

**United States Department of the Interior
BUREAU OF LAND MANAGEMENT**

**Environmental Impact Statement: FERC/FEIS-0272F (CP16-10-000 and CP16-13-000)
Case File Numbers: VAES-058143 and WVES-058142**

RECORD OF DECISION

**Mountain Valley Pipeline Project
Decision to Grant Rights of Way and Temporary Use Permits**

**Monroe and Braxton Counties, West Virginia
Giles and Montgomery Counties, Virginia**

Bureau of Land Management
Eastern States Office, Washington, D.C.
Southeastern States District Office, Flowood, Mississippi

With the Concurrence of:

U.S. Department of Defense, Army Corps of Engineers, Huntington District Office
U.S. Department of Agriculture, George Washington-Jefferson National Forest

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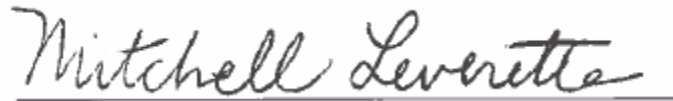
December 20, 2017

Final Agency Actions

Issuance of Right-of-Way Grant

Acting Eastern States Director's Recommendation

I recommend approval of a 42-inch, steel-welded, underground natural gas pipeline Right-of-Way grant and associated Temporary Use Permits (VA-ES-058143 and WV-ES-058142) to Mountain Valley Pipeline, LLC, subject to terms, conditions, stipulations, and environmental protection measures developed by the U.S. Department of the Interior, U.S. Department of Agriculture Forest Service, and the U.S. Army Corps of Engineers and identified in this Record of Decision, including appendices, and the Plan of Development developed by Mountain Valley Pipeline, LLC.



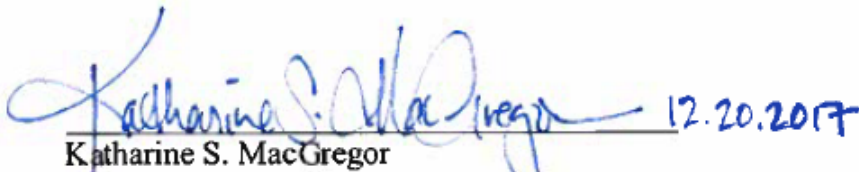
DEC 20 2017

Mitchell Leverette

Acting State Director, Bureau of Land Management, Eastern States

Approval by the Assistant Secretary

I hereby approve the decision recommended by the Acting Eastern States Director, subject to terms, conditions, stipulations, and environmental protection measures developed by the U.S. Department of the Interior, U.S. Department of Agriculture Forest Service, and the U.S. Army Corps of Engineers and identified in this Record of Decision, including appendices, and the Plan of Development developed by Mountain Valley Pipeline, LLC. My approval of this decision constitutes the final decision of the Department of the Interior. In accordance with 15 U.S.C. § 717r(d)(1), any challenge to this decision must be brought in the United States Court of Appeals for the Fourth Circuit. Additionally, any challenge to this decision is subject to 42 U.S.C. § 4370m-6.



Katharine S. MacGregor

Deputy Assistant Secretary, Land and Minerals Management

Exercising the Authority of the Assistant Secretary, Land and Minerals Management

Executive Summary

This Record of Decision (ROD) documents the decision and rationale of the Bureau of Land Management (BLM) to grant a Right of Way (ROW) and temporary use permits (TUP) for the Mountain Valley Pipeline (MVP) project on Federal lands under the jurisdiction of the US Department of Agriculture Forest Service (FS) and U.S. Army Corps of Engineers (USACE) in Virginia and West Virginia. The Mountain Valley Pipeline project (“Project”) will cross FS and USACE lands. This document, therefore, also serves as the ROD for USACE and the FS. While no BLM-administered lands are associated with the proposed Project, the BLM is responsible for considering a ROW and TUP application when lands administered by two or more Federal land management agencies are involved, per the Mineral Leasing Act (MLA). The Federal Energy Regulatory Commission (FERC) was the lead agency in the preparation of the Environmental Impact Statement (EIS).

This ROD was prepared in accordance with National Environmental Policy Act (NEPA), MLA, and other applicable Federal laws and regulations. The BLM, USACE, FS, U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), U.S. Department of Transportation (USDOT), West Virginia Department of Environmental Protection (WVDEP), and West Virginia Division of Natural Resources (WVDNR), served as Cooperating Agencies in the preparation of the Mountain Valley Pipeline Project Final EIS pursuant to Section 204 of NEPA. The BLM, FS, and USACE have adopted the Final EIS per 40 C.F.R. 1506.3, and the BLM has prepared this ROD based on information contained in the Final EIS for project-related actions affecting FS and USACE lands. This decision will specifically affect the Federal lands detailed in FERC’s Certificate of Public Convenience and Necessity (Certificate, Attachment A), MVP’s Plan of Development (POD, Attachment B), and described in the Final EIS for the project. As such, the focus of this document, while occasionally referencing the entire MVP, will be on the facilities, effects, mitigations, and stipulations associated with the pipeline as it occurs on Federal lands.

FERC issued a Certificate for the MVP Project on October 13, 2017 (Attachment A). The Certificate authorizes Mountain Valley to construct, operate, and maintain:

- approximately about 303.5 miles of new underground 42-inch-diameter pipeline extending from the new Mobley Interconnect in Wetzel County, West Virginia to the existing Transcontinental Gas Pipe Line Company LLC (Transco) Station 165 in Pittsylvania County, Virginia;
- 3 new compressor stations (Bradshaw, Harris, Stallworth) in West Virginia, totaling about 171,600 horsepower;
- 4 new meter and regulation stations and interconnections (Mobley, Sherwood, WB, and Transco);
- 3 new taps (Webster, Roanoke Gas Lafayette, and Roanoke Gas Franklin);
- 8 pig launchers and receivers at 5 locations; and

- 36 mainline block valves.

The MVP is 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 contracted volumes of natural gas.

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, JNF) and the USACE (as part of the Weston and Gauley Bridge Turnpike Trail). Under the Mineral Leasing Act (MLA, 30 U.S.C. 185 et seq.), the BLM is the Federal agency responsible for issuing ROW and TUP 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 is responsible for the issuance of a Grant to Mountain Valley for a pipeline easement over Federal lands, dependent on concurrence from the FS and the USACE. The MVP pipeline route will cross about 3.6 miles (83 acres or 1.2 percent of the total MVP acreage) of the JNF (managed by the FS) in Monroe County, West Virginia and Giles and Montgomery Counties, Virginia. The MVP pipeline route will cross about 60 feet of the Weston and Gauley Bridge Turnpike Trail, managed by the USACE, in Braxton County, West Virginia. Additional mitigation may be required as a result of the Grant. FS and USACE each have the responsibility of determining whether or not to concur with the BLM's decision on whether or not to issue a ROW grant across Federal lands. Both the FS and the USACE have adopted the Final EIS and concur with the issuance of this Grant.

After extensive environmental analysis, consideration of agency, tribal, and public comments, and application of pertinent Federal laws and policies, and in accordance with 43 C.F.R. Part 2880, it is the decision of the BLM with concurrence from FS and USACE to authorize a 30-year ROW and associated TUP for the construction, operation, maintenance, and termination of the selected alternative for MVP across Federal lands. The Grant will be for the route certificated by FERC (Attachment A).

This ROD constitutes the Department's and BLM's final decision for the MVP Project, including mitigation and monitoring requirements.

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ATTACHMENTS

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Attachment B: Mountain Valley Pipeline Project Plan of Development

Attachment C: Right of Way Grant and Temporary Use Permit

Attachment D: US Fish and Wildlife Service Biological Opinion

Attachment E: Migratory Bird Conservation Plan

Attachment F: Programmatic Agreement for Historic Properties

Attachment G: Agency Concurrence Letters

Attachment H: Final Environmental Impact Statement Comment Summary and Response Report

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ACP	Atlantic Coast Pipeline
AEP	American Electric Power
ANST	Appalachian National Scenic Trail
APE	Area of Potential Effect
AO	Authorized Officer
BA	Biological Assessment
Bcf/d	Billion Cubic Feet Per Day
BO	Biological Opinion
BLM	U.S. Department of the Interior, Bureau of Land Management
BMP	Best Management Practice
BRP	Blue Ridge Parkway
Certificate	Certificate of Public Convenience and Necessity
CEQ	Council on Environmental Quality
CWA	Clean Water Act
Dth/d	Dekatherms Per Day
DOI	Department of Interior
EEP	Equitrans Expansion Project
ESA	Endangered Species Act
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPAct	Energy Policy Act
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act
FRAP	Federal Rules of Appellate Procedure
FS	U.S. Department of Agriculture, Forest Service
JNF	Jefferson National Forest
KOP	Key Observation Point
LRMP	Land and Resource Management Plans
LOP	Limited Operating Period
MBTA	Migratory Bird Treaty Act
MFP	Management Framework Plan
MIS	Management Indicator Species
MLA	Mineral Leasing Act
MP	Mile Post
MVP	Mountain Valley Pipeline
NAGPRA	Native American Graves Repatriation Act
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFS	National Forest System
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOI	Notice of Intent
NRHP	National Register of Historic Places
NTP	Notice to Proceed
PA	Programmatic Agreement

POD	Plan of Development
ROD	Record of Decision
RMP	Resource Management Plan
ROW	Right-of-Way
SHPO	State Historic Preservation Officer
TUP	Temporary Use Permit
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Department of Interior, Fish and Wildlife Service
USDOT	U.S. Department of Transportation
VDGIF	Virginia Department of Game and Inland Fisheries
VIA	Visual Impact Assessment
VMS	Visual Management System
VRM	Visual Resource Management
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Division of Natural Resources

Introduction

This ROD documents the decision and rationale of the BLM to grant a ROW and TUP for the MVP project on Federal lands under the jurisdiction of the FS and USACE in Virginia and West Virginia. As discussed in detail below, the Project will cross 3.6 miles of the FS and approximately 60 feet of USACE lands. This document, therefore, also serves as the ROD for USACE and the FS. While no BLM-administered lands are associated with the proposed Project, the BLM is responsible for considering a ROW and TUP application when lands administered by two or more Federal land management agencies are involved, per the MLA. The FERC was the lead agency in the preparation of the EIS.

This ROD was prepared in accordance with NEPA, MLA, and other applicable Federal laws and regulations. The BLM, USACE, FS, EPA, USFWS, USDOT, WVDEP, and WVDNR, served as Cooperating Agencies in the preparation of the Mountain Valley Pipeline Project Final EIS pursuant to Section 204 of NEPA. The BLM, FS, and USACE have adopted the Final EIS per 40 C.F.R. 1506.3, and the BLM has prepared this ROD based on information contained in the Final EIS for project-related actions affecting FS and USACE lands. This decision will specifically affect the Federal lands detailed in FERC's Certificate (Attachment A), MVP's POD (Attachment B), and described in the Final EIS for the project. As such, the focus of this document, while occasionally referencing the entire MVP, will be on the facilities, effects, mitigations, and stipulations associated with the pipeline as it occurs on Federal lands.

