

1.0 INTRODUCTION

In accordance with the Natural Gas Act (NGA, Title 15 United States Code [U.S.C.] § 717), the Federal Energy Regulatory Commission (FERC or Commission) is responsible for deciding whether to authorize the construction and operation of interstate natural gas transmission facilities. The National Environmental Policy Act (NEPA, 42 U.S.C. § 4321 et seq.) requires that the Commission consider the environmental impacts of a proposed project prior to making a decision. The Commission's natural gas program's environmental staff¹ has prepared this draft Environmental Impact Statement (EIS) so that the FERC can comply with NEPA, and to assess the potential environmental impacts that could result from the construction and operation of two separate, but related, projects. One project is a proposal from Mountain Valley Pipeline, LLC (Mountain Valley)² in Docket No. CP16-10-000; while the other project is a proposal from Equitrans, L.P. (Equitrans)³ in Docket No. CP16-13-000. Throughout this EIS these two companies are collectively referred to as the Applicants.

On October 23, 2015, Mountain Valley filed its formal application with the FERC in Docket No. CP16-10-000, pursuant to section 7(c) of the NGA. Mountain Valley is seeking a Certificate of Public Convenience and Necessity (Certificate) from the Commission authorizing the proposed Mountain Valley Project (MVP), with facilities located in the State of West Virginia and the Commonwealth of Virginia. The MVP would involve constructing and operating about 301 miles of 42-inch-diameter pipeline; 3 compressor stations totaling about 171,600 International Organization for Standardization (ISO) horsepower (hp); 4 meter and regulation (M&R) stations; 5 pig⁴ launchers and receivers; and 36 mainline block valves (MLV). Mountain Valley is currently proposing two taps for the MVP: one tap to serve the Roanoke Gas Company, LLC (Roanoke Gas) and one tap at the Webster Interconnect. The MVP includes four interconnections or tie-ins with facilities operated by Equitrans, Columbia Gas Transmission LLC (Columbia),⁵ and Transcontinental Gas Pipe Line Company LLC (Transco). The MVP facilities would be designed to transport about 2.0 million dekatherms per day (Dth/d, equivalent to about 2.0 billion cubic feet per day [Bcf/d]) of natural gas.

Mountain Valley also requested that the Commission issue it a Blanket Certificate to allow for the construction, operation, and abandonment of certain eligible unspecified future facilities and related services under the Commission's regulations at Subpart F of Title 18 Code of Federal Regulations (CFR) Part 157, and a Blanket Certificate to allow for open access transportation services and pre-granted abandonment approval under Subpart G of Part 284.

¹ Commission staff was assisted in the preparation of this EIS by a third party environmental contractor, Cardno.

² Mountain Valley is a joint venture between affiliates of EQT Midstream Partners, LP; NextEra Energy US Gas Assets, LLC; WGL Midstream, Inc.; Vega Energy Midstream MVP, LLC; RGC Midstream, LLC; and Con Edison Gas Midstream, LLC. MVP facilities would be operated by an affiliate of the EQT Corporation.

³ Equitrans is a limited partnership, with about 97.25 percent owned by Equitrans Investments, LLC and 2.75 percent owned by Equitrans Services, LLC, both subsidiaries of EQT Midstream Partners LP.

⁴ A "pig" is a device used to clean or inspect the interior of a pipeline.

⁵ Columbia Gas Transmission LLC is an affiliate of the Columbia Pipeline Group. In this EIS, all of the Columbia Pipeline Group affiliates are referred to as "Columbia."

Mountain Valley would have to document minor future actions performed under the Blanket Certificate program in either annual reports or as Prior Notice applications, subject to our⁶ environmental review in accordance with the FERC's regulations at Part 157.206.

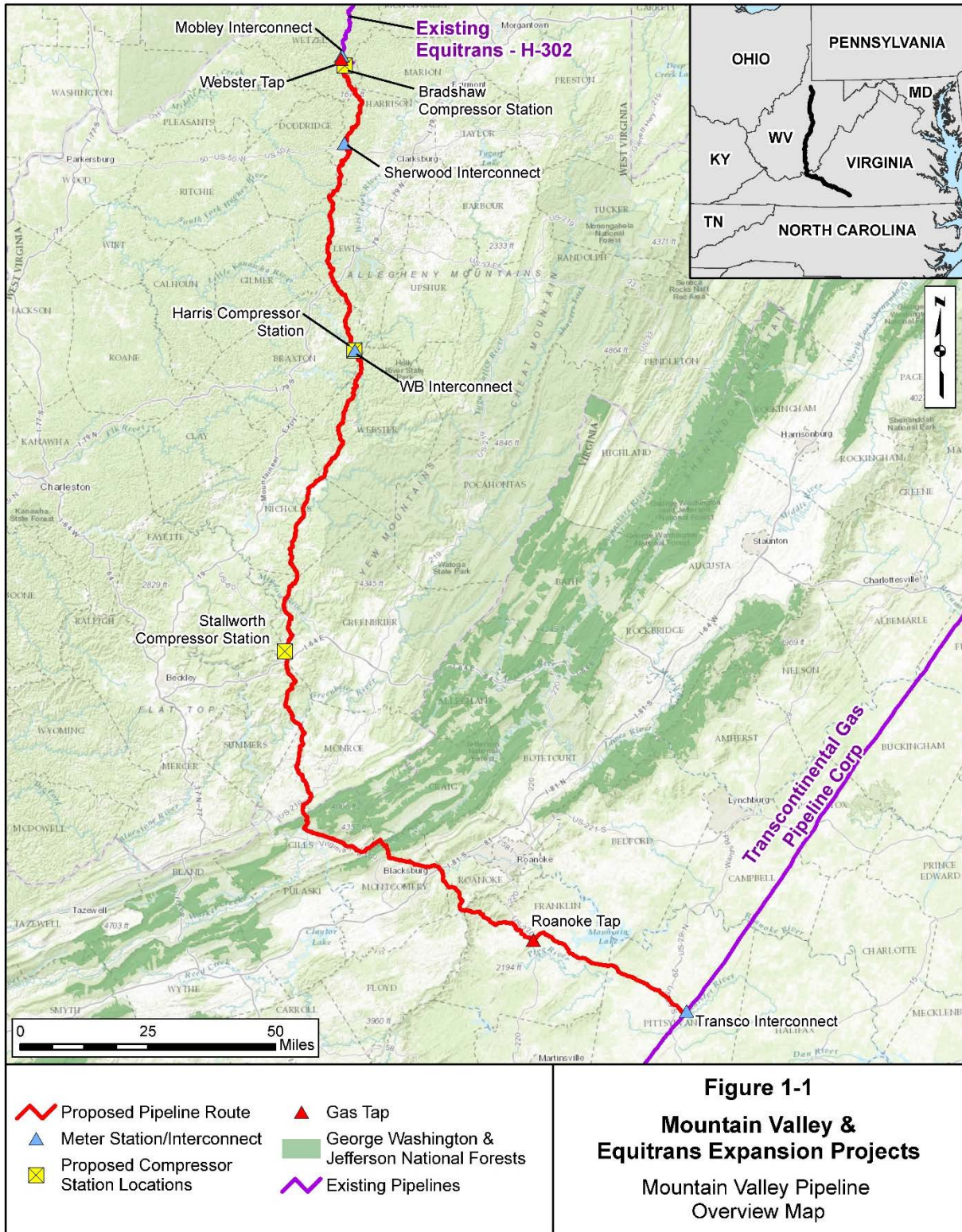
On October 27, 2015, Equitrans filed its formal application with the FERC in Docket No. CP16-13-000, pursuant to Sections 7(b) and (c) of the NGA. Equitrans is seeking a Certificate authorizing the proposed Equitrans Expansion Project (EEP), with facilities located in the Commonwealth of Pennsylvania and the State of West Virginia. The EEP would involve construction and operation of a total of about 8 miles of various diameter pipelines; a new 31,300 nominal hp compressor station; and 4 pig launcher and receiver sites. There would be four tap locations and one interconnection. The EEP facilities would transport up to 400,000 Dth/d (about 0.4 Bcf/d) of contracted firm capacity of natural gas. In addition, Equitrans proposes as part of the EEP to abandon, by dismantlement and removal, the existing 4,800 hp Pratt Compressor Station. The EEP would connect with the MVP at the Webster Interconnect and Mobley Tap in Wetzel County, West Virginia. Therefore, we are conducting an environmental analysis of both projects combined in this single comprehensive EIS, as they are related and connected actions.

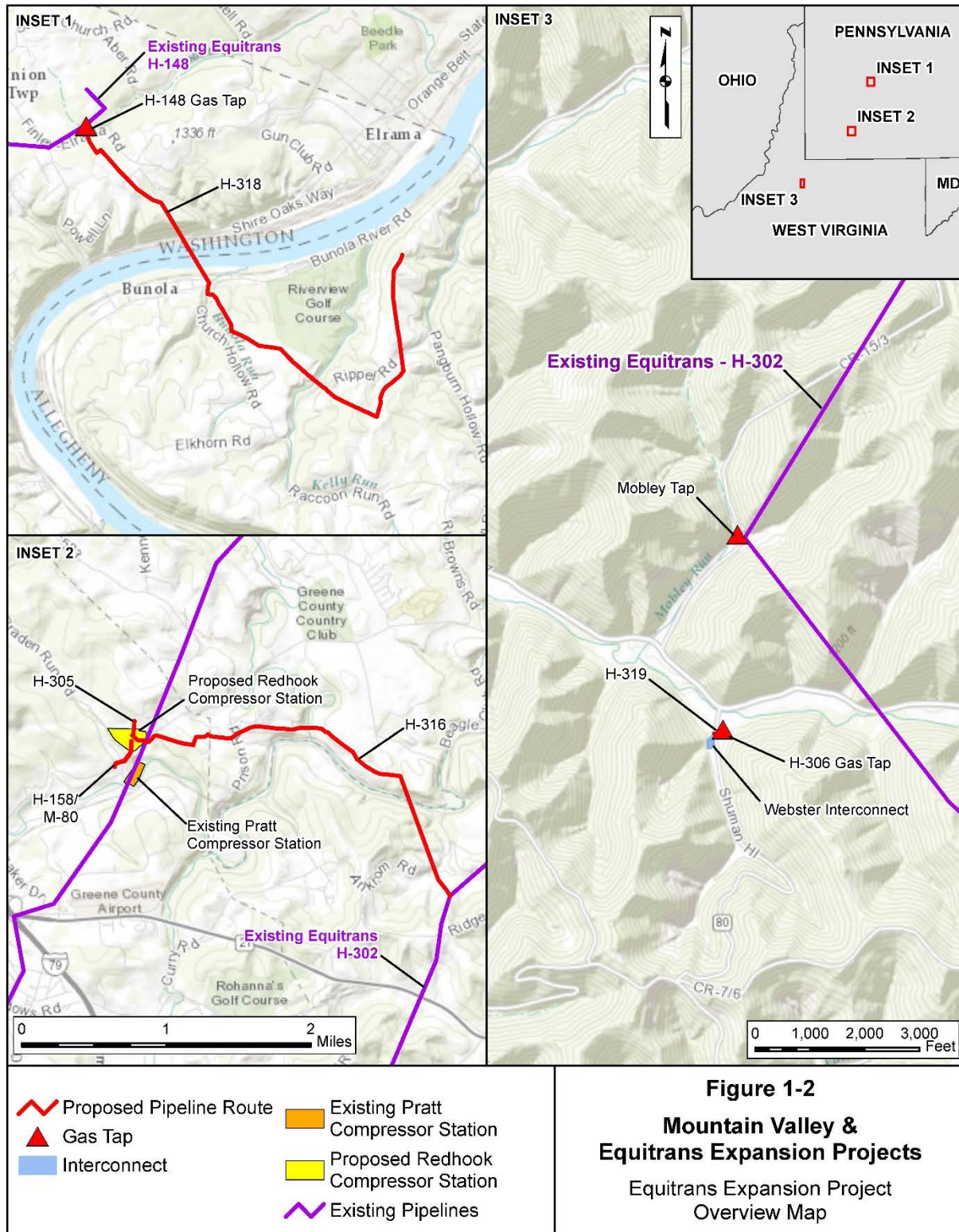
A detailed description of both projects is presented in section 2.0 of this EIS. Figures 1-1 and 1-2 provide overview maps of the MVP and the EEP, respectively.

