

Enclosure 1

Rationale for EPA Approval of Virginia's 2024 Clean Water Act Section 303(d) List

1. Introduction

Pursuant to Section 303(d)(2) of the Clean Water Act (CWA) (33 U.S.C. § 1313(d)(2)), the U.S. Environmental Protection Agency (EPA) is approving all waterbody-pollutant combinations identified on Virginia's 2024 CWA Section 303(d) list (303(d) list) and taking no action, at this time, on water quality related information suggesting the presence of perfluorooctane sulfonic acid (PFOS) in fish tissue in certain segments in the Middle Chickahominy River watershed. This document sets forth the EPA's reasoning. The EPA received Virginia's 2024 303(d) list on March 28, 2025, through the EPA's Assessment, Total Maximum Daily Load (TMDL) Tracking and implementation System (ATTAINS), which is the EPA's electronic system to accept and track 303(d) submissions and actions.¹

Consistent with CWA Section 303(d) and 40 CFR §§ 130.2(j) & 130.7, the EPA has conducted a complete review of Virginia's 2024 303(d) list and supporting documentation and information, including changes from the previous 303(d) list. Based on this review, the EPA has determined that Virginia has met the requirements of Section 303(d) of the CWA and EPA's implementing regulations with respect to all of the waterbody-pollutant combinations identified in the portion of the Integrated Report (Category 5) constituting Virginia's list of water quality-limited segments (WQLSs) still requiring TMDLs (2024 303(d) list). The EPA, therefore, approves Virginia's decision to list these waters on the 2024 303(d) list as submitted electronically to the EPA through ATTAINS.

While EPA is approving all waterbody-pollutant combinations identified on Virginia's 2024 303(d) list, EPA is taking no action at this time on water quality related information suggesting the presence of PFOS in fish tissue in certain segments in the Middle Chickahominy River watershed. Until such time as the EPA takes action, those waterbody-pollutant combinations will remain in the same Integrated Report category consistent with Virginia's 2024 303(d) list as submitted.

The EPA's action regarding Virginia's 303(d) list does not extend to any waterbodies, or portions of waterbodies, that are within Indian country, as defined in 18 U.S.C. Section 1151. The EPA is taking no action to approve or disapprove the state's 303(d) list with respect to those waters. The EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters. The EPA's action regarding Virginia's 303(d) list also does not extend to any waterbodies, or portions of waterbodies, that are not "waters of the United States" as that term is used in 33 USC § 1362(7). The EPA is taking no action to approve or disapprove Virginia's 303(d) list with respect to those waters.

2. The EPA's Analysis of Virginia's Submission

Section 303(d)(1) of the CWA and the EPA's implementing regulations at 40 CFR 130.7 require states, territories, and authorized Tribes (herein referred to as "states") to identify waters for which effluent limitations required by CWA Section 301(b)(1)(A) and (B) are not stringent enough to implement any

¹ ATTAINS data is publicly accessible via the EPA's How's My Waterway online tool and ATTAINS web and geospatial services. For more information, see: <https://www.epa.gov/waterdata/get-data-access-public-attains-data>.

applicable water quality standard (WQS). States need not identify on their lists waters where the following controls are adequate to implement applicable standards: 1) technology-based effluent limitations required by the Act, 2) more stringent effluent limitations required by state or local authority, and 3) other pollution control requirements required by state, local, or federal authority. 40 CFR 130.7(b)(1) and (2). CWA Section 303(d) lists must identify WQLSs still requiring TMDLs. 40 CFR 130.7(b). The definition of “water quality limited segment” in 40 CFR 130.2(j) includes any segment where it is known that water quality does not meet applicable water quality standards (referred to as “impaired waters”) and any segment that is not expected to meet applicable water quality standards (referred to as “threatened” waters).² The term “applicable water quality standards” refers to those water quality standards established under Section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. 40 CFR 130.7(b)(3). A WQLS must be on the 303(d) list and requires a TMDL unless the state can demonstrate that no pollutant(s) causes or contributes to the impairment.³ In addition, in developing their CWA 303(d) lists, states must meet several procedural, submission, and content requirements as described in this decision document.

