D. Utility lines.

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area must be returned to its preconstruction elevations and contours with topsoil from the impact area where practicable and restored within 30 days of completing work in the area, unless otherwise authorized by the Department of Environmental Quality. Restoration shall be the seeding or planting of the same vegetation cover type originally present, including any necessary, supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

2. Material resulting from trench excavation may be temporarily sidecast into wetlands not to exceed a total of 90 days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a french drain effect). For example, utility lines may be backfilled with clay blocks to ensure that the trench does not drain surface waters through which the utility line is installed.

E. Stream modification and ~~stream bank~~ streambank protection.

1. Riprap bank stabilization and riprap aprons for outfalls shall be of an appropriate size and design ~~in accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992~~ Stormwater Management Regulation (9VAC25-875).

2. ~~Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.~~

~~3.~~ 2. For ~~stream bank~~ streambank protection activities, the structure and backfill shall be placed as close to the ~~stream bank~~ streambank as practicable. No material shall be placed in excess of the minimum necessary for erosion protection.

~~4.~~ 3. All ~~stream bank~~ streambank protection control structures shall be located to eliminate or minimize impacts to vegetated wetlands to the maximum extent practicable.

~~5.~~ 4. Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of submerged sills or breakwaters.

~~6.~~ 5. Redistribution of existing stream substrate for the purpose of erosion control is prohibited.

~~7.~~ 6. No material removed from the stream bottom shall be disposed of in surface waters, unless otherwise authorized by this VWP general permit.

F. Stormwater management facilities.

1. Stormwater management facilities shall be installed in accordance with best management practices and watershed protection techniques (e.g., vegetated buffers, siting considerations to minimize adverse effects to aquatic resources, bioengineering methods incorporated into the facility design to benefit water quality and minimize adverse effects to aquatic resources) that provide for long-term aquatic resources protection and enhancement, to the maximum extent practicable.

2. Compensation for unavoidable impacts shall not be allowed within maintenance areas of stormwater management facilities.

3. Maintenance activities within stormwater management facilities shall not require additional permit coverage or compensation, provided that the maintenance activities do not exceed the original contours of the facility, as approved and constructed, and are accomplished in designated maintenance areas as indicated in the facility maintenance or design plan or when unavailable, an alternative plan approved by the Department of Environmental Quality.

Part II.

Construction and Compensation Requirements, Monitoring, and Reporting.

A. Minimum compensation requirements.

1. The permittee shall provide any required compensation for impacts in accordance with the conditions in this VWP general permit, the coverage letter, and the chapter promulgating the general permit.

2. Compensation options that may be considered under this VWP general permit include the purchase of mitigation bank credits or the purchase of in-lieu fee program credits with a primary service area that covers the impact site in accordance with § 62.1-44.15:23 of the Code of Virginia, 9VAC25-660-70, and the associated provisions of 9VAC25-210-116.

3. The final compensation plan shall be submitted to and approved by the department prior to a construction activity in permitted impacts areas. The department shall review and provide written comments on the final plan within 30 days of receipt or it shall be deemed approved. The final plan as approved by the department shall be an enforceable requirement of any coverage under this VWP general permit. Deviations from the approved final plan shall be submitted and approved in advance by the department.

B. Impact site construction monitoring.

1. Construction activities authorized by this permit that are within impact areas shall be monitored and documented. The monitoring shall consist of:

a. Preconstruction photographs taken at each impact area prior to initiation of activities within impact areas. Photographs remain on the project site and shall depict the impact area and the nonimpacted surface waters immediately adjacent to and downgradient of each impact area. Each photograph shall be labeled to include the following information: permit number, impact area number, date and time of the photograph, name of the person taking the photograph, photograph orientation, and photograph subject description.

b. Site inspections shall be conducted by the permittee or the permittee's qualified designee once every calendar month during activities within impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity and within the project or right-of-way limits; and all on-site permanent preservation areas required under this permit. Observations shall be recorded on the inspection form provided by the Department of Environmental Quality. The form shall be completed in its entirety for each monthly inspection and shall be kept on site and made available for review by the Department of Environmental Quality staff upon request during normal business hours. Inspections are not required during periods of no activity within impact areas.

2. Monitoring of water quality parameters shall be conducted during permanent relocation of perennial streams through new channels in the manner noted in this subdivision. The permittee shall report violations of water quality standards to the Department of Environmental Quality in accordance with the procedures in 9VAC25-660-100 Part II C of this permit. Corrective measures and additional monitoring may be required if water quality standards are not met. Reporting shall not be required if water quality standards are not violated.

a. A sampling station shall be located upstream and immediately downstream of the relocated channel.

b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every 30 minutes for at least two hours at each station prior to opening the new channels and immediately before opening new channels.

c. Temperature, pH, and D.O. readings shall be taken after opening the channels and every 30 minutes for at least three hours at each station.

C. Reporting.

1. Written communications required by this VWP general permit shall be submitted to the appropriate Department of Environmental Quality office. The VWP general permit tracking number shall be included on all correspondence.

2. The Department of Environmental Quality shall be notified in writing prior to the start of construction activities at the first authorized impact area.

3. A construction status update form provided by the Department of Environmental Quality shall be completed and submitted to the Department of Environmental Quality twice per year for the duration of coverage under a VWP general permit. Forms completed in June shall be submitted by or on July 10, and forms completed in December shall be submitted by or on January 10. The form shall include reference to the VWP permit tracking number and one of the following statements for each authorized surface water impact location:

a. Construction activities have not yet started;

b. Construction activities have started;

c. Construction activities have started but are currently inactive; or

d. Construction activities are complete.

4. The Department of Environmental Quality shall be notified in writing within 30 days following the completion of all activities in all authorized impact areas.

5. The permittee shall notify the Department of Environmental Quality in writing when unusual or potentially complex conditions are encountered that require debris removal or involve a potentially toxic ~~substance~~ substances. Measures to remove the obstruction,

material, or toxic substance or to change the location of a structure are prohibited until approved by the Department of Environmental Quality.

6. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday, the appropriate Department of Environmental Quality regional office shall be notified; otherwise, the Department of Emergency Management shall be notified at 1-800-468-8892.

7. Violations of state water quality standards shall be reported to the appropriate Department of Environmental Quality office no later than the end of the business day following discovery.

8. The permittee shall notify the Department of Environmental Quality no later than the end of the third business day following the discovery of additional impacts to surface waters, including wetlands, stream channels, and open water that are not authorized by the Department of Environmental Quality or to any required preservation areas. The notification shall include photographs, estimated acreage or linear footage of impacts, and a description of the impacts.

9. Submittals required by this VWP general permit shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Part III.

Conditions Applicable to All VWP General Permits.

A. Duty to comply. The permittee shall comply with all conditions, limitations, and other requirements of the VWP general permit; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations, and toxic standards and prohibitions.

B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent impacts in violation of the VWP general permit that may have a reasonable likelihood of adversely affecting human health or the environment.

C. Reopener. This VWP general permit may be reopened to modify its conditions when the circumstances on which the previous VWP general permit was based have materially and substantially changed, or special studies conducted by the department or the permittee show material and substantial change since the time the VWP general permit was issued and thereby constitute cause for revoking and reissuing the VWP general permit.

D. Compliance with state and federal law. Compliance with this VWP general permit constitutes compliance with the VWP permit requirements of the State Water Control Law. Nothing in this VWP general permit shall be construed to preclude the institution of any legal action under or relieve the permittee from any responsibilities, liabilities, or other penalties established pursuant to any other state law or regulation or under the authority preserved by § 510 of the Clean Water Act.

E. Property rights. Coverage under this VWP general permit does not convey property rights in either real or personal property or any exclusive privileges, nor does it authorize injury to private property, any invasion of personal property rights, or any infringement of federal, state, or local laws or regulations.

F. Severability. The provisions of this VWP general permit are severable.

G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the department or any duly authorized agent of the department, at reasonable times and under reasonable circumstances, to enter upon the permittee's property, public or private, and have access to inspect and copy any records that must be kept as part of the VWP general permit conditions; to inspect any facilities, operations, or practices (including monitoring and control equipment) regulated or required under the VWP general permit; and to sample or monitor any substance, parameter, or activity for the purpose of ensuring compliance with the conditions of the VWP general permit or as otherwise authorized by law. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained herein in this general permit shall make an inspection time unreasonable during an emergency.

H. Transferability of VWP general permit coverage. VWP general permit coverage may be transferred to another permittee when all of the criteria listed in this subsection are met. On the date of the VWP general permit coverage transfer, the transferred VWP general permit coverage shall be as fully effective as if it had been granted directly to the new permittee.

1. The current permittee notifies the department of the proposed transfer of the general permit coverage and provides a written agreement between the current and new permittees containing a specific date of transfer of VWP general permit responsibility, coverage, and liability to the new permittee, or that the current permittee will retain such responsibility, coverage, or liability, including liability for compliance with the requirements of enforcement activities related to the authorized activity.

2. The department does not within 15 days notify the current and new permittees of the board's intent to modify or revoke and reissue the VWP general permit.

I. Notice of planned change. VWP general permit coverage may be modified subsequent to issuance in accordance with 9VAC25-660-80.

J. VWP general permit coverage termination for cause. VWP general permit coverage is subject to termination for cause by the department after public notice and opportunity for a hearing in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

1. Noncompliance by the permittee with any provision of this chapter, any condition of the VWP general permit, or any requirement in general permit coverage;

2. The permittee's failure in the application or during the process of granting VWP general permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;

3. The permittee's violation of a special or judicial order;

4. A determination by the department that the authorized activity endangers human health or the environment and can be regulated to acceptable levels by a modification to the VWP general permit coverage or a termination;

5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP general permit; or

6. A determination that the authorized activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

K. The department may terminate VWP general permit coverage without cause when the permittee is no longer a legal entity due to death or dissolution or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the department shall follow the applicable procedures for termination under ~~9VAC25-210-180~~ 9VAC25-210, this chapter, and ~~§ 62.1-44.15:25~~ subdivision (5) of § 62.1-44.15 of the Code of Virginia.

L. VWP general permit coverage termination by consent. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all authorized activities requiring notification under 9VAC25-660-50 A and all compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this termination of coverage on behalf of the department. The permittee shall submit the following information:

1. Name, mailing address, and telephone number;
2. Name and location of the activity;
3. The VWP general permit tracking number; and
4. One of the following certifications:

a. For project completion:

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage have been completed. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage."

b. For project cancellation:

"I certify under penalty of law that the activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage will not occur. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

c. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by the Department of Environmental Quality, and the following certification statement:

"I certify under penalty of law that the activities or the required compensatory mitigation authorized by the VWP general permit and general permit coverage have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which VWP general permit coverage has been granted in order to maintain compliance with the conditions of the VWP general permit or coverage.

P. Duty to provide information.

1. The permittee shall furnish to the department information that the department may request to determine whether cause exists for modifying, revoking, or terminating VWP permit coverage or to determine compliance with the VWP general permit or general permit coverage. The permittee shall also furnish to the department, upon request, copies of records required to be kept by the permittee.

2. Plans, maps, conceptual reports, and other relevant information shall be submitted as required by the department prior to commencing construction.

Q. Monitoring and records requirements.

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP general permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 as published in the July 1, 2024, update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP general permit, and records of all data used to complete the application for coverage under the VWP general permit, for a period of at least three years from the date of general permit expiration. This period may be extended by request of the department at any time.

4. Records of monitoring information shall include, as appropriate:

- a. The date, exact place, and time of sampling or measurements;
- b. The name of the individuals who performed the sampling or measurements;
- c. The date and time the analyses were performed;
- d. The name of the individuals who performed the analyses;

- 554 e. The analytical techniques or methods supporting the information such as
 555 observations, readings, calculations, and bench data used;
 556 f. The results of such analyses; and
 557 g. Chain of custody documentation.
- 558 R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit,
 559 it shall be unlawful for the permittee to:
- 560 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
 561 deleterious substances;
 - 562 2. Excavate in a wetland;
 - 563 3. Otherwise alter the physical, chemical, or biological properties of state waters and make
 564 them detrimental to the public health, to animal or aquatic life, or to the uses of such waters
 565 for domestic or industrial consumption, for recreation, or for other uses; or
 - 566 4. On and after October 1, 2001, conduct the following activities in a wetland:
 - 567 a. New activities to cause draining that significantly alter or degrade existing wetland
 568 acreage or functions;
 - 569 b. Filling or dumping;
 - 570 c. Permanent flooding or impounding; or
 - 571 d. New activities that cause significant alteration or degradation of existing wetland
 572 acreage or functions.
- 573 S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the
 574 expiration date of the VWP general permit shall comply with the provisions in 9VAC25-660-27.

575 FORMS (9VAC25-660)

- 576 [Department of Environmental Quality Water Division Permit Application Fee Form, Form 5](#)
 577 [\(rev. 10/2018\)](#)
- 578 [Joint Permit Application \(JPA\)-State Specific Information \(rev. 11/2024\)](#)
- 579 ~~Virginia Department of Transportation, Inter-Agency Coordination Meeting Joint Permit~~
 580 ~~Application (eff. 6/2008)~~
- 581 [Virginia Department of Transportation, Interagency Coordination Meeting Joint Permit](#)
 582 [Application \(rev. 7/2017\)](#)
- 583 [Monthly Reporting of Impacts Less than or Equal to One-Tenth Acre Statewide \(eff. 8/2007\)](#)

584 Documents Incorporated by Reference (9VAC25-660)

- 585 ~~Classification of Wetlands and Deepwater Habitats of the United States, Cowardin, Lewis M.~~
 586 ~~II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992.~~
- 587 [Classification of Wetlands and Deepwater Habitats of the United States, adapted from](#)
 588 [Cowardin, Carter, Golet, and LaRoe \(1979\), Wetlands Subcommittee, Federal Geographic Data](#)
 589 [Committee, August 2013](#)
- 590 Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230
- 591 ~~Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of~~
 592 ~~Conservation and Recreation~~
- 593 ~~Virginia Invasive Plant Species List, Natural Heritage Technical Document 14-11, Department~~
 594 ~~of Conservation and Recreation, Division of Natural Heritage (2014)~~

595 [Virginia Invasive Plant Species List, Division of Natural Heritage, Department of Conservation](#)
596 [and Recreation, September 2024](#)


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Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-660
VAC Chapter title(s)	Virginia Water Protection General Permit for Impacts Less Than One-Half Acre
Action title	2026 Reissuance of General Permit - 9VAC25-660
Final agency action date	November 18, 2025
Date this document prepared	November 5, 2025

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the *Code of Virginia*). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*. 30, 2023

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This regulatory action is needed to reissue Chapter 660 - *Virginia Water Protection General Permit for Impacts Less Than One-Half Acre* that is expiring on August 1, 2026. The general permit is a streamlined permitting approach for regulating impacts to the Commonwealth's surface waters. This action provides efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes.

The purpose of this regulatory action is to reissue this general permit – also referred to as WP1 - which expires on August 1, 2026, for another ten-year term and allow for amendments to provide clarity in provisions related to coverage expiration, transition, and continuation; to correct citations and typographical errors; to update forms and reference documents; and to clarify administrative procedures.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

Subsection D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the State Water Control Board (Board) to develop general permits for specific activities. The *Virginia Water Protection General Permit for Impacts Less Than One-Half Acre*, 9VAC25-660, covers activities causing permanent and temporary impacts to less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed.

Per § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022), DEQ conducts once every four years a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

"DEQ" means the Department of Environmental Quality.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, "board" means the Department of Environmental Quality.

"Coverage" means authorization to conduct a project in accordance with a VWP general permit.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"TAC" stands for Technical Advisory Committee.

"VDOT" means the Virginia Department of Transportation.

"VWP" stands for Virginia Water Protection.

"VWP general permit" means the general permit text, terms, requirements, and conditions set forth in a regulation that constitutes a VWP permit authorizing a specified category of activities.

"WP1" stands for Virginia Water Protection General Permit for Impacts Less Than One-Half Acre, 9VAC25-660.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) that the agency has “adopted final amendments” to the regulation; 3) the name of the agency taking the action; and 4) the title of the regulation. A suggested statement is, “On [insert date] the Board/Department of [insert name] adopted final amendments to the [title of regulation(s)].”

At its meeting on November 18, 2025, the State Water Control Board (SWCB) adopted the final amendments to the *Virginia Water Protection General Permit for Impacts Less Than One-Half Acre* (9VAC25-660).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

The basis for this regulatory action is the State Water Control Law (Chapter 3.1 of Title 62.1 of the *Code of Virginia*) with specific provisions in law (Article 2.2., §§ 62.1-44.15:20 - 62.1-44.15:23.1, and Article 2.6, §§ 62.1-44.15:80 – 62.1-44.15:84) mandating certain actions and allowing discretionary authority over certain matters to the promulgating agency. Subsection D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the Board to develop general permits for such activities in wetlands as it deems appropriate, and that the general permits shall include such terms and conditions as the Board deems necessary to protect state waters and fish and wildlife resources from significant impairment. It further directs the Board to develop a general permit for activities causing wetland impacts of less than one-half acre.

Section 62.1-44.15(10) of the *Code of Virginia* sets forth the Board's authority for the adoption of regulations deemed necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth:

“(10) To adopt such regulations as it deems necessary to enforce the general soil erosion control and stormwater management program and water quality management program of the Board in all or part of the Commonwealth, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable.”

In addition, periodic and small business impact reviews are provided for in § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The existing *Virginia Water Protection General Permit for Impacts Less Than One-Half Acre* (9VAC25-660 et seq.) is expiring on August 1, 2026. In conjunction with reissuance of this VWP general permit, the VWP Permit Program is amending the existing VWP regulation for this general permit as necessary to implement the general permit. If the existing VWP general permit is not reissued prior to expiration on August 1, 2026, no general permit coverage can be extended to applicants submitting new applications for activities regulated by this general permit or to existing permittees wishing to continue authorized activities beyond August 1, 2026. These applicants would be required to wait for reissuance of the next applicable general permit or obtain a VWP individual permit instead.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The Board is amending the expiration and effective dates in the *Virginia Water Protection General Permit for Impacts Less Than One-Half Acre* for another ten-year term. The Board is proposing amendments related to transitioning between the expiring VWP general permit and the next consecutive VWP general permit. The amendments to the regulation include provisions related to application forms, form formats, coverage issuance, and continuation of activities. These amendments include updates to citations, references, form names and dates, as well as corrections of typographical and grammatical errors.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, permittees, and the agency of reissuing this general permit are that a Virginia Water Protection (VWP) general permit will continue to be available to applicants submitting new applications for regulated activities or to existing permittees wishing to continue authorized activities beyond August 1, 2026. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. There are no known disadvantages to the public, agency, or regulated community.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no regulatory requirements that are more restrictive than applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information.

Other State Agencies Particularly Affected

The Virginia Department of Transportation (VDOT) may be impacted by the regulatory changes. VDOT Forms are included in all four of the VWP general permits. VDOT was represented on the Technical Advisory Committee (TAC).

Localities Particularly Affected:

There are no localities that bear a disproportionate material impact as the general permit is available and applies statewide.

Other Entities Particularly Affected:

No other entities are particularly affected by the proposed regulation.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

A public comment period was held from August 25, 2025, through October 24, 2025. In addition to the comment period, a public hearing was held on Wednesday, October 15, 2025. One comment was received.

Commenter	Comment	Agency response
Natasha Nahas	How has "the board" determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect in stream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant	Coverage under a VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statutes, regulations, or ordinances, including erosion and sediment control, stormwater management, discharges to state waters, and the Chesapeake Bay Preservation Act requirements. The permit conditions included in the general permit

	impairment of state waters or fish and wildlife resources? What relevant information/data-recently collected (within the last permit cycle, or last two permit cycles) - was evaluated?	provide a reasonable assurance that if complied with the permitted activity will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Where there will be impacts, VWP permittees are required to first avoid and minimize impacts and then compensate for unavoidable impacts. Overall, water quality in Virginia has improved in recent years. As part of DEQ's Water Quality Assessment process, monitoring results are analyzed to determine if the water quality meets set standards and is clean enough for swimming, fishing and other uses. Virginia's comprehensive surface water quality monitoring strategy integrates both fixed-site (i.e., conventional) and probabilistic monitoring techniques to improve understanding of water quality conditions. Results of the most recent Water Quality Assessment, which are published in the Final 2024 305(b)/303(d) Water Quality Assessment Integrated Report, provide a summary of the water quality conditions in Virginia from Jan. 1, 2017, to Dec. 31, 2022. The results in the integrated report demonstrate overall trends in state waters and prompt action, including development of total maximum daily loads for waters that do not meet water quality standards. The main purpose of this amendment is to reissue the general permit regulation for another ten-year term. The only changes proposed to the general permit section (Section 100) are minor (updating the date of the new permit term, and other editorial corrections) and changes to maintain consistency with current stormwater program requirements. No changes have been made to the regulation in response to this comment.

Details of Changes Made Since the Previous Stage

List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and

*what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

No changes are being made to the final amendments since the proposed stage.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

In addition to the correction of spellings and citations and the replacement of the current effective and expiration dates with the new permit term dates throughout the general permit regulation, the following changes are being proposed:

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-660		Chapter Title.	Title revised to include "VWP" abbreviation for clarity and consistency.
9VAC25-660-25		Authorization for coverage under VWP general permit effective August 1, 2006.	Repealing Section 25 pertaining to transition of general permit coverage from 2006 to 2016. Section is obsolete and no longer relevant.
9VAC25-660-27		VWP general permit coverage; transition; continuation.	Title of Section revised to read: "VWP general permit and coverage; expiration; transition; continuation" to clarify requirements found in the section. Requirements identified in the subsections of this section were reorganized to: (1) clearly state the term of the general permit; (2) identify and carry through on the expectation for the need to reapply at the end of the permit term when a project has not been completed to help in the applicant or permittee's planning efforts and (3) include the existing Board administrative continuance provisions originally included in 9VAC25-660-35.
9VAC25-660-30		Authorization to impact surface waters	Language added to this section provides for additional flexibility in the application and

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			notification formats that are acceptable.
9VAC25-660-35		Administrative continuance	Repealing this section. The administrative continuance provisions have been moved to 9VAC25-660-27 C.
9VAC25-660-100		VWP General Permit	Replace references throughout the section to the outdated "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" with the "Virginia Erosion and Stormwater Management Regulation, 9VAC25-875." Part I E – combine subdivisions 1 and 2 associated with removing handbook reference. Stormwater management requirements vary depending upon the activities being conducted. Referencing the 9VAC25-875 regulation avoids setting conflicting requirements between the VWP general permit and the stormwater management requirements that may apply to a permittee needing both authorizations. Part II C 5 – replace 'substance' with 'substances'. Part III K – revise erroneous citations 9VAC25-210-180 and 62.1-44.15:25 with correct citations 9VAC25-210, 9VAC25-660, and 62.1-44.15(5). Replace 'stream bank' with 'streambank'.
FORMS		Forms incorporated as part of the general permit regulation	Updating forms to reference the current titles and versions.
DOCUMENTS INCORPORATED BY REFERENCE.		Documents incorporated as part of the general permit regulation by reference	Deletion of reference to obsolete "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation."

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Revising document title, version date, and link for the Virginia Invasive Plant Species List.
			Revising document title, version date, and link for <i>Classification of Wetlands and Deepwater Habitats of the United States</i> , adapted from Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. The general permit is available for use by the regulated community, including small businesses.

The reissuance of this VWP general permit accomplishes the objectives of applicable laws and minimizes the application and permit implementation costs to affected small business owners. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and permit application and compliance costs.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This general permit applies to activities causing permanent and temporary impacts to less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed. It has been designed to minimize burden on regulated entities while accomplishing the objectives of applicable laws and minimizes the application and permit implementation costs. This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficient, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-660
VAC Chapter title(s)	Virginia Water Protection General Permit for Impacts Less Than One-Half Acre
Action title	2026 Reissuance of General Permit- 9VAC25-660 (WP1)
Date this document prepared	April 25, 2025 – Resubmitted October 16, 2025 - No changes have been made to the regulation between the proposed and final stages. As a result, no changes have been made to this form.
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulation intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2.

Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	<u>Background</u> The general permit is a streamlined permitting approach for impacts to the Commonwealth's surface waters. The proposed action provides efficiency to the permit coverage process for activities having minor

	impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes. Virginia Wetland Protection (VWP) general permits expire every 10 years and must be reissued in order for permit coverage to be available to existing entities to continue coverage and for new entities to be able to obtain coverage for conducting this regulated activity. If the general permit is not re-issued, each member of the regulated community will need to obtain an individual VWP permit to conduct the regulated activity. This VWP general permit WP1 expires August 1, 2026, and must be reissued to make coverage available for activities having permanent and temporary impacts of less than one-half acre of nontidal wetlands or open water and up to 300 linear feet of nontidal stream bed after August 1, 2026. For this reason, the costs associated with obtaining an individual VWP permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Direct Costs: Permit application fees apply to VWP general permit WP1 coverages once a certain amount of impacts is reached (more than one-tenth acre of wetlands/open water or more than 300 linear feet of stream channel) – below these limits, the fee is \$0. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. WP1 fee is \$600. The individual permit fees range from \$2,400 to a maximum of \$60,000. Because this general permit has lower allowable impact limits, it is not used as often as other VWP general permits. Approximately two WP1 coverages that require a fee are issued per year. Indirect Costs: The proposed amendments are not expected to result in any additional indirect costs for the regulated community since the changes do not add requirements or impose any additional burdens on them. Indirect costs may include fees charged to applicants who contract assistance through professional services to complete and submit application forms. However, the cost involved to prepare an application for a VWP general

	permit coverage is considerably less than the cost for a VWP individual permit due to the amount of time needed to gather and provide required information, and the cost to place a required public comment notice in one or more newspapers. The use of professional services by applicants is optional. Direct Benefits: The number of regulated entities covered by the VWP general permit WP1, and who will need to complete authorized activities but that will no longer have coverage after August 1, 2026, is low compared to the other VWP general permit types. Based on data in DEQ's Comprehensive Environmental Data System (CEDs), likely less than five new regulated entities are expected to need to receive coverage by August 1, 2026, adding somewhat to the potential pool of permittees unable to continue or complete authorized activities. Regardless, reissuance of this general permit required in Virginia Code allows applicable permittees to continue or complete projects with little to no interruption. Reissuance with the amendments also ensures that new entities are able to obtain coverage for small impacts to surface waters before and after August 1, 2026. The proposed amendments clarify several provisions in the VWP general permit regulation, including transitional provisions described above, that improve understanding among the regulated community, saving time in planning projects and preparing applications. Indirect Benefits: The reissuance of this VWP general permit may indirectly benefit economic development because it allows for the issuance of a general permit in regulation that is protective of human health and the environment, and is a less burdensome authorization pathway for the regulated community than having to obtain a VWP individual permit. Regulating discharges into state surface waters, including wetlands, aids in creating cleaner waters and appealing places to live, work, and recreate in Virginia, thus benefiting tourism and economic development.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct and indirect costs. No indirect costs are expected due to the limited extent of the changes being	(b) \$600 for each general permit coverage requiring a fee.

	made to the general permit regulation.	
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Tableau database reporting software; 9VAC25-20 Fees for Permits and Certificates	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: If the regulation remains as is, the general permit expires on August 1, 2026, and no VWP general permit option will be available for use after that date. If there is no VWP general permit coverage option, then one direct cost is applicants having only one choice for project approval, the VWP individual permit. Application fees for this permit type are listed in 9VAC25-20; are based on the amount of impacts and/or activities; and are substantially higher than the application fees currently charged for VWP general permit coverage, which is maxed out at two acres. The maximum fee for a general permit coverage is \$2,400, and the maximum fee for an individual permit is \$60,000. Indirect Costs: An indirect cost is that existing permittees needing to complete projects will no longer have coverage, and should the project not be complete, they would have to stop work or risk enforcement action by one or more agencies and obtain an individual permit. Also, some projects will likely not be implemented due to the increased time period, extra informational requirements, and public involvement necessary to issue a VWP individual permit versus a general permit coverage. Direct/Indirect Benefits:

	There are no direct or indirect benefits to the regulated public or the Commonwealth.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) As noted above, the Commonwealth stands to lose revenue directly and indirectly from the absence of being able to issue VWP general permit coverages.	(b)None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Regulating activities through the issuance of general permit regulations and coverages is an alternative streamlined approach that is used to regulate entities that conduct similar activities as opposed to requiring individual permits for those activities. Direct Costs: A benefit of this general permit is its lower cost to permittees relative to the cost to obtaining a VWP individual permit. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. The coverage fees for a general permit range from \$0 to a maximum of \$2,400; the individual permit fees range from \$2,400 to a maximum of \$60,000. Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) See above for an analysis of the direct costs of an individual permit.	(b)None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, VWP individual permits would be required to conduct the regulated activities.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Assistance	N/A	
(5) Information Sources	N/A	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the VWP general permit regulation. Single family residences do not typically conduct activities that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry's use of the VWP general permit. While not typical, a family or families may need to conduct activities in state surface waters that are regulated. Certain residential activities in wetlands do not require a VWP permit of any type, but in the rare case such a permit would be required, the VWP general permit coverage offers a streamlined pathway for approval at a lower cost. Also, if this general permit did not exist, individual permits at a higher cost may be required for the residential activities. Also, if the applicant were in the commercial or industrial sector, and the higher-fee VWP individual permit was necessary, costs could be passed on to consumers, including families.	
(4) Information Sources	N/A	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a

	streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, a VWP individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for certain activities in state surface waters.	
(4) Alternatives	N/A	
(5) Information Sources	N/A	

Changes to Number of Regulatory Requirements**Table 5: Regulatory Reduction**

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-660-25	(M/A):	1	0	-1	-1
	(D/A):	1	0	-1	-1
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-660-27	(M/A):	0	0	0	0
	(D/A):	0	+1	0	+1
	(M/R):	3	0	0	0
	(D/R):	0	+1	0	+1
9VAC25-660-30	(M/A):	5	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-660-35	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	1	0	-1	-1
9VAC25-660-100	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	54	0	0	0
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): -1
					(D/A): 0
					(M/R): 0
					(D/R): 0

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-660 entire chapter	Cost of individual permit vs VWP general permit WP1	Individual permit cost if a general permit is not reissued - \$2,400 ¹ (Does not include the time and costs for the applicant to prepare the individual permit application, including public notice fees.) Minimum cost for an average of two issuances per year could total \$4,800.	Maximum cost per WP1 general permit coverage - \$600 ² (Fee for this general permit is \$600 based on total allowable impacts. Averaging two issuances per year could total about \$1,200.)	Savings of \$1,800 per coverage, plus the additional expenses related to the issuance of a VWP individual permit (variable case-by-case).
9VAC25-660 entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2024) - 156 days ³	Average amount of time to issue general permit coverage (FY2024) – 42 days ⁴	Permittee obtains permit coverage on average 114 days sooner under the general permit.

¹ 9VAC25-20, based on maximum one-half acre of impacts

² Ibid.

³ DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Tableau database reporting software

⁴ Ibid.

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
N/A	N/A	N/A

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB E

Project 8057 - Exempt Final

State Water Control Board

2026 Reissuance of General Permit – 9VAC25-670

Chapter 670

Virginia Water Protection (VWP) General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities

9VAC25-670-25. Authorization for coverage under VWP general permit effective August 1, 2006. (Repealed.)

A. All complete applications or notifications received by the department through 11:59 p.m. on August 1, 2016, shall be processed in accordance with the VWP general permit regulation in effect August 1, 2006, through August 1, 2016. If the application or notification is incomplete or if there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a completeness determination, the applicant shall reapply for coverage under the VWP general permit effective August 2, 2016, or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. VWP general permit authorizations granted through 11:59 p.m. on August 1, 2016, shall remain in full force and effect until 11:59 p.m. on the expiration date stated on the VWP authorization cover page, unless otherwise revoked or terminated or unless a notice of project completion is received by the department on or before that date. Any permittee that desires to continue an authorized activity beyond the stated expiration date must reapply for coverage under the VWP general permit effective August 2, 2016, pursuant to its terms, standards, and conditions, or apply for a VWP individual permit, including payment of any required permit application fee. This section shall only apply to permittees holding valid authorizations for coverage granted under the VWP general permit effective August 1, 2006, through August 1, 2016.

9VAC25-670-27. VWP general permit and coverage; expiration; transition; continuation.

A. The general permit in 9VAC25-670-100 is effective August 2, 2026, and expires August 1, 2036. All applications or notifications received on or after August 2, 2016 2026, will be processed in accordance with the VWP general permit regulation effective August 2, 2016 2026. If there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a permit coverage decision, the applicant shall reapply for coverage under the next consecutive VWP general permit or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. The general permit in 9VAC25-670-100 is effective August 2, 2016, and expires August 1, 2026. Any coverage that is granted pursuant to 9VAC25-670-30 shall remain in full force and effect until 11:59 p.m. on August 1, 2026 2036, unless the general permit coverage is terminated or revoked on or before this date. Where a permittee that has received general permit coverage desires to continue or complete the authorized activities beyond August 1, 2026 2036, the permittee shall reapply for new general permit coverage or for a VWP individual permit, including payment of any required permit application fee. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

C. In any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with

this chapter and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit. Application may be made at any time for a VWP individual permit in accordance with 9VAC25-210. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

9VAC25-670-30. Authorization to impact surface waters.

A. Any person granted coverage under the VWP general permit effective August 2, 2016 2026, may permanently or temporarily impact up to one acre of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and other utility line activities, provided that:

1. The applicant submits notification as required in ~~9VAC25-670-50 and 9VAC25-670-60~~ this chapter using forms of application or notification.
2. The applicant remits any required permit application fee.
3. The applicant receives general permit coverage from the Department of Environmental Quality and complies with the limitations and other requirements of the VWP general permit; the general permit coverage letter; the Clean Water Act, as amended; and the State Water Control Law and attendant regulations.
4. The applicant has not been required to obtain a VWP individual permit under 9VAC25-210 for the proposed project impacts. The applicant, at ~~his~~ the applicant's discretion, may seek a VWP individual permit or coverage under another applicable VWP general permit in lieu of this VWP general permit.
5. Impacts, both temporary and permanent, result from a single and complete project, including all attendant features.
 - a. Where a utility line has multiple crossings of surface waters (several single and complete projects) with more than minimal impacts, the department may, at its discretion, require a VWP individual permit for the project.
 - b. Where an access road segment (e.g., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of surface waters (several single and complete projects), the department may, at its discretion, require a VWP individual permit.
6. The stream impact criterion applies to all components of the project, including any structures and stream channel manipulations.
7. When functions of surface waters are permanently adversely affected, such as for conversion of forested to emergent wetlands in a permanently maintained utility right-of-way, compensation shall be required for impacts outside of a ~~20-foot-wide~~ 20-foot-wide permanently maintained corridor. Compensation shall not be required for impacts within the ~~20-foot-wide~~ 20-foot-wide portion of permanently maintained corridor. For example, with a ~~50-foot-wide~~, 50-foot-wide permanently maintained corridor, compensation on each side of the 20-foot portion would be required for impacts that occur between the 20-foot and the 50-foot marks.
8. When required, compensation for unavoidable impacts is provided in accordance with § 62.1-44.15:23 of the Code of Virginia, 9VAC25-670-70, and 9VAC25-210-116.

B. Activities that may be granted coverage under this VWP general permit include the following:

1. The construction, maintenance, or repair of utility lines, including outfall structures and the excavation, backfill, or bedding for utility lines, provided there is no change in preconstruction contours.

2. The construction, maintenance, or expansion of a substation facility or pumping station associated with a power line or utility line.

3. The construction or maintenance of foundations for overhead utility line towers, poles, or anchors, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a single pad) are used where feasible.

4. The construction of access roads for the construction or maintenance of utility lines including overhead power lines and utility line substations, provided the activity in combination with any substation does not exceed the threshold limit of this VWP general permit.

C. The board waives the requirement for coverage under a VWP general permit for activities that occur in an isolated wetland of minimal ecological value, as defined in 9VAC25-210-10. Upon request by the department, any person claiming this waiver shall demonstrate to the satisfaction of the department that he qualifies for the waiver.

D. Coverage under this VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

E. Coverage under a nationwide or regional permit promulgated by the U.S. Army Corps of Engineers (USACE), and for which the department has issued § 401 certification in accordance with 9VAC25-210-130 H as of August 2, 2016 2026, shall constitute coverage under this VWP general permit unless (i) a state program general permit (SPGP) is required and granted for the activity or impact; or (ii) coverage under a VWP general permit is not allowed pursuant to subdivision D 2 of § 62.1-44.15:21 of the State Water Control Law.

F. When the department determines on a case-by-case basis that concerns for water quality and the aquatic environment so indicate, the department may require a VWP individual permit in accordance with 9VAC25-210-130 B rather than granting coverage under this VWP general permit.

9VAC25-670-35. Administrative continuance. (Repealed.)

~~Beginning on August 2, 2016, in any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with 9VAC25-670-50 and 9VAC25-670-60 and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit.~~

9VAC25-670-100. VWP general permit.

VWP GENERAL PERMIT NO. WP2 FOR FACILITIES AND ACTIVITIES OF UTILITIES AND PUBLIC SERVICE COMPANIES REGULATED BY THE FEDERAL ENERGY REGULATORY COMMISSION OR THE STATE CORPORATION COMMISSION AND OTHER UTILITY LINE ACTIVITIES UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE WATER CONTROL LAW

Effective date: August 2, 2016 2026

Expiration date: August 1, 2026 2036

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of surface waters or fish and wildlife resources. In issuing this VWP general permit, the board has not taken into consideration the structural stability of any proposed activities.

The permanent or temporary impact of up to one acre of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general permit set forth herein; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it.

Part I.

Special Conditions.

A. Authorized activities.

1. The activities authorized by this chapter shall not cause more than the permanent or temporary impacts of up to one acre of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the department in the coverage letter, if any, shall be enforceable conditions of this permit.

2. Any changes to the authorized permanent impacts to surface waters shall require a notice of planned change in accordance with 9VAC25-670-80. An application or request for modification to coverage or another VWP permit application may be required.

3. Any changes to the authorized temporary impacts to surface waters shall require written notification to and approval from the Department of Environmental Quality in accordance with 9VAC25-670-80 prior to initiating the impacts and restoration to preexisting conditions in accordance with the conditions of this permit.

4. Modification to compensation requirements may be approved at the request of the permittee when a decrease in the amount of authorized surface waters impacts occurs, provided that the adjusted compensation meets the initial compensation goals.

B. Overall conditions.

1. The activities authorized by this VWP general permit shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of the Code of Virginia.

2. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Pipes and culverts placed in streams must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless otherwise specifically approved by the Department of Environmental Quality on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be

countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters, unless the area is contained within a cofferdam and the work is performed in the dry or unless otherwise approved by the Department of Environmental Quality. Excess or waste concrete shall not be disposed of in flowing surface waters or washed into flowing surface waters.