1.1 BACKGROUND AND THE PRE-FILING REVIEW PROCESS

The Energy Policy Act of 2005 (EPAAct) details the voluntary process by which FERC-jurisdictional companies seeking authority under Section 7 of the NGA can participate in the FERC's pre-filing environmental review process. Procedures for our pre-filing environmental review process are outlined in the FERC regulations at 18 CFR 157.21. The purpose of pre-filing is to encourage the early involvement of stakeholders, facilitate interagency cooperation, and identify and attempt to resolve environmental issues, including facility locations and alternatives, before the filing of a formal application with the Commission.

⁶ The pronouns "we," "us," and "our" refer to the environmental staff within the FERC's Office of Energy Projects, Division of Gas, Environment, and Engineering.





1.1.1 Mountain Valley Project

On October 27, 2014, Mountain Valley filed a request to enter into the Commission's pre-filing environmental process for the MVP. The FERC granted Mountain Valley's request on October 31, 2014, and established pre-filing Docket No. PF15-3-000. At that time we selected Cardno as our third-party environmental contractor to assist us in the preparation of this EIS.⁷ Cardno staff also attended open houses, public meetings, reviewed Resource Reports, and drafted environmental information request (EIR) questions.

As part of the pre-filing process, Mountain Valley initially hosted 14 public open house meetings at various locations in West Virginia and Virginia between December 2014 and January 2015. The purpose of the open house meetings was to inform the public about the MVP, and for company representatives to answer questions about the location of planned facilities. The FERC staff participated in the open house meetings and provided information about our environmental review process. About 800 people attended those 14 open house meetings (see table 1.1-1).

TABLE 1.1-1	
Open House Locations for the Mountain Valley Project	
Date	Location
December 15, 2014	Hampton Inn Gretna/Alta Vista/Chatham; Gretna / VA
December 16, 2014	Harvester Performance Center; Rocky Mount / VA
December 17, 2014	Salem Civic Center; Salem / VA
December 18, 2014	Days Inn Blacksburg; Blacksburg / VA
January 12, 2015	Pearisburg Community Center; Pearisburg / VA
January 13, 2015	Lindside United Methodist Church; Lindside / WV
January 14, 2015	Summers County Courthouse; Hinton / WV
January 15, 2015	Rupert Community Center; Rupert / WV
January 20, 2015	Summersville Arena and Conference Center; Summersville / WV
January 21, 2015	Webster Springs Municipal Building; Webster Springs / WV
January 22, 2015	Burnsville Community Center; Burnsville / WV
January 26, 2015	Plantation Inn and Suites; Jane Lew / WV
January 27, 2015	Progressive Women's Association; Clarksburg / WV
January 28, 2015	Jacksonburg Fire Department; Jacksonburg / WV
April 6, 2015	Union Church of God; Union / WV
April 7, 2015	Craig County High School; New Castle / VA

⁷ Third-party contractors are selected by Commission staff and funded by project applicants. Third-party contractors work solely under the direction of the FERC staff, who directs the scope, content, quality, and schedule of the contractor's work. The FERC staff independently evaluates the results of the third-party contractor's work, and the Commission, through its staff, bears ultimate responsibility for full compliance with the requirements of NEPA.

On February 18, 2015, Mountain Valley filed several revisions to its planned pipeline routing. Accordingly, Mountain Valley held two additional open house meetings in April 2015 (see table 1.1-1) to inform the public and answer questions regarding these newly developed routes; about 200 people attended. The FERC staff also participated in these two open house meetings.

On February 27, 2015, we sent letters to various federal and state resource agencies that might have an interest in cooperating in the production of the EIS for the MVP.⁸ On April 17, 2015, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Mountain Valley Pipeline Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI). The NOI was published in the *Federal Register* and sent to the parties on our environmental mailing list, which included federal and state resource agencies; elected officials; environmental groups and non-governmental organizations (NGO); Native Americans and Indian tribes; potentially affected landowners; local libraries and newspapers; and other stakeholders who had indicated an interest in the MVP. The NOI also announced the date, time, and location of six public scoping meetings sponsored by the FERC in the project area (see the Public Review section 1.4 below).

The NOI contained a paragraph requesting agencies with jurisdiction or expertise to cooperate with us in the preparation of the EIS. The United States (U.S.) Department of Agriculture (USDA) Forest Service (FS), Jefferson National Forest; U.S. Army Corps of Engineers (COE), Huntington and Norfolk Districts; U.S. Department of the Interior (USDOI) Bureau of Land Management (BLM); U.S. Environmental Protection Agency (EPA), Region 3; Pipeline and Hazardous Materials Safety Administration (PHMSA) within the U.S. Department of Transportation (DOT); West Virginia Department of Environmental Protection (WVDEP); and West Virginia Division of Natural Resources (WVDNR) all agreed to be cooperating agencies. See section 1.3.2 below for details on cooperating agency roles and responsibilities.

During pre-filing, Mountain Valley filed draft environmental Resource Reports to meet the requirements of 18 CFR 380.12. Mountain Valley filed first drafts of Resource Reports 1 (Project Description) and 10 (Summary of Alternatives) on December 1, 2014. We issued an EIR for those first draft reports on March 13, 2015. Mountain Valley filed drafts of Resource Reports 2 through 9 and 12 in rolling submittals between March 27 and May 22, 2015. Mountain Valley filed second drafts of Resource Reports 1 and 10 on March 27, 2015 and April 14, 2015, respectively. We issued another EIR for those draft reports on August 11, 2015. Mountain Valley addressed many of our EIR questions in the revised Resource Reports attached to its formal application filed with the FERC on October 23, 2015.

⁸ The FERC sent letters to the Jefferson National Forest in Roanoke, Virginia; the U.S. Army Corps of Engineers District Officers in Huntington, West Virginia, and Norfolk, Virginia; Region 3 of the U.S. Environmental Protection Agency in Philadelphia, Pennsylvania; the Appalachian Trail Park Office of the National Park Service in Harpers Ferry, West Virginia; the Virginia and West Virginia Field Offices of the U.S. Fish and Wildlife Service; the Eastern Office of Pipeline and Hazardous Materials Safety Administration of the U.S. Department of Transportation; the West Virginia Department of Environmental Protection; the West Virginia Division of Natural Resources; the Virginia Department of Game and Inland Fisheries; and the Virginia Department of Environmental Quality, requesting their participation as cooperating agencies.

1.1.2 Equitrans Expansion Project

Equitrans requested to use our pre-filing review process on April 1, 2015. The FERC accepted that request on April 9, 2015, and assigned the EEP pre-filing Docket No. PF15-22-000. We stated that the analysis of the EEP would be included in the EIS for the MVP, and indicated that Cardno would also serve as our third-party environmental contractor for the EEP.

On May 20, 2015 and May 21, 2015, Equitrans hosted two open house meetings for its planned project.⁹ Cardno staff, representing the FERC, participated in the EEP open house meetings. An estimated 40 people attended these two meetings.

On August 11, 2015, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Equitrans Expansion Project, and Request for Comments on Environmental Issues* and opened a scoping period to solicit comments and environmental concerns regarding Equitrans' planned project. This scoping period ended on September 14, 2015.

Equitrans filed its first draft Resource Reports 1 and 10 on May 15, 2015. The FERC issued an EIR for these first draft reports on July 2, 2015. Equitrans filed all other draft Resource Reports, including second drafts of Resource Reports 1 and 10, on July 10, 24, 27, and 31, 2015. The FERC issued a second EIR for the EEP on September 28, 2015. Equitrans addressed many of our EIR questions in the Resource Reports attached to its formal application filed with the FERC on October 27, 2015.

1.2 PURPOSE AND NEED OF THE PROJECTS

The Council on Environmental Quality's (CEQ) regulations for implementing NEPA at 40 CFR 1502.1 recommends that an EIS should briefly address the underlying purpose and need for a project. In general, as described by the Applicants, the purpose of both the MVP and the EEP is to transport natural gas produced in the Appalachian Basin to markets in the Northeast, Mid-Atlantic, and Southeastern United States. Specifically, the MVP would deliver the identified gas volumes (2 Bcf/d) to five contracted shippers via a pooling point at Transco Station 165 in Pittsylvania County, Virginia; while the EEP would deliver contracted volumes of 0.4 Bcf/d (with potential for an additional 0.2 Bcf/d) to various end users via a connection with the MVP in Wetzel County, West Virginia. Further details are presented below.

During scoping, we received comments asserting that the real "secret" purpose of the MVP is to export natural gas overseas as liquefied natural gas (LNG).¹⁰ As explained by the FERC staff at the public scoping meetings, there is no truth to that rumor. Mountain Valley clearly stated in its application that it did not design its facilities to transport natural gas to an

⁹ Equitrans held two open house meetings at the Forward Township Municipal Office on May 20, 2015 and at the Jefferson Volunteer Fire Company on May 21, 2015.

¹⁰ See, for example, the written comments of Paul Washburn dated November 9, 2014 (accession number 20141110-5077) and Carl Zipper dated May 3, 2015 (accession number 20150504-5046), and the oral comments of Sidney Johnson and Barbara Rea at the public scoping meeting held at Lindsie, West Virginia on May 4, 2015 (accession number 20150504-4003).

LNG export terminal. The nearest LNG export terminal to the terminus of the MVP pipeline at the inland Transco Station 165 would be the existing Cove Point LNG terminal on the Chesapeake Bay in Calvert County, Maryland about 190 miles away. There is no direct connection from the Transco Station 165 to the Cove Point terminal. Mountain Valley stated that it does not intend to seek permission to export natural gas overseas as LNG from either the U.S. Department of Energy or the FERC.

1.2.1 Mountain Valley Project

In its formal application with the FERC, Mountain Valley explained that the Mid-Atlantic and Southeastern United States has been mostly supplied with natural gas from the Gulf Coast. Recently, Gulf Coast supplies have been declining, while Mid-Atlantic and Southeastern market demands have been growing. In the Southeast, many electric generating utilities are switching from a fuel source of coal to natural gas (EIA, 2015). In addition, the population of the East Coast is expected to rise in the future. At the same time, natural gas production from shale formations in the Appalachian Basin has been increasing; from 2 Bcf/d in 2010 to 15 Bcf/d in 2014. According to Mountain Valley, the MVP would alleviate some of the constraints on this natural gas production by adding infrastructure to transport lower-priced natural gas from the Appalachian Basin to industrial users and power generators in the Mid-Atlantic and Southeastern United States, as well as to local distribution companies (LDC). The terminus for the MVP pipeline at Transco Station 165 is the existing pooling point for Zone 5 on Transco's system and a gas trading hub for the Mid-Atlantic market. Along its route, the MVP pipeline would also be tapped to supply natural gas to Roanoke Gas, an LDC serving southwestern Virginia and a partner in the MVP.

1.2.2 Equitrans Expansion Project

According to Equitrans, the EEP would provide additional volumes of firm capacity of natural gas to be transported north-south on its existing system. The creation of expansion capacity on Equitrans' system would allow shippers to transport natural gas produced in the Appalachian Basin to markets in the Northeast, Mid-Atlantic, and Southeastern United States, mainly through an interconnection with the MVP. However, the EEP would also interconnect with the existing systems of Texas Eastern Transmission, LP (Texas Eastern); Dominion Transmission, Inc. (Dominion); and Columbia. End-users could include LDCs, industry, and electric power generators. Equitrans stated that the EEP would increase system reliability, efficiency, and operational flexibility for its customers.