States must submit their 303(d) lists to the EPA on April 1 of every even-numbered year. 40 CFR 130.7(d)(1). The EPA must approve or disapprove the 303(d) list not later than 30 days after submission. The EPA approves a list only if it meets the requirements of 40 CFR 130.7(b). 40 CFR 130.7(d)(2). If the EPA approves the listing(s), the state must incorporate the listing(s) into its current Water Quality Management (WQM) plan. If the EPA disapproves a listing decision(s), the EPA must, no later than 30 days after the date of such disapproval, identify waters for inclusion on the 303(d) list (i.e., add the waters to the list). The EPA then must promptly issue a public notice seeking comment on the listing(s). After considering public comment and making any revisions the EPA deems appropriate, the EPA must then transmit the listing(s) to the state, and the state must incorporate the listing(s) into its WQM plan. 40 CFR 130.7(d)(2).

The statutory and regulatory requirements, and the EPA’s review of the state’s compliance with the requirements, are described in detail in this document. To the extent that any EPA-approved listing decisions are unchanged from prior approved Section 303(d) list actions, the EPA incorporates the reasoning of those previous list actions unless otherwise noted.

A. Supporting documentation for making listing determinations

EPA regulations at 40 CFR 130.7(b)(6) require states to include, as part of their submissions to the EPA, documentation to support the state’s determination to list or not to list its waters on the 303(d) list. Such documentation shall include, at a minimum, the information discussed in subsections i through iv, immediately below.

² The EPA uses the term WQLS to reflect the combination of a water segment and an applicable WQS that is not attained or is threatened. For example, if a segment is not meeting three applicable WQS then there are three WQLS for that segment.

³ See CWA Sections 303(d)(1)(A) and 303(d)(1)(C); 40 CFR § 130.7(b)(4); 2006 Integrated Reporting Memorandum, page 60; 2024 Integrated Reporting Memorandum, pages 18-19. EPA Integrated Reporting Memoranda may be found at <https://www.epa.gov/tmdl/integrated-reporting-guidance-under-cwa-sections-303d-305b-and-314>.

i. Description of the methodology used to develop the 303(d) list. 40 CFR 130.7(b)(6)(i).

EPA regulations at 40 CFR 130.7(b)(6) require states to include a description of the methodology used to develop the 303(d) list.⁴ The EPA does not approve or disapprove assessment methodologies. Instead, in acting on CWA 303(d) lists, the EPA evaluates whether the state, territory, or authorized tribe met listing requirements in determining whether applicable WQS are met and included waters requiring TMDLs on its 303(d) list.⁵

The EPA finds that Virginia has provided a description of its methodologies used for determining whether its waters are achieving the state's WQS, satisfying the regulatory requirement to provide a "description of the methodology used to develop the list." 40 CFR 130.7(b)(6)(i). A summary of Virginia's assessment methodologies can be found in *Chapter 4.1 Assessment Methodology* of the IR, and the methodologies are further detailed in Virginia's 2024 Water Quality Assessment Guidance Manual.⁶ The EPA has considered the state's methodology as part of its review of the state's 303(d) list.

Virginia updated its Chesapeake Bay Dissolved Oxygen Assessment Methodology. In previous IR cycles, Virginia used the 3D interpolator results produced by the Chesapeake Bay Program (CBP) Office to make dissolved oxygen water quality standards attainment status determinations. For the 2024 IR cycle, Virginia conducted its own assessments using a replicate version of the 3D interpolator. Virginia's assessment procedures as compared to the CBP Office's assessment procedures incorporated a number of technical differences. Virginia provided a detailed description of these differences to the EPA in a Final Technical Memo describing Virginia's Bay DO assessment procedures. All waters in the Chesapeake Bay impaired for DO are covered by existing TMDLs. Accordingly, this change in Virginia's Chesapeake Bay Dissolved Oxygen Assessment Methodology did not result in any segments being added or removed from the 2024 303(d) list.

ii. Description of the data and information used to identify waters. 40 CFR 130.7(b)(6)(ii).