4. All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

5. Erosion and sedimentation controls shall be designed ~~in accordance with~~ to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875). These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area is stabilized and shall then be removed.

6. Exposed slopes and streambanks shall be stabilized immediately upon completion of work in each permitted area. All denuded areas shall be properly stabilized ~~in accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875)~~.

7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways), and demolition activities associated with the project shall be accomplished in such a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this VWP general permit.

8. No machinery may enter flowing waters, unless authorized by this VWP general permit or approved prior to entry by the Department of Environmental Quality.

9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats, geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum extent practicable. Equipment and materials shall be removed immediately upon completion of work.

10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of authorized activities and within the project or right-of-way limits shall be clearly flagged or marked for the life of the construction activity at that location to preclude any unauthorized disturbances to these surface waters and compensatory mitigation areas during construction. The permittee shall notify contractors that no activities are to occur in these marked surface waters.

11. Temporary disturbances to surface waters during construction shall be avoided and minimized to the maximum extent practicable. All temporarily disturbed wetland areas shall be restored to preexisting conditions within 30 days of completing work at each respective temporary impact area, which shall include reestablishing preconstruction elevations and contours with topsoil from the impact area where practicable and planting or seeding with appropriate wetland vegetation according to cover type (i.e., emergent, scrub-shrub, or forested). The permittee shall take all appropriate measures to promote and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation through the second year post-disturbance. All temporarily impacted streams and streambanks shall be restored to their preconstruction elevations and contours with topsoil from the impact area where practicable within 30 days following the construction at that

stream segment. Streambanks shall be seeded or planted with the same vegetation cover type originally present, including any necessary, supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

12. Materials (including fill, construction debris, and excavated and woody materials) temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately stabilized to prevent entry into state waters, managed such that leachate does not enter state waters, and completely removed within 30 days following completion of that construction activity. Disturbed areas shall be returned to preconstruction elevations and contours with topsoil from the impact areas where practicable; restored within 30 days following removal of the stockpile; and restored with the same vegetation cover type originally present, including any necessary, supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

13. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, french drains, or other similar structures.

14. The permittee shall employ measures to prevent spills of fuels or lubricants into state waters.

15. The permittee shall conduct his activities in accordance with the time-of-year restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia Marine Resources Commission, or other interested and affected agencies, as contained, when applicable, in a Department of Environmental Quality VWP general permit coverage letter, and shall ensure that all contractors are aware of the time-of-year restrictions imposed.

16. Water quality standards shall not be violated as a result of the construction activities.

17. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless otherwise authorized by the Department of Environmental Quality, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream channel can begin.

C. Road crossings.

1. Access roads and associated bridges, pipes, and culverts shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable. Access roads constructed above preconstruction elevations and contours in surface waters must be bridged, piped, or culverted to maintain surface flows.

2. Installation of road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions, or similar structures.

D. Utility lines.

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area must be returned to its preconstruction elevations and contours with topsoil from the impact area where practicable and restored within 30 days of completing work in the area, unless otherwise authorized by the Department of Environmental Quality. Restoration shall be the seeding or planting of the same vegetation

cover type originally present, including any necessary, supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

2. Material resulting from trench excavation may be temporarily sidecast into wetlands, not to exceed 90 days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a trench drain effect.). For example, utility lines may be backfilled with clay blocks to ensure that the trench does not drain surface waters through which the utility line is installed.

E. Stream modification and ~~stream bank~~ streambank protection.

1. Riprap bank stabilization and riprap aprons for outfalls shall be of an appropriate size and design ~~in accordance to comply with the requirements of the~~ Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875).

~~2. Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.~~

~~3. 2.~~ For ~~stream bank~~ streambank protection activities, the structure and backfill shall be placed as close to the ~~stream bank~~ streambank as practicable. No material shall be placed in excess of the minimum necessary for erosion protection.

~~4. 3.~~ All ~~stream bank~~ streambank protection structures shall be located to eliminate or minimize impacts to vegetated wetlands to the maximum extent practicable.

~~5. 4.~~ Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of submerged sills or breakwaters.

~~6. 5.~~ Redistribution of existing stream substrate for the purpose of erosion control is prohibited.

~~7. 6.~~ No material removed from the stream bottom shall be disposed of in surface waters, unless otherwise authorized by this VWP general permit.

Part II.

Construction and Compensation Requirements, Monitoring, and Reporting.

A. Minimum compensation requirements.

1. The permittee shall provide any required compensation for impacts in accordance with the conditions in this VWP general permit, the coverage letter, and the chapter promulgating the general permit. For all compensation that requires a protective mechanism, including preservation of surface waters or buffers, the permittee shall record the approved protective mechanism in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

2. Compensation options that may be considered under this VWP general permit shall meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and 9VAC25-670-70.

3. The permittee-responsible compensation site ~~or sites~~ depicted in the conceptual compensation plan submitted with the application shall constitute the compensation site. A site change may require a modification to coverage.

4. For compensation involving the purchase of mitigation bank credits or the purchase of in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas until documentation of the mitigation bank credit purchase or of the in-lieu fee program credit purchase has been submitted to and received by the Department of Environmental Quality.

5. The final compensation plan shall be submitted to and approved by the department prior to a construction activity in permitted impact areas. The department shall review and provide written comments on the final plan within 30 days of receipt or it shall be deemed approved. The final plan as approved by the department shall be an enforceable requirement of any coverage under this VWP general permit. Deviations from the approved final plan shall be submitted and approved in advance by the department.

a. The final permittee-responsible wetlands compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) A summary of the type and acreage of existing wetland impacts anticipated during the construction of the compensation site and the proposed compensation for these impacts; a site access plan; a monitoring plan, including proposed success criteria, monitoring goals, and the location of photo-monitoring stations, monitoring wells, vegetation sampling points, and reference wetlands or streams, if available; an abatement and control plan for undesirable plant species; an erosion and sedimentation control plan; a construction schedule; and the final protective mechanism for the protection of the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

b. The final permittee-responsible stream compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) An evaluation, discussion, and plan drawing ~~or drawings~~ of existing conditions on the proposed compensation stream, including the identification of functional and physical deficiencies for which the measures are proposed, and summary of geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth ratio, sinuosity, slope, substrate, etc.); a site access plan; a monitoring plan, including a monitoring and reporting schedule, monitoring design and methodologies for success, proposed success criteria, location of photo-monitoring stations, vegetation sampling points, survey points, bank pins, scour chains, and reference streams; an abatement and control plan for undesirable plant species; an erosion and sedimentation control plan, if appropriate; a construction schedule; a plan-view drawing depicting the pattern and all compensation measures being employed; a profile drawing; cross-sectional drawing ~~or drawings~~ of the proposed compensation stream; and the final protective mechanism for the protection of the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned

lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

6. The following criteria shall apply to permittee-responsible wetland or stream compensation:

a. The vegetation used shall be native species common to the area, shall be suitable for growth in local wetland or riparian conditions, and shall be from areas within the same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural Resources Conservation Service Land Resource Region as that of the project site. Planting of woody plants shall occur when vegetation is normally dormant, unless otherwise approved in the final wetlands or stream compensation plan or plans.

b. All work in permitted impact areas shall cease if compensation site construction has not commenced within 180 days of commencement of project construction, unless otherwise authorized by the department.

c. The Department of Environmental Quality shall be notified in writing prior to the initiation of construction activities at the compensation site.

d. Point sources of stormwater runoff shall be prohibited from entering a wetland compensation site prior to treatment by appropriate best management practices. Appropriate best management practices may include sediment traps, grassed waterways, vegetated filter strips, debris screens, oil and grease separators, or forebays.

e. The success of the compensation shall be based on meeting the success criteria established in the approved final compensation plan.

f. If the wetland or stream compensation area fails to meet the specified success criteria in a particular monitoring year, other than the final monitoring year, the reasons for this failure shall be determined and a corrective action plan shall be submitted to the Department of Environmental Quality for approval with or before that year's monitoring report. The corrective action plan shall contain at a minimum the proposed actions, a schedule for those actions, and a monitoring plan, and shall be implemented by the permittee in accordance with the approved schedule. Should significant changes be necessary to ensure success, the required monitoring cycle shall begin again, with monitoring year one being the year that the changes are complete, as confirmed by the Department of Environmental Quality. If the wetland or stream compensation area fails to meet the specified success criteria by the final monitoring year or if the wetland or stream compensation area has not met the stated restoration goals, reasons for this failure shall be determined and a corrective action plan, including proposed actions, a schedule, and a monitoring plan, shall be submitted with the final year monitoring report for Department of Environmental Quality approval. Corrective action shall be implemented by the permittee in accordance with the approved schedule. Annual monitoring shall be required to continue until two sequential, annual reports indicate that all criteria have been successfully satisfied and the site has met the overall restoration goals (e.g., that corrective actions were successful).

g. The surveyed wetland boundary for the compensation site shall be based on the results of the hydrology, soils, and vegetation monitoring data and shall be shown on the site plan. Calculation of total wetland acreage shall be based on that boundary at the end of the monitoring cycle. Data shall be submitted by December 31 of the final monitoring year.

h. Herbicides or algicides shall not be used in or immediately adjacent to the compensation site or sites without prior authorization by the department. All vegetation

removal shall be done by manual means, unless authorized by the Department of Environmental Quality in advance.

B. Impact site construction monitoring.

1. Construction activities authorized by this permit that are within impact areas shall be monitored and documented. The monitoring shall consist of:

a. Preconstruction photographs taken at each impact area prior to initiation of activities within impact areas. Photographs shall remain on the project site and depict the impact area and the nonimpacted surface waters immediately adjacent to and downgradient of each impact area. Each photograph shall be labeled to include the following information: permit number, impact area number, date and time of the photograph, name of the person taking the photograph, photograph orientation, and photograph subject description.

b. Site inspections shall be conducted by the permittee or the permittee's qualified designee once every calendar month during activities within impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity and within the project or right-of-way limits; and all on-site permanent preservation areas required under this permit. Observations shall be recorded on the inspection form provided by the Department of Environmental Quality. The form shall be completed in its entirety for each monthly inspection and shall be kept on site and made available for review by the Department of Environmental Quality staff upon request during normal business hours. Inspections are not required during periods of no activity within impact areas.

2. Monitoring of water quality parameters shall be conducted during permanent relocation of perennial streams through new channels in the manner noted in this subdivision. The permittee shall report violations of water quality standards to the Department of Environmental Quality in accordance with the procedures in ~~9VAC25-670-100~~ Part II E of the permit. Corrective measures and additional monitoring may be required if water quality standards are not met. Reporting shall not be required if water quality standards are not violated.

a. A sampling station shall be located upstream and immediately downstream of the relocated channel.

b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every 30 minutes for at least two hours at each station prior to opening the new channels and immediately before opening new channels.

c. Temperature, pH, and D.O. readings shall be taken after opening the channels and every 30 minutes for at least three hours at each station.

C. Permittee-responsible wetland compensation site monitoring.

1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site or sites, including invert elevations for all water elevation control structures and spot elevations throughout the site or sites. Aerial surveys shall include the variation from actual ground conditions, such as +/- plus or minus 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

2. Photographs shall be taken at the compensation site or sites from the permanent markers identified in the final compensation plan, and established to ensure that the same locations and view directions at the site ~~or sites~~ are monitored in each monitoring period. These photographs shall be taken after the initial planting and at a time specified in the final compensation plan during every monitoring year.

3. Compensation site monitoring shall begin on the first day of the first complete growing season (monitoring year one) after wetland compensation site construction activities, including planting, have been completed. Monitoring shall be required for monitoring years one, two, three, and five, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the fifth monitoring year, then monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

4. The establishment of wetland hydrology shall be measured during the growing season, with the location and number of monitoring wells, and frequency of monitoring for each site, set forth in the final monitoring plan. Hydrology monitoring well data shall be accompanied by precipitation data, including rainfall amounts, either from on site, or from the closest weather station. Once the wetland hydrology success criteria have been satisfied for a particular monitoring year, weekly monitoring may be discontinued for the remainder of that monitoring year following Department of Environmental Quality approval. After a period of three monitoring years, the permittee may request that hydrology monitoring be discontinued, providing that adequate hydrology has been established and maintained. Hydrology monitoring shall not be discontinued without written approval from the Department of Environmental Quality.

5. The presence of hydric soils or soils under hydric conditions shall be evaluated in accordance with the final compensation plan.

6. The establishment of wetland vegetation shall be in accordance with the final compensation plan. Monitoring shall take place in August, September, or October during the growing season of each monitoring year, unless authorized in the monitoring plan.

7. The presence of undesirable plant species shall be documented.

8. All wetland compensation monitoring reports shall be submitted in accordance with ~~9VAC25-670-100~~ Part II E 6 of the permit.

D. Permittee-responsible stream compensation and monitoring.

1. Riparian buffer restoration activities shall be detailed in the final compensation plan and shall include, as appropriate, the planting of a variety of native species currently growing in the site area, including appropriate seed mixtures and woody species that are bare root, balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the ~~stream bank~~ streambank at bankfull elevation landward on both sides of the stream, shall be required where practical.

2. The installation of root wads, vanes, and other instream structures, shaping of the ~~stream banks~~ streambanks, and channel relocation shall be completed in the dry whenever practicable.

3. Livestock access to the stream and designated riparian buffer shall be limited to the greatest extent practicable.

4. Stream channel restoration activities shall be conducted in the dry or during low flow conditions. When site conditions prohibit access from the streambank or upon prior authorization from the Department of Environmental Quality, heavy equipment may be authorized for use within the stream channel.

5. Photographs shall be taken at the compensation site from the vicinity of the permanent photo-monitoring stations identified in the final compensation plan. The photograph orientation shall remain constant during all monitoring events. At a minimum, photographs shall be taken from the center of the stream, facing downstream, with a sufficient number of photographs to view the entire length of the restoration site. Photographs shall document the completed restoration conditions. Photographs shall be taken prior to site activities, during instream and riparian compensation construction activities, within one week of completion of activities, and during at least one day of each monitoring year to depict restored conditions.

6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site ~~or sites~~. Aerial surveys shall include the variation from actual ground conditions, such as ~~±~~ plus or minus 0.2 feet. The survey shall be certified by the licensed surveyor or by a registered, professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations from the final compensation plans in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

7. Compensation site monitoring shall begin on day one of the first complete growing season (monitoring year one) after stream compensation site construction activities, including planting, have been completed. Monitoring shall be required for monitoring years one and two, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the final monitoring year, then monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

8. All stream compensation site monitoring reports shall be submitted in accordance with ~~9VAC25-670-100~~ Part II E 6 of the permit.

E. Reporting.

1. Written communications required by this VWP general permit shall be submitted to the appropriate Department of Environmental Quality office. The VWP general permit tracking number shall be included on all correspondence.

2. The Department of Environmental Quality shall be notified in writing prior to the start of construction activities at the first permitted impact area.

3. A construction status update form provided by the Department of Environmental Quality shall be completed and submitted to the Department of Environmental Quality twice per year for the duration of coverage under a VWP general permit. Forms completed in June shall be submitted by or on July 10, and forms completed in December shall be submitted by or on January 10. The form shall include reference to the VWP permit tracking number and one of the following statements for each authorized surface water impact location:

- a. Construction activities have not yet started;
- b. Construction activities have started;
- c. Construction activities have started but are currently inactive; or
- d. Construction activities are complete.

4. The Department of Environmental Quality shall be notified in writing within 30 days following the completion of all activities in all authorized impact areas.

5. The Department of Environmental Quality shall be notified in writing prior to the initiation of activities at the permittee-responsible compensation site. The notification shall include a projected schedule of activities and construction completion.

6. All permittee-responsible compensation site monitoring reports shall be submitted annually by December 31, with the exception of the last year, in which case the report shall be submitted at least 60 days prior to the expiration of the general permit, unless otherwise approved by the Department of Environmental Quality.

a. All wetland compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site, including a site location map identifying photo-monitoring stations, vegetative and soil monitoring stations, monitoring wells, and wetland zones.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Analysis of all hydrology information, including monitoring well data, precipitation data, and gauging data from streams or other open water areas, as set forth in the final compensation plan.

(5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.

(6) Analysis of all vegetative community information, including woody and herbaceous species, both planted and volunteers, as set forth in the final compensation plan.

(7) Photographs labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description of the photograph subject. This information shall be provided as a separate attachment to each photograph, if necessary. Photographs taken after the initial planting shall be included in the first monitoring report after planting is complete.

(8) Discussion of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site.

(10) Discussion of corrective measures or maintenance activities to control undesirable species, to repair damaged water control devices, or to replace damaged planted vegetation.

(11) Corrective action plan that includes proposed actions, a schedule, and monitoring plan.

b. All stream compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site, including a site location map identifying photo-monitoring stations and monitoring stations.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Evaluation and discussion of the monitoring results in relation to the success criteria and overall goals of compensation.

(5) Photographs shall be labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description of the photograph subject. Photographs taken prior to compensation site construction activities, during instream and riparian restoration

activities, and within one week of completion of activities shall be included in the first monitoring report.

(6) Discussion of alterations, maintenance, or major storm events resulting in significant change in stream profile or cross section, and corrective actions conducted at the stream compensation site.

(7) Documentation of undesirable plant species and summary of abatement and control measures.

(8) Summary of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site, and as-built survey, if applicable.

(10) Corrective action plan that includes proposed actions, a schedule and monitoring plan.

(11) Additional submittals that were approved by the Department of Environmental Quality in the final compensation plan.

7. The permittee shall notify the Department of Environmental Quality in writing when unusual or potentially complex conditions are encountered that require debris removal or involve potentially toxic ~~substance~~ substances. Measures to remove the obstruction, material, or toxic substance or to change the location of a structure are prohibited until approved by the Department of Environmental Quality.

8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday, the appropriate Department of Environmental Quality regional office shall be notified; otherwise, the Department of Emergency Management shall be notified at 1-800-468-8892.

9. Violations of state water quality standards shall be reported to the appropriate Department of Environmental Quality office no later than the end of the business day following discovery.

10. The permittee shall notify the Department of Environmental Quality no later than the end of the third business day following the discovery of additional impacts to surface waters, including wetlands, stream channels, and open water that are not authorized by the Department of Environmental Quality or to any required preservation areas. The notification shall include photographs, estimated acreage or linear footage of impacts, and a description of the impacts.

11. Submittals required by this VWP general permit shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Part III.

Conditions Applicable to All VWP General Permits.

649 A. Duty to comply. The permittee shall comply with all conditions, limitations, and other
650 requirements of the VWP general permit; any requirements in coverage granted under this VWP
651 general permit; the Clean Water Act, as amended; and the State Water Control Law and
652 regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a
653 violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement
654 action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage
655 revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification
656 to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve
657 the permittee of the duty to comply with all applicable federal and state statutes, regulations, and
658 toxic standards and prohibitions.

659 B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent
660 impacts in violation of the VWP general permit that may have a reasonable likelihood of adversely
661 affecting human health or the environment.

662 C. Reopener. This VWP general permit may be reopened to modify its conditions when the
663 circumstances on which the previous VWP general permit was based have materially and
664 substantially changed, or special studies conducted by the department or the permittee show
665 material and substantial change since the time the VWP general permit was issued and thereby
666 constitute cause for revoking and reissuing the VWP general permit.

667 D. Compliance with state and federal law. Compliance with this VWP general permit
668 constitutes compliance with the VWP permit requirements of the State Water Control Law.
669 Nothing in this VWP general permit shall be construed to preclude the institution of any legal
670 action under or relieve the permittee from any responsibilities, liabilities, or other penalties
671 established pursuant to any other state law or regulation or under the authority preserved by §
672 510 of the Clean Water Act.

673 E. Property rights. The issuance of this VWP general permit does not convey property rights
674 in either real or personal property or any exclusive privileges, nor does it authorize injury to private
675 property, any invasion of personal property rights, or any infringement of federal, state, or local
676 laws or regulations.

677 F. Severability. The provisions of this VWP general permit are severable.

678 G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
679 department or any duly authorized agent of the department, at reasonable times and under
680 reasonable circumstances, to enter upon the permittee's property, public or private, and have
681 access to inspect and copy any records that must be kept as part of the VWP general permit
682 conditions; to inspect any facilities, operations, or practices (including monitoring and control
683 equipment) regulated or required under the VWP general permit; and to sample or monitor any
684 substance, parameter, or activity for the purpose of ensuring compliance with the conditions of
685 the VWP general permit or as otherwise authorized by law. For the purpose of this section, the
686 time for inspection shall be deemed reasonable during regular business hours. Nothing contained
687 ~~herein in this general permit~~ shall make an inspection time unreasonable during an emergency.

688 H. Transferability of VWP general permit coverage. VWP general permit coverage may be
689 transferred to another permittee when all of the criteria listed in this subsection are met. On the
690 date of the VWP general permit coverage transfer, the transferred VWP general permit coverage
691 shall be as fully effective as if it had been granted directly to the new permittee.

692 1. The current permittee notifies the department of the proposed transfer of the general
693 permit coverage and provides a written agreement between the current and new
694 permittees containing a specific date of transfer of VWP general permit responsibility,
695 coverage, and liability to the new permittee, or that the current permittee will retain such
696 responsibility, coverage, or liability, including liability for compliance with the requirements
697 of enforcement activities related to the authorized activity.

2. The department does not within the 15 days notify the current and new permittees of the board's intent to modify or revoke and reissue the VWP general permit.

I. Notice of planned change. VWP general permit coverage may be modified subsequent to issuance in accordance with 9VAC25-670-80.

J. VWP general permit coverage termination for cause. VWP general permit coverage is subject to termination for cause by the department after public notice and opportunity for a hearing in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

1. Noncompliance by the permittee with any provision of this chapter, any condition of the VWP general permit, or any requirement in general permit coverage;
2. The permittee's failure in the application or during the process of granting VWP general permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;
3. The permittee's violation of a special or judicial order;
4. A determination by the department that the authorized activity endangers human health or the environment and can be regulated to acceptable levels by a modification to the VWP general permit coverage or a termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP general permit; or
6. A determination that the authorized activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

K. The department may terminate VWP general permit coverage without cause when the permittee is no longer a legal entity due to death or dissolution or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the department shall follow the applicable procedures for termination under ~~9VAC25-210-180~~ 9VAC25-210, this chapter, and § 62.1-44.15:25 subdivision (5) of § 62.1-44.15 of the Code of Virginia.

L. VWP general permit coverage termination by consent. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all authorized activities requiring notification under 9VAC25-670-50 A and all compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this termination of coverage on behalf of the department. The permittee shall submit the following information:

1. Name, mailing address, and telephone number;
2. Name and location of the activity;
3. The VWP general permit tracking number; and
4. One of the following certifications:
 - a. For project completion:

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage have been completed. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the

submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage."

b. For project cancellation:

"I certify under penalty of law that the activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage will not occur. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

c. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by the Department of Environmental Quality, and the following certification statement:

"I certify under penalty of law that the activities or the required compensatory mitigation authorized by the VWP general permit and general permit coverage have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which VWP general permit coverage has been granted in order to maintain compliance with the conditions of the VWP general permit or coverage.

P. Duty to provide information.

1. The permittee shall furnish to the department any information that the department may request to determine whether cause exists for modifying, revoking, or terminating VWP permit coverage or to determine compliance with the VWP general permit or general permit coverage. The permittee shall also furnish to the department, upon request, copies of records required to be kept by the permittee.

2. Plans, maps, conceptual reports, and other relevant information shall be submitted as required by the department prior to commencing construction.

Q. Monitoring and records requirements.

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP general permit. Analysis of

pollutants will be conducted according to 40 CFR Part 136 as published in the July 1, 2024, update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP general permit, and records of all data used to complete the application for coverage under the VWP general permit, for a period of at least three years from the date of general permit expiration. This period may be extended by request of the department at any time.

4. Records of monitoring information shall include, as appropriate:

- a. The date, exact place, and time of sampling or measurements;
- b. The name of the individuals who performed the sampling or measurements;
- c. The date and time the analyses were performed;
- d. The name of the individuals who performed the analyses;
- e. The analytical techniques or methods supporting the information such as observations, readings, calculations, and bench data used;
- f. The results of such analyses; and
- g. Chain of custody documentation.

R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit, it shall be unlawful for the permittee to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances;
- 2. Excavate in a wetland;
- 3. Otherwise alter the physical, chemical, or biological properties of state waters and make them detrimental to the public health, to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses; or
- 4. On and after October 1, 2001, conduct the following activities in a wetland:
 - a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;
 - b. Filling or dumping;
 - c. Permanent flooding or impounding; or
 - d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the expiration date of the VWP general permit shall comply with the provisions in 9VAC25-670-27.

FORMS (9VAC25-670)

[Department of Environmental Quality Water Division Permit Application Fee Form, Form 5 \(rev. 10/2018\)](#)

[Joint Permit Application \(JPA\)-State Specific Information \(rev. 11/2024\)](#)

~~Virginia Department of Transportation, Inter-Agency Coordination Meeting Joint Permit Application (eff. 6/2008)~~

834 [Virginia Department of Transportation, Interagency Coordination Meeting Joint Permit](#)
835 [Application \(rev. 7/2017\)](#)
836 [Monthly Reporting of Impacts Less than or Equal to One-Tenth Acre Statewide \(eff. 8/2007\)](#)

837 Documents Incorporated by Reference (9VAC25-670)

838 ~~Classification of Wetlands and Deepwater Habitats of the United States, Cowardin, Lewis M.~~
839 ~~II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992~~

840 [Classification of Wetlands and Deepwater Habitats of the United States, adapted from](#)
841 [Cowardin, Carter, Golet, and LaRoe \(1979\), Wetlands Subcommittee, Federal Geographic Data](#)
842 [Committee, August 2013](#)

843 Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230

844 ~~Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of~~
845 ~~Conservation and Recreation~~

846 ~~Virginia Invasive Plant Species List, Natural Heritage Technical Document 14-11, Department~~
847 ~~of Conservation and Recreation, Division of Natural Heritage (2014)~~

848 [Virginia Invasive Plant Species List, Division of Natural Heritage, Department of Conservation](#)
849 [and Recreation, September 2024](#)


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Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-670
VAC Chapter title(s)	Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities
Action title	2026 Reissuance of General Permit - 9VAC25-670
Final agency action date	November 18, 2025
Date this document prepared	November 5, 2025

Although a regulatory action may be exempt from executive branch review pursuant to § 2.2-4002 or § 2.2-4006 of the *Code of Virginia*, the agency is still encouraged to provide information to the public on the Regulatory Town Hall using this form. However, the agency may still be required to comply with the Virginia Register Act, Executive Order 14 (as amended, July 16, 2018), the Regulations for Filing and Publishing Agency Regulations (1VAC7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This regulatory action is needed to reissue Chapter 670 - *Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities* that is expiring on August 1, 2026. The general permit is a streamlined permitting approach for regulating impacts to the Commonwealth's surface waters. This action provides efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes.

The purpose of this regulatory action is to reissue this general permit – also referred to as WP2 - which expires on August 1, 2026, for another ten-year term and allow for amendments to provide clarity in provisions related to coverage expiration, transition, and continuation; to correct citations and typographical errors; to update forms and reference documents; and to clarify administrative procedures.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). “Mandate” is defined as “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”

Section D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the State Water Control Board (Board) to develop general permits for specific activities. The *Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities*, 9VAC25-670, covers permanent or temporary impacts up to one acre of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and other utility line activities.

Per § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022), DEQ conducts once every four years a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the “Definitions” section of the regulation.

“DEQ” means the Department of Environmental Quality.

“Board” means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, “board” means the Department of Environmental Quality.

“Coverage” means authorization to conduct a project in accordance with a VWP general permit.

“State waters” means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

“TAC” stands for Technical Advisory Committee.

“VDOT” means the Virginia Department of Transportation.

“VWP” stands for Virginia Water Protection.

“VWP general permit” means the general permit text, terms, requirements, and conditions set forth in a regulation that constitutes a VWP permit authorizing a specified category of activities.

“WP2” stands for Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities, 9VAC25-670.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

At its meeting on November 18, 2025, the State Water Control Board (SWCB) adopted the final amendments to the *Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities* (9VAC25-670).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity's overall regulatory authority.

The basis for this regulatory action is the State Water Control Law (Chapter 3.1 of Title 62.1 of the *Code of Virginia*) with specific provisions in law (Article 2.2., §§ 62.1-44.15:20 - 62.1-44.15:23.1, and Article 2.6, §§ 62.1-44.15:80 – 62.1-44.15:84) mandating certain actions and allowing discretionary authority over certain matters to the promulgating agency. Subsection D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the Board to develop general permits for such activities in wetlands as it deems appropriate, and that the general permits shall include such terms and conditions as the Board deems necessary to protect state waters and fish and wildlife resources from significant impairment. It further directs the Board to develop a general permit for facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or State Corporation Commission, except for construction of any natural gas transmission pipeline that is greater than 36 inches inside diameter pursuant to a certificate of public convenience and necessity under § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)),

Section 62.1-44.15(10) of the *Code of Virginia* sets forth the Board's authority for the adoption of regulations deemed necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth:

“(10) To adopt such regulations as it deems necessary to enforce the general soil erosion control and stormwater management program and water quality management program of the Board in all or part of the Commonwealth, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable.”

In addition, periodic and small business impact reviews are provided for in § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The existing *Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities* (9VAC25-670 et seq.) is expiring on August 1, 2026. In conjunction with reissuance of this VWP general permit, the VWP Permit Program is amending the existing VWP regulation for this general permit as necessary to implement the general permit. If the existing VWP general permit is not reissued prior to expiration on August 1, 2026, no general permit coverage can be extended to applicants submitting new applications for activities regulated by this general permit or to existing permittees wishing to continue authorized activities beyond August 1, 2026. These applicants would be required to wait for reissuance of the next applicable general permit or obtain a VWP individual permit instead.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The Board is amending the expiration and effective dates in the *Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities* for another ten-year term. The Board is proposing amendments related to transitioning between the expiring VWP general permit and the next consecutive VWP general permit. The amendments to the regulation include provisions related to application forms, form formats, coverage issuance, and continuation of activities. These amendments include updates to citations, references, form names and dates, as well as corrections of typographical and grammatical errors.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, permittees, and the agency of reissuing this general permit are that a Virginia Water Protection (VWP) general permit will continue to be available to applicants submitting new applications for regulated activities or to existing permittees wishing to continue authorized activities beyond August 1, 2026. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. There are no known disadvantages to the public, agency, or regulated community.

Requirements More Restrictive than Federal

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously reported information, include a specific statement to that effect.

There are no regulatory requirements that are more restrictive than applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information.

Other State Agencies Particularly Affected

The Virginia Department of Transportation (VDOT) may be impacted by the regulatory changes. VDOT Forms are included in all four of the VWP general permits. VDOT was represented on the Technical Advisory Committee (TAC).

Localities Particularly Affected

There are no localities that bear a disproportionate material impact as the general permit is available and applies statewide.

Other Entities Particularly Affected

No other entities are particularly affected by the proposed regulation.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

A public comment period was held from August 25, 2025, through October 24, 2025. In addition to the comment period, a public hearing was held on Wednesday, October 15, 2025. One comment was received.

Commenter	Comment	Agency response
Natasha Nahas	How has “the board” determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect in stream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources? What relevant information/data-recently collected (within the last permit cycle, or last two permit cycles) - was evaluated?	Coverage under a VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statutes, regulations, or ordinances, including erosion and sediment control, stormwater management, discharges to state waters, and the Chesapeake Bay Preservation Act requirements. The permit conditions included in the general permit provide a reasonable assurance that if complied with the permitted activity will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Where there will be

		impacts, VWP permittees are required to first avoid and minimize impacts and then compensate for unavoidable impacts. Overall, water quality in Virginia has improved in recent years. As part of DEQ's Water Quality Assessment process, monitoring results are analyzed to determine if the water quality meets set standards and is clean enough for swimming, fishing and other uses. Virginia's comprehensive surface water quality monitoring strategy integrates both fixed-site (i.e., conventional) and probabilistic monitoring techniques to improve understanding of water quality conditions. Results of the most recent Water Quality Assessment, which are published in the Final 2024 305(b)/303(d) Water Quality Assessment Integrated Report, provide a summary of the water quality conditions in Virginia from Jan. 1, 2017, to Dec. 31, 2022. The results in the integrated report demonstrate overall trends in state waters and prompt action, including development of total maximum daily loads for waters that do not meet water quality standards. The main purpose of this amendment is to reissue the general permit regulation for another ten-year term. The only changes proposed to the general permit section (Section 100) are minor (updating the date of the new permit term, and other editorial corrections) and changes to maintain consistency with current stormwater program requirements. No changes have been made to the regulation in response to this comment.

Details of Changes Made Since the Previous Stage

*List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

No changes are being made to the final amendments since the proposed stage.

Detail of All Changes Proposed in this Regulatory Action

*List all changes proposed in this exempt action and the rationale for the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. *Please put an asterisk next to any substantive changes.*

In addition to the correction of spellings and citations and the replacement of the current effective and expiration dates with the new permit term dates throughout the general permit regulation, the following changes are being proposed:

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-670		Chapter Title.	Title revised to include "VWP" abbreviation for clarity and consistency.
9VAC25-670-25		Authorization for coverage under VWP general permit effective August 1, 2006.	Repealing Section 25 pertaining to transition of general permit coverage from 2006 to 2016. Section is obsolete and no longer relevant.
9VAC25-670-27		VWP general permit coverage; transition; continuation.	Title of Section revised to read: "VWP general permit and coverage; expiration; transition; continuation" to clarify requirements found in the section. Requirements identified in the subsections of this section were reorganized to: (1) clearly state the term of the general permit; (2) identify and carry through on the expectation for the need to reapply at the end of the permit term when a project has not been completed to help in the applicant or permittee's planning efforts and (3) include the existing Board administrative continuance provisions originally included in 9VAC25-670-35.
9VAC25-670-30		Authorization to impact surface waters	Language added to this section provides for additional flexibility in the application and notification formats that are acceptable.
9VAC25-670-35		Administrative continuance	Repealing this section. The administrative continuance provisions have been moved to 9VAC25-670-27 C.
9VAC25-670-100		VWP General Permit	Replace references throughout the section to the outdated "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" with the "Virginia Erosion and Stormwater Management Regulation, 9VAC25-875."

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Part I E – combine subdivisions 1 and 2 associated with removing handbook reference. Stormwater management requirements vary depending upon the activities being conducted. Referencing the 9VAC25 875 regulation avoids setting conflicting requirements between the VWP general permit and the stormwater management requirements that may apply to a permittee needing both authorizations. Part II E 7 – replace ‘substance’ with ‘substances’. Part III K – revise erroneous citations 9VAC25-210-180 and 62.1-44.15:25 with correct citations 9VAC25-210, 9VAC25-670, and 62.1-44.15(5). Replace ‘stream bank’ with ‘streambank’.
FORMS		Forms incorporated as part of the general permit regulation	Updating of forms to reference the current versions.
DOCUMENTS INCORPORATED BY REFERENCE.		Documents incorporated as part of the general permit regulation by reference	Deletion of reference to obsolete “Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation.” Revising document title, version, date, and link for the Virginia Invasive Plant Species List. Revising document title, version date, and link for <i>Classification of Wetlands and Deepwater Habitats of the United States</i>, adapted from Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. The general permit is available for use by the regulated community, including small businesses.

The reissuance of this VWP general permit accomplishes the objectives of applicable laws and minimizes the application and permit implementation costs to affected small business owners. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and permit application and compliance costs.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This general permit applies to facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and other utility line activities. It has been designed to minimize burden on regulated entities while accomplishing the objectives of applicable laws and minimizes the application and permit implementation costs. This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficient, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-670
VAC Chapter title(s)	Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities
Action title	2026 Reissuance of General Permit – 9VAC25-670 (WP2)
Date this document prepared	April 25, 2025 – Resubmitted October 16, 2025 - No changes have been made to the regulation between the proposed and final stages. As a result, no changes have been made to this form.
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2.

Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs &	Background:

Benefits (Monetized)	The general permit is a streamlined permitting approach for impacts to the Commonwealth's surface waters. The proposed action provides efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes. Virginia Wetland Protection (VWP) general permits expire every 10 years and must be reissued in order for permit coverage to be available to existing entities to continue coverage and for new entities to be able to obtain coverage for conducting this regulated activity. If the general permit is not re-issued, each member of the regulated community will need to obtain an individual VWP permit to conduct the regulated activity. This VWP general permit WP2 expires August 1, 2026, and must be reissued to make coverage available for permanently or temporarily impacting up to one acre of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and other utility line activities after August 1, 2026. For this reason, the costs associated with obtaining an individual VWP permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Direct Costs: Permit application fees apply to VWP general permit coverages once a certain amount of impacts is reached (more than one-tenth acre of wetlands/open water or more than 300 linear feet of stream channel) – below these limits, the fee is \$0. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. WP2 fees range from \$600 to \$1,200. The individual permit fees range from \$2,400 to a maximum of \$60,000. Approximately 17 WP2 coverages that require a fee are issued per year. On average, another 22 WP2 coverages are issued per year that do not require fees. Indirect Costs: The proposed amendments are not expected to result in any additional indirect costs for the regulated community since the changes do not add requirements or impose any additional burdens on them, Indirect costs

	may include fees charged to applicants who contract assistance through professional services to complete and submit application forms. However, the cost involved to prepare an application for a VWP general permit coverage is considerably less than the cost for a VWP individual permit due to the amount of time needed to gather and provide required information, and the cost to place a required public comment notice in one or more newspapers. The use of professional services by applicants is optional. Direct Benefits: There are approximately 83 regulated entities covered by VWP general permit WP2 who will need to complete authorized activities but that will no longer have coverage after August 1, 2026. There are an additional, approximate 17 new regulated entities identified as likely to have received coverage under VWP general permit WP2 by August 1, 2026, adding to the potential pool of permittees unable to continue or complete authorized activities. Reissuance of this general permit allows applicable permittees to continue or complete projects with little to no interruption. Reissuance with the amendments proposed also ensures that new entities are able to obtain coverage before and after August 1, 2026 for conducting covered activities in surface waters. The proposed amendments clarify several provisions in the VWP general permit regulation, including transitional provisions described above, that improve understanding among the regulated community, saving time in planning projects and preparing applications. Indirect Benefits: The reissuance of this VWP general permit may indirectly benefit economic development because it allows for the issuance of a general permit in regulation that is protective of human health and the environment, and is a less burdensome authorization pathway for the regulated community than having to obtain a VWP individual permit. Regulating discharges into state surface waters, including wetlands, aids in creating cleaner waters and appealing places to live, work, and recreate in Virginia, thus benefiting tourism and economic development.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct and indirect costs.	(b) \$600 to a maximum of \$1,200 for each general permit coverage.
(3) Net Monetized Benefit	N/A	

(4) Other Costs & Benefits (Non-Monetized)	N/A
(5) Information Sources	DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software; 9VAC25-20 Fees for Permits and Certificates

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: If the regulation remains as is, the general permit expires on August 1, 2026, and no VWP general permit option will be available for use after that date. If there is no VWP general permit coverage option, then one direct cost is applicants having only one choice for project approval, the VWP individual permit. Application fees for this permit type are listed in 9VAC25-20; are based on the amount of impacts and/or activities; and are substantially higher than the application fees currently charged for VWP general permit coverage, which is maxed out at two acres. The maximum fee for a general permit coverage is \$2,400, and the maximum fee for an individual permit is \$60,000. Indirect Costs: An indirect cost is that existing permittees needing to complete projects will no longer have coverage, and should the project not be complete, they would have to stop work or risk enforcement action by one or more agencies and obtain an individual permit. Also, some projects will likely not be implemented due to the increased time period, extra informational requirements, and public involvement necessary to issue a VWP individual permit versus a general permit coverage. Direct/Indirect Benefits: There are no direct or indirect benefits to the regulated public or the Commonwealth.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) As noted above, the Commonwealth stands to lose revenue directly and indirectly from the absence of being able to issue VWP general permit coverages.	(b)None.
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Regulating activities through the issuance of general permit regulations and coverages is an alternative streamlined approach that is used to regulate entities that conduct similar activities as opposed to requiring individual permits for those activities. Direct Costs: A benefit of this general permit is its lower cost to permittees relative to the cost to obtaining a VWP individual permit. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. The coverage fees for a general permit range from \$0 to a maximum of \$2,400; the individual permit fees range from \$2,400 to a maximum of \$60,000. Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above for an analysis of the direct costs of an individual permit.	(b)None.
(3) Net Monetized Benefit	N/A	

(4) Other Costs & Benefits (Non-Monetized)	N/A
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, VWP individual permits would be required to conduct the regulated activities.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Assistance	N/A	
(5) Information Sources	N/A	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the VWP general permit regulation. Single family residences do not typically conduct activities that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry's use of the VWP general permit. This VWP general permit WP2 is unlikely to affect or benefit families due to its limited use for activities conducted by regulated public service companies.	
(4) Information Sources	N/A	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, a VWP individual permit would be required to conduct the regulated activity.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for certain activities in state surface waters.	
(4) Alternatives	N/A	
(5) Information Sources	N/A	

Changes to Number of Regulatory Requirements**Table 5: Regulatory Reduction**

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-670-25	(M/A):	1	0	-1	-1
	(D/A):	1	0	-1	-1
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-670-27	(M/A):	0	0	0	0
	(D/A):	0	+1	0	+1
	(M/R):	3	0	0	0
	(D/R):	0	+1	0	+1
9VAC25-670-30	(M/A):	5	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-670-35	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	1	0	-1	-1
9VAC25-670-100	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	54	0	0	0
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): -1
					(D/A): 0
					(M/R): 0
					(D/R): 0

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-670 entire chapter	Cost of individual permit vs VWP general permit WP2	Individual permit cost if a general permit is not issued: \$2,400 ¹ . (Does not include the time and costs for the applicant to prepare the individual permit application or public notice fees. Minimum cost for an average of 17 issuances per year could total \$40,800.)	Maximum cost per VWP general permit WP2 - \$1,200 ² , (General permit coverage fees range from \$600 to \$1,200 based on total allowable impacts. Averaging 17 issuances per year could total between \$10,200 and \$20,400.)	While the general permit represents a base cost savings of \$1,200 per coverage, the additional savings compared to an individual permit could be up to \$600 per coverage depending upon total impacts, plus the additional expenses related to the issuance of a VWP individual permit (variable case-by-case).
(VAC25-670 entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2024): 156 days ³	Average amount of time to issue general permit coverage (FY2024): 42 days ⁴	Permittee obtains permit coverage on average 114 days sooner under the general permit.

¹ 9VAC25-20, based on maximum of one acre of impacts

² Ibid.

³ DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software

⁴ Ibid.

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
N/A	N/A	N/A

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB F

Project 8058 - Exempt Final

State Water Control Board

2026 Reissuance of General Permit – 9VAC25-680

Chapter 680

Virginia Water Protection (VWP) General Permit for Linear Transportation Projects

9VAC25-680-25. Authorization for coverage under VWP general permit effective August 1, 2006. (Repealed.)

A. All complete applications or notifications received by the department through 11:59 p.m. on August 1, 2016, shall be processed in accordance with the VWP general permit regulation in effect August 1, 2006, through August 1, 2016. If the application or notification is incomplete or if there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a completeness determination, the applicant shall reapply for coverage under the VWP general permit effective August 2, 2016, or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. VWP general permit authorizations granted through 11:59 p.m. on August 1, 2016, shall remain in full force and effect until 11:59 p.m. on the expiration date stated on the VWP authorization cover page, unless otherwise revoked or terminated or unless a notice of project completion is received by the department on or before that date. Any permittee that desires to continue an authorized activity beyond the stated expiration date must reapply for coverage under the VWP general permit effective August 2, 2016, pursuant to its terms, standards, and conditions, or apply for a VWP individual permit, including payment of any required permit application fee. This section shall only apply to permittees holding valid authorizations for coverage granted under the VWP general permit effective August 1, 2006, through August 1, 2016.

9VAC25-680-27. VWP general permit and coverage; expiration; transition; continuation.

A. The general permit in 9VAC25-680-100 is effective August 2, 2026, and expires August 1, 2036. All applications or notifications received on or after August 2, 2026, will be processed in accordance with the VWP general permit regulation effective August 2, 2026. If there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a permit coverage decision, the applicant shall reapply for coverage under the next consecutive VWP general permit or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. ~~The general permit in 9VAC25-680-100 is effective August 2, 2016, and expires August 1, 2026.~~ Any coverage that is granted pursuant to 9VAC25-680-30 shall remain in full force and effect until 11:59 p.m. on August 1, 2026 2036, unless the general permit coverage is terminated or revoked on or before this date. Where a permittee that has received general permit coverage desires to continue or complete the authorized activities beyond August 1, 2026 2036, the permittee shall reapply for new general permit coverage or for a VWP individual permit, including payment of any required permit application fee. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

C. In any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with this chapter and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP

general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit. Application may be made at any time for a VWP individual permit in accordance with 9VAC25-210. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

9VAC25-680-30. Authorization to impact surface waters.

A. Any person granted coverage under the VWP general permit effective August 2, 2016 2026, may permanently or temporarily impact up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for linear transportation projects, provided that:

1. The applicant submits notification as required in ~~9VAC25-680-50 and 9VAC25-680-60~~ this chapter using forms of application or notification.
2. The applicant remits any required permit application fee.
3. The applicant receives general permit coverage from the Department of Environmental Quality and complies with the limitations and other requirements of the VWP general permit; the general permit coverage letter; the Clean Water Act, as amended; and the State Water Control Law and attendant regulations.
4. The applicant has not been required to obtain a VWP individual permit under 9VAC25-210 for the proposed project impacts. The applicant, at ~~his~~ the applicant's discretion, may seek a VWP individual permit or coverage under another applicable VWP general permit in lieu of coverage under this VWP general permit.
5. Impacts, both temporary and permanent, result from a single and complete project, including all attendant features.
 - a. Where a road segment (e.g., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of state waters (several single and complete projects), the department may, at its discretion, require a VWP individual permit.
 - b. For the purposes of this chapter, when an interchange has multiple crossings of state waters, the entire interchange shall be considered the single and complete project.
6. The stream impact criterion applies to all components of the project, including structures and stream channel manipulations.
7. Dredging does not exceed 5,000 cubic yards.
8. When required, compensation for unavoidable impacts is provided in accordance with § 62.1-44.15:23 of the Code of Virginia, 9VAC25-680-70, and 9VAC25-210-116.

B. Activities that may be granted coverage under this VWP general permit include the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, bicycle and pedestrian paths, and airport runways and taxiways, including all attendant features, both temporary and permanent).

C. The board waives the requirement for coverage under a VWP general permit for activities that occur in an isolated wetland of minimal ecological value, as defined in 9VAC25-210-10. Upon request by the department, any person claiming this waiver shall demonstrate to the satisfaction of the department that he qualifies for the waiver.

D. Coverage under this VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

E. Coverage under a nationwide or regional permit promulgated by the U.S. Army Corps of Engineers (USACE), and for which the department has issued § 401 certification in accordance

with 9VAC25-210-130 H as of August 2, ~~2016~~ 2026, shall constitute coverage under this VWP general permit, unless a state program general permit (SPGP) is required and granted for the activity or impact.

F. When the department determines on a case-by-case basis that concerns for water quality and the aquatic environment so indicate, the department may require a VWP individual permit in accordance with 9VAC25-210-130 B rather than granting coverage under this VWP general permit.

9VAC25-680-35. Administrative continuance. ~~(Repealed.)~~

~~Beginning on August 2, 2016, in any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with 9VAC25-680-50 and 9VAC25-680-60 and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit.~~

9VAC25-680-100. VWP general permit.

VWP GENERAL PERMIT NO. WP3 FOR LINEAR TRANSPORTATION PROJECTS
UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE
WATER CONTROL LAW

Effective date: August 2, ~~2016~~ 2026

Expiration date: August 1, ~~2026~~ 2036

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP general permit, the board has not taken into consideration the structural stability of any proposed activities.

The permanent or temporary impact of up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general permit ~~set forth herein~~; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it.

Part I.

Special Conditions.

A. Authorized activities.

1. The activities authorized by this chapter shall not cause more than the permanent or temporary impacts of up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the department in the coverage letter, if any, shall be enforceable conditions of this permit.

2. Any changes to the authorized permanent impacts to surface waters shall require a notice of planned change in accordance with 9VAC25-680-80. An application or request for modification to coverage or another VWP permit application may be required.

3. Any changes to the authorized temporary impacts to surface waters shall require written notification to and approval from the Department of Environmental Quality in accordance with 9VAC25-680-80 prior to initiating the impacts and restoration to preexisting conditions in accordance with the conditions of this permit.

4. Modification to compensation requirements may be approved at the request of the permittee when a decrease in the amount of authorized surface waters impacts occurs, provided that the adjusted compensation meets the initial compensation goals.

B. Overall conditions.

1. The activities authorized by this VWP general permit shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of the Code of Virginia.

2. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Pipes and culverts placed in streams must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless specifically approved by the Department of Environmental Quality on a case-by-case basis and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipe and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes or culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters, unless the area is contained within a cofferdam and the work is performed in the dry or unless otherwise approved by the Department of Environmental Quality. Excess or waste concrete shall not be disposed of in flowing surface waters or washed into flowing surface waters.

4. All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

5. Erosion and sedimentation controls shall be designed ~~in accordance with~~ to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875). These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area is stabilized and shall then be removed.

6. Exposed slopes and streambanks shall be stabilized immediately upon completion of work in each permitted impact area. All denuded areas shall be properly stabilized ~~in accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875)~~.

7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways) and demolition activities associated with the project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this VWP general permit.

8. No machinery may enter flowing waters, unless authorized by this VWP general permit or approved prior to entry by the Department of Environmental Quality.

9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats, geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum extent practicable. Equipment and materials shall be removed immediately upon completion of work.

10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of authorized activities and within the project or right-of-way limits shall be clearly flagged or marked for the life of the construction activity at that location to preclude unauthorized disturbances to these surface waters and compensatory mitigation areas during construction. The permittee shall notify contractors that no activities are to occur in these marked surface waters.

11. Temporary disturbances to surface waters during construction shall be avoided and minimized to the maximum extent practicable. All temporarily disturbed wetland areas shall be restored to preexisting conditions within 30 days of completing work at each respective temporary impact area, which shall include reestablishing preconstruction elevations and contours with topsoil from the impact area where practicable and planting or seeding with appropriate wetland vegetation according to cover type (i.e., emergent, scrub-shrub, or forested). The permittee shall take all appropriate measures to promote and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation through the second year post-disturbance. All temporarily impacted streams and streambanks shall be restored to their preconstruction elevations and contours with topsoil from the impact area where practicable within 30 days following the construction at that stream segment. Streambanks shall be seeded or planted with the same vegetation cover type originally present, including any necessary, supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

12. Materials (including fill, construction debris, and excavated and woody materials) temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately stabilized to prevent entry into state waters, managed such that leachate does not enter state waters, and completely removed within 30 days following completion of that construction activity. Disturbed areas shall be returned to preconstruction elevations and contours with topsoil from the impact area where practicable; restored within 30 days following removal of the stockpile; and restored with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

13. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, french drains, or other similar structures.

14. The permittee shall employ measures to prevent spills of fuels or lubricants into state waters.

15. The permittee shall conduct his activities in accordance with the time-of-year restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia

Marine Resources Commission, or other interested and affected agencies, as contained, when applicable, in Department of Environmental Quality VWP general permit coverage, and shall ensure that all contractors are aware of the time-of-year restrictions imposed.

16. Water quality standards shall not be violated as a result of the construction activities.

17. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless otherwise authorized by the Department of Environmental Quality, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream channel can begin.

C. Road crossings.

1. Access roads and associated bridges, pipes, and culverts shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable. Access roads constructed above preconstruction elevations and contours in surface waters must be bridged, piped, or culverted to maintain surface flows.

2. Installation of road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions, or similar structures.

D. Utility lines.

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area must be returned to its preconstruction elevations and contours with topsoil from the impact area where practicable and restored within 30 days of completing work in the area, unless otherwise authorized by the Department of Environmental Quality. Restoration shall be the seeding or planting of the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

2. Material resulting from trench excavation may be temporarily sidcast into wetlands not to exceed a total of 90 days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a french drain effect). For example, utility lines may be backfilled with clay blocks to ensure that the trench does not drain surface waters through which the utility line is installed.

E. Stream modification and ~~stream bank~~ streambank protection.

1. Riprap bank stabilization and riprap aprons for outfalls shall be of an appropriate size and design ~~in accordance to comply with the requirements of the~~ Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875).

~~2. Riprap aprons for all outfalls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.~~

~~3.~~ 2. For ~~bank~~ streambank protection activities, the structure and backfill shall be placed as close to the ~~stream bank~~ streambank as practicable. No material shall be placed in excess of the minimum necessary for erosion protection.

275 4. ~~3.~~ All ~~stream bank~~ streambank protection structures shall be located to eliminate or
276 minimize impacts to vegetated wetlands to the maximum extent practicable.

277 ~~5.~~ 4. Asphalt and materials containing asphalt or other toxic substances shall not be used
278 in the construction of submerged sills or breakwaters.

279 ~~6.~~ 5. Redistribution of existing stream substrate for the purpose of erosion control is
280 prohibited.

281 ~~7.~~ 6. No material removed from the stream bottom shall be disposed of in surface waters,
282 unless otherwise authorized by this VWP general permit.

283 F. Dredging.

284 1. Dredging depths shall be determined and authorized according to the proposed use
285 and controlling depths outside the area to be dredged.

286 2. Dredging shall be accomplished in a manner that minimizes disturbance of the bottom
287 and minimizes turbidity levels in the water column.

288 3. If evidence of impaired water quality, such as a fish kill, is observed during the dredging,
289 dredging operations shall cease, and the Department of Environmental Quality shall be
290 notified immediately.

291 4. Barges used for the transportation of dredge material shall be filled in such a manner
292 to prevent the overflow of dredged materials.

293 5. Double handling of dredged material in state waters shall not be permitted.

294 6. For navigation channels the following shall apply:

295 a. A buffer of four times the depth of the dredge cut shall be maintained between the
296 bottom edge of the design channel and the channelward limit of wetlands, or a buffer
297 of 15 feet shall be maintained from the dredged cut and the channelward edge of
298 wetlands, whichever is greater. This landward limit of buffer shall be flagged and
299 inspected prior to construction.

300 b. Side slope cuts of the dredging area shall not exceed a two-horizontal-to-one-
301 vertical slope to prevent slumping of material into the dredged area.

302 7. A dredged material management plan for the designated upland disposal site shall be
303 submitted and approved 30 days prior to initial dredging activity.

304 8. Pipeline outfalls and spillways shall be located at opposite ends of the dewatering area
305 to allow for maximum retention and settling time. Filter fabric shall be used to line the
306 dewatering area and to cover the outfall pipe to further reduce sedimentation to state
307 waters.

308 9. The dredge material dewatering area shall be of adequate size to contain the dredge
309 material and to allow for adequate dewatering and settling out of sediment prior to
310 discharge back into state waters.

311 10. The dredge material dewatering area shall utilize an earthen berm or straw bales
312 covered with filter fabric along the edge of the area to contain the dredged material, filter
313 bags, or other similar filtering practices, any of which shall be properly stabilized prior to
314 placing the dredged material within the containment area.

315 11. Overtopping of the dredge material containment berms with dredge materials shall be
316 strictly prohibited.

317 G. Stormwater management facilities.

318 1. Stormwater management facilities shall be installed in accordance with best
319 management practices and watershed protection techniques (e.g., vegetated buffers,
320 siting considerations to minimize adverse effects to aquatic resources, bioengineering

methods incorporated into the facility design to benefit water quality and minimize adverse effects to aquatic resources) that provide for long-term aquatic resources protection and enhancement, to the maximum extent practicable.

2. Compensation for unavoidable impacts shall not be allowed within maintenance areas of stormwater management facilities.

3. Maintenance activities within stormwater management facilities shall not require additional permit coverage or compensation, provided that the maintenance activities do not exceed the original contours of the facility, as approved and constructed, and is accomplished in designated maintenance areas as indicated in the facility maintenance or design plan or when unavailable, an alternative plan approved by the Department of Environmental Quality.

Part II.

Construction and Compensation Requirements, Monitoring and Reporting.

A. Minimum compensation requirements.

1. The permittee shall provide any required compensation for impacts in accordance with the conditions in this VWP general permit, the coverage letter, and the chapter promulgating the general permit. For all compensation that requires a protective mechanism, including preservation of surface waters or buffers, the permittee shall record the approved protective mechanism in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

2. Compensation options that may be considered under this VWP general permit shall meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and 9VAC25-680-70.

3. The permittee-responsible compensation site ~~or sites~~ depicted in the conceptual compensation plan submitted with the application shall constitute the compensation site. A site change may require a modification to coverage.

4. For compensation involving the purchase of mitigation bank credits or the purchase of in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas until documentation of the mitigation bank credit purchase or of the in-lieu fee program credit purchase has been submitted to and received by the Department of Environmental Quality.

5. The final compensatory mitigation plan shall be submitted to and approved by the department prior to a construction activity in permitted impact areas. The department shall review and provide written comments on the final plan within 30 days of receipt or it shall be deemed approved. The final plan as approved by the department shall be an enforceable requirement of any coverage under this VWP general permit. Deviations from the approved final plan shall be submitted and approved in advance by the department.

a. The final permittee-responsible wetlands compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) A summary of the type and acreage of existing wetland impacts anticipated during the construction of the compensation site and the proposed compensation for these impacts; a site access plan; a monitoring plan, including proposed success criteria, monitoring goals, and the location of photo-monitoring stations, monitoring wells, vegetation sampling points, and reference wetlands or streams, if available; an

abatement and control plan for undesirable plant species; an erosion and sedimentation control plan; a construction schedule; and the final protective mechanism for the protection of the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

b. The final permittee-responsible stream compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) An evaluation, discussion, and plan drawing ~~or drawings~~ of existing conditions on the proposed compensation stream, including the identification of functional and physical deficiencies for which the measures are proposed, and summary of geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth ratio, sinuosity, slope, substrate, ~~etc.~~); a site access plan; a monitoring plan, including a monitoring and reporting schedule, monitoring design and methodologies for success, proposed success criteria, location of photo-monitoring stations, vegetation sampling points, survey points, bank pins, scour chains, and reference streams; an abatement and control plan for undesirable plant species; an erosion and sedimentation control plan, if appropriate; a construction schedule; a plan-view drawing depicting the pattern and all compensation measures being employed; a profile drawing; cross-sectional drawing ~~or drawings~~ of the proposed compensation stream; and the final protective mechanism for the protection of the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

6. The following criteria shall apply to permittee-responsible wetland or stream compensation:

a. The vegetation used shall be native species common to the area, shall be suitable for growth in local wetland or riparian conditions, and shall be from areas within the same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural Resources Conservation Service Land Resource Region as that of the project site. Planting of woody plants shall occur when vegetation is normally dormant, unless otherwise approved in the final wetlands or stream compensation plan ~~or plans~~.

b. All work in permitted impact areas shall cease if compensation site construction has not commenced within 180 days of commencement of project construction, unless otherwise authorized by the department.

c. The Department of Environmental Quality shall be notified in writing prior to the initiation of construction activities at the compensation site.

d. Point sources of stormwater runoff shall be prohibited from entering a wetland compensation site prior to treatment by appropriate best management practices. Appropriate best management practices may include sediment traps, grassed waterways, vegetated filter strips, debris screens, oil and grease separators, or forebays.

e. The success of the compensation shall be based on meeting the success criteria established in the approved final compensation plan.

f. If the wetland or stream compensation area fails to meet the specified success criteria in a particular monitoring year, other than the final monitoring year, the reasons for this failure shall be determined and a corrective action plan shall be submitted to the Department of Environmental Quality for approval with or before that year's monitoring report. The corrective action plan shall contain at minimum the proposed actions, a schedule for those actions, and a monitoring plan, and shall be implemented by the permittee in accordance with the approved schedule. Should significant changes be necessary to ensure success, the required monitoring cycle shall begin again, with monitoring year one being the year that the changes are complete as confirmed by the Department of Environmental Quality. If the wetland or stream compensation area fails to meet the specified success criteria by the final monitoring year or if the wetland or stream compensation area has not met the stated restoration goals, reasons for this failure shall be determined and a corrective action plan, including proposed actions, a schedule, and a monitoring plan, shall be submitted with the final year monitoring report for the Department of Environmental Quality approval. Corrective action shall be implemented by the permittee in accordance with the approved schedule. Annual monitoring shall be required to continue until two sequential, annual reports indicate that all criteria have been successfully satisfied and the site has met the overall restoration goals (e.g., that corrective actions were successful).

g. The surveyed wetland boundary for the compensation site shall be based on the results of the hydrology, soils, and vegetation monitoring data and shall be shown on the site plan. Calculation of total wetland acreage shall be based on that boundary at the end of the monitoring cycle. Data shall be submitted by December 31 of the final monitoring year.

h. Herbicides or algicides shall not be used in or immediately adjacent to the compensation site or sites without prior authorization by the department. All vegetation removal shall be done by manual means only, unless authorized by the Department of Environmental Quality in advance.

B. Impact site construction monitoring.

1. Construction activities authorized by this permit that are within impact areas shall be monitored and documented. The monitoring shall consist of:

a. Preconstruction photographs taken at each impact area prior to initiation of activities within impact areas. Photographs shall remain on the project site and depict the impact area and the nonimpacted surface waters immediately adjacent to and downgradient of each impact area. Each photograph shall be labeled to include the following information: permit number, impact area number, date and time of the photograph, name of the person taking the photograph, photograph orientation, and photograph subject description.

b. Site inspections shall be conducted by the permittee or the permittee's qualified designee once every calendar month during activities within impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity and within the project or right-of-way limits; and all on-site permanent preservation areas required under this permit. Observations shall be recorded on the inspection form provided by the Department of Environmental Quality. The form shall be completed in its entirety for each monthly inspection and shall be kept on site and made available for review by the Department of Environmental Quality staff upon

request during normal business hours. Inspections are not required during periods of no activity within impact areas.

2. Monitoring of water quality parameters shall be conducted during permanent relocation of perennial streams through new channels in the manner noted in this subdivision. The permittee shall report violations of water quality standards to the Department of Environmental Quality in accordance with the procedures in ~~9VAC25-680-100~~ Part II E of this permit. Corrective measures and additional monitoring may be required if water quality standards are not met. Reporting shall not be required if water quality standards are not violated.

a. A sampling station shall be located upstream and immediately downstream of the relocated channel.

b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every 30 minutes for at least two hours at each station prior to opening the new channels and immediately before opening new channels.

c. Temperature, pH, and D.O. readings shall be taken after opening the channels and every 30 minutes for at least three hours at each station.

C. Permittee-responsible wetland compensation site monitoring.

1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site or sites, including invert elevations for all water elevation control structures and spot elevations throughout the site or sites. Aerial surveys shall include the variation from actual ground conditions, such as ~~±~~ plus or minus 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

2. Photographs shall be taken at the compensation site or sites from the permanent markers identified in the final compensation plan, and established to ensure that the same locations and view directions at the site ~~or sites~~ are monitored in each monitoring period. These photographs shall be taken after the initial planting and at a time specified in the final compensation plan during every monitoring year.

3. Compensation site monitoring shall begin on the first day of the first complete growing season (monitoring year one) after wetland compensation site construction activities, including planting, have been completed. Monitoring shall be required for monitoring years one, two, three, and five, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the final monitoring year, then monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

4. The establishment of wetland hydrology shall be measured weekly during the growing season, with the location and number of monitoring wells, and frequency of monitoring for each site, set forth in the final monitoring plan. Hydrology monitoring well data shall be accompanied by precipitation data, including rainfall amounts, either from on site or from the closest weather station. Once the wetland hydrology success criteria have been satisfied for a particular monitoring year, monitoring may be discontinued for the remainder of that monitoring year following Department of Environmental Quality approval. After a period of three monitoring years, the permittee may request that hydrology monitoring be discontinued, providing that adequate hydrology has been established and maintained. Hydrology monitoring shall not be discontinued without written approval from the Department of Environmental Quality.

5. The presence of hydric soils or soils under hydric conditions shall be evaluated in accordance with the final compensation plan.

6. The establishment of wetland vegetation shall be in accordance with the final compensation plan. Monitoring shall take place in August, September, or October during the growing season of each monitoring year, unless otherwise authorized in the monitoring plan.

7. The presence of undesirable plant species shall be documented.

8. All wetland compensation monitoring reports shall be submitted in accordance with ~~9VAC25-680-100~~ Part II E 6 of this permit.

D. Permittee-responsible stream compensation and monitoring.

1. Riparian buffer restoration activities shall be detailed in the final compensation plan and shall include, as appropriate, the planting of a variety of native species currently growing in the site area, including appropriate seed mixtures and woody species that are bare root, balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the ~~stream bank~~ streambank at bankfull elevation landward on both sides of the stream, shall be required where practical.

2. The installation of root wads, vanes, and other instream structures, shaping of the ~~stream banks~~ streambanks and channel relocation shall be completed in the dry whenever practicable.

3. Livestock access to the stream and designated riparian buffer shall be limited to the greatest extent practicable.

4. Stream channel restoration activities shall be conducted in the dry or during low flow conditions. When site conditions prohibit access from the streambank or upon prior authorization from the Department of Environmental Quality, heavy equipment may be authorized for use within the stream channel.

5. Photographs shall be taken at the compensation site from the vicinity of the permanent photo-monitoring stations identified in the final compensation plan. The photograph orientation shall remain constant during all monitoring events. At a minimum, photographs shall be taken from the center of the stream, facing downstream, with a sufficient number of photographs to view the entire length of the restoration site. Photographs shall document the completed restoration conditions. Photographs shall be taken prior to site activities, during instream and riparian compensation construction activities, within one week of completion of activities, and during at least one day of each monitoring year to depict restored conditions.

6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site or sites. Aerial surveys shall include the variation from actual ground conditions, such as ~~±~~ plus or minus 0.2 feet. The survey shall be certified by the licensed surveyor or by a registered, professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations from the final compensation plans in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

7. Compensation site monitoring shall begin on day one of the first complete growing season (monitoring year one) after stream compensation site constructions activities, including planting, have been completed. Monitoring shall be required for monitoring years one and two, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the final monitoring year, then

monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

8. All stream compensation site monitoring reports shall be submitted in accordance with ~~9VAC25-680-100~~ Part II E 6 of this permit.

E. Reporting.

1. Written communications required by this VWP general permit shall be submitted to the appropriate Department of Environmental Quality office. The VWP general permit tracking number shall be included on all correspondence.

2. The Department of Environmental Quality shall be notified in writing prior to the start of construction activities at the first permitted impact area.

3. A construction status update form provided by the Department of Environmental Quality shall be completed and submitted to the Department of Environmental Quality twice per year for the duration of coverage under a VWP general permit. Forms completed in June shall be submitted by or on July 10, and forms completed in December shall be submitted by or on January 10. The form shall include reference to the VWP permit tracking number and one of the following statements for each authorized surface water impact location:

a. Construction activities have not yet started;

b. Construction activities have started;

c. Construction activities have started but are currently inactive; or

d. Construction activities are complete.

4. The Department of Environmental Quality shall be notified in writing within 30 days following the completion of all activities in all authorized impact areas.

5. The Department of Environmental Quality shall be notified in writing prior to the initiation of activities at the permittee-responsible compensation site. The notification shall include a projected schedule of activities and construction completion.

6. All permittee-responsible compensation site monitoring reports shall be submitted annually by December 31, with the exception of the last year, in which case the report shall be submitted at least 60 days prior to the expiration of the general permit, unless otherwise approved by the Department of Environmental Quality.

a. All wetland compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site including a site location map identifying photo-monitoring stations, vegetative and soil monitoring stations, monitoring wells, and wetland zones.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Analysis of all hydrology information, including monitoring well data, precipitation data, and gauging data from streams or other open water areas, as set forth in the final compensation plan.

(5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.

(6) Analysis of all vegetative community information, including woody and herbaceous species, both planted and volunteers, as set forth in the final compensation plan.

(7) Photographs labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description

of the photograph subject. This information shall be provided as a separate attachment to each photograph, if necessary. Photographs taken after the initial planting shall be included in the first monitoring report after planting is complete.

(8) Discussion of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site.

(10) Discussion of corrective measures or maintenance activities to control undesirable species, to repair damaged water control devices, or to replace damaged planted vegetation.

(11) Corrective action plan that includes proposed actions, a schedule, and monitoring plan.

b. All stream compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site including a site location map identifying photo-monitoring stations and monitoring stations.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Evaluation and discussion of the monitoring results in relation to the success criteria and overall goals of compensation.

(5) Photographs shall be labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description of the photograph subject. Photographs taken prior to compensation site construction activities, during instream and riparian restoration activities, and within one week of completion of activities shall be included in the first monitoring report.

(6) Discussion of alterations, maintenance, or major storm events resulting in significant change in stream profile or cross section, and corrective actions conducted at the stream compensation site.

(7) Documentation of undesirable plant species and summary of abatement and control measures.

(8) Summary of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site, and as-built survey, if applicable.

(10) Corrective action plan that includes proposed actions, a schedule and monitoring plan.

(11) Additional submittals that were approved by the Department of Environmental Quality in the final compensation plan.

7. The permittee shall notify the Department of Environmental Quality in writing when unusual or potentially complex conditions are encountered that require debris removal or involve potentially toxic ~~substance~~ substances. Measures to remove the obstruction, material, or toxic ~~substance~~ substances or to change the location of a structure are prohibited until approved by the Department of Environmental Quality.

8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday, the appropriate Department of Environmental Quality regional office shall be notified;

otherwise, the Department of Emergency Management shall be notified at 1-800-468-8892.

9. Violations of state water quality standards shall be reported to the appropriate Department of Environmental Quality office no later than the end of the business day following discovery.

10. The permittee shall notify the Department of Environmental Quality no later than the end of the third business day following the discovery of additional impacts to surface waters including wetlands, stream channels, and open water that are not authorized by the Department of Environmental Quality or to any required preservation areas. The notification shall include photographs, estimated acreage or linear footage of impacts, and a description of the impacts.

11. Submittals required by this VWP general permit shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Part III.

Conditions Applicable to All VWP General Permits.

A. Duty to comply. The permittee shall comply with all conditions, limitations, and other requirements of the VWP general permit; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations, and toxic standards and prohibitions.

B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent impacts in violation of the VWP general permit that may have a reasonable likelihood of adversely affecting human health or the environment.

C. Reopener. This VWP general permit may be reopened to modify its conditions when the circumstances on which the previous VWP general permit was based have materially and substantially changed, or special studies conducted by the department or the permittee show material and substantial change since the time the VWP general permit was issued and thereby constitute cause for revoking and reissuing the VWP general permit.

D. Compliance with state and federal law. Compliance with this VWP general permit constitutes compliance with the VWP permit requirements of the State Water Control Law. Nothing in this VWP general permit shall be construed to preclude the institution of any legal action under or relieve the permittee from any responsibilities, liabilities, or other penalties

established pursuant to any other state law or regulation or under the authority preserved by § 510 of the Clean Water Act.

E. Property rights. The issuance of this VWP general permit does not convey property rights in either real or personal property or any exclusive privileges, nor does it authorize injury to private property, any invasion of personal property rights, or any infringement of federal, state, or local laws or regulations.

F. Severability. The provisions of this VWP general permit are severable.

G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the department or any duly authorized agent of the department, at reasonable times and under reasonable circumstances, to enter upon the permittee's property, public or private, and have access to inspect and copy any records that must be kept as part of the VWP general permit conditions; to inspect any facilities, operations, or practices (including monitoring and control equipment) regulated or required under the VWP general permit; and to sample or monitor any substance, parameter, or activity for the purpose of ensuring compliance with the conditions of the VWP general permit or as otherwise authorized by law. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained ~~herein~~ in this general permit shall make an inspection time unreasonable during an emergency.

H. Transferability of VWP general permit coverage. VWP general permit coverage may be transferred to another permittee when all of the criteria listed in this subsection are met. On the date of the VWP general permit coverage transfer, the transferred VWP general permit coverage shall be as fully effective as if it had been granted directly to the new permittee.

1. The current permittee notifies the department of the proposed transfer of the general permit coverage and provides a written agreement between the current and new permittees containing a specific date of transfer of VWP general permit responsibility, coverage, and liability to the new permittee, or that the current permittee will retain such responsibility, coverage, or liability, including liability for compliance with the requirements of enforcement activities related to the authorized activity.

2. The department does not within 15 days notify the current and new permittees of the board's intent to modify or revoke and reissue the VWP general permit.

I. Notice of planned change. VWP general permit coverage may be modified subsequent to issuance in accordance with 9VAC25-680-80.

J. VWP general permit coverage termination for cause. VWP general permit coverage is subject to termination for cause by the department after public notice and opportunity for a hearing in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

1. Noncompliance by the permittee with any provision of this chapter, any condition of the VWP general permit, or any requirement in general permit coverage;
2. The permittee's failure in the application or during the process of granting VWP general permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;
3. The permittee's violation of a special or judicial order;
4. A determination by the department that the authorized activity endangers human health or the environment and can be regulated to acceptable levels by a modification to VWP general permit coverage or a termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP general permit; or
6. A determination that the authorized activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

K. The department may terminate VWP general permit coverage without cause when the permittee is no longer a legal entity due to death or dissolution or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the department shall follow the applicable procedures for termination under ~~9VAC25-210-480~~ 9VAC25-210, this chapter, and ~~§ 62.1-44.15:25~~ subdivision (5) of § 62.1-44.15 of the Code of Virginia.

L. VWP general permit coverage termination by consent. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all authorized activities requiring notification under 9VAC25-680-50 A and all compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this termination of coverage on behalf of the department. The permittee shall submit the following information:

1. Name, mailing address, and telephone number;
2. Name and location of the activity;
3. The VWP general permit tracking number; and
4. One of the following certifications:

a. For project completion:

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage have been completed. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit coverage."

b. For project cancellation:

"I certify under penalty of law that the activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage will not occur. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

c. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by the Department of Environmental Quality, and the following certification statement:

"I certify under penalty of law that the activities or the required compensatory mitigation authorized by the VWP general permit and general permit coverage have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and

that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit authorization or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which VWP general permit coverage has been granted in order to maintain compliance with the conditions of the VWP general permit or coverage.

P. Duty to provide information.

1. The permittee shall furnish to the department any information that the department may request to determine whether cause exists for modifying, revoking, or terminating VWP permit coverage or to determine compliance with the VWP general permit or general permit coverage. The permittee shall also furnish to the department, upon request, copies of records required to be kept by the permittee.

2. Plans, maps, conceptual reports, and other relevant information shall be submitted as required by the department prior to commencing construction.

Q. Monitoring and records requirements.

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP general permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 as published in the July 1, 2024, update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP general permit, and records of all data used to complete the application for coverage under the VWP general permit, for a period of at least three years from the date of general permit expiration. This period may be extended by request of the department at any time.

4. Records of monitoring information shall include, as appropriate:

- a. The date, exact place, and time of sampling or measurements;
- b. The name of the individuals who performed the sampling or measurements;
- c. The date and time the analyses were performed;
- d. The name of the individuals who performed the analyses;
- e. The analytical techniques or methods supporting the information such as observations, readings, calculations, and bench data used;
- f. The results of such analyses; and
- g. Chain of custody documentation.

R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit, it shall be unlawful for the permittee to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances;
2. Excavate in a wetland;
3. Otherwise alter the physical, chemical, or biological properties of state waters and make them detrimental to the public health, to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses; or
4. On and after August 1, 2001, for linear transportation projects of the Virginia Department of Transportation, or on and after October 1, 2001, for all other projects, conduct the following activities in a wetland:
 - a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;
 - b. Filling or dumping;
 - c. Permanent flooding or impounding; or
 - d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the expiration date of the VWP general permit shall comply with the provisions in 9VAC25-680-27.

FORMS (9VAC25-680)

[Department of Environmental Quality Water Division Permit Application Fee Form, Form 5 \(rev. 10/2018\)](#)

[Joint Permit Application \(JPA\)-State Specific Information \(rev. 11/2024\)](#)

~~Virginia Department of Transportation, Inter Agency Coordination Meeting Joint Permit Application (eff. 6/2008)~~

[Virginia Department of Transportation, Interagency Coordination Meeting Joint Permit Application \(rev. 7/2017\)](#)

[Monthly Reporting of Impacts Less than or Equal to One-Tenth Acre Statewide \(eff. 8/2007\)](#)

Documents Incorporated by Reference (9VAC25-680)

~~Classification of Wetlands and Deepwater Habitats of the United States, Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992~~

[Classification of Wetlands and Deepwater Habitats of the United States, adapted from Cowardin, Carter, Golet, and LaRoe \(1979\), Wetlands Subcommittee, Federal Geographic Data Committee, August 2013](#)

Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230

~~Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation~~

~~Virginia Invasive Plant Species List, Natural Heritage Technical Document 14-11, Department of Conservation and Recreation, Division of Natural Heritage (2014)~~

[Virginia Invasive Plant Species List, Division of Natural Heritage, Department of Conservation and Recreation, September 2024](#)


townhall.virginia.gov

Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-680
VAC Chapter title(s)	Virginia Water Protection General Permit for Linear Transportation Projects
Action title	2026 Reissuance of General Permit - 9VAC25-680
Final agency action date	November 18, 2025
Date this document prepared	November 5, 2025

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the *Code of Virginia*). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*. 30, 2023

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This regulatory action is needed to reissue Chapter 680 - *Virginia Water Protection General Permit for Linear Transportation Projects* that is expiring on August 1, 2026. The general permit is a streamlined permitting approach for regulating impacts to the Commonwealth's surface waters. This action provides efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes.