1.2.3 Project Need

During scoping, we received comments questioning the need for the MVP on the grounds that it would not directly benefit the citizens of West Virginia and Virginia, and stating that pipeline construction and operation would be a burden on affected landowners.¹¹ Some

¹¹ See, for examples, the March 6, 2015 written comment of Beth Covington (accession number 20150306-0027), and the oral statements by Virginia Wise at the May 5, 2015 public meeting in Elliston, Virginia (accession number 20150520-4002) and Sandy Arthur at the public meeting in Chatham, Virginia (accession number 20150611-4003).

individuals suggested that there is no need for additional volumes of natural gas in the region, and advocated for increased development of renewable resources to replace the MVP.¹² In this EIS, we partly address those comments in either the Alternatives section (see section 3) or in the Socioeconomics section (see section 4.9). Above, we note that in fact the MVP would provide additional volumes of natural gas to local consumers, as Mountain Valley would have a tap for Roanoke Gas, an LDC serving communities in southwest Virginia. However, this EIS is not a decision document, and it does not address in detail the need or public benefits of either the MVP or the EEP. The Commission will more fully explain its opinions on project benefits and need in its Orders for the MVP and the EEP.

Under Section 7 of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate to construct and operate them. The Commission bases its decisions on technical competence, financing, rates, market demand, gas supply, environmental impact, long-term feasibility, and other issues concerning a proposed project. The Commission has developed a “Certificate Policy Statement”¹³ that established criteria for determining whether there is a need for a proposed project and whether the proposed project would serve the public interest.

1.2.3.1 Mountain Valley Project

From June 12 to July 10, 2014, Mountain Valley held a non-binding open season for firm transportation capacity on its planned pipeline. A binding open season was held from September 2 to October 21, 2014, after which Mountain Valley executed long-term precedent agreements with four shippers for 2 Bcf/d of natural gas firm transportation capacity. On January 27, 2016, Mountain Valley informed the FERC that it executed another long-term precedent agreement with a fifth shipper.¹⁴ Therefore, the project now has five shippers and is fully subscribed (see table 1.2-1).

¹² See, for examples, the June 4, 2015 written comment of Christy Mackie (accession number 20150604-5066), the May 31, 2015 written comment of Nancy Schimmel (accession number 20150601-5207), and the April 15, 2015 written comment of Christopher Swan (accession number 20150415-5215).

¹³ See *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), clarified in 90 FERC ¶ 61,128, and further clarified in 92 ¶ 61,094 (2000).

¹⁴ Mountain Valley filed copies of the precedent agreements in its application to the FERC and on January 27, 2016. The original four shippers were EQT Energy, LLC; Roanoke Gas Company; USG Properties Marcellus Holdings, LLC; and WGL Midstream, Inc. The fifth shipper is Consolidated Edison Company of New York, Inc. which committed to 250,000 Dth/d, while USG Properties Marcellus Holdings agreed to reduce its firm capacity commitment from 500,000 Dth/d to 250,000 Dth/d.

TABLE 1.2-1	
Shippers for the Mountain Valley Project	
Shipper	Capacity (Dth/d)
EQT Energy, LLC	1,290,000
WGL Midstream, Inc.	200,000
Roanoke Gas Company	10,000
USG Properties Marcellus Holdings, LLC	250,000
Consolidated Edison Company of New York, Inc.	250,000
Total	2,000,000

1.2.3.2 Equitrans Expansion Project

From March 5 to March 20, 2015, Equitrans held a non-binding open season for natural gas firm transportation on its system. Ultimately, it signed a long-term precedent agreement with a single shipper for 400,000 Dth/d of firm transportation service.¹⁵

1.3 PURPOSE AND SCOPE OF THIS EIS

Our principal purposes in preparing this EIS are to:

- identify and assess potential impacts on the natural and human environment that would result from the construction and operation of the proposed projects;
- describe and evaluate reasonable alternatives to the proposed projects that would avoid or minimize adverse impacts on locations of specific environmental resources;
- recommend mitigation measures, as necessary, that could be implemented by the Applicants to reduce impacts on specific environmental resources; and
- encourage and facilitate involvement by the public and interested agencies in the environmental review process.

The EIS is organized into five main sections: 1) Introduction, 2) Description of the Proposed Action, 3) Alternatives, 4) Environmental Analysis, and 5) Conclusions and Recommendations. In section 3 we compare the environmental impacts associated with constructing and operating facilities at the locations proposed by the Applicants with a range of alternatives, including the no action alternative, system alternatives, route alternatives, and aboveground facility location alternatives. In section 4 we present our environmental analysis for various resource areas such as geology; soils; water resources and wetlands; vegetation; fish and wildlife; threatened, endangered, and other special-status species; land use, recreation, and visual resources; socioeconomics, including environmental justice; cultural resources; air quality and noise; reliability and safety; and cumulative impacts. Within each resource discussion we describe the affected environment as it currently exists and address the environmental

¹⁵ A copy of the precedent agreement for the EEP is attached to Equitrans' application to the FERC.

consequences associated with the construction and operation of the MVP and the EEP. We also evaluate any Applicant-proposed measures that would reduce impacts on specific resources, and present any additional recommendations we have to further reduce resource impacts. Section 5 summarizes our overall conclusions and presents all our recommended mitigation measures.

Below we discuss the scope of the actions of the FERC and cooperating agencies in the analysis of the proposed projects.

1.3.1 Federal Energy Regulatory Commission

Originally known as the Federal Power Commission when created by Congress in 1920, the agency was reorganized and renamed the FERC under the administration of President Jimmy Carter. The FERC is an independent federal regulatory agency¹⁶ that regulates the interstate transportation of natural gas, among other industries, in accordance with the NGA of 1938 as amended.

The FERC is responsible for authorizing interstate natural gas transmission facilities, as specified in Section 311(e)(1) of EPAct and the NGA. Pursuant to EPAct Section 313(b)(1), the FERC is the lead federal agency for the coordination of all applicable federal authorizations. Thus, the FERC is the lead federal agency for preparation of this EIS to comply with NEPA, as described in the CEQ's regulations at 40 CFR 1501.5 and in keeping with our May 2002 Interagency Agreement with other federal agencies.¹⁷

As the lead federal agency, we prepared this EIS to assess the environmental impacts that could result from constructing and operating the MVP and the EEP. This document was prepared in compliance with the requirements of the CEQ's regulations at 40 CFR 1500-1508, and the FERC's regulations for implementing NEPA at 18 CFR 380. As applicable, this EIS is also intended to fulfill the cooperating federal agencies obligations under NEPA (see section 1.3.2 below) and to support subsequent conclusions and decisions made by the Commission and the cooperating agencies.

The Commission will consider the findings contained herein, as well as non-environmental issues, in its review of Mountain Valley's and Equitrans' applications. The identification of environmental impacts related to the construction and operation of the projects, and the mitigation of those impacts, as disclosed in this EIS, would be components of the Commission's decision making process. The Commission would issue its decision in an Order. If the projects are approved, the Commission would issue a Certificate to Mountain Valley and Equitrans. The Commission may accept the applications in whole or in part, and can attach

¹⁶ The decision makers at the agency are five Commissioners (at full contingent) appointed by the President and confirmed by Congress. The decisions of the Commission cannot be challenged by the President or Congress, but may be reviewed in federal court.

¹⁷ May 2002 *Interagency Agreement on Early Coordination of Required Environmental and Historic Preservation Reviews Conducted in Conjunction With the Issuance of Authorizations to Construct and Operate Interstate Natural Gas Pipelines Certificated by the Federal Energy Regulatory Commission*, signed by the FERC, Advisory Council on Historic Preservation, CEQ, USDA, U.S. Department of the Army, U.S. Department of Commerce, U.S. Department of Energy, EPA, USDOJ, and DOT.

engineering and environmental conditions to the Order that would be enforceable actions to assure that the proper mitigation measures are implemented prior to a project going into service. Further, the Applicants would be required to implement the construction procedures and mitigation measures proposed in their filings with the FERC, unless specifically modified by other Certificate conditions.

1.3.2 Cooperating Agencies

The BLM, COE, EPA, FS, DOT, WVDEP, and WVDNR are all cooperating agencies, as defined in 40 CFR 1501.6, for the development of this EIS. The FS, COE, BLM, EPA, and DOT are cooperating in a manner consistent with the May 2002 interagency agreement with the FERC. The scope of the actions of the individual cooperating agencies with regards to the review of the projects are further summarized below.

A cooperating agency has jurisdiction by law over part of a project and/or has special expertise with respect to environmental issues. Cooperating agencies play a role in the environmental analyses of these projects and assist in developing mitigation plans or other measures. They participate in the NEPA process by reviewing the applications and related materials, and by reviewing administrative drafts of the overall EIS or the specific portions related to agency permitting or special expertise. The various cooperating agencies anticipate adopting this EIS, pursuant to 40 CFR 1506.3(c), to support their decisions in issuing their own permits, licenses, or authorizations for the projects.

We recognize that the cooperating agencies will use the information and analysis contained in this EIS in reaching their own independent conclusions regarding the environmental impacts of the projects on the lands and resources they administer. Nothing in this EIS should be read to affect the ability of another agency to reach a conclusion or impose a requirement that is different from that recommended by the Commission staff. Additionally, nothing in this EIS should be read to affect in any way an agency's authority to monitor, enforce, or modify any requirement it imposes on the Applicants within its jurisdiction. Other regulatory agencies also may include their own terms and conditions or stipulations as part of their permits or approvals. While there would be jurisdictional differences between the FERC's and other agencies' conditions, the FERC's post-Certificate monitoring program for the MVP and the EEP would address all environmental or construction-related conditions or other permit requirements placed on Mountain Valley and Equitrans by the regulatory agencies.

1.3.2.1 U.S. Department of Agriculture - Forest Service

The FS is a civilian federal agency within the USDA, and can trace its roots back to 1876 when Congress assigned the Office of Special Agent within the USDA the responsibility of assessing the quality of forests in the country. With the Forest Reserve Act of 1891, Congress established the process for designating western public domain lands that later became National Forests. In 1905, President Theodore Roosevelt established the FS to provide quality water and timber for the nation's benefit, and transferred the care of the national forests to the new agency. The Weeks Act of 1911 authorized the FS to purchase privately owned lands in the eastern United States for the protection of water supplies and navigable rivers. In 1936, President Franklin Roosevelt established the Jefferson National Forest in southwestern Virginia from lands

that formerly belonged to the Natural Bridge National Forest (created in 1916). In 1995, the Jefferson National Forest was administratively combined with the George Washington National Forest in west central Virginia; forming the George Washington and Jefferson National Forests (GWJeff), a single administrative unit of nearly 1.8 million acres, with the Forest Supervisor's Office located in Roanoke, Virginia. The GWJeff is a part of the Southern Region (Region 8) of the FS, headquartered in Atlanta, Georgia.

The GWJeff is one of 154 national forests and 20 national grasslands in 44 states and Puerto Rico. It is the responsibility of the FS to manage the national forests for multiple uses of resources such as water, forage, wildlife, wood, recreation, minerals, and wilderness; and to provide products and benefits to benefit the American people while ensuring the productivity of the land and protecting the quality of the environment.

The mission of the FS is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations. The agency carries out this mission through four main activities: international assistance in forest management; domestic community assistance to help protect and manage non-federal forest lands; forestry research; and the protection and management of National Forest System (NFS) lands.

