#### 8/24/21

#### DRAFT FACT SHEET

Virginia Water Protection (VWP) Individual Permit No. 21-0416 Mountain Valley Pipeline Project, Craig, Franklin, Giles, Montgomery, Pittsylvania, and Roanoke Counties, Virginia

DEQ has reviewed the application for the VWP Individual Permit No. 21-0416 and has determined that the project qualifies for an individual permit. Pursuant to Va. Code 62.1-44.15:20.D, issuance of the permit shall, in conjunction with Certification No. 17-001, constitute the certification required under Section 401 of the federal Clean Water Act for the project.

The following details the application review process and summarizes relevant information for developing the Part I - Special Conditions for permit issuance.

#### 1. Contact Information:

# Permittee Legal Name and Address:

Mountain Valley Pipeline, LLC 2200 Energy Drive Canonsburg, PA 15317 Robert Cooper rcooper@equitransmidstream.com 724-271-7600

# **Agent Legal Name and Address**

Tetra Tech, Inc.
661 Anderson Drive, Foster Plaza 7, Suite 200
Pittsburgh, PA 15220
Henry Schumacher
Email
Phone

#### 2. Processing Dates:

Prefiling Meeting Request:	1/26/21
Prefiling Meeting:	2/3/21
Received Application:	2/22/21
Received Joint Permit Application (JPA) Number:	3/1/21
Water Quality Certification Request:	3/4/21
Application Complete:	6/4/21
Permit Fee Deposited by Accounting:	6/4/21
Processing Deadline (120 days from Complete Application):	10/2/21
1 <sup>st</sup> Request for Additional Information Sent:	3/16/21
Final Request for Additional Information Received:	5/14/21

Notification of JPA sent to Local Government(s):

Request for comments sent to VDH, VDWR, VDCR, VMRC:

Letters sent to Riparian Landowners:

Draft Permit Package Issued:

Copy of Public Notice sent to DEQ Central Office:

Date

Copy of Public Notice sent to Local Gov't and Planning District:

Date

Public Notice Published: 8/25/21 to 8/28/21

End of 60-Day Public Comment Period: 10/27/21
Received Verification of Publication: Date

Public Meeting or Hearing: 9/27/21 & 9/28/21

Permit Decision:

Water Quality Certification Action Deadline:

Date
12/31/21

# 3. Project Location and Site Description:

The Mountain Valley Pipeline (MVP) Project is a 42-inch diameter natural gas pipeline approximately 304 miles in length, running from Wetzel County, West Virginia to Transco Village in Pittsylvania County, Virginia. The portion of the project located within Virginia consists of approximately 107 miles of pipeline and 51 miles of access roads in Giles, Craig, Montgomery, Roanoke, Franklin, and Pittsylvania counties. Stationing numbers and mileposts (MP) identified on application map entitled *Mountain Valley Pipeline Project Spreads* 8, 9, 10 & 11, dated July 2018, and *Figure 4. Detail Maps* 4-525 through 4-786 of the application provide reference points for locations along the pipeline. *Figure* 5. *USACE Norfolk District Wetlands and Waterbodies Overview Map* depicts the Project's location in Virginia, including surface waters located within the project's right-of-way.

The portions of this project occurring in uplands are in various states of construction. Generally, the applicant has cleared right-of-way and installed pipeline in the upland areas that do not require permits to impact surface waters. Many of these areas remain cleared and in a state of temporary stabilization as MVP seeks authorization to install the pipeline across streams and wetlands. MVP previously undertook some surface water impacts in Virginia under its original Nationwide Permit 12 authorization. MVP has installed one wetland and three stream crossings in Montgomery County and two wetland and twenty-one stream crossings in Franklin County. The current VWP Permit application is for the remaining impacts to state waters associated with pipeline construction, access roads and support activities. The application proposes 428 total surface water impact locations comprised of 315 temporary stream impact locations, 2 permanent stream impact locations, 72 temporary wetland impact locations, 1 permanent fill wetland impact and 38 permanent conversion wetland impacts.

Information for each impact location including county, waterbody, basin, subbasin, section, class, special standards, HUC, latitude, longitude, U.S.G.S. Quadrangle and State Watershed Number are provided in Table 4 located in Appendix 2 of this document.

In Virginia, the MVP crosses three EPA Level III ecoregions: 1) Ridge and Valley (MPs 191.3 to 238.1), 2) Blue Ridge (MPs 238.1 to 251.7 and 252.0 to 253.5), and 3) Piedmont (MPs 251.7 to 252.0 and 253.5 to 303.5). "The Ridge and Valley ecoregion is a diverse and extensive region extending from New York south into Alabama. The landscape is a mix of forest, pasture, and cropland. The terrain is northeast-southwest oriented with roughly parallel ridges, rolling valleys, and irregular hills composed of

sandstone, shale, limestone, and dolomite. The MVP pipeline route across the Ridge and Valley physiographic region would cross through the Middle New, Upper James, and Upper Roanoke River watersheds.

The Blue Ridge ecoregion is a narrow region that extends from southern Pennsylvania south into northern Georgia. The terrain is generally rugged with a variety of features including narrow ridges, hilly plateaus, and massive mountainous areas with a landscape a mix of forest, small pasture, fruit orchards, and tree farms. The MVP pipeline route across the Blue Ridge physiographic region would cross through the Upper Roanoke River watershed.

The Piedmont ecoregion is a transitional area between the mountainous Appalachians and the relatively flat coastal plain. The area is comprised of oak-hickory-pine forests with rolling hills and plains dominating the landscape. Much of the region is urbanized with a mix of planted pine, pasture, and cropland (Woods et al., 1999). The MVP pipeline route across the Piedmont physiographic region would cross through the Upper Roanoke River and Bannister watersheds."

### 4. Application

The application was deemed complete based on the information received from the applicant from February 22, 2021, through June 4, 2021, including the request for water quality certification submitted on March 4, 2021. This information will be hereto referred to as the "application."

# 5. Project Purpose:

The applicant describes the Project's purpose and need in the narrative attachment to the JPA titled "Mountain Valley Pipeline Project Individual Permit Application," dated February 2021 and detailed in the FEIS. The overall project purpose is to provide natural gas for use by local distribution companies, industrial users, and power-generation facilities in the Mid-Atlantic, southeastern, and Appalachian markets. The Project will also provide markets along the route access natural gas supplies.

Specifically, the MVP's purpose is to deliver natural gas to five contracted shippers via a pooling point at Transco Station 165 in Pittsylvania County, Virginia. This entails construction of a 42" natural gas pipeline and associated infrastructure from the new Mobley Interconnect in Wetzel County, West Virginia to the WB Interconnect in Braxton County, West Virginia; Greene Interconnect in Monroe County, West Virginia; Roanoke Gas Lafayette Tap in Montgomery County, Virginia; the Roanoke Gas Franklin Tap in Franklin County, Virginia; and finally to the existing Transcontinental Gas Pipe Line Company LLC Station 165 in Pittsylvania County, Virginia.

#### 6. Project Information and History:

On October 23, 2015, Mountain Valley Pipeline, LLC (MVP) filed an application with the Federal Energy Regulatory Commission (FERC) for authorization, pursuant to section 7(c) of the Natural Gas Act, to construct and operate its proposed Mountain Valley Pipeline Project in West Virginia and Virginia. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), FERC staff evaluated the potential environmental impacts associated with the construction and operation of the MVP Project in an Environmental Impact Statement (EIS). Numerous federal and state agencies including

the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Interior (DOI), Bureau of Land Management (BLM) and Fish and Wildlife Service (FWS) participated as cooperating agencies. FERC issued the draft EIS for the project on September 16, 2016, addressing the issues raised during the scoping period and up to the point of publication.

In October 2016, after the issuance of the draft EIS, Mountain Valley filed a number of minor route modifications to address recommendations in the draft EIS, avoid sensitive environmental areas, accommodate landowner requests, or for engineering design reasons. FERC issued a Final Environmental Impact Statement (FEIS) for the Mountain Valley Project in June 2017.

Mountain Valley submitted a Joint Permit Application to the USACE, Virginia Department of Environmental Quality (DEQ), and Virginia Marine Resources Commission (VMRC) on September 11, 2017. On January 23, 2018, the USACE Norfolk District issued a letter to Mountain Valley verifying that the Project complied with all conditions of Nationwide Permit 12 (NWP 12), including the Commonwealth's April 7, 2017, conditional water quality certification for the nationwide permit.

Additionally, due to significant public concern regarding construction of the pipeline raised during 2016-2017, DEQ made the decision to require an upland 401 certification for the project. This upland 401 certification included additional conditions to address several unique aspects of the project that are not directly regulated by other regulations or permits, including the Virginia Water Protection Program. The upland 401 certification conditions focused on providing additional protections related to those unique aspects that DEQ believes are necessary in upland areas to minimize potential impacts to water quality. The resources and impacts of concern are karst hydrogeology, private and public water supplies, maximization of riparian forest buffers, surface water withdrawals that are exempt from permitting requirements, minimization of landslide risks related to construction activity on steep slopes, minimization of risks associated with blasting activities, and financial responsibility associated with impacts to private drinking water sources.

Several parties filed a petition in the U.S. Court of Appeals for the Fourth Circuit challenging the Board's decision to issue the Upland 401 Certification. Following briefing and oral argument, the court denied the petition. An opinion was issued on August 1, 2018, upholding the State Water Control Board's (SWCB) unanimous decision to issue the Upland 401 Certification (*Sierra Club v. SWCB*, 898 F.3d 383 (4th Cir. 2018).

A number of legal and regulatory events occurred during 2018 that bear on the project history and the status of wetland permitting. In the face of continuing opposition and citizen demands, in April 2018, the SWCB directed DEQ to solicit public comment on three issues surrounding the Corps' verification of NWP 12. After the public comment process concluded, the SWCB decided to take no action to amend or modify the 401 certification with respect to MVP's NWP 12 verification.

Also, during 2018, the Virginia General Assembly amended the Code of Virginia to incorporate DEQ's decision to require two 401 water quality certifications for natural gas pipeline projects that have an internal diameter greater than thirty six inches. This law became effective on July 1, 2018. The law also requires these projects to obtain an individual Virginia Water Protection Permit rather than be authorized

under a general permit. The Board approved the associated amendments to the Virginia Water Protection Permit Program regulations in September 2018.

Additionally, by letter dated October 5, 2018, the USACE suspended MVP's authorization under NWP 12. The suspension was the result of a ruling by the United States Court of Appeals for the Fourth Circuit that vacated the USACE's verification of MVP's compliance with the NWP 12 in West Virginia.

In September 2020, the USACE proposed to re-issue and modify its NWPs, including NWP 12. By letter dated December 21, 2020, DEQ denied water quality certification under the NWP 12 specifically "for any applicant to the Federal Energy Regulatory Commission for a certificate of public convenience and necessity pursuant to § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)) to construct any natural gas transmission pipeline greater than 36 inches inside diameter, in which case issuance of a Virginia Water Protection Permit pursuant to this article and a certification issued pursuant to Article 2.6 (§ 62.1-44.15:80 et seq.)."

A detailed project history was also provided by the applicant in Section 1.2 of the Individual Permit Application narrative, Attachment B of the application, and the water quality certification request.

#### 7. Avoidance and Minimization Efforts:

The VWPP regulations incorporate the requirement of avoidance and minimization in accordance with the federal Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230, also known as the Section 404(b)(1) guidelines (See 9VAC25-210-80 B 1 g) in terms of impacts to surface waters. FERC, the lead federal agency on the MVP Project, issued the *Mountain Valley Project and Equitrans Expansion Project Final Environmental Impact Statement (FERC/FEIS-0272F)* in June 2017. The FERC is the federal agency responsible for authorizing interstate natural gas transmission facilities under the Natural Gas Act and was the lead federal agency for preparation of the FEIS in compliance with the requirements of NEPA. The FEIS established the "preferred alternative that could meet the project purpose" for the project, which resulted in the alignment presented in the Joint Permit Application to DEQ. The application states, "The CWA requires that the location of discharges authorized under Section 404 be determined through the application of guidelines developed by the USACE and the Environmental Protection Agency (EPA). The guidelines required by Section 404(b), which are set forth at 40 C.F.R. Part 230, require that an applicant demonstrate that the proposed discharge of dredged or fill material is the least environmentally damaging practicable alternative (LEDPA)".

DEQ assesses VWP Permit applications for whether the application demonstrates that alternatives were evaluated and that proposed alternative is demonstrated to be the LEDPA for any given project. However, with respect to FERC-regulated interstate pipelines, the Virginia code limits the scope of DEQ's review of project alternatives in two material respects. First, Virginia Statute § 62.1-44.15:21, Impacts to wetlands, states, "Each wetland and stream crossing shall be considered as a single and complete project; however, only one individual Virginia Water Protection Permit addressing all such crossings shall be required for any such pipeline." SecondSecond, Virginia Statute § 62.1-44.15:81, Application and preparation of draft certification conditions, states, "No action by either the Department or the Board on a certification pursuant to this article shall alter the siting determination made through Federal Energy Regulatory Commission or State Corporation Commission approval."

Therefore, the project's alignment as presented in the application for a VWP Permit has been determined by the FERC to be "the preferred alternative that could meet the project purpose," and the Code of Virginia specifically excludes DEQ from evaluating further alignment modifications. As of June 2021, the MVP has already installed approximately 70% of the pipeline in the upland portions of the project right-of-way, generally leaving only the jurisdictional water crossings unconstructed. The Application states, "FERC, as the lead agency, reviewed the no action alternative, alternative modes of transportation, system alternatives, a number of major route alternatives, and over 25 route variations in the FEIS. Based on its technical analysis and comments received, FERC concluded that the proposed Project, with the adoption of one route variation, was the preferred alternative that could meet the project purpose."

The following is a synopsis of the no action and offsite alternatives evaluated by the applicant that were evaluated prior to the FERC's approval of the current alignment, as presented in the Application, and detailed in the *Mountain Valley Project and Equitrans Expansion Project Final Environmental Impact Statement (FERC/FEIS-0272F)*.

#### 7.1 No Action Alternatives

# **Alternative # 1 No Action (No Build)**

MVP would not construct the Project under The No Action (No Build) Alternative. The applicant explains that this alternative would likely result in other natural gas shippers seeking alternative means to transport the proposed volumes of gas in the market associated with the Project. This, in turn, may result in the expansion of existing natural gas infrastructure and transportation systems that would have associated environmental impacts. The applicant suggests that the No Build Alternative would limit economic growth in the areas proposed for natural gas delivery. Finally, the No Build Alternative does not support the stated purpose of the project, and therefore, is not a practicable alternative.