On September 16, 2016, FERC issued the Draft EIS for MVP. On December 22, 2016, the Department of the Interior (DOI) issued a comment letter on the Draft EIS concluding that, "In general, DOI bureau review has resulted in the conclusion that the current DEIS lacks sufficient information to perform adequate analysis of impacts to DOI resources." The BLM's incorporated comment letter stated that, "Because the DEIS lacks information, it precludes meaningful analysis of the potential impacts discussed herein." The BLM's comment letter noted that the "DEIS fails to analyze much of the information [listed in BLM's letter] because the applicant did not provide it despite multiple requests, the applicant provided the information after the close of the comment period, or the process had not been completed before the release of the DEIS." The BLM's letter concluded, "In order to give cooperating agencies and the public an opportunity to meaningfully consider and comment on such new information, we are considering submitting a formal request to FERC to complete a Revised Supplemental Draft Environmental Impact Statement." The letter noted that the BLM and FERC's Federal coordinator had scheduled an in-person meeting on January 9, 2017.

BLM representatives met with FERC's Federal coordinator in early January to discuss the agencies' concerns. FERC, as lead agency for the NEPA process, committed to addressing the information and requests outlined in the Department of the Interior's and others' comment letters.

Over the next several months, in response to the agencies' concerns and public comment and in coordination with cooperating agencies, FERC issued multiple Environmental Information Requests regarding the project. On February 3, 2017, Mountain Valley filed an answer to certain comments on the Draft EIS. On February 9, 2017, Mountain Valley filed answers to FERC's January 27, 2017 Environmental Information Requests. On March 30, 2017, Mountain Valley

filed answers to FERC's March 20, 2017 Environmental Information Requests. Mountain Valley filed supplemental materials on April 18; June 30; July 7, 17, 20, and 27; August 4 and 25; September 1, 5, 18, and 28; October 20 and 31, and November 1, 8, 13, 15, 21, 28, and 30; and December 6, 11, and 12, 2017.

Agency staff from BLM, the FS, and USACE continued to evaluate information, data, and supplemental materials filed by Mountain Valley related to Federal lands throughout the process of drafting the Final EIS. BLM staff provided comments on the Administrative Draft of the Final EIS and assisted FERC, the lead agency for NEPA compliance, as requested. FERC assured the cooperating agencies that FERC would consider and incorporate, as appropriate, any suggestions or comments presented to FERC's docket as the agencies finalized the Final EIS for the project. FERC provided good faith, reasoned analysis in response to the cooperating agencies' concerns, requested additional information as necessary, and worked with the cooperating agencies to address the agencies' concerns in the Final EIS. On June 23, 2017, FERC issued the Final EIS for the project.

On July 28, 2017, the DOI's Office of Environmental Policy and Compliance submitted the Department's preliminary review of the Final EIS (FERC e-Library 20170728-5150(32303051)). The Department's letter notes that "BLM's comments on the DEIS identified a number of BLM's initial concerns and offered suggestions for change. After the release of the DEIS, FERC, as lead agency, continued to work cooperatively with the Federal agencies involved to address these concerns and shape the proposal to meet statutory and regulatory obligations." The Department's letter notes that "FERC requested additional information, required the applicants to file the information to FERC's e-Library system, and allowed the public to 'comment on that information at the time of its filing.'" The Department's letter applauds FERC for "directly respond[ing] to comments received during the comment period" and for continuing to "update information as necessary between the release of the DEIS and the FEIS." The Department noted FERC's particular responses to BLM's comments on the purpose and need statement, details on elimination of alternatives and route changes, geotechnical analysis, a revised visual assessment, and the approach to corridors, waterbody crossing methods and dust. The Department also noted that FERC required the applicant to respond to BLM's letter and that "Mountain Valley filed requested documents and has been working closely with the Federal agencies on an updated POD." The Department thanked Mountain Valley Pipeline for taking steps to address the Federal agencies' concerns by responding to FERC's Environmental Information Requests, abandoning an open trench contingency plan to cross the Appalachian National Scenic Trail, agreeing to maintain a vegetated buffer between the trail and the pipeline, and continuing to coordinate with relevant stakeholders.

BLM acknowledges that it initially suggested that the agency was considering requesting a revised or supplemental Draft EIS. However, after further review of the record preceding and following the Draft EIS and the actions taken by FERC in cooperation with cooperating agencies in response to public comments, BLM has determined that a revised or supplemental Draft EIS is not required. As the FERC noted in response to the U.S. Department of the Interior's comments, the Draft EIS was based on two years of work and analysis by FERC staff and "environmental surveys of almost 90 percent of the MVP pipeline route." FERC E-Library No. 201702623-4000. Additionally, in response to the Federal agencies' comments on the Draft EIS, FERC and the proponent proactively responded to the Federal agencies' concerns, FERC worked cooperatively

with the Federal agencies involved to ensure that post-DEIS environmental information requests met the Federal agencies' needs, and FERC allowed additional comment on the additional information and data. FERC E-Library No. 201702623-4000 at FA11-2 (FERC's Response to DOI Comments) ("The Applicants must file information requested in the Draft EIS on our e-Library system which is available to the public. Therefore, the public can comment on that information at the time of its filing."). FERC adequately addressed BLM's comments in its response to comments and the Final EIS.

Based on the record before the agencies, the BLM concludes "consistent with the evolving nature of a major project, that [FERC's] process for ventilating and analyzing potential environmental impacts . . . involved the requisite 'hard look,' and that any deficiencies in the draft environmental impact statement as may have existed were cured by the final environmental impact statement." *National Committee for the New River v. FERC*, 373 F.3d 1323 (D.C. Cir. 2004). As demonstrated by the number of comments on the Draft EIS, the depth of these comments' analysis on a wide range of resource issues, and the Department's own comments on the Draft EIS, the Draft EIS served as a "springboard for public comment" and "elicit[ed] suggestions for change." *See id.*

After reviewing the record, FERC's responses to agency and public concerns, FERC's incorporation of public comment before and after the official close of the comment period on the Draft EIS, FERC's Environmental Information Requests and Mountain Valley's responses, and the Final EIS, BLM concludes that any omissions in the Draft EIS did not leave the agencies or public without opportunity to comment on a material environmental aspect of the project or without information about the proposed project. The matters of principal concern, outlined in the BLM's, other agencies', and public's detailed comments before and after the Draft EIS and addressed in the FEIS, are of a similar nature to those addressed in public comments on the Draft EIS and are reflected in the conditions attached by FERC to the certificate of authorization for the project (Attachment A), the POD (Attachment B), and the stipulations in the BLM Grant (Attachment C, Exhibit D).

The BLM has conducted an independent review and determined that the suggestions and comments it provided during the preparation of the Final EIS have been addressed and satisfied and that the Final EIS was prepared in a manner that complies with all requirements of the NEPA, 42 U.S.C. 4321 et seq.; the Council on Environmental Quality (CEQ) regulations that implement the NEPA, 40 C.F.R. Parts 1500 – 1508; and all policies of the DOI and the BLM for the preparation of NEPA documents. In light of these determinations, the BLM has elected to adopt the FERC-issued Final EIS without recirculation, as is provided for by 40 C.F.R. 1506.3(c). The FERC Final EIS can be found on the following website: <https://www.ferc.gov/industries/gas/enviro/eis/2017/06-23-17-FEIS.asp>

In reaching this conclusion, BLM also refers to the expert opinions of the Federal agencies that administer the lands over which the pipeline will cross and the FERC's opinion and role as lead agency for NEPA compliance for this complex interstate project. The BLM does not directly manage any land involved in the MVP project. In cases that do not involve land managed by BLM, BLM's analysis of a proposal is based in large part on "the agencies that are impacted from the proposal and their review of the proposal in light of the purposes for which the land they administer is dedicated." *Navajo Refining Co.*, 149 IBLA 014, 21 (1999). Both the FS and the USACE have adopted the Final EIS and concur with the issuance of this Grant.

Background and Project Information

FERC is responsible for authorizing construction and operation of interstate natural gas pipelines. FERC issues Certificates for natural gas pipelines under Section 7 of the Natural Gas Act of 1938 (NGA), as amended, and authorizes construction and siting of facilities for the import or export of natural gas under Section 3 of the NGA. FERC also authorizes construction and operation of natural gas pipelines per the Natural Gas Policy Act of 1978 (15 U.S.C. 3341-3348). Accordingly, FERC served as the Lead Agency for Mountain Valley Pipeline LLC's application for the Mountain Valley Pipeline Project. FERC used the Final EIS it prepared according to NEPA to issue its Certificate for the MVP Project on October 13, 2017 (Attachment A). The Certificate authorizes Mountain Valley to construct, operate, and maintain:

- approximately about 303.5 miles of new underground 42-inch-diameter pipeline extending from the new Mobley Interconnect in Wetzel County, West Virginia to the existing Transcontinental Gas Pipe Line Company LLC (Transco) Station 165 in Pittsylvania County, Virginia;
- 3 new compressor stations (Bradshaw, Harris, Stallworth) in West Virginia, totaling about 171,600 horsepower;
- 4 new meter and regulation stations and interconnections (Mobley, Sherwood, WB, and Transco);
- 3 new taps (Webster, Roanoke Gas Lafayette, and Roanoke Gas Franklin);
- 8 pig launchers and receivers at 5 locations; and
- 36 mainline block valves.

The MVP is designed to transport about 2.0 million Dth/d, equivalent to about 2.0 Bcf/d of contracted volumes of natural gas.

The associated Equitrans Extension Project (EEP), also evaluated in the Final EIS, will involve construction and operation of a total of about 7.4 miles of various diameter natural gas pipelines, 1 new compressor station, 2 interconnects, 4 pig launcher and receiver sites, cathodic protection beds, and the decommissioning of an existing compressor station, in Pennsylvania and West Virginia. No meter stations or mainline valves are associated with the EEP. The Equitrans Expansion portion of the project does not impact National Forest System lands. The EEP is not part of this ROD because it only crosses lands administered under one Federal agency, USACE (Huntington District and Pittsburgh District), and therefore, under the MLA, any associated ROW must be issued by USACE.

A summary of ROW length and acreage and access roads for each jurisdiction is presented in the Table 1-1 of the POD (Attachment B).

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, JNF) and the USACE (as part of the Weston and Gauley Bridge Turnpike Trail). Under the Mineral

Leasing Act (MLA, 30 U.S.C. 185 et seq.), the BLM is the Federal agency responsible for issuing ROW and TUP 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 is responsible for the issuance of a Grant to Mountain Valley for a pipeline easement over Federal lands, dependent on concurrence from the FS and the USACE. The MVP pipeline route will cross about 3.6 miles (83 acres or 1.2 percent of the total MVP acreage) of the JNF (managed by the FS) in Monroe County, West Virginia and Giles and Montgomery Counties, Virginia. The MVP pipeline route will cross about 60 feet of the Weston and Gauley Bridge Turnpike Trail, managed by the USACE, in Braxton County, West Virginia. Additional mitigation may be required as a result of the Grant. FS and USACE each have the responsibility of determining whether or not to concur with the BLM's decision on whether or not to issue a ROW and TUP across Federal lands.

Purpose and Need

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. The MVP is designed to transport about 2.0 million Dth/d, equivalent to about 2.0 billion Bcf/d of contracted volumes of natural gas. The EEP will transport up to 400,000 Dth/d (about 0.4 Bcf/d) of contracted firm capacity of natural gas.