The MVP pipeline route would cross about 3.4 miles of the Jefferson National Forest in Monroe County, West Virginia and Giles and Montgomery Counties, Virginia. The proposed pipeline route would cross Peters Mountain between mileposts (MP) 195.3 and 196.9 (1.6 miles), Sinking Creek Mountain between MPs 217.2 and 218.0 (0.8 mile), and Brush Mountain between MPs 218.4 and 219.4 (1.0 mile). Table 1.3-1 identifies construction and operation impacts of the project in the Jefferson National Forest. There are no significant aboveground facilities (such as compressor stations, M&R stations, MLVs) proposed within the Jefferson National Forest, although there would be minor appurtenances that include test stations and line markers, which would be entirely contained within the operational right-of-way as required by PHMSA safety regulations.

TABLE 1.3-1		
Land Requirements for the Mountain Valley Project in the Jefferson National Forest		
Facility	Land Required for Construction (acres)	Land Required for Operation (acres)
Pipeline <u>a/</u>	52.2	20.5
Additional Temporary Workspace (ATWS)	1.0	0.0
Access Roads	27.6	17.3
Totals	80.9	37.8
a/ Acreage based on 125-foot-wide construction right-of-way and 50-foot-wide permanent right-of-way. Does not account for reduced workspace in sensitive areas.		

In November 2014, Mountain Valley submitted its *Application for Transportation and Utility Systems and Facilities on Federal Lands* (SF-299) to the FS, to allow for environmental surveys of the proposed crossing of the National Forest. On May 8, 2015, the FS issued a one-year temporary special use permit for Mountain Valley to conduct surveys within the Jefferson National Forest. On April 29, 2016, the FS issued another temporary special use permit for Mountain Valley to continue survey activities within the Forest.

In February 2016, Mountain Valley notified the FERC that the MVP would cross federally owned lands managed separately by both the FS (as part of the Jefferson National Forest) and the COE (as part of Weston Gauley Bridge Turnpike Trail). Under the Mineral Leasing Act (30 U.S.C. 185 et seq.), the BLM is the federal agency responsible for issuing Right-of-Way Grants for natural gas pipelines across federal lands under the jurisdiction of the BLM or under the jurisdiction of two or more federal agencies. Therefore, the BLM would be responsible for the issuance of a Right-of-Way Grant to Mountain Valley for a pipeline easement over federal lands, dependent on concurrence from the FS and the COE.

Mountain Valley submitted its Right-of-Way Grant application to the BLM and FS on April 5, 2016, to cross federal lands. The decision for a Right-of-Way Grant across federal lands would be documented in a Record of Decision (ROD) issued by the BLM.

In a May 4, 2015 letter to the FERC, the FS agreed to be a cooperating agency in the production of this EIS. The FS stated that it would participate in the NEPA scoping process, prepare environmental analyses, and develop portions of the EIS to which it has expertise. The FS would consider adopting this EIS for agency decisions pursuant to 40 CFR 1506.3(c) if, after an independent review of the document, the FS concurs that the analysis provides sufficient evidence to support agency decisions and is satisfied that agency comments and suggestions have been addressed. FS land management planning requirements were established by the National Forest Management Act and regulations at 36 CFR 219. These laws and regulations require a Forest-specific, multi-year Land and Resource Management Plan (LRMP). The LRMP for the Jefferson National Forest was first developed in 1985, and revised in 2004. All projects or activities within a National Forest must be consistent with the governing LRMP, pursuant to 36 CFR 219.15. Additionally, all projects or activities within a National Forest must be approved using the NEPA process.

The FS has determined that the MVP, as proposed, would not be consistent with certain requirements of the Jefferson National Forest LRMP. If the FS decides to concur with a Right-of-Way Grant for crossing the Jefferson National Forest, the FS would be required to amend the Jefferson National Forest LRMP. The FS intends to adopt this EIS in its assessment of potential amendments to its LRMP that could then make the MVP pipeline a conforming use of the Jefferson National Forest LRMP (additional detail is in section 4.8 of this EIS). The FS would issue its own ROD for these amendments to its LRMP using the analysis from this EIS. This would be a separate action from the issuance of the ROD for the Right-of-Way Grant issued by the BLM for crossing the Jefferson National Forest. The LRMP amendments proposed are in accordance to 36 CFR 219.15 (2012 version) regulations.

One of the many partnerships that the FS participates in for the management of certain National Forest lands is the unique cooperative management system partnership for the

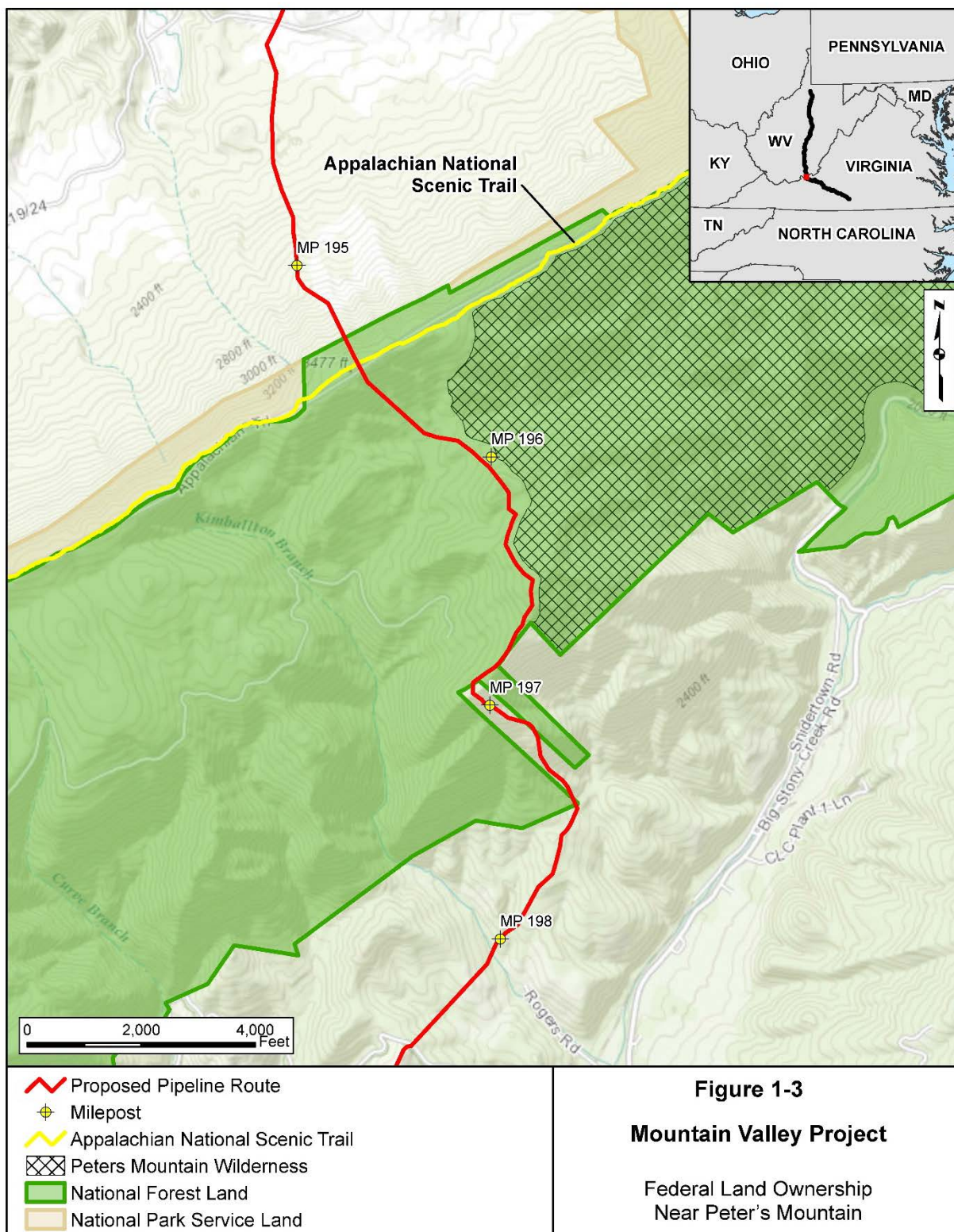
Appalachian National Scenic Trail (ANST). The ANST, first envisioned in 1921 and first completed as a footpath through 14 states in 1937, became the first National Scenic Trail in the United States with the passage of the National Trails System Act (NTSA) in 1968. This federal law designates the entire 2,190-mile ANST as a National Scenic Trail; designates the National Park Service (NPS) as the lead federal agency for the administration of the entire ANST; recognizes the rights of the other federal and state public land managers whose lands are crossed by the ANST; and requires the consistent cooperative management of the unique ANST resource by the NPS; working formally with the non-profit Appalachian Trail Conservancy (ATC), and all the public land managing agencies that the ANST traverses – notably and specifically, the FS. More of the ANST is on FS lands than any of more than 75 other public land ownerships trail-wide.

Both the NPS and FS have acquired private lands in the name of the U.S. Government specifically for the protection of the ANST, beyond the public lands that they already managed in 1968. In the vicinity of the MVP proposed route, because of the location of the official proclamation boundary of the Jefferson National Forest, the NPS and FS have each separately acquired several land parcels since 1978. Under the authority of NTSA, ongoing management of the NPS-acquired parcels in this area has been administratively transferred to the FS. However, the NPS retains several specific rights and responsibilities for these NPS-acquired transfer lands, and these lands, along with all other NPS-acquired ANST lands, are specifically considered to be a part of the ANST as a unit of the National Park system. However, FS-acquired lands, even those acquired specifically for the protection of the ANST under the authority of the NTSA, are not considered to be a part of the ANST as a unit of the National Park system. This difference is a factor in the proposed routing of the MVP across lands which are generally depicted entirely as “FS lands” on most maps. The tract (parcel) ownership of the federal lands on Peters Mountain in the area of the MVP proposed route is shown on figure 1-3 for reference.

1.3.2.2 U.S. Army Corps of Engineers

The U.S. Army separated out the COE in 1802. While originally tasked to construct military installations, the COE evolved into a builder of federal dams and waterways for flood control. With the River and Harbors Act of 1899 (RHA, 33 U.S.C. 403), Congress gave the COE the power to control obstructions to navigation. Under Section 404 of the Federal Water Pollution Control Act Amendments of 1972 (later incorporated into the Clean Water Act [CWA] 33 U.S.C. 1344) the COE was given authority over the discharge of dredged or fill materials into the Waters of the United States. The MVP would cross three COE Districts, including the Huntington District, Pittsburgh District, and Norfolk District. The EEP would cross two COE Districts, including the Huntington District and Pittsburgh District. The MVP would cross about 60 feet of the Weston Gauley Bridge Turnpike Trail, managed by the COE, in Braxton County, West Virginia.

Mountain Valley filed its permit applications with the Huntington and Norfolk Districts of the COE on February 21, 2016. Equitrans stated that it filed applications under Section 404 of the CWA and Section 10 of the RHA with the Pittsburgh and Huntington Districts of the COE on November 25, 2015. Due to alignment changes since that filing, Equitrans intends to file revised applications during the fall of 2016. Equitrans filed copies of its COE permit applications with the FERC on July 14, 2016.



The COE's regulations for permits under Section 10 of the RHA can be found at 33 CFR 322, while regulations for permits under Section 404 of the CWA are at 33 CFR 323, and processing of permits is at 33 CFR 325. Once the COE determines a permit application to be complete, it would issue a public notice. The COE notice is not the same as the FERC NOI. However, comments received by the COE in response to its notice should be submitted or summarized in a filing with the FERC, as the Commission is the keeper of the consolidated record in accordance with EPCA Section 313(d).

As an element of its review, the COE must consider whether the proposed projects represent the least environmentally damaging practicable alternative pursuant to the CWA Section 404(b)(1) guidelines. The term practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall purpose of the projects.