# Alternative # 2 No Action (No Permit) Alternative

Under the No Action (No Permit) Alternative, MVP would construct the Project to avoid all impacts that would require permits from USACE under Clean Water Act (CWA) § 404 and Rivers and Harbors Act (RHA) § 10, and/or DEQ under CWA § 401. MVP explains that there are hundreds of streams within the proposed alignments. Construction with no CWA permits would require a combination of rerouting around resources, installing the pipeline beneath resources and bridging resources with the pipeline. Authorization from the USACE (and VMRC) would be necessary to cross RHA § 10 navigable waters using any of the available crossing methods. This would necessitate avoiding RHA § 10 waters altogether. There are five RHA § 10 waters that the proposed pipeline route crosses, two of which, the Roanoke River and Blackwater River, are in Virginia. Avoiding RHA § 10 waters would require a longer route resulting in increased stream crossings, many of them in mountainous terrain where the topography is often prohibitive to trenchless grossing methods. The applicant concludes "the inherent engineering and cost challenges that must be overcome to construct the Project in mountainous terrain, attempting to do so while avoiding all stream and wetland impacts likely would prove not only impracticable, but impossible."

#### 7.2 Natural Gas Transportation Method Alternatives

MVP considered other methods of natural gas transportation besides the transportation of natural gas via underground steel pipelines, including transportation by ships, trucks, and railroads. MVP states in the Application "While these following options were originally considered in the FEIS, before construction began, it is worth noting that any of the environmental impacts that would result from implementing these alternatives would be in addition to the many environmental impacts of the Project, including tree clearing and WOTUS crossings, that have already occurred."

# **Alternative # 3 LNG Water Vessel Delivery**

MVP considered transporting the natural gas by water to terminals via ships. The closest Liquid Natural Gas (LNG) import/export terminal to the Project is the Dominion Cove Point terminal in Calvert County, Maryland.

The Cove Point terminal total capacity (1.8 Bcf/D) is less than the amount proposed by the Project (2.0 Bcf/D). To handle the required volumes of the Project, the Cove Point terminal would have to expand to over double the current size. This expansion would result in temporary and permanent environmental impacts to wetlands and other aquatic resources along the Chesapeake Bay shore. MVP states, "The regulatory risk of obtaining approvals to expand the terminal, the cost of the expansion, and the many years it would take to complete the expansion appear to present significant obstacles. Accordingly, this option is not an 'available' alternative within the meaning of 40 C.F.R. § 230.10(a)(2)."

MVP states that even if this alternative were pursued, LNG Truck Delivery, LNG Railroad Delivery and pipeline delivery are not practicable alternatives to transport the Project's volume of gas from the Project terminus in West Virginia to the Cove Point terminal.

MVP states that this alternative would not satisfy the overall project purpose of "transporting low-cost natural gas produced in the Appalachian Basin to markets in the Mid-Atlantic, Appalachia, and southeastern United States." The LNG terminals on the East or Gulf coasts capable of importing gas shipped from Cove Point are all significantly further away from the Project's delivery points than the Project terminus in Mobley, West Virginia.

MVP states that this alternative is not less environmentally damaging than the proposed alternative. The Cove Point terminal would have to double its capacity and transportation infrastructure constructed to supply the gas to the intended recipients, resulting in cumulative environmental impacts greater than the impacts of the proposed Project. MVP states, "Based on the considerations above, the Cove Point LNG alternative is not available, practicable, or less environmentally damaging than the Project."

# **Alternative # 4 LNG Truck Delivery**

MVP considered the potential transportation alternative of using trucks to transport LNG on

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existing roadways. MVP found this alternative to be logistically impracticable because it would require the construction of new natural gas lignification facilities in the Appalachian Basin, new gasification facilities at the delivery points, and new pipeline to deliver the gas to the liquefaction points. MVP anticipates that the required infrastructure expansion under this alternative would have substantial environmental impacts. This alternative would also require MVP to procure 3,182 transportation trucks that would have high maintenance costs and introduce a large volume of truck traffic to the public road systems. MVP concludes that, "Due to the technical and logistical constraints associated with the construction and operation of new liquefaction and regasification facilities and associated pipelines, this is not a practicable alternative."

# **Alternative # 5 LNG Railroad Delivery**

MVP considered the potential transportation alternative of using railroad tanker cars along existing tracks to transport LNG. MVP found this alternative to be logistically impracticable because it would require the construction of new natural gas liquefaction facilities and new gasification facilities at the delivery points, as well as the procurement of railway access and new railway construction. MVP anticipates that the required infrastructure expansion to liquefaction and gasification facilities and the projected requirement of railway extensions under this alternative would have substantial environmental impacts. This alternative would require 779 rail cars and a daily consumption of 95,600 gallons of fuel, resulting in an increase in local air pollution. MVP concludes that, "The environmental impacts that would result from the implementation of this alternative would be in addition to the many environmental impacts of the Project, including tree clearing and WOTUS crossings, that have already. Therefore, the Project would be less environmentally damaging than this alternative."

# 7.3 System Alternatives

Systems alternatives would use existing and proposed natural gas transmission facilities to meet the Project's purpose. The FERC evaluated existing systems.

# **Alternative # 6 Existing Systems**

- Texas Eastern Pipeline System Alternative
- Columbia Pipeline System Alternative
- East Tennessee Pipeline System Alternative
- Transco Pipeline System Alternative

As detailed in the Application and FEIS, the FERC analysis concluded that using the alternative systems to meet the Project's purpose would result similar or greater environmental impacts as the Project. FERC determined that the system alternatives did not provide the necessary geographic coverage, did not allow for the volumes of gas proposed, would require facility expansion resulting in environmental impacts, added costs and long project delays.

#### 7.4 Route Alternatives Analysis

#### **Alternative #7 Alternate Routes**

MVP's route selection process considered pipeline length, avoidance of major population centers and avoidance of "sensitive areas" or "exclusion areas." The route selection considered avoidance of National Forests, National Parks, The Appalachian National Scenic Trail, and the Blue Ridge Parkway. Where avoidance of these resources was not practicable, MVP sought to find optimal crossing location. Additionally, the route analysis sought to collocate the pipeline with existing utility corridors to minimize the creation of new right-of-way. MVP evaluated collocation opportunities with existing pipelines, major highways and major electric transmission lines.

The initial corridor selection analysis identified 94 potential corridor segments consisting of approximately 2,362 miles of possible pipeline routes. MVP rejected as not practicable initial routes that partially collocated with power transmission lines, because the power lines perpendicular orientation across ridges and slopes "presented significant construction challenges, as well as a high risk of slope failure and pipeline slips in the side-slope areas once the pipeline was in operation." MVP determined that collocation routes on major highways were not practicable due to federal and state constraints on activities within the roads' rights-of-way. MVP determined that location adjacent to highway rights-of-way was not practicable due to "constructability challenges due to numerous roadway overpasses and underpasses, large interchanges, elevated sections of roadway including bridges, roadway cuts and fills, areas congested with development and homes, and narrow valleys where suitable terrain is already partially or fully encumbered by the roadway." MVP also determined that the roadway collocation alternative would be 143 miles longer, affect 2,100 more acres and cross an additional 104 perennial streams than the selected route.

MVP provides the following summary of the route selection process in the Application: "Between FERC's FEIS and the Supplemental Environmental Impact Statement (SEIS) prepared by the U.S. Forest Service (USFS), the agencies evaluated 27 route alternatives and compared their impacts to the proposed pipeline. With one exception, none of the alternatives were found to be practicable or have less adverse environmental impacts than the proposed Project route. One alternative, Variation 250, was found to be practicable and have less adverse environmental impacts and has therefore been incorporated into the proposed Project route prior to completion of the FEIS. Additional details and maps for these alternatives can be found in the FERC FEIS § 3.4.2 and USFS SEIS § 2."

For additional information, see pages 11-23 of the *Mountain Valley Pipeline Project Individual Permit Application* dated February 2021, and pages 3-1 through 3-119 of the *Mountain Valley Project and Equitrans Expansion Project Final Environmental Impact Statement (FERC/FEIS-0272F)*, dated June 2017.

Therefore, the project's alignment as presented in the application for a VWP Permit has been determined by the FERC to be "the preferred alternative that could meet the project purpose". As discussed above, Virginia Statute § 62.1-44.15:21 requires that DEQ consider each stream and wetland crossing as a "single and complete project" for the purposes of its review of the application. Additionally, Virginia Statute § 62.1-44.15:81 prohibits DEQ from altering pipeline siting determinations made by FERC."

DEQ provided comments and recommendations to the FERC on December 22, 2016, for the Mountain Valley Project Draft Environmental Impact Statement (FERC/DEIS-DO272, FERC Docket Number CP16-10-000; DEQ 16-194F). These comments and recommendations addressed pre-impact characterization of temporary impact locations, surface water resources, recommended mitigation, and alignment revisions based on a GIS evaluation of each pipeline crossing of a waterbody.

#### **Specific On-site Measures to Reduce Impacts**

Beyond the siting determination, avoidance and minimization includes specific on-site measures taken to reduce the size, scope, configuration, or density of the proposed project, which would avoid or result in less adverse impact to surface waters. For the purpose of evaluating on-site avoidance and minimization efforts, DEQ considers each stream and wetland crossing to be a single and complete project. Furthermore, Virginia Statute § 62.1-44.15:21 J 1 requires DEQ to conduct an "individual review" only for any "proposed water body crossing with an upstream drainage area of five square miles or greater."

#### DEQ Section 401 Water Quality Certification

DEQ issued Section 401 Water Quality Certification No. 17-001 to MVP on December 8, 2017. The Certification addressed Project activities in upland areas outside of the USACE jurisdictional areas under 33 U.S.C. § 1344 and the VWP Permit Program. The Certification applies to all proposed upland activities associated with the construction, operation, maintenance, and repair of the pipeline, any components thereof or appurtenances thereto, and related access roads and rights-of-way as well as certain project-related surface water withdrawals. This Certification covers all relevant upland Project activities within the route identified in the Environmental Impact Statement. The Certification conditions related to the onsite avoidance and minimization of impacts to surface waters, including wetlands are:

- 1. Removal of riparian buffers not directly associated with the Project's construction activities is prohibited. Disturbance and removal of riparian buffers from Project-related upland land disturbing activities that would occur within 50 feet of any perennial, intermittent, or ephemeral surface waters shall be avoided where possible, and minimized to the maximum extent practicable if 50 feet is not possible. The Owner shall notify the Department of any and all instances in which it believes 50 feet is not possible and shall proceed only where the Department concurs with the Owner's use of less than 50 feet of buffer. Removal of riparian buffers not associated with crossings shall not be allowed where stream bank stability under normal flow conditions would be compromised.
- 2. The construction limit of disturbance (LOD) in upland areas approaching waterbody and wetland crossings shall be reduced from 125 feet to 75 feet wide and shall apply 50 feet from each side of the stream or wetland crossing to minimize the extent of riparian buffer disturbance. For any upland area approaching a waterbody or wetland crossing where this reduced LOD is not possible, notification of FERC approval (and Corps approval, if required) shall be provided to the Department prior to initiating land disturbing activity in that area.
- 3. Any surface water withdrawals for the purposes of hydrostatic testing shall not violate applicable Water Quality Standards and shall be managed so that no more than 10% of the instantaneous flow rate from the channel is removed; the intake screens shall be designed so that screen

openings are not larger than 1 millimeter and the screen face intake velocities are not greater than 0.25 feet per second.

- 4. Any surface water withdrawals for the purposes of horizontal directional drilling or dust control that do not exceed 10,000 gallons per day from non-tidal waters or two million gallons per day from tidal waters shall not violate applicable Water Quality Standards and shall be managed so that no more than 10% of the instantaneous flow rate from the channel is removed and the intake screens shall be designed so that screen openings are not larger than 1 millimeter and the screen face intake velocities are not greater than 0.25 feet per second.
- 5. All construction and installation associated with the Project, except as permitted by USACE, shall be accomplished in such a manner that construction material or waste material shall not be placed into any perennial, intermittent, or ephemeral surface waters or karst features.
- 6. The Owner shall implement the measures intended to minimize the potential for discharges of soil or rock as detailed in the General Blasting Plan (February 2017) and the Landslide Mitigation Plan Revision 4 (February 2017), and any subsequent revisions or addenda to the same approved by FERC. The Owner shall notify the Department immediately, but no later than 24 hours after discovery, if blasting or landslide activity results in unpermitted discharges of soil or rock to any perennial, intermittent, or ephemeral surface waters.

DEQ also regulates the potential discharge of sediments from the Project to surface waters through (a) regulations adopted for land-disturbing activities pursuant to the Stormwater Management Act (Va. Code § 62.1-44.15:24, et seq.) and Erosion and Sediment Control Law (Va. Code § 62.144.15:51, et seq.); and (b) all requirements of the Annual Standards and Specifications applicable to the Project initially approved by the Department on June 20, 2017.

In addition to the on-site avoidance and minimization measures proposed in the Application, DEQ's review of VWP Permit Application 21-0416, and subsequent requests for additional information resulted in the following on-site avoidance and minimization.

- The avoidance of impacts to wetlands W-IJ97 and W-D4, resulting in a reduction of 61 square feet of proposed permanent wetland impacts.
- A revision from permanent impact to temporary impact at wetland W-IJ96PEM, a reduction of 579 square feet to proposed permanent impacts.
- A revision from permanent impact to temporary impact at stream S-IJ85, a reduction of 401 square feet (50 linear feet) to proposed permanent stream impacts.

The VWP Permit application included MVP's evaluation of each surface water crossing of the pipeline for the practicability of using a trenchless crossing method rather than an open cut. Open-cut crossings install the pipeline via a trench excavated in the stream or wetland. Trenchless crossing methods bore or tunnel beneath the surface water resource. Trenchless methods include Horizontal Directional Drilling (HDD), Conventional Bore, Guided Conventional Bore, Microtunneling, and Direct Pipe. The Application's "Table 15 - Crossing Method Summary" summarizes MVP's evaluation of using trenchless

crossing methods at each surface water crossing to avoid and minimize impacts. MVP considered crossing length, bore-pit depth, stream depth, steep slopes, karst geology, cost, potential for bore failure and unique site-specific constraints. MVP's evaluation identified 236 locations where the pipeline crosses streams in Virginia. Of these 236 stream crossings, MVP determined that 92 could be crossed using trenchless methods, completely avoiding pipeline impacts to streams and wetlands at those locations.