The purpose of this regulatory action is to reissue this general permit – also referred to as WP3 - which expires on August 1, 2026, for another ten-year term and allow for amendments to provide clarity in provisions related to coverage expiration, transition, and continuation; to correct citations and typographical errors; to update forms and reference documents; and to clarify administrative procedures.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

Section D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the State Water Control Board (Board) to develop general permits for specific activities. The *Virginia Water Protection General Permit for Linear Transportation Projects*, 9VAC25-680, covers permanent or temporary impacts up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for linear transportation projects.

Per § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022), DEQ conducts once every four years a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

"DEQ" means the Department of Environmental Quality.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, "board" means the Department of Environmental Quality.

"Coverage" means authorization to conduct a project in accordance with a VWP general permit.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"TAC" stands for Technical Advisory Committee.

"VDOT" means the Virginia Department of Transportation.

"VWP" stands for Virginia Water Protection.

"VWP general permit" means the general permit text, terms, requirements, and conditions set forth in a regulation that constitutes a VWP permit authorizing a specified category of activities.

"WP3" stands for Virginia Water Protection General Permit for Linear Transportation Projects, 9VAC25-680.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) that the agency has “adopted final amendments” to the regulation; 3) the name of the agency taking the action; and 4) the title of the regulation. A suggested statement is, “On [insert date] the Board/Department of [insert name] adopted final amendments to the [title of regulation(s)].”

At its meeting on November 18, 2025, the State Water Control Board (SWCB) adopted the final amendments to the *Virginia Water Protection General Permit for Linear Transportation Projects* (9VAC25-680).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

The basis for this regulatory action is the State Water Control Law (Chapter 3.1 of Title 62.1 of the *Code of Virginia*) with specific provisions in law (Article 2.2., §§ 62.1-44.15:20 - 62.1-44.15:23.1, and Article 2.6, §§ 62.1-44.15:80 – 62.1-44.15:84) mandating certain actions and allowing discretionary authority over certain matters to the promulgating agency. Subsection D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the Board to develop general permits for such activities in wetlands as it deems appropriate, and that the general permits shall include such terms and conditions as the Board deems necessary to protect state waters and fish and wildlife resources from significant impairment. It further directs the Board to develop a general permit for Virginia Department of Transportation or other linear transportation projects.

Section 62.1-44.15(10) of the *Code of Virginia* sets forth the Board's authority for the adoption of regulations deemed necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth:

“(10) To adopt such regulations as it deems necessary to enforce the general soil erosion control and stormwater management program and water quality management program of the Board in all or part of the Commonwealth, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable.”

In addition, periodic and small business impact reviews are provided for in § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The existing *Virginia Water Protection General Permit for Linear Transportation Projects* (9VAC25-680 et seq.) is expiring on August 1, 2026. In conjunction with reissuance of this VWP general permit, the VWP Permit Program is amending the existing VWP regulation for this general permit as necessary to implement the general permit. If the existing VWP general permit is not reissued prior to expiration on August 1, 2026, no general permit coverage can be extended to applicants submitting new applications for activities regulated by this general permit or to existing permittees wishing to continue authorized activities beyond August 1, 2026. These applicants would be required to wait for reissuance of the next applicable general permit or obtain a VWP individual permit instead.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The Board is amending the expiration and effective dates in the *Virginia Water Protection General Permit for Linear Transportation Projects* for another ten-year term. The Board is proposing amendments related to transitioning between the expiring VWP general permit and the next consecutive VWP general permit. The amendments to the regulation may include provisions related to application forms, form formats, coverage issuance, and continuation of activities. These amendments will include updates to citations, references, form names and dates, as well as correct typographical and grammatical errors.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, permittees, and the agency of reissuing this general permit are that a Virginia Water Protection (VWP) general permit will continue to be available to applicants submitting new applications for regulated activities or to existing permittees wishing to continue authorized activities beyond August 1, 2026. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. There are no known disadvantages to the public, agency, or regulated community.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no regulatory requirements that are more restrictive than applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information.

Other State Agencies Particularly Affected

The Virginia Department of Transportation (VDOT) may be impacted by the regulatory changes. VDOT Forms are included in all four of the VWP general permits. VDOT was represented on the Technical Advisory Committee (TAC).

Localities Particularly Affected:

There are no localities that bear a disproportionate material impact as the general permit is available and applies statewide.

Other Entities Particularly Affected:

No other entities are particularly affected by the proposed regulation.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

A public comment period was held from August 25, 2025, through October 24, 2025. In addition to the comment period a public hearing was held on Wednesday, October 15, 2025. One comment was received.

Commenter	Comment	Agency response
Natasha Nahas	How has "the board" determined that there is a reasonable	Coverage under a VWP general permit does not relieve the permittee of the responsibility

	assurance that this VWP general permit, if complied with, will protect in stream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources? What relevant information/data-recently collected (within the last permit cycle, or last two permit cycles) - was evaluated?	to comply with any other applicable federal, state, or local statutes, regulations, or ordinances, including erosion and sediment control, stormwater management, discharges to state waters, and the Chesapeake Bay Preservation Act requirements. The permit conditions included in the general permit provide a reasonable assurance that if complied with the permitted activity will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Where there will be impacts, VWP permittees are required to first avoid and minimize impacts and then compensate for unavoidable impacts. Overall, water quality in Virginia has improved in recent years. As part of DEQ's Water Quality Assessment process, monitoring results are analyzed to determine if the water quality meets set standards and is clean enough for swimming, fishing and other uses. Virginia's comprehensive surface water quality monitoring strategy integrates both fixed-site (i.e., conventional) and probabilistic monitoring techniques to improve understanding of water quality conditions. Results of the most recent Water Quality Assessment, which are published in the Final 2024 305(b)/303(d) Water Quality Assessment Integrated Report, provide a summary of the water quality conditions in Virginia from Jan. 1, 2017, to Dec. 31, 2022. The results in the integrated report demonstrate overall trends in state waters and prompt action, including development of total maximum daily loads for waters that do not meet water quality standards. The main purpose of this amendment is to reissue the general permit regulation for another ten-year term. The only changes proposed to the general permit section (Section 100) are minor (updating the date of the new permit term, and other editorial corrections) and changes to maintain consistency with current stormwater program requirements. No changes have been made to the regulation in response to this comment.

Details of Changes Made Since the Previous Stage

*List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

No changes are being made to the final amendments since the proposed stage.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

In addition to the correction of spellings and citations and the replacement of the current effective and expiration dates with the new permit dates throughout the general permit regulation, the following changes are being proposed:

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-680		Chapter Title.	Title revised to include "VWP" abbreviation for clarity and consistency.
9VAC25-680-25		Authorization for coverage under VWP general permit effective August 1, 2006.	Repealing Section 25 pertaining to transition of general permit coverage from 2006 to 2016. Section is obsolete and no longer relevant.
9VAC25-680-27		VWP general permit coverage; transition; continuation.	Title of Section revised to read: "VWP general permit and coverage; expiration; transition; continuation" to clarify requirements found in the section. Requirements identified in the subsections of this section were reorganized to: (1) clearly state the term of the general permit; (2) identify and carry through on the expectation for the need to reapply at the end of the permit term when a project has not

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			been completed to help in the applicant or permittee's planning efforts and (3) include the existing Board administrative continuance provisions originally included in 9VAC25-680-35.
9VAC25-680-30		Authorization to impact surface waters	Language added to this section provides for additional flexibility in the application and notification formats that are acceptable.
9VAC25-680-35		Administrative continuance	Repealing this section. The administrative continuance provisions have been moved to 9VAC25-680-27 C.
9VAC25-680-100		VWP General Permit	Replace references throughout the section to the outdated "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" with the "Virginia Erosion and Stormwater Management Regulation, 9VAC25-875." Part I E – combine subdivisions 1 and 2 associated with removing handbook reference. Stormwater management requirements vary depending upon the activities being conducted. Referencing the 9VAC25-875 regulation avoids setting conflicting requirements between the VWP general permit and the stormwater management requirements that may apply to a permittee needing both authorizations. Part II E 7 – replace 'substance' with 'substances'. Part III K – revise erroneous citations 9VAC25-210-180 and 62.1-44.15:25 with correct citations 9VAC25-210, 9VAC25-680, and 62.1-44.15(5). Replace 'stream bank' with 'streambank'.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
FORMS		Forms incorporated as part of the general permit regulation	Updating forms to reference the current titles and versions.
DOCUMENTS INCORPORATED BY REFERENCE.		Documents incorporated as part of the general permit regulation by reference	Deletion of reference to obsolete "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation." Revising document title, version date, and link for the Virginia Invasive Plant Species List. Revising document title, version date, and link for <i>Classification of Wetlands and Deepwater Habitats of the United States</i>, adapted from Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. The general permit is available for use by the regulated community, including small businesses.

The reissuance of this VWP general permit accomplishes the objectives of applicable laws and minimizes the application and permit implementation costs to affected small business owners. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and permit application and compliance costs.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This general permit applies to the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, bicycle and pedestrian paths, and airport runways and taxiways, including all attendant features both temporary and permanent). It has been designed to minimize burden on regulated entities while accomplishing the objectives of applicable laws and minimizes the application and permit implementation costs. This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficient, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-680
VAC Chapter title(s)	Virginia Water Protection General Permit for Linear Transportation Projects
Action title	2026 Reissuance of General Permit – 9VAC25-680 (WP3)
Date this document prepared	April 25, 2025 – Resubmitted October 16, 2025 - No changes have been made to the regulation between the proposed and final stages. As a result, no changes have been made to this form.
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2.

Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: The general permit is a streamlined permitting approach for impacts to the Commonwealth's surface waters. The proposed action provides

	efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes. Virginia Wetland Protection (VWP) general permits expire every 10 years and must be reissued in order for permit coverage to be available to existing entities to continue coverage and for new entities to be able to obtain coverage for conducting this regulated activity. If the general permit is not re-issued, each member of the regulated community will need to obtain an individual VWP permit to conduct the regulated activity. This VWP general permit WP3 expires August 1, 2026, and must be reissued to make coverage available for permanently or temporarily impact up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for linear transportation projects after August 1, 2026. For this reason, the costs associated with obtaining an individual VWP permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Direct Costs: Permit application fees apply to VWP general permit coverages once a certain amount of impacts is reached (more than one-tenth acre of wetlands/open water or more than 300 linear feet of stream channel) – below these limits, the fee is \$0. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. WP3 fees range from \$600 to \$2,400. The individual permit fees range from \$2,400 to a maximum of \$60,000. Approximately 17 WP3 coverages that require a fee are issued per year. On average, another 20 WP3 coverages are issued per year that do not require fees. Indirect Costs: The proposed amendments are not expected to result in any additional indirect costs for the regulated community since the changes do not add requirements or impose any additional burdens on them. Indirect costs may include fees charged to applicants who contract assistance through professional services to complete and submit application forms. However, the cost involved to prepare an application for a VWP general

	permit coverage is considerably less than the cost for a VWP individual permit due to the amount of time needed to gather and provide required information, and the cost to place a required public comment notice in one or more newspapers. The use of professional services by applicants is optional. Direct Benefits: There are approximately 86 regulated entities covered by VWP general permit WP3 who will need to complete authorized activities but that will no longer have coverage after August 1, 2026. There are an additional, approximate 17 new regulated entities identified as likely to have received coverage under VWP general permit WP3 by August 1, 2026, adding to the potential pool of permittees unable to continue or complete authorized activities. Reissuance of this general permit allows applicable permittees to continue or complete projects with little to no interruption. Reissuance with the amendments proposed also ensures that new entities are able to obtain coverage before and after August 1, 2026 for conducting covered activities in surface waters. The proposed amendments clarify several provisions in the VWP general permit regulation, including transitional provisions described above, that improve understanding among the regulated community, saving time in planning projects and preparing applications. Indirect Benefits: The reissuance of this VWP general permit may indirectly benefit economic development because it allows for the issuance of a general permit in regulation that is protective of human health and the environment, and is a less burdensome authorization pathway for the regulated community than having to obtain a VWP individual permit. Regulating discharges into state surface waters, including wetlands, aids in creating cleaner waters and appealing places to live, work, and recreate in Virginia, thus benefiting tourism and economic development.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct and indirect costs. No indirect costs are expected due to the limited extent of the changes being made to the general permit regulation.	(b) \$600 to a maximum of \$2,400 for each general permit coverage requiring a fee.

(3) Net Monetized Benefit	N/A
(4) Other Costs & Benefits (Non-Monetized)	N/A
(5) Information Sources	DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software; 9VAC25-20 Fees for Permits and Certificates

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: If the regulation remains as is, the general permit expires on August 1, 2026, and no VWP general permit option will be available for use after that date. If there is no VWP general permit coverage option, then one direct cost is applicants having only one choice for project approval, the VWP individual permit. Application fees for this permit type are listed in 9VAC25-20; are based on the amount of impacts and/or activities; and are substantially higher than the application fees currently charged for VWP general permit coverage, which is maxed out at two acres. The maximum fee for a general permit coverage is \$2,400, and the maximum fee for an individual permit is \$60,000. Indirect Costs: An indirect cost is that existing permittees needing to complete projects will no longer have coverage, and should the project not be complete, they would have to stop work or risk enforcement action by one or more agencies and obtain an individual permit. Also, some projects will likely not be implemented due to the increased time period, extra informational requirements, and public involvement necessary to issue a VWP individual permit versus a general permit coverage. Direct/Indirect Benefits: There are no direct or indirect benefits to the regulated public or the Commonwealth.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) As noted above, the Commonwealth stands to lose revenue directly and indirectly from the absence of being able to issue VWP general permit coverages.	(b) None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Regulating activities through the issuance of general permit regulations and coverages is an alternative streamlined approach that is used to regulate entities that conduct similar activities as opposed to requiring individual permits for those activities. Direct Costs: A benefit of this general permit is its lower cost to permittees relative to the cost to obtaining a VWP individual permit. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. The coverage fees for a general permit range from \$0 to a maximum of \$2,400; the individual permit fees range from \$2,400 to a maximum of \$60,000. Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) See above for an analysis of the direct costs of an individual permit.	(b) None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, VWP individual permits would be required to conduct the regulated activities.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Assistance	N/A	
(5) Information Sources	N/A	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the VWP general permit regulation. Single family residences do not typically conduct activities that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry's use of the VWP general permit. While not typical, a family or families may need to conduct activities in state surface waters that are regulated. Certain residential activities in wetlands do not require a VWP permit of any type, but in the rare case such a permit would be required, the VWP general permit coverage offers a streamlined pathway for approval at a lower cost. Also, if this general permit did not exist, individual permits at a higher cost may be required for the residential activities. Also, if the applicant were in the commercial or industrial sector, and the higher-fee VWP individual permit was necessary, costs could be passed on to consumers, including families.	
(4) Information Sources	N/A	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a

	streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, a VWP individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for certain activities in state surface waters.	
(4) Alternatives	N/A	
(5) Information Sources	N/A	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-680-25	(M/A):	1	0	-1	-1
	(D/A):	1	0	-1	-1
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-680-27	(M/A):	0	0	0	0
	(D/A):	0	+1	0	+1
	(M/R):	3	0	0	0
	(D/R):	0	+1	0	+1
9VAC25-680-30	(M/A):	5	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-680-35	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	1	0	-1	-1
9VAC25-680-100	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	54	0	0	0
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): -1
					(D/A): 0
					(M/R): 0
					(D/R): 0

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-680 entire chapter	Cost of individual permit vs VWP general permit WP3	Individual permit cost if a general permit is not reissued: \$2,400 ¹ (Does not include the time and costs for the applicant to prepare the individual permit application or public notice fees. Minimum cost for an average of 17 issuances per year could total \$40,800.)	Maximum cost per VWP general permit WP3 - \$2,400 ² . (General permit coverage fees range from \$600 to \$2,400 based on total allowable impacts. Averaging 17 issuances per year could total between \$10,200 and \$40,800.	While the general permit represents a similar base cost, the savings per coverage compared to an individual permit could be up to \$1,800 depending upon total impacts, plus the additional expenses related to the issuance of a VWP individual permit (variable case-by-case).
9VAC25-680 entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2024); 156 days ³	Average amount of time to issue general permit coverage (FY2024): 42 days ⁴	Permittee obtains permit coverage on average 114 days sooner under the general permit.

Other Decreases or Increases in Regulatory Stringency (if applicable)

¹ 9VAC25-20, based on maximum of two acres of impacts

² Ibid.

³ DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software

⁴ Ibid.

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
N/A	N/A	N/A

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB G

Project 8059 - Exempt Final

State Water Control Board

2026 Reissuance of General Permit – 9VAC25-690

Chapter 690

Virginia Water Protection (VWP) General Permit for Impacts from Development and Certain Mining Activities

9VAC25-690-25. Authorization for coverage under VWP general permit effective August 1, 2006. (Repealed.)

A. All complete applications or notifications received by the department through 11:59 p.m. on August 1, 2016, shall be processed in accordance with the VWP general permit regulation in effect August 1, 2006, through August 1, 2016. If the application or notification is incomplete or if there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a completeness determination, the applicant shall reapply for coverage under the VWP general permit effective August 2, 2016, or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. VWP general permit authorizations granted through 11:59 p.m. on August 1, 2016, shall remain in full force and effect until 11:59 p.m. on the expiration date stated on the VWP authorization cover page, unless otherwise revoked or terminated or unless a notice of project completion is received by the department on or before that date. Any permittee that desires to continue an authorized activity beyond the stated expiration date must reapply for coverage under the VWP general permit effective August 2, 2016, pursuant to its terms, standards, and conditions, or apply for a VWP individual permit, including payment of any required permit application fee. This section shall only apply to permittees holding valid authorizations for coverage granted under the VWP general permit effective August 1, 2006, through August 1, 2016.

9VAC25-690-27. VWP general permit and coverage; expiration; transition; continuation.

A. The general permit in 9VAC25-690-100 is effective August 2, 2026, and expires August 1, 2036. All applications or notifications received on or after August 2, 2026, will be processed in accordance with the VWP general permit regulation effective August 2, 2026. If there is not adequate time as allowed by § 62.1-44.15:21 of the Code of Virginia to make a permit coverage decision, the applicant shall reapply for coverage under the next consecutive VWP general permit or apply for a VWP individual permit, including payment of any required permit application fee. No refund of permit application fees shall be made.

B. ~~The general permit in 9VAC25-690-100 is effective August 2, 2016, and expires August 1, 2026.~~ Any coverage that is granted pursuant to 9VAC25-690-30 shall remain in full force and effect until 11:59 p.m. on August 1, 2026 2036, unless the general permit coverage is terminated or revoked on or before this date. Where a permittee that has received general permit coverage desires to continue or complete the authorized activities beyond August 1, 2026 2036, the permittee shall reapply for new general permit coverage or for a VWP individual permit, including payment of any required permit application fee. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

C. In any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with this chapter and the board, through no fault of the permittee, does not issue the next consecutive

VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit. Application may be made at any time for a VWP individual permit in accordance with 9VAC25-210. Activities in surface waters requiring a permit shall not commence or continue until VWP general permit coverage is granted and effective or a VWP individual permit is issued by the department.

9VAC25-690-30. Authorization to impact surface waters.

A. Any person granted coverage under the VWP general permit effective August 2, 2016 2026, may permanently or temporarily impact up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for general development and certain mining activities, provided that:

1. The applicant submits notification as required in ~~9VAC25-690-50 and 9VAC25-690-60~~ this chapter using forms of application or notification.
2. The applicant remits any required permit application fee.
3. The applicant receives general permit coverage from the Department of Environmental Quality and complies with the limitations and other requirements of the VWP general permit; the general permit coverage letter; the Clean Water Act, as amended; and the State Water Control Law and attendant regulations.
4. The applicant has not been required to obtain a VWP individual permit under 9VAC25-210 for the proposed project impacts. The applicant, at ~~his~~ the applicant's discretion, may seek a VWP individual permit, or coverage under another applicable VWP general permit, in lieu of coverage under this VWP general permit.
5. Impacts, both temporary and permanent, result from a single and complete project including all attendant features.
 - a. Where a road segment (e.g., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of surface waters (several single and complete projects), the department may, at its discretion, require a VWP individual permit.
 - b. For the purposes of this chapter, when an interchange has multiple crossings of surface waters, the entire interchange shall be considered the single and complete project.
6. The stream impact criterion applies to all components of the project, including structures and stream channel manipulations.
7. Dredging does not exceed 5,000 cubic yards.
8. When required, compensation for unavoidable impacts is provided in accordance with § 62.1-44.15:23 of the Code of Virginia, 9VAC25-690-70, and 9VAC25-210-116.

B. Activities that may be granted coverage under this VWP general permit include the following:

1. Residential, commercial, institutional. The construction or expansion of building foundations, building pads, and attendant features for residential, commercial, and institutional development activities.
 - a. Residential developments include both single and multiple units.
 - b. Commercial developments include retail stores, industrial facilities, restaurants, business parks, office buildings, and shopping centers.

c. Institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship.

d. Attendant features include roads, parking lots, garages, yards, utility lines, stormwater management facilities, and recreation facilities (such as playgrounds, playing fields, and golf courses). Attendant features must be necessary for the use and maintenance of the structures.

2. Recreational facilities. The construction or expansion of recreational facilities and small support facilities.

a. Recreational facilities include hiking trails, bike paths, horse paths, nature centers, and campgrounds (but not trailer parks). Boat ramps (concrete or open-pile timber), boathouses, covered boat lifts, mooring piles and dolphins, fender piles, camels (wooden floats serving as fenders alongside piers), and open-pile piers (including floating piers, and travel-lift piers, ~~etc.~~) associated with recreational facilities are also included.

b. Recreational facilities do not include as a primary function the use of motor vehicles, buildings, or impervious surfaces.

c. Golf courses and ski area expansions may qualify as recreational facilities provided the construction of the proposed facility does not result in a substantial deviation from the natural contours and the facility is designed to minimize adverse effects on state waters and riparian areas. Measures that may be used to minimize adverse effects on waters and riparian areas include the implementation of integrated pest management plans, adequate stormwater management, vegetated buffers, and fertilizer management plans.

d. Small support facilities are authorized provided they are directly related to the recreational activity. Small support facilities include maintenance storage buildings and stables.

e. The following do not qualify as recreational facilities: hotels, restaurants, playing fields (e.g., baseball, soccer, or football fields), basketball and tennis courts, racetracks, stadiums, arenas, or new ski areas.

f. The recreational facility must have an adequate water quality management plan, such as a stormwater management plan, to ensure that the recreational facility results in no substantial adverse effects to water quality.

3. Stormwater management facilities. The construction, maintenance, and excavation of stormwater management facilities; the installation and maintenance of water control structures, outfall structures, and emergency spillways; and the maintenance dredging of existing stormwater management facilities.

a. Stormwater management facilities include stormwater ponds and facilities, detention basins, retention basins, traps, and other facilities designed to reduce pollutants in stormwater runoff.

b. The stormwater management facility must:

(1) To the maximum extent practicable, be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates).

(2) Not permanently restrict or impede the passage of normal or expected high flows, unless the primary purpose of the facility is to impound waters.

(3) Withstand expected high flows.

(4) To the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and not increase water flows from the project site, relocate water, or redirect flow beyond preconstruction conditions.

(5) To the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the facility is part of a larger system designed to manage water flows.

(6) Be designed using best management practices (BMPs) and watershed protection techniques. ~~Examples of such BMPs are described in the Virginia Stormwater Management Handbook and include~~ to minimize adverse effects to aquatic resources, including forebays, vegetated buffers, bioengineering methods, and siting considerations ~~to minimize adverse effects to aquatic resources.~~

c. Maintenance excavation shall be in accordance with the original facility maintenance plan, or when unavailable, an alternative plan approved by the Department of Environmental Quality, and shall not exceed, to the maximum extent practicable, the character, scope, or size detailed in the original design of the facility.

4. Mining facilities. The construction or expansion of mining facilities and attendant features for a single and complete project. This general permit may not be used to authorize impacts from in-stream mining activities or operations as defined in 9VAC25-690-10.

a. Mining facilities include activities directly associated with aggregate mining (e.g., sand, gravel, and crushed or broken stone); hard rock/mineral mining (e.g., metalliferous ores); and surface coal, natural gas, and coalbed methane gas mining, as authorized by the Virginia Department of Energy.

b. Attendant features are authorized provided they are directly related to the mining facility, and include access road construction, parking lots, offices, maintenance shops, garages, and stormwater management facilities.

c. Both direct impacts (e.g., footprints of all fill areas, road crossings, sediment ponds, and stormwater management facilities; mining through state waters; stockpile of overburden; and excavation) and indirect impacts (e.g., diversion of surface water and reach of state waters affected by sediment pond pool and sediment transport) shall be considered when granting coverage under this general permit.

C. The board waives the requirement for coverage under a VWP general permit for activities that occur in an isolated wetland of minimal ecological value, as defined in 9VAC25-210-10. Upon request by the department, any person claiming this waiver shall demonstrate to the satisfaction of the department that he qualifies for the waiver.

D. Coverage under VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

E. Coverage under a nationwide or regional permit promulgated by the U.S. Army Corps of Engineers (USACE), and for which the department has issued § 401 certification in accordance with 9VAC25-210-130 H as of August 2, ~~2016~~ 2026, shall constitute coverage under this VWP general permit unless (i) a state program general permit (SPGP) is required and granted for the activity or impact; or (ii) coverage under a VWP general permit is not allowed pursuant to subdivision D 2 of § 62.1-44.15:21 of the State Water Control Law.

F. Coverage under a permit issued by the Department of Energy under the Virginia Coal Surface Mining Control and Reclamation Act, Chapter 10 (§ 45.2-1000 et seq.) of Title 45.2 of the Code of Virginia, where such permit authorizes activities that may be permitted by this chapter

and contains a mitigation plan for the impacts from the mining activities, shall also constitute coverage under this VWP general permit.

G. When the department determines on a case-by-case basis that concerns for water quality and the aquatic environment so indicate, the department may require a VWP individual permit in accordance with 9VAC25-210-130 B rather than granting coverage under this VWP general permit.

9VAC25-690-35. Administrative continuance. (Repealed.)

~~Beginning on August 2, 2016, in any case where an existing permittee has submitted a timely and complete notification or application for coverage under the next consecutive VWP general permit in accordance with 9VAC25-690-50 and 9VAC25-690-60 and the board, through no fault of the permittee, does not issue the next consecutive VWP general permit with an effective date on or before the expiration date of the expiring VWP general permit, the conditions of that expiring VWP general permit and any requirements of coverage granted under it shall continue in force until the effective date of the next consecutive VWP general permit.~~

9VAC25-690-100. VWP general permit.

VWP GENERAL PERMIT NO. WP4 FOR IMPACTS FROM DEVELOPMENT AND CERTAIN MINING ACTIVITIES UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE WATER CONTROL LAW

Effective date: August 2, ~~2016~~ 2026

Expiration date: August 1, ~~2026~~ 2036

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP general permit, the board has not taken into consideration the structural stability of any proposed activities.

The permanent or temporary impact of up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general permit ~~set forth herein~~; any requirements in coverage granted under this general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it.

Part I.

Special Conditions.

A. Authorized activities.

1. The activities authorized by this chapter shall not cause more than the permanent or temporary impacts of up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the department in the coverage letter, if any, shall be enforceable conditions of this permit.

2. Any changes to the authorized permanent impacts to surface waters shall require a notice of planned change in accordance with 9VAC25-690-80. An application or request for modification to coverage or another VWP permit application may be required.

3. Any changes to the authorized temporary impacts to surface waters shall require written notification to and approval from the Department of Environmental Quality in accordance with 9VAC25-690-80 prior to initiating the impacts and restoration to preexisting conditions in accordance with the conditions of this permit.

4. Modification to compensation requirements may be approved at the request of the permittee when a decrease in the amount of authorized surface waters impacts occurs, provided that the adjusted compensation meets the initial compensation goals.

B. Overall conditions.

1. The activities authorized by this VWP general permit shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of the Code of Virginia.

2. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Pipes and culverts placed in streams must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless otherwise specifically approved by the Department of Environmental Quality on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters, unless the area is contained within a cofferdam and the work is performed in the dry or unless otherwise approved by the Department of Environmental Quality. Excess or waste concrete shall not be disposed of in flowing surface waters or washed into flowing surface waters.

4. All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

5. Erosion and sedimentation controls shall be designed ~~in accordance with~~ to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875), or for mining activities covered by this general permit, the standards issued by the Virginia Department of Energy that are effective as those in ~~the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992~~ 9VAC25-875. These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area is stabilized and shall then be removed.

6. Exposed slopes and streambanks shall be stabilized immediately upon completion of work in each permitted impact area. All denuded areas shall be properly stabilized in ~~accordance to comply with the requirements of the~~ accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992 Stormwater Management Regulation (9VAC25-875).

7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways) and demolition activities associated with the project shall be accomplished in a manner

that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this VWP general permit.

8. No machinery may enter flowing waters, unless authorized by this VWP general permit or approved prior to entry by the Department of Environmental Quality.

9. Heavy equipment in temporarily-impacted wetland areas shall be placed on mats, geotextile fabric, or other suitable material to minimize soil disturbance to the maximum extent practicable. Equipment and materials shall be removed immediately upon completion of work.

10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of authorized activities and within the project or right-of-way limits shall be clearly flagged or marked for the life of the construction activity at that location to preclude unauthorized disturbances to these surface waters and compensatory mitigation areas during construction. The permittee shall notify contractors that no activities are to occur in these marked surface waters.

11. Temporary disturbances to surface waters during construction shall be avoided and minimized to the maximum extent practicable. All temporarily disturbed wetland areas shall be restored to preexisting conditions within 30 days of completing work at each respective temporary impact area, which shall include reestablishing preconstruction elevations and contours with topsoil from the impact area where practicable and planting or seeding with appropriate wetland vegetation according to cover type (i.e., emergent, scrub-shrub, or forested). The permittee shall take all appropriate measures to promote and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation through the second year post-disturbance. All temporarily impacted streams and streambanks shall be restored to their preconstruction elevations and contours with topsoil from the impact area where practicable within 30 days following the construction at that stream segment. Streambanks shall be seeded or planted with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

12. Materials (including fill, construction debris, and excavated and woody materials) temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately stabilized to prevent entry into state waters, managed such that leachate does not enter state waters, and completely removed within 30 days following completion of that construction activity. Disturbed areas shall be returned to preconstruction elevations and contours with topsoil from the impact area where practicable; restored within 30 days following removal of the stockpile; and restored with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

13. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, french drains, or other similar structures.

14. The permittee shall employ measures to prevent spills of fuels or lubricants into state waters.

15. The permittee shall conduct activities in accordance with the time-of-year restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia Marine Resources Commission, or other interested and affected agencies, as contained, when

applicable, in Department of Environmental Quality VWP general permit coverage, and shall ensure that all contractors are aware of the time-of-year restrictions imposed.

16. Water quality standards shall not be violated as a result of the construction activities.

17. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless otherwise authorized by the Department of Environmental Quality, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream channel can begin.

C. Road crossings.

1. Access roads and associated bridges, pipes, and culverts shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable. Access roads constructed above preconstruction elevations and contours in surface waters must be bridged, piped, or culverted to maintain surface flows.

2. Installation of road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions, or similar structures.

D. Utility lines.

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area must be returned to its preconstruction elevations and contours with topsoil from the impact area where practicable and restored within 30 days of completing work in the area, unless otherwise authorized the Department of Environmental Quality. Restoration shall be the seeding or planting of the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List, September 2024, shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

2. Material resulting from trench excavation may be temporarily sidcast into wetlands not to exceed a total of 90 days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a french drain effect.). For example, utility lines may be backfilled with clay blocks to ensure that the trench does not drain surface waters through which the utility line is installed.

E. Stream modification and ~~stream bank~~ streambank protection.

1. Riprap bank stabilization ~~and riprap aprons for outfalls~~ shall be of an appropriate size and design ~~in accordance to comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992~~ Stormwater Management Regulation (9VAC25-875).

~~2. Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.~~

~~3. 2.~~ For ~~stream bank~~ streambank protection activities, the structure and backfill shall be placed as close to the ~~stream bank~~ streambank as practicable. No material shall be placed in excess of the minimum necessary for erosion protection.

~~4. 3.~~ All ~~stream bank~~ streambank protection structures shall be located to eliminate or minimize impacts to vegetated wetlands to the maximum extent practicable.

368 ~~5.~~ 4. Asphalt and materials containing asphalt or other toxic substances shall not be used
369 in the construction of submerged sills or breakwaters.

370 ~~6.~~ 5. Redistribution of existing stream substrate for the purpose of erosion control is
371 prohibited.

372 ~~7.~~ 6. No material removed from the stream bottom shall be disposed of in surface waters,
373 unless otherwise authorized by this VWP general permit.

374 F. Dredging.

375 1. Dredging depths shall be determined and authorized according to the proposed use
376 and controlling depths outside the area to be dredged.

377 2. Dredging shall be accomplished in a manner that minimizes disturbance of the bottom
378 and minimizes turbidity levels in the water column.

379 3. If evidence of impaired water quality, such as a fish kill, is observed during the dredging,
380 dredging operations shall cease, and the Department of Environmental Quality shall be
381 notified immediately.

382 4. Barges used for the transportation of dredge material shall be filled in such a manner
383 to prevent the overflow of dredged materials.

384 5. Double handling of dredged material in state waters shall not be permitted.

385 6. For navigation channels the following shall apply:

386 a. A buffer of four times the depth of the dredge cut shall be maintained between the
387 bottom edge of the design channel and the channelward limit of wetlands, or a buffer
388 of 15 feet shall be maintained from the dredged cut and the channelward edge of
389 wetlands, whichever is greater. This landward limit of buffer shall be flagged and
390 inspected prior to construction.

391 b. Side slope cuts of the dredging area shall not exceed a two-horizontal-to-one-
392 vertical slope to prevent slumping of material into the dredged area.

393 7. A dredged material management plan for the designated upland disposal site shall be
394 submitted and approved 30 days prior to initial dredging activity.

395 8. Pipeline outfalls and spillways shall be located at opposite ends of the dewatering area
396 to allow for maximum retention and settling time. Filter fabric shall be used to line the
397 dewatering area and to cover the outfall pipe to further reduce sedimentation to state
398 waters.

399 9. The dredge material dewatering area shall be of adequate size to contain the dredge
400 material and to allow for adequate dewatering and settling out of sediment prior to
401 discharge back into state waters.

402 10. The dredge material dewatering area shall utilize an earthen berm or straw bales
403 covered with filter fabric along the edge of the area to contain the dredged material, filter
404 bags, or other similar filtering practices, any of which shall be properly stabilized prior to
405 placing the dredged material within the containment area.

406 11. Overtopping of the dredge material containment berms with dredge materials shall be
407 strictly prohibited.

408 G. Stormwater management facilities.

409 1. Stormwater management facilities shall be installed in accordance with best
410 management practices and watershed protection techniques (e.g., vegetated buffers,
411 siting considerations to minimize adverse effects to aquatic resources, bioengineering
412 methods incorporated into the facility design to benefit water quality and minimize adverse

effects to aquatic resources) that provide for long-term aquatic resources protection and enhancement, to the maximum extent practicable.

2. Compensation for unavoidable impacts shall not be allowed within maintenance areas of stormwater management facilities.

3. Maintenance activities within stormwater management facilities shall not require additional permit coverage or compensation provided that the maintenance activities do not exceed the original contours of the facility, as approved and constructed, and is accomplished in designated maintenance areas as indicated in the facility maintenance or design plan or when unavailable, an alternative plan approved by the Department of Environmental Quality.

Part II.

Construction and Compensation Requirements, Monitoring, and Reporting.

A. Minimum compensation requirements.

1. The permittee shall provide any required compensation for impacts in accordance with the conditions in this VWP general permit, the coverage letter, and the chapter promulgating the general permit. For all compensation that requires a protective mechanism, including preservation of surface waters or buffers, the permittee shall record the approved protective mechanism in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

2. Compensation options that may be considered under this VWP general permit shall meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and 9VAC25-690-70.

3. The permittee-responsible compensation site ~~or sites~~ depicted in the conceptual compensation plan submitted with the application shall constitute the compensation site. A site change may require a modification to coverage.

4. For compensation involving the purchase of mitigation bank credits or the purchase of in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas until documentation of the mitigation bank credit purchase or of the in-lieu fee program credit purchase has been submitted to and received by the Department of Environmental Quality.

5. The final compensation plan shall be submitted to and approved by the department prior to a construction activity in permitted impact areas. The department shall review and provide written comments on the final plan within 30 days of receipt or it shall be deemed approved. The final plan as approved by the department shall be an enforceable requirement of any coverage under this VWP general permit. Deviations from the approved final plan shall be submitted and approved in advance by the department.

a. The final permittee-responsible wetlands compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) A summary of the type and acreage of existing wetland impacts anticipated during the construction of the compensation site and the proposed compensation for these impacts; a site access plan; a monitoring plan, including proposed success criteria, monitoring goals, and the location of photo-monitoring stations, monitoring wells, vegetation sampling points, and reference wetlands or streams, if available; an abatement and control plan for undesirable plant species; an erosion and

sedimentation control plan; a construction schedule; and the final protective mechanism for the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

b. The final permittee-responsible stream compensation plan shall include:

(1) The complete information on all components of the conceptual compensation plan.

(2) An evaluation, discussion, and plan drawing ~~or drawings~~ of existing conditions on the proposed compensation stream, including the identification of functional and physical deficiencies for which the measures are proposed, and summary of geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth ratio, sinuosity, slope, and substrate, ~~etc.~~); a site access plan; a monitoring plan, including a monitoring and reporting schedule, monitoring design and methodologies for success, proposed success criteria, location of photo-monitoring stations, vegetation sampling points, survey points, bank pins, scour chains, and reference streams; an abatement and control plan for undesirable plant species; an erosion and sedimentation control plan, if appropriate; a construction schedule; a plan-view drawing depicting the pattern and all compensation measures being employed; a profile drawing; cross-sectional drawing ~~or drawings~~ of the proposed compensation stream; and the final protective mechanism for the protection of the compensation site ~~or sites~~, including all surface waters and buffer areas within its boundaries.