The BLM's purpose and need for the proposed action is to respond to a ROW Grant application submitted by Mountain Valley. Under the MLA, the Secretary of the Interior has delegated authority to the BLM to grant a ROW and TUP on Federal lands under the jurisdiction of two or more Federal agencies. Before issuing the Grant, the BLM must receive the written concurrence of the other surface managing Federal agencies (*i.e.*, FS and USACE) in accordance with 43 C.F.R. 2884.26.

The FS's purpose and need for the proposed action is to consider issuing a concurrence to the BLM for the Grant and to evaluate an amendment to the Land and Resource Management Plan (LRMP) for the JNF that will make provision for the MVP pipeline's construction and operation. The FS amendment to the JNF LRMP is analyzed in the EIS.

USACE's purpose and need for the proposed action is to consider adopting the EIS for the purposes of exercising its regulatory authorities. As an element of its review, the USACE must consider whether the proposed projects represent the least environmentally damaging practicable alternative pursuant to the Clean Water Act (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.

Decision and Rationale for Decision

After extensive environmental analysis, consideration of agency, tribal, and public comments, and application of pertinent Federal laws and policies, and in accordance with 43 C.F.R. Part 2880, it is the decision of the BLM with concurrence from FS and USACE to grant ROWs VA-ES-058143 and WV-ES-058142 and the associated TUPs for the construction, operation, maintenance, and termination of the selected alternative for MVP across Federal lands. The

Grant will be for the route certificated by FERC (Attachment A). Specifically, the BLM, with concurrence from FS and USACE, has decided to:

1. Grant a ROW authorizing the construction, operation, and maintenance of a 42-inch, steel-welded underground natural gas pipeline. On Federal lands, the ROW will be 50 feet wide (including the ground occupied by the pipeline) and 3.6 miles long, and will encompass 21.8 acres more or less in Monroe County, West Virginia, and Giles and Montgomery Counties in Virginia (See Table 1-1 in Attachment B). The term of the grant is thirty (30) years with the right of renewal. This ROW grant is issued under authority of the MLA, as amended (30 U.S.C. 185).
2. Grant a ROW authorizing the upgrade, use, and maintenance of existing access roads outside the permanent ROW. The grant is 25 feet wide on major access roads and 34,826 feet long, encompassing approximately 20 acres. See Attachment C. This ROW grant is issued under authority of the MLA, as amended and supplemented (30 U.S.C. 185).
3. Issue a TUP in association with the MVP Pipeline Project ROW authorizing the use of Temporary Workspace outside of the permanent ROW during the construction of the project. The TUP will encompass an area on Federal lands (in addition to the permanent 50-foot ROW). A 75 feet wide temporary construction ROW encompasses approximately 51.4 acres. The term of the TUP will be approximately 3 years with a right of renewal. This TUP is issued under authority of the MLA, as amended (30 U.S.C. 185). See Table 1-1 in Attachment B.
4. Issue a TUP in association with the MVP Pipeline Project ROW authorizing the upgrade, use and maintenance of access roads outside the permanent ROW. The TUP for access roads will expand the road from 25 feet wide to 40 feet wide in most sections, but expanded to 50 feet wide at some of the turns and approximately 6.6 miles long, encompassing approximately 30.9 acres. The existing access roads are identified and discussed in the Off Highway Vehicle Management Plan in the Plan of Development (POD) (Attachment B, Appendix AA). The term of the TUP will be 1 year with a right of renewal. This TUP is issued under authority of the MLA, as amended (30 U.S.C. 185). See Table 1-1 in Attachment B.
5. In accordance with 43 C.F.R. Part 2800, Mountain Valley has provided the BLM with a final POD, entitled the MVP Project POD dated December 2017 (Attachment B), which details how the pipeline and associated facilities will be constructed in compliance with Grant terms, conditions, and stipulations. This POD is approved and will be made a part of the Grant. Mountain Valley shall construct, operate and maintain the facilities, improvements and structures within the ROW, and areas authorized by the TUPs in strict conformity with the POD. Any relocation, additional construction, or use that is not in accordance with the approved POD shall not be initiated without the prior written approval of the Authorized Officer (AO).

Prior to any construction or other surface disturbance associated with the Grant, Mountain Valley shall receive written Notices to Proceed (NTPs) from the AO or delegated agency representative.

Any NTP shall authorize construction or use only as therein expressly stated and only for the particular location, segment, area, and use described.

Agency Standards

The Grant must comply with agency (BLM, FS, USACE, and FERC) stipulations described and referenced in the attachments to this ROD (Attachment C, Exhibit D).

Bonding

Mountain Valley will post a performance bond in the amount of \$8,665,838 to ensure adequate adherence to all terms and conditions on Federal lands. The bond will apply to the following:

- Restoration and reclamation of disturbed areas and other requirements relative to the construction phase of the project until these have been accepted by the Authorized Officer. Other requirements include, but are not limited to, completion of all required reports, providing all essential records, and permanent curation of artifacts. Upon completion, or partial completion of these construction related requirements, the Authorized Officer may terminate or reduce the amount of the bond. Bonding amount for reclamation activities is \$3,909,838.
- Accommodating all cultural resources costs associated with implementing the Programmatic Agreement and approved treatment plans or other mitigation activities, as negotiated by the Holder where they contract for services in support of the Programmatic Agreement. Such costs may include, but are not limited to treatment, field work, post-field analyses, research, and report preparation, interim and summary reports preparation, the curation of project documentation and artifacts collects (except for Native American Graves Protection and Repatriation Act [NAGPRA]) related human remains and cultural artifacts) in an Agency-approved curation facility, and costs associated with the repatriation of NAGPRA items. Bonding amount for cultural work is \$2,500,000.
- Implementing decommissioning activities, including physical disconnection; cleaning and purging; filling and sealing; pipeline removal; surface reclamation, and purchase of fill and reclamation materials. Bonding amount for decommission activities is \$1,256,000.
- Liability for damages or injuries resulting from releases or discharges of Hazardous Materials or Hazardous Waste during the construction and reclamation phase of the project. Bonding amount for Hazardous Materials or Hazardous Waste liability is \$1,000,000.

The bond may be released as specific tasks are completed and accepted by the BLM. This bond must be maintained in effect until temporary improvements used during construction are removed; restoration and reclamation of the ROW has been accepted by the AO; and all products required by the PA and the Grant have been accepted by the BLM and the FS or USACE, as appropriate.

Decommissioning on Federal Lands

Upon termination of the Grant, all facilities on Federal lands will be decommissioned in accordance with an abandonment plan that will be reviewed and approved by the BLM, FS, USACE and FERC. Any aboveground pipeline facilities or markers will be completely removed and the associated location will be restored to as near original condition as possible. The underground pipe will be purged of gas, cleaned, isolated from interconnections with other pipelines, sealed, and left in place. All access roads not required to meet Federal transportation needs will be removed and the sites reclaimed to agency standards.

State and Federal Legal Requirements

In accordance with 30 U.S.C. 185(v) and 43 C.F.R. 2885.11(b), this ROD also requires Mountain Valley to meet the requirements of the other major authorizing agencies for this project concerning any necessary Federal and state permits, licenses, and/or approval and consultation requirements on Federal lands as identified in Table 1.5-1 of the EIS, including the following:

- Bald Eagle and Golden Eagle Protection Act
- Clean Air Act
- Clean Water Act
- Endangered Species Act
- Migratory Bird Treaty Act
- National Historic Preservation Act
- National Trails System Act
- Rivers and Harbors Act
- Wilderness Act

Compliance and Monitoring

Mountain Valley will fund third-party compliance environmental inspectors/monitors for pipeline construction, access road upgrades, and aboveground facility construction. These monitors will report directly to the BLM, FS, and FERC. Their role and responsibility is to ensure compliance with all terms, conditions, and stipulations of the Grant, FERC's Certificate, and other permits, approvals and regulatory requirements as described in Table 1.5-1 of the Final EIS. The environmental inspectors/monitors shall follow the Environmental Compliance Management Plan included in the POD (Attachment B, Appendix N). Mountain Valley will also be responsible for funding third-party monitoring of the reclamation and stabilization of the pipeline over the long term. Included in this requirement, among other things, is the yearly monitoring of the ROW for invasive plants and, if necessary, spraying as outlined in the Exotic and Invasive Species Control Plan and Herbicide Use Plan included in Appendices S and T, respectively of the POD (Attachment B).

Terms, Conditions, and Stipulations

This decision is contingent on meeting all terms, conditions and stipulations for Federal lands included in the BLM's Grant and in FERC's Certificate.

Notice to Proceed

This Decision does not authorize Mountain Valley to commence construction of any project facilities for the MVP Project or proceed with other ground-disturbing activities in connection with the MVP Project on Federal lands. Mountain Valley shall not commence construction of project facilities or proceed with any ground-disturbing activities related to the MVP Project on Federal lands until Mountain Valley:

1. in accordance with 43 C.F.R. 2886.10, receives a written Notice to Proceed from the AO, authorizing Mountain Valley to commence construction of project facilities or proceed with other ground-disturbing activities in connection with the MVP Pipeline Project,
2. complies with all pre-construction requirements included in FERC's Order, dated October 13, 2017, certifying the MVP Project 161 FERC 61,043 and the Grant. This includes written confirmation from FERC's Director, Office of Energy Projects, that Mountain Valley has complied with Condition 28 of Appendix A of FERC's Order.
3. provides the BLM and FS with documentation that Mountain Valley's obligations pursuant to FERC's Order have been met.

Appeal of this Decision

Section 313(b) of the Energy Policy Act (EPA) of 2005, which amended the NGA, grants the United States Courts of Appeals original and exclusive jurisdiction to review Federal decisions to issue, condition, or deny a Federal authorization for any facility that will be constructed or operated subject to 15 U.S.C. 717b or 15 U.S.C. 717f:

The United States Court of Appeals for the circuit in which a facility subject to section 717b of this title or section 717f of this title is proposed to be constructed, expanded, or operated shall have original and exclusive jurisdiction over any civil action for the review of an order or action of a Federal agency (other than the Commission) or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit, license, concurrence, or approval (hereinafter collectively referred to as "permit") required under Federal law, other than the Coastal Zone Management Act of 1972.

This Decision is an order or action of a Federal agency issuing a permit, as that term is used in the EPA, 15 U.S.C. 717r (d)(1), because it is an agency decision to issue and condition a BLM Grant for the use of Federal lands involved in the MVP Project, which is a facility that will be constructed and operated pursuant to 15 U.S.C. 717f. Accordingly, this Decision is appealable directly to an appropriate United States Court of Appeals in accordance with 15 U.S.C. 717r and the Federal Rules of Appellate Procedure (FRAP).

FRAP 4(a)(1)(B) states that in cases where the United States or its officer or agency is a party, the notice of appeal "may be filed by any party within 60 days after entry of the judgment or

order appealed from.” Similarly, the NGA requires that any party aggrieved by a FERC order on rehearing file a notice of appeal with the appropriate United States Court of Appeals within sixty (60) days, 15 U.S.C. 717r(b). Thus, any notice of appeal of this Decision must be filed in the appropriate United States Court of Appeals within sixty (60) days of the date of this Decision.