In June 2005, the FERC and the COE entered into a Memorandum of Understanding (MOU) that specified that the FERC, as lead federal agency, would be responsible for determining the purpose and need of a project for the NEPA document and the Commission's authorization; and further, that the COE would give deference, to the maximum extent allowed by law, to the range of alternatives that FERC determines to be appropriate for a project. Although the COE should exercise its independent judgment while carrying out its regulatory responsibilities, it should give deference, to the maximum extent allowed by law, to the FERC's determinations of project purpose, need, and alternatives.¹⁸

The District Engineer cannot make a decision on a permit application until the requirements of NEPA are fulfilled. After the publication of an EIS, the COE permit decision can be issued as a ROD.

In a May 5, 2015 letter to the FERC, the Norfolk District agreed to be a cooperating agency in the production of this EIS. On March 18, 2015, the Huntington District also agreed to be a cooperating agency. As a cooperating agency, the COE may adopt this EIS for the purposes of exercising its regulatory authorities.

1.3.2.3 U.S. Bureau of Land Management

In February 2016, Mountain Valley notified the FERC that the MVP would cross federally owned lands managed separately by both the FS (as part of the Jefferson National Forest) and the COE (as part of Weston Gauley Bridge Turnpike Trail). Pursuant to the Mineral Leasing Act of 1920 and in accordance with 43 CFR 2880, the BLM is the federal agency responsible for issuing Right-of-Way Grants for natural gas pipelines across federal lands under the jurisdiction of the BLM or under the jurisdiction of two or more federal agencies. Mountain

¹⁸ *Memorandum of Understanding between the U.S. Army Corps of Engineers and the Federal Energy Regulatory Commission Supplementing the Interagency Agreement on Early Coordination of Required Environmental and Historic Preservation Reviews Conducted in Conjunction with the Issuance of Authorizations to Construct and Operate Interstate Natural Gas Pipelines Certificated by the Federal Energy Regulatory Commission*, executed 30 June 2005.

Valley has applied to the BLM for a Right-of-Way Grant to cross lands managed by the FS and the COE. Thus, the BLM agreed to be a cooperating agency.

The BLM will consider whether to issue a Right-of-Way Grant that provides terms and conditions for construction and operation of the MVP on federal lands in accordance with 43 CFR 2880 and relevant BLM manual and handbook direction. For example, the BLM would seek to ensure that any grant protects the natural resources associated with Federal lands and adjacent lands and prevents unnecessary or undue degradation to public lands. In making a decision whether to issue a Right-of-way Grant for the MVP, the BLM would consider several factors including this EIS, conformance with the FS LRMP, and impacts on resources and programs. Following adoption of this EIS and receipt of concurrence from the FS and COE, the BLM would issue a ROD that documents the decision whether to grant, grant with conditions, or deny the Temporary Use Permit and the Right-of-Way Grant to Mountain Valley.

The BLM, FS, and COE are also using this EIS process to identify specific stipulations (including design features and mitigation measures) related to resources within their respective jurisdictions for inclusion in the Right-of-Way Grant. Mountain Valley submitted a Right-of-Way Grant application to the BLM on April 5, 2016, and filed a copy with the FERC on April 8, 2016. Mountain Valley's right-of-way application to the BLM included a Plan of Development (POD). The POD is a detailed description of the proposed action on federally administered lands and facilities and would be made a part of the Right-of-Way Grant. The POD includes attachments that were developed in cooperation with the FS and the COE that are individual plans detailing Mountain Valley's proposed method for construction and operation of the pipeline, mitigation measures, stipulations, and other specific standards that would apply on federal lands.

1.3.2.4 U.S. Environmental Protection Agency

Established in 1970, the EPA is an independent federal agency responsible for protecting human health and safeguarding the natural environment. The EPA has responsibilities under NEPA, the Clean Air Act (CAA, 42 U.S.C. 7401 et seq.), and the CWA. The EPA shares responsibility for administering and enforcing Section 404 of the CWA with the COE, and has authority to veto the COE permit decisions.

The EPA has delegated water quality certification, under Section 401 of the CWA, to the jurisdiction of individual state agencies. The EPA may assume Section 401 authority if no state program exists, if the state program is not functioning adequately, or at the request of the state. The EPA also oversees the issuance of a National Pollutant Discharge Elimination System (NPDES) permit by the state agency, under Section 402 of the CWA, for point-source discharge of water used for hydrostatic testing of pipelines into waterbodies.

The EPA has jurisdictional authority under the CAA to control air pollution by developing and enforcing rules and regulations for all entities that emit toxic substances into the air. Under this authority, the EPA has developed regulations for major sources of air pollution, and has delegated the authority to implement these regulations to state and local agencies. State and local agencies are allowed to develop and implement their own regulations for non-major sources of air pollutants. The EPA also establishes general conformity applicability thresholds

that a federal agency can utilize to determine whether a specific action requires a general conformity assessment.

In addition to its permitting responsibilities, the EPA is required under Section 309 of the CAA to review and publicly comment on the environmental impacts of major federal actions, including actions that are the subject of draft and final EISs, and is responsible for implementing certain procedural provisions of NEPA (e.g., publishing Notices of Availability of the draft and final EISs in the *Federal Register*) to establish statutory timeframes for the environmental review process.

Region 3 of the EPA agreed to be a cooperating agency in the production of this EIS (letter to the FERC dated April 13, 2015). The EPA indicated it could assist the FERC with compliance with NEPA, assess compliance with the CWA, and provide technical assistance for the analysis of alternatives, environmental justice, and cumulative impacts.

On June 16, 2015, EPA Region 3 provided comments to the FERC in response to the NOI for the MVP. Among other issues, the EPA made recommendations that the EIS address the Section 401 and 404 CWA permitting processes, wetland conversions, karst terrain, hydrostatic testing of the pipeline, biological resources, environmental justice, and air quality.

1.3.2.5 U.S. Department of Transportation – Pipeline and Hazardous Materials Safety Administration

PHMSA was created under the Norman Y. Mineta Research and Special Programs Improvement Act of 2004 as an agency under the DOT. PHMSA is responsible for advancing the safe transportation of natural gas, petroleum, and other hazardous materials by pipeline through the development and enforcement of pipeline safety regulations pursuant to 49 U.S.C. 601. Included in PHMSA's authority is the development and enforcement of regulations and standards related to the design, construction, operation, and maintenance of natural gas pipelines, under the Natural Gas Pipeline Safety Act (49 U.S.C. 1671 et seq.). Accordingly, the Applicants must design, construct, operate, and maintain their natural gas pipeline facilities in compliance with the pipeline safety standards, which are contained in 49 CFR 192.

The DOT agreed to be a cooperating agency in the production of this EIS (letter to the FERC dated March 26, 2015). The Eastern Region Community Assistance and Technical Services (CATS) managers reviewed the draft EIS text as it pertains to pipeline safety to ensure that the information contained within does not violate or contradict the federal pipeline safety regulations. A CATS representative made presentations at three of the FERC's public scoping meetings for the MVP held from May 11 - 13, 2015.

1.3.2.6 West Virginia Department of Environmental Protection

In a letter to the FERC dated March 31, 2015, the WVDEP agreed to be a cooperating agency in the development of this EIS. The WVDEP is a state agency responsible for implementing and enforcing West Virginia's environmental regulations with respect to managing the state's air, land, and water resources. The Division of Water and Waste Management's (DWWM) mission is to preserve, protect, and enhance the state's watersheds for the benefit and

safety of all its citizens through implementation of programs controlling hazardous waste, solid waste, and surface and groundwater pollution, from any source. The DWWM may grant, grant with conditions, waive, or deny a Water Quality Certificate application under Section 401 of the CWA and operates in accordance with 47CSR5A. Section 401 Water Quality Certification is required for each permit or license issued by a federal agency to ensure that projects will not violate the state's water quality standards or stream designated uses. The WVDEP's Division of Air Quality implements the permit program established under the West Virginia's Air Pollution Control Act. Major sources are primarily permitted under the new source review rules found at 45CSR14 and 45CSR19. Under 45CSR30, the Division issues Operating Permits for Title V of the CAA.

In addition to serving as a regulatory role for the proposed project, the WVDEP has requested to be a cooperating agency in order to lend experience and insight concerning environmental impacts relative to this type of activity, and to provide recommendations on assessment, minimization, and mitigation of potential environmental impacts.

1.3.2.7 West Virginia Division of Natural Resources

In a letter to the FERC dated March 12, 2015, the WVDNR, Wildlife Resources Section (WRS), agreed to be a cooperating agency in the development of this EIS.

The statutory mission of the WVDNR is to provide and administer a long-range comprehensive program for the exploration, conservation, development, protection, enjoyment, and use of the natural resources of the State of West Virginia. The Division is composed of Wildlife Resources, Parks and Forests, Law Enforcement Sections and the Office of Lands and Streams.

Under State Code §20-2-1, "It is declared to be the public policy of the State of West Virginia that the wildlife resources of this state shall be protected for the use and enjoyment of all the citizens of the State. All species of wildlife shall be maintained for values which may be either intrinsic or ecological or of benefit to man. Such benefits shall include (1) hunting, fishing, and other diversified recreational uses; (2) economic contributions in the best interests of the people of this state and (3) scientific and educational uses."

The WRS is responsible for management of the state's wildlife resources. The primary objective of the WRS is to maintain and perpetuate fish and wildlife at levels compatible with the available habitat while providing maximum opportunities for recreation, research, and education. The WRS is comprised of Game Management, Fisheries, Wildlife Diversity, Technical Support, and Environmental Coordination Units.

The WRS Environmental Coordination Unit reviews numerous projects that potentially impact wildlife, fisheries, and their respective habitats. Primary concerns are road construction, stream alteration, hydropower projects, power line rights-of-way, gas line construction, oil/gas well sites, surface mines, and other construction projects. In numerous cases, recommendations have been made to alter projects, thus reducing detrimental impacts on wildlife and fisheries. The Technical Support unit provides Geographic Information System (GIS) and computer support to all biologists in the agency.

Currently, the Game Management Unit conducts management activities on 105 Wildlife Management Areas and 8 State Forests totaling 1,415,839 acres. Black bear, white-tailed deer, and wild turkey are some of the most important hunted game species. Impacts on property managed by the WRS may be subject to review by the U.S. Fish and Wildlife Service (FWS) for concurrence under the authority established in 50 CFR 80.

Fisheries management programs are designed to provide a variety of fishing opportunities and experiences for the enjoyment of anglers. These programs consist of efforts focused on warmwater species (e.g., walleye and channel catfish), and coldwater species (e.g., trout), that are stocked in rivers, lakes, reservoirs, and streams throughout the state. Research, stocking, public access development, regulations, and outreach combined with habitat protection, improvement, and restoration form the foundation of management of the state's fishery resources.

The Wildlife Diversity and Natural Heritage Program is responsible for those species listed by the federal government as threatened or endangered, and nongame wildlife, nongame fish, mussels, birds, and their habitats. It also administers outreach programs and provides vital assessment information.

The State Parks and Forests Section promotes conservation by preserving and protecting natural areas of unique or exceptional scenic, scientific, cultural, archaeological, or historical significance and to provide outdoor recreational opportunities for the citizens of this state and its visitors. The system is composed of 35 parks, 7 forests, 5 wildlife management areas, the Greenbrier River Trail, and North Bend Rail Trail.

The Office of Lands and Streams (OLS) preserves, protects, and enhances the State's title to its recreation lands. Currently, the WVDNR holds title to the beds of the state's rivers, creeks, and streams totaling some 34,000 miles or some 5,000 named waterways in the state. The OLS grants right-of-entry letters to governmental agencies, companies, and individuals to conduct construction activities in the state's rivers, creeks, and streams as well as right-of-way licenses for pipelines, underground or underwater cables, and overhead power and telephone lines crossing the state's waterways.

The Law Enforcement Section is responsible for the prompt, orderly, and effective enforcement of all laws of Chapter 20, Code of West Virginia, and rules promulgated under that authority. Of primary importance is the protection of West Virginia's wildlife to the degree that they are not endangered by unlawful activities.