EPA regulations at 40 CFR 130.7(b)(6)(ii) require states to provide a description of the data and information used to identify waters, including a description of the data and information used by the state as required by 40 CFR 130.7(b)(5). The EPA finds that Virginia has provided a description of the data and information that it assembled and evaluated. 40 CFR 130.7(b)(6)(ii). Virginia included this information in *Chapter 3. Surface Water Monitoring Programs* of the IR. The EPA has considered the state's description as part of its review of the state's 303(d) list.

iii. A rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in § 130.7(b)(5). 40 CFR 130.7(b)(6)(iii).

EPA regulations at 40 CFR 130.7(b)(6)(iii) require states to provide a rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in § 130.7(b)(5). 40 CFR 130.7(b)(6)(iii). The EPA evaluates whether a state provides a

⁴ The EPA's Integrated Reporting Memoranda provide more information on assessment methods. See 2006 Integrated Reporting Memorandum (IR Memo) at 29.

⁵ 2024 IR Memo at 15.

⁶ Hyperlink: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/wqa-guidance-manual>

technical, science-based rationale for decisions not to use data or information in developing the list.⁷ With respect to the waters on which the EPA is taking action, the EPA finds that Virginia generally provided a rationale for not using the data it assembled and evaluated to develop its list. 40 CFR 130.7(b)(6)(iii). In general, Virginia's rationale can be found in its IR in *Chapter 3.4.1 Quality Assurance and data submission requirements*, which describes how citizen and non-agency data are evaluated and used by Virginia for purposes of the IR and the Section 303(d) List. The EPA has considered the state's rationale as part of its review of the state's 303(d) list.

iv. *Other reasonable information requested by the Region.* 40 CFR 130.7(b)(6)(iv).

EPA regulations at 40 CFR 130.7(b)(6)(iv) require states to provide any other reasonable information requested by the EPA. Upon request by the EPA, each state must demonstrate good cause for not including a water or waters on the list. Consistent with 40 CFR 130.7(b)(6)(iv), good cause includes, but is not limited to:

- assessment and interpretation of more recent or accurate data in the record demonstrate that the applicable WQS is met;
- more sophisticated water quality modeling;
- flaws in the original analysis that led to the water being listed;
- changes in conditions.

Good cause may also include, for example (see, e.g., 2006 IR Memo at 58-59):

- EPA approval or establishment of a TMDL;
- demonstration that the impairment is being addressed through more stringent effluent limits or other pollution control requirements; or
- demonstration that the impairment is not caused by a pollutant.

With respect to the waters on which the EPA is taking action, the EPA finds that Virginia generally provided additional reasonable information requested by the EPA. 40 CFR 130.7(b)(6)(iv). For each WQLS removed from the 303(d) list, Virginia provided a reason to the EPA, either that applicable WQS were attained based on new data or a new assessment method, flaws in the original analysis led to the water being listed originally, the WQS was changed or is no longer applicable, the pollutant causing the impairment was refined, the waterbody was renamed or re-segmented and the impairment remained, the impairment was not caused by a pollutant, or a TMDL was approved by the EPA. The EPA has considered the additional information provided as part of its review of the state's 303(d) list.

B. Public participation

EPA regulations require states to provide for public participation in the development of their 303(d) lists, including describing their process for involving the public and other stakeholders in their Continuing Planning Processes (CPP). 40 CFR 130.7(a). States are expected to demonstrate how they considered public comments in their final decisions. The EPA considers the public comments and state responses as appropriate in its actions on 303(d) lists in determining whether a state has provided reasoned support for its submission.⁸

⁷ 2024 IR Memo at FN 15 (citing court cases); 2006 IR Memo at 37 (the EPA evaluates whether there is a "reasonable technical rationale").

⁸ 2006 IR Memo at 25-26.

The state's 2024 303(d) list submission to the EPA included a summary of public comments and the state's responses to comments. Virginia released its draft 2024 IR and the Section 303(d) list of impaired waters for public review and comment on April 22, 2024, with a public comment period, open for 30 days, until May 22, 2024. A notice of availability of the draft 2024 IR and the Section 303(d) list was published in the Virginia Register of Regulations on April 22, 2024. In addition, announcements were sent via e-mail to Virginia's stakeholders listserve. All materials, including the IR narrative and supporting documentation and information, were made available on Virginia's webpage.⁹ A public meeting was held virtually to present and summarize the draft IR on May 2, 2024.