Mitigation, Monitoring, and Environmental Effects of the Mountain Valley Pipeline Project

Mitigation and Monitoring

Adverse effects of the pipeline will be mitigated through measures set forth in the Applicant’s POD dated December 2017 (Attachment B), by measures required by FERC or other agencies, and by any additional terms and conditions stipulated in the Grant (Attachment C, Appendix D). Singularly and collectively, they avoid, rectify, reduce, or eliminate potential adverse environmental impacts to the Federal lands. Implementation of the Environmental Monitoring Compliance Plan (Attachment B, Appendix N) during construction will ensure that all environmental protection measures are completed in accordance with the Final EIS, POD, the ROD, the Grant, the BO, the PA, and FERC’s authorizing Order.

Also see the Discussion of Environmental Effects section below for additional information on how impacts to soil, water, riparian, old growth management areas, the Appalachian National Scenic Trail (ANST), and scenic integrity objectives have been mitigated to the extent practicable.

This ROD is based on a review of the record that shows a thorough analysis of environmental impacts. The environmental consequences of constructing and operating the MVP Project were evaluated by FERC and the Cooperating Agencies as required by NEPA. The environmental analysis evaluated impacts to 12 resource categories: geology, soils, water, vegetation, wildlife, fisheries and aquatic, special status species, land use and visual, socioeconomic, cultural, air quality and noise, and reliability and safety. Four levels of impact duration were considered: temporary, short-term (up to 3 years following construction), long-term (from 3 to 50 years after construction), and permanent (more than 50 years required to return to pre-construction conditions).

An impact was considered to be significant if it will result in a substantial adverse change in the physical environment. The analysis also included an assessment of whether impacts will occur directly or indirectly as a result of construction and maintenance. Pursuant to 40 C.F.R. 1508.7, the Final EIS provided cumulative impacts analysis for the MVP Project. This included consideration of past, present and reasonably foreseeable actions in the project area and whether, and to what extent, those actions will contribute to the cumulative effects to the environment. The most significant environmental impacts to emerge from the scoping comments, agency and tribal consultations, and FERC’s evaluation of impacts are described in the Discussion of Environmental Effects section of this ROD.

Project Construction and Operation

The BLM requires project proponents to prepare a POD (Attachment B) as part of the ROW application process (43 C.F.R. 2884.11). Table one shows the POD’s project-specific plans developed to reduce construction impacts.

Table 1: Project Specific Plans in the Plan of Development

Appendix	Name
Appx A	Map Appendix
Appx B	Details Appendix
Appx C	Erosion and Sedimentation Control
Appx D	Spill, Prevention, Control and Countermeasure (SPCC) Plans and Unanticipated Discovery of Contamination Plans
Appx E	Conventional Bore Contingency Plan for the Proposed Crossing of the Appalachian National Scenic Trail
Appx F	Landslide Mitigation Plan
Appx G	Site Specific Design of Stabilization Measures in Selected High Hazard Portions of the Route of the Proposed MVP in the Jefferson National Forest
Appx H	Restoration Plan
Appx I	Timber Removal Plan for the Jefferson National Forest
Appx J	General Blasting Plan for Jefferson National Forest
Appx K	Site-Specific Water Crossing Monitoring and Mitigation Plans
Appx L	Karst Mitigation Plan
Appx M	Winter Construction Plan
Appx N	Environmental Compliance Management Plan
Appx O	Plan for Unanticipated Historic Properties and Human Remains for West Virginia and Virginia
Appx P	Plan for Unanticipated Discovery of Paleontological Resources
Appx Q	Construction Emergency Preparedness and Response Plan
Appx R	Operations, Maintenance, and Emergency Response Plan
Appx S	Exotic and Invasive Species Control Plan
Appx T	Herbicide Usage Plan
Appx U	Stormwater Pollution Prevention Plan
Appx V	Plant and Wildlife Conservation Measures Plan
Appx W	Fugitive Dust Control Plan
Appx X	Fire Prevention and Suppression Plan
Appx Y	Hazardous Materials Management Plan
Appx Z	Flagging, Fencing, and Signage Plan
Appx AA	Off-Highway Vehicle Management Plan

These and other mitigation plans and procedures are referenced in and included as appendices to the Final EIS and the POD.

Discussion of Environmental Effects

Geology, Paleontology and Soils

Potential geologic hazards on Federal lands include seismicity, flooding, stream hazards, and landslides. FERC’s Final EIS concludes that constructing and operating MVP and EEP facilities in accordance with its Mining Area Construction Plan and the Acid Forming Materials

Mitigation Plan (both in Attachment A) as well as the POD's Plan for Unanticipated Discovery of Paleontological Resources (Attachment B, Appendix P) will not result in a significant impact on these resources.

Seismicity

The MVP will cross the JNF within a seismically active area known for small local seismic events and one historic quake (estimated to be a magnitude 5.8) that took place in 1897. Thus, there is potential for earthquakes to occur during the decades of operation and maintenance of the MVP. In order to withstand impacts from a seismic event, MVP will be designed according to 49 C.F.R. 192 Subpart C, ASME B31.8-2014 Paragraph 840, and Pipeline Research Council International Guidelines for the Seismic Design and Assessment of Natural Gas and Liquid Hydrocarbon Pipelines.

Flooding and Other Stream Hazards

Streams where flooding and other hazards are present and may impact pipeline stream crossings are found along the pipeline route at Craig Creek, at the tributaries to Craig Creek, and at the tributary to Kimballton Branch. Mountain Valley will minimize impacts by employing stream crossing measures indicated in the POD Site-Specific Water Crossing Monitoring and Mitigation Plan (Attachment B, Appendix K).

Blasting

MVP has stated that only minimal blasting is needed for construction within the JNF. During construction, Mountain Valley will be required to comply with all Federal and state regulations for blasting and as well as any other measures detailed in the POD General Blasting Plan (Attachment B, Appendix J).

Paleontology

Discovery of a significant paleontological resource is unlikely in the JNF. Regardless, if a significant paleontological resource is discovered during construction of the MVP, Mountain Valley will follow the procedures detailed in the POD Plan for Unanticipated Discovery of Paleontological Resources (Attachment B, Appendix D).

Landslides

Construction and operation of the MVP could result in alterations to geologic conditions affecting steep slope stability, as outlined in the FEIS.

MVP has developed a POD Landslide Mitigation Plan (Attachment B, Appendix F). The Landslide Mitigation Plan includes field inspections and mitigation measures, including the use of thicker-walled pipe in slip prone areas. Mountain Valley will also monitor for potential rock block slides along the southeast slopes of Peters Mountain, Sinking Creek Mountain, and Brush Mountain by using LiDAR to evaluate slope characteristics and potential movement. Mountain Valley will also adhere to the POD Site-Specific Design of Stabilization Measures in Selected

High-Hazard Portions of the Route of the Proposed Mountain Valley Pipeline Project in JNF (Attachment B, Appendix G). During construction, Mountain Valley will deploy a landslide inspection team to identify geohazards and to develop mitigation schemes using landslide mitigation typical drawings developed for the project. However, if subsurface conditions are not conducive to the use of these typical mitigation schemes, additional mitigation will be developed for specific site conditions found.

Soils

Most of the impacts on soil resources in the JNF will be temporary to short term in duration, and include soil erosion and sedimentation, soil compaction, reduction of soil porosity, increased runoff potential, effects on soil fertility, and effects on revegetation potential. Impacts on soil related to the proposed project will be minimal. To mitigate impacts to soils on the JNF, Mountain Valley will incorporate requirements from the Virginia Erosion and Sediment Control Handbook into its Erosion and Sediment Control Plans (Attachment B, Appendix C), including segregation of topsoil and utilizing FS-approved seed mixes on FS lands. Monitoring during and post-construction will follow the procedures outlined in section 2.4.4 of the Final EIS.

Water Resources

Groundwater

Potential impacts on groundwater along the MVP pipeline route across the JNF are expected to be limited to temporary or short-term impacts associated with clearing, grading, and trenching during construction. It is unlikely that the trench will be deep enough to significantly affect aquifers. No hydrostatic test water will be obtained from groundwater sources within the JNF. The Final EIS indicates there are no identified springs within 500 feet of the MVP crossing of the JNF. However, should a spring be encountered during construction, Mountain Valley will use daylight drains (open ended and drain out to the ground surface) located behind trench breakers to capture and direct the water to energy-dissipating devices located at the ground's surface within the ROW. Mountain Valley will then direct any resulting discharge downslope to prevent accumulation within the ROW. Mountain Valley will adhere to its POD and Erosion and Sediment Control Plan (Attachment B, Appendix C) to minimize potential adverse project-related effects on groundwater resources on groundwater resources within the JNF.

Surface Water

Within the JNF, the MVP will require 17 waterbody crossings, all of which will be done using dry open-cut methods. Of these 17 waterbody crossings, five will be pipeline crossings and 12 will be access road crossings. Although sedimentation is unavoidable during in-stream construction, associated impacts will be minimized by the use of temporary and permanent sediment and erosion controls designed to avoid the movement of upstream sediments into downstream portions of waterbodies. Mountain Valley will follow procedures listed in the POD and Site-Specific Water Crossing Monitoring and Mitigation Plans (Attachment B, Appendix K) to reduce impacts to waterbody crossings.

One waterbody that will be crossed, Craig Creek, is a National River Inventory-listed waterbody and also contains habitat for threatened and endangered species. Mountain Valley has committed to limit construction (including waterbody crossings) in the Craig Creek area to times of dry weather or low water flow. Mountain Valley will also work with the FS and VADEQ to develop and implement high quality and multiple tiered erosion control measures at the proposed Craig Creek crossing to minimize potential erosion and subsequent water quality impacts.

Mountain Valley will not withdraw or discharge any waters for hydrostatic testing activities on FS lands. Water used for dust suppression in the JNF will be from municipal sources and supplemented by surface water not on the National Forest, if needed.

Wetlands

Following construction, a majority of the wetlands in the temporary workspaces will be returned to pre-construction conditions and functions. Impacts on wetlands will be minimized by adherence to the measures outlined in Mountain Valley's POD (Attachment B). Permanent impacts on wetlands will include the conversion of forested wetlands to scrub-shrub or emergent wetlands within the pipeline permanent easement, as well as the installation of culverts and permanent fill in wetlands for access roads. While adverse and long-term impacts on wetlands will occur, the impacts will not be significant with the implementation of BMPs and mitigation as laid out in the FEIS, the POD, the Grant, and FERC's Certificate.

The USACE and designated state agencies require mitigation for unavoidable wetland impacts to preserve no net loss of wetland function. As discussed in the FEIS, the USACE-required mitigation plan will also detail measures for restoring affected wetlands and monitoring restoration efforts.

Vegetation, Wildlife, Fisheries, and Federally Listed and State-Sensitive Species

Vegetation

Of the potential impacts on vegetation analyzed in the Final EIS, the most adverse impacts from construction and operation will be on forested vegetation crossed by the MVP, and this will be a significant impact. This conclusion is based on the nature of both direct and indirect impacts, the acreages affected, and the long-term or permanent duration of the impacts. Mountain Valley has developed a Migratory Bird Conservation Plan (Attachment E), which addresses upland forest impacts due to the habitat requirements of many migratory birds, to address concerns of the EPA, VADEQ, WVDNR, USFWS, and other cooperating agencies regarding the impacts on large acreages of upland forest. The plan includes additional avoidance, minimization, and restoration measures for the impacts on the upland forest habitat.