(3) The approved protective mechanism. The protective mechanism shall be recorded in the chain of title to the property, or an equivalent instrument for government-owned lands, and proof of recordation shall be submitted to the Department of Environmental Quality prior to commencing impacts in surface waters.

6. The following criteria shall apply to permittee-responsible wetland or stream compensation:

a. The vegetation used shall be native species common to the area, shall be suitable for growth in local wetland or riparian conditions, and shall be from areas within the same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural Resources Conservation Service Land Resource Region as that of the project site. Planting of woody plants shall occur when vegetation is normally dormant, unless otherwise approved in the final wetlands or stream compensation plan ~~or plans~~.

b. All work in permitted impact areas shall cease if compensation site construction has not commenced within 180 days of commencement of project construction, unless otherwise authorized by the department.

c. The Department of Environmental Quality shall be notified in writing prior to the initiation of construction activities at the compensation site.

d. Point sources of stormwater runoff shall be prohibited from entering a wetland compensation site prior to treatment by appropriate best management practices. Appropriate best management practices may include sediment traps, grassed waterways, vegetated filter strips, debris screens, oil and grease separators, or forebays.

e. The success of the compensation shall be based on meeting the success criteria established in the approved final compensation plan.

f. If the wetland or stream compensation area fails to meet the specified success criteria in a particular monitoring year, other than the final monitoring year, the reasons for this failure shall be determined, and a corrective action plan shall be submitted to the Department of Environmental Quality for approval with or before that year's monitoring report. The corrective action plan shall contain at minimum the proposed actions, a schedule for those actions, and a monitoring plan, and shall be implemented by the permittee in accordance with the approved schedule. Should significant changes be necessary to ensure success, the required monitoring cycle shall begin again, with monitoring year one being the year that the changes are complete, as confirmed by the Department of Environmental Quality. If the wetland or stream compensation area fails to meet the specified success criteria by the final monitoring year or if the wetland or stream compensation area has not met the stated restoration goals, reasons for this failure shall be determined and a corrective action plan, including proposed actions, a schedule, and a monitoring plan, shall be submitted with the final year monitoring report for Department of Environmental Quality approval. Corrective action shall be implemented by the permittee in accordance with the approved schedule. Annual monitoring shall be required to continue until two sequential, annual reports indicate that all criteria have been successfully satisfied and the site has met the overall restoration goals (e.g., that corrective actions were successful).

g. The surveyed wetland boundary for the wetlands compensation site shall be based on the results of the hydrology, soils, and vegetation monitoring data and shall be shown on the site plan. Calculation of total wetland acreage shall be based on that boundary at the end of the monitoring cycle. Data shall be submitted by December 31 of the final monitoring year.

h. Herbicides or algicides shall not be used in or immediately adjacent to the wetlands or stream compensation site ~~or sites~~ without prior authorization by the department. All vegetation removal shall be done by manual means, unless authorized by the Department of Environmental Quality in advance.

B. Impact site construction monitoring.

1. Construction activities authorized by this permit that are within impact areas shall be monitored and documented. The monitoring shall consist of:

a. Preconstruction photographs taken at each impact area prior to initiation of activities within impact areas. Photographs shall remain on the project site and depict the impact area and the nonimpacted surface waters immediately adjacent to and downgradient of each impact area. Each photograph shall be labeled to include the following information: permit number, impact area number, date and time of the photograph, name of the person taking the photograph, photograph orientation, and photograph subject description.

b. Site inspections shall be conducted by the permittee or the permittee's qualified designee once every calendar month during activities within impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity and within the project or right-of-way limits; and all on-site permanent preservation areas required under this permit. Observations shall be recorded on the inspection form provided by the Department of Environmental Quality. The form shall be completed in its entirety for each monthly inspection and shall be kept on site and made available for review by the Department of Environmental Quality staff upon

request during normal business hours. Inspections are not required during periods of no activity within impact areas.

2. Monitoring of water quality parameters shall be conducted during permanent relocation of perennial streams through new channels in the manner noted in this subdivision. The permittee shall report violations of water quality standards to the Department of Environmental Quality in accordance with the procedures in ~~9VAC25-690-100~~ Part II E of the permit. Corrective measures and additional monitoring may be required if water quality standards are not met. Reporting shall not be required if water quality standards are not violated.

a. A sampling station shall be located upstream and immediately downstream of the relocated channel.

b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every 30 minutes for at least two hours at each station prior to opening the new channels and immediately before opening new channels.

c. Temperature, pH, and D.O. readings shall be taken after opening the channels and every 30 minutes for at least three hours at each station.

C. Permittee-responsible wetland compensation site monitoring.

1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site or sites, including invert elevations for all water elevation control structures and spot elevations throughout the site or sites. Aerial surveys shall include the variation from actual ground conditions, such as ~~±~~ plus or minus 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

2. Photographs shall be taken at the compensation site or sites from the permanent markers identified in the final compensation plan, and established to ensure that the same locations and view directions at the site ~~or sites~~ are monitored in each monitoring period. These photographs shall be taken after the initial planting and at a time specified in the final compensation plan during every monitoring year.

3. Compensation site monitoring shall begin on day one of the first complete growing season (monitoring year one) after wetland compensation site construction activities, including planting, have been completed. Monitoring shall be required for monitoring years one, two, three, and five, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the final monitoring year, then monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

4. The establishment of wetland hydrology shall be measured during the growing season, with the location and number of monitoring wells, and frequency of monitoring for each site, set forth in the final monitoring plan. Hydrology monitoring well data shall be accompanied by precipitation data, including rainfall amounts either from on site or from the closest weather station. Once the wetland hydrology success criteria have been satisfied for a particular monitoring year, monitoring may be discontinued for the remainder of that monitoring year following Department of Environmental Quality approval. After a period of three monitoring years, the permittee may request that hydrology monitoring be discontinued, providing that adequate hydrology has been established and maintained. Hydrology monitoring shall not be discontinued without written approval from the Department of Environmental Quality.

5. The presence of hydric soils or soils under hydric conditions shall be evaluated in accordance with the final compensation plan.

6. The establishment of wetland vegetation shall be in accordance with the final compensation plan. Monitoring shall take place in August, September, or October during the growing season of each monitoring year, unless otherwise authorized in the monitoring plan.

7. The presence of undesirable plant species shall be documented.

8. All wetland compensation monitoring reports shall be submitted in accordance with ~~9VAC25-690-100~~ Part II E of the permit.

D. Permittee-responsible stream compensation and monitoring.

1. Riparian buffer restoration activities shall be detailed in the final compensation plan and shall include, as appropriate, the planting of a variety of native species currently growing in the site area, including appropriate seed mixtures and woody species that are bare root, balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the ~~stream bank~~ streambank at bankfull elevation landward on both sides of the stream, shall be required where practical.

2. The installation of root wads, vanes, and other instream structures, shaping of the ~~stream banks~~ streambanks, and channel relocation shall be completed in the dry whenever practicable.

3. Livestock access to the stream and designated riparian buffer shall be limited to the greatest extent practicable.

4. Stream channel restoration activities shall be conducted in the dry or during low flow conditions. When site conditions prohibit access from the streambank or upon prior authorization from the Department of Environmental Quality, heavy equipment may be authorized for use within the stream channel.

5. Photographs shall be taken at the compensation site from the vicinity of the permanent photo-monitoring stations identified in the final compensation plan. The photograph orientation shall remain constant during all monitoring events. At a minimum, photographs shall be taken from the center of the stream, facing downstream, with a sufficient number of photographs to view the entire length of the restoration site. Photographs shall document the completed restoration conditions. Photographs shall be taken prior to site activities, during instream and riparian compensation construction activities, within one week of completion of activities, and during at least one day of each monitoring year to depict restored conditions.

6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial surveys, shall be conducted for the entire compensation site or sites. Aerial surveys shall include the variation from actual ground conditions, such as ~~±~~ plus or minus 0.2 feet. The survey shall be certified by the licensed surveyor or by a registered, professional engineer to conform to the design plans. The survey shall be submitted within 60 days of completing compensation site construction. Changes or deviations from the final compensation plans in the as-built survey or aerial survey shall be shown on the survey and explained in writing.

7. Compensation site monitoring shall begin on day one of the first complete growing season (monitoring year one) after stream compensation site construction activities, including planting, have been completed. Monitoring shall be required for monitoring years one and two, unless otherwise approved by the Department of Environmental Quality. In all cases, if all success criteria have not been met in the final monitoring year, then

monitoring shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied.

8. All stream compensation site monitoring reports shall be submitted by in accordance with ~~9VAC25-690-100~~ Part II E of the permit.

E. Reporting.

1. Written communications required by this VWP general permit shall be submitted to the appropriate Department of Environmental Quality office. The VWP general permit tracking number shall be included on all correspondence.

2. The Department of Environmental Quality shall be notified in writing prior to the start of construction activities at the first permitted impact area.

3. A construction status update form provided by the Department of Environmental Quality shall be completed and submitted to the Department of Environmental Quality twice per year for the duration of coverage under a VWP general permit. Forms completed in June shall be submitted by or on July 10, and forms completed in December shall be submitted by or on January 10. The form shall include reference to the VWP permit tracking number and one of the following statements for each authorized surface water impact location:

a. Construction activities have not yet started;

b. Construction activities have started;

c. Construction activities have started but are currently inactive; or

d. Construction activities are complete.

4. The Department of Environmental Quality shall be notified in writing within 30 days following the completion of all activities in all authorized impact areas.

5. The Department of Environmental Quality shall be notified in writing prior to the initiation of activities at the permittee-responsible compensation site. The notification shall include a projected schedule of activities and construction completion.

6. All permittee-responsible compensation site monitoring reports shall be submitted annually by December 31, with the exception of the last year, in which case the report shall be submitted at least 60 days prior to the expiration of the general permit, unless otherwise approved by the Department of Environmental Quality.

a. All wetland compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site, including a site location map identifying photo-monitoring stations, vegetative and soil monitoring stations, monitoring wells, and wetland zones.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Analysis of all hydrology information, including monitoring well data, precipitation data, and gauging data from streams or other open water areas, as set forth in the final compensation plan.

(5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.

(6) Analysis of all vegetative community information, including woody and herbaceous species, both planted and volunteers, as set forth in the final compensation plan.

(7) Photographs labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description

of the photograph subject. This information shall be provided as a separate attachment to each photograph, if necessary. Photographs taken after the initial planting shall be included in the first monitoring report after planting is complete.

(8) Discussion of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site.

(10) Discussion of corrective measures or maintenance activities to control undesirable species, to repair damaged water control devices, or to replace damaged planted vegetation.

(11) Corrective action plan that includes proposed actions, a schedule, and monitoring plan.

b. All stream compensation site monitoring reports shall include, as applicable, the following:

(1) General description of the site, including a site location map identifying photo-monitoring stations and monitoring stations.

(2) Summary of activities completed during the monitoring year, including alterations or maintenance conducted at the site.

(3) Description of monitoring methods.

(4) Evaluation and discussion of the monitoring results in relation to the success criteria and overall goals of compensation.

(5) Photographs shall be labeled with the permit number, the name of the compensation site, the photo-monitoring station number, the photograph orientation, the date and time of the photograph, the name of the person taking the photograph, and a brief description of the photograph subject. Photographs taken prior to compensation site construction activities, during instream and riparian restoration activities, and within one week of completion of activities shall be included in the first monitoring report.

(6) Discussion of alterations, maintenance, or major storm events resulting in significant change in stream profile or cross section, and corrective actions conducted at the stream compensation site.

(7) Documentation of undesirable plant species and summary of abatement and control measures.

(8) Summary of wildlife or signs of wildlife observed at the compensation site.

(9) Comparison of site conditions from the previous monitoring year and reference site, and as-built survey, if applicable.

(10) Corrective action plan that includes proposed actions, a schedule and monitoring plan.

(11) Additional submittals that were approved by the Department of Environmental Quality in the final compensation plan.

7. The permittee shall notify the Department of Environmental Quality in writing when unusual or potentially complex conditions are encountered that require debris removal or involve potentially toxic ~~substance~~ substances. Measures to remove the obstruction, material, or toxic ~~substance~~ substances or to change the location of a structure are prohibited until approved by the Department of Environmental Quality.

8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday, the appropriate Department of Environmental Quality regional office shall be notified;

otherwise, the Department of Emergency Management shall be notified at 1-800-468-8892.

9. Violations of state water quality standards shall be reported to the appropriate Department of Environmental Quality office no later than the end of the business day following discovery.

10. The permittee shall notify the Department of Environmental Quality no later than the end of the third business day following the discovery of additional impacts to surface waters, including wetlands, stream channels, and open water that are not authorized by the Department of Environmental Quality or to any required preservation areas. The notification shall include photographs, estimated acreage or linear footage of impacts, and a description of the impacts.

11. Submittals required by this VWP general permit shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation."

Part III.

Conditions Applicable to All VWP General Permits.

A. Duty to comply. The permittee shall comply with all conditions, limitations, and other requirements of the VWP general permit; any requirements in coverage granted under this VWP general permit; the Clean Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations, and toxic standards and prohibitions.

B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent impacts in violation of the VWP general permit that may have a reasonable likelihood of adversely affecting human health or the environment.

C. Reopener. This VWP general permit may be reopened to modify its conditions when the circumstances on which the previous VWP general permit was based have materially and substantially changed, or special studies conducted by the department or the permittee show material and substantial change since the time the VWP general permit was issued and thereby constitute cause for revoking and reissuing the VWP general permit.

D. Compliance with state and federal law. Compliance with this VWP general permit constitutes compliance with the VWP permit requirements of the State Water Control Law. Nothing in this VWP general permit shall be construed to preclude the institution of any legal action under or relieve the permittee from any responsibilities, liabilities, or other penalties

established pursuant to any other state law or regulation or under the authority preserved by § 510 of the Clean Water Act.

E. Property rights. The issuance of this VWP general permit does not convey property rights in either real or personal property or any exclusive privileges, nor does it authorize injury to private property, any invasion of personal property rights, or any infringement of federal, state, or local laws or regulations.

F. Severability. The provisions of this VWP general permit are severable.

G. Inspection and entry. Upon presentation of credential, the permittee shall allow the department or any duly authorized agent of the department, at reasonable times and under reasonable circumstances, to enter upon the permittee's property, public or private, and have access to inspect and copy any records that must be kept as part of the VWP general permit conditions; to inspect any facilities, operations, or practices (including monitoring and control equipment) regulated or required under the VWP general permit; and to sample or monitor any substance, parameter, or activity for the purpose of ensuring compliance with the conditions of the VWP general permit or as otherwise authorized by law. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained ~~herein~~ in this general permit shall make an inspection time unreasonable during an emergency.

H. Transferability of VWP general permit coverage. VWP general permit coverage may be transferred to another permittee when all of the criteria listed in this subsection are met. On the date of the VWP general permit coverage transfer, the transferred VWP general permit coverage shall be as fully effective as if it had been granted directly to the new permittee.

1. The current permittee notifies the department of the proposed transfer of the general permit coverage and provides a written agreement between the current and new permittees containing a specific date of transfer of VWP general permit responsibility, coverage, and liability to the new permittee, or that the current permittee will retain such responsibility, coverage, or liability, including liability for compliance with the requirements of enforcement activities related to the authorized activity.

2. The department does not within 15 days notify the current and new permittees of the board's intent to modify or revoke and reissue the VWP general permit.

I. Notice of planned change. VWP general permit coverage may be modified subsequent to issuance in accordance with 9VAC25-690-80.

J. VWP general permit coverage termination for cause. VWP general permit coverage is subject to termination for cause by the department after public notice and opportunity for a hearing in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

1. Noncompliance by the permittee with any provision of this chapter, any condition of the VWP general permit, or any requirement in general permit coverage;
2. The permittee's failure in the application or during the process of granting VWP general permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;
3. The permittee's violation of a special or judicial order;
4. A determination by the department that the authorized activity endangers human health or the environment and can be regulated to acceptable levels by a modification to VWP general permit coverage or a termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP general permit; or
6. A determination that the authorized activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

K. The department may terminate VWP general permit coverage without cause when the permittee is no longer a legal entity due to death or dissolution or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the department shall follow the applicable procedures for termination under ~~9VAC25-210-480~~ 9VAC25-210, this chapter, and ~~§ 62.1-44.15:25~~ subdivision (5) of § 62.1-44.15 of the Code of Virginia.

L. VWP general permit coverage termination by consent. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all authorized activities requiring notification under 9VAC25-690-50 A and all compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this termination of coverage on behalf of the department. The permittee shall submit the following information:

1. Name, mailing address, and telephone number;
2. Name and location of the activity;
3. The VWP general permit tracking number; and
4. One of the following certifications:

a. For project completion:

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage have been completed. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage."

b. For project cancellation:

"I certify under penalty of law that the activities and any required compensatory mitigation authorized by the VWP general permit and general permit coverage will not occur. I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

c. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by the Department of Environmental Quality, and the following certification statement:

"I certify under penalty of law that the activities or the required compensatory mitigation authorized by the VWP general permit and general permit coverage have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination I am no longer authorized to perform activities in surface waters in accordance with the VWP general permit and general permit coverage, and

that performing activities in surface waters is unlawful where the activity is not authorized by the VWP permit or coverage, unless otherwise excluded from obtaining coverage. I also understand that the submittal of this notice does not release me from liability for any violations of the VWP general permit or coverage, nor does it allow me to resume the authorized activities without reapplication and coverage."

M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which VWP general permit coverage has been granted in order to maintain compliance with the conditions of the VWP general permit or coverage.

P. Duty to provide information.

1. The permittee shall furnish to the department any information that the department may request to determine whether cause exists for modifying, revoking, or terminating VWP permit coverage or to determine compliance with the VWP general permit or general permit coverage. The permittee shall also furnish to the department, upon request, copies of records required to be kept by the permittee.

2. Plans, maps, conceptual reports, and other relevant information shall be submitted as required by the department prior to commencing construction.

Q. Monitoring and records requirements.

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP general permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 as published in the July 1, 2024, update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP general permit, and records of all data used to complete the application for coverage under the VWP general permit, for a period of at least three years from the date of general permit expiration. This period may be extended by request of the department at any time.

4. Records of monitoring information shall include, as appropriate:

- a. The date, exact place, and time of sampling or measurements;
- b. The name of the individuals who performed the sampling or measurements;
- c. The date and time the analyses were performed;
- d. The name of the individuals who performed the analyses;
- e. The analytical techniques or methods supporting the information such as observations, readings, calculations, and bench data used;
- f. The results of such analyses; and
- g. Chain of custody documentation.

R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit, it shall be unlawful for the permittee to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances;
2. Excavate in a wetland;
3. Otherwise alter the physical, chemical, or biological properties of state waters and make them detrimental to the public health, to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses; or
4. On and after October 1, 2001, conduct the following activities in a wetland:
 - a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;
 - b. Filling or dumping;
 - c. Permanent flooding or impounding; or
 - d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the expiration date of the VWP general permit shall comply with the provisions in 9VAC25-690-27.

FORMS (9VAC25-690)

[Department of Environmental Quality Water Division Permit Application Fee Form, Form 5 \(rev. 10/2018\)](#)

[Joint Permit Application \(JPA\)-State Specific Information \(rev. 11/2024\)](#)

~~Virginia Department of Transportation, Inter-Agency Coordination Meeting Joint Permit Application (eff. 6/2008)~~

[Virginia Department of Transportation, Interagency Coordination Meeting Joint Permit Application \(rev. 7/2017\)](#)

[Monthly Reporting of Impacts Less than or Equal to One-Tenth Acre Statewide \(eff. 8/2007\)](#)

Documents Incorporated by Reference (9VAC25-690)

~~Classification of Wetlands and Deepwater Habitats of the United States, Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992~~

[Classification of Wetlands and Deepwater Habitats of the United States, adapted from Cowardin, Carter, Golet, and LaRoe \(1979\), Wetlands Subcommittee, Federal Geographic Data Committee, August 2013](#)

Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230

~~Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation~~

~~Virginia Invasive Plant Species List, Natural Heritage Technical Document 14-11, Department of Conservation and Recreation, Division of Natural Heritage (2014)~~

~~Virginia Stormwater Management Handbook, First Edition, 1999, Department of Conservation and Recreation~~

[Virginia Invasive Plant Species List, Division of Natural Heritage, Department of Conservation and Recreation, September 2024](#)


townhall.virginia.gov

Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-690
VAC Chapter title(s)	Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities
Action title	2026 Reissuance of General Permit - 9VAC25-690
Final agency action date	November 18, 2025
Date this document prepared	November 5, 2025

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the *Code of Virginia*). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*. 30, 2023

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This regulatory action is needed to reissue Chapter 690 - *Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities* that is expiring on August 1, 2026. The general permit is a streamlined permitting approach for regulating impacts to the Commonwealth's surface waters. This action provides efficiency to the permit coverage process for activities having minor impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes.

The purpose of this regulatory action is to reissue this general permit – also referred to as WP4 - which expires on August 1, 2026, for another ten-year term and allow for amendments to provide clarity in provisions related to coverage expiration, transition, and continuation; to correct citations and typographical errors; to update forms and reference documents; and to clarify administrative procedures.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

Section D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the State Water Control Board (Board) to develop general permits for specific activities. The *Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities*, 9VAC25-690, covers permanent or temporary impacts up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for general development and certain mining activities.

Per § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022), DEQ conducts once every four years a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

"DEQ" means the Department of Environmental Quality.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, "board" means the Department of Environmental Quality.

"Coverage" means authorization to conduct a project in accordance with a VWP general permit.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"TAC" stands for Technical Advisory Committee.

"VTCA" means the Virginia Transportation Construction Alliance

"VDOT" means the Virginia Department of Transportation.

"VWP" stands for Virginia Water Protection.

"VWP general permit" means the general permit text, terms, requirements, and conditions set forth in a regulation that constitutes a VWP permit authorizing a specified category of activities.

"WP4" stands for Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities, 9VAC25-690.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) that the agency has “adopted final amendments” to the regulation; 3) the name of the agency taking the action; and 4) the title of the regulation. A suggested statement is, “On [insert date] the Board/Department of [insert name] adopted final amendments to the [title of regulation(s)].”

At its meeting on November 18, 2025, the State Water Control Board (SWCB) adopted the final amendments to the *Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities* (9VAC25-690).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

The basis for this regulatory action is the State Water Control Law (Chapter 3.1 of Title 62.1 of the *Code of Virginia*) with specific provisions in law (Article 2.2., §§ 62.1-44.15:20 - 62.1-44.15:23.1, and Article 2.6, §§ 62.1-44.15:80 – 62.1-44.15:84) mandating certain actions and allowing discretionary authority over certain matters to the promulgating agency. Subsection D of § 62.1-44.15:21 (Impacts to wetlands) of the *Code of Virginia* directs the Board to develop general permits for such activities in wetlands as it deems appropriate, and that the general permits shall include such terms and conditions as the Board deems necessary to protect state waters and fish and wildlife resources from significant impairment. It further directs the Board to develop a general permit for coal, natural gas, and coalbed methane gas mining activities authorized by the Department of Energy, and sand mining and for activities governed by nationwide or regional permits approved by the Board and issued by the U.S. Army Corps of Engineers.

Section 62.1-44.15(10) of the *Code of Virginia* sets forth the Board's authority for the adoption of regulations deemed necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth:

“(10) To adopt such regulations as it deems necessary to enforce the general soil erosion control and stormwater management program and water quality management program of the Board in all or part of the Commonwealth, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable.”

In addition, periodic and small business impact reviews are provided for in § 2.2-4017 (periodic review) and § 2.2-4007.1 (small business review) of the *Code of Virginia*, and Executive Order 19 (2022).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The existing *Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities* (9VAC25-690 et seq.) is expiring on August 1, 2026. In conjunction with reissuance of this VWP general permit, the VWP Permit Program is amending the existing VWP regulation for this general permit as necessary to implement the general permit. If the existing VWP general permit is not reissued prior to expiration on August 1, 2026, no general permit coverage can be extended to applicants submitting new applications for activities regulated by this general permit or to existing permittees wishing to continue authorized activities beyond August 1, 2026. These applicants would be required to wait for reissuance of the next applicable general permit or obtain a VWP individual permit instead.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

The Board is amending the expiration and effective dates in the *Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities* for another ten-year term. The Board is proposing amendments related to transitioning between the expiring VWP general permit and the next consecutive VWP general permit. The amendments to the regulation may include provisions related to application forms, form formats, coverage issuance, and continuation of activities. These amendments include updates to citations, references, form names and dates, as well as correct typographical and grammatical errors.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, permittees, and the agency of reissuing this general permit are that a Virginia Water Protection (VWP) general permit will continue to be available to applicants submitting new applications for regulated activities or to existing permittees wishing to continue authorized activities beyond August 1, 2026. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. There are no known disadvantages to the public, agency, or regulated community.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no regulatory requirements that are more restrictive than applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information.

Other State Agencies Particularly Affected

The Virginia Department of Transportation (VDOT) may be impacted by the regulatory changes. VDOT Forms are included in all four of the VWP general permits. VDOT was represented on the Technical Advisory Committee (TAC).

Localities Particularly Affected:

There are no localities that bear a disproportionate material impact as the general permit is available and applies statewide.

Other Entities Particularly Affected:

No other entities are particularly affected by the proposed regulation.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

A public comment period was held from August 25, 2025, through October 24, 2025. In addition to the comment period, a public hearing was held on Wednesday, October 15, 2025. Two comments were received.

Commenter	Comment	Agency response
Natasha Nahas	How has “the board” determined that there is a reasonable assurance that this VWP general permit, if complied with, will protect in stream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources? What relevant information/data-recently collected (within the last permit cycle, or last two permit cycles) - was evaluated?	Coverage under a VWP general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statutes, regulations, or ordinances, including erosion and sediment control, stormwater management, discharges to state waters, and the Chesapeake Bay Preservation Act requirements. The permit conditions included in the general permit provide a reasonable assurance that if complied with the permitted activity will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Where there will be impacts, VWP permittees are required to first avoid and minimize impacts and then compensate for unavoidable impacts. Overall, water quality in Virginia has improved in recent years. As part of DEQ's Water Quality Assessment process, monitoring results are analyzed to determine if the water quality meets set standards and is clean enough for swimming, fishing and other uses. Virginia's comprehensive surface water quality monitoring strategy integrates both fixed-site (i.e., conventional) and probabilistic monitoring techniques to improve understanding of water quality conditions. Results of the most recent Water Quality Assessment, which are published in the Final 2024 305(b)/303(d) Water Quality Assessment Integrated Report, provide a summary of the water quality conditions in Virginia from Jan. 1, 2017, to Dec. 31, 2022. The results in the integrated report demonstrate overall trends in state waters and prompt action, including development of total maximum daily loads for waters that do not meet water quality standards. The main purpose of this amendment is to reissue the general permit regulation for another ten-year term. The only changes proposed to the general permit section (Section 100) are minor (updating the date of the new permit term, and other editorial corrections) and changes to maintain consistency with current stormwater program requirements. No changes have been made to the regulation in response to this comment.

Rob Lanham – Virginia Transportation Construction Alliance (VTCA)	The commenter supports the reissuance of the General Permit for Impacts from Development and Certain Mining Activities and encourages the Department to retain impact limits of less than two acres and the permit duration of ten years.	No changes to the regulations have been made as a result of this comments.

Details of Changes Made Since the Previous Stage

*List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

No changes are being made to the final amendments since the proposed stage.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

In addition to the correction of spellings and citations and the replacement of the current effective and expiration dates with the new permit dates throughout the general permit regulation, the following changes are being proposed:

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-690		Chapter Title.	Title revised to include "VWP" abbreviation for clarity and consistency.
9VAC25-690-25		Authorization for coverage under VWP general permit effective August 1, 2006.	Repealing Section 25 pertaining to transition of general permit coverage from 2006 to 2016. Section is obsolete and no longer relevant.
9VAC25-690-27		VWP general permit coverage; transition; continuation.	Title of Section revised to read: "VWP general permit and coverage; expiration; transition; continuation" to clarify requirements found in the section.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Requirements identified in the subsections of this section were reorganized to: (1) clearly state the term of the general permit; (2) identify and carry through on the expectation for the need to reapply at the end of the permit term when a project has not been completed to help in the applicant or permittee's planning efforts and (3) include the existing Board administrative continuance provisions originally included in 9VAC25-690-35.
9VAC25-690-30		Authorization to impact surface waters	Language added to this section provides for additional flexibility in the application and notification formats that are acceptable. Delete reference to the Virginia Stormwater Management Handbook in 30.B.3.b(6). This handbook was repealed.
9VAC25-690-35		Administrative continuance	Repealing this section. The administrative continuance provisions have been moved to 9VAC25-690-27 C.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-690-100		VWP General Permit	Replace references throughout the section to the outdated "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" with the "Virginia Erosion and Stormwater Management Regulation, 9VAC25-875." Part I E – combine subdivisions 1 and 2 associated with removing handbook reference. Stormwater management requirements vary depending upon the activities being conducted. Referencing the 9VAC25-875 regulation avoids setting conflicting requirements between the VWP general permit and the stormwater management requirements that may apply to a permittee needing both authorizations. Part II E 7 – replace 'substance' with 'substances'. Part III K – revise erroneous citations 9VAC25-210-180 and 62.1-44.15:25 with correct citations 9VAC25-210, 9VAC25-690, and 62.1-44.15(5). Replace 'stream bank' with 'streambank'.
FORMS		Forms incorporated as part of the general permit regulation	Updating forms to reference the current titles and versions.
DOCUMENTS INCORPORATED BY REFERENCE.		Documents incorporated as part of the general permit regulation by reference	Deletion of reference to obsolete "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, Department of Conservation and Recreation". Deletion of reference to obsolete "Virginia Stormwater Management Handbook, First Edition, 1999, Department of Conservation and Recreation." Revising document title, version date, and link for the Virginia Invasive Plant Species List.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Revising document title, version date, and link for <i>Classification of Wetlands and Deepwater Habitats of the United States</i> , adapted from Cowardin, Lewis M. II, et al., United States Fish and Wildlife Service, December 1979, Reprinted 1992.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. The continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit and makes permit administration more reasonable for DEQ. The general permit is available for use by the regulated community, including small businesses.

The reissuance of this VWP general permit accomplishes the objectives of applicable laws and minimizes the application and permit implementation costs to affected small business owners. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and permit application and compliance costs.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This general permit applies to the construction and maintenance of development activities and activities directly associated with the construction and maintenance of development activities and to activities directly associated with aggregate mining (e.g., sand, gravel, and crushed or broken stone); hard rock/mineral mining (e.g., metalliferous ores); and surface coal, natural gas, and coalbed methane gas

mining, as authorized by the Virginia Department of Energy. It has been designed to minimize burden on regulated entities while accomplishing the objectives of applicable law and minimizes the application and permit implementation costs. This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficient, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-690
VAC Chapter title(s)	Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities
Action title	2026 Reissuance of General Permit – 9VAC25-690 (WP4)
Date this document prepared	April 25, 2025 – Resubmitted October 16, 2025 - No changes have been made to the regulation between the proposed and final stages. As a result, no changes have been made to this form.
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulation intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2.

Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	Background: The general permit is a streamlined permitting approach for impacts to the Commonwealth's surface waters. The proposed action provides efficiency to the permit coverage process for activities having minor

	impacts to state surface waters, simplifies permit issuance procedures, and makes clarifying amendments for improved understanding of regulatory provisions and permit processes. Virginia Wetland Protection (VWP) general permits expire every 10 years and must be reissued in order for permit coverage to be available to existing entities to continue coverage and for new entities to be able to obtain coverage for conducting this regulated activity. If the general permit is not re-issued, each member of the regulated community will need to obtain an individual VWP permit to conduct the regulated activity. This VWP general permit WP4 expires August 1, 2026, and must be reissued to make coverage available for permanently or temporarily impact up to two acres of nontidal wetlands or open water and up to 1,500 linear feet of nontidal stream bed for general development and certain mining activities after August 1, 2026. For this reason, the costs associated with obtaining an individual VWP permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Direct Costs: Permit application fees apply to VWP general permit WP4 coverages once a certain amount of impacts is reached (more than one-tenth acre of wetlands/open water or more than 300 linear feet of stream channel) – below these limits, the fee is \$0. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. WP4 fees range from \$600 to \$2,400. The individual permit fees range from \$2,400 to a maximum of \$60,000. Approximately 140 WP4 coverages that require a fee are issued per year. On average, another 45 WP4 coverages are issued per year that do not require fees. Indirect Costs: The proposed amendments are not expected to result in any additional indirect costs for the regulated community since the changes do not add requirement or impose any additional burdens on them. Indirect costs may include fees charged to applicants who contract assistance through professional services to complete and submit application forms. However, the cost involved to prepare an application for a VWP general permit coverage is considerably less than the cost for a VWP individual

	permit due to the amount of time needed to gather and provide required information, and the cost to place a required public comment notice in one or more newspapers. The use of professional services by applicants is optional. Direct Benefits: There are approximately 597 regulated entities covered by VWP general permit WP4 who will need to complete authorized activities but that will no longer have coverage after August 1, 2026. There are an additional, approximate 140 new regulated entities identified as likely to have received coverage by August 1, 2026, adding to the potential pool of permittees unable to continue or complete authorized activities. Reissuance of this general permit allows applicable permittees to continue or complete projects with little to no interruption. Reissuance with the amendments proposed also ensures that new entities are able to obtain coverage before and after August 1, 2026 for conducting covered activities in surface waters. The proposed amendments clarify several provisions in the VWP general permit regulation, including transitional provisions described above, that improve understanding among the regulated community, saving time in planning projects and preparing applications. Indirect Benefits: The reissuance of this VWP general permit may indirectly benefit economic development because it allows for the issuance of a general permit in regulation that is protective of human health and the environment, and is a less burdensome authorization pathway for the regulated community than having to obtain a VWP individual permit. Regulating discharges into state surface waters, including wetlands, aids in creating cleaner waters and appealing places to live, work, and recreate in Virginia, thus benefiting tourism and economic development.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct and indirect costs. No indirect costs are expected due to the limited extent of the changes being made to the general permit regulation.	(b) \$600 to a maximum of \$2,400 for each general permit coverage requiring a fee.
(3) Net Monetized Benefit	N/A	

(4) Other Costs & Benefits (Non-Monetized)	N/A
(5) Information Sources	DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software; 9VAC25-20 Fees for Permits and Certificates

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: If the regulation remains as is, the general permit expires on August 1, 2026, and no VWP general permit option will be available for use after that date. If there is no VWP general permit coverage option, then one direct cost is applicants having only one choice for project approval, the VWP individual permit. Application fees for this permit type are listed in 9VAC25-20; are based on the amount of impacts and/or activities; and are substantially higher than the application fees currently charged for VWP general permit coverage, which is maxed out at two acres. The maximum fee for a general permit coverage is \$2,400, and the maximum fee for an individual permit is \$60,000. Indirect Costs: An indirect cost is that existing permittees needing to complete projects will no longer have coverage, and should the project not be complete, they would have to stop work or risk enforcement action by one or more agencies and obtain an individual permit. Also, some projects will likely not be implemented due to the increased time period, extra informational requirements, and public involvement necessary to issue a VWP individual permit versus a general permit coverage. Direct/Indirect Benefits: There are no direct or indirect benefits to the regulated public or the Commonwealth.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) As noted above, the Commonwealth stands to lose revenue directly and indirectly from the absence of being able to issue VWP general permit coverages.	(b)None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Regulating activities through the issuance of general permit regulations and coverages is an alternative streamlined approach that is used to regulate entities that conduct similar activities as opposed to requiring individual permits for those activities. Direct Costs: A benefit of this general permit is its lower cost to permittees relative to the cost to obtaining a VWP individual permit. The application fee cost to applicants for VWP general permit coverage is less than that for a VWP individual permit. The coverage fees for a general permit range from \$0 to a maximum of \$2,400; the individual permit fees range from \$2,400 to a maximum of \$60,000. Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) See above for an analysis of the direct costs of an individual permit.	(b)None.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, VWP individual permits would be required to conduct the regulated activities.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Assistance	N/A	
(5) Information Sources	N/A	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the VWP general permit regulation. Single family residences do not typically conduct activities that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry's use of the VWP general permit. While not typical, a family or families may need to conduct activities in state surface waters that are regulated. Certain residential activities in wetlands do not require a VWP permit of any type, but in the rare case such a permit would be required, the VWP general permit coverage offers a streamlined pathway for approval at a lower cost. Also, if this general permit did not exist, individual permits at a higher cost may be required for the residential activities. Also, if the applicant were in the commercial or industrial sector, and the higher-fee VWP individual permit was necessary, costs could be passed on to consumers, including families.	
(4) Information Sources	N/A	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit

	regulation, a VWP individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None	(b) None
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the VWP general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for certain activities in state surface waters.	
(4) Alternatives	N/A	
(5) Information Sources	N/A	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-690-25	(M/A):	1	0	-1	-1
	(D/A):	1	0	-1	-1
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-690-27	(M/A):	0	0	0	0
	(D/A):	0	+1	0	+1
	(M/R):	3	0	0	0
	(D/R):	0	+1	0	+1
9VAC25-690-30	(M/A):	5	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-690-35	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	1	0	-1	-1
9VAC25-690-100	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	54	0	0	0
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): -1
					(D/A): 0
					(M/R): 0
					(D/R): 0

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-690 entire chapter	Cost of individual permit vs VWP general permit WP4	Individual permit cost if a general permit is not reissued: \$2,400 ¹ (Does not include the costs for the applicant to prepare the individual permit application or public notice fees. Minimum cost for an average of 140 issuances per year could total \$336,000.)	Maximum cost per VWP general permit WP4 - \$2,400 ² (General permit coverage fees range from \$600 to \$2,400 based on total allowable impacts. Averaging 140 issuances per year could total between \$84,000 and \$336,000.)	While the general permit represents a similar base cost, the savings per coverage compared to an individual permit could be up to \$1,800 depending upon total impacts, plus the additional expenses related to the issuance of a VWP individual permit (variable case-by-case).
9VAC25-690 entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2024): 156 days ³	Average amount of time to issue general permit (FY2024): 42 days ⁴	Permittee obtains permit coverage on average 114 days sooner under the general permit.

Other Decreases or Increases in Regulatory Stringency (if applicable)

¹ 9VAC25-20, based on maximum of two acres of impacts

² Ibid.

³ DEQ Comprehensive Environmental Data System (CEDS) and Virginia Department of Accounts annual reporting using Logi and Tableau database reporting software

⁴ Ibid.

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
N/A	N/A	N/A

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB H



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

MEMORANDUM

TO: State Water Control Board

FROM: Elizabeth McKercher, Water Planning Division Director

A handwritten signature in black ink, appearing to read "Elizabeth McKercher".