1.3.3 Out-of-Scope Issues

During scoping, we received comments that raised issues that are outside the scope of this EIS. For example, some commenters requested that the FERC combine a number of both jurisdictional and non-jurisdictional pipeline projects proposed, or in the early planning stage, to be located in West Virginia or Virginia into a single "programmatic" EIS.¹⁹ However, there is

¹⁹ See, for examples, the June 16, 2015 letters from the Nature Conservancy (accession number 20150617-5045) and the Appalachian Mountain Advocates (accession number 20150617-5044).

no Commission plan, policy, or program for the development of natural gas infrastructure.²⁰ The FERC's review and approval of individual projects under the NGA does not constitute a coordinated federal program. In a previous case, the Commission stated that it "does not direct the development of the gas industry's infrastructure, either on a broad regional basis, or in the design of specific projects."²¹ Nor does the FERC engage in regional planning exercises that would result in the selection of one project over another.²² Rather, the Commission acts on individual applications filed by entities proposing to construct interstate natural gas pipelines. Further, the CEQ regulations for implementing NEPA do not require a programmatic EIS. What is required by NEPA, and what the Commission provides, is a thorough examination of the potential impacts of specific projects.

Companies select the location of their proposed facilities based on market forces and other factors, and the Commission staff analyzes the environmental impacts of construction and operation of those facilities at the locations selected by the applicants, and of an appropriate range of alternatives. However, under cumulative impacts in section 4.13 of this EIS, we consider other projects that may be built during the same timeframe as the MVP and the EEP within the same area of geographic scope.

We received comments suggesting that the MVP would lead to additional exploration and production of natural gas in the Marcellus shale region. According to some, this increased or "induced" production would correspondently result in more hydraulic drilling or "fracking."²³ The FERC does not regulate activities associated with the exploration and production of natural gas, including fracking. Those activities are regulated by individual states. While we know generally that natural gas is produced in the Appalachian Basin, there is no reasonable way to determine the exact wells providing gas transported in the MVP and the EEP pipelines, nor is there a reasonable way to identify the well-specific exploration and production methods used to obtain those gas supplies.²⁴

Because a natural gas transportation project is proposed before the FERC, it is not likely that it would lead to additional drilling and production. In fact, the opposite causal relationship is more likely, i.e., once production begins in an area, shippers or end users will support the development of a pipeline to move the natural gas to markets. In past proceedings, the Commission concluded that the environmental effects resulting from natural gas production are not linked to or caused by a proposed pipeline project.²⁵ Therefore, induced or additional natural

²⁰ *Texas Eastern Transmission, LP*, 149 FERC ¶ 61,259, at PP 38-47 (2014); *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,255 (2014).

²¹ *Texas Eastern Transmission, LP & Algonquin Gas Transmission, LLC* (2012) 141 FERC § 61,043, page 25.

²² 124 FERC § 61,257, Section D, pages 29-30.

²³ See, for examples, the June 16, 2015 letters from the Appalachian Mountain Advocates (accession number 20150617-5044) and the Chesapeake Climate Action Network (accession number 20150616-5356), and the April 1, 2015 letter from Cari Cohen (accession number 20150407-0014).

²⁴ The Commission addressed this issue in its *Order Granting Section 3 Authorization* to Sabine in Docket No. CP11-72-000 (139 FERC ¶ 61,039 [2012], IV, pages 31-33).

²⁵ *Central New York Oil and Gas Co., LLC*, 137 FERC ¶ 61,121, at PP 81-101 (2011), Order on Rehearing 138 FERC ¶ 61,104, at PP 33-49 (2012), Petition for Review Dismissed sub nom. *Coalition for Responsible Growth v. FERC*, 485 Fed. Appx. 472, 474-75 (2012) (unpublished opinion).

gas production is not a “reasonably foreseeable” indirect effect resulting from the proposed MVP and the EEP, and this topic need not be addressed in this EIS.

Some comments were of an administrative nature. There were requests to hold more public scoping meetings, and requests to extend the scoping period.²⁶ Our NOI for the MVP announced six public scoping meetings that were held in West Virginia and Virginia, in the vicinity of the proposed MVP pipeline route. The meeting locations were fairly evenly spaced apart and selected within reasonable driving distance for most citizens in the project area, given facility and staff constraints. While scoping meetings are a valuable tool for us to receive verbal comments from the public, they are only one of several ways for interested persons to bring their concerns to the attention of the Commission. We equally consider written comments that are submitted electronically or through the mail. Additional public comment sessions will be held at multiple locations along the proposed pipeline route to take comments on this draft EIS.

Our NOI for the MVP also established a 60-day scoping period that concluded on July 16, 2015. Our NOI for the EEP established a 35-day scoping period that ended on September 14, 2015. However, we continued to consider comments received after the close of the scoping periods, up until the time we completed our reviews of the applications, and drafted this EIS.

A number of commenters object to the Applicants’ future use of eminent domain (if certificated by the Commission).²⁷ The Commission urges applicants to reach mutual agreements with landowners, and eminent domain should only be used as a last resort. The U.S. Congress conveyed the power of eminent domain to private companies that obtain a Certificate from the FERC when it passed Section 7(h) of the NGA in 1947. In cases where agreements between a company and a landowner cannot be reached, compensation for an easement would be determined by local courts, not by the FERC or the Applicants. The topic of property rights is briefly discussed in this EIS under Socioeconomics (see section 4.9).

1.4 PUBLIC REVIEW

Prior to and during the pre-filing process, the Applicants contacted federal, state, and local governmental agencies to inform them about their respective projects and discuss project-specific issues. The Applicants also contacted affected landowners, to inform them about the projects, and to obtain permission to perform environmental surveys. Each company also developed a public participation plan (*Public, Stakeholder, and Agency Participation Plan* for the MVP and *Public Participation Plan* for the EEP) to facilitate stakeholder communications and make information available to the public and regulatory agencies.²⁸ These public

²⁶ See, for examples, the April 22, 2015 letter from David Werner (accession number 20150422-5189) and the April 26, 2015 letter from Pat Leonard (accession number 20150427-5049).

²⁷ See, for examples, the March 16, 2015 letter from Anita Bevins (accession number 20150317-5004), the April 1, 2015 letter from Frankie Garman (accession number 20150406-0063), and the verbal comments of Ian Reily, Kate Dunnagan, and Brache Rauchle from the May 7, 2015 public meeting at Chatham, Virginia (accession number 20150611-4003).

²⁸ Mountain Valley’s public participation plan was filed with its October 27, 2014 request to the FERC to initiate the pre-filing review process. Equitrans’ public participation plan was filed with its April 1, 2015 request to the FERC to initiate our pre-filing review.

participation plans established a single point of contact within each company for the public or agencies to call or e-mail with questions or concerns; a publicly accessible website with information about their projects (including maps) and project status; and regular newsletter mailings for affected landowners and other interested parties.

On April 17, 2015, the FERC issued an NOI that described the planned MVP; requested comments from the public; and announced the time and location of public scoping comment meetings. The NOI was sent to 2,846 parties, including federal, state, and local government agencies; elected officials; environmental groups and NGOs; Native Americans and Indian tribes; affected landowners; local libraries and newspapers; and other stakeholders who had indicated an interest in the MVP. The NOI was also published in the *Federal Register* on April 28, 2015.²⁹ Issuance of the NOI opened a 60-day formal scoping period that ended June 16, 2015.

The FERC sponsored six public scoping meetings in the project area during the formal scoping period to provide the public with the opportunity to comment orally on the MVP. The scoping meetings were held in Lindside, West Virginia on May 4, 2015; Ellison, Virginia on May 5, 2015; Chatham, Virginia on May 7, 2015; Pine Grove, West Virginia on May 11, 2015; Weston, West Virginia on May 12, 2015; and Summersville, West Virginia on May 13, 2015. Approximately 650 people in total attended the public scoping meetings. A total of 169 attendees provided oral comments at the meetings. Transcripts of each scoping meeting were placed into the FERC's public record for the MVP and are available for viewing electronically through the Internet.³⁰

In addition to our formal notices, on March 25, 2015 and April 11, 2016, we issued Project Update brochures for the MVP to provide stakeholders current information on the FERC's environmental review process. The brochures were sent to all parties on our environmental mailing list.

On August 11, 2015, the FERC issued an NOI for the EEP. The NOI stated that Commission staff would evaluate the EEP jointly with MVP in a single comprehensive EIS because the two projects are interconnected. The EEP NOI was sent to 575 parties and was published in the *Federal Register* on August 17, 2015.³¹ Issuance of the EEP NOI opened a 35-day formal scoping period for filing written comments on the EEP that closed on September 14, 2015.

We received a total of five comments in response to the EEP NOI. Because of the low turn-out at the open house meetings and low response to the EEP NOI, the FERC staff did not hold public scoping meetings in the project area for the EEP.

²⁹ 80 FR 23535 (2015).

³⁰ To access the public record for this proceeding, go to the FERC's Internet website (<http://www.ferc.gov>), click on "Documents & Filings" and select the "eLibrary" feature. Click on "General Search" from the eLibrary menu and enter the docket number excluding the last three digits in the field (i.e., PF15-3, PF15-22, CP16-10, or CP16-13). Select an appropriate data range.

³¹ 80 FR 49217 (2015).

During the pre-filing period, the FERC staff visited the project area and inspected portions of the MVP route, by automobile on public roads, and by use of a helicopter flyover of the portion in Virginia. In addition, the FERC staff attended a meeting with representatives of Mountain Valley, the FS, the NPS, and the ATC at the headquarters office of the GWJJeff in Roanoke, Virginia on April 8, 2015. On May 6, 2015, the FERC staff met with representatives of the Red Sulphur Public Service District and the Town of Union at the district office in Peterstown, West Virginia. Notes summarizing those meetings were placed into the FERC's public record for the proceeding.³²

During the pre-filing periods, FERC staff participated in conference calls on an approximately bi-weekly basis with representatives from Mountain Valley and Equitrans and federal and state cooperating governmental agencies to discuss the projects' progress and issues. After the filing of Mountain Valley and Equitrans' applications with the FERC, company representatives were barred from the bi-weekly calls because of the FERC's *ex-parte* rules, although the cooperating agencies continued to participate. Summaries of the telephone calls were placed in the public record.

On November 5, 2015, the FERC issued a combined *Notice of Application* (NOA) announcing that Mountain Valley had filed its formal application for the MVP on October 23, 2015, and Equitrans had filed its formal application for the EEP on October 27, 2015. Our NOA stated there are two ways to become involved in the Commission's review of the projects. One way is to become an intervenor, or party to the proceeding. This is a legal position that carries certain rights and responsibilities, and gives parties legal standing to request a rehearing and challenge a Commission decision in court. The second way to participate is to file comments with the Secretary of the Commission (Secretary). A person does not have to become an intervenor to have their comments considered. However, filing of comments does not make the person a party to the proceeding. The comment period to respond to the NOA closed on November 27, 2015. Between the filing of Mountain Valley's application, and the end of the NOA comment period, 220 parties filed for intervenor status for the MVP. For the same period, 21 parties filed for intervenor status for the EEP.

From the time we accepted Mountain Valley's request to start the pre-filing process on October 31, 2014 to April 16, 2015, we received 597 comments on the record about the MVP. The issuance of our NOI for the MVP on April 17, 2015, marked the start of the official scoping period. During the official scoping period, from April 17 to June 16, 2015, we received 964 comments. This includes 2 letters from members of Congress; 11 letters from federal agencies; 1 letter from an Indian tribe; 8 letters from state agencies; 25 letters from county governments; 1 letter from a local government; 56 letters from NGOs; 175 letters from affected landowners; and 685 letters from the general public. These counts do not include the 393 form letters we received. After the close of scoping, up until the first draft of this section of this EIS was written (June 16, 2016), we received an additional 428 comment letters.