The impact of the MVP on all vegetation types will be reduced by implementing the measures contained in the FEIS, the POD, the Grant, and FERC's Certificate, including Mountain Valley's project-specific Erosion and Sediment Control Plans (Attachment B, Appendix C). Mountain Valley will reduce the potential introduction and spread of non-native invasive plant and weed species by following the measures outlined in its project-specific Exotic and Invasive

Species Control Plan (Attachment B, Appendix S). The chance for wildfire caused by construction will be minimized by Mountain Valley following the measures outlined in its project-specific Fire Prevention and Suppression Plan (Attachment B, Appendix X). Also, the high rate of average precipitation in the project area will reduce the potential for fires. Mountain Valley will coordinate with the FS, and follow the measures outlined in its Forest-specific POD, to minimize impacts on vegetation within the JNF.

Within the Jefferson National Forest, an estimated 336 acres of interior forest will be converted to forest edge habitat, based on the extension of forest edge an estimated 300 feet on either side of the MVP ROW.

Because construction activities such as clearing, trenching, and backfilling associated with the pipeline are temporary and linear across the landscape, localized impacts on individual trees are possible. In a majority of the affected acreage, oak decline events are expected to occur due to the significant age of the oaks. Mountain Valley will not utilize burning within the JNF during the clearing phase of construction. In accordance with the JNF Timber Removal Plan (Attachment B, Appendix I), Mountain Valley will purchase, cut, and remove all merchantable timber on JNF lands that is reasonably accessible. Brush and slash will be windrowed or removed. Mountain Valley will develop seed mixes for National Forest System lands in coordination with the FS.

MVP will minimize impacts on riparian zones by narrowing the width of its standard construction ROW at waterbody crossings; stabilizing and restoring streambeds and banks to pre-construction conditions; returning rock and gravel to the stream; revegetating stream banks with native tree and shrub species recommended by the FS; and restricting the herbaceous vegetation area to a small portion of the total ROW clearing. Mountain Valley will, in coordination with FS, incorporate pesticides or herbicides into the management plan for maintenance of the ROW and treatment of invasive species on the JNF. Herbicides will be applied in compliance with the MVP Herbicide Usage Plan (Attachment B, Appendix T) and the FS Standards and Guidelines; and will comply with all label instructions as well as applicable state and Federal regulations.

Wildlife

Field surveys along the proposed corridor within the JNF have documented the presence of black bears, white-tailed deer, wild turkey, and numerous migratory birds. Constructing the MVP will fragment existing forested habitat and create new forest edges. About 336 acres of interior forest habitat will be converted to forest edge habitat, based on the extension of forest edge an estimated 300 feet on either side of the MVP ROW.

To reduce the effects of forest fragmentation on FS lands and expedite the re-establishment of wildlife habitat after construction, the FS will require Mountain Valley to maintain ROW in an herbaceous state along a 10-foot-wide corridor centered over the pipeline, with trees selectively removed within 15 feet as needed where root systems could threaten the pipeline, and the remainder of the corridor will be seeded with seed mixes and then replanted with shrubs and shallow rooted trees as approved by the FS and consistent with the MVP Procedures and the Plan of Development Restoration Plan (Attachment B, Appendix H). Additionally, Mountain Valley

will allow shrubby vegetation to grow within the temporary construction zones on the edges of the operating corridor in the JNF.

FERC concluded that constructing and operating the MVP will not significantly affect wildlife at population levels. Mountain Valley will minimize impacts on wildlife and habitat by following the measures outlined in their POD (Attachment B), agency stipulations, and best management practices (BMPs), such as routing the pipeline to minimize impacts on sensitive areas, co-locating the pipeline with other rights-of-way where feasible, revegetating temporary and permanent workspaces with native seed mixes, reducing the construction ROW through wetlands, and implementing their Migratory Bird Conservation Plan (Attachment E) prior to construction.

Fisheries and Aquatic Resources

The Final EIS concludes that constructing and operating the MVP will not significantly impact fisheries and aquatic resources. Mountain Valley proposed several measures to avoid or minimize impacts on fisheries, and will be required to implement construction, mitigation, and restoration measures required by the USACE and state permitting agencies that will further minimize impacts.

On November 1, 2017 the West Virginia Department of Environmental Protection's Division of Water and Waste Management waived the requirement for Mountain Valley to obtain an individual Section 401 Water Quality Certification, pursuant to Section 401 of the Federal Clean Water Act. The WVDEP found that the proposed mitigation for the permanent resource impacts in West Virginia have been addressed in Mountain Valley's previously granted WVDEP Section 401 Water Quality Certification Application, the Huntington District Nationwide 12 application (submitted February 17, 2017), and the Pittsburgh District Nationwide 12 application (submitted February 17, 2017). The Commonwealth of Virginia issued a Section 401 Water Quality Certification for the USACE Nationwide Permit and Norfolk District Regional Conditions on April 7, 2017, and an additional certification on December 8, 2017. The permanent resource impacts and any associated mitigation in the Commonwealth of Virginia are addressed in Mountain Valley's Project Specific Standards and Specifications provided to the Commonwealth of Virginia, posted to the FERC docket on June 30, 2017.

With respect to the Project's stream and wetland crossings, the USACE and the Virginia Marine Resources Commission are presently reviewing a draft Joint Permit Application (JPA) that will ensure that any impacts are avoided and minimized, and, if necessary, compensated. The USACE may grant Mountain Valley's request for authorization to proceed under Nationwide 12 only after it has independently concluded that the proposed stream and wetland crossings will have no more than minimal individual and cumulative adverse environmental effects (NWP Gen. Cond. 23) and that the crossings meet all other requirements of the USACE's Nationwide Permit, the Norfolk District's Regional Conditions, and the Commonwealth's 401 Water Quality Certification of Nationwide Permit 12.

The specific measures Mountain Valley will take to reduce potential impacts on aquatic resources and riparian vegetation, and to restore streambed habitat to promote the rapid recolonization of the stream crossings are discussed in the Final EIS and the POD.

Mountain Valley will adhere to all in-stream construction time-of-year restrictions imposed by the Virginia Department of Game and Inland Fisheries (VDGIF) and will relocate any fish or freshwater mussels present within the construction zone. All fish and freshwater mussel relocations will be supervised by qualified, professional biologists in possession of pertinent Federal and/or state permits. Mountain Valley will use the dry open-cut method to cross the waterbodies within and near the JNF boundary.

Special Status Species

Special status species are afforded protection by law, regulation, or policy by Federal and/or state agencies. For the purposes of this ROD, special status species include Federally listed species that are protected under the Endangered Species Act (ESA) or are under review as candidates for such listing by the USFWS; Federal species of concern; and species that are state-listed as threatened, endangered, or have been given certain other state designations.

Impacts on endangered, threatened, and other special status species will be similar to the impacts to vegetation, wildlife and aquatic species discussed above. Impacts on special status species may be greater than impacts on other wildlife and vegetation because these species may be more sensitive to disturbance; more specific to a habitat; and less able to move to unaffected suitable habitat since such habitat may not be available within a reasonable proximity, may not be available at all, or may exist only in small tracts. Potential impacts that could affect the conservation needs of a species or decrease the viability of a population include habitat fragmentation, loss, or degradation; decreased breeding or nesting success; increased predation or decreased food sources; and injury or mortality.

Federal agencies are required by the ESA Section 7(a)(2) to ensure that any action authorized, funded, or carried out by the agency will not jeopardize the continued existence of a Federally listed threatened or endangered species or species proposed for listing, or result in the destruction or adverse modification of designated critical habitat. As the lead Federal agency, the FERC is responsible for determining whether any Federally listed endangered or threatened species or any of their designated critical habitats are near the site of the proposed action, and to determine the proposed action's potential effects on those species or critical habitats.

The Biological Opinion (BO) does not evaluate the effects of the MVP on species discussed in section 4.7 of the Final EIS with designations other than endangered or threatened. These include species classified as potential candidate species, such as the candy darter (*Etheostoma osburni*) and orangefin madtom (*Noturus gilberti*), and species of concern, such as the Atlantic pigtoe (*Fusconaia masoni*), yellow lampmussel (*Lampsilis cariosa*), and the Ellett Valley millipede (*Pseudotremia cavernarum*).

As stated in the Final EIS, should a Federally listed, proposed, petitioned, or candidate species be identified during construction that has not been previously identified during field surveys or assessed through consultation, and project activities could adversely affect the species, Mountain Valley will suspend the construction activity and notify FERC and the USFWS of the potential affect. The construction activity will not resume until FERC completes its consultation with the USFWS.

Mountain Valley performed habitat and species surveys in 2015 and 2016 and filed survey reports which outlined the survey methodologies, locations where surveys were conducted, and the survey results. If a special status species was identified, the location was recorded and information about the species characteristics and habitat was documented. Mountain Valley utilized the results of the botanical and biological surveys to develop a draft BA, which the FERC in turn used to develop a final BA (dated July 7, 2017). USFWS issued their BO (Attachment D) on November 21, 2017.

Mountain Valley informally coordinated with the USFWS regarding Federally listed species and designated critical habitat in the project areas. Mountain Valley also communicated with the FS, WVDNR, Virginia Department of Conservation and Recreation-Division of Natural Heritage, and VDGIF. Based on these communications and a review of the USFWS' Information for Planning and Conservation database and other publicly available information, Mountain Valley identified 23 Federally listed or otherwise sensitive species as occurring or possibly occurring in the project areas. Tables 4.7.1-1 and 4.7.1-2 list the Federally threatened, endangered, and other Federal species of concern that are known to occur or could occur within the project areas. None of the identified species have designated Critical Habitat in the MVP area.

Mountain Valley consulted with the FS to determine what types of special status species could be affected by the MVP within the JNF. FERC assessed the potential effects of the MVP on four categories of special status species within the JNF and concluded that the MVP is not likely to adversely affect Federally listed species within the JNF. FERC further concluded that the MVP will be unlikely to cause a Trend Toward Federal Listing or Loss of Viability for Regional Forester's Sensitive Species. FS Locally Rare Species and Management Indicator Species (MIS) do not have regulatory protection associated with them and FERC therefore did not make any final determination of the effects of the MVP on these species.

Raptors and Other Migratory Birds

The Migratory Bird Treaty Act (16 U.S.C. 703-711) (MBTA) is a Federal law that implements the United States' commitment to international conventions with Canada, Mexico, Japan, and Russia for the protection of shared migratory bird resources. In addition to the MBTA, the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) (BGEPA) prohibits knowingly taking, 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. Protections under the BGEPA include provisions not included in the MBTA such as the protection of unoccupied nests and the definition of take that includes the prohibition of disturbing eagles.

Migratory Bird Conservation Measures Plan

In addition to adhering to the commitments listed in the POD (Attachment D), Mountain Valley, in collaboration with the USFWS, has prepared the Migratory Bird Conservation Plan (Attachment E). The conservation measures in the Plan were volunteered by Mountain Valley and have been agreed upon by Mountain Valley and USFWS as a commitment that Mountain Valley will adhere to in order to avoid and minimize adverse impacts on migratory bird habitats.