SUBJECT: Request to Proceed to Public Hearing and Comment on Proposed Amendments to the Water Quality Standards — Triennial Review

DATE: October 16, 2025

EXECUTIVE SUMMARY

Staff intends to ask the State Water Control Board (Board) for approval to go to public hearing and comment on amendments to the Water Quality Standards regulation (9 VAC 25-260 Virginia Water Quality Standards, Triennial Review Proposed Amendments; attached). The Board is required to review of the Water Quality Standards (WQS) under the Code of Virginia (§62.1- 44.15(3a)) and federal regulation at 40 CFR 131 at least once every three years. During this review the Board must adopt, modify or cancel standards as appropriate. This rulemaking is needed because new scientific information is available to update the WQS and changes are needed to ensure Department of Environmental Quality (DEQ) permitting, monitoring and assessment programs are based on the most recent science and policies. The goal is to provide the citizens of the Commonwealth with a technical regulation that is protective of water quality in surface waters, reflects recent scientific information, reflects agency procedures and is reasonable and practical. A Regulatory Advisory Panel (RAP) advised staff on development of the proposed amendments. An overview of the proposed changes is presented below and discussed in more detail in subsequent sections of this memorandum:

- Update the description of the Deep Water Aquatic Life Designated Use in 9VAC25-260-10 to include a reference to a DEQ authored technical support document that provides the technical basis for expanding the existing boundary of the Deep Water use in Virginia's Chesapeake Bay mainstem, which is described in a 2004 EPA-Chesapeake Bay Program Office document that is referenced in this section. The adoption of this boundary expansion would enable the consideration of the pycnocline—a layer in the water column

marked by steep increase in water density that impedes the aeration of bottom waters—in the assessment of dissolved oxygen (DO) criteria in much of Virginia’s Chesapeake Bay mainstem. The DO criteria that are designed to protect the Deep Water use are less stringent than the default criteria.

- The addition of a tenths’ place to Chesapeake Bay DO criteria that are currently expressed as whole numbers to be consistent with the number of significant digits expressed in other DO criteria in the WQS.
- Modification of implementation language for Chesapeake Bay water quality criteria to allow for more flexibility in assessment methods.
- Adoption of nationally recommended aquatic life criteria for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). These criteria recommendations, finalized by the U.S. Environmental Protection Agency (EPA) in 2024, are designed to protect freshwater organisms and are expressed as water column and fish tissue concentrations.
- Revision to the language pertaining to the copper Biotic Ligand Model (BLM), which can be used to determine alternative criteria for copper protective aquatic life in freshwater in place of hardness-based criteria equations. The proposed language states that any dataset used to develop BLM-based criteria shall be collected in accordance with a study plan approved by DEQ.

BACKGROUND

A Notice of Intended Regulatory Action (NOIRA) was published April 21, 2025. The NOIRA is available at: <https://townhall.virginia.gov/l/viewaction.cfm?actionid=6680>. A public comment period was held between April 21 and May 21, 2025. Comments were received from several organizations and individuals; a summary of the public comments received are provided as Attachment 1 of the Agency Background Document for the Proposed Regulation (which is provided as Attachment 3 of this memo). A RAP consisting of 15 members was formed and three meetings were held (July 24, August 15, and August 28, 2025). The RAP members and the organization represented by each member are presented as Attachment 1 of this memo. The meeting minutes from each of the three RAP meetings may be accessed online at: <https://townhall.virginia.gov/L/meetings.cfm>.

PROPOSED 2025 TRIENNIAL REVIEW AMENDMENTS

The following discussion summarizes the key sections of the regulation proposed for amendment and provides background on the basis for the proposed updates. A summary table providing further details on the specific changes proposed for amendment with this rulemaking is provided in Attachment 2 of this memo. Additional details on the background, legal authority, purpose, impacts, issues and public comments associated with the proposed regulation are contained in the Agency Background Document which is included as Attachment 3 of this memo.

1. Designation of Uses § 9 VAC 25-260-10

This section designates all state waters for recreational uses, the propagation and growth of balanced, indigenous aquatic life, wildlife, and the production of edible and marketable natural resources. It also describes the aquatic life uses specific to the tidal waters of the Chesapeake

Bay and its tributaries. One of these special uses is the Deep Water designated use, which protects the survival and growth of aquatic life inhabiting deep-water habitats. Where designated, this use exists within and below the observed pycnocline, a water column layer marked by a steep increase in water density. This layer can impede mixing of the water column, resulting in the natural depletion of dissolved oxygen in bottom waters. Pycnoclines are characteristic of deeper waters and appear frequently during the summer. Out of consideration of the natural effect that pycnocline formation has on DO concentrations, the Deep Water use is protected with less stringent DO criteria than the DO criteria applicable to well-mixed waters. Currently, only a small portion of Virginia's Chesapeake Bay mainstem is designated for the Deep Water use. A comprehensive examination of historical and contemporary monitoring data has led staff to the conclusion that the physical conditions characteristic of the Deep Water habitat (deep-water bathymetry, summertime water column stratification, and minimal inflow of oxygen-rich waters) are present in portions of Virginia's Chesapeake Bay mainstem that are not currently designated for the Deep Water use. DEQ staff recommend the expansion of the current Deep Water boundary to include areas with the bottom bathymetry, stratification (pycnocline occurrence), and water circulation patterns characteristic of this designated use. These changes are not expected to have an economic impact on permittees.

2. Criteria for surface water § 9 VAC 25-260-140

The Table of Parameters contains a list of toxic chemicals, and the water quality criteria designed to protect human health and aquatic life. The criteria are expressed as concentrations in parts per billion (micrograms/liter). Triennial Review is the appropriate time to update the Table based on new technical information available on the toxicity of these parameters to human health and aquatic life.

a) **Aquatic Life Criteria for PFOA and PFOS**—EPA has issued new criteria recommendations for PFOA and PFOS, which are in a group of chemicals called per- and polyfluoroalkyl substances (PFAS). These criteria are designed to protect aquatic life in freshwater. Virginia does not currently have criteria for these compounds. This change could have an economic impact on permittees if PFOA or PFOS are present in their effluent.

b) **Modification to language pertaining to the copper BLM**—DEQ staff recommend amendments to current language to include a statement that agency-approved procedures are to be used for conducting a BLM study and deriving freshwater copper criteria using the BLM for the purpose of permitting evaluations. The recommended language modification also makes it clearer that the BLM-based criteria supersede hardness-based criteria. This change could have an economic impact on permittees if copper is present in their effluent. It is uncertain whether the change would be an increase or a decrease in costs for permittees as site specific copper determinations using the BLM may be less or more expensive depending on the characteristics of the effluent and the receiving waters.

3. Chesapeake Bay Aquatic Life Criteria § 9 VAC 25-260-185

This section lists criteria that protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.

a) **Significant digits and Chesapeake Bay DO criteria**—There are 11 dissolved oxygen criteria in this section. Six of these criteria have one significant digit (a whole number), while the remaining criteria have two significant digits. The DO criteria applicable to non-Chesapeake Bay waters contained in 9VAC25-260-50 are expressed as two significant digits. The EPA-authored technical support materials for the Chesapeake Bay DO criteria do not provide an explanation for the low precision of the criteria expressed as whole numbers. DEQ staff recommend that a decimal place be added to the Migratory Fish Spawning and Nursery, Open Water, and Deep Water Chesapeake Bay DO criteria currently expressed as whole numbers. This action would produce consistency across the majority of DO criteria in the WQS except for DO criteria for the Deep Channel use, which will remain at one significant figure. This will alleviate confusion for implementation programs that use DEQ's rounding policy, which instructs DEQ staff to round compliance values to the number of significant digits in a permit limit or criterion. These changes are not expected to have an economic impact on permittees.

b) **Modification to Chesapeake Bay Criteria Implementation Language**—DEQ staff recommend modification to implementation language that is contained in this section. Currently the language restricts the assessment of Chesapeake Bay DO criteria to a specific method—the cumulative frequency distribution (CFD). This method has not allowed for the assessment of all Chesapeake Bay DO criteria using all existing datasets. DEQ staff recommend that the language be amended to allow for the use of DEQ-approved methods, including the CFD. This change is not expected to have an economic impact on permittees.

4. Special standards and requirements §9 VAC 25-260-310

A description of all site-specific criteria and the waters they apply to are provided in this section.

Site-specific DO criterion for the tidal Chickahominy River—DEQ staff have determined that the water quality in the tidal Chickahominy River is influenced significantly by surrounding wetlands and thus should be protected according to a special DO criterion recommended by EPA in 2004 for wetland-influenced tidal waters of the Chesapeake Bay. A 30-day mean criterion of 4.0 mg/L would replace the current 30-day mean criterion of 5.0 mg/L for salinity levels greater than 0.5 ppt and 5.5 mg/L for salinity less than or equal to 0.5 ppt. This special criterion would apply from June 1 to September 30. The current 30-day mean criterion would apply during the non-summer months. This change is not expected to have an economic impact on permittees.

Site-specific DO criterion for the tidal Pocomoke River-Oligohaline—DEQ staff recently learned that Maryland adopted a site-specific DO criterion for its side of the oligohaline portion of the Pocomoke River, which is split between Maryland and

Virginia. To bring consistency to the protection of this waterbody, DEQ staff recommend that the same criterion (a 30-day mean of 4.0 mg/L) be applied to the side of the waterbody within Virginia's boundary. This change is not expected to have an economic impact on permittees.

Text of the proposed Water Quality Standards regulation (9 VAC 25-260) incorporating the 2025 Triennial Review amendments is provided as Attachment 4.

ADDITIONAL COMMENTS AND ISSUES

Several other issues were suggested for consideration by commenters and/or RAP members during either the NOIRA public comment period or RAP meetings and were discussed with the RAP. However, where noted, DEQ staff do not believe revisions to the regulation with respect to these issues are warranted at this time.

Criteria to Protect Human Health; Per- and Polyfluoroalkyl Substances (PFAS/PFOA/PFBS)

EPA has developed draft nationally recommended water quality criteria for these substances protective of human health but has not yet finalized these recommendations. DEQ staff will consider the adoption of PFOS, PFOA, and PFBS human health criteria when they have been finalized. As noted above, DEQ staff recommend proceeding with adopting the PFOS and PFOA final recommended criteria for protection of aquatic life.

Criteria to Protect Primary Contact Recreation; Cyanotoxins

In 2019, EPA recommended thresholds designed to protect primary contact recreators (swimmers and bathers) from the harmful effects of cyanotoxins. Cyanotoxins are toxins produced by cyanobacteria, a kind of algae that can produce harmful algae blooms (HABs) in lakes/reservoirs and other slow-moving water bodies. States have the discretion to adopt the recommended thresholds as swimming advisory levels or as water quality criteria. Since 2021, the Virginia Department of Health (VDH) has used these thresholds, in addition to thresholds for other cyanotoxins, as the basis for swimming advisories. DEQ considers VDH swimming advisories when assessing the recreation use. Water quality assessments of the recreation use regarding HABs are reliant on swimming advisories issued by VDH.

Clarification of Shellfish Bacteria Criteria

A commenter suggested revisions to the fecal coliform criteria designed to ensure safe shellfish consumption to remove a reference to a specific method. VDH, the agency that is charged with implementing these criteria, has requested that no changes be recommended for these criteria.

Numeric Turbidity/Solids Criteria

Multiple commenters requested that DEQ develop numeric turbidity or solids criteria to protect rivers and streams from the impacts caused by excessive sediment. DEQ was directed by the Board to develop such criteria in 2019. DEQ has initiated this process but has not developed

candidate criteria. Turbidity/solids criteria will be handled in a rulemaking separate from this Triennial Review.

Review of Mixing Zone Policy

In response to comments requesting that DEQ re-evaluate its mixing zone policy to better protect sensitive aquatic life like freshwater mussels, Mr. Joseph Bryan, Virginia Pollutant Discharge Elimination System (VPDES) Permits Manager, presented an overview of DEQ's mixing zone policies to the RAP. The RAP did not propose regulatory changes for this triennial review, but DEQ acknowledged the concerns and indicated a need to review the recently adopted ammonia standard and how it interacts with agency guidance on mixing zones.

Nutrient Criteria

In response to comments received, Dr. Tish Robertson, WQS Scientist, summarized the existing programs that address nutrients in Virginia and the work that DEQ is doing to address nutrient over-enrichment. Virginia is relying heavily on the implementation measures and nutrient control strategies from existing programs, including the Chesapeake Bay Watershed Implementation Plan. These programs and practices are part of efforts to achieve the nutrient and sediment reductions established in the 2010 Chesapeake Bay Total Maximum Daily Load (TMDL), lakes/reservoirs nutrient criteria, and local nutrient, sediment and bacteria TMDLs.

Statewide Freshwater Aquatic Life Selenium Criterion

A commenter requested that DEQ consider adopting the most recent EPA-recommended selenium criterion for the protection of freshwater aquatic life. In 2025, the Board approved the adoption of this criterion for four waterbodies in the Tug Fork watershed. This criterion is expected to be more challenging to implement than other aquatic life criteria because of the hierarchical structure of the criteria elements (fish egg-ovary, fish whole body, fish muscle, and two flow-based water column concentrations). Because of these challenges, DEQ will be using the four waterbodies in the Tug Fork watershed as a pilot study that will inform the agency on whether the criterion should be adopted statewide.

Statewide Copper BLM Criteria

In 2016, the Board adopted the copper BLM into the WQS to provide an alternative to hardness-based freshwater copper criteria. However, the BLM has not been used due to the absence of language in the WQS and related guidance that would allow for the implementation of BLM-derived copper criteria without the need to promulgate each individual site-specific criterion. To address this issue, proposed language has been added to specify that any dataset used to develop BLM-based criteria shall be collected in accordance with a study plan approved by DEQ that will outline the procedures for collecting data and performing calculations for a site-specific BLM study. These data and calculations would be submitted to DEQ for review and incorporation into VPDES permitting evaluations. The hardness-based criteria will be used by default in cases where there is not enough data to use the BLM.

Implementation Guidance for Narrative Criteria

A commenter and RAP member requested that DEQ amend the WQS to fully implement and enforce the narrative criteria in all regulatory actions. Currently, water quality programs maintain these guidelines in program-specific implementation guidance manuals, which are revised periodically through the public participation procedures stipulated by § 2.2-4002.1 of the Administrative Process Act. Ms. Sandra Mueller, Water Monitoring and Assessment Program Manager, presented to the RAP examples of how narrative criteria are implemented in assessments, water compliance, and enforcement actions via DEQ's water resources and water permitting programs. No formal proposal was made for consideration by the RAP.

Request to Standardize Public Water Supply Delineations

A commenter and RAP member requested that DEQ standardize language pertaining to waters designated as public water supply (PWS) so that they extend no further than five miles above/upstream of a raw water intake, unless there is a compelling reason to do otherwise. Mr. David Whitehurst, WQS regulation coordinator, introduced the topic during the second RAP meeting and explained that there are fewer section descriptions in the WQS that have the "five miles above/upstream" language than descriptions that are inclusive of all "tributaries" or "headwaters". During the third RAP meeting, presentation materials prepared by Mr. Robert Edelman, Director of the Division of Technical Services in the VDH-Office of Drinking Water, were shared with the RAP members to provide an overview of VDH's source water protection policy and the context of the "five mile" delineation. Afterwards, Dr. Robertson provided a presentation with an overview of the statutory requirements regarding changing a designated beneficial use. Under federal code, states cannot remove uses that existed on or after November 28, 1975. Given these challenges, the PWS item was not recommended for consideration during the 2025 Triennial Review.

Consensus

Finally, it should be noted that there was general consensus among the RAP members for the proposed amendments to the WQS. However, there was not unanimous support for the proposed PFOA and PFOS aquatic life criteria. One RAP member expressed their reservations due to concerns over implementation. Additionally, upon further reflection after the final RAP meeting, one RAP member indicated an intent to suggest edits to the proposed Bay Criteria Implementation language to ensure that the CFD is required where it is currently working. DEQ staff note these concerns; however, the proposed criteria were supported by the majority of the RAP as well as DEQ staff.

ATTORNEY GENERAL CERTIFICATION

These amendments have been forwarded to the Office of the Attorney General for agency statutory authority, but authority has not yet been granted. The amendments will be proposed to be "contingent upon Attorney General Office certification of statutory authority" if not received by the November Board meeting.

PRESENTER CONTACT INFORMATION

Name: Tish Robertson, WQS Scientist

Phone: (804) 659-1295
Email: tish.robertson@deq.virginia.gov

ATTACHMENTS

Attachments to this memo to aid in your review of these proposed regulatory amendments are as follows:

Attachment 1 - 2025 Triennial Review Regulatory Advisory Panel Membership

Attachment 2 - Summary Table of 2025 Triennial Review Water Quality Standards Amendments

Attachment 3 - Agency Background Document for the Proposed Regulation

Attachment 4 - State Water Control Board, 9 VAC 25-260 Virginia Water Quality Standards, Triennial Review Proposed Amendments, 2025

Attachment 5 – Office of Regulatory Management (ORM) Economic Review Form

ATTACHMENT 1

2025 Triennial Review Regulatory Advisory Panel Membership

Triennial Review 2025

Regulatory Advisory Panel Members and Alternates

- Mike Gerel/ Joe Wood *Chesapeake Bay Foundation*
- K.C Filipino/Jill Sunderland *Hampton Roads Planning District Commission*
- Tom Dunlap/Jamie Brunkow *James River Association*
- Jamie S. Heisig-Mitchell/
Richard Sedgley *VA Association of Municipal Wastewater Agencies (VAMWA)*
- Martha Moore/Jake Tabor *VA Farm Bureau Federation*
- Jim Taylor *VA Manufacturers Association (VMA)*
- Juan J. Vicenty-Gonzalez/
Denise Hakowski *EPA Region 3*
- Kaylyn Gootman/Peter
Tango *EPA-Chesapeake Bay Program Office*
- JoAnn Banda/Serena Ciparis/
Anne Condon *U.S. Fish and Wildlife Service*
- Darryl Glover *Virginia Dept. of Conservation & Recreation (DCR)*
- Julie Henderson/Danielle
Schools *Virginia Dept. of Health (VDH-Environmental Services)*
- Dwayne Roadcap/Bob
Edelman *Virginia Dept. of Health (VDH-Office of Drinking Water)*
- Hanna Schul *Virginia Dept. of Wildlife Resources*
- David Sligh/Jackie Goodrum *Wild Virginia*
- Carl Friedrichs *Virginia Institute of Marine Science*

ATTACHMENT 2

Summary Table of 2025 Triennial Review Water Quality Standards Amendments

Amendment Proposal Summary Table – Triennial Review, September 2025

Section	Draft Proposed Amendments
9VAC25-260-10. Designation of uses.	• Add reference to DEQ-authored technical support document that provides the technical basis for expanding the Deep Water use in Virginia’s Chesapeake Bay mainstem and Mobjack Bay. This document is dated October 9, 2025.
9VAC25-260-140. Criteria for surface water.	• Addition of aquatic life criteria for PFOA and PFOS. • Amended language for Biotic Ligand Model (BLM) option for copper criteria (9VAC25-260-140.G). • Corrected a Chemical Abstracts Service (CAS) number for tributyltin. • Modified upstream boundary for Chickahominy River transition zone to indicate upstream terminus at Walker’s Dam.
9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.	• Inserted a decimal place to the Migratory Fish Spawning and Nursery, Open Water, and Deep Water Chesapeake Bay DO criteria currently expressed as whole numbers. • Amended implementation language in subsection D to allow for use of other DEQ-approved assessment methods.
9VAC25-260-187. Lake and Reservoir criteria.	• Name change: Lake Pelham to Lake Culpeper.
9VAC25-260-280. Analytical procedures.	• Removed “as amended” in reference to documents incorporated by reference. This is required by the Virginia Code Commission’s regulations.
9VAC25-260-310. Special standards and requirements.	• Added special DO criteria for tidal Chickahominy and Pocomoke Rivers. •
9VAC25-260-370. Classification column.	• Changed “DGIF” to “DWR” to reflect this agency name change.
9VAC25-260-390 Potomac River Basin (Potomac River Subbasin).	• Amended section 7g to replace “proposed impoundment” with “Germantown Lake” and tributaries. • Amended to correct pH special standard in section 11 (stockable trout waters Turkey Run). It was previously 9.6 and has been changed to 9.5.
9VAC25-260-400 Potomac River Basin (Shenandoah River Subbasin).	• Amended PWS segment for Front Royal to accommodate relocated intake in section 2b. Modified language to accommodate relocation of raw water intake approximately 3,600 feet downriver.
9VAC25-260-410 James River Basin (Lower).	• Added notation in special standards column of section 1 for tidal Chickahominy River DO special standard.
9VAC25-260-450 Roanoke River Basin.	• Amended to clarify stockable trout water in section 7b, Roanoke vs “South Roanoke”. Revised segment description to clarify the inclusion of South Fork Roanoke River, which was not addressed when originally adopted. Corrected upstream terminus to “confluence of Bottom and Goose creeks near the Floyd-Montgomery County line.”
9VAC25-260-520 Chesapeake Bay, Atlantic Ocean and small coastal basins.	• Added notation in special standards column of section 1 for the Pocomoke River DO special standard.
9VAC25-260-540 New River Basin.	• Amended section 2 to change “Big Wilson Creek” to “Wilson Creek” and moved to maintain alphabetic listing.
Documents Incorporated by Reference	• <u>Boundary of the Deep Water Designated Use in Virginia's Chesapeake Bay Mainstem</u>

ATTACHMENT 3

Agency Background Document for the Proposed Regulation



townhall.virginia.gov

Proposed Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC25-260
VAC Chapter title(s)	Water Quality Standards
Action title	Triennial Review 2024 Rulemaking to adopt new, update, or cancel existing water quality standards as required by § 62.1-44.15 of the Code of Virginia and the Federal Clean Water Act, 33 U.S.C. §§ 1251
Date this document prepared	September 22, 2025

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19, the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The subject matter of the rulemaking includes updated numerical and narrative criteria, use designations and other policies contained in the Water Quality Standards Regulation (9 VAC 25-260).

The intent of this rulemaking is to protect designated and beneficial uses of state waters by adopting regulations that are technically correct, necessary and reasonable. These standards will be used in setting Virginia Pollutant Discharge Elimination System (VPDES) Permit limits and for evaluating the waters of the Commonwealth for inclusion in the Clean Water Act 305(b) report and on the 303(d) list. Waters not meeting standards may require development of a Total Maximum Daily Load, effluent limitations, or further analysis of use removal or modification under the Clean Water Act at 303(e) and Code of Virginia [§ 62.1-44.19:7](#).

This rulemaking is needed because the last triennial review was completed in August 2022, and new scientific information is available to update the water quality standards. Changes to the regulation are also needed to ensure Department permitting, monitoring and assessment programs are based on the most recent science and policies. In addition, the State Water Control Board (Board) must fulfill the legal mandates for a three-year review under the Code of Virginia, per § 62.1-44.15(3a), and federal regulations at 40 CFR 131.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

BLM	Biotic Ligand Model
Board	State Water Control Board
CAS	Chemical Abstracts Service
Department	Virginia Department of Environmental Quality (or DEQ)
DO	Dissolved Oxygen
DWR	Virginia Department of Wildlife Resources
EPA	U.S. Environmental Protection Agency
PFAS	Per- and polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PWS	Public Water Supply
RAP	Regulatory Advisory Panel
TMDL	Total Maximum Daily Load
VDH	Virginia Department of Health
VPDES	Virginia Pollutant Discharge Elimination System

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

Federal and state mandates in the Clean Water Act at 303(c), federal regulations at 40 CFR 131, and the Code of Virginia in § 62.1-44.15(3a) require that water quality standards be adopted, modified or cancelled every three years. These are the most relevant laws and regulations.

Legal Basis

Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

The promulgating entity is the State Water Control Board (Board).

The Clean Water Act authorizes restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. The Clean Water Act at 303(c)(1) requires that the states hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards.

The Federal regulations at 40 CFR 131 authorize requirements and procedures for developing, reviewing, revising and approving water quality standards by the States as authorized by section 303(c) of the Clean Water Act. 40 CFR 131 specifically requires the states to adopt criteria to protect designated uses.

The State Water Control Law authorizes protection and restoration of the quality of state waters, safeguarding the clean waters from pollution, prevention and reduction of pollution and promotion of water conservation. The State Water Control Law (Code of Virginia) at § 62.1-44.15(3a) requires the Board to establish standards of quality and to modify, amend or cancel any such standards or policies. It also requires the Board to hold public hearings from time to time for the purpose of reviewing the water quality standards, and, as appropriate, adopting, modifying or canceling such standards.

The correlation between the proposed regulatory action and the legal authority identified above is that the amendments being considered are modifications of criteria that will protect designated uses and criteria, and designated uses are requirements of the Water Quality Standards.

The authority to adopt standards as provided by the provisions in the previously referenced citations is mandated, although the specific standards to be adopted or modified are discretionary to the Environmental Protection Agency and the state.

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

The rulemaking is essential to the protection of health, safety or welfare of the citizens of the Commonwealth because proper water quality standards protect water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption.

The intent of this rulemaking is to protect designated and beneficial uses of state waters by adopting a regulation that is technically correct, necessary, and reasonable. Changes to the regulation are also needed to ensure Department permitting, monitoring and assessment programs are based on the most recent science and policies. In addition, the Board must fulfill the legal mandates for a three-year review under the Code of Virginia, per § 62.1-44.15(3a), and federal regulations at 40 CFR 131.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

This rulemaking revises DEQ's Water Quality Standards for designated uses, surface water criteria, analytical procedures and special standards and requirements. The proposed amendments to the Water Quality Standards are summarized below.

Section 9VAC25-260-10 (Designation of uses):

- Added reference to DEQ-authored technical support document that provides the technical basis for expanding the Deep Water use in Virginia's Chesapeake Bay mainstem and Mobjack Bay.

Section 9VAC25-260-140 (Criteria for surface water):

- Addition of aquatic life criteria for PFOA and PFOS.

- Amended language for Biotic Ligand Model (BLM) option for copper criteria (9VAC25-260-140.G).
- Corrected a Chemical Abstracts Service (CAS) number for tributyltin.
- Modified upstream boundary for Chickahominy River transition zone to indicate upstream terminus at Walker's Dam.

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

- Inserted a decimal place to the Migratory Fish Spawning and Nursery, Open Water, and Deep Water Bay DO criteria currently expressed as whole numbers.
- Amended implementation language in subsection D to allow for use of other DEQ-approved assessment methods.

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

- Name change: Lake Pelham to Lake Culpeper.

Section 9VAC25-260-280 (Analytical procedures):

- Removed "as amended" in reference to documents incorporated by reference. This is required by the Virginia Code Commission's regulations.

Section 9VAC25-260-310 (Special standards and requirements):

- Added special DO criteria for tidal Chickahominy and Pocomoke-Oligohaline Rivers.

Section 9VAC25-260-370 (Classification column):

- Changed "DGIF" to "DWR" to reflect the name change of this state agency.

Section 9VAC25-260-390, Potomac River Basin (Potomac River Subbasin):

- Amended section 7g to replace "proposed impoundment" with "Germantown Lake" and tributaries.
- Amended to correct pH special standard in section 11 (Stockable trout waters Turkey Run). It was previously 9.6 and has been changed to 9.5.

Section 9VAC25-260-400, Potomac River Basin (Shenandoah River Subbasin):

- Amended PWS segment for Front Royal to accommodate relocated intake in section 2b. Modified language to accommodate relocation of raw water intake approximately 3,600 feet downriver.

Section 9VAC25-260-410, James River Basin (Lower):

- Added notation in special standards column of section 1 for tidal Chickahominy River DO special standard.

Section 9VAC25-260-450, Roanoke River Basin:

- Amended to clarify Stockable trout water in section 7b, Roanoke vs "South Roanoke". Revised segment description to clarify the inclusion of South Fork Roanoke River, which was not addressed when originally adopted. Corrected upstream terminus to "confluence of Bottom and Goose creeks near the Floyd-Montgomery County line."

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

- Added notation in special standards column of section 1 for the Pocomoke River DO special standard.

Section 9VAC25-260-540, New River Basin:

- Amended section 2 to change "Big Wilson Creek" to "Wilson Creek" and moved to maintain alphabetic listing.

Documents Incorporated by Reference:

- .Boundary of the Deep Water Designated Use in Virginia's Chesapeake Bay Mainstem (VADEQ, 2025)

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The primary advantage to the public is that the updated water quality standards amendments are based on better scientific information to protect aquatic life and human health. The disadvantage is that criteria that become more stringent may result in increased costs to the regulated community. However, the goal is to set realistic, protective goals in water quality management and to maintain the most scientifically defensible criteria in the Water Quality Standards regulation. EPA has also provided guidance that these criteria are "approvable" under the federal Clean Water Act.

The advantage to the agency or the Commonwealth that will result from the adoption of these amendments will be more accurate and scientifically defensible permit limits, assessments and clean-up plans (TMDLs). These are discussed under the "Purpose" section where the goals of the proposal, the environmental benefits, and the problems the proposal is intended to solve are discussed.

The regulated community may find that some of the amendments pertinent to their operations provide greater flexibility and may be economically advantageous. Other amendments may require additional capital or operating costs by the regulated community to control their discharges, particularly where the numerical criteria are more stringent (see Economic Impact). In some instances, individual members of the regulated community may view some cases as disadvantageous.

There is no disadvantage to the agency or the Commonwealth that will result from the adoption of these amendments.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Consistent with § 2.2-4007.04 of the Code of Virginia, identify any other state agencies, localities, or other entities particularly affected by the regulatory change. Other entities could include local partners such as tribal governments, school boards, community services boards, and similar regional organizations. "Particularly affected" are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected

No other state agencies are anticipated to be particularly affected by these regulations with the exception of those which operate facilities subject to VPDES permitting that may potentially be impacted by the proposed amendments as related to discharge permits. Staff do not anticipate this to impact many facilities.

Localities Particularly Affected

Localities which operate facilities subject to VPDES permitting may potentially be impacted by the proposed amendments as related to discharge permits.

Other Entities Particularly Affected

Entities which operate facilities subject to VPDES permitting may potentially be impacted by the proposed amendments as related to discharge permits.

For purposes of "Locality Particularly Affected" under the Board's statutes

No locality is anticipated to be particularly affected.

Economic Impact

Consistent with § 2.2-4007.04 of the Code of Virginia, identify all specific economic impacts (costs and/or benefits) anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo.

Impact on State Agencies

<i>For your agency:</i> projected costs, savings, fees, or revenues resulting from the regulatory change, including: a) fund source / fund detail; b) delineation of one-time versus on-going expenditures; and c) whether any costs or revenue loss can be absorbed within existing resources.	There will be no additional costs to the state/agency. Existing water quality monitoring programs (and related funding sources) will continue to support the proposed changes.
<i>For other state agencies:</i> projected costs, savings, fees, or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.	No other state agencies are anticipated to be particularly affected by these regulations with the exception of those which operate facilities subject to VPDES permitting. The proposed changes could have an economic impact on permittees if PFOS/PFOA or copper compounds are present in their effluent. Facilities that are found to discharge PFOS and PFOA contaminants at levels that exceed the proposed aquatic life criteria may incur costs. While the new criteria could lead to increased monitoring and treatment requirements and costs for facilities that discharge these substances, the costs cannot be quantified because of the variability of facilities across Virginia. As such, no immediate costs are quantified, though future impacts will depend on the results of ongoing monitoring and facility-specific discharges. Regarding the amendment that involves the optional use of the BLM for assessing copper toxicity in freshwater systems: In 2015, EPA estimated costs ranging from \$443 to \$1,772 (adjusted for inflation) per seasonal sampling event. Although the BLM requires more extensive

	data collection, it can lead to long-term cost savings by better characterizing copper toxicity, allowing for less stringent permit limits and lower treatment or monitoring costs. Since the BLM is already allowed in the regulation, the amendment only requires that approved procedures must be used, making the submittals to the agency more consistent and that BLM results should be used over hardness criteria. Thus, the amendment does not create any new costs.
<i>For all agencies:</i> Benefits the regulatory change is designed to produce.	The regulatory changes produce indirect benefits through protection of water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption. A general benefit of the proposed amendments will be scientifically correct and legally defensible water quality standards to protect the surface waters of Virginia. Allowing additional assessment methods and correcting river basin tables streamlines water quality evaluations, reduces the likelihood of unnecessary remediation, ensures that resources are allocated where they are most needed, and allows Virginia to realize the full benefits of its continuous water quality monitoring datasets in Chesapeake Bay since they cannot currently be used for water quality assessments.

Impact on Localities

If this analysis has been reported on the ORM Economic Impact form, indicate the tables (1a or 2) on which it was reported. Information provided on that form need not be repeated here.

Projected costs, savings, fees, or revenues resulting from the regulatory change.	The proposed changes to the Water Quality Standards (WQS) do not impose direct costs. No indirect costs are expected from amendments proposed that allow additional water quality assessment methods and to correct errors in the River Basin Tables. These changes are administrative in nature and serve to streamline evaluations and improve data accuracy. They do not introduce new regulatory burdens and are not anticipated to result in any direct or indirect costs to the agency or regulated entities. Also, no indirect costs are expected for proposed changes to the deep water designated uses or revising the DO criteria for the tidal Chickahominy River and Pocomoke River. These revised criteria account for naturally low oxygen levels in these systems, especially during warmer months, and may reduce regulatory burden by making criteria less stringent.

	Regarding the amendment that involves the optional use of the BLM for assessing copper toxicity in freshwater systems: In 2015, EPA estimated costs ranging from \$443 to \$1,772 (adjusted for inflation) per seasonal sampling event. Although the BLM requires more extensive data collection, it can lead to long-term cost savings by better characterizing copper toxicity, allowing for less stringent permit limits and lower treatment or monitoring costs. Importantly, the proposed amendment does not mandate BLM use; it simply clarifies its availability by facilities to use the method to determine their permit limits. Since the BLM is already allowed in the regulation, the amendment only requires that approved procedures must be used, making the submittals to the agency more consistent and that BLM results should be used over hardness criteria. Thus, the amendment does not create any new costs. Facilities that are found to discharge PFOS and PFOA contaminants at levels that exceed the proposed aquatic life criteria may incur costs. While the new criteria could lead to increased monitoring and treatment requirements and costs for facilities that discharge these substances, the costs cannot be quantified because of the variability of facilities across Virginia. As such, no immediate costs are quantified, though future impacts will depend on the results of ongoing monitoring and facility-specific discharges.
Benefits the regulatory change is designed to produce.	Local partners and their citizens will benefit from improved water quality that protects human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as by commercial and recreational fishing industries. Reducing exposure to PFOS and PFOA helps safeguard public health and aquatic life by reducing exposure to harmful contaminants and can lead to reduced healthcare costs and increased productivity. More accurate DO criteria and designated use boundaries help protect aquatic ecosystems, supporting biodiversity and enhancing the long-term sustainability of fisheries and tourism. Facilities may also benefit from cost reductions where criteria reflect natural conditions and are less stringent. Allowing additional assessment methods and correcting river basin tables streamlines water

	quality evaluations and reducing the likelihood of unnecessary remediation and ensures that resources are allocated where they are most needed. Allowing additional assessment methods will allow Virginia to realize the full benefits of its continuous water quality monitoring datasets in Chesapeake Bay since they cannot currently be used for water quality assessments. Permittees could benefit from using the BLM method where it results in more flexible permit conditions and cost savings.

Impact on Other Entities

If this analysis has been reported on the ORM Economic Impact form, indicate the tables (1a, 3, or 4) on which it was reported. Information provided on that form need not be repeated here.

Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.	The proposed changes could have an economic impact on VPDES permittees if PFOS/PFOA or copper compounds are present in their effluent.
Agency's best estimate of the number of such entities that will be affected. Include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated, and; b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.	146 permittees may be affected by the modified language for the copper BLM. These permittees currently have copper limits. Municipally-owned wastewater treatment plants comprise 36% of these permittees, while industrial facilities make up the rest. There are other permittees that currently do not have copper limits but they may be required to have them when their permits are renewed, if this amendment is adopted. Adding new aquatic life criteria for these new contaminants, PFOS and PFOA, requires permitted dischargers with these contaminants in their effluent to meet the criteria. This could lead to treatment or monitoring costs that cannot be quantified at this time. The Department estimates that 268 industrial dischargers may be subject to additional monitoring requirements due to the potential for manufacturing sources of PFAS.
All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Be specific and include all costs including, but not limited to: a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change; c) fees; d) purchases of equipment or services; and e) time required to comply with the requirements.	No administrative costs are projected nor are costs for real estate development or additional services.

Benefits the regulatory change is designed to produce.	The regulatory changes produce indirect benefits through protection of water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption. A general benefit of the proposed amendments will be scientifically correct and legally defensible water quality standards to protect the surface waters of Virginia.

Alternatives to Regulation

Describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulatory change.

One alternative is to keep the current water quality standard regulation unchanged or to delay the triennial review. Since triennial review is required by law to occur every three years this alternative was rejected. The most likely alternative that would be less costly or less intrusive for small businesses would be to not update the criteria for surface water in §9 VAC 25-260-140 to include the aquatic life criteria for PFOA and PFOS and the modification to language pertaining to the copper BLM. Those alternatives were not chosen because impacts specific to small businesses are not anticipated and the proposed amendments are based upon more recent scientific information and data that provide for improved protection of the designated uses for Virginia's surface waters. Comments submitted in response to the NOIRA were considered, and a Regulatory Advisory Panel (RAP) was established to assist the Department in developing the proposed amendments to the Water Quality Standards and to identify any less burdensome or intrusive alternatives. The proposed amendments are necessary to achieve the purpose of the regulatory change.

If this analysis has been reported on the ORM Economic Impact form, indicate the tables on which it was reported. Information provided on that form need not be repeated here.

Regulatory Flexibility Analysis

Consistent with § 2.2-4007.1 B of the Code of Virginia, describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

Water Quality Standards do not establish compliance or reporting requirements. The proposed changes in the Water Quality Standards Regulation are implemented through established Department programs, including the VPDES permitting program, the water quality monitoring and assessment programs, and the TMDL program. These programs have the flexibility to implement the existing and proposed amendments to the Water Quality Standards to provide for flexibility in regulatory recordkeeping and water quality monitoring efforts. Economic estimates of the same are provided above.

If this analysis has been reported on the ORM Economic Impact form, indicate the tables on which it was reported. Information provided on that form need not be repeated here.

Periodic Review and Small Business Impact Review Report of Findings

If you are using this form to report the result of a periodic review/small business impact review that is being conducted as part of this regulatory action, and was announced during the NOIRA stage, indicate whether the regulatory change meets the criteria set out in EO 19 and the ORM procedures, e.g., is necessary for the protection of public health, safety, and welfare; minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and is clearly written and easily understandable.

In addition, as required by § 2.2-4007.1 E and F of the Code of Virginia, discuss the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, discuss why the agency's decision, consistent with applicable law, will minimize the economic impact of regulations on small businesses.