To minimize the disturbance to surface waters from the construction equipment, the application evaluated whether equipment could access construction areas via the placement of timber mat bridges over streams instead of installing temporary road crossings and using fill material that would then have to be removed. Table B-1 of the Application identifies 317 individual stream impact areas, 315 of which are temporary impacts. Of the 315 temporary stream impact locations reported, the Application identifies 135 that propose the use of timber mats that span the affected stream channels with no direct impact proposed to the streambed.

Although Virginia Statute § 62.1-44.15:21 J 1 requires that DEQ conduct an individual review only for waterbody crossings with a drainage area greater than 5 square miles, DEQ has reviewed each crossing in the Application. Based on DEQ review of the Application, the Department has determined the Application meets the requirement of 9 VAC 25-210-80.B.1.g. in providing an alternatives analysis for the proposed Project detailing the specific on-site and off-site measures taken during project design and development to first avoid and then minimize impacts to surface waters to the maximum extent practicable in accordance with the Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 CFR Part 230 in terms of impacts to state waters and fish and wildlife resources.

For the reasons discussed above we have determined that the alternatives evaluated are not practicable and/or do not meet the Project's purpose and need. Given the requirements under § 62.1-44.15:21 and prohibitions under § 62.1-44.15:81, we have determined the proposed project is the LEDPA.

# 8. Project Impacts:

The permit authorizes surface water impacts as listed below. In summary, this permit authorizes a total of 9.41 acres of impacts to surface waters consisting of 5.90 acres of wetlands and 3.51 acres (17,128 linear feet) of streams.

Impost Type	Sunface Water Type	Impact A	uthorized
Impact Type	Surface Water Type	<b>Square Feet</b>	Linear Feet
	Palustrine Emergent Wetland (PEM)	1,707	N/A
Permanent	Stream Channel	441	63
	Subtotal	2,148	63
	PFO to PEM	51,826	N/A
Conversion	PSS to PEM	32,948	N/A
	Subtotal	84,774	N/A
	Palustrine Emergent Wetland (PEM)	170,409	N/A
Temporary	Stream Channel	152,684	17,065
	Subtotal	323,093	17,065
	TOTAL	410,015	17,128
		(9.41 Acres)	17,120

The location and dimension of the Authorized surface water impacts shall be as depicted on the impacts maps provided as Figure 4 Detail Maps 4-552 through 4-786, Attachment H-3, entitled Virginia Plan and Profile Crossing Drawings, Attachment B entitled Table B-1 Virginia Stream Impacts, and Table B-2 Virginia Wetland Impacts, dated February 22, 2021, with latest revisions dated of May 14, 2021, received May 14, 2021.

# 9. Compensation for Unavoidable Impacts:

The VWP Permit requires the documentation of the purchase of wetland and stream compensation credits.

The Joint Permit Application provides documentation of compensatory mitigation for wetland and stream crossings. The applicant has provided compensation for the proposed permanent and conversion wetland impacts through the purchase of 7.1 wetland credits from Bannister Bend Farm, LLC Wetland Mitigation Bank in Pittsylvania County, Virginia, purchase agreement dated November 30, 2017. The applicant has provided compensation for the proposed permanent stream impacts through the purchase of 298 stream credits from Graham and David Mitigation Bank, LLC in Montgomery County, Virginia, purchase agreement dated November 30, 2017. The applicant has provided documentation of a reserved purchase of 0.014 wetland credits from Thompson Place Stream and Wetland Mitigation Bank in Blacksburg, VA, credit availability letter dated August 17, 2021.

Wetland or stream compensation is not required for temporary impacts as the temporary impacts are required to be restored to the pre-construction elevation and reseeded or planted to restore a native wetland or riparian vegetation. The restoration of temporarily impacted surface waters shall be in accordance with the approved stream and wetland restoration plan.

# **10. Site Inspection:**

Starting in 2017 DEQ inspectors and DEQ approved third-party inspectors have conducted ongoing site inspections related to Erosion and Sediment Control plan approvals and compliance at proposed stream and wetland crossings.

# 11. Relevant Regulatory Agency Comments:

As part of the application-review process, DEQ contacted the appropriate state regulatory agencies. Any relevant agency comments were addressed in the VWP individual permit Part I - Special Conditions. Therefore, staff anticipates no adverse effect on water quality and fish and wildlife resources provided the applicant adheres to all permit conditions.

#### Summary of State Agency Comments and Actions

By email, dated April 19, 2021, DEQ requested comments from the following state agencies: Virginia Department of Wildlife Resources (VDWR), Virginia Department of Conservation and Recreation (VDCR), Virginia Marine Resources Commission (VMRC), and Virginia Department of Health (VDH). Failure to provide comments within 45 calendar days of the DEQ request for comments implies that the

agency has no comments on the project activities. Final comments were not received from VDWR within the 45 days; however, their draft comments were received on June 3, 2021, within the 45-day review period. VDWR subsequently provided final comments on July 7, 2021. VMRC did not reply with comments; however, it is issuing an MRC Individual Permit for the project. DCR and VDH replied with comments within the 45-day comment period. A summary of State Agency comments is presented below.

DEQ reviewed the comments from VDCR and VDWR listed below and summarized in the referenced attached tables. Based upon DEQ's review of the comments, some of the comments are addressed by VWP Permit Conditions, some comments are outside of the scope of VWP Program's statutory and regulatory authority, and compliance with some comments are necessary to protect any potential impacts to threatened or endangered species. The recommendations not addressed in the standard Permit conditions, and appropriate in terms of VWP Permit regulations, are included as a condition of the VWP Permit via Permit Condition E 1 – Wildlife Resources and attached to the Permit as Table 3 located in Appendix 1.

#### **VDCR**

DEQ received comments from the VDCR on June 6, 2021. VDCR supports adherence to time-of-year restrictions (TOYRs) for instream work as recommended by the Virginia Department of Wildlife Resources (VDWR) and United States Fish and Wildlife Service (USFWS). Specific recommendations made by VDCR are included with Table 3, located in Appendix I. The following general recommendations were also received:

- Due to the legal status of the Roanoke logperch, orangefin madtom, and candy darter, VDCR recommends continued coordination with VDWR and USFWS to ensure compliance with protected species legislation.
- For bat species such as the eastern small-footed bat, the Indiana bat, the little brown bat, the tricolored bat, and the big brown bat, VDCR recommends continued coordination with USFWS and VDWR to ensure compliance with the protected species legislation. Due to the legal status of the tri-colored bat and little brown bat, VDCR recommends coordination with the VDWR, Virginia's regulatory authority for the management and protection of these species to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 570). VDCR recommends avoiding impacts to roost habitats during the summer or winter months.
- To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, VDCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. VDCR recommends adherence to erosion and sediment control measures as required by the US Forest Service, FERC, and DEQ under the DSEIS protective of the downstream, karst resources.
- VDCR recommends adherence to the Emergency Spill Plan (APPENDIX D-2 Spill Prevention, Control, and Countermeasure (SPCC) Plan and Unanticipated Discovery of Contamination Plan for Construction Activities in Virginia) updated in October 20, 2017.
- VDCR supports the monitoring of water quality in these streams, rivers and creeks supporting
  rare, threatened and endangered resources to identify and address sediment loads during the
  construction of the Mountain Valley Pipeline.

• The applicant/developer must contact the local floodplain administrator for an official floodplain determination and comply with the community's local floodplain ordinance, including receiving a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. For state projects, VDCR recommends that compliance documentation be provided prior to the project being funded.

#### **VDWR**

VDWR provided preliminary comments to DEQ by email dated June 3, 2021, and July 7, 2021. VDWR provided final comments in table format on August 6, 2021. Specific recommendations made by VDWR are included in Appendix I, Table 3. VDWR also provided the following general recommendations:

- Mussel Surveys (associated with Craig Creek and tributaries): We recommend that a mussel survey be performed from 100 meters upstream through 400 meters downstream of impact areas as noted in the attached spreadsheet. This survey should be performed by a qualified, permitted biologist, preferably no more than six months prior to the start of construction. If mussel relocations are necessary, they should be coordinated with Brian Watson, DWR Region II Aquatic Resources Biologist (434-525-7522), and no federally listed species should be relocated without first coordinating with the USFWS (804-693-6694). All survey and relocation activities should adhere to the attached guidance. In addition, we recommend a time of year restriction on all instream work (not including any mussel surveys) as depicted in the attached spreadsheet. Survey results should be made available to Amy Martin in DWR's Headquarters office in Henrico and Brian Watson in DWR's Forest Office. Upon review of the results, we will make final recommendations regarding the protection of listed species known from the area. All survey reports should reference the ESSLog# displayed in the subject line of this email. If the applicant prefers, they may provide us with good, representative photographs of the impact area(s) for our review. The photos should clearly depict the size of the stream, the substrate type, and the banks up and downstream of the site. Upon review of the photos, we may be able to rule out the need for a mussel survey based on the habitat available on site.
- Stockable Trout Waters: there are a couple crossings of waters designated as stockable trout waters. If instream work in such waters is proposed, we ask that the applicant coordinate with our regional managers to ensure avoidance of any stocking or angling activities. Those contacts are as follows: Jeff Williams, 276-783-4860 or Jeff.Williams@DWR.virginia.gov and Scott Smith, 434-525-7522 or Scott.Smith@DWR.virginia.gov. I indicate on the spreadsheet whom to contact.
- Bored/Drilled crossings: Assuming the sites have been assessed and are appropriate for this method of crossing, that there is a frac-out plan in place, and there is strict adherence to erosion and sediment controls during installation bore pits and associated activities, such crossings do not have to adhere to instream work TOYRs.
- Ephemeral/Intermittent streams: If work can be performed when there is no flow in the stream (dry conditions) and erosion and sediment controls are in place during work, TOYRs are not necessary. Placement of cofferdams and installation of pump arounds to create a dry work

area/trench in a stream with flow is not considered "dry conditions" and such activities should adhere to any TOYR recommended for the crossing.

- Recommend that instream work be designed and performed in a manner that minimizes impacts upon natural streamflow and movement of resident aquatic species. If a dam and pump-around must be used, we recommend it be used for as limited a time as possible and that water returned to the stream be free of sediment and excess turbidity. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap.
- To minimize harm to the aquatic environment and its residents resulting from use of the Tremie method to install concrete, installation of grout bags, and traditional pouring of concrete, recommend that such activities occur only in the dry, allowing all concrete to harden and cure prior to contact with open water.
- Due to future maintenance costs associated with culverts, and the loss of riparian and aquatic habitat, DGIF prefer stream crossings to be constructed via clear-span bridges. However, if this is not possible, we recommend countersinking any culverts below the streambed at least 6 inches, or the use of bottomless culverts, to allow passage of aquatic organisms.
- Recommend the installation of floodplain culverts to carry bankfull discharges.
- Recommend adherence to the attached fish relocation BMPs at all stream crossings.
- Avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable; maintain naturally vegetated buffers of at least 100 feet in width around wetlands and on both sides of perennial and intermittent streams.
- Where practicable; conduct significant tree removal and ground clearing activities outside of the primary songbird nesting season of March 15 through August 15.
- Implement and maintain appropriate erosion and sediment controls throughout project construction and site restoration.
- To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap.

#### **VDH**

VDH provided comments in a memorandum dated June 2, 2021 and transmitted by email on June 2, 2021. VDH identified wells within one a one-mile radius of the project, surface water intakes within a five-mile radius of the project, and watersheds where the project is located that include public water sources. VDH also recommended best management practices be employed including erosion and sediment controls, spill prevention controls and management of materials on site and during transport.

#### **VMRC**

VMRC did not reply to the request for comments; however, they have issued an Individual MRC Permit for the Project. The MRC permit is subject to ongoing modifications to change eight stream crossings from open cut to trenchless occurring up to and during the VWP application receipt and processing period.

# Summary of Federal Agency Comments and Actions

The project is being reviewed by the USACE for an individual permit, which the USACE public noticed on March 29, 2021.

# 12. Riparian Landowner Notification:

Staff notified riparian landowners located adjacent to the impact area and within one-half mile downstream of each distinct impact area by letter dated April 13, 2021. Notifications of riparian and adjacent landowners were conducted in accordance with DEQ guidance. The applicant obtained the riparian landowner information from each counties' land records databases as provided by the respective counties, with the exception of Craig County, which does not maintain a land records website. The applicant obtained riparian landowner information for twelve total affected riparian landowners in Craig County through a third-party land records service, and verified the accuracy of those records with the Craig County Commissioner of Revenue's office on August 11, 2021.

The applicant identified 804 riparian parcels affected by the project, presented in *Attachment B-5* of the application. The applicant provided to DEQ unsealed envelopes addressed to each of the property owners identified by the respective county resources. The envelopes contained a notification letter and mapping depicting the affected parcel in relation to the project. For multiple affected parcels with the same owner, the applicant placed the notification letters and mapping into one envelope, resulting in six hundred twenty total envelopes. Prior to sending the notifications, DEQ staff performed a quality control check by randomly selecting 10% of the envelopes and checking them for accuracy against the counties' online land records. DEQ staff sealed the envelopes and mailed them from DEQ Central Office. Of the six hundred and twenty envelopes mailed, eight came back to DEQ marked return to sender, representing approximately 1% of the total envelopes mailed.

# 13. Public Comment [if applicable: and Public Hearing]:

The public notice was published in Newspaper Name on Date. The public comment period ran from Date to Date.

[If several public comments were received, staff can summarize public comments and staffs' responses to public comment in this section. If multiple public comments were received, staff can add an attachment to the fact sheet summarizing public comments and staffs' responses.]

[Choose one and make appropriate edits: No public comments were received during the public comment period. Therefore, no changes have been made to the permit conditions.]

#### Or

[# public comment letters were received. However, no substantial or disputed issues were presented that warranted revisions to the draft conditions of the permit.]

#### Or

[# responses were received from the public: two opposed the permit and five requested protection of wetlands. Due to the public response, a public hearing was held on Date.]

Summarize hearing events and comments. [Ex.: A summary of citizen comments and staffs' responses are included as Attachment A to this fact sheet. In response to citizen comments, and comments received from DCR on Date(s), staff made the following changes to the draft permit. List changes.]

# 14. Special Conditions:

The following conditions were developed to protect instream beneficial uses, to ensure compliance with applicable water quality standards, to prevent significant impairment of state waters or fish and wildlife resources, to provide for no net loss of wetland acreage, and to provide no net loss of functions in all surface waters through compensatory mitigation and monitoring and reporting.

# Section A Authorized Activities

Nos. 1-4 addresses the activities authorized by this permit, including impact types and limits. No. 1 references Table 1 Stream Impacts and Table 2 Wetland Impacts, located in Appendix 1 of the permit.