The USFWS and Mountain Valley will consider the Plan as a good faith effort to reduce impacts of habitat loss from development and operation of the project. These conservation measures in the Plan are further outlined in Mountain Valley's POD and provide additional conservation benefits that go beyond typical avoidance, minimization, and compensatory conservation measures.

Visual Resources

The character of the visual resources in the project area varies because the landscape reflects the dominant landforms, unique geologic patterns, distinct biotic communities, and multiple land uses of an area. The Visual Impacts Assessment (VIA) determined consistency with the BLM Visual Resource Management (VRM) system and the FS Visual Management System (VMS) for Federal lands affected. The VRM and VMS programs identify management objectives for maintaining the visual setting that apply to the lands under their respective management.

Federally owned or managed recreational and special use areas that will be crossed by the MVP pipeline route include the Weston and Gauley Bridge Turnpike Trail, the BRP, and the JNF. Within the JNF, the pipeline will cross the ANST and the Brush Mountain Inventoried Roadless Area. To limit visual impacts, MVP will cross under the ANST, the Weston and Gauley Bridge Turnpike Trail, and the Blue Ridge Parkway using bores. About 3.6 miles of the MVP pipeline route will cross the JNF. On the JNF, construction of the MVP will directly impact a total of about 83 acres. Impacts on National Forest resources will be minimized by Mountain Valley following the measures outlined in the POD (Attachment B) and the PA, including the various resource-specific mitigation plans attached to the POD and any additional mitigation required by implementation of the PA. The PA allows for Mountain Valley, FS, NPS and other Consulting Parties to continue to consult on possible adverse effects to the ANST viewshed from the project.

Mountain Valley performed a VIA of its entire pipeline route. It identified nine Key Observation Points (KOPs) where visual impacts may be high because the pipeline corridor may stand out from the surrounding landscape and will be visible to viewers. After the issuance of the draft EIS several comments were received on the VIA. In response, Mountain Valley expanded its analysis to include several additional KOPs and submitted separate VIAs for the crossings of the Weston and Gauley Bridge Turnpike Trail (which is administered by the USACE), the Blue Ridge Parkway (which is administered by the National Park Service), and the JNF. In Appendix S of the Final EIS, FERC reproduced visual simulations for the highly sensitive KOPs.

The JNF VIA identified 47 KOPs on or adjacent to NFS lands that include specific viewing locations associated with the ANST, Craig Creek Road, Pocahontas Road, U.S. 219, and the town of Pearisburg, Virginia. Mountain Valley will be required to complete the mitigation measures for revegetation and restoration identified in section 4.8.2.6 of the Final EIS within 5 years after completion of project construction in order to meet the FS's Scenic Integrity Objectives on FS lands.

Mountain Valley has incorporated mitigation measures for each location into its POD Restoration Plan (Attachment B, Appendix H). Site-specific mitigation measures include enhanced reclamation and restoration procedures to reduce visual contrast in highly visible areas and creating irregular edges along the construction alignment to reduce its distinct linear nature.

Wilderness Resources

The MVP pipeline route will not cross any designated Wilderness Areas, but will cross within 0.25 mile of the Peters Mountain Wilderness and the Brush Mountain Wilderness, within 2.5 miles of the Mountain Lake Wilderness, and within 7.5 miles of the Brush Mountain East Wilderness (Final EIS, Section 4.8.1.6). A VIA conducted for the Brush Mountain and Peters Mountain Wilderness indicated no impacts to the Peters Mountain Wilderness and low visual impacts to visitors in the Brush Mountain Wilderness because of the amount of screening provided by the thick forest between the proposed pipeline route and the Wilderness. Given that the pipeline will not cross any designated Wilderness and based on the analysis conducted on assessing potential impacts to wilderness character from activities occurring outside of the Wilderness areas, no further action is needed to address requirements of the Wilderness Act of 1964.

Cultural Resources

Section 101 of the NHPA requires that the FERC consult with Indian tribes that may attach religious or cultural significance to historic properties in the area of potential effect (APE). Historic properties include historic sites, districts, buildings, structures, objects, or properties of traditional religious or cultural importance that are listed or eligible for listing on the National Register of Historic Places (NRHP). FERC consulted with 37 Indian tribes that may have an interest in the MVP. The Eastern Band of Cherokee Indians in North Carolina filed a letter with FERC accepting the Treatment Plan for site 44GS0241 and requesting the presence of tribal monitors during data recovery excavations at the site. The Cherokee Nation of Oklahoma, in a letter to FERC dated October 31, 2017, stated that it does not object to the Project, if tribal monitors are employed at site 44GS0241 during data recovery excavations. As reflected in the Grant, Mountain Valley has agreed to employ tribal monitors at this site. FS will require the use of Eastern Band of Cherokee Indians and Cherokee Nation of Oklahoma monitors on site 44GS0241. The Cherokee Nation of Oklahoma also requested to be a consulting party to the PA.

Section 106 of the NHPA requires that the FERC take into account the effects of its undertakings on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. The steps in the process to comply with Section 106, outlined in the implementing regulations at 36 C.F.R. Part 800, include consultations, identification of historic properties, assessment of effects, and resolution of adverse effects. Mountain Valley and Equitrans conducted archaeological and historic architectural surveys of the APE to identify historic properties. Mountain Valley defined its direct APE as a 300-footwide corridor. The proposed pipeline route will cross through seven recorded Historic Districts (Big Stony Creek Historic District, Greater Newport Rural Historic District, North Fork Valley Rural Historic District, Bent Mountain Rural Historic District, Blue Ridge Parkway Historic District, Coles-Terry Rural Historic District, and the Lynchburg and Danville Railroad Historic District).

Archaeological surveys and reports of investigation have been completed on historic sites within the area directly affected by MVP on the JNF. These reports indicate MVP has the potential to adversely affect historic properties on the Forest. The FS and BLM reviewed and commented on

survey reports and Section 106 compliance documents. FERC will continue to consult with Federal land managing agencies, SHPOs, interested Indian tribes, and other consulting parties under the auspices of the PA (Attachment F) to assess and address project effects, pursuant to 36 C.F.R. 800.4(b)(2).

Mountain Valley identified 11 previously recorded archaeological sites and three previously recorded architectural sites in the APE in West Virginia. In Virginia, there are 42 previously recorded archaeological sites within the APE, as well as the NRHP-eligible ANST. Mountain Valley will achieve a “No Adverse Effect” determination on the NRHP-eligible ANST by boring under the trail and by complying with the terms of the PA regarding indirect effects of the MVP on the ANST.

The MVP will cross the Weston and Gauley Bridge Turnpike Trail at about MP 66.8 in Braxton County, West Virginia. The Weston and Gauley Bridge Turnpike Trail was placed on the NRHP in 1998, and is addressed in section 4.10 of the EIS. While pipeline route will cross the NRHP-listed Weston and Gauley Bridge Turnpike Trail, use of a bore under the trail will result in a “No Adverse Effect” determination.

Resolution of adverse effects to NRHP-listed and eligible historic properties is addressed in the PA (Attachment F) and the associated Treatment Plans developed through consultation with the relevant SHPOs, ACHP, and FS, USACE, NPS, and other consulting parties, including consulting Native American tribes, as appropriate. The execution of the PA was a prerequisite for the ROD, however all components of the Treatment Plan must be fully executed and approved prior to the BLM authorizing Mountain Valley to undertake any construction or other ground-disturbing activities on Federal land in connection with the MVP Project.

The PA addresses all NRHP-eligible sites, including the following sites that involve Federal lands:

Appalachian National Scenic Trail (ANST 21-5012): Portions of the ANST are located on the JNF. Mountain Valley proposes to avoid permanent adverse impacts to the ANST by boring under it. Operating the boring machine will result in localized, short-term noise that may be audible to hikers on the trail if present at the time of construction. The buffer distances between the trail and the boring machine will minimize noise impacts. Additionally, Mountain Valley will use vegetative mitigation in the pipeline corridor on NFS lands to achieve consistency with the JNF scenic integrity objectives within five years after construction is completed. The PA allows for continued consultation regarding effects and mitigation measures associated with the MVP on the ANST. Mountain Valley will comply with the results of the consultation regarding any additional mitigation measures required. In light of these measures, the MVP will have no adverse effects on the ANST. (see Final EIS, Section 4.10.7.1)

Weston and Gauley Bridge Turnpike (NR#98001430): MVP crosses this site in Braxton County, West Virginia, which is an historic property listed on the NRHP that is owned at the crossing location by the USACE (Huntington District). Because the pipeline will be bored under the trail, and Mountain Valley will implement other measures to reduce impacts (summarized in sections 4.8.2.4 and 4.8.2.6 of the FERC’s Final EIS), the MVP will have no adverse effects on the Weston and Gauley Bridge Turnpike at the crossing.

Blue Ridge Parkway (BRP): MVP crosses this site in Roanoke County, Virginia, and the Blue Ridge Parkway Historic District is listed on the NRHP. The BRP is managed by the NPS. The PA provides for continued consultation regarding effects and mitigation measures associated with the MVP on the BRP and the BRP Historic District. Mountain Valley will comply with the results of the consultation regarding any additional mitigation measures required.

Cumulative Impacts

The Final EIS included a cumulative impact analysis for the MVP Project to determine if modification of the project or additional mitigation measures will be necessary to avoid any identified impacts to the environment that will result from the incremental impact of the action when added to other past, present, and reasonable foreseeable actions. Projects and activities included were those having impacts on resources that overlap with the predicted impacts of the MVP. Where the analysis indicated a potential for cumulative impacts, information was quantified to the extent feasible. The analysis focused on seven types of projects that will potentially cause a cumulative impact when considered with the proposed projects. These are:

- oil and gas exploration and production;
- other FERC-jurisdictional natural gas interstate transportation projects (such as the Atlantic Coast Pipeline Project [ACP] and the Columbia WB XPress Project);
- non-jurisdictional pipelines and gathering systems;
- mining operations;
- transportation or road projects;
- commercial/residential/industrial and other development projects; and
- other energy projects, including power plants or electric transmission lines.

The analysis concluded the majority of the cumulative impacts will be temporary and minor and occurring during the construction phase of the project. However, long-term impacts on vegetation and land uses could occur if the other current and reasonably foreseeable future projects analyzed are constructed and result in similar vegetation/land use impacts.

The Final EIS analyzed cumulative impacts of the MVP, in addition to other projects that may occur within the same area of geographic scope and timeframe. None of the FERC-jurisdictional projects evaluated for the cumulative impacts analysis will be located within the JNF; however, the ACP is proposed to cross the George Washington National Forest in Virginia. Because the JNF and George Washington National Forest are administratively combined under FS management and review, the impacts on sensitive resources from the proposed pipelines on both Forests have been evaluated together. It is anticipated that any adverse impacts on sensitive resources within the JNF or George Washington National Forest resulting from any other types of projects considered in our analysis will be regulated through project design, BMPs, and FS permitting. Therefore, the cumulative impacts associated with the MVP, when combined with other known or reasonably foreseeable projects in the geographic scope, will not be significant for the JNF.

Project-wide, for all resources analyzed, and in consideration of the Applicants' proposed measures and our recommendations for additional measures intended to result in the further

avoidance, minimization, and/or mitigation of effects, FERC concluded that the effects of adding the impacts of the MVP with the impacts of other projects will not be significant.