Virginia responded to all comments received in a comment response document included within the final IR submission to the EPA. In addition, Virginia made several changes to the IR in response to public comment, as appropriate.

In addition to the draft 2024 IR, Virginia provided the public with notice and an opportunity to comment on its assessment methodologies. Virginia issued its draft Water Quality Assessment Guidance Manual for public comment from March 22, 2023, through April 21, 2023, and provided responses to all comments received. The final Water Quality Assessment Guidance Manual was published for another public comment period from September 25, 2023, through October 25, 2023, and again, Virginia provided responses to all comments received. After, the final Water Quality Assessment Guidance Manual became effective on November 25, 2023.

The EPA concludes that Virginia provided an opportunity for public comment on its 303(d) list consistent with 40 CFR 130.7(a).

C. Assembling, evaluating, and using data and information

i. Assemble and evaluate data and information

States must assemble and evaluate all existing and readily available water quality-related data and information to develop the CWA 303(d) list. 40 CFR 130.7(b)(5). In reviewing a state's 303(d) list submission, the EPA considers whether the state has satisfied the requirements under 40 CFR 130.7(b)(5) to assemble and evaluate all existing and readily available water quality-related data and information when developing their CWA 303(d) lists. This includes, at a minimum, all existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent CWA Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate non-attainment of applicable water quality standards; (3) waters for which water quality problems have been reported by local, state, and federal agencies; members of the public; academic institutions (these organizations and groups should be actively solicited for research they may be conducting or reporting); and (4) waters identified as impaired or threatened in any CWA Section 319 nonpoint source assessment submitted to the EPA. 40 CFR 130.7(5)(i)-(iv). In addition to these minimum categories, states are required to assemble and evaluate any other water quality-related data and information that is existing and readily available. 40 CFR 130.7(b)(5).

⁹ Hyperlink: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>

The EPA has reviewed the state's submission, including the state's description of the data and information that it assembled and evaluated and finds that the state satisfied the requirement to assemble and evaluate all existing and readily available water quality-related data and information to develop its list under 40 CFR 130.7(b)(5). Virginia's description of the data and information that it assembled and evaluated to develop its list can be found in *Chapter 3 Surface Water Monitoring Programs* of the IR. For the 2024 IR, Virginia assembled data and information collected between January 1, 2017, through December 31, 2022. During this time period, Virginia staff collected samples at 3,421 water quality monitoring stations. See table 3.1-1 of the IR for more information on Virginia's water quality monitoring programs.

In addition to Virginia's water quality monitoring programs, Virginia issued a public solicitation for water quality data prior to its public notice of the draft IR. This solicitation of data was open from January 13, 2023, until February 6, 2023. During the 2024 assessment cycle, Virginia received and assembled and evaluated pursuant to 40 CFR 130.7(b)(5) data from 78 citizen monitoring groups representing 1,812 monitoring locations. Virginia also received data from 13 local, state, and federal government organizations external to Virginia, which represented an additional 351 sites.

ii. Use of data and information

States must use existing and readily available water quality-related data and information in developing the CWA 303(d) list, 40 CFR 130.7(b)(5), unless they provide a rationale not to use them, 40 CFR 130.7(b)(6)(iii). The EPA evaluates whether a state provides a technical, science-based rationale for decisions not to use data or information in developing the list.¹⁰ The EPA evaluated whether Virginia provided a technical, science-based rationale for any decisions not to use existing and readily available water quality-related data or information to make a WQS attainment status determination and concluded Virginia generally provided such a rationale consistent with 40 CFR 130.7(b)(6)(iii) with respect to the waters on which EPA is taking action.

Virginia ranks the external data it receives from citizen groups, the private sector, and other governmental agencies using a data tiering process where Virginia staff review the quality assurance and quality control procedures of the organizations, identify issues, and work with the organizations to improve the data collection and submittal process. To assist external groups with developing their monitoring programs, the agency developed the Virginia Volunteer Water Quality Monitoring Program Methods Manual.¹¹ Additional resources to assist external groups are also available on Virginia's Citizen Monitoring webpage.¹² These efforts ensure that the external data used by Virginia to develop its list are scientifically sound and that Virginia's rationales for excluding certain data from use in IR assessments are consistently applied, technical, and science-based. See *Chapter 3.4.1 Quality Assurance and data submission requirements* of the IR for more information.