#### Section B Permit Term

Nos. 1-2 addresses the permit term and re-issuance process to ensure that all permit conditions are completed. The draft permit term is set at 10 years.

# Section C Standard Project Conditions

- No. 1 addresses the requirement for the minimization of adverse impacts to instream beneficial uses.
- No. 2 ensures that the project will be executed in a manner that limits the disruption of the movement of aquatic life.
- No. 3 ensures that downstream flows will be maintained to protect both instream and off-stream beneficial uses.
- No. 4 ensures the minimization of adverse effects on navigation.
- No. 5 ensures the passage of high flows.
- No. 6 requires maintenance of continuous flow of perennial springs for the protection of instream beneficial use except for temporary impacts authorized by this permit.
- No. 7 ensures that dredging and filling operations will minimizes stream bottom disturbances and turbidity.

- No. 8 requires instream activities to be conducted during low-flow conditions to protect instream beneficial uses.
- No. 9 requires erosion and sedimentation controls to be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
- Nos. 10 through 12 provide requirements and limitations on the entry of various materials (including concrete, fill, construction and waste material, fuels, lubricants, and untreated stormwater runoff) into state waters.
- Nos. 13 through 14 limits the use of machinery and equipment in surface waters to protect beneficial uses.
- No. 15 prohibits the violation of Water Quality Standards in surface waters as a result of project activities.
- No. 16 requires the identification of all non-impacted surface waters in the vicinity of the proposed activity to prevent unpermitted impacts.
- Nos. 17 through 20 set forth all reporting requirements concerning construction, monitoring, compensation, and restoration as required by current law and regulations.

# Section D Installation of Utilities and Temporary Impacts

- No. 1 sets forth permit conditions as required by the regulatory requirements for natural gas pipelines.
- No. 2 requires the minimization of disturbance to surface waters and restoration to preconstruction conditions following utility line installation.
- No. 3 sets a 90-day time limit for temporary sidecasting during trench excavation to minimize impacts to surface waters.
- No. 4 provides the requirements for trench construction to avoid the drainage of surface waters.
- No. 5 through 9 require temporary disturbances to surface waters during construction to be avoided and minimized to the maximum extent practicable and the restoration of such temporary disturbances.
- No. 10 Requires submission of a temporary streamstream and wetland impact restoration pplan to DEQ for review and approval prior to initiation of construction activities in in wetlands or stream channels, and specifies the required elements of the plan.

# Section E Wildlife Resources

No. 1 requires that the permittee adhere to time-of-year restrictions recommended by the Department of Wildlife Resources for the protection of fish and wildlife resources, and the recommendations of the Department of Conservation and Recreation, as presented in Table 3, Appendix 1. This condition sets the approval process for revisions to TOYRs and requires the creation of a public webpage to host the latest revisions to Table 3.

# Section F Stream Modifications, Including Intake/Outfall Structures

- No. 1 prohibits the use of stream substrate for erosion control to avoid additional impacts to state waters.
- No. 2 requires upland disposal of material removed from stream substrate to avoid unpermitted impacts to surface waters.
- No. 3 ensures riprap placement conforms to current law and regulation.

Nos. 4 and 5 direct the placement and contents of materials for the construction of submerged structures, and on-bank storage and staging of materials, to protect water quality and fish and wildlife resources.

# Section Letter Road Crossings

- No. 1 provides specifications for access road construction to minimize adverse effects to surface waters.
- No. 2 ensures pipes and culvert construction is conducted in the dry to protect water quality and wildlife habitat.
- No. 3 requires that temporary impacts be restored immediately following construction to minimize impacts to water quality and fish and wildlife resources.
- No. 4 requires measurement of stream bottom elevations at permanent road crossings S-H42 (VWP No. S-314) and S-IJ16a (VWP No. S-60) to ensure for the re-establishment of a natural stream bottom and low flow channel to maintain instream beneficial uses. The intent of this condition is to maintain a hydrologic connection and enable the stream bottom to reestablish in the culvert.
- No. 5 summarizes requirements for pipe and culvert placement and countersinking to provide for the reestablishment of a natural stream bottom and low flow channel to maintain instream beneficial uses.
- No. 6 dictates when and how stream bottom elevations at road crossings shall be measured.

# Section H Stormwater Management Facilities

- No. 1 defines the general requirements for stormwater management facility construction to minimize adverse effects to aquatic resources and provide for long-term aquatic resources protection and enhancement.
- No. 2 provides limits and guidance for maintenance excavation to avoid unpermitted impacts to surface waters.
- No. 3 requires correct draining methods to minimize sedimentation of surface waters.

#### Section I Project Construction Monitoring and Submittals (Impact Site)

Nos. 1 through 6 address monitoring and submittals required for pre-construction, during construction and post-construction for the impact areas on site.

# Section J Compensatory Mitigation

No. 1 references the documentation included in the application that establishes the applicant's purchase of 7.1 wetland credits from Bannister Bend Farm, LLC Wetland Mitigation Bank in Pittsylvania County, Virginia, 298 stream credits from Graham and David Mitigation Bank, LLC in Montgomery County, Virginia, and documentation of a reserved purchase of 0.014 wetland credits from Thompson Place Stream and Wetland Mitigation Bank in Blacksburg, VA.

No. 2 provides the requirement to fulfill any additional mitigation requirements of this permit in accordance with 9VAC25-210 et seq. and § 62.1-44.15:23 of the Code of Virginia.

#### Section K Other Regulatory Actions

- No. 1 incorporates by reference the conditions set forth in Section IV(b)(2) and Section IV(c) of the Consent Decree between Mountain Valley Pipeline, LLC and DEQ, dated December 11, 2019.
- No. 2 incorporates by reference all conditions of the latest DEQ approved revision of the Annual Standards and Specifications pertaining to work within and around wetlands and streams.

No. 3 incorporates by reference all requirements of the latest revisions of the DEQ approved Erosion and Sediment Control General Details, Erosion and Sediment Control Narrative, and Erosion and Sediment Control Plan drawings that pertain to work within and around wetlands and stream crossings.

#### 15. General Conditions:

The general conditions specified in the effective VWP Permit Program Regulation 9VAC25-210 apply to all VWP individual permits.

# 16. General Criteria (9VAC25-260-20.A):

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

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

# 17. Staff Findings and Recommendations:

- The proposed activity is consistent with the provisions of the Clean Water Act and State Water Control Law, and will protect instream beneficial uses.
- The proposed permit addresses avoidance and minimization of wetland impacts to the maximum extent practicable.
- The effect of the impact, together with other existing or proposed impacts to streams and wetlands, will not cause or contribute to significant impairment of state waters or fish and wildlife resources.
- Discharges from the proposed activity will comply with applicable water quality requirements.
- The proposed permit conditions address no net loss of wetland acreage and no net loss of functions in all surface waters through compensatory mitigation, and adequately assess compensation implementation via success monitoring and reporting.
  The draft permit reflects the required consultation with and full consideration of the written recommendations of VMRC, VDH, VDCR, and VDWR. The staff invited, but did not receive, comments from VMRC, which is reviewing the project through its own permitting process.

# [If applicable: 16. Action by the State Water Control Board

The Board [approved or denied] VWP Individual Permit No. ##-###.]



# APPENDIX 3

County	NHD Stream Name1	Basin	Subbasin	Section	Class	Special Standards HUC 8	Q In	rtitude2	Longitude2	USGS O	Ouad 0	State Watershed No. \	NOS ID	WQA Water Name	Trout	Stream Type
Giles	UNT to Kimballton Branch	New River Basin	New River Subbasin		IV	u 05050		37.375311	-80.680878					Stony Creek Tributaries		Intermittent
Giles	Kimballton Branch	New River Basin	New River Subbasin	1d	IV	u 05050		37.374377	-80.682038	PEARISI			RL 09 043001	Kimballton Branch		Perennial
Giles	UNT to Stony Creek	New River Basin	New River Subbasin		IV	u 05050		37.362202	-80.688092					Stony Creek Tributaries		Intermittent
Giles	Stony Creek	New River Basin	New River Subbasin	1d	V	05050		37.360325	-80.684214			NE75	RI 09 043041	Stony Creek Lower 1		Perennial
Giles	Stony Creek	New River Basin	New River Subbasin	1d	V	05050		37.360276	-80.684193					Stony Creek Lower 1		Perennial
Giles	Stony Creek	New River Basin	New River Subbasin	1d	V	05050		37.360071	-80.68396	PEARISI				Stony Creek Lower 1		Perennial
Giles	UNT to Dry Branch	New River Basin	New River Subbasin	1	IV	u 05050		37.35043	-80.658259	PEARIS				New River/Little Stony Creek	103	Intermittent
Giles	UNT to Dry Branch	New River Basin	New River Subbasin	1	IV	u 05050		37.350373	-80.65823					New River/Little Stony Creek		Intermittent
Giles	Dry Branch	New River Basin	New River Subbasin	1	IV	u 05050		37.349095	-80.65204					New River/Little Stony Creek		Intermittent
Giles	UNT to Dry Branch	New River Basin	New River Subbasin	1	IV	u 05050		37.348641	-80.647225					New River/Little Stony Creek		Intermittent
Giles	UNT to Little Stony Creek	New River Basin		1d	VI	05050		37.344876	-80.633426					Little Stony Creek Tributaries	Yes	Intermittent
Giles	UNT to Little Stony Creek	New River Basin	New River Subbasin		VI	05050		37.344859	-80.631295					Little Stony Creek Tributaries		Intermittent
Giles	UNT to Little Stony Creek	New River Basin	New River Subbasin	1d	VI	05050		37.344779	-80.633379					Little Stony Creek Tributaries		Intermittent
Giles	UNT to Little Stony Creek	New River Basin	New River Subbasin	1d	VI	05050		37.344278	-80.626185	PEARIS				Little Stony Creek Tributaries		Intermittent
Giles	UNT to Little Stony Creek	New River Basin		1d	VI	05050		37.344277	-80.626113			NF74	05_043176	Little Stony Creek Tributaries		Intermittent
Giles	UNT to Little Stony Creek	New River Basin	New River Subbasin	1d	VI	05050		37.344277	-80.6281			NE74	NL_09_043176	Little Stony Creek Tributaries		Intermittent
		New River Basin	New River Subbasin	1d	VI			37.344103	-80.620823	EGGLES						Intermittent
Giles	UNT to Little Stony Creek UNT to Little Stony Creek	New River Basin	New River Subbasin	1d	VI	05050 05050		37.342331	-80.620823	EGGLES				Little Stony Creek Tributaries Little Stony Creek Tributaries		Intermittent
					VI	05050		37.342236	-80.620342							
	UNT to Little Stony Creek	New River Basin												Little Stony Creek Middle		Perennial
Giles	Little Stony Creek	New River Basin	New River Subbasin		VI	05050		37.342172	-80.62009					Little Stony Creek Middle		Perennial
Giles	UNT to Little Stony Creek	New River Basin	New River Subbasin	1d	VI	05050		37.340977	-80.618031					Little Stony Creek Middle	Yes	Perennial
Giles	Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.338952	-80.614618	EGGLES				New River/Little Stony Creek		Intermittent
Giles	UNT to Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.337763	-80.606008					New River/Little Stony Creek	1	Intermittent
Giles	UNT to Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.337639	-80.605571					New River/Little Stony Creek	-	Intermittent
Giles	UNT to Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.335094	-80.596868					New River/Little Stony Creek	1	Intermittent
Craig	Sinking Creek	New River Basin	New River Subbasin	1	٧	05050		37.333152	-80.429438					Sinking Creek Middle	Yes	Artificial Path
	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.332869	-80.559168					New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.332191	-80.559979		STON			New River & Sinking Creek Tributaries	1	Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.332146	-80.560079	EGGLES	STON			New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.331748	-80.583355	EGGLES	STON	NE74	RL_09_063934	New River/Little Stony Creek		Intermittent
Giles	Doe Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.331332	-80.583047	EGGLES	STON I	NE74	RL_09_063940	Doe Creek		Intermittent
Craig	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.328329	-80.42281					Sinking Creek Tributaries		Intermittent
Craig	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.326705	-80.425803	NEWPO				Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.326015	-80.556831	EGGLES	STON	NE65	RL 09 063937	New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.325728	-80.565082		STON			New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.325638	-80.56468				RL 09 063936	New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.325607	-80.564373					New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.325566	-80.564634					New River & Sinking Creek Tributaries		Intermittent
	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.324781	-80.431446					Sinking Creek Tributaries		Intermittent
Craig				1	IV										-	
Giles	UNT to Sinking Creek UNT to Sinking Creek	New River Basin New River Basin	New River Subbasin New River Subbasin	1	IV	u 05050 u 05050		37.323702 37.323533	-80.555627 -80.555257					New River & Sinking Creek Tributaries New River & Sinking Creek Tributaries	-	Intermittent
				1	IV										-	
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1		u 05050		37.322737	-80.552396				RL_09_063937	New River & Sinking Creek Tributaries	-	Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.322194	-80.553058					New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.321823	-80.55311					New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.321756	-80.553011					New River & Sinking Creek Tributaries		Intermittent
Montgomery	UNT to Craig Creek	James River Basin	Upper James River Subbasin	12	IV	02080		37.32109	-80.412831					Craig Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	V	05050		37.318956	-80.440648					Sinking Creek Middle		Artificial Path
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	V	05050		37.31893	-80.44093					Sinking Creek Middle		Artificial Path
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	V	05050		37.318647	-80.441619					Sinking Creek Middle		Artificial Path
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.318324	-80.54772					New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.318246	-80.547711	EGGLES	STON	NE65	RL_09_064023	Sinking Creek Tributaries		Intermittent
Montgomery	UNT to Craig Creek	James River Basin	Upper James River Subbasin	12	IV	02080	0201	37.317187	-80.409235	NEWPO	ORT .	JU41	RL_2A_064348	Craig Creek Tributaries		Intermittent
Montgomery	UNT to Craig Creek	James River Basin	Upper James River Subbasin	12	IV	02080	0201	37.316523	-80.408646	NEWPO	ORT	JU41	RL_2A_064348	Craig Creek Tributaries		Intermittent
Montgomery	Craig Creek	James River Basin	Upper James River Subbasin	12	V	02080	0201	37.314504	-80.402613	NEWPO	ORT .	JU41	RL_2A_064327	Craig Creek	Yes	Perennial
Montgomery	UNT to Craig Creek	James River Basin	Upper James River Subbasin	12	IV	02080	0201	37.31391	-80.398683	NEWPO	ORT .	JU41	RL_2A_064358	Craig Creek Tributaries		Intermittent
	UNT to Craig Creek	James River Basin	Upper James River Subbasin	12	IV	02080	0201	37.313615	-80.402521	NEWPO	ORT .	JU41	RL 2A 064365	Craig Creek Tributaries		Intermittent
Montgomery	Craig Creek	James River Basin	Upper James River Subbasin	12	V	02080		37.313511	-80.404606					Craig Creek	Yes	Perennial
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050	0002	37.311735	-80.532304			NE65		New River & Sinking Creek Tributaries		Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.31173	-80.544091					New River & Sinking Creek Tributaries	1	Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.31173	-80.544091					New River & Sinking Creek Tributaries		Intermittent
Giles	Sinking Creek	New River Basin	New River Subbasin	1	٧	05050		37.311616	-80.515786					Sinking Creek Middle		Artificial Path
	UNT to Sinking Creek	New River Basin	New River Subbasin	1	٧	05050		37.307524	-80.466665					Sinking Creek Middle		Artificial Path
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	v	05050		37.305508	-80.467231					Sinking Creek Middle		Artificial Path
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.300454	-80.472911					Sinking Creek Wildere Sinking Creek Tributaries	1.03	Intermittent
Montgomery	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7	VI	pH-6.5-9.5, 03010		37.299397	-80.391243				RL 4A 064396	Unnamed tributary	Yes	Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050		37.298226	-80.480624					Sinking Creek Tributaries		Intermittent
	UNT to Mill Creek		Roanoke River Subbasin	7		pH-6.5-9.5, 03010		37.297166	-80.386612				RL_4A_064385			Intermittent
Giles	Greenbriar Branch	New River Basin	New River Subbasin	1	IV	u 05050		37.297100	-80.380012					New River & Sinking Creek Tributaries		Perennial
		New River Basin	New River Subbasin	1	IV	u 05050		37.296662	-80.494174						+	Perennial
Giles	UNT to Greenbriar Branch UNT to Mill Creek		Roanoke River Subbasin	7									RL 4A 064392	New River & Sinking Creek Tributaries	Vo-	
		Roanoke River Basin		1				37.296356	-80.375118						Yes	Intermittent
Giles	UNT to Sinking Creek	New River Basin	New River Subbasin	1	IV	u 05050 pH-6.5-9.5. 03010		37.296226	-80.481455				RL_09_064472 RL_4A_064391	Sinking Creek Tributaries	V	Intermittent
······································	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	/		p e.e e.e)		37.296153							Yes	Intermittent
	Mill Creek	Roanoke River Basin	Roanoke River Subbasin	/	VI	pH-6.5-9.5, 03010		37.295743	-80.375921					Mill Creek	Yes	Intermittent
	North Fork Roanoke River	Roanoke River Basin	Roanoke River Subbasin	7		pH-6.5-9.5, 03010	J101	37.268586						Roanoke River, North Fork Upper Middle	1	Perennial
	UNT to North Fork RoanokeRiver		Roanoke River Subbasin	7		pH-6.5-9.5, 03010		37.264817			NALDS MILL			N.F. Roanoke River Tribs.	1	Intermittent
	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7		pH-6.5-9.5, 03010		37.258717						North Fork Roanoke River Tribs.		Intermittent
	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7	IV	pH-6.5-9.5, 03010		37.258673						North Fork Roanoke River Tribs.	1	Intermittent
	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7		pH-6.5-9.5, 03010		37.258403						North Fork Roanoke River Tribs.	1	Intermittent
Montgomery	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7	IV	pH-6.5-9.5, 03010		37.258198						North Fork Roanoke River Tribs.	L	Intermittent
	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7	IV	pH-6.5-9.5, 03010	0101	37.258176						North Fork Roanoke River Tribs.		Intermittent
Montgomery	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7	IV	pH-6.5-9.5, 03010	0101	37.257998	-80.284735	MCDON	NALDS MILL	RU07	RL_4A_052252	North Fork Roanoke River Tribs.		Intermittent
											NALDS MILL				т —	
Montgomery	UNT to Flatwoods Branch	Roanoke River Basin	Roanoke River Subbasin	7	IV	pH-6.5-9.5, 03010	J101 I	37.25726	-80.281611	MCDU	INALUS WILL II	KUU/ II	KL 4A U5222X	North Fork Roanoke River Tribs.		Intermittent