³² See filings on April 17, 2015 in accession number 20150420-0013, and on May 21, 2015 in accession number 20150521-0009.

From the time we accepted Equitrans' request to start the pre-filing process on April 9, 2015, to August 10, 2015, we received three comments regarding the EEP. The issuance of our NOI for the EEP on August 11, 2015 marked the start of the official scoping period. During the official scoping period, from August 11 to September 14, 2015, we received five comments. This includes two letters from state agencies; one letter from an NGO; one letter from an affected landowner, and one letter from the general public. For the EEP, we received 17 letters after the close of the pre-filing period, up until the time we drafted this EIS.

Table 1.4-1 lists the environmental topics raised in comments received on the projects during the scoping period. The most common comments were on socioeconomic topics.

TABLE 1.4-1		
Issues Identified During the Scoping Process <u>a/</u>		
Issues	Percentage <u>b/</u>	EIS Section Addressing Issue
General	4	
Project purpose and need		1.2
Coordination of NEPA reviews by cooperating agencies		1.3.2
Pre-filing process		1.1
Compliance with environmental permits		1.5
Right-of-way width		1.5
Depth of cover		2.4.2
Non-jurisdictional facilities		2.2
Timeframes and project schedules		1.4, 2.5
Future project expansion		2.7
Mitigation measures		4.0
Production of natural gas from the Marcellus Shale		1.3.3, 4.13
Exportation of natural gas		1.2
Alternatives	4	3.0
No-action alternative		3.1
Energy conservation		3.0
Non-gas energy alternatives		3.0
Consideration of renewable energy alternatives		3.0
Use of other natural gas systems		3.3
Consideration of alternative routes to avoid populated areas and sensitive resources		3.3, 3.4, 3.5
Geology	9	4.1
Potential for seismic activity (earthquakes)		4.1.1.5, 4.1.2.3
Impacts from landslides		4.1.1.5, 4.1.2.4
Impacts from blasting		4.1.1.6, 4.1.2.7
Impacts due to construction in karst terrain		4.1.1.5, 4.1.2.5
Soils	(included in Geology)	4.2
Erosion and sediment control		4.2.1, 4.2.2
Contaminated soils		4.2.1.3, 4.2.2.2
Soil compaction		4.2.2

TABLE 1.4-1 (continued)

Issues Identified During the Scoping Process a/

Issues	Percentage	EIS Section Addressing Issue
Water Quality and Aquatic Resources	11	4.3, 4.7
Storage of hazardous materials		4.3
Impacts on groundwater and drinking water supplies		4.3.1
Dewatering methods		2.4, 4.3.1
Waterbody crossings		4.3.2
Impacts of horizontal directional drill crossings		4.3.2
Impacts on the pipeline from a flood event		4.3.2
Impacts on fishery resources		4.6
Wetlands	(included in Water and Aquatic resources)	4.3.3
Impacts on wetlands		4.3.3
Vegetation	8	4.4
Impacts on forest		4.4.1.5
Revegetation of areas cleared during construction		4.4.2
Plans for invasive species control		4.4.1.3
Wildlife	6	4.5
Compliance with the Migratory Bird Treaty Act		4.5.3
Impacts on wildlife from forest fragmentation/forest edge effect		4.4.1, 4.5.8
Special Status Species	4	4.7
Agency coordination and requirements		4.7.1.1
Evaluation of potential impacts on threatened or endangered species and their habitat		4.7.1, 4.7.2
Land Use	7	4.8
Impacts on future development plans		2.7, 4.8.1.5
Eminent domain and compensation process		4.8.2.2
Compatibility with federally and state-owned lands		4.8.1.6, 4.8.2.4
Impacts on existing residences and structures during construction and operation		4.8.1.5, 4.8.2.2
Impacts on recreational and special interest areas		4.8.1.6, 4.8.2.4
Visual impacts of cleared rights-of-way & aboveground facilities		4.8.1.10, 4.8.2.5
Impacts on landowners from removal of lands from conservation programs with potential tax implications		4.8.1, 4.8.2
Impacts on transportation infrastructure (roads, highways, railroads)		4.9.1.5, 4.9.2.5
Increased impacts on landowners from trespassers		4.8.2
Impacts due to crossing of the Appalachian National Scenic Trail, the Jefferson National Forest, and the Blue Ridge Parkway		4.8.1, 4.8.2

TABLE 1.4-1 (continued)		
Issues Identified During the Scoping Process <u>a/</u>		
Issues	Percentage	EIS Section Addressing Issue
Socioeconomics	12	4.9
Employment opportunities for local contractors and laborers and increased tax revenues		4.9.1.6, 4.9.2.7
Impacts on community public safety resources		4.9.1.3., 4.9.2.3
Traffic impacts		4.9.1.5, 4.9.2.5
Impacts on environmental justice communities		4.9.1.8, 4.9.2.8
Impacts on homes, businesses, and land values		4.9.1.6, 4.9.2.6
Impacts on mortgage rates		4.9.1.6, 4.9.2.6
Impacts on ability to obtain and afford homeowner's insurance		4.9.1.6, 4.9.2.6
Impacts on tourism		4.9.1.4, 4.9.2.4
Cultural Resources	6	4.10
Tribal consultations		4.10.1
Impacts on culturally and historically significant properties		4.10.2
Air Quality	3	4.11.1
Consistency with the emissions limits and standards		4.11.1
Impacts on air quality		4.11.1
Greenhouse gas emissions		4.11.1
Radon		4.11.1.4
Impacts from crossing lands containing uranium		4.1.1.4
Noise	(included in Air Quality)	4.11.2
Potential noise impacts on residences		4.11.2
Reliability and Safety	8	4.12
Emergency response		4.12.1
Remote detection of pipeline leaks		4.12.1
Safety and reliability of constructing and maintaining the pipeline		4.12.1
Pipeline damage from accidental third-party or terrorist actions		4.12.2
Cumulative Impacts	3	4.13
Analysis of cumulative impacts		4.13.1
<u>a/</u> Based on non-form letters filed during the formal scoping period from April 17, 2015 through June 16, 2015 for the MVP and from August 11, 2015 to September 14, 2015 for the EEP.		
<u>b/</u> Percentages will not sum to 100 percent because most letters include more than one category		

This draft EIS was filed with the EPA and sent to the parties on our environmental mailing list. The distribution list for the draft EIS is provided in appendix A. A formal Notice of Availability for the draft EIS was issued by the FERC and published in the *Federal Register*. The Notice of Availability disclosed a 90-day period for the public to comment on the draft EIS,

and explained how electronic or written comments can be filed with the Commission. In addition, the Notice of Availability listed the dates, times, and locations of public sessions to be held in the project area to take verbal comments on the draft EIS. All comments received on the draft EIS related to environmental issues, whether verbal or written, will be addressed by the FERC staff in the final EIS.

1.5 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

1.5.1 Federal Laws Other than the National Environmental Policy Act

The FERC and the other federal agencies that must make a decision on the MVP and the EEP are required to comply with numerous federal statutes in addition to NEPA, including the Bald and Golden Eagle Protection Act (BGEPA), the CAA, the CWA, the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the National Historic Preservation Act (NHPA), the NTSA, the RHA, and the Wilderness Act. Each of these statutes has been taken into account in the preparation of this EIS, as discussed below.

1.5.1.1 Bald Eagle and Golden Eagle Protection Act

The Bald Eagle Protection Act (16 U.S.C. 668) was originally passed by Congress in 1940, and amended in 1962 to also protect golden eagles via the BGEPA. The 1972 amendment increased penalties for violation of the Act. The 1978 amendment allowed taking of golden eagle nests that interfere with resource development, with permission from the Secretary of the Interior. The BGEPA prohibits taking without a permit, or taking with wanton disregard for the consequences of an activity, any bald or golden eagle or their body parts, nests, chicks, or eggs, which includes collection, molestation, disturbance, or killing. The BGEPA protections include provisions not included in the MBTA, such as the protection of unoccupied nests and a prohibition on disturbing eagles. The BGEPA includes limited exceptions to its prohibitions through a permitting process. This EIS discusses compliance with the BGEPA in section 4.5.

1.5.1.2 Clean Air Act

Congress originally passed the CAA (42 U.S.C. 85) in 1963, and made major revisions to it in 1970, 1977, and 1990. The primary objective of the CAA, as amended, is to establish federal standards for various pollutants from both stationary and mobile sources, and to provide for the regulation of polluting emissions via state implementation plans. In addition, the CAA was established to prevent significant deterioration in certain areas where air pollutants exceed national standards and to provide for improved air quality in areas that do not meet federal standards (nonattainment areas).

The EPA has regulatory authority under the CAA. Section 309 of the CAA directs the EPA to review and comment in writing on environmental impacts associated with all major federal actions.

Ambient air quality is protected by federal regulations under the CAA. These regulations include compliance under the New Source Performance Standards (NSPS) and requirements for the Prevention of Significant Deterioration (PSD). The EPA has delegated the federal permitting

process for the CAA to each state where the MVP and the EEP facilities are proposed. Although applications are reviewed by both the state and the EPA, the state would determine the need for a NSPS or a PSD permit. Mountain Valley submitted an air quality permit application to the WVDEP on October 21, 2015. Section 4.11.1 of this EIS has a detailed discussion of air quality issues.

1.5.1.3 Clean Water Act

The CWA got its legislative start as the Federal Water Pollution Control Act of 1948, but the Act was amended and renamed in 1972. The CWA (33 U.S.C. 1251 et seq.) establishes the basic structure for regulating discharges of pollutants into the Waters of the United States and regulating quality standards for surface waters. Section 404 of the CWA outlines procedures by which the COE can issue permits for the discharge of dredged or fill material into Waters of the United States, including wetlands. Mountain Valley submitted permit applications to the Huntington and Norfolk Districts of the COE on February 21, 2016. Equitrans submitted permit applications with the Huntington and Pittsburgh Districts on November 25, 2015 followed by a joint permit in June 2016. The EPA also independently reviews Section 404 CWA applications and has veto power for permits issued by the COE.

The EPA has also delegated water quality certification under CWA Section 401 and NPDES permitting under CWA Section 402 to agencies (i.e., the Virginia Department of Environmental Quality [VDEQ] and the WVDEP) in states crossed by the MVP and the EEP. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. The NPDES permit program controls stormwater discharges. Mountain Valley submitted its Section 401 and Section 402 applications to the WVDEP and the VDEQ in February 2016. Section 4.3 of this EIS discusses impacts on water resources that may be applicable to compliance with the CWA.

1.5.1.4 Endangered Species Act

The Endangered Species Preservation Act of 1966 was amended in 1969, and evolved into the ESA (16 U.S.C. 1531-1544) in 1973. Section 7 of the ESA states that any project authorized, funded, or conducted by any federal agency (in this case, the FERC) should not "...jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined...to be critical..." The FERC, as the lead federal agency for the MVP and the EEP, is required to consult with the FWS to determine whether any federally listed or proposed endangered or threatened species or their designated critical habitats would be affected by the projects. Based on consultations with the FWS and findings of project-related effects on specific listed species or their habitats, the FERC staff will prepare a biological assessment (BA) to identify the nature and extent of adverse impacts, and to recommend measures that would avoid, reduce, or mitigate impacts on habitats and/or species. The BA will be submitted to the FWS at a later date, which

will respond with its biological opinion (BO) on whether any federally listed species or habitats would be placed in jeopardy because of the projects (see section 4.7 of this EIS).³³

1.5.1.5 Migratory Bird Treaty Act

The MBTA (16 U.S.C. 703-712) dates back to 1918, but has been amended many times. The MBTA implements various treaties and conventions between the United States, Mexico, Canada, Japan, and Russia for the protection of migratory birds. Birds protected under the MBTA include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows, and others, including their body parts (feathers, plumes, etc.), nests, and eggs. The MBTA makes it unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess, offer to or sell, barter, purchase, deliver, or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not.