In addition to external data, for a small subset of waterbodies, Virginia provided additional scientific, technical rationale for not using certain state-collected Virginia Stream Condition Index (VSCI) scores or Virginia Coastal Plain Macroinvertebrate Index (VCPMI) scores to develop its list. At the EPA's request,

¹⁰ See FN 6.

¹¹ Hyperlink: <https://www.deq.virginia.gov/home/showpublisheddocument/12448/638550178841270000>

¹² Hyperlink: <https://www.deq.virginia.gov/our-programs/water/water-quality/monitoring/citizen-monitoring>

Virginia provided supplemental data and information including data on hyper-dominance of macroinvertebrate communities and rationale for why certain samples may not be representative of stream conditions to support its decision to not use select low VSCI and VCPMI macroinvertebrate scores to list those waterbodies. Ultimately, the EPA determined that these data and information regarding certain biological samples represent a technical, science-based rationale for Virginia's decision not to use that data in developing the list consistent with 40 CFR 130.7(b)(6)(iii).

D. Identification of waters for inclusion on the Section 303(d) list

As noted above, EPA regulations at 40 CFR 130.7(b)(6) require states to provide documentation to support the state's determination to list or not to list its waters on the 303(d) list.

i. Approval of Identification of waters for inclusion on the 303(d) list

The EPA determined that Virginia's 2024 303(d) list encompasses waters consistent with the CWA 303(d) and 40 CFR 130.7 requirements,¹³ and the EPA is approving all waters the state included on the 303(d) list. The EPA's approval of the waters on the 303(d) list is based on the EPA's review of the state's submission including the description of the data and information concerning individual waters, documentation to support decisions to rely or not rely on particular data and information, and a description of how data and information were applied to make WQS attainment status determinations. The EPA also considered applicable public comments and responses. Virginia's 303(d) list of WQLSs can be found in ATTAINS and is also displayed in Appendix 1a of Virginia's IR.¹⁴

Chantilly Crushed Stone raised a number of concerns in public comments to VADEQ and in separate communications directly to the EPA asserting that Sand Branch should be omitted from Virginia's Section 303(d) list. The EPA has reviewed Chantilly Crushed Stone's comments and data (to both the EPA and VADEQ) and VADEQ's response and approves VADEQ's inclusion of Sand Branch on the 2024 303(d) list. A more detailed discussion of the EPA's reasons for approving VADEQ's decision to include Sand Branch on the 2024 303(d) list is set forth in Appendix A.

ii. Approval of exclusion of waters identified on previous 303(d) lists

Virginia's 2024 303(d) list submission delists 188 WQLSs. In reviewing the state's 2024 303(d) list, the EPA carefully considered the state's decision to remove certain WQLSs that had been included in previous 303(d) lists (delist), its justification for those removals, any applicable comments and responses, and the methodology used in making those decisions. The EPA concludes that the decisions to remove WQLSs previously identified as part of the 303(d) list are reasonable, based on all existing

¹³ Virginia added 214 WQLSs to its 303(d) list in 2024. The impairments added to the 303(d) list relate to benthic macroinvertebrates bioassessments, chlorophyll-a, dioxin, dissolved oxygen, enterococcus, *escherichia coli* (*E. coli*), estuarine bioassessments, fecal coliform, heptachlor epoxide in fish tissue, iron, mercury in fish tissue, polychlorinated biphenyls (PCBs), PCBs in fish tissue, pH, total phosphorus, sediment bioassay, and thallium. Most additions were a result of new water quality, fish tissue, or sediment data suggesting that the waterbodies are not meeting water quality standards. Other reasons include changes to assessment methods or WQS, the pollutant causing the impairment was refined, or the waterbody was renamed or re-segmented.