County	NHD Stream Name1	Basin	Subbasin	Section C	lass Special Standards	HUC 8	Latitude2	Longitude2	USGS Quad	State Watershed No.	WOS ID	WOA Water Name	Trout	Stream Type
	UNT to Flatwoods Branch		Roanoke River Subbasin	17 IN		03010101	37.256959		MCDONALDS MILL			North Fork Roanoke River Tribs.	l	Intermittent
	Flatwoods Branch		Roanoke River Subbasin	7 1		03010101			MCDONALDS MILL			Roanoke River, North Fork/Bradshaw Creek		Intermittent
	UNT to Bradshaw Creek		Roanoke River Subbasin	7 1		03010101			MCDONALDS MILL			Roanoke River, North Fork/Bradshaw Creek		Intermittent
	UNT to Bradshaw Creek		Roanoke River Subbasin	7 1	p 2.0 2.0)	03010101			MCDONALDS MILL			Bradshaw Creek Tribs		Intermittent
	Bradshaw Creek		Roanoke River Subbasin	7 1		03010101			MCDONALDS MILL			Bradshaw Creek		Perennial
	UNT to Roanoke River		Roanoke River Subbasin	7b IV		03010101		-80,206995		RU09		Roanoke River Tributaries sec. 7b		Intermittent
	UNT to Roanoke River		Roanoke River Subbasin	7b 1		03010101	37.231693	-80.198778		RU09		Roanoke River	Yes	Artificial Path
	UNT to Roanoke River		Roanoke River Subbasin	7b V		03010101		-80.19846		RU09		Roanoke River	Yes	Artificial Path
Montgomery	UNT to South Fork Roanoke River		Roanoke River Subbasin	7b V	PWS pH-6.5-9.5,	03010101		-80.201144		RU09		Roanoke River	Yes	Artificial Path
	UNT to Indian Run		Roanoke River Subbasin	7b IV		03010101	37.216102	-80.19739		RU05		Roanoke River, South Fork UT PWS Sec. 7b Tributaries	163	Intermittent
	UNT to Roanoke River		Roanoke River Subbasin	7b IV		03010101	37.210922	-80.193318		RU09		Roanoke River Tribs.		Intermittent
	UNT to Roanoke River		Roanoke River Subbasin	7b IV		03010101		-80.187282		RU09		Roanoke River Tribs.		Intermittent
Roanoke	UNT to Roanoke River		Roanoke River Subbasin	7a IV		03010101		-80.167933		RU09		Roanoke River Tributaries w/ PWS sec. 7a		Intermittent
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.151146		RU02		Bottom Creek Upper	Yes	Intermittent
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.151146		RU02		Bottom Creek Upper	Yes	Intermittent
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.148948		RU02		Bottom Creek Tribs.	Yes	Intermittent
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101	37.181506	-80.149497		RU02		Bottom Creek Tribs.	Yes	Intermittent
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101				RU02		Bottom Creek Tribs.  Bottom Creek Tribs.	Yes	Intermittent
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101				RU02		Bottom Creek Upper	Yes	Perennial
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101	37.170458	-80.138216		RU02		Bottom Creek	Yes	Perennial
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 1		03010101	37.169474	-80.130356		RU02		Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.138258		RU02		Bottom Creek 1710s. Bottom Creek	Yes	Perennial
	Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.138295		RU02		Bottom Creek Upper	Yes	Perennial
					p e.e e.e)									
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101	37.168361 37.165862	-80.138381		RU02 RU02		Bottom Creek Upper	Yes	Perennial
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.139317				Bottom Creek Upper	Yes	Perennial
Roanoke	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.139378		RU02 RU02		Bottom Creek Upper	Yes	Perennial
	UNT to Mill Creek		Roanoke River Subbasin	7 1		03010101		-80.134799				Bottom Creek Tribs.	1	Intermittent
	UNT to Mill Creek		Roanoke River Subbasin	7 1		03010101		-80.129179		RU02		Bottom Creek Tribs.	L.	Intermittent
Roanoke	UNT to Mill Creek		Roanoke River Subbasin	/ V		03010101		-80.13246		RU02		Bottom Creek Tributaries	Yes	Perennial
Roanoke	UNT to Mill Creek		Roanoke River Subbasin	7 V		03010101		-80.133919		RU02		Bottom Creek Tributaries	Yes	Perennial
	UNT to Bottom Creek		Roanoke River Subbasin	7 V		03010101		-80.138399		RU02		Bottom Creek Tribs.	Yes	Intermittent
	Mill Creek		Roanoke River Subbasin	7 V		03010101		-80.139715		RU02		Bottom Creek Tributaries	Yes	Perennial
	UNT to Mill Creek		Roanoke River Subbasin	7 1		03010101		-80.137649		RU02		Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1		03010101		-80.137622	ELLISTON	RU02	RL_4A_052465	Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1	/ pH-6.5-9.5,	03010101	37.134176	-80.137484	ELLISTON	RU02	RL_4A_052465	Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1	/ pH-6.5-9.5,	03010101	37.128922	-80.133769	ELLISTON	RU02	RL_4A_052449	Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1	/ pH-6.5-9.5,	03010101	37.128853	-80.13391	ELLISTON	RU02	RL_4A_052449	Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1\	/ pH-6.5-9.5,	03010101	37.12849	-80.132601	ELLISTON	RU02	RL 4A 052449	Bottom Creek Tribs.		Intermittent
Roanoke	UNT to Mill Creek	Roanoke River Basin	Roanoke River Subbasin	7 1	/ pH-6.5-9.5,	03010101	37.128484	-80.130943	ELLISTON	RU02	RL 4A 052330	Bottom Creek Tributaries		Intermittent
	UNT to Green Creek		Roanoke River Subbasin	6a V		03010101			BENT MOUNTAIN			S.F. Blackwater River Tribs.	Yes	Intermittent
	UNT to Green Creek		Roanoke River Subbasin	6a V		03010101			BENT MOUNTAIN			S.F. Blackwater River Tribs.	Yes	Intermittent
Franklin	UNT to Green Creek		Roanoke River Subbasin	6a V		03010101			CALLAWAY	RU21		S.F. Blackwater River Tribs.	Yes	Intermittent
Franklin	UNT to North Fork BlackwaterRiver	Roanoke River Basin	Roanoke River Subbasin	6a II		03010101		-80.086182	CALLAWAY	RU20	RL 4A 059927	Upper Blackwater River		Intermittent
Franklin	North Fork Blackwater River		Roanoke River Subbasin	6a II		03010101		-80.074673	CALLAWAY	RU20		Blackwater River, North Fork Upper		Perennial
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101	37.121558			RU20		N.F. Blackwater River Tribs.		Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101	37.121513		CALLAWAY	RU20		N.F. Blackwater River Tribs.		Intermittent
	UNT to North Fork Blackwater River		Roanoke River Subbasin	6a II		03010101				RU20		N.F. Blackwater River Tribs.		Intermittent
	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101				RU20		N.E. Blackwater River Tribs.		Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101				RU20		N.F. Blackwater River Tribs.		Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101	37.104707		CALLAWAY	RU20		Upper Blackwater River		Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101				RU20		Upper Blackwater River		Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101				RU20			<del>                                     </del>	Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101	37.102491			RU20	NL_4A_059908	Upper Blackwater River Upper Blackwater River	-	Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101			CALLAWAY	RU20		N.F. Blackwater River Tribs	-	Intermittent
Franklin	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101	37.101127		CALLAWAY	RU20		Upper Blackwater River	+	Intermittent
	UNT to North Fork BlackwaterRiver		Roanoke River Subbasin	6a II		03010101				RU20			+	Intermittent
	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101			BOONES MILL	RU22		Upper Blackwater River Blackwater River Tribs.	+	
	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22		Blackwater River Tribs. Blackwater River Tribs.	+	Intermittent
Franklin	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101	37.089178		BOONES MILL	RU22	RL_4A_060398		+	Intermittent
Franklin	Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22	RL_4A_060398		+	Perennial
Franklin	Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22	RL 4A 059444		+	Perennial
Franklin	Teels Creek		Roanoke River Subbasin	6a II						RU22	RL_4A_059444 RL_4A_059497		+	Perennial
i i di iidiii						03010101							<del>                                     </del>	
Franklin	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22		Upper Blackwater River	+	Intermittent
	Teels Creek UNT to Teels Creek		Roanoke River Subbasin Roanoke River Subbasin	6a II		03010101				RU22 RU22	RL_4A_059543 RL_4A_059487		+	Perennial Perennial
													1	
Franklin	Teels Creek		Roanoke River Subbasin	6a II		03010101			BOONES MILL	RU22	RL_4A_059487		1	Perennial
Franklin Franklin	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101	37.070101		BOONES MILL	RU22		Blackwater River Tribs.	<del>                                     </del>	Intermittent
	UNT to Teels Creek		Roanoke River Subbasin			03010101				RU22	RL_4A_059449		-	Perennial
	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22	RL_4A_059487		1	Perennial
	UNT to Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22	RL_4A_059449		-	Perennial
Franklin	UNT to Blackwater River		Roanoke River Subbasin	6a II		03010101	37.064748		REDWOOD	RU22		Blackwater River Tribs.	1	Intermittent
	UNT to Blackwater River		Roanoke River Subbasin	6a II		03010101				RU22		Upper Blackwater River	1	Intermittent
	Teels Creek		Roanoke River Subbasin	6a II		03010101				RU22	RL_4A_059449		1	Perennial
Franklin	UNT to Blackwater River		Roanoke River Subbasin	6a II		03010101				RU22		Upper Blackwater River	1	Intermittent
Franklin	UNT to Blackwater River		Roanoke River Subbasin	6a II		03010101	37.062262		REDWOOD	RU22		Upper Blackwater River		Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a II		03010101				RU22		Upper Blackwater River		Intermittent
	UNT to Maggodee Creek		Roanoke River Subbasin	6a II		03010101	37.059535			RU23	RL_4A_061408	Maggodee Creek Tributaries		Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a II	I NEW-1	03010101		-79.853595	REDWOOD	RU22	RL_4A_059729	Blackwater River Lower 2		Artificial Path
Franklin	UNT to Blackwater River		Roanoke River Subbasin	6a II	I NEW-1	03010101				RU22		Blackwater River Lower 2		Artificial Path
Franklin	Teels Creek	Roanoke River Basin	Roanoke River Subbasin	6a II	I NEW-1	03010101	37.05839			RU22	RL_4A_059480	Teels Creek		Perennial
Franklin	UNT to Maggodee Creek	Roanoke River Basin	Roanoke River Subbasin	6a II	NEW-1	03010101	37.058165	-79.844877	REDWOOD	RU23	RL_4A_061408	Maggodee Creek Tributaries		Intermittent
	UNT to Maggodee Creek		Roanoke River Subbasin	6a II		03010101	37.057776		REDWOOD	RU23	RL_4A_061408	Maggodee Creek Tributaries		Intermittent
	UNT to Maggodee Creek		Roanoke River Subbasin	6a II		03010101				RU23		Maggodee Creek Tributaries		Intermittent