Alternatives Considered

FERC and the Cooperating Agencies considered range of reasonable alternatives to determine if any would be reasonable and environmentally preferable to the Proposed Action. The range of alternatives evaluated in the Final EIS, detailed in Section 3.0, includes the no action alternative, system alternatives, pipeline route alternatives, route variations, and compressor station equipment alternatives. The Final EIS also discusses other alternatives that were eliminated from detailed review because they were not reasonable or practicable.

No Action Alternative

The CEQ regulations for implementing NEPA (at 40 C.F.R. 1502.14(d)) require the Commission to consider and evaluate the no action alternative. According to the CEQ, in instances involving Federal decisions on proposals for projects, no action will mean the proposed activity will not take place and the resulting environmental effects from taking no action will be compared with the effects of permitting the proposed activity. If the Commission selects the no action alternative, it may deny the application. In that case, the stated objectives of the project will not be achieved. This alternative was considered but not analyzed in detail.

Major Route Alternatives

During the pre-filing period, Mountain Valley and Equitrans assessed numerous route alternatives. Mountain Valley adopted 11 route alternative segments and 571 minor route variations into its proposed project design for various reasons including landowner requests, avoidance of sensitive environmental resources, or engineering considerations. On October 14, 2016, Mountain Valley adopted two route variations that were recommended in the FERC's September 2016 draft EIS. That same filing documented 130 additional minor route variations that modified the draft EIS proposed pipeline route to account for landowner requests, avoidance of specific sensitive environmental resources (such as archaeological sites or wetlands), avoidance of areas of steep terrain or side slopes, and engineering adjustments.

In addition to the proposed action and the No Action Alternatives, FERC evaluated four major route alternatives to the MVP proposed pipeline route or major portions (i.e., exceeding 50 miles in length) of the routes: Alternative 1, Hybrid 1A and Hybrid 1B Alternatives, and the Northern Pipeline – ACP Collocation Alternative. None of these alternatives, summarized below, offer a significant environmental advantage over the proposed pipeline route and were thus not evaluated in detail.

Alternative 1

As with the proposed route, Alternative 1 will begin at the proposed Webster Interconnect in Wetzel County, West Virginia and end at the Transco Station 165 in Pittsylvania County,

Virginia. Alternative 1 was considered to maximize collocation with existing rights-of-way. Alternative 1 will be collocated primarily with existing electric transmission lines for approximately 101 miles, or about 31 percent of its total length. For comparison, the proposed route will be collocated with existing rights-of-way for 29 miles, or about 10 percent of its total length.

Alternative 1 crosses 1.9 fewer miles of NFS lands, and less FS-designated old growth forest, roadless areas, and semi-primitive areas, and would impact less interior forest in comparison to the proposed route. However, Alternative 1 is 20 miles longer, potentially disturbing 336 more acres, and 90 more parcels. The alternative crosses approximately 1,924 more feet of wetlands and 38 more perennial waterbodies compared to the proposed route. Alternative 1 also crosses the New River twice, as well as Radford University Conservancy property, all of which is avoided by the proposed MVP pipeline route. Additionally, Alternative 1 crosses about 43 more miles of steep slopes, 7 more miles of side slopes, and 14 more miles of karst terrain. Given consideration of these factors, FERC concluded that Alternative 1 does not offer a significant environmental advantage when compared to the corresponding proposed route.

Hybrid Alternative 1A

Hybrid 1A would follow the proposed route from its origin to about MP 135, where it would then switch over to the route for Alternative 1 and then proceed to the project terminus. Where Hybrid 1A would be located south of Mile Post (MP) 135, it would be substantially collocated with various overhead electric transmission lines. Hybrid 1A would cross many of the same features as the proposed route such as the ANST, Blue Ridge Parkway, and the JNF, but would cross them in a different location and in a different setting (e.g., adjacent to an existing powerline).

Hybrid 1A would have certain environmental advantages over the proposed route such as avoiding the Slussers Chapel Conservation Site and known karst features, and crossing 1.8 fewer miles of the JNF, 68 fewer springs and wells, 11.3 fewer miles of forested lands, and about 5 fewer miles of areas with landslide potential. In addition, it would be collocated with existing corridors for almost 52 more miles, thereby reducing greenfield construction and impacts on interior forest.

However, Hybrid 1A would also have some environmental disadvantages compared to the proposed route, including increased length by over 6 miles, thereby increasing the area of overall project disturbance, affecting 28 more landowners, crossing 22 more perennial streams, and crossing two more major waterbodies. Further, Hybrid 1A would cross 12.2 more miles of steep slopes and 19 more miles of side slopes compared to the proposed route, presenting substantially more obstacles to safe construction, increasing extra workspace requirements, and potentially affecting worksite stability during construction and after restoration. Given consideration of these factors, FERC concluded that Hybrid 1A does not offer a significant environmental advantage when compared to the corresponding proposed route.

Hybrid Alternative 1B

Hybrid 1B would follow the Alternative 1 route from the project origin to about MP 135, where it would then switch over to the proposed route and then proceed to the project terminus. Where Hybrid 1B would be located north of MP 135, it would be substantially collocated with various overhead electric transmission lines. Hybrid 1B would cross many of the same features as the proposed route such as the ANST, BRP, and the JNF.

Hybrid 1B would have certain environmental advantages over the proposed route such as affecting 28 fewer springs and wells, 6 fewer residences within 50 feet of construction, and 93 fewer miles of shallow bedrock. In addition, it would be collocated with existing corridors for almost 57 more miles, thereby reducing greenfield construction and impacts on interior forest.

However, Hybrid 1B would also have some environmental disadvantages compared to the proposed route, including increased length by almost 15 miles, thereby increasing the area of overall project disturbance, affecting 7 more wetlands, crossing 20 more perennial streams, and crossing two more major waterbodies. Further, Hybrid 1B would cross 28.7 more miles of steep slopes and 22 more miles of side slopes compared to the proposed route, presenting substantially more obstacles to safe construction, increasing extra workspace requirements, and potentially affecting worksite stability during construction and after restoration. Given consideration of these factors, FERC concluded that Hybrid 1B does not offer a significant environmental advantage when compared to the corresponding proposed route.

Northern Pipeline – ACP Collocation Alternative

The Northern Pipeline - ACP Collocation Alternative was developed by FERC staff to evaluate a pipeline route that would be collocated with the proposed ACP (FERC staff issued a draft EIS for the ACP in December 2016). This has also been called the “two pipelines – one route” alternative. The Northern Pipeline Alternative - ACP Collocation Alternative would involve the installation of a 42-inch-diameter pipeline for the MVP adjacent to the pipeline proposed for the ACP Project, following the ACP route. The alternative would then generally be routed parallel to the proposed ACP for about 205 miles in a south-easterly direction before intersecting the existing Transco pipeline. Then it would generally parallel the Transco pipeline corridor to the southwest for about 65 miles to reach Transco Station 165.

The alternative would provide some environmental benefits. One benefit of the Northern Pipeline - ACP Collocation Alternative would be the use of a single construction ROW to install two parallel adjacent pipelines. The alternative would collocate the MVP pipeline with the ACP (assuming the ACP was certificated and constructed) for about 205 miles, compared to the MVP pipeline being collocated adjacent to existing rights-of-way for just 25.4 miles along its corresponding segment of proposed route. If the MVP pipeline and ACP were built separately, along different routes, as currently proposed, the combined construction areas would disturb about 9,645 acres total.

If the MVP pipeline and the ACP were built parallel and adjacent to each other along the route of just of the ACP, using a 250-foot-wide construction ROW for both pipelines combined, about 8,288 acres in total would be disturbed. The Northern Pipeline- ACP Collocation Alternative would cross less FS-designated old growth forest, fewer FS-designated inventoried roadless

areas, and fewer FS-designated semi-primitive areas than the corresponding segment of the proposed MVP pipeline route. The Northern Pipeline- ACP Collocation Alternative also would affect less forest, including less interior forest compared to the proposed route.

However, the Northern Pipeline – ACP Collocation Alternative would be about 7 miles longer, would disturb about 101 acres more during construction, and affect 28 more parcels than the corresponding segment of the MVP pipeline proposed route. The alternative would cross 15.6 more miles of FS lands, 36 more perennial waterbodies, and more wetlands, including 1,256 more feet of forested wetlands. In addition, the Northern Pipeline – ACP Collocation Alternative would cross 9 more major waterbodies, and 9 more miles of karst terrain.

Another major disadvantage of the Northern Pipeline – ACP Collocation Alternative route is the necessity to construct two parallel pipelines along approximately 205 miles of the ACP route, much of which presents significant constructability issues related to topography and space. The Northern Pipeline – ACP Collocation Alternative would have about 22 more miles of side slope than the MVP pipeline route. Based on FERC’s review of data, aerial photography, and topography, we conclude that in many areas such as in Lewis and Upshur Counties, West Virginia and Augusta and Nelson Counties, Virginia, there is insufficient space along the narrow ridgelines to accommodate two parallel 42-inch-diameter parallel pipelines. This would result in side slope (i.e., side-hill) or two-tone construction techniques, with additional acres of disturbance required for MVP, given the amount space needed to safely accommodate equipment and personnel, as well as spoil storage. The constructability issues alone are likely to render this alternative technically infeasible. Consequently, FERC concluded that this alternative does not provide a significant environmental advantage over the MVP pipeline route.

Other Alternatives Addressed in the Final Environmental Impact Statement

Route Variations

Route variations are shorter than major route alternatives, but are generally longer and more substantial than minor route deviations designed to avoid or further reduce impacts on specific localized resources. The Draft EIS, issued September 16, 2016, considered route variations that were developed by the Applicants during initial project planning and throughout the pre-filing processes in 13 cases, generally in response to stakeholder or FERC staff comments, including 10 cases associated with the MVP. Since issuance of the Draft EIS, Mountain Valley has submitted multiple filings adopting routing changes.

System Alternatives

FERC’s analysis of system alternatives included an evaluation of whether existing or proposed natural gas pipeline systems could meet the projects’ objectives. FERC could not identify any existing interstate natural gas transmission systems that fully extend from the Applicants’ proposed starting points (in southwestern Pennsylvania and northern West Virginia) to the termini of their pipelines (in the case of MVP this would be at Transcontinental Gas Pipe Line Company LLC’s Station 165 in southeast Virginia). Because existing systems have their

capacities already subscribed, there would not be enough space available on those systems for the additional volumes proposed by Equitrans (0.4 Bcf/d) and Mountain Valley (2 Bcf/d).

Alternative Crossing Locations for the Appalachian National Scenic Trail

The MVP pipeline route crosses the ANST at about MP 196.3 along the proposed route filed on October 14, 2016, within the JNF in Monroe County, West Virginia. This route segment was previously identified in a June 24, 2016 filing as Route Modification FS78. In response to FS comments about the ANST crossing, to expand the length of the bore under the trail, and to increase the forested buffer zones on each side of the trail, Mountain Valley adopted Route Modification FS78 as its proposed route in a filing on July 18, 2016. Route Modification FS78 would also avoid the Peters Mountain Wilderness by adjusting the pipeline route to the west of Mystery Ridge Road.