¹⁴ Notably, the EPA's approval applies to the Category 5 WQLSs presented in ATTAINS. In case of discrepancies that exist between ATTAINS and Virginia's IR, ATTAINS takes precedence.

and readily available water quality-related data and information, applicable WQS, and sound science, and the removal decisions are properly justified.

The impairments delisted include aldrin in fish tissue, benthic macroinvertebrates bioassessments, chlordane, chlordane in fish tissue, chloride, DDE in fish tissue, DDT in fish tissue, dissolved oxygen, enterococcus, *escherichia coli* (*E. coli*), estuarine bioassessments, fecal coliform, harmful algal blooms, mercury in fish tissue, mirex, pH, and temperature. For each WQLS removed from the 303(d) list, Virginia provided a reason to the EPA, either that applicable WQSs were attained based on new data or a new assessment method, flaws in the original analysis led to the water being listed originally, the WQS was changed or is no longer applicable, the pollutant causing the impairment was refined, the waterbody was renamed or re-segmented and the impairment remained, the impairment was not caused by a pollutant, or a TMDL was approved by the EPA. See 40 CFR 130.7(b)(6)(iv); 2006 IR Memo at pp. 58-59.

- Consistent with the EPA's regulations at 40 CFR 130.7(b), the state appropriately moved previously-listed waters to Category 4a of the IR where an EPA-approved TMDL is now in place. If a water was previously listed for more than one impairment, only those impairments associated with the pollutants addressed in the TMDL were moved to Category 4a. In its 2024 303(d) list submission, Virginia moved 21 previously-listed WQLSs to Category 4a. Three were listed for benthic macroinvertebrates bioassessments and were moved to Category 4a because the *Benthic TMDL Development for the Lynch Creek and Reed Creek Watersheds Located in Campbell and Pittsylvania Counties* TMDL Report covers these listings and was approved by EPA since Virginia completed its previous 303(d) list. The 18 others were listed for benthic macroinvertebrates bioassessments or *E. coli* and were moved to Category 4A because the record demonstrates that a TMDL that covers these listings was already in place and approved by EPA during previous IR cycles.

iii. A rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in § 130.7(b)(5). 40 CFR 130.7(b)(6)(iii).

EPA regulations at 40 CFR 130.7(b)(6)(iii) require states to provide a rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in § 130.7(b)(5). 40 CFR 130.7(b)(6)(iii). The EPA evaluates whether a state provides a technical, science-based rationale for decisions not to use data or information in developing the list.¹⁵ For the waters covered by EPA's action, the EPA finds that Virginia generally provided a rationale for not using the data it assembled and evaluated to develop its list. 40 CFR 130.7(b)(6)(iii). In general, Virginia's rationale can be found in its IR in *Chapter 3.4.1 Quality Assurance and data submission requirements*, which describes how citizen and non-agency data are evaluated and used by Virginia for purposes of the IR and the Section 303(d) List. The EPA has considered the state's rationale as part of its review of the state's 303(d) list.

¹⁵ See Footnote 6

iii. No action at this time.

The EPA is taking no action at this time while the EPA continues to work with VADEQ in the near term to assess waters where samples suggest the presence of per- and polyfluoroalkyl substances (PFAS). Following publication of the draft 2024 303(d) list, VADEQ received public comment from Wild Virginia drawing attention to water quality-related information regarding certain fish tissue and ambient water chemistry data for perfluorooctane sulfonic acid (PFOS) in the Middle Chickahominy River watershed and urging that certain segments in that watershed be identified as WQLSs for PFOS on Virginia's 2024 303(d) list. The EPA received a similar letter from Wild Virginia following Virginia's submission of the final draft 2024 303(d) list pursuant to 33 U.S.C. § 1313(d)(2) and 40 C.F.R. § 130.7(d). The EPA's action pursuant to 33 U.S.C. § 1313(d)(2) on segments where there is water quality-related data suggesting the presence PFOS remains pending. A list of these segments is provided in Appendix B. Until such time as the EPA takes action, those waterbody-pollutant combinations will remain in the same Integrated Report category consistent with Virginia's 2024 303(d) list as submitted.