County	NHD Stream Name1	Basin	Subbasin	Section	Class Special Sta	ndards HUC 8	Latitude2 Longitude2	USGS Quad	State Watershed No.	WQS_ID	WQA Water Name	Trout Stream Type
Franklin	Little Creek	Roanoke River Basin	Roanoke River Subbasin		III NEW-1	03010101	37.057584	-79.913921 BOONES MILL			Little Creek Middle	Perennial
Franklin	UNT to Maggodee Creek	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.056594	-79.835785 REDWOOD	RU23	RL_4A_061590	Maggodee Creek Lower	Artificial Path
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.056084	-79.850384 REDWOOD	RU22	RL_4A_059587	Blackwater River Tribs.	Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.055912	-79.883177 BOONES MILL	RU22	RL_4A_059763	Blackwater River Lower 3	Artificial Path
Franklin	UNT to Maggodee Creek	Roanoke River Basin		6a	III NEW-1	03010101	37.055193	-79.833881 REDWOOD	RU23	RL_4A_061590	Maggodee Creek Lower	Artificial Path
Franklin	Maggodee Creek	Roanoke River Basin	Roanoke River Subbasin		III NEW-1	03010101	37.055147	-79.830098 REDWOOD	RU23	RL_4A_061590	Maggodee Creek Lower	Artificial Path
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin		III NEW-1	03010101	37.053336	-79.884604 BOONES MILL	RU22	RL_4A_059604	Blackwater River Tribs.	Intermittent
Franklin	Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.052843	-79.825711 REDWOOD	RU24	RL_4A_061577	Blackwater River Upper	Artificial Path
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.052125	-79.886182 BOONES MILL	RU22	RL_4A_059565	Blackwater River Tribs.	Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin		III NEW-1	03010101	37.049238	-79.817223 REDWOOD	RU24	RL_4A_061522	Blackwater River Tribs.	Intermittent
Franklin	Little Creek	Roanoke River Basin	Roanoke River Subbasin	6f	IV PWS, NEW	1 03010101	37.049219	-79.908513 BOONES MILL	RU22	RL_4A_059788	Little Creek Lower	Artificial Path
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.048037	-79.813934 REDWOOD	RU24	RL_4A_061522	Blackwater River Tribs.	Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6f	IV PWS, NEW	1 03010101	37.047765	-79.897636 BOONES MILL	RU22	RL_4A_059592	Blackwater River Tribs.	Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.047172	-79.813 REDWOOD	RU24	RL 4A 061522	Blackwater River Tribs.	Intermittent
Franklin	UNT to Maple Branch		Roanoke River Subbasin	6a	III NEW-1	03010101	37.043871	-79.822898 REDWOOD	RU24	RL_4A_061454	Maple Branch	Intermittent
Franklin	Maple Branch	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.043854	-79.822974 REDWOOD	RU24	RL 4A 061454	Maple Branch	Intermittent
Franklin	UNT to Blackwater River	Roanoke River Basin	Roanoke River Subbasin	6i	IV PWS. NEW	1 03010101	37.042742	-79.809015 REDWOOD	RU24	RL 4A 061353	Blackwater River Lower Tributaries	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.037916	-79.804237 REDWOOD	RU24	RL 4A 061569	Blackwater River Lower Tributaries	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.036271	-79.799442 REDWOOD	RU24	RL 4A 061571	Blackwater River Tribs.	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin	6a	III NEW-1	03010101	37.036173	-79.79924 REDWOOD	RU24	RL 4A 061571	Blackwater River Tribs.	Intermittent
Franklin	Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin	6i	IV PWS, NEW	1 03010101	37.031714	-79.788213 REDWOOD		RL 4A 061419	Foul Ground Creek Lower	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin	6i	IV PWS, NEW		37.031063	-79.778588 REDWOOD	RU24	RL 4A 061547	Blackwater River Tribs.	Intermittent
	UNT to Foul Ground Creek	Roanoke River Basin			IV PWS, NEW		37.031011	-79.778435 REDWOOD			Blackwater River Tribs.	Intermittent
Franklin	UNT to Foul Ground Creek		Roanoke River Subbasin		IV PWS, NEW		37.030974	-79.77819 REDWOOD			Blackwater River Tribs.	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin			IV PWS, NEW		37.030972	-79.778083 REDWOOD	RU24		Blackwater River Tribs.	Intermittent
Franklin	UNT to Foul Ground Creek	Roanoke River Basin	Roanoke River Subbasin		IV PWS, NEW		37.030861	-79.778069 REDWOOD			Blackwater River Tribs.	Intermittent
Franklin	UNT to Foul Ground Creek		Roanoke River Subbasin		IV PWS, NEW		37.038893	-79.774785 REDWOOD			Blackwater River Lower Tributaries	Intermittent
Franklin	UNT to Foul Ground Creek		Roanoke River Subbasin		IV PWS, NEW		37.028392	-79.773359 REDWOOD			Blackwater River Lower Tributaries  Blackwater River Lower Tributaries	Intermittent
Franklin	UNT to Poul Glound Creek	Roanoke River Basin			IV PWS, NEW		37.026392	-79.761958 REDWOOD			Blackwater River Tribs./SML	Intermittent
Franklin	UNT to Poplar Camp Creek	Roanoke River Basin			IV PWS, NEW		37.019526	-79.762002 REDWOOD			Blackwater River Tribs./SML	Intermittent
Franklin	UNT to Poplar Camp Creek		Roanoke River Subbasin		IV PWS, NEW		37.019359	-79.761643 REDWOOD			Blackwater River Tribs./SML	Intermittent
Franklin	Poplar Camp Creek		Roanoke River Subbasin		IV PWS, NEW		37.019359	-79.761643 REDWOOD			Poplar Camp Creek	Perennial
Franklin	UNT to Blackwater River	Roanoke River Basin			IV PWS, NEW		37.009236	-79.754238 REDWOOD	RU24		Blackwater River Lower/Smith Mountain Lake	Intermittent
Franklin	UNT to Blackwater River		Roanoke River Subbasin		IV PWS, NEW		37.005236	-79.747749 MONETA SW			Blackwater River Lower/Smith Mountain Lake	Perennial
i i di ildiii												i ci ci ililiai
Franklin Franklin	UNT to Blackwater River		Roanoke River Subbasin		IV PWS, NEW		37.000529	-79.74276 MONETA SW			Blackwater River Lower/Smith Mountain Lake	Perennial
			Roanoke River Subbasin		IV PWS, NEW		36.995814	-79.735144 PENHOOK			Standiford Creek	Perennial
Franklin	UNT to Jacks Creek	Roanoke River Basin			III III	03010101	36.98943	-79.722366 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin			03010101	36.988273	-79.708199 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		III III	03010101	36.988031	-79.71745 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin			03010101	36.988009	-79.711881 PENHOOK	RU32	RL_4A_061830	Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		III	03010101	36.988008	-79.714922 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		III	03010101	36.987961	-79.702711 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		III	03010101	36.987818	-79.700634 PENHOOK			Pigg River Middle	Perennial
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		==	03010101	36.987719	-79.698901 PENHOOK			Pigg River Middle	Perennial
Franklin	UNT to Jacks Creek	Roanoke River Basin			Ш	03010101	36.987715	-79.698555 PENHOOK			Pigg River Middle	Perennial
	UNT to Jacks Creek		Roanoke River Subbasin		III	03010101	36.985174	-79.692272 PENHOOK	RU32	RL_4A_061844	Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		III	03010101	36.985124	-79.692272 PENHOOK	RU32	RL_4A_061844	Pigg River Tribs.	Intermittent
Franklin	UNT to Jacks Creek		Roanoke River Subbasin		Ш	03010101	36.984846	-79.69187 PENHOOK	RU32	RL_4A_061844	Pigg River Tribs.	Intermittent
Franklin	UNT to Little Jacks Creek	Roanoke River Basin			Ш	03010101	36.982507	-79.687818 PENHOOK	RU32	RL_4A_061863	Pigg River Tribs.	Intermittent
	UNT to Little Jacks Creek	Roanoke River Basin			Ш	03010101	36.98224	-79.6875 PENHOOK			Pigg River Tribs.	Intermittent
	UNT to Little Jacks Creek	Roanoke River Basin	Roanoke River Subbasin		Ш	03010101	36.981971	-79.686901 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	UNT to Little Jacks Creek	Roanoke River Basin			III	03010101	36.979223	-79.684192 PENHOOK	RU32	RL_4A_061723	Pigg River Middle	Intermittent
Franklin	Little Jacks Creek	Roanoke River Basin	Roanoke River Subbasin		III	03010101	36.978529	-79.682186 PENHOOK	RU32	RL_4A_061723	Pigg River Middle	Intermittent
Franklin	UNT to Little Jacks Creek	Roanoke River Basin			III	03010101	36.978025	-79.680682 PENHOOK	RU32	RL_4A_061723	Pigg River Middle	Intermittent
Franklin	UNT to Turkey Creek	Roanoke River Basin			III	03010101	36.976421	-79.677525 PENHOOK	RU32	RL_4A_061852	Pigg River Tribs.	Intermittent
Franklin	UNT to Turkey Creek	Roanoke River Basin			III	03010101	36.974647	-79.674453 PENHOOK			Pigg River Tribs.	Intermittent
Franklin	Turkey Creek	Roanoke River Basin			Ш	03010101	36.973282	-79.673075 PENHOOK	RU32	RL 4A 061771	Pigg River Middle	Perennial
Franklin	UNT to Turkey Creek		Roanoke River Subbasin		Ш	03010101	36.973237	-79.669898 PENHOOK	RU32	RL_4A_061812	Pigg River Tribs.	Intermittent
Franklin	Dinner Creek	Roanoke River Basin		6a	III	03010101	36.972125	-79.662987 PENHOOK	RU32	RL_4A_061768	Pigg River Middle	Intermittent
Franklin	UNT to Dinner Creek		Roanoke River Subbasin		==	03010101	36.972032	-79.662504 PENHOOK	RU32	RL_4A_061768	Pigg River Middle	Intermittent
Franklin	Polecat Creek	Roanoke River Basin			Ш	03010101	36.970904	-79.65737 PENHOOK			Pigg River Middle	Intermittent
Franklin	UNT to Owens Creek	Roanoke River Basin			III	03010101	36.970522	-79.653726 PENHOOK			Pigg River Middle	Intermittent
Franklin	UNT to Owens Creek		Roanoke River Subbasin		==	03010101	36.970133	-79.651328 PENHOOK			Pigg River Middle	Intermittent
Franklin	Owens Creek		Roanoke River Subbasin		Ш	03010101	36.969118	-79.645042 PENHOOK	RU32		Pigg River Middle	Perennial
Franklin	Strawfield Creek	Roanoke River Basin			III	03010101	36.96864	-79.642174 PENHOOK		RL_4A_061968	Pigg River Middle	Perennial
Franklin	UNT to Parrot Branch	Roanoke River Basin	Roanoke River Subbasin	6a	Ξ	03010101	36.967711	-79.63659 PENHOOK	RU32	RL_4A_061969	Pigg River Middle	Perennial
	Parrot Branch		Roanoke River Subbasin		=	03010101	36.967025	-79.630747 PENHOOK			Pigg River Middle	Perennial
Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin			III	03010101	36.965631	-79.605542 SANDY LEVEL	RU36		Pigg River Lower	Perennial
	UNT to Jonnikin Creek	Roanoke River Basin			III	03010101	36.9656	-79.604894 SANDY LEVEL			Pigg River Lower	Perennial
Pittsylvania	Jonnikin Creek		Roanoke River Subbasin		==	03010101	36.965405	-79.59913 SANDY LEVEL			Pigg River Lower	Perennial
	UNT to Jonnikin Creek		Roanoke River Subbasin		III	03010101	36.964763	-79.617043 SANDY LEVEL			Unnamed tributary	Intermittent
Franklin		Roanoke River Basin			=	03010101	36.96443	-79.595691 SANDY LEVEL	RU36		Pigg River Lower	Artificial Path
Franklin Pittsylvania	UNT to Jonnikin Creek		Roanoke River Subbasin	6a	Ш	03010101	36.964407	-79.595841 SANDY LEVEL			Pigg River Lower	Artificial Path
Franklin Pittsylvania Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin					36.96242	-79.5905 SANDY LEVEL		RL_4A_062130		Intermittent
Franklin Pittsylvania Pittsylvania			Roanoke River Subbasin	6a	Ш	03010101						miterimitent
Franklin Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin		6a		03010101 03010101	36.959361	-79.586437 SANDY LEVEL			Pigg RiverTribs.	Intermittent
Franklin Pittsylvania Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek UNT to Jonnikin Creek	Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin	6a 6a 6a	II				RU36	RL_4A_087413		
Franklin Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a	III	03010101 03010101	36.959361 36.957805	-79.586437 SANDY LEVEL	RU36 RU36	RL_4A_087413 RL_4A_087413	Pigg RiverTribs. Pigg RiverTribs.	Intermittent
Franklin Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a 6a	II	03010101 03010101 03010101	36.959361 36.957805 36.95758	-79.586437 SANDY LEVEL -79.583545 SANDY LEVEL -79.583492 SANDY LEVEL	RU36 RU36 RU36	RL_4A_087413 RL_4A_087413 RL_4A_087413	Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs.	Intermittent Intermittent Intermittent
Franklin Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek	Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a 6a 6a		03010101 03010101	36.959361 36.957805	-79.586437 SANDY LEVEL -79.583545 SANDY LEVEL	RU36 RU36 RU36 RU36	RL_4A_087413 RL_4A_087413 RL_4A_087413 RL_4A_087416	Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs.	Intermittent Intermittent
Franklin Pittsylvania	UNT to Jonnikin Creek UNT to Rocky Creek UNT to Rocky Creek	Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a 6a 6a 6a		03010101 03010101 03010101 03010101 03010101	36.959361 36.957805 36.95758 36.952275 36.949615	-79.586437 SANDY LEVEL -79.583545 SANDY LEVEL -79.583492 SANDY LEVEL -79.58046 SANDY LEVEL -79.579553 SANDY LEVEL	RU36 RU36 RU36 RU36 RU36	RL 4A 087413 RL 4A 087413 RL 4A 087413 RL 4A 087416 RL 4A 087397	Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs. Pigg RiverTribs.	Intermittent Intermittent Intermittent Intermittent Intermittent Intermittent
Franklin Pittsylvania	UNT to Jonnikin Creek UNT to Rocky Creek UNT to Rocky Creek UNT to Rocky Creek UNT to Rocky Creek	Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a 6a 6a 6a 6a		03010101 03010101 03010101 03010101 03010101 03010101	36.959361 36.957805 36.95758 36.952275 36.949615 36.944049	-79.586437 SANDY LEVEL -79.583545 SANDY LEVEL -79.583492 SANDY LEVEL -79.58046 SANDY LEVEL -79.579553 SANDY LEVEL -79.571442 SANDY LEVEL	RU36 RU36 RU36 RU36 RU36 RU36	RL 4A 087413 RL 4A 087413 RL 4A 087413 RL 4A 087416 RL 4A 087397 RL 4A 087327	Pigg RiverTribs.	Intermittent Intermittent Intermittent Intermittent Intermittent Intermittent Perennial
Franklin Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania Pittsylvania	UNT to Jonnikin Creek UNT to Rocky Creek UNT to Rocky Creek	Roanoke River Basin Roanoke River Basin	Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin Roanoke River Subbasin	6a 6a 6a 6a 6a 6a 6a 6a		03010101 03010101 03010101 03010101 03010101	36.959361 36.957805 36.95758 36.952275 36.949615	-79.586437 SANDY LEVEL -79.583545 SANDY LEVEL -79.583492 SANDY LEVEL -79.58046 SANDY LEVEL -79.579553 SANDY LEVEL	RU36 RU36 RU36 RU36 RU36 RU36 RU36	RL 4A 087413 RL 4A 087413 RL 4A 087413 RL 4A 087416 RL 4A 087397 RL 4A 087327	Pigg RiverTribs. Pigg River Lower	Intermittent Intermittent Intermittent Intermittent Intermittent Intermittent