This regulatory action is necessary for the protection of public health and for the protection of the Commonwealth's surface waters and aquatic life. The Water Quality Standards regulation forms the basis upon which effluent discharge limits are set in VPDES permits and upon which it is determined whether or not waters are attaining applicable designated uses. Comment received during the Notice of Intended Regulatory Action (NOIRA) ranged from agreement that the proposed amendments are necessary to protect designated uses (i.e. PFOS and PFOA aquatic life criteria) to suggestions for changes to certain sections to address mixing zone determinations, narrative criteria implementation, public water supply determinations, and the need to include certain pollutant parameters in the regulation (i.e. polyfluoroalkyl substances, algal toxins). Federal and state mandates in the federal Clean Water Act at 303(c), federal regulations at 40 CFR 131, and the Code of Virginia in §62.1-44.15(3a) require that water quality standards be adopted, modified or cancelled every three years. This rulemaking is needed because the last triennial review was completed in August 2022, and new scientific information is available to update the water quality standards. Potential economic impacts would be the result of possibly more stringent VPDES permit limits. Impacts specific to small businesses are not anticipated.

Public Comment

Summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency's response. Include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency. If no comment was received, enter a specific statement to that effect.

See Attachment 1.

Public Participation

Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below.

In addition to any other comments, the Board is seeking comments on the costs and benefits of the proposal and the potential impacts of this regulatory proposal. Also, the Board is seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include: 1) projected reporting, recordkeeping and other administrative costs; 2) probable effect of the regulation on affected small businesses; and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit written comments for the public comment file may do so by mail or email to Tish Robertson, VA Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218; Phone: (804) 659-1295; Email: deqecology@deq.virginia.gov. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall (<http://www.townhall.virginia.gov>). Written comments must include the name and address of the commenter. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

A public hearing will be held following the publication of this stage and notice of the hearing will be posted on the Virginia Regulatory Town Hall (<http://www.townhall.virginia.gov>) and on the Commonwealth Calendar (<https://commonwealthcalendar.virginia.gov/>). Both oral and written comments may be submitted at that time.

A formal hearing will be held on a date and time and at a place to be determined, if a request for a formal hearing is received by the contact person listed above within 30 days of publication of the notice of public comment period in the Virginia Register of Regulations.

Detail of Changes

List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Use all tables that apply, but delete inapplicable tables.

If an existing VAC Chapter(s) is being amended or repealed, use Table 1 to describe the changes between the existing VAC Chapter(s) and the proposed regulation. If the existing VAC Chapter(s) or sections are being repealed and replaced, ensure Table 1 clearly shows both the current number and the new number for each repealed section and the replacement section.

Table 1: Changes to Existing VAC Chapter(s)

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-260-10. Designation of uses.		Currently Item 4 contains a reference to an EPA (2004) document that provides the technical rationale for the designation of the Deep Water use in the tidal waters of the Chesapeake Bay. It delineates the Deep Water use in only a small portion of Virginia's mainstem of the Chesapeake Bay.	Inserted an additional reference to a document authored by DEQ that provides the technical basis for an expanded Deep Water use boundary in Virginia's mainstem of the Chesapeake Bay and a portion of Mobjack Bay. This change expands the area currently designated for the Deep Water use by 84%. The impact of this change is that less stringent dissolved oxygen criteria will be appropriately applied to the areas newly included in this expansion. The impact to dischargers is not known.
9VAC25-260-140. Criteria for surface water.		Currently no freshwater aquatic life criteria for PFOA and PFOS are included in the regulation.	Addition of EPA's aquatic life criteria for PFOA and PFOS, which are designed to safeguard aquatic life by reducing exposure to these contaminants. This change could have an economic impact

		Language pertaining to BLM does not make it clear that BLM-based copper criteria supersede hardness-based criteria and that a BLM dataset should be collected with a DEQ-approved study plan. CAS number for tributyltin is E1790678. Upstream boundary for Chickahominy River transition zone is at Holly Landing.	on permittees if these compounds are present in their effluent, as described in the Economic Impact section above. Amended the copper BLM language to clarify that BLM-based criteria supersede hardness-based criteria and that a BLM dataset should be collected with a DEQ-approved study plan. This change could have an economic impact on permittees if copper is present in their effluent, as described in the Economic Impact section above. Corrected CAS number for tributyltin to E1790679. No impacts are expected. Upstream boundary for Chickahominy River transition zone changed to Walker's Dam. The existing upstream terminus of tidal waters at Holly Landing is upriver from Walker's Dam. Tidal action does not occur above the dam. This change enables a more accurate assessment of the tidal Chickahominy River segment (CHOH) and ensures that data representing tidal waters are evaluated for this Chesapeake Bay segment. No impacts are expected.
9VAC25-260-280. Analytical procedures.		Includes "as amended" language that refers to documents incorporated by reference.	Removed "as amended" in reference to documents incorporated by reference to comply with the Virginia Code Commission's regulations at 1VAC7-10-140 C. No impacts are expected.
9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.		Currently 6 of 11 dissolved oxygen criteria are expressed as whole numbers. Implementation language states that the cumulative frequency distribution method shall be used to assess Chesapeake Bay dissolved oxygen criteria	A tenths' placeholder has been added to five of the whole-numbered criteria to provide greater consistency within the regulation for dissolved oxygen criteria within the regulation and to alleviate confusion in implementation programs. The impact is that these criteria will be slightly more stringent when used in assessment. Amended implementation language in subsection D to allow for use of other DEQ-approved assessment methods. The impact is that DEQ will conduct more complete assessments of the dissolved oxygen criteria.
9VAC25-260-187. Lake and Reservoir criteria.		Currently it refers to Lake Pelham.	Updated name of Lake Pelham to Lake Culpeper following the renaming of the lake in 2022. No impacts are expected.
9VAC25-260-310. Special		Currently there is no special DO criteria for the tidal	Added special DO criteria for tidal Chickahominy and Pocomoke-

standards and requirements.		Chickahominy and Pocomoke rivers.	Oligohaline Rivers. The impact is that less stringent criteria will apply to these waters, potentially resulting in them being assessed as meeting water quality standards.
9VAC25-260-370. Classification column.		Currently references the formerly named agency "Department of Game and Inland Fisheries" and "DGIF"	Amended to reference "Department of Wildlife Resources" and "DWR" in response to the agency's name being revised. No impacts expected.
9VAC25-260-390. Potomac River Basin (Potomac River Subbasin).		Current language describing Section 7g refers to "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. Typographic error in Section 11 special standards column for Turkey Run Stockable Trout Waters segment. Upper boundary of pH reads "9.6".	Proposed impoundment was constructed and called Germantown Lake. Amended language removes reference to "proposed impoundment". No impacts expected. Amended to correct pH in section 11 (Stockable trout waters Turkey Run). Changed upper pH to 9.5. No impacts expected.
9VAC25-260-400. Potomac River Basin (Shenandoah River Subbasin).		Current language for Section 2b describes Front Royal's PWS intake at the State Route 619 bridge in Front Royal.	PWS intake was moved approximately 3600 feet downriver. Amended language for PWS segment in Front Royal to accommodate relocated intake. No impacts expected.
9VAC25-260-410. James River Basin (Lower).		Currently there is no notation in Section 1 special standards column to denote the addition of proposed Chickahominy River dissolved oxygen special standard (kk) in that section.	Amended to add "kk" notation for dissolved oxygen special standard. This special standard is applicable to the tidal Chickahominy River which is in section 9VAC25-260-410. The special dissolved oxygen criterion is recommended by EPA for tidal waters that are influenced by wetlands, which DEQ staff have determined to be the case for this waterbody. No impacts expected.
9VAC25-260-450. Roanoke River Basin.		Current segment description reads "Roanoke River from the Spring Hollow Reservoir intake to the Floyd-Montgomery County line."	Amended to clarify delineation of stockable trout waters in section 7b and greater specificity to the upstream terminus. The Roanoke River is formed by the North and South Fork Roanoke rivers a short distance upriver from the Spring Hollow Reservoir intake. ("Roanoke" vs "South Roanoke") No impacts expected.
9VAC25-260-520. Chesapeake Bay, Atlantic Ocean and		Currently no notation in Section 2 special standards column to denote the addition of proposed Pocomoke River dissolved	Amended to add "ll" notation for dissolved oxygen special standard. This special standard is applicable to the tidal Pocomoke River which is in section 9VAC25-260-520. The special dissolved oxygen criterion is

small coastal basins.		oxygen special standard (II) in that section.	recommended by EPA for tidal waters that are influenced by wetlands, which DEQ staff have determined to be the case for this waterbody. This change will result in Virginia's portion of this waterbody being assessed against the same criterion that Maryland adopted for its portion. No impacts expected.
9VAC25-260-540, New River Basin.		Natural Trout Waters in Section 2 lists 3 segments of Big Wilson Creek as natural trout waters.	"Big Wilson Creek" is misnamed. Amended to change "Big Wilson Creek" to "Wilson Creek" and moved to maintain alphabetic listing. Deleted the word "Big" from other trout water descriptions using "Big Wilson Creek" as a demarcation reference. No impacts expected.
Documents Incorporated by Reference		Current documents incorporated by reference remain.	Boundary of the Deep Water Designated Use in Virginia's Chesapeake Bay Mainstem (VADEQ, October 9, 2025)

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that this regulation will have a direct impact on the institution of the family and family stability.

ATTACHMENT 1

Summary of Comments from the Triennial Review
Notice of Intended Regulatory Action
Comment period April 21, 2025 – May 21, 2025

Commenter	Comments – General/Miscellaneous	Agency Response
James River Association (JRA)	They state that they have previously raised concerns about turbidity issues related to permitted activities, including land development upstream of restoration projects and freshwater mussel habitat. The State Water Control Board previously directed DEQ to propose numeric turbidity criteria, but progress has stalled. They stated that now is the time to move forward and include turbidity standards in the review.	Regarding turbidity controls, the Board directed DEQ to develop numeric criteria for turbidity in 2019. DEQ has initiated this process but has not yet developed candidate criteria. However, DEQ has updated the Construction Stormwater General Permit with new turbidity requirements. Turbidity criteria, or a component thereof, will be handled in its own rulemaking process.
Chesapeake Bay Foundation (CBF)	Virginia currently has narrative water quality standards that encompass turbidity but lack a quantitative standard to assess ambient turbidity levels. Lack of a quantitative target has had clear negative implications in the past and limits the state's ability to address turbidity-related water quality concerns, as evidenced during the Atlantic Coast Pipeline project. Analysis of DEQ probabilistic monitoring data sets on an ecoregion basis indicated a significant relationship between elevated dry weather turbidity and multiple habitat scoring metrics in specific ecoregions (i.e., Blue Ridge, Mountain). They urge DEQ to evaluate these relationships to develop ambient water quality standards for relevant ecoregions.	See above response.
Wild Virginia (Wild VA)	They stated that there is no excuse for continued delay in adopting numeric criteria for turbidity and/or solids. They stated the Mountain Valley Pipeline (MVP) has caused serious problems in dozens of waterbodies, but DEQ has refused to acknowledge WQS violations due to resistance to the use of narrative criteria, or develop numeric criteria, to control solids or turbidity.	See above response.
Environmental Protection Agency, Region 3 (EPA)	They recommended that, in addition to the background documents, rationale documents be made available during the public comment period.	The comment is noted.
Hampton Roads Planning District Commission	They stated that the triennial review will be valuable to Hampton Roads localities that are affected by local Total Maximum Daily Loads (TMDLs) and to those who comply with the Chesapeake Bay TMDL.	The comment is noted.
Virginia Association of Municipal Wastewater	They stated their strong support for protection of Public Water Supplies (PWS) and wish to see the regulation more effective and efficient in doing so by fully implementing VDH's policy that PWS intakes enjoy protection not only at the point of the intake but	Limiting the PWS designation to only waters within 5 miles upstream of a raw water intake would require the removal of the PWS use from waters that are

Administrators (VAMWA)	generally to a point five miles above the intake. They mentioned that the regulation is currently vague or ambiguous due to expressing PWS intake protection in various and inconsistent ways. They believe it would be better to provide clarity on beneficial use protection in the regulation, protecting all existing PWS uses by covering to a point five miles above the intake consistent with VDH's drinking water protection policy, while maintaining and providing assimilative capacity in waterbodies at points more than five miles upstream.	currently designated as PWS that are beyond this extent. Under federal code, states cannot remove uses that existed on or after November 28, 1975. States also cannot remove designated uses that are attained/attainable.
Virginia Manufacturers Association (VMA)	The commenter noted that its members are affected by Virginia's WQS as implemented through Virginia Pollutant Discharge Elimination System (VPDES) permitting actions and Total Maximum Daily Loads (TMDLs). They stated that there are a number of water quality-related issues in play at the federal level and they look forward to participating in Virginia's efforts to integrate them into Virginia's WQS regulations.	The comments are noted.
Commenter	Comments – Section 20: Narrative Criteria	Agency Response
Wild Virginia (Wild VA)	They stated that DEQ fails to base regulatory decisions on important parts of the narrative criteria. Wild VA and other groups included extensive comments during the last triennial review process explaining deficiencies in DEQ's approach and proposing specific amendment language to address those deficiencies. They resubmitted their comment letter dated March 18, 2022. In that letter, they recommended that the State Water Control Board (Board) should adopt guidelines for the implementation of the state's narrative water quality criteria as part of the water quality standards regulations. They asserted that it is necessary and appropriate for the state to incorporate policies or guidelines into the regulations to ensure the narrative criteria are applied consistently. The approach they proposed would be consistent with other implementation in the standards such as the policy for mixing zones. They also provided DEQ's use of the Stream Condition Index as applied through the biological monitoring program for assessment purposes. They stated that the fact that applying regulations such as narrative criteria is difficult is not a valid or acceptable excuse for failing to do so.	DEQ water quality programs address narrative water quality criteria by using translators for assessing impacts to designated uses for which numeric criteria do not exist in the WQS. Among these translators are: biological indices, probabilistic weight-of-evidence assessments, fish tissue screening values, fish consumption advisories, swimming advisories, beach closures, shellfish harvesting closures, Harmful Algal Bloom (HAB) swimming advisories, and others. Also, public-generated reports and photos are frequently the basis of follow-up monitoring or compliance actions. Program-specific implementation guidance manuals are revised periodically through the public participation procedures stipulated by § 2.2-4002.1 of the Administrative Process Act and there are more benefits to keeping implementation policies outside of the water quality standards regulation than there are downsides.
Commenter	Comments – Section 20: Mixing Zones	
James River Association (JRA)	They raised concerns related to mixing zones, including with the 2015 draft VPDES permit for Bremon Power Station, which proposed a nearly 10-mile mixing zone in the middle James River, and with the	DEQ acknowledges the concerns raised regarding mixing zones.. Overlapping mixing zones and temperature criteria are considered

	2024 draft VPDES permit for AdvanSix Resins and Chemicals, which proposed the continued use of a mixing zone which vastly exceeds the footprint of the receiving watercourse. They urge DEQ to review the extent of mixing zone use in the state, gather data and evaluate the impact of existing mixing zones individually as well as areas where they overlap, and consider regulatory updates that would reduce the commonwealth's reliance on mixing zones as a substitute for other pollution controls.	by modeling staff when reviewing regulatory mixing zones. No regulatory changes are currently proposed.
Chesapeake Bay Foundation (CBF)	They stated there is a need for greater clarity around the limited circumstances under which mixing zones may be appropriate and the requirements for permittees to provide DEQ with sufficient information to carefully consider whether they are appropriate. Mixing zones for ammonia are in use that allow for mussel lethality within the mixing zone and they are interested in understanding how mixing zone use is considered by DEQ related to updated ammonia water quality criteria. They would appreciate DEQ providing details about the number and extent of such mixing zones during the RAP process.	See above response.
Commenter	Comments – Section 140: Criteria	Agency Response
James River Association (JRA)	They appreciate the inclusion of EPA's 2024 aquatic life criteria for PFOA and PFOS. They urge the Board and DEQ to apply existing narrative water quality standards to cover PFAS chemicals and, further, to develop numeric standards for PFAS as part of this review.	EPA has developed draft nationally recommended water quality criteria for additional PFAS substances protective of human health but has not yet finalized these recommendations. DEQ staff will consider their adoption when they have been finalized. DEQ will continue to use VDH fish consumption advisories for PFOS in assessment determinations.
Chesapeake Bay Foundation (CBF)	They stated their appreciation for including the promulgation of PFOA and PFOS aquatic life criteria in this rulemaking. They suggested that DEQ consider adoption of water quality criteria for perfluorobutane sulfonic acid ("PFBS") recently developed by EPA as well as updating WQS regulations to assess other ways to protect public health and designated uses of state waters against the impacts of other per- and polyfluoroalkyl substances ("PFAS"). They expressed some concern regarding HABs and/or cyanotoxins negatively impacting the recreational use of some surface waters. They have concerns over DEQ assessment guidance that connects Virginia Department of Health (VDH) advisories and impairment status. Given the very limited nature of VDH's monitoring sites, they would appreciate DEQ providing a summary of such advisories and the corresponding impairment decisions. They stated it would be helpful if the DEQ could identify any TMDLs that resulted from advisories and a summary of the monitoring programs that have supported these initiatives.	PFAS: See response above HABs: In addition to responding to reports of potential HAB events by collecting samples for toxin analysis, DEQ added toxin samples to the routine monthly monitoring in Lake Anna and Smith Mountain Lake in 2025. DEQ plans to add toxin analyses to additional routine lake monitoring runs across the state beginning 2026. To date in 2025, HAB toxins have not been measured at levels of concern at any samples, and almost all sample results for toxins have been below lab detection levels. While toxins have not been observed at levels of concern in DEQ's sampling, this does not mean that algal blooms will no longer occur in the state.

		Regarding HAB studies: In 2022, the General Assembly appropriated \$3.5 million to DEQ to conduct studies of HABs occurring in Lake Anna and the Shenandoah River basin. These studies have been carried out in partnership with VDH, the United States Geological Survey (USGS), the Interstate Commission on the Potomac River Basin (ICPRB), George Mason University, and Virginia Commonwealth University. As part of Phase I of the study, DEQ and USGS collected monitoring data in Lake Anna, beginning in 2023 and concluding in December 2024. The data collected is currently being analyzed to identify primary drivers and possible sources of HAB occurrences. This analysis will be used during Phase II of the project, which entails development of an implementation plan to identify strategies to mitigate and remediate the occurrence of HABs. To assist in identifying strategies, a computer model is currently being developed that will be used to understand the existing pollutant loads and needed reductions to meet water quality goals. The implementation plan development process will include public participation comprised of stakeholder meetings. DEQ anticipates initiating Phase II in Spring/Summer 2026.
Environmental Protection Agency, Region 3 (EPA)	They stated that, in addition to the PFOA and PFOS freshwater criteria, EPA also published benchmarks that are derived to protect aquatic life from short-term exposures to eight individual per- or polyfluoroalkyl (PFAS) in freshwaters (PFBA, PFHxA, PFNA, PFDA, PFBS, PFHxS, 8:2 FTUCA and 7:3 FTCA), as well as PFOA and PFOS in saltwater environments. They suggested that Virginia could consider these benchmarks in implementing its water quality protection programs. They also encourage DEQ to consider statewide application of: BLM-derived copper criteria (revised 2007), freshwater selenium criteria (revised 2021), nutrient criteria for lakes/reservoirs (revised 2021),	PFAS: DEQ staff will consider the adoption of additional PFAS criteria when the criteria recommendations have been finalized. Copper BLM: Under this triennial review, DEQ is proposing a process to enable the use of the copper BLM wherever sufficient data exists. The hardness-based criteria will be used by default in cases where there are not enough data to use the BLM to calculate freshwater copper criteria.

	ecoregional nutrient criteria for rivers/streams. They suggested that DEQ consider EPA recommendations for cyanotoxins and as well as their draft human health criteria for PFOA, PFOS, and PFBS during the rulemaking.	Selenium: In 2025, the Board approved the adoption of the freshwater selenium criterion for four waterbodies in the Tug Fork watershed. DEQ will be using the four waterbodies in the Tug Fork watershed as a pilot study that will inform the agency on whether the criterion should be adopted statewide. Nutrient criteria: Virginia relies on implementation measures from existing programs that include the Chesapeake Bay Watershed Implementation Plan, lakes/reservoirs nutrient criteria, and local TMDLs. Actions on the ground are resulting in significant improvement to nutrient control and reduction. Cyanotoxins: States have the discretion to adopt the recommended thresholds as swimming advisory levels or as water quality criteria. Since 2021, Virginia has used these thresholds, in addition to thresholds for other cyanotoxins, as the basis for swimming advisories. DEQ considers Virginia Department of Health (VDH) swimming advisories when assessing the recreation use. Water quality assessments of the recreation use regarding HABs should rest on swimming advisories issued by VDH.
Southern Environmental Law Center, Allegheny-Blue Ridge Alliance, don't spread on me, Potomac Riverkeeper Network, Rockbridge Conservation, Sierra Club Virginia Chapter, Totter Creek Watershed Association, Virginia	The commenter provided extensive information related to the toxicity of PFAS compounds and the ubiquitous nature of their presence in the environment and the hazards they represent to aquatic life and human health. The comments stated that water quality standards must protect public health and the designated uses of state waters and that the Board and DEQ should apply existing narrative water quality standards to cover PFAS. They also stated that the Board and DEQ should assess and adopt numeric water quality standards for PFAS. At a minimum, the Board and DEQ should adopt aquatic life criteria and human health criteria for PFOA and PFOS that are at least as stringent as the EPA recommendations. The Board and DEQ should also assess the development of criteria for other PFAS based on the recommended EPA benchmarks and other available data. In	See response above

Conservation Network, and Waterkeepers Chesapeake (SELC, et al)	developing and adopting any PFAS aquatic life or human health criteria, the Board and DEQ should consider whether more stringent criteria are warranted given that the EPA recommendations do not account for potential mixture effects of multiple PFAS.	
Commenter	Comments – Section 160: Shellfish Bacteria Criteria	
IDEXX	They recommended removing reference to “...MF (membrane filtration using mTEC culture media)” and replace the units “CFU” with “organisms” in this Section of the WQS regulation. They stated that removal of CFU allows the use of methods that report in different units accepted by US EPA for compliance with Clean Water Act testing. Removing CFU and stating ‘organisms’ will be less confusing to utilities and laboratories as they decide on using either a CFU or MPN reporting test method. Options on the market other than the mTEC method can provide better accuracy, ease of use, quicker results and ability to act upon those results faster.	The Virginia Department of Health -Division of Shellfish Safety (VDH-DSS) implements the shellfish bacteria criteria to determine shellfish growing areas and closures. VDH-DSS has requested that the current language not be revised.
Commenter	Comments – Section 185: Chesapeake Bay Criteria	
Environmental Protection Agency, Region 3 (EPA)	They recommended that the dissolved oxygen criteria for all Bay use designations in 9VAC25-260-185 be expressed as 2 significant digits. They recommended that VADEQ engage with the Chesapeake Bay Partnership where potential revisions to WQS regulations related to the Chesapeake Bay are being considered to ensure that any such revisions are consistent with Partnership agreements.	The comments are noted. DEQ has been in communication with the Chesapeake Bay Partnership regarding the development of these amendments. With the exception of the dissolved oxygen criteria for the Deep Channel use, all other dissolved oxygen criteria in section 9VAC25-260-185.A will be expressed as having 2 significant digits.

ATTACHMENT 4

**State Water Control Board, 9 VAC 25-260 Virginia Water Quality
Standards, Triennial Review Proposed Amendments, 2025**

Triennial Review 2024 Rulemaking to adopt new, update, or cancel existing water quality standards as required by § 62.1-44.15 of the Code of Virginia and the Federal Clean Water Act, 33 U.S.C. §§ 1251

Chapter 260

Water Quality Standards

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

49 deep-water habitats. This designated use extends to the tidally influenced waters located between
50 the upper and lower boundaries of the pycnocline where, in combination with bottom bathymetry
51 and water circulation patterns, a pycnocline is present and presents a barrier to oxygen
52 replenishment of deeper waters. In some areas, the deep-water designated use extends from the
53 upper boundary of the pycnocline down to the bottom water-sediment interface (see boundaries
54 in U.S. Environmental Protection Agency, 2004 Technical Support Document for Identification of
55 Chesapeake Bay Designated Uses and Attainability 2004 Addendum, Chesapeake Bay Program
56 Office, Annapolis, Maryland) and the updated boundaries in the Chesapeake Bay mainstem and
57 Mobjack Bay as described in the DEQ 2025 technical support document titled "Boundary of the
58 Deep Water Designated Use in Virginia's Chesapeake Bay Mainstem". This use applies June 1
59 through September 30.

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

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

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

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

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

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

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

- 88 1. Naturally occurring pollutant concentrations prevent the attainment of the use;
- 89 2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment
90 of the use unless these conditions may be compensated for by the discharge of sufficient volume
91 of effluent discharges without violating state water conservation requirements to enable uses to
92 be met;
- 93 3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot
94 be remedied or would cause more environmental damage to correct than to leave in place;
- 95 4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use,
96 and it is not feasible to restore the water body to its original condition or to operate such
97 modification in a way that would result in the attainment of the use;
- 98 5. Physical conditions related to the natural features of the water body, such as the lack of a
99 proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude
100 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.

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

A. Instream water quality conditions shall not be acutely¹ or chronically² 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		
Acenaphthene (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
Aluminum (µg/l) 7429905 Acute and chronic freshwater aluminum criteria values for a site shall be calculated using the 2018 Aluminum Criteria Calculator (Aluminum Criteria Calculator V.2.0.xlsx), or a calculator in R or other software package using the same 1985 Guidelines calculation approach and underlying model equations as in the Aluminum Criteria Calculator V.2.0.xlsx, as defined in EPA's Final Aquatic Life Ambient Water Quality Criteria for Aluminum. (EPA-822-R-18-001, 2018) Values displayed in the table are examples of criteria calculated by the model using the indicated input parameters for pH, hardness, and Dissolved Organic Carbon (DOC). Freshwater criteria expressed as total recoverable.	1,300 pH= 7.0 Total hardness (CaCO3) = 25 mg/l DOC = 5.0 mg/l	500 pH= 7.0 Total hardness (CaCO3) = 25 mg/l DOC = 5.0 mg/l				
Ammonia (µg/l) 7664417 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					5.3	580
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
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
2,2'-Oxybis(1-Chloropropane) (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
Cadmium (µg/l)⁵ 7440439 Freshwater values are a function of total hardness as calcium carbonate (CaCO₃) 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 DWR 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
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 $[e^{\{0.8190[\ln(\text{hardness})]+3.7256\}}]$ (CF _a) Freshwater chronic criterion µg/l WER $[e^{\{0.8190[\ln(\text{hardness})]+0.6848\}}]$ (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

Copper (µg/l)⁵ 7440508 Freshwater values are a function of total hardness as calcium carbonate CaCO₃ 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 CaCO₃ = 100	9.0 CaCO₃ = 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		
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					9.5	270

Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ .						
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
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					4.6 E-8	4.7 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
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	

Lead (µg/l)⁵ 7439921 Freshwater values are a function of total hardness as calcium carbonate CaCO₃ 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		
Nickel (µg/l) ⁵ 7440020 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	470	1,500

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 .					0.0065	27
N-Nitrosodiphenylamine (µg/l) 86306 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ .					30	55
N-Nitrosodi-n-propylamine (µg/l) 621647 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ .					0.047	4.6
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	0.00058	0.00058
Pentachlorobenzene (µg/l) 608935					0.1	0.1
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
<u>Perfluorooctanoic acid (PFOA)</u> <u>(µg/l)</u>	<u>3,100</u>	<u>100</u>				

45285516; 335671; 3825261						
Perfluorooctane sulfonate (PFOS) (µg/l) 45298906; 1763231; 2795393; 56773423; 4021470; 29457725	71	See footnote 9 for tissue values 0.25 See footnote 10 for tissue values				
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)					15	
Beta Particle & Photon Activity (mrem/yr) (formerly man-made radionuclides)					4	
Combined Radium 226 and 228 (pCi/L)					5	
Uranium (µg/L) 7440611					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	160	3,800

Silver ($\mu\text{g/l}$)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 ($\mu\text{g/l}$) $\text{WER} [e^{\{1.72[\ln(\text{hardness})]-6.52\}}]$ (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) $\text{CF}_a = 0.85$	3.4; $\text{CaCO}_3 = 100$		1.9 X WER		
Sulfate ($\mu\text{g/l}$) Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.				250,000	
Temperature See 9VAC25-260-50					
1,2,4,5-Tetrachlorobenzene 95943				0.03	0.03
1,1,2,2-Tetrachloroethane ($\mu\text{g/l}$) 79345 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.				2.0	30
Tetrachloroethylene ($\mu\text{g/l}$) 127184				100	290

Known or suspected carcinogen; human health criteria at risk level 10^{-5} .						
Thallium (µg/l) 7440280					0.22	0.43
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) ~~E1790678~~ E1790679	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					15	28

Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ .						
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
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[ln(hardness)]+0.884}](CF _a) Freshwater chronic criterion (µg/l) WER [e ^{0.8473[ln(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	7,000	23,000

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

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

³Criteria 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. Human health criteria are based on the assumption of average amount of exposure on a long-term basis.

⁴Criteria 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. Human health criteria are based on the assumption of average amount of exposure on a long-term basis.

⁵Acute 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.

⁶The 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.

⁷The criteria listed in this table are two significant digits with the exception of criteria values for the animal tissue concentrations for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). In Footnote 8 (all digits for these criteria values are significant). For other criteria that are

referenced to other sections of this regulation in this table, all numbers listed as criteria values are significant.

⁸The 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.

⁹ Perfluorooctanoic acid (PFOA) - Duration for invertebrate/fish tissue is instantaneous and not to be exceeded.

1.18 mg/kg wet weight in invertebrate whole-body tissue.

6.49 mg/kg wet weight fish whole-body tissue.

0.133 mg/kg wet weight fish muscle tissue.

¹⁰ Perfluorooctane sulfonate (PFOS) - Duration for invertebrate/fish tissue is instantaneous and not to be exceeded.

0.028 mg/kg wet weight in invertebrate whole-body tissue.

0.201 mg/kg wet weight fish whole-body tissue.

0.087 mg/kg wet weight fish muscle tissue.

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 Totopotomoy 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)-~~ N37°24'25"/W76°56'16" (Walker's Dam).

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 copper Biotic Ligand Model (BLM) may be used as an alternative to the hardness-based freshwater copper criteria in 9VAC25-260-140 B. The copper BLM is described in the document "Aquatic Life Ambient Freshwater Quality Criteria for Copper" (EPA-822-R-07-001). Site-specific BLM derived criteria, where established, will supersede hardness-based criteria for freshwater copper.~~ The BLM is a bioavailability model that uses receiving water characteristics to develop site-specific criteria.

1. 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.

2. If sufficient data for these parameters are available, the BLM can be used to calculate alternate criteria values for the copper criteria. Any dataset used to develop BLM-based criteria shall be collected in accordance with a study plan approved by DEQ. The BLM criteria would be used instead of the hardness-based criteria and ~~takes take~~ the place of the hardness adjustment and the WER. A WER will not be applicable with the BLM.

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 greater than or equal to 6.0 mg/l (tidal habitats with 0-0.5 ppt salinity)	February 1 - May 31
	Instantaneous minimum greater than or equal to 5.0 mg/l	
Open water ¹	30-day mean greater than or equal to 5.5 mg/l (tidal habitats with 0-0.5 ppt salinity)	year-round ²
	30-day mean greater than or equal to 5.0 mg/l (tidal habitats with greater than 0.5 ppt salinity)	
	7-day mean greater than or equal to 4.0 mg/l	

	Instantaneous minimum greater than or equal to 3.2 mg/l at temperatures less than 29°C Instantaneous minimum greater than or equal to 4.3 mg/l at temperatures greater than or equal to 29°C	
Deep water	30-day mean greater than or equal to 3.0 mg/l 1-day mean greater than or equal to 2.3 mg/l Instantaneous minimum greater than or equal to 1.7 mg/l	June 1 - September 30
Deep channel	Instantaneous minimum greater than or equal to 1 mg/l	June 1 - September 30

¹In 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.

²Open-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	5,380	22%	13,450	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	266	13%	665	April 1 - October 31
JMSTF1	1,333	13%	3,332	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	531	22%	1,328	April 1 - October 31
JMSPH	604	22%	1,510	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

¹The 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.

²Percent light-through-water = $100e^{(-K_d Z)}$ where K_d is water column light attenuation coefficient and can be measured directly or converted from a measured secchi depth where $K_d = 1.45/\text{secchi depth}$. 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 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.	March 1 - September 30

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		

¹First 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 cumulative frequency distribution method, where applicable, and other published methods approved by DEQ, shall be used to~~

~~assess attainment of these criteria. These methods include procedures described 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.~~

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 locations 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 , Spotsylvania, Orange Counties	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
<u>Lake Culpeper</u>	<u>Culpeper County</u>	<u>35</u>	<u>40</u>
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 Mooney	Stafford County	25	40
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 Wildlife Resources regarding the status of the fishery in determining whether or not the designated use for that

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343 waterbody is being attained. If the designated use of the subject waterbody is not being attained, the
344 board shall assess the waterbody as impaired in accordance with § 62.1-44.19:5 of the Code of Virginia.
345 If the designated use is being attained, the board shall assess the waterbody as impaired in accordance
346 with § 62.1-44.19:5 of the Code of Virginia until site-specific criteria are adopted and become effective
347 for that waterbody.

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

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353 **9VAC25-260-280. Analytical procedures.**

354 Analytical testing should be done in accordance with accepted procedures in 40 CFR 136, as
355 amended published in the 40 CFR July 1, 2024, update or other board department or EPA recognized
356 and approved methods.

357

358 **9VAC25-260-310. Special standards and requirements.**

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

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

365 The geometric mean fecal coliform value for a sampling station shall not exceed an MPN (most
366 probable number) or MF (membrane filtration using mTEC culture media) of 14 per 100 milliliters
367 (ml) of sample and the estimated 90th percentile shall not exceed an MPN of 43 per 100 ml for a
368 5-tube decimal dilution test or an MPN of 49 per 100 ml for a 3-tube decimal dilution test or MF
369 test of 31 CFU (colony forming units) per 100 ml.

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

372 b. Policy for the Potomac Embayments. At its meeting on September 12, 1996, the board adopted
373 a policy (9VAC25-415. Policy for the Potomac Embayments) to control point source discharges
374 of conventional pollutants into the Virginia embayment waters of the Potomac River, and their
375 tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 bridge in King
376 George County. The policy sets effluent limits for BOD₅, total suspended solids, phosphorus, and
377 ammonia, to protect the water quality of these high profile waterbodies.

378 c. Canceled.

379 d. Canceled.

380 e. Canceled.

381 f. Canceled.

382 g. Occoquan watershed policy. At its meeting on July 26, 1971 (Minute 10), the board adopted a
383 comprehensive pollution abatement and water quality management policy for the Occoquan
384 watershed. The policy set stringent treatment and discharge requirements in order to improve and
385 protect water quality, particularly since the waters are an important water supply for Northern
386 Virginia. Following a public hearing on November 20, 1980, the board, at its December 10-12,
387 1980, meeting, adopted as of February 1, 1981, revisions to this policy (Minute 20). These
388 revisions became effective March 4, 1981. Additional amendments were made following a public
389 hearing on August 22, 1990, and adopted by the board at its September 24, 1990, meeting
390 (Minute 24) and became effective on December 5, 1990. Copies are available upon request from
391 the Department of Environmental Quality.

392 h. Canceled.

393 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. Canceled.

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 is greater than or equal to 4.0 mg/l	June 1 - September 30
	Instantaneous minimum is greater than or equal to 3.2 mg/l at temperatures less than 29°C	
	Instantaneous minimum is greater than or equal to 4.3 mg/l at temperatures greater than or equal to 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 µl	Chesapeake Bay Program Segment	Temporal Application
Open water	8	JMSTF2	March 1 - May 31 (spring)
	10	JMSTF1	
	13	JMSOH	
	7	JMSMH	

	8	JMSPH	July 1 - September 30 (summer)
	21	JMSTF2	
	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.

ii. In the wadeable portions of the mainstem sections of the Shenandoah River, North Fork Shenandoah River, and South Fork Shenandoah River listed in the table in this subdivision, a determination of persistent nuisance filamentous algae impeding the recreation use should be made when exceedances of either of the specified benthic chlorophyll-a concentration thresholds occur in more than one recreation season (May 1 to October 31) in three years. "Wadeable" constitutes a stream that can be crossed and sampled safely during a given sampling event occurring within the recreation season.

Segment	Two-Month Median (mg/m ²)	Seasonal Median (mg/m ²)
Shenandoah River from its confluence of the North Fork and South Fork Shenandoah Rivers downstream to the Virginia-West Virginia state line	150	100
North Fork Shenandoah River from its confluence with Fort Run downstream to its confluence with the South Fork Shenandoah River	150	100
South Fork Shenandoah River from its confluence with the North and South Rivers downstream to its confluence with the North Fork Shenandoah River	150	100

jj. The selenium chronic criteria for the protection of freshwater aquatic life apply in the following waters:

Knox Creek watershed in Buchanan County:

- (1) Race Fork and tributaries.
- (2) Pounding Mill Creek and tributaries.
- (3) Right Fork of Lester Fork and tributaries.
- (4) Abners Fork and tributaries.

Media Type	Fish Tissue ¹	Water Column ⁴

Criterion Element	Egg-ovary ²	Fish Whole-body or Muscle ³	Monthly Average Exposure	Intermittent Exposure ⁵
Magnitude	15.1 mg/kg dw	8.5 mg/kg dw whole-body or 11.3 mg/kg dw muscle (skinless, boneless filet)	1.5 µg/L in lentic aquatic systems 3.1 µg/L in lotic aquatic systems	$WQC_{int} = (WQC_{30-day} - C_{bkgnd}(1-f_{int}))f_{int}$
Duration	Instantaneous measurement ⁶	Instantaneous measurement ⁶	30 days	Number of days/month with an elevated concentration
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years on average	Not more than once in three years on average

mg/kg dw = milligrams per kilogram dry weight

1. Fish tissue elements are expressed as steady state.
2. Egg-ovary supersedes any whole-body, muscle, or water column element when fish egg-ovary concentrations are measured, except as noted in footnote 4.
3. Fish whole-body or muscle tissue supersedes water column element when both fish tissue and water concentrations are measured, except as noted in footnote 4.
4. Water column values are based on dissolved total selenium in water and are derived from fish tissue values using bioaccumulation modeling. When selenium inputs are increasing, water column values are the applicable criterion element in the absence of steady-state condition fish tissue data. In fishless waters, compliance may be assessed using methods consistent with Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater, EPA-822-R-21-006.
5. Where WQC_{30-day} is the water column monthly element for either lentic (still) or lotic (flowing) waters; C_{bkgnd} is the average background selenium concentration; and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value greater than or equal to 0.033 (corresponding to one day).
6. Fish tissue data provide instantaneous point measurements that reflect integrative accumulation of selenium over time and space in fish populations at a given site.

kk. The following site-specific dissolved oxygen criteria apply to the tidal Chickahominy River and its 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 segment CHKO 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.