VADEQ has undertaken a number of steps to collect and evaluate water quality related information concerning the presence of PFAS in the water column and in fish tissue in certain segments of the Middle Chickahominy River watershed. Together with the Virginia Department of Health (VDH), VADEQ has engaged in extensive monitoring and source characterization for PFAS in the Middle Chickahominy River watershed. These efforts have included establishing (with Henrico County) a unified command to help identify risks to public health, working with the United States Geological Survey to undertake monitoring, and making data available to the public through a dashboard: [Statewide PFAS Sampling Dashboard \(arcgis.com\)](https://arcgis.com). In addition, the Virginia Legislature has enacted legislation effective July 1, 2024, as Virginia Code § 62.1-44.34:29 through 33, requiring monitoring and self-reporting of certain discharges and to facilitate data collection and analysis with a goal to assess and reduce the occurrence of PFAS in the Commonwealth's public water supplies. The EPA appreciates Virginia's efforts to address the presence of PFAS in the Middle Chickahominy River watershed.

Following VADEQ's submission of its 2024 Integrated Report, VDH published for public comment proposed *Advisory Guidelines for Fish with Perfluorooctane Sulfonic Acid*.¹⁶ VDH subsequently issued a fish consumption advisory for the Chickahominy River watershed due to the presence of PFOS.¹⁷ The 2024 303(d) list does not reflect VDH's most recent actions because they occurred after submission of the 2024 303(d) list pursuant to CWA Section 303(d)(2). The EPA recently publicized the steps it intends to take to address the presence of PFAS in the environment. See <https://www.epa.gov/newsreleases/administrator-zeldin-announces-major-epa-actions-combat-pfas-contamination>. In the near term, the EPA anticipates that VADEQ will use the information it has collected to update its Assessment Methodologies for its 2026 Section 303(d) list, including how it will evaluate data suggesting the presence of PFAS. The EPA commends the steps taken by VADEQ to date and looks forward to further working with VADEQ to evaluate and address data suggesting the presence of PFAS in the water column and fish tissue in the Middle Chickahominy River watershed.

¹⁶ 41 Virginia Register 1793, 1892 (April 7, 2025) available at <https://register.dls.virginia.gov/vol41/iss17/v41i17.pdf> (last visited April 20, 2025). See also <https://townhall.virginia.gov/I/GDocForum.cfm?GDocForumID=2590> (last visited April 20, 2025).

¹⁷ <https://www.vdh.virginia.gov/news/2024-regional-news-releases/virginia-health-officials-issues-fish-consumption-advisory-for-chickahominy-waterhead/> (last visited May 14, 2025)

E. Identification of pollutants causing or expected to cause a violation of applicable WQS (130.7(b)(4))

As part of their CWA 303(d) lists, states are required to identify the pollutants causing or expected to cause violations of the applicable WQS. 40 CFR 130.7(b)(4). This includes a pollutant that by itself or in combination with other pollutants causes or is expected to cause violations of applicable WQS. States must identify on their 303(d) lists all pollutants that are known to be causing or are expected to cause violations of the applicable WQS. 40 CFR 130.7(b)(4), see also, 2024 IR memo at 17-19. For listed waters, if the available data and information do not support identification of pollutants causing or expected to cause the exceedance, list submissions could identify the pollutant as “unknown”¹⁸.

Consistent with 40 CFR 130.7(b)(4), Virginia appropriately identified the pollutants that were causing or expected to cause a violation of the applicable WQS. For waters where the available data and information identified a biological impairment, but did not support the identification of the pollutants causing or expected to cause the exceedance, the state appropriately included the water on the 2024 303(d) list and identified the cause as a biological-related impairment. The EPA encourages the state to reassess and potentially refine that determination when additional data and information become available. See e.g., 2024 IR memo. For future IR cycles, the EPA encourages Virginia to consider whether it has enough data and information to identify pollutants that are causing or expected to cause violations of the applicable WQS, including narrative WQS designed to support aquatic life designated uses.