County	NHD Stream Name1	Basin Subba	asin	Section	Class	Special Standards	HUC 8	Latitude2	Longitude2 USGS Q		State Watershed No. V	VQS_ID	WQA Water Name	Trout	Stream Type
	Harpen Creek	Roanoke River Basin Roano			Ш		03010101	36.925105	-79.51735 SANDY				Pigg River Lower		Perennial
Pittsylvania	UNT to Harpen Creek				Ш		03010101	36.920737	-79.505898 SANDY				Pigg River Lower		Perennial
	UNT to Harpen Creek	Roanoke River Basin Roano			Ш		03010101	36.917694	-79.496604 PITTSVI				Pigg RiverTribs.		Intermittent
	Harpen Creek	Roanoke River Basin Roano			Ш		03010101	36.916463	-79.492669 PITTSVI				Pigg River Lower		Perennial
	UNT to Harpen Creek	Roanoke River Basin Roano			III		03010101	36.915658	-79.490029 PITTSVI				Pigg RiverTribs.		Intermittent
ittsylvania	UNT to Harpen Creek	Roanoke River Basin Roano					03010101	36.913003	-79.487838 PITTSVI -79.471492 PITTSVI				Pigg RiverTribs.		Intermittent
	UNT to Cherrystone Creek UNT to Cherrystone Creek	Roanoke River Basin Roano Roanoke River Basin Roano					03010105	36.905329 36.905307	-79.471492 PITTSVI	ILLE I			Cherrystone Creek Tributaries Cherrystone Creek Tributaries		Intermittent
	UNT to Cherrystone Creek	Roanoke River Basin Roano					03010105	36.902991	-79.46822 PITTSVI				Cherrystone Creek Tributaries		Intermittent
ittsylvania	UNT to Cherrystone Creek	Roanoke River Basin Roano					03010105	36.901941	-79.466535 PITTSVI				Cherrystone Creek Tributaries		Intermittent
	UNT to Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2d			03010105	36.899437	-79.462685 PITTSVI		RD55 R	L 4Δ 083383	Cherrystone Creek Tributaries		Perennial
	UNT to Cherrystone Creek	Roanoke River Basin Roano				PWS	03010105	36.899411	-79.462483 PITTSVI	ILLE E			Cherrystone Creek Tributaries		Perennial
,	UNT to Cherrystone Creek						03010105	36.899248	-79.462396 PITTSVI				Cherrystone Creek Tributaries		Perennial
Pittsylvania	UNT to Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2d	Ш	PWS	03010105	36.89774	-79.458046 PITTSVI	ILLE F			Cherrystone Creek		Perennial
	UNT to Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2d	Ш		03010105	36.897315	-79.456119 PITTSVI	ILLE F	RD55 R	L_4A_083373	Cherrystone Creek		Perennial
Pittsylvania	UNT to Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2d	≡	PWS	03010105	36.895915	-79.45296 PITTSVI	ILLE F	RD55 R	L_4A_083390	Cherrystone Creek Tributaries		Intermittent
Pittsylvania	UNT to Cherrystone Creek	Roanoke River Basin Roano					03010105	36.895808	-79.45292 PITTSVI	ILLE F	RD55 R		Cherrystone Creek Tributaries		Intermittent
Pittsylvania	Cherrystone Creek						03010105	36.894043	-79.445744 PITTSVI	ILLE F			Cherrystone Creek		Perennial
	UNT to Cherrystone Creek						03010105	36.893727	-79.444763 PITTSVI				Cherrystone Creek		Perennial
Pittsylvania	UNT to Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2d			03010105	36.892751	-79.440053 PITTSVI				Cherrystone Creek Tributaries		Perennial
	UNT to Pole Bridge Branch						03010105	36.891451	-79.433781 PITTSVI		RD55 R	L_4A_083355	Cherrystone Creek Tributaries		Perennial
	UNT to Pole Bridge Branch						03010105	36.886114	-79.430914 PITTSVI				Pole Bridge Branch		Perennial
	Pole Bridge Branch						03010105	36.884444	-79.42822 PITTSVI				Cherrystone Creek Tributaries		Intermittent
	UNT to Pole Bridge Branch			Lu			03010105	36.884284	-79.427914 PITTSVI		RD55 R		Cherrystone Creek Tributaries		Intermittent
ittsylvania	UNT to Pole Bridge Branch			2d			03010105	36.879063	-79.420189 PITTSVI				Cherrystone Creek Tributaries		Perennial
ittsylvania	UNT to Pole Bridge Branch UNT to Pole Bridge Branch	Roanoke River Basin Roano Roanoke River Basin Roano					03010105 03010105	36.877937 36.877416	-79.417992 PITTSVI -79.416255 PITTSVI		RD55 R	L_4A_U83444	Cherrystone Creek Tributaries		Intermittent
											NDE6	L_4A_U83444	Cherrystone Creek Tributaries	_	
ittsylvania ittsylvania	UNT to Mill Creek UNT to Mill Creek		oke River Subbasin oke River Subbasin				03010105 03010105	36.871651 36.871478	-79.404061 CHATHA -79.403907 CHATHA				Whitehorn Creek Tributaries Whitehorn Creek Tributaries		Intermittent
	UNT to Mill Creek						03010105	36.866534	-79.403907 CHATHA				Whitehorn Creek Tributaries  Whitehorn Creek Tributaries	_	Intermittent
	Mill Creek		oke River Subbasin				03010105	36.863513	-79.397914 CHATHA				Whitehorn Creek Tributaries		Intermittent
ittsylvania	Little Cherrystone Creek	Roanoke River Basin Roano			=		03010105	36.851931	-79.386051 CHATHA				Little Cherrystone Creek		Perennial
ittsylvania	UNT to Little Cherrystone Creek		oke River Subbasin		Ш		03010105	36.849394	-79.37778 CHATHA		RD55 R		Little Cherrystone Creek		Perennial
Pittsylvania	UNT to Little Cherrystone Creek		oke River Subbasin		=		03010105	36.843486	-79.369222 SPRING				Unnamed tributary		Perennial
ittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano		2	Ш		03010105	36.841112	-79.366848 SPRING				Unnamed tributary		Perennial
ittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano			Ш		03010105	36.841093	-79.366942 SPRING				Unnamed tributary		Perennial
ittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2	Ш		03010105	36.834501	-79.360244 SPRING	GARDEN F	RD55 R	L_4A_083559	Little Cherrystone Creek		Perennial
ittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano			Ш		03010105	36.833412	-79.359823 SPRING				Unnamed tributary		Perennial
Pittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2	≡		03010105	36.830285	-79.356618 SPRING	GARDEN F			Unnamed tributary		Intermittent
	UNT to Little Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin	2	≡		03010105	36.829823	-79.346016 SPRING	GARDEN F	RD55 R	L_4A_083641	Unnamed tributary		Intermittent
ittsylvania	UNT to Little Cherrystone Creek	Roanoke River Basin Roano	oke River Subbasin		Ш		03010105	36.828993	-79.344442 SPRING		RD55 R	L_4A_083673	Unnamed tributary		Intermittent
	UNT to Little Cherrystone Creek	Roanoke River Basin Roano			Ш		03010105	36.828958	-79.344315 SPRING				Unnamed tributary		Intermittent
,	UNT to Little Cherrystone Creek	Roanoke River Basin Roano			Ш		03010105	36.828831	-79.353849 SPRING				Little Cherrystone Creek		Perennial
	Little Cherrystone Creek	Roanoke River Basin Roano			Ш		03010105	36.828207	-79.349814 SPRING				Little Cherrystone Creek		Perennial
Giles	W-Z11				VI		05050002	37.346591	-80.641713 PEARISE				Little Stony Creek	Yes	Intermittent
Giles	W-Z3				VI		05050002	37.342244	-80.620612 EGGLES		NE74 R	L_09_043164	Little Stony Creek Tributaries	Yes	Intermittent
Giles	W-CD12		River Subbasin	-	V		05050002	37.318644	-80.441717 NEWPO				Sinking Creek Middle	Yes	Artificial Path
Giles	W-MM10		River Subbasin	-	IV	_	05050002	37.298219 37.29667	-80.480617 NEWPO				Sinking Creek Tributaries		Intermittent
Giles	W-RR1b W-IJ46-PEM		River Subbasin oke River Subbasin		IV VI		05050002 03010101	37.296153	-80.494042 NEWPO -80.367508 MCDON	JKI I	NE64 R	L 4A 064391	New River & Sinking Creek Tributaries	Yes	Perennial Intermittent
	W-AD4		oke River Subbasin				03010101	37.286984	-80.330124 MCDON				Roanoke River, North Fork/Bradshaw Creek	res	Intermittent
	W-F9-PFO		oke River Subbasin				03010101	37.258109	-80.285892 MCDON				North Fork Roanoke River Tribs		Intermittent
	W-C12-PEM		oke River Subbasin				03010101	37.257265	-80.281667 MCDON				North Fork Roanoke River Tribs.		Intermittent
	W-C12-7 EW	Roanoke River Basin Roano					03010101	37.257203	-80.281649 MCDON	NALDS MILL	RU07 R		North Fork Roanoke River Tribs.		Intermittent
	W-C11		oke River Subbasin				03010101	37.257107	-80.281351 MCDON				North Fork Roanoke River Tribs.		Intermittent
	W-C6		oke River Subbasin				03010101	37.25586	-80.275715 MCDON				Roanoke River, North Fork/Bradshaw Creek		Intermittent
Vontgomery	W-C5	Roanoke River Basin Roano	oke River Subbasin				03010101	37.255606	-80.274237 MCDON	NALDS MILL			Roanoke River, North Fork/Bradshaw Creek		Intermittent
/lontgomery	W-AB7	Roanoke River Basin Roano				PWS pH-6.5-9.5,	03010101	37.231426	-80.198615 ELLISTO	NC NC			Roanoke River	Yes	Artificial Path
∕lontgomery	W-KL58	Roanoke River Basin Roano		7b			03010101	37.229183	-80.203106 ELLISTO				Roanoke River, South Fork Lower	Yes	Artificial Path
Nontgomery	W-EF5-PFO	Roanoke River Basin Roano					03010101	37.210948	-80.193359 ELLISTO				Roanoke River Tribs.		Intermittent
	W-EF18		oke River Subbasin				03010101	37.179449	-80.140665 ELLISTO				Bottom Creek Upper	Yes	Perennial
oanoke	W-EF17		oke River Subbasin				03010101	37.179402	-80.1406 ELLISTO				Bottom Creek Upper	Yes	Perennial
	W-IJ94-PEM		oke River Subbasin				03010101	37.170092	-80.138294 ELLISTO				Bottom Creek	Yes	Perennial
oanoke	W-IJ96-PEM		oke River Subbasin				03010101	37.169461	-80.130376 ELLISTO				Bottom Creek Tribs.	Yes	Intermittent
	W-IJ95-PSS		oke River Subbasin				03010101	37.169068	-80.138278 ELLISTO				Bottom Creek	Yes	Perennial
	W-IJ102		oke River Subbasin				03010101	37.168289	-80.138375 ELLISTO				Bottom Creek Upper	Yes	Perennial
anoke anoke	W-KL17 W-EF42		oke River Subbasin oke River Subbasin				03010101 03010101	37.160152 37.157611	-80.134774 ELLISTO -80.133722 ELLISTO				Bottom Creek Tribs.  Bottom Creek Tribs.		Intermittent
	W-HS02		oke River Subbasin				03010101	37.157611	-80.133722 ELLISTO				Bottom Creek Tribs. Bottom Creek Tribs.	_	Intermittent
	W-AB6-PEM-2	Roanoke River Basin Roano					03010101	37.156825	-80.131998 ELLISTO				Bottom Creek Tribs.		Intermittent
	W-AB6-PFO-1	Roanoke River Basin Roano			•		03010101	37.156713	-80.131681 ELLISTO				Bottom Creek Tribs.		Intermittent
anoke	W-AB6-PEM-1		oke River Subbasin				03010101	37.15617	-80.131001 ELLISTO				Bottom Creek Tribs.		Intermittent
	W-AB6-PSS	Roanoke River Basin Roano					03010101	37.156034	-80.130603 ELLISTO				Bottom Creek Tribs.		Intermittent
	W-AB5	Roanoke River Basin Roano					03010101	37.15584	-80.130227 ELLISTO				Bottom Creek Tribs.		Intermittent
	W-AB3-PEM-2	Roanoke River Basin Roano			•		03010101	37.155664	-80.129569 ELLISTO				Bottom Creek Tribs.		Intermittent
anoke	W-EF46	Roanoke River Basin Roano	oke River Subbasin				03010101	37.154575	-80.129122 ELLISTO	ON F	RU02 R	L_4A_052515	Bottom Creek Tribs.		Intermittent
	W-KL48-PSS-1	Roanoke River Basin Roano					03010101	37.152292	-80.130022 ELLISTO				Bottom Creek Tributaries	Yes	Perennial
	W-KL48-PEM		oke River Subbasin	7			03010101	37.151965	-80.130049 ELLISTO		RU02 R	L_4A_052412	Bottom Creek Tributaries	Yes	Perennial
oanoke	W-KL48-PSS-2	Roanoke River Basin Roano		7			03010101	37.150926	-80.131271 ELLISTO				Bottom Creek Tributaries	Yes	Perennial
oanoke	W-KL50	Roanoke River Basin Roano	oke River Subbasin	7			03010101	37.150728	-80.131537 ELLISTO	ON F			Bottom Creek Tributaries	Yes	Perennial
oanoke	W-KL49	Roanoke River Basin Roano	oke River Subbasin	7	V	pH-6.5-9.5,	03010101	37.150297	-80.132193 ELLISTO		RU02 R	L_4A_052412	Bottom Creek Tributaries	Yes	Perennial
Janoke				I			03010101	37.150006	-80.132403 ELLISTO	ON E	RU02 R	I 4A 052412	Bottom Creek Tributaries	Yes	Perennial
oanoke	W-KL51-PEM W-KL51-PSS	Roanoke River Basin Roano	oke River Subbasin	7		pH-6.5-9.5,	03010101	37.149975			1002	L_4A_032412	Bottom creek inbutanes	163	