On March 30, 2011, the FERC and the FWS entered into an MOU that focuses on migratory birds and strengthening conservation through enhanced collaboration between the agencies. This voluntary MOU does not waive legal requirements under the MBTA, the BGEPA, the ESA, or any other statutes, and does not authorize the take of migratory birds. This EIS discusses compliance with the MBTA in section 4.5.

1.5.1.6 National Historic Preservation Act

Congress passed the NHPA in 1966 (54 U.S.C. 3001 et seq.), which has been amended multiple times, most recently in 2014. The NHPA created the National Register of Historic Places (NRHP), established the Advisory Council on Historic Preservation (ACHP), and directed states to appoint State Historic Preservation Officers (SHPO).

Section 101(d)(6) of the NHPA states that properties of religious and cultural importance to an Indian tribe may be determined to be eligible for the NRHP. In meeting our responsibilities under the NHPA, and our tribal trust obligations (further discussed in section 4.10 of this EIS), the FERC consulted on a government-to-government basis with Indian tribes that may have an interest in the projects and their potential effects on religious or cultural properties.

Section 106 of the NHPA requires the FERC to take into account the effects of its undertakings on historic properties, which include prehistoric or historic sites, districts, buildings, structures, objects, or properties of traditional religious or cultural importance that are listed or eligible for listing on the NRHP. The FERC must also afford the ACHP an opportunity to comment on the effects of its undertakings. In accordance with the ACHP's regulations for implementing Section 106 at 36 CFR 800, the FERC, as the lead agency, is required to consult with the appropriate SHPOs, interested Indian tribes, and other consulting parties; identify historic properties in the area of potential effect (APE); and assess project effects on historic properties. The Applicants, as non-federal parties, can assist the FERC in meeting its obligations

³³ Once available, a copy of our BA will be placed in the public record for this proceeding.

under Section 106 by preparing the necessary information and analyses as allowed under Part 800.2(a)(3). However, the FERC remains responsible for all final determinations.

If the FERC determines that the projects may have adverse effects on historic properties, we would contact the ACHP and invite them to play a role in the resolution of adverse effects, and we would execute an agreement document with the appropriate consulting parties. The status of our compliance with the NHPA is discussed in section 4.10 of this EIS.

1.5.1.7 National Trails System Act

The National Trails System Act of 1968 authorized a national system of trails. The National Trails System has four classes of trails: national scenic trails, national historic trails, national recreation trails, and connecting or side trails (Johnson, 2016). Currently the National Trails System includes 11 national scenic trails, 19 national historic trails, more than 1,200 national recreation trails, and six connecting and side trails. The scenic and historic trails total more than 54,000 miles of trail.

1.5.1.8 Rivers and Harbors Act

The River and Harbors Appropriation Act of 1899, commonly known as the RHA, is the oldest federal environmental law in the United States (Makuch and Pereira, 2012). Section 10 of the RHA requires approval by the COE for regulated activities conducted below the ordinary high water line of navigable waters of the United States. Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway.

1.5.1.9 Wilderness Act

The Wilderness Act, signed into law in 1964, created the National Wilderness Preservation System and recognized wilderness as “an area where earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” The Wilderness Act further defined wilderness as “an area of undeveloped federal and retaining its primeval character and influence without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions...” Currently over 106 million acres of federal public lands have been designated by Congress as Wilderness lands. (NPS, 2016).

1.5.2 State and Local Laws

In some cases, Mountain Valley and Equitrans would obtain applicable state and local permits or authorizations, as required under specific state and county laws and regulations in order to allow the MVP and EEP to move forward. The FERC encourages cooperation between applicants and state and local authorities; however, state and local agencies, through the application of state and local laws, may not prohibit or unreasonably delay the construction or operation of facilities approved by the FERC. Any state or local permits issued with respect to

jurisdictional facilities must be consistent with the conditions of any authorization issued by the FERC.³⁴

A list of major federal and state environmental permits, approvals, and consultations for the MVP and the EEP is provided in table 1.5-1. The Applicants would be responsible for obtaining all permits and approvals required to construct and operate the MVP and the EEP, regardless of whether or not they appear in this table.

TABLE 1.5-1					
Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects					
Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
Federal					
FERC	Certificate under Section 7 of the NGA	October 23, 2015 application filed with the FERC	Pending	October 27, 2015 application filed with the FERC	Pending
BLM	Right-of-way Grant for COE and FS lands	April 5, 2016	Pending	N/A	N/A
ACHP	Comment on undertakings under Section 106 of the NHPA	Pending	Pending	Pending	Pending

³⁴ See *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply V. Public Service Commission*, 894 F. 2d 571 (2n Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC 61,091 (1990) and 59 FERC 61,094 (1992).

TABLE 1.5-1 (continued)					
Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects					
Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
USDA FS Jefferson National Forest	Survey permission under the Forestwide Standard, FW-244	November 2014, March 2015, August 2015	Pending	N/A	N/A
	Consideration of the Right-of-Way Grant and Temporary Use Permit under Section 28 of the Mineral Leasing Act	April 5, 2016	Pending	N/A	N/A
	Cooperating Agency for EIS under Section 204 of NEPA				
	LRMP Amendments				
	Regional Forester's Sensitive Species viability determinations				
	ROD for Forest Plan Amendments under the National Forest Management Act	January 22, 2016 filed Right-of-Way Grant application & POD	Pending	NA	NA
COE Huntington District, Norfolk District, Pittsburgh District	Section 404 of CWA & Section 10 of RHA permits	February 21-24, 2016	Pending	October 2015	Pending
	Joint Permit Application	N/A	N/A	June 2016	Pending
USDOI - FWS	Section 7 of ESA, BGEPA, and MBTA Consultations	Consultation Initiated September 2014	Pending	Consultation Initiated June 24, 2015	Pending

TABLE 1.5-1 (continued)

Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects

Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
USDOI – NPS ANST Office Blue Ridge Parkway Office	Right-of-way Grant to cross the Blue Ridge Parkway under the Energy Policy Act of 2005; 36 CFR 14; 16 USC5; 16 USC 79; NEPA	Applications Pending	Pending	N/A	N/A
DOT - PHMSA and Office of Safety, Energy, and the Environment	Consultation	Consultation Initiated October 2014	N/A	Consultation Initiated April 27, 2015	N/A
State of West Virginia					
West Virginia Division of Culture and History	Section 106 NHPA Consultations	August 12, October 12, & December 24, 2015 & February 24, June 16, & July 8, 2016 reports submitted	October 6 & November 16, 2015 & January 27, February 12, April 4, & May 2, 2016 SHPO comments	February 5, 2016 survey reports submitted	Pending
WVDEP, Division of Air Quality	CAA permit for air emissions for the Bradshaw, Harris, and Stallworth Compressor Stations	Application filed October 21, 2015	Pending	N/A	N/A
WVDEP, Division of Water and Waste Management	Section 401 CWA Water Quality Certification	Application filed February 25, 2016	Pending	N/A	N/A
	Section 402 CWA NPDES Permit – Construction Stormwater General Permit for Oil and Gas Related Construction Activities	Application filed February 23, 2016	Pending	Application Pending	Pending
	Section 402 CWA NPDES Hydrostatic Test Discharge Permit	Application filed October 2016	Pending	Application Pending	Pending

TABLE 1.5-1 (continued)

Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects

Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
WVDNR, Office of Land and Streams	Permit for construction in or across a stream under WV Code Chapter 5A, Article 11	Application filed second quarter 2016	Pending	Application Pending	Pending
West Virginia Department of Transportation	Road Crossings & Encroachment Permits under Section 6, Article 16, Chapter 17; Section 9, Article 16, Chapter 17; Section 8, Article 4, Chapter 17, West Virginia Code 1931	Application filed second quarter 2016	Pending	Application Pending	Pending
State of Virginia					
VDEQ – Water Division	Section 401 CWA – Water Quality Certificate	N/A – issued with the COE permit	Pending	N/A	N/A
	Section 402 CWA NPDES Permit – Construction Stormwater General Permit	February 11, 2016, June 27, 2016	Pending	N/A	N/A
	Section 402 CWA NPDES Hydrostatic Test Withdrawal Permit (Permit 9VAC25-200-10)	Consultation Initiated on March 22, 2016	N/A	N/A	N/A
	Section 402 CWA NPDES Hydrostatic Test Discharge Permit (General Permit VAG83)	Consultation Initiated on March 22, 2016	N/A	N/A	N/A

TABLE 1.5-1 (continued)

Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects

Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
VDGIF	Consultations on impacts on state-managed lands under FWS Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.)	Consultation Initiated on March 22, 2016	N/A	N/A	N/A
Virginia Department of Historic Resources	Section 106 NHPA Consultations	August 12, September 11, 2015, October 8, & December 1, 2015, & January 14, March 10 & 15, June 7 & 24, & July 12, 2016 reports submitted	October 22 & 27, & December 30 & 31, 2015 & January 6, February 18, April 21, & May 25, 2016 SHPO comments	N/A	N/A
Virginia Department of Transportation	Road bonds and crossing permits under Code of Virginia 33.1-12	Application filed second quarter 2016	Pending	N/A	N/A
Virginia Marine Resources Commission	Submerged Lands License under Virginia Administrative Code 4 VAC 20-120-10 ET SEQ.	February 24, 2016	Pending	N/A	N/A
Virginia Department of Forestry	Consultations	Consultation Initiated on October 13, 2014	N/A	N/A	N/A
Virginia Department of Conservation and Recreation	Consultations regarding wildlife species/habitat, state-managed lands, and state parks	Consultation Initiated on October 13, 2014	N/A	N/A	N/A
Virginia Outdoors Foundation	Conversion/Dive rsion of Open Space Access or Utility Easement Application under Virginia Code Section 10.1-1704	January 22, 2016	Pending	N/A	N/A

TABLE 1.5-1 (continued)

Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects

Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
State of Pennsylvania					
Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation	Section 106 NHPA Consultations	N/A	N/A	February 5, 2016 survey reports submitted	Pending
Pennsylvania Department of Conservation and Natural Resources	ESA Consultations	N/A	N/A	Consultation Initiated on June 24, 2015	Pending
Pennsylvania Department of Environmental Protection (PADEP), Air Permits Division	Chapter 127 Minor Source Permit Title V or Minor Source Operating Permit under CAA	N/A	N/A	October 2015	Pending
PADEP	ESCGP-2; General Permit for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing, or treatment operations or transmission facilities under 25 Pa. Code 102.5 (c) and (m)	N/A	N/A	March 2016	Pending
	PAG-10 General Permit; Hydrostatic Testing of Tanks and Pipelines under CWA	N/A	N/A	Consultation initiated on April 27, 2015; State-wide PAG-10 authorization held. Permit Application Filed – March 2016	N/A

TABLE 1.5-1 (continued)					
Major Environmental Permits, Licenses, Approvals, and Consultations Applicable to the Proposed Projects					
Agency	Permit/ Consultation	Mountain Valley Project		Equitrans Expansion Project	
		Submittal Date (Anticipated)	Receipt Date (Anticipated)	Submittal Date (Anticipated)	Receipt Date (Anticipated)
PADEP, Division of Waterways, Wetlands, and Stormwater Management	Chapter 105 Water Obstruction and Encroachment Permit; CWA Section 401 Water Quality Certification (jointly with COE Section 404) Submerged Lands License Agreement	N/A	N/A	October 2015	Pending
Pennsylvania Fish and Boat Commission	ESA Consultations	N/A	N/A	Consultation Initiated on June 24, 2015	Pending
Pennsylvania Game Commission	ESA Consultations	N/A	N/A	Consultation Initiated on June 24, 2015	Pending
Pennsylvania Department of Transportation	Highway Occupancy Permit under Sections 411 and 420 of the State Highway Law	N/A	N/A	Application Pending	Pending
N/A = Not applicable					

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