F. Priority ranking and two-year TMDL development (130.7(b)(4))

The CWA and the EPA’s regulations, require states to establish a priority ranking for the waters on their CWA 303(d) list “taking into account the severity of the pollution and the uses to be made of such waters.” CWA Section 303(d)(1)(A); 40 CFR 130.7(b)(4). The regulations at 40 CFR 130.7(b)(4) provide that this priority ranking must include “all listed water quality limited segments still requiring TMDLs” and further require that states submit their priority rankings to the EPA as a component of their biennial CWA 303(d) lists. Additionally, the regulations require that the priority ranking identify the waters targeted for TMDL development in the next two years. 40 CFR 130.7(b)(4).

Virginia’s description of how all listed WQLSs are prioritized for TMDL development, including identification of waters targeted for TMDL development in the next two years, is included within the state’s 303(d) list submission. In addition, Virginia’s described how its priority ranking took into account the severity of pollution and the uses to be made of such waters in *Chapter 6.1.1 Total Maximum Load Development (TMDLs), Subsection Prioritization of Waters* of the IR. The specific WQLSs ranked as high priorities and targeted for TMDL development in the next two years were selected based upon the target impairments and concepts discussed in the planning, prioritization, and restoration section of the Prioritization Framework in *Chapter 6.2 303(d) Program Vision* of the IR. Virginia’s list of WQLSs ranked as high priorities and targeted for TMDL development in the next two years can be found in

¹⁸ 2024 Integrated Report IR Memo at 18. “Subsequent lists provide opportunities to identify pollutants that were previously not known. Prior to establishing a TMDL for such waters, the pollutant causing the impairment must be identified. Additional monitoring may be needed to determine the pollutant causing the exceedance of an applicable WQS. States, territories, and authorized tribes may schedule additional monitoring to support stressor analysis before TMDL development to better inform TMDL priority setting or as part of data collection for TMDL development.”

ATTAINS and is also displayed in Appendix 1a of Virginia's IR with an "H" in the "TMDL Development Priority" column and in Figure 6.1-2 of the IR.

The EPA's review of Virginia's submission finds that the state established a priority ranking for all waters on the CWA 303(d) list, taking into account the severity of the pollution and the uses to be made of such waters.¹⁹ In addition, the state identified the waters targeted for TMDL development in the next two years.

G. Tribal Consultation by the EPA

The EPA's policy is to consult on a government-to-government basis with federally recognized tribal governments when EPA actions and decisions may affect Tribes. EPA identified in advance all Tribes that may be affected by the EPA's action on the state's CWA 303(d) list. On May 13, 2024, the EPA notified each of the following Tribes with letters on the availability of a consultation opportunity concerning the EPA's action to approve or disapprove Virginia's Section 303(d) List of impaired waters:

- Chickahominy Indian Tribe
- Chickahominy Indian Tribe – Eastern Division
- Monacan Indian Nation
- Nansemond Indian Nation
- Pamunkey Indian Tribe
- Rappahannock Indian Tribe
- Upper Mattaponi Indian Tribe

Ultimately, none of the Tribes opted to consult with the EPA on this matter. The EPA will complete coordination with Tribes by providing a copy of the EPA's action and Decision Rationale.

3. Summary of the EPA's decision on the 2024 CWA 303(d) list

After careful review of Virginia's final CWA 303(d) list submission package, the EPA has determined that VADEQ has met the requirements of Section 303(d) of the Clean Water Act and its implementing regulations with respect to all of the waterbody-pollutant combinations identified in the portion of the Integrated Report (Category 5) constituting VA's list of water quality-limited segments still requiring Total Maximum Daily Loads (2024 303(d) list). The EPA, therefore, approves VADEQ's decision to include these waters on the 2024 303(d) list as submitted electronically to the EPA through the Assessment, TMDL Tracking and Implementation System (ATTAINS).

While EPA is approving all waterbody-pollutant combinations identified on Virginia's 2024 303(d) list, EPA is taking no action at this time on water quality related information suggesting the presence of PFOS in fish tissue in certain segments in the Middle Chickahominy River watershed. Until such time as EPA takes action, those waterbody-pollutant combinations will remain in the same Integrated Report category consistent with Virginia's 2024 303(d) list as submitted.

¹⁹ In addition to these two statutory factors, states may also consider other factors when prioritizing TMDLs. See 57 Fed. Reg. 33040, 33,044-45 (July 24, 1992).