County Roanoke		Basin	Subbasin Roanoke River Subbasin	Section Cl	lass Special Standards pH-6.5-9.5.	03010101 Latitude2	37.148328	ngitude2 -80.133901		State Watershed No. RU02		WQA Water Name Bottom Creek Tributaries		Stream Type Perennial
Roanoke			Roanoke River Subbasin	7 V		03010101	37.142977	-80.138322		RU02		Bottom Creek Tribs.	Yes	Intermittent
Roanoke			Roanoke River Subbasin	7 V		03010101	37.138922	-80.139845		RU02		Bottom Creek Tributaries	Yes	Perennial
Roanoke			Roanoke River Subbasin	7 IV		03010101	37.136601	-80.128216		RU02		Bottom Creek Tributaries  Bottom Creek Tribs.	res	Intermittent
Roanoke			Roanoke River Subbasin	7 IV		03010101	37.136466	-80.128238		RU02		Bottom Creek Tribs.		Intermittent
Roanoke			Roanoke River Subbasin	7 IV	p 0.0 0.0)	03010101	37.135529	-80.134044		RU02		Bottom Creek Tributaries		Intermittent
Roanoke	W-Y2		Roanoke River Subbasin	7 IV		03010101	37.134284	-80.137448		RU02		Bottom Creek Tribs.		Intermittent
Roanoke	W-IJ10		Roanoke River Subbasin	7 IV		03010101	37.132561	-80.131744		RU02		Bottom Creek Tributaries		Intermittent
Roanoke			Roanoke River Subbasin	7 IV		03010101	37.13247	-80.131638		RU02		Bottom Creek Tributaries		Intermittent
Roanoke			Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.132456	-80.131463	ELLISTON	RU02		Bottom Creek Tributaries		Intermittent
Roanoke	W-B25-PEM-4		Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.128942	-80.133774	ELLISTON	RU02		Bottom Creek Tribs.		Intermittent
Roanoke	W-B25-PEM-1	Roanoke River Basin	Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.128645	-80.133283	ELLISTON	RU02	RL_4A_052449	Bottom Creek Tribs.		Intermittent
Roanoke	W-B24-PSS	Roanoke River Basin	Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.12854	-80.130794	ELLISTON	RU02	RL_4A_052330	Bottom Creek Tributaries		Intermittent
Roanoke		Roanoke River Basin	Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.12853	-80.13106		RU02		Bottom Creek Tributaries		Intermittent
Roanoke	W-B25-PSS-2	Roanoke River Basin	Roanoke River Subbasin	7 IV	/ pH-6.5-9.5,	03010101	37.128527	-80.132335		RU02	RL_4A_052330	Bottom Creek Tributaries		Intermittent
Roanoke	W-B25-PEM-1	Roanoke River Basin	Roanoke River Subbasin	7 IV		03010101	37.128449	-80.132802		RU02		Bottom Creek Tribs.		Intermittent
Roanoke			Roanoke River Subbasin	7 IV		03010101	37.128436	-80.132646		RU02	RL_4A_052449	Bottom Creek Tribs.		Intermittent
Franklin			Roanoke River Subbasin	6a VI		03010101	37.125329		BENT MOUNTAIN			S.F. Blackwater River Tribs.	Yes	Intermittent
Franklin	W-RR4		Roanoke River Subbasin	6a VI		03010101	37.125117	-80.11353		RU21		S.F. Blackwater River Tribs.	Yes	Intermittent
Franklin	W-RR3		Roanoke River Subbasin	6a VI		03010101	37.124214	-80.114746		RU21		S.F. Blackwater River Tribs.	Yes	Intermittent
Franklin			Roanoke River Subbasin	6a VI		03010101	37.123851	-80.115802		RU21		Upper Blackwater River	Yes	Intermittent
Franklin			Roanoke River Subbasin	6a III		03010101	37.121559	-80.08575		RU20		N.F. Blackwater River Tribs.		Intermittent
Franklin			Roanoke River Subbasin	6a VI		03010101	37.117734	-80.095992		RU21		Upper Blackwater River	Yes	Intermittent
Franklin Franklin	W-IJ1 W-IJ2-PEM		Roanoke River Subbasin Roanoke River Subbasin	6a III		03010101 03010101	37.092927 37.092555	-80.027568 ( -80.027314 (		RU20 RU20	KL_4A_059931	Upper Blackwater River	+	Intermittent
Franklin Franklin			Roanoke River Subbasin Roanoke River Subbasin	6a III		03010101	37.092555 37.084557			RU20 RU22	RL_4A_059931 RL 4A 059534	Upper Blackwater River	+	Intermittent Perennial
Franklin Franklin	W-E7 W-F8			od III		03010101	37.084557 37.082843						+	
Franklin Franklin	W-E8 W-EF51		Roanoke River Subbasin	od III			37.082843 37.064781	-79.9461 I -79.87446 I		RU22	RL_4A_059497		1-	Perennial
Franklin			Roanoke River Subbasin Roanoke River Subbasin	6a III		03010101 03010101	37.059608	-79.840707 I		RU22 RU23	RL_4A_059633		+-	Intermittent
Franklin			Roanoke River Subbasin	6a III		03010101	37.059608			RU23		Maggodee Creek Tributaries Little Creek Middle	1-	Perennial
Franklin	W-CD5		Roanoke River Subbasin	6a III		03010101	37.057586			RU22		Little Creek Middle	1-	Perennial Perennial
Franklin	W-EF48		Roanoke River Subbasin	6a III		03010101	37.052142			RU22		Blackwater River Tribs.		Intermittent
Franklin				6f IV		03010101	37.047767			RU22	PI 4A 059503	Blackwater River Tribs.		Intermittent
Franklin			Roanoke River Subbasin	6i IV		03010101	37.031961	-79.788589		RU24		Foul Ground Creek Lower		Intermittent
Franklin	W-A12-PFO		Roanoke River Subbasin	6i IV		03010101	37.031754	-79.788099		RU24		Foul Ground Creek Lower		Intermittent
Franklin			Roanoke River Subbasin	6i IV		03010101	37.031643	-79.788111		RU24		Foul Ground Creek Lower		Intermittent
Franklin			Roanoke River Subbasin	6i IV		03010101	37.028394	-79.773243		RU24	RI 44 061367	Blackwater River Lower Tributaries		Intermittent
Franklin			Roanoke River Subbasin	6a III		03010101	36.98939	-79.72209		RU32		Pigg River Tribs.		Intermittent
Franklin			Roanoke River Subbasin	6a III		03010101	36,988077	-79,702803		RU32		Pigg River Tribs.		Intermittent
Franklin			Roanoke River Subbasin	6a III		03010101	36.988073	-79.714967		RU32		Pigg River Tribs.		Intermittent
Franklin	W-H14	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.988069	-79.711841	PENHOOK	RU32		Pigg River Tribs.		Intermittent
Franklin	W-A8	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.987947	-79,700844		RU32	RL 4A 061740	Pigg River Middle		Perennial
Franklin	W-H15		Roanoke River Subbasin	6a III		03010101	36.987938	-79.714829		RU32		Pigg River Tribs.		Intermittent
Franklin	W-H9	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.978536	-79.682057	PENHOOK	RU32		Pigg River Middle		Intermittent
Franklin	W-H6	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.972189	-79.663042	PENHOOK	RU32	RL_4A_061768	Pigg River Middle		Intermittent
Pittsylvania	W-D3	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.965318	-79.59876	SANDY LEVEL	RU36		Pigg River Lower		Perennial
Franklin	W-MM17	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.964731	-79.617067	SANDY LEVEL	RU36	RL_4A_062120	Unnamed tributary		Intermittent
Pittsylvania	W-B5	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.959293			RU36	RL_4A_087413	Pigg RiverTribs.		Intermittent
				6a III		03010101	36.957884					Pigg RiverTribs.		Intermittent
Pittsylvania	W-C1	Roanoke River Basin	Roanoke River Subbasin	6a III		03010101	36.929954			RU36	RL_4A_087515			Perennial
				6a III		03010101	36.924983			RU36		Pigg River Lower		Perennial
Pittsylvania	W-B3		Roanoke River Subbasin	6a III		03010101	36.916508	-79.49236		RU36		Pigg River Lower		Perennial
Pittsylvania				2d III		03010105	36.905418	-79.471566		RD55		Cherrystone Creek Tributaries		Artificial Path
				2d III		03010105	36.903012	-79.468192		RD55		Cherrystone Creek Tributaries		Intermittent
				2d III		03010105	36.894087	-79.44611		RD55		Cherrystone Creek		Perennial
Pittsylvania	W-MM8-PEM			2d III		03010105	36.894034	-79.445486		RD55		Cherrystone Creek		Perennial
			Hodifold Hiver Subbusin	2d III		03010105	36.89393	-79.445461		RD55		Cherrystone Creek	-1	Perennial
,	.,			2d III		03010105 03010105	36.884674	-79.428607 F		RD55		Pole Bridge Branch	+	Perennial Intermittent
Pittsylvania Pittsylvania	W-Q1 W-G2		Roanoke River Subbasin Roanoke River Subbasin	2   111		03010105	36.851816	-79.427305 F		RD55 RD55		Cherrystone Creek Tributaries Little Cherrystone Creek	+	Perennial
			Roanoke River Subbasin	2		03010105	36.831816			RD55		Little Cherrystone Creek Little Cherrystone Creek	+-	Perennial
			Roanoke River Subbasin	2 111		03010105	36.835004			RD58		Unnamed tributary	+	Intermittent
Pittsylvania			Roanoke River Subbasin	2 111		03010105	36.834817			RD55		Little Cherrystone Creek	+	Perennial
	W-II21		Roanoke River Subbasin	2 111		03010105	36.834623			RD58		Unnamed tributary	+	Intermittent
			Roanoke River Subbasin	2 111		03010105	36.833741	-79.360081				Unnamed tributary	1 -	Perennial
			Roanoke River Subbasin	2 III		03010105	36.830361	-79,356631		RD55		Unnamed tributary		Intermittent
			Roanoke River Subbasin	2 111		03010105	36.82778			RD55		Little Cherrystone Creek	1 -	Perennial
Pittsylvania			Roanoke River Subbasin	2 III		03010105	36.827748			RD55		Little Cherrystone Creek		Perennial
Montgomery						03010101	37.268174	-80.316468				·		
Franklin	W-IJ6					03010101	37.089156	-80.005036						
Franklin	W-II8					03010101	37.091357	-79.992006						
Franklin	W-GH2					03010101	37.092404	-79.983182						
Montgomery	UNT to North Fork RoanokeRiver					03010101	37.267002	-80.312898						
Montgomery	UNT to North Fork RoanokeRiver					03010101	37.264882	-80.307302						
	UNT to North Fork RoanokeRiver					03010101	37.264858	-80.307151						
Franklin	Green Creek					03010101	37.127733	-80.116787						
Franklin	UNT to Green Creek					03010101	37.127077	-80.111387						
Franklin	UNT to Green Creek					03010101	37.126962	-80.111052						
	UNT to North Fork BlackwaterRiver					03010101	37.115679	-80.0603						
Franklin						03010101	37.106614	-80.054219						
Franklin	UNT to North Fork BlackwaterRiver												_	
Franklin Franklin	UNT to North Fork BlackwaterRiver					03010101	37.092555	-80.027314						
Franklin								-80.027314 -80.024366 -80.005026						

County	NHD Stream Name1	Basin	Subbasin	Section	Class 5	Special Standards	HUC 8	Latitude2	Longitude2	USGS Quad	State Watershed No.	WQS ID	WQA Water Name	Trout	Stream Type
Franklin	UNT to Little Creek						03010101	37.090361	-79.99635	4		· -			
Franklin	UNT to Little Creek						03010101	37.091413	-79.99394	4					
Franklin	UNT to Little Creek						03010101	37.091382	-79.9906	2					
Franklin	UNT to Little Creek						03010101	37.091354	-79.99201	3					
Franklin	UNT to Little Creek						03010101	37.092397	-79.98322	7					
Franklin	UNT to Little Creek						03010101	37.091608	-79.98783	9					
Franklin	UNT to Little Creek						03010101	37.091564	-79.98805	1					
Franklin	UNT to Little Creek						03010101	37.092697	-79.97840	2					
Franklin	UNT to Teels Creek						03010101	37.090153	-79.95393	6					
Franklin	UNT to Teels Creek						03010101	37.074664	-79.94112	3					
Franklin	UNT to Teels Creek						03010101	37.074636	-79.94133	6					
Franklin	UNT to Teels Creek						03010101	37.06061	-79.92117	9					
Franklin	UNT to Blackwater River						03010101	37.005496	-79.75265	5					
Note: Gray	scale rows indicate timber mat crossi	ngs, and one additio	nal temporary workspace (/	ATWS) co	mplet	ed under NWP-1	2								