<u>Designated use</u>	<u>Criteria Concentration/Duration</u>	<u>Temporal Application</u>
<u>Open water</u>	<u>30 day mean is greater than or equal to 4.0 mg/l</u> <u>Instantaneous minimum is greater than or equal to 3.2 mg/l at temperatures less than 29°C</u> <u>Instantaneous minimum is greater than or equal to 4.3 mg/l at temperatures greater than or equal to 29°C</u>	<u>June 1 - September 30</u>

ll. The following site-specific dissolved oxygen criteria apply to the tidal Pocomoke River 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 segment POCOH 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.

<u>Designated use</u>	<u>Criteria Concentration/Duration</u>	<u>Temporal Application</u>
<u>Open water</u>	<u>30 day mean is greater than or equal to 4.0 mg/l</u> <u>Instantaneous minimum is greater than or equal to 3.2 mg/l at temperatures less than 29°C</u> <u>Instantaneous minimum is greater than or equal to 4.3 mg/l at temperatures greater than or equal to 29°C</u>	<u>June 1 - September 30</u>

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~~DWR trout waters. The Department of ~~Game and Inland Fisheries (DGIF)~~ Wildlife Resources (DWR) 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~~-DWR 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~~-DWR 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~~-DWR. Those trout waters which have no ~~DGIF~~-DWR classification are shown with a triple asterisk (***). The ~~DGIF~~-DWR classes are described below. Inclusion of these ~~DGIF~~ DWR 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~~ DWR are also recognized in 9VAC25-260-110.

~~DGIF~~ DWR 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.

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	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 and its tributaries from the Germantown Lake dam on~~ 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~~ 9.5	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.

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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, ii	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, ii	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, ii	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-14, 15, ii	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, ii	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 Luray Avenue in~~ 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-12,16, ii	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 former location of the dam above Waynesboro .
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.
3d	IV	PWS	South Fork Shenandoah River and its tributaries from the City of Harrisonburg water supply intake near the confluence of Big Run to points 5 miles upstream.
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, including Skidmore Fork upstream to the

			headwaters of Switzer Lake, 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.
	V		Stockable Trout Waters in Section 5d.
	viii		Switzer Lake from its dam upstream to the impoundment 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. This does not include Switzer Lake, which is Class V Stockable Trout Waters.
5e	VI	PWS	North River and its tributaries from Staunton Dam to their headwaters unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5e
	iii	ee	Elkhorn Lake from the dam upstream to the impoundment headwaters.
	VI		Natural Trout Waters in Section 5e

	iv		North River from the headwaters of Elkhorn Lake upstream including all named and unnamed tributaries.
6	IV	pH-6.5-9.5, ii	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	V	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.

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607 **9VAC25-260-410. James River Basin (Lower).**

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a, z, bb, <u>kk</u> , 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			(Deleted)
	VII		Swamp waters in Section 1f 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.

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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 <u>South Fork Roanoke River at the confluence of Bottom Creek and Goose Creek near the</u> 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.

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, <u>II</u>	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.

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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.

			<u>Wilson Creek from its confluence with the New River upstream including all named and unnamed tributaries.</u>
	***		<u>Wilson Creek from its confluence with the New River 8.8 miles upstream.</u>
	ii		<u>Wilson Creek from 8.8 miles above its confluence with the New River 6.6 miles upstream.</u>
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.
	lii		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)

Documents Incorporated by Reference (9VAC25-260)

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

Aquatic Life Ambient Freshwater Quality Criteria-Copper, EPA-822-R-07-001, U.S. EPA, Office of Water, February 2007 Revision

Final Aquatic Life Ambient Water Quality Criteria for Aluminum, EPA-822-R-18-001, U.S. EPA, Office of Water, December 2018

[Boundary of the Deep Water Designated Use in Virginia's Chesapeake Bay Mainstem, Virginia Department of Environmental Quality, October 2025](#)

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-260
VAC Chapter title(s)	Water Quality Standards
Action title	Triennial Review 2024 Rulemaking to adopt new, update, or cancel existing Water Quality Standards as required by § 62.1-44.15 of the Code of Virginia and the Federal Clean Water Act, 33 U.S.C. §§ 1251
Date this document prepared	September 10, 2025
Regulatory Stage (including Issuance of Guidance Documents)	Proposed

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

(1) Direct & Indirect Costs & Benefits (Monetized)	<u>Introduction:</u> The State Water Control Board (Board) is required to review the Water Quality Standards regulation (WQS) under the Code of Virginia (§ 62.1-44.15(3a)) and federal regulation at 40 CFR 131, at least once every three years. During this triennial review the Board must adopt, modify or cancel standards as appropriate. based on current scientific data. The proposed amendments that were developed as part of the Triennial Review 2024 Rulemaking include: 1. Updated boundaries in the Chesapeake Bay and Mobjack Bay waterways to expand the deep water designated use. (9VAC25-260-10) 2. Allowing additional water quality monitoring assessment methods. (9VAC25-260-185) 3. Corrections to River Basin Tables. (9VAC25-260-390 through 9VAC25-260-540) 4. A change to add special dissolved oxygen (DO) criteria for the tidal Chickahominy river (9VAC25-260-310) 5. Revising special DO Criterion for Pocomoke River (9VAC25-260-310). 6. Requiring Biological Ligand Model (BLM) to evaluate copper toxicity where data is available (9VAC25-260-140 G). 7. Amend water quality criteria to include EPA recommended aquatic life criteria for perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) (9VAC25-260-140). 8. Amending the Chesapeake Bay DO criteria to include a significant figure (i.e. adding a decimal place). (9VAC25-260-185) 9. Updating documents incorporated by reference <u>Direct Costs:</u> The proposed changes to the Water Quality Standards (WQS) do not impose direct costs. Instead, WQS are implemented through separate regulations, such as the Virginia Pollutant Discharge Elimination System (VPDES) permits, or for Clean Water Act 305(b)/303(d) water quality assessments to identify and report impaired waters, where indirect costs could be incurred by the agency or private entities. <u>Indirect Costs:</u> No indirect costs are expected from proposed amendments that allow additional water quality assessment methods and to correct errors in the River Basin Tables. These changes are administrative in nature and serve to streamline evaluations and improve data accuracy. They do not introduce new regulatory burdens and are not anticipated to result in any

	direct or indirect costs to the agency or regulated entities. Also, no indirect costs are expected for proposed changes to the deep water designated uses or revising the DO criteria for the tidal Chickahominy River and Pocomoke River. The revised criteria account for naturally low oxygen levels in these systems, especially during warmer months, and may reduce regulatory burden by making criteria less stringent. Additional costs are not expected with the proposal to add a decimal place to reflect a significant figure to the Chesapeake Bay DO criteria. This action makes precision of the Chesapeake Bay's DO criteria consistent across all the DO criteria in the WQS and alleviates confusion for implementation programs that use DEQ's rounding policy, which instructs DEQ staff to round compliance values to the number of significant digits in a permit limit or criterion. While the added decimal place could theoretically result in segments of the Bay being classified as impaired due to the added decimal place, the cost of such a change cannot be quantified because this is dependent on future water quality monitoring results when compared to the new criteria, the status of the overall Chesapeake Bay TMDL, and specific facility processes and costs needed to improve DO levels if needed at the time. Some facilities discharging in Chesapeake Bay waters could also be affected if the added decimal place shows that they exceed the DO limit, where they would not have previously due to rounding. Facilities that are found to discharge PFOS and PFOA contaminants at levels that exceed the criteria may incur costs. While the new criteria could lead to increased monitoring and treatment requirements and costs for facilities that discharge these substances, the costs cannot be quantified because of the variability of facilities across Virginia. As such, no immediate costs are expected, though future impacts will depend on the results of ongoing monitoring and facility-specific discharges. One proposed amendment involves the optional use of the BLM for assessing copper toxicity in freshwater systems. The BLM, which was adopted into Virginia's standards in 2016, offers a more site-specific and scientifically robust alternative to traditional hardness-based criteria. The proposed amendment clarifies that permittees must use agency-approved procedures when conducting BLM studies to determine freshwater copper criteria for permitting evaluations. The recommended language modification also makes it clearer that the BLM-based criteria supersede hardness-based criteria. In 2015, EPA estimated costs ranging from \$443 to \$1,772 (adjusted for inflation) per seasonal sampling event. Although the BLM requires more extensive data collection, it can lead to long-term cost savings by better characterizing copper toxicity, allowing for less stringent permit limits and lower treatment or monitoring costs. Importantly, the proposed amendment does not mandate BLM use; it

	simply clarifies its availability by facilities to use the method to determine their permit limits. Since the BLM is already allowed in the regulation, the amendment only requires that approved procedures must be used, making the submittals to the agency more consistent and that BLM results should be used over hardness criteria. Thus, the amendment does not create any new costs. <u>Direct Benefits:</u> The proposed amendments do not have direct benefits that can be monetized at this time since benefits are mostly in the form of improved water quality or less stringent permit limits depending on specific facilities that can't be predicted. These changes help improve water quality by guiding more accurate assessments and permit limits and contribute to efforts to remove the streams from the impaired waters list and remove fish consumption advisories. <u>Indirect Benefits:</u> DEQ is not able to monetize the total potential indirect benefits from the proposed changes to the WQS at this time. Indirect benefits are incurred later through improved water quality which will protect human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as by commercial and recreational fishing industries. Facilities may also benefit from cost reductions where criteria reflect natural conditions and are less stringent. Permittees could benefit from using the BLM method where it results in more flexible permit conditions and cost savings. One item in the proposed amendments enhances DEQ's ability to assess water quality by using all available data in Chesapeake Bay criteria assessments. Currently, regulatory language limits assessments to using only discrete datasets, excluding available monitoring datasets from state of the art automated, continuous, and high frequency data collection. The proposed revised language would allow for Chesapeake Bay criteria to be assessed using the currently utilized method and also allow for alternate scientifically defensible methods. This change expands the use of existing datasets beyond a limited set of water quality criteria. Acquiring these data cost an estimated \$2.5 million from state and federal funds annually. Maximizing the data use provides a better return on this investment.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	No monetizable direct costs. Indirect costs vary and are generally not monetizable.	Unable to monetize

	Permittees opting to use the BLM method may incur costs ranging from \$443 to \$1,772 per sampling event but could realize overall savings through more flexible permit conditions.	
(3) Net Monetized Benefit	Unable to monetize	
(4) Other Costs & Benefits (Non-Monetized)	<u>Indirect Benefits:</u> The proposed amendments broadly benefit the public by ensuring that the water quality criteria that protect aquatic life and human health are updated based on better scientific information. This includes cleaner water, more abundant and healthier fisheries, and more reliable public water supplies, and contributes to economic benefits for tourism, economic development, and commercial and recreational fishing industries. The accurate classification of water bodies further ensures that public water sources for household consumption, water bodies used for recreational purposes, and aquatic life uses are correctly assessed and protected for such use. Virginia benefits from clearer, science-based permit limits, assessments and clean-up plans (TMDLs), or if there are legal proceedings brought either by the regulated community or by conservation groups. Reducing exposure to PFOS and PFOA helps safeguard public health and aquatic life by reducing exposure to harmful contaminants and can lead to reduced healthcare costs and increased productivity. More accurate DO criteria and designated use boundaries help protect aquatic ecosystems, supporting biodiversity and enhancing the long-term sustainability of fisheries and tourism. Allowing additional assessment methods and correcting river basin tables streamlines water quality evaluations, reduces the likelihood of unnecessary remediation, and ensures that resources are allocated where they are most needed. Allowing additional assessment methods will allow Virginia to realize the full benefits of its continuous water quality monitoring datasets in Chesapeake Bay since they cannot currently be used for water quality assessments.	
(5) Information Sources	Training materials on Copper BLM: Implementation EPA https://www.epa.gov/wqc/supplementary-training-materials-aquatic-life-criteria-copper	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Maintaining the status quo would mean not making changes to Virginia's WQS developed as part of a triennial review of the regulation, mandated by federal regulation (Section 303(c)(1) of the Clean Water Act) and state law (§ 62.1-44.15(3a)). Recommendations for amendments were provided by DEQ staff, EPA, and the public during the review, which included a Regulatory Advisory Panel (RAP) made up of members of the public and stakeholders. If the current regulatory requirements are maintained, the regulation would contain outdated criteria and water quality goals no longer representative of current science and not reflective of the information gathered through the RAP participatory process. <u>Direct Costs:</u> Retaining the status quo would not incur any direct costs for stakeholders or DEQ. As explained above, this regulation does not impose direct costs but there are indirect costs such as through implementation of water permitting programs and TMDLs. <u>Indirect Costs:</u> Indirect costs cannot be monetized at this time. The economic costs stem from poor water quality or impaired waterbodies failing to provide beneficial uses to the public overall, such as diminished recreation or fishing opportunities. The potential uses are too variable to estimate the monetary impact of the reduced water quality. Maintaining the status quo would also prevent DEQ and the regulatory community from the benefits of several of the changes in the proposed regulations that provide regulatory relief or flexibility, such as the expanded deep use designation in the Chesapeake Bay mainstem and alternative methods to assess DO. <u>Direct & Indirect Benefits:</u> There are no direct or indirect benefits to maintaining the status quo.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Unable to monetize expected indirect costs.	(b) Unable to monetize expected indirect benefits.
(3) Net Monetized Benefit		

(4) Other Costs & Benefits (Non-Monetized)	<u>Indirect Costs:</u> The status quo may not meet the mandates to review WQS in the triennial review as mandated in federal regulation (Section 303(c)(1) of the federal Clean Water Act) and state law (§62.1-44.15(3a)). Maintaining the status quo would not lead to improved water quality or improved accuracy of assessments of the Commonwealth's waters. Without the amendments, certain waters could be misclassified, inaccurately designated as impaired, and possibly developing unnecessary cleanup plans or requirements on permittees. There may also be increased aquatic life risks due to a failure to include the PFOA and PFOS criteria which may lead to serious aquatic life effects. Maintaining the status quo would also prevent DEQ and the regulatory community from the benefits of several of the changes in the proposed regulations that provide regulatory relief or flexibility, such as the expanded deep use designation in the Chesapeake Bay mainstem and alternative methods to assess DO. Without the change that allows the use of additional assessment methods, Virginia cannot use all its continuous water quality monitoring datasets since they cannot be used for Chesapeake Bay assessments under the status quo. Some permittees may suffer an indirect cost if they are not able to utilize a BLM for evaluating copper toxicity, which could result in less stringent permit requirements. <u>Indirect Benefits:</u> Under the status quo, certain permittees could avoid costs associated with proposed amendments. Some facilities may benefit if the EPA recommended aquatic life criteria for PFOS and PFOA or the added significant figure are not implemented.
(5) Information Sources	N/A

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	There is no alternative approach to proposing these amendments since the underlying federal regulation (Section 303(c)(1) of the Clean Water Act) and state law (§62.1-44.15(3a)) mandate the triennial review.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) N/A	(b) N/A
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	N/A	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	Localities would experience the same costs and benefits described in table 1a. No estimate is available concerning the number of localities benefiting from these regulatory changes. <u>Direct Costs:</u> See Table 1a. <u>Indirect Costs:</u> See Table 1a. <u>Direct Benefits:</u> See Table 1a. <u>Indirect Benefits:</u> See Table 1a.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See Table 1a.	(b) See Table 1a.

(3) Other Costs & Benefits (Non-Monetized)	Local partners and their citizens will benefit from improved water quality that protects human health and aquatic life, resulting in healthier fisheries and safer, more reliable public water supplies. These improvements will also contribute to economic benefits from tourism and economic development and produce edible and marketable natural resources, such as by commercial and recreational fishing industries. Local partners may also benefit from several of the changes in the proposed regulations that provide regulatory relief or flexibility, such as the expanded deep use designation in the Chesapeake Bay mainstem and alternative methods to assess DO.
(4) Assistance	N/A
(5) Information Sources	See Table 1a.

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	<u>Direct Costs:</u> There are no direct costs associated with the proposed amendments that impact families. <u>Indirect Costs:</u> There are no indirect costs associated with the proposed amendments that impact families. <u>Direct and Indirect Benefits:</u> Families generally benefit from improved water quality which protects recreational uses, such as, swimming and boating; as well as aquatic life and wildlife benefits, including game fish, and producing production of edible and marketable natural resources, such as fish and shellfish.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A

(3) Other Costs & Benefits (Non-Monetized)	(a) None
(4) Information Sources	N/A

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	The costs and benefits of the proposed amendments for small businesses would be the same as explained in Table 1a. The Department is unable to identify the number of small businesses that would benefit from this regulatory change. <u>Direct Costs:</u> See Table 1a. <u>Indirect Costs:</u> See Table 1a. <u>Direct Benefits:</u> See Table 1a. <u>Indirect Benefits:</u> See Table 1a.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See Table 1a	(b) See Table 1a
(3) Other Costs & Benefits (Non-Monetized)	There are no other costs or benefits associated with the proposed amendments.	
(4) Alternatives	There is no alternative approach to the proposals since the underlying statute and regulation mandate the triennial review.	

(5) Information Sources	N/A

Changes to Number of Regulatory Requirements**Table 5: Regulatory Reduction**

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-260-10	(M/A):	7	0	0	0
	(D/A):	0	0	0	0
	(M/R):	6	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-140	(M/A):	29	0	0	0
	(D/A):	4	0	0	0
	(M/R):	1	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-185	(M/A):	7	0	0	0
	(D/A):	0	0	0	0
	(M/R):	1	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-187	(M/A):	6	0	0	0
	(D/A):	0	0	0	0
	(M/R):	2	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-280	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	1	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-310	(M/A):	15	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-370	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0

9VAC25-260-390	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-400	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-410	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-450	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-520	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-260-540	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:		(M/A):0			
		(D/A): 0			
		(M/R): 0			
		(D/R): 0			

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
N/A				

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
9VAC25-260-310	Change to add special DO criteria for the tidal Chickahominy River. Add Special DO Criterion for Pocomoke River (9VAC25-260-310) to match Maryland and recognize the naturally occurring low DO.	Reduces regulatory stringency by lowering the DO level that the waterbody must meet during summer months which reflects the natural condition of tidally influenced waters.
9VAC25-260-185 A	Amend Dissolved Oxygen criteria in Chesapeake Bay to include a significant figure (i.e. adding a decimal place).	This change may increase stringency depending on the situation since adding a decimal place to include the significant figure can affect how rounding water quality data compares to the criteria.
9VAC25-260-185	Existing regulatory language limits Chesapeake Bay assessments to using only discrete datasets, excluding other types of available data from being applied to assessments such as continuous data.	The proposed modification enhances DEQ's ability to assess water quality by using all available data in Chesapeake Bay criteria assessments. Currently, regulatory language limits assessments to using only discrete datasets, excluding available monitoring datasets from state of the art automated, continuous, and high frequency data collection. The proposed revised language would allow

		for Chesapeake Bay criteria to be assessed using the currently utilized method and also allow for alternate scientifically defensible methods. This change expands the use of existing datasets beyond a limited set of water quality criteria. Acquiring these data cost an estimated \$2.5 million from state and federal funds annually. Maximizing the data use provides a better return on this investment.
9VAC25-260-140	Amend water quality criteria for surface water to include EPA recommended aquatic life criteria for PFOS and PFOA.	Adding new aquatic life criteria for these new contaminants, PFOS and PFOA, requires permitted dischargers with these contaminants in their effluent to meet the criteria. This could lead to treatment or monitoring costs that cannot be quantified at this time.

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A	N/A	N/A	N/A

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB I



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

MEMORANDUM

TO: State Water Control Board Members

FROM: Meghan Mayfield, Director, Clean Water Financing & Training Services 

DATE: November 6, 2025

SUBJECT: FY 2026 Virginia Clean Water Revolving Loan Fund Final Authorizations

Purpose

Title IV of the Clean Water Act requires the annual submission of a Project Priority List and Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund (VCWRLF) Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the State Water Control Board (Board) to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this process is for the Board to set the loan terms and authorize the execution of the loan agreements.

Background

On June 9, 2025, the Virginia Department of Environmental Quality's (DEQ's) Clean Water Financing and Assistance Program (CWFAP) opened the solicitation period for VCWRLF applications from the Commonwealth's localities, wastewater authorities, and potential land conservation, living shoreline, and brownfield remediation applicants. July 25, 2025, was established as the deadline for receiving applications. DEQ received 25 wastewater improvement applications requesting \$438,801,477, one land conservation application requesting \$30,000,000, and one emerging contaminants application requesting \$6,600,000. In total, DEQ received 27 applications requesting a total of \$475,401,477.

CWFAP staff reviewed an updated capacity assessment of the VCWRLF, completed by Virginia Resources Authority (VRA), to determine the level of authorizations the fund could manage while maintaining the ability to provide funds for requests in future years. Based on this assessment, CWFAP staff determined that all projects could not be funded by the VCWRLF and proceeded to eliminate five (5) projects from the funding list based on previously established project bypass procedures.

Additionally, the Hampton Roads Sanitation District (HRSD) programmatic loan was reduced to from \$150,000,000 to \$60,000,000 and the Prince William County HL Mooney Advanced Water Reclamation Facility (AWRF) project was reduced from \$36,000,000 to \$10,000,000.

By memorandum dated September 26, 2025, the Director of DEQ tentatively approved the list of 22 projects for a total of \$255,742,977 in loan assistance from available and anticipated FY 2026 resources and authorized CWFAP staff to proceed to public comment. A listing of the projects in priority order, a brief description of each, and amount of assistance requested is included in Attachment A. Notice of the draft funding list was posted on the Virginia Regulatory Town Hall and DEQ's CWFAP website for a 30-day public comment period from September 30, 2025 to October 31, 2025. No comments were received.

Discussion

The CWFAP staff have finalized the recommended loan amounts, interest rates, and loan terms in accordance with the Board's guidelines. No changes from the tentative approval list previously released for public comment are being recommended.

The loan rates and terms listed in the table below are submitted for Board consideration. In accordance with Board guidelines, a residential user charge impact analysis was conducted for each project. This analysis determines the anticipated user charges as a result of the project relative to the affordable rate as a percentage of the applicant's median household income. Projects involving higher user charges relative to income generally receive lower interest rates than those with relatively lower user charges.

Congress has not finalized the federal State Revolving Fund appropriation for FY 2026. As such, DEQ does not currently know the amount(s), if any, that could be made available as principal forgiveness in FY 2026. CWFAP staff will analyze the projects with regard to the program's hardship affordability criteria and will be prepared to work with the Director on providing principal forgiveness to some projects as allowed by previous delegations if it is provided for by federal appropriation.

As in the last several years, DEQ is proposing that the subsidized program rate for wastewater related projects differ depending on the term of the loan, such that 20-year term program rates are set at 1.50% (150 basis points) below market, 25-year term program rates are 1.25% (125 basis points) below market, and 30-year term program rates are 1.00% (100 basis points) below market. Market rates would be based on an evaluation by the VRA of the market conditions that exist approximately one month prior to each loan closing. The program is recommending the hardship interest rate be set at 0.5%, and a minimum interest rate of 1% for all other loans.

For projects such as wastewater treatment plants and pump stations that involve significant mechanical equipment, the maximum loan term would be up to 25 years, whereas the term for projects that primarily involve wastewater conveyance piping installation or improvements and projects funded using programmatic financing could be up to 30 years and no longer than the expected useful life of the project.

Proposed FY 2026 VCWRLF Funding List

FY 2026 Proposed Interest Rates and Loan Term Authorizations			
Applicant	Loan Amount	Interest Rates	Max Term
Hampton Roads Sanitation District	\$60,000,000	PR	up to 25 years
City of Norfolk Department of Public Utilities	\$30,000,000	0.5%	up to 25 years
Bristol Virginia Utilities Authority	\$5,554,253	0.5%	up to 30 years
City of Lynchburg	\$18,215,000	PR	up to 30 years
Town of Christiansburg	\$3,786,340	PR	up to 25 years
City of Martinsville	\$16,672,000	0.5%	up to 25 years
Town of Wytheville	\$24,469,000	PR	up to 25 years
Wythe County Board of Supervisors	\$975,000	PR	up to 25 years
City of Richmond	\$51,414,869	0.5%	up to 25 years
Charles City County	\$1,403,125	0.5%	up to 25 years
Town of Front Royal	\$1,800,000	PR	up to 25 years
Town of Bowling Green	\$2,783,800	0.5%	up to 25 years
Town of Pulaski	\$6,600,000	0.5%	up to 30 years
Charles City County	\$1,826,000	0.5%	up to 25 years
Prince William County Service Authority	\$10,000,000	PR	up to 25 years
Town of Pamplin City	\$2,129,300	0.5%	up to 30 years
Town of Blackstone	\$611,632	PR	up to 30 years
Town of Blackstone	\$4,168,446	PR	up to 30 years
City of Hopewell	\$1,029,022	PR	up to 25 years
Town of Front Royal	\$7,960,000	PR	up to 25 years
Upper Occoquan Service Authority	\$1,300,000	0%	up to 25 years
Washington County Service Authority	\$3,045,190	0.5%	up to 30 years
TOTAL	\$255,742,977		
PR = Program Rate *minimum 1%			

Staff Recommendation

Staff recommend that the Board authorize the execution of loan agreements for the projects, loan amounts, interest rates and terms listed above, and that 20-year term program rates are set at 1.5% (150 basis points) below market, 25-year term program rates are 1.25% (125 basis points) below market, and 30-year term program rates are 1.00% (100 basis points) below market, based on VRA's evaluation of the market conditions that exist approximately one month prior to each loan closing. The hardship interest rate will be 0.5%, and the minimum interest rate will be 1% for all other loans. Loan closings will be subject to receipt of a favorable financial capability analysis report and supporting recommendation from VRA for each loan recipient.

VCWRLF FY26 PPL - Attachment A

FY 2026 Applicants	Amount Requested	Amount Recommended for Funding	Project Description	Points	Projected Project Start
Hampton Roads Sanitation District	\$150,000,000	\$60,000,000	This loan will finance the capital construction program, which includes 27 projects within HRSD's Capital Improvement Plan. Of those projects, the James River and Nansemond River SWIFT facility projects comprise a majority of the scope funded by this assistance agreement. EQUIVALENCY and GREEN PROJECT RESERVE	459.87	March 2021
City of Norfolk Department of Public Utilities	\$30,000,000	\$30,000,000	Norfolk Department of Utilities Wastewater Projects: This project involves 20 wastewater improvement projects, including pump station replacements and gravity sewer main line replacements.	426.85	October 2024
Bristol Virginia Utilities Authority	\$5,554,253	\$5,554,253	The project includes the rehabilitation of ~11,000 LF of 36" & smaller diameter pipe and the rehabilitation of ~66 manholes. The proposed project is the 2nd phase of a 3-phase project and is located within the Beaver Creek sewer basin, which is currently under a consent order with DEQ. The project will address additional inflow and infiltration issues on the Beaver Creek interceptor located upstream of a chronic sanitary sewer overflow location.	412.37	July 2026
City of Lynchburg	\$18,215,000	\$18,215,000	This application will fund three projects: CSO 70 improvement is the recommended Project No. 7 in the City of Lynchburg's CSO Long-term Control Plan (LTCP) and Special Order of Consent. Project scope includes CSO regulator replacement and upsize of sewer pipe to reduce CSO discharge frequency and volume. This project will reduce annual CSO overflow volume by approximately 4.7 million gallons. CSO 14 improvement is associated with Project No. 8 in the City of Lynchburg's CSO Long-term Control Plan (LTCP) and Special Order of Consent. Project scope will separate storm sewer and sewer system. New storm sewer to be installed and existing sewer to be rehabilitated. This project will eliminate one CSO overflow location. CSO 33 and 34 improvement is associated with Project No. 8 in the City of Lynchburg's CSO Long-term Control Plan (LTCP) and Special Order of Consent. Project scope will separate storm sewer and sewer system. New storm sewer to be installed and existing sewer to be rehabilitated. This project will eliminate two CSO overflow locations.	412.34	January 2026
Town of Christiansburg	\$3,786,340	\$3,786,340	This project will replace the existing boiler and heat exchanger with new equipment housed in a code-compliant building to improve safety and ensure continued sludge processing at the Christiansburg WWTF.	398.13	October 2025
City of Martinsville	\$16,672,000	\$16,672,000	This project will upgrade and renovate the Martinsville WWTP, which is an 8 MGD facility serving both the City and a portion of Henry County. Much of the equipment is original to the 1985/86 upgrade and has far exceeded the expected service life. All equipment experiences reoccurring mechanical issues significantly increasing the risk of failure to meet effluent quality standards. Currently, the treatment process lacks flow equalization capability leading to illicit discharges.	396.33	March 2026
Town of Wytheville	\$24,469,000	\$24,469,000	This project includes replacement of aging equipment at the Town of Wytheville WWTP and improvements to reliability in order to more effectively meet regulatory permitting and state code requirements. The work specifically addresses asset replacement needs in the headworks along with improvements in the process portion of the plant. This project will be a comprehensive upgrade and will include SCADA improvements.	371.37	March 2027
Wythe County Board of Supervisors	\$975,000	\$975,000	The Jackson Elementary School wastewater project will consist of demolishing the failing septic tank and low-pressure distribution /mass drain field system where the school presently discharges wastewater. The replacement system will consist of installing a duplex submersible pump lift station and approximately 5,500 linear feet of 2-inch sewer force main which will pump into the Shorts Creek wastewater collection system owned by the County. The lift station will have an emergency backup generator as well as security fencing around the perimeter of the lift station site.	358.37	August 2025
City of Richmond	\$51,414,869	\$51,414,869	The performance of the WWTP Main Pumping Station pumps has degraded over time. This project will utilize the existing facility and replace the four existing pumps with six new vertical centrifugal pumps. The project will also make process mechanical improvements, structural improvements, electrical improvements, I&C improvements to optimize the performance of the pumping station to maximize flow to the WWTP during wet weather events.	344.06	April 2026
Charles City County	\$1,403,125	\$1,403,125	The project will abandon the failing Administrative Building WWTP, which serves only the Government Building, due to poor condition and non-viable sand filter repairs. Sewer flows will be redirected by upgrading the existing pump station and installing a new force main to the Charles City County Schools WWTP, which has available capacity. This project is vital to address public health and environmental risks from ongoing DEQ violations caused by the current plant.	332.18	June 2026
Town of Front Royal	\$1,800,000	\$1,800,000	This project will replace the two existing pumps, add a third pump to the station, replace the pneumatic check valves with swing check valves, upgrade electrical equipment to accommodate the new pumps, replace the wet well platform and staircase, replace the existing comminutor, and repair or replace the emergency generator.	331.39	September 2025

VCWRLF FY26 PPL - Attachment A

FY 2026 Applicants	Amount Requested	Amount Recommended for Funding	Project Description	Points	Projected Project Start
Town of Bowling Green	\$2,783,800	\$2,783,800	The Bowling Green WWTF provides sewage treatment for the Town of Bowling Green. Sludge wasted from the facility is first aerobically digested then dewatered in sludge drying beds. The drying beds no longer drain properly, preventing the production of dewatered sludge, and they are undersized. A new permit limit on ammonia will be implemented in 2028. Construction of a belt filter press is proposed to replace the failing sludge drying beds and meet the upcoming permit requirements.	309.05	June 2026
Town of Pulaski	\$6,600,000	\$6,600,000	The proposed project is intended to renew a portion of the Pulaski Interceptor (reinforced concrete sanitary sewer pipe and manholes) that has experienced significant degradation associated with high levels of corrosive sewer gases. All sewer flow from the Town of Pulaski is pumped to a receiving manhole at the start of the Pulaski Interceptor, located in Pulaski County, which flows east through the Town of Dublin, ultimately being treated at the Pepper's Ferry Regional Wastewater Treatment Facility. The Pulaski Interceptor also collects flow from the Town of Dublin and Pulaski County sanitary sewer systems. The sulfate/sulfide-related corrosion has had a significant impact on the structural integrity of the Interceptor's pipes and manholes, as shown in the field data collected for this Preliminary Engineering Report. Affected pipes and manholes will be rehabilitated through cured-in-place pipe lining and manhole rehabilitation techniques such as full cementitious lining and frame and cover replacement, among others.	296.96	January 2026
Craig-New Castle Public Service Authority	\$55,331,000	\$0	This project includes a comprehensive upgrade to the treatment and collection systems. The project has been submitted as a phased approach to maximize funding effectiveness. The work includes replacement of the existing WWTP lagoon and Imhoff treatment systems with a new package WWTP, replacement of the existing STEG collection system, replacement of an existing inverted syphon, and construction of a new duplex grinder pump station.	295.00	March 2027
Charles City County	\$1,826,000	\$1,826,000	The Ruthville WWTP Replacement Project will upgrade a failing treatment facility that has repeatedly violated discharge limits and triggered enforcement by the Virginia DEQ. Serving key community buildings, the current plant poses health and environmental risks. This project will install a modern, compliant system to restore safety and regulatory compliance.	282.18	September 2025
Carroll County Public Service Authority	\$4,392,500	\$0	The proposed project is a joint effort between the CCPSA and NCDOT to close two (2) wastewater treatment plant facilities and install pump stations, force mains, and related improvements to convey sewage to the City of Mount Airy's 7.0 MGD WWTP for treatment.	272.68	April 2027
B4 Natural Resources Foundation	\$30,000,000	\$0	This project includes the purchase of land and/or conservation easements on up to 1,368 acres lying in and adjacent to Loudoun County. LAND CONSERVATION	260.00	July 2026
Prince William County Service Authority	\$36,000,000	\$10,000,000	The Project addresses aging infrastructure and process improvements and provides operational efficiencies that will allow Prince William County Service Authority (PWCSA) to meet current and future demand conditions. It is a Design-Build project comprised of numerous components as follows: 1) Equalization Basin Modification; 2) Primary Clarifier Odor Control System Upgrades; 3) Primary Clarifier Collection Equipment Improvement; 4) Primary Clarifier Electrical Building and Ancillary Facility Upgrades; 5) Influent Flow Diversion and Equalization Basin Flow Metering Improvements; 6) Ultraviolet (UV) Building Improvements and Additional UV Equipment; 7) Yard Valves Replacement; 8) Methanol System Improvements; 9) Lime System Upgrades; 10) Ferric System Improvements; 11) Secondary Clarifier Improvements; 12) Plant Structural Protection; 13) Solids Polymer System Improvements; and 14) Headworks and Featherstone Force Main Analysis and Design. The project includes elements of Repair, Replacement, Process Improvements, Expansion, and New Construction. This is a supplemental application under the same title as the previous 2021, 2023, and 2024 applications. EQUIVALENCY	245.22	November 2023
Maury Service Authority	\$4,000,000	\$0	Due to deferred maintenance, several liquid train unit processes require replacement. The non-potable water system and plant SCADA struggle to meet the demands of the current plant. The UV disinfection process dates back to the 1990s and has reached the end of its functional life. The UV manufacturer has communicated that multiple components are obsolete/no-longer-available. This project will replace the UV disinfection system, non-potable water system, plant SCADA, and related appurtenances.	227.73	November 2027
Town of Pamplin City	\$2,129,300	\$2,129,300	The Phase 2 sanitary sewer system improvements will replace existing failing septic tank systems and expand sewer service to the remainder of the town in which sanitary sewer service was not provided under phase 1. Phase 1 provides sewer service to 66 sewer connections and 4 non-residential connections. The project will address risk to human health by replacing existing failing septic systems with a low pressure system.	216.34	July 2026
Town of Blackstone	\$611,632	\$611,632	Project consists of replacing a short section of Fort Avenue's 10" terra-cotta gravity sewer that is collapsing under an active railroad. It will be replaced with 317 ft. section of 10" PVC gravity sewer and bored casing under the railroad. This section of sewer receives the forcemain discharge from one of the town's municipal pump stations.	204.06	August 2025

VCWRLF FY26 PPL - Attachment A

FY 2026 Applicants	Amount Requested	Amount Recommended for Funding	Project Description	Points	Projected Project Start
Town of Abingdon	\$4,635,000	\$0	The Wyndale Road Sub-Basin Improvements Project - Phase 1 is an area of the Town's system that experiences a large amount of I/I resulting in several SSOs. The project includes the replacement of approximately 8,000 LF of 12" and 8" gravity sewer main and 24 manholes and additional Closed-Circuit Television (CCTV) inspections in areas of the East and West interceptors to evaluate and identify system defects.	187.39	April 2027
Town of Blackstone	\$4,168,446	\$4,168,446	Project includes replacement of a 10" ductile-iron force main installed in the 1990s that has corroded and worn thin with multiple breaks in recent years. It will be replaced parallel to the existing force main with a new 12" PVC force main. It will be approximately 8,861 LF.	179.06	July 2026
City of Hopewell	\$1,029,022	\$1,029,022	The Jackson Farm pump station rehabilitation project will include safety, process, mechanical, electrical, and structural repairs. The project will also include backup emergency generator installation, SCADA integration and the purchase of bypass pumps.	172.54	January 2027
Town of Front Royal	\$7,960,000	\$7,960,000	This project will construct a new centrifuge dewatering facility to dewater biosolids which will improve compliance and operational resilience.	146.39	October 2026
Upper Occoquan Service Authority	\$6,600,000	\$1,300,000	UOSA's Granular Activated Carbon (GAC) Optimization Project will update its existing carbon treatment process to optimally remove PFAS. The existing activated carbon is 25+ years old and its adsorptive capacity for PFAS removal is exhausted. This project will replace the existing carbon with a product that will better target PFAS adsorption. In addition, effective PFAS removal requires that UOSA's carbon filters operate in two stages, the first stage being a biological treatment stage and the second for PFAS adsorption. Filter underdrain modifications are required to allow the filters to work in this configuration and are part of this project. Finally, UOSA will make improvements to its carbon transfer system to ensure it can regenerate and adequate volume of carbon to meet final effluent water quality goals. IJA EC PROJECT.	138.10	November 2026
Washington County Service Authority	\$3,045,190	\$3,045,190	The Exit 13 Phase 2B sewer project will provide sewer to the last section of Lee Highway from Abingdon to the City of Bristol. This project will provide public sewer to an area where there are many aging septic systems. The DEQ was instrumental in providing funding for a neighboring project that provided the infrastructure necessary to support the future Exit 13 Phase 2B. Project will consist of 6,250 LF of 8-inch gravity sewer, 3-inch forcemain and pump station.	132.39	January 2027
Total Requested/Recommended	\$475,401,477	\$255,742,977			