The MVP pipeline would cross the ANST at the crest of Peters Mountain at an area that is predominantly forested. Mountain Valley intends to cross under the ANST using a 600-foot-long horizontal bore. This would allow for a 300-foot-wide forested buffer on each side of the trail. The bore pits would be moved downslope from the trail (a vertical drop of 70 to 90 feet on each side). This buffer of undisturbed forest on either side of the trail would prevent direct impacts on the surface of the trail itself and would substantially reduce visual impacts on users of the ANST. This construction technique would result in noise that may be audible to hikers but these impacts would vary based on the presence of hikers at the time of construction. The crossing and potential visual impacts on the ANST are discussed in more detail in section 4.8 of the Final EIS.

FERC evaluated two route variations for crossing of the ANST along existing ROWs, to minimize impacts on users of the ANST. These route variations are the State Route (SR) 635-ANST Variation and the American Electric Power (AEP) -ANST Variation (see figure 3.5.1-7). A comparative analysis of environmental impacts of the proposed route and the SR 635-ANST and AEP-ANST Variations is presented in table 3.5.1-6 of the Final EIS. Based on this analysis, FERC concluded that neither ANST alternative offered a significant environmental advantage when compared to the corresponding proposed route.

Environmentally Preferable Alternative

The environmentally preferable alternative is the proposed action described in Section 2.0 of the Final EIS for the MVP Pipeline Project as modified to include mitigation measures required by FERC, BLM, FS, USFWS, and other Federal agencies. I concur with FERC's conclusion (Final EIS, Section 3.1.1) that the no action alternative does not meet the stated purpose of the MVP and likely would not offer a significant environmental advantage.

Land Use Plan Conformance

A LUP describes broad multiple use direction for managing public lands. The BLM and the FS are subject to land use planning as required by the Federal Land Policy and Management Act of

1976 (FLPMA) and the National Forest Management Act (NFMA) of 1976 (P.L. 94-588), respectively.

Conformance with BLM Land Use Plans (LUP) and Planning Processes

The BLM LUPs are called Resource Management Plans (RMP) or Management Framework Plans (MFP). Because there are no BLM-administered lands affected by the MVP Pipeline Project, the action is in conformance with BLM land use plans.

Conformance with US Army Corp of Engineers Land Use Requirements

USACE was a cooperating agency in the preparation of the MVP Pipeline Final EIS. USACE is not governed by a land use planning law that parallels FLPMA or NFMA.

Conformance with National Forest Plans and Planning Processes

FS land management planning requirements were established by the National Forest Management Act and regulations at 36 CFR 219 which require a Forest-specific, multi-year LRMP. Forest Plan standards are mandatory constraints on project and activity decision-making, established to help achieve or maintain desired conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iii)). The Forest Service's planning regulations allow for amending a plan at any time to help units adapt to new information or changing conditions. A plan amendment is required to add, modify, or remove plan components. The FS operates under a multi-year LRMP for the JNF. The route of the MVP pipeline through the JNF would cross five separate management prescriptions outlined in the LRMP

Mountain Valley modified its proposal with several route adjustments, additional design features, and mitigation measures (where feasible to minimize environmental effects) to achieve consistency with many of the Plan standards, however the amendment described in this decision is necessary to make the MVP a conforming use with the LRMP. Section 4.8.2.6, "Amendment to the LRMP for the Jefferson National Forest" of the FEIS, details how this amendment complies with the planning regulations. FS determined a five-part amendment is needed to allow the MVP Project to be consistent with the LRMP. Specifically, the amendment modifies standards that are intended to protect soil, water, riparian, visual, old growth and recreational resources. Standards are mandatory constraints on project and activity decision-making, established to help achieve or maintain desired conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iii)). The five-part LRMP amendment was approved the FS in their MVP Record of Decision, issued December 1, 2017.

After review of the environmental analysis disclosed in the FEIS, the project record, Mountain Valley's POD, comments from the public, partners, and other agencies, the requirements for plan amendments at 36 CFR Part 219, the objections received on the draft decision, and the Reviewing Officer's response to those objections, the FS decided to amend the JNF LRMP as displayed in Table 2. As the Table shows, the plan amendment modifies plan standards for the following five areas: Utility Corridors, Soil and Riparian, Old Growth Management Area,

Appalachian National Scenic Trail Area, and Scenic Integrity Objectives. New or modified plan amendment language is in “bold” text in column 2 of the table. All design features and mitigation measures described in the FEIS that are applicable to NFS land are incorporated by reference into my decision. The areas affected by this decision include approximately 83 acres of lands (including access roads) associated with the 3.6-mile pipeline corridor for the MVP Project that would cross the JNF in Monroe County, West Virginia and Giles and Montgomery Counties, Virginia.

Table 2. JNF Revised Land and Resource Management Plan Amendment Specific to the MVP Project

Jefferson NF Forest Plan Standards prior to modification for the MVP Project	Standards as Modified for the MVP Project
Part 1 – Utility Corridors	
Standard FW-248: Following evaluation of the above criteria, decisions for new authorizations outside of existing corridors and designated communication sites will include an amendment to the Forest Plan designating them as Prescription Area 5B or 5C (Jefferson NF LRMP, p. 2-60).	Standard FW 248: Following evaluation of the above criteria, decisions for new authorizations outside of existing corridors and designated communication sites will include an amendment to the Forest Plan designating them as Prescription Area 5B or 5C. However, this requirement does not apply to the operational right-of-way for the MVP Project.
Part 2 – Soil and Riparian	
Standard FW-5: On all soils dedicated to growing vegetation, the organic layers, topsoil and root mat will be left in place over at least 85% of the activity area and revegetation is accomplished within 5 years (Jefferson NF LRMP, p. 2-7).	Standard FW-5: On all soils dedicated to growing vegetation, the organic layers, topsoil and root mat will be left in place over at least 85% of the activity area and revegetation is accomplished within 5 years, with the exception of the operational right-of-way and the construction zone for the Mountain Valley Pipeline, for which the applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented.
Standard FW-8: To limit soil compaction, no heavy equipment is used on plastic soils when the water table is within 12 inches of the surface, or when soil moisture exceeds the plastic limit. Soil moisture exceeds the plastic limit when soil can be rolled to pencil size without breaking or crumbling (Jefferson NF LRMP, p. 2-7).	Standard FW-8: To limit soil compaction, no heavy equipment is used on plastic soils when the water table is within 12 inches of the surface, or when soil moisture exceeds the plastic limit, with the exception of the operational right-of-way and the construction zone for the Mountain Valley Pipeline, for which applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented. Soil moisture exceeds the plastic limit when soil can be rolled to pencil size without breaking or crumbling.
Standard FW-9: Heavy equipment is operated so that soil indentations, ruts, or furrows are aligned on the contour and the slope of such indentations is 5 percent or less (Jefferson NF LRMP, p. 2-7).	Standard FW-9: Heavy equipment is operated so that soil indentations, ruts, or furrows are aligned on the contour and the slope of such indentations is 5 percent or less, with the exception of the operational rights-of-way and the construction zone for the Mountain Valley Pipeline, for which applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented.
Standard FW-13: Management activities expose no more than 10% mineral soil in the channeled ephemeral zone (Jefferson NF LRMP, p. 2-8).	Standard FW-13: Management activities expose no more than 10% mineral soil in the channeled ephemeral zone, with the exception of the operational right-of-way and the construction zone for the Mountain Valley Pipeline,

Jefferson NF Forest Plan Standards prior to modification for the MVP Project	Standards as Modified for the MVP Project
	for which the responsible official must ensure applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented.
Standard FW-14: In channeled ephemeral zones, up to 50% of the basal area may be removed down to a minimum basal area of 50 square feet per acre. Removal of additional basal area is allowed on a case-by-case basis when needed to benefit riparian dependent resources (Jefferson NF LRMP, p. 2-8).	Standard FW-14: In channeled ephemeral zones, up to 50% of the basal area may be removed down to a minimum basal area of 50 square feet per acre. Removal of additional basal area is allowed on a case-by-case basis when needed to benefit riparian-dependent resources, with the exception of the operational right-of-way and the construction zone for the Mountain Valley Pipeline, for which applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented.
Standard 11-003: Management activities expose no more than 10 percent mineral soil within the project area riparian corridor (Jefferson NF LRMP, p. 3-182).	Standard 11-003: Management activities expose no more than 10 percent mineral soil within the project area riparian corridor, with the exception of the operational right-of-way and the construction zone for the Mountain Valley Pipeline for which applicable mitigation measures identified in the approved POD and MVP Project design requirements must be implemented.
Part 3 – Old Growth Management Area	
Standard 6C-007: Allow vegetation management activities to: maintain and restore dry-mesic oak forest, dry and xeric oak forest, dry and dry-mesic oak-pine old growth forest communities; restore, enhance, or mimic historic fire regimes; reduce fuel buildups; maintain rare communities and species dependent on disturbance; provide for public health and safety; improve threatened, endangered, sensitive, and locally rare species habitat; control non-native invasive vegetation(Jefferson NF LRMP, pp. 3-82 to 3-83).	Standard 6C-007: Allow vegetation management activities to: maintain and restore dry-mesic oak forest, dry and xeric oak forest, dry and dry-mesic oak-pine old growth forest communities; restore, enhance, or mimic historic fire regimes; reduce fuel buildups; maintain rare communities and species dependent on disturbance; provide for public health and safety; improve threatened, endangered, sensitive, and locally rare species habitat; control non-native invasive vegetation, and clear the trees within the construction zone associated with the Mountain Valley Pipeline.
Standard 6C-026: These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites. Existing uses are allowed to continue (Jefferson NF LRMP, p. 3-84).	Standard 6C-026: These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites, with the exception of the Mountain Valley Pipeline right-of-way. Existing uses are allowed to continue.
Part 4 – Appalachian National Scenic Trail	
Standard 4A-028: Locate new public utilities and rights-of-way in areas of this management prescription area where major impacts already exist. Limit linear utilities and rights-of-way to a single crossing of the prescription area, per project (Jefferson NF LRMP, p. 3-23).	Standard 4A-028: Locate new public utilities and rights-of-way in areas of this management prescription area where major impacts already exist, with the exception of the Mountain Valley Pipeline right-of-way. Limit linear utilities and rights-of-way to a single crossing of the prescription area, per project.
Part 5 – Scenery Integrity Objectives	
Standard FW-184: The Forest Scenic Integrity Objectives (SIOs) Maps govern all new projects (including special uses). Assigned SIOS are consistent with Recreation Opportunity Spectrum	Standard FW-184: The Forest Scenic Integrity Objectives (SIOs) Maps govern all new projects (including special uses), with the exception of the Mountain Valley Pipeline right-of-way. MVP shall attain the existing SIOs within

Jefferson NF Forest Plan Standards prior to modification for the MVP Project	Standards as Modified for the MVP Project
management direction. Existing conditions may not currently meet the assigned SIO (Jefferson NF LRMP, p. 2-48).	five years after completion of the construction phase of the project, to allow for vegetation growth. Assigned SIOs are consistent with Recreation Opportunity Spectrum management direction. Existing conditions may not currently meet the assigned SIO.

Agency and Public Involvement

Environmental Review Process

The Final EIS for the MVP Pipeline Project was prepared pursuant to NEPA with FERC as the Lead Agency. The Cooperating Agencies assisted with the preparation of the Final EIS by providing comments, information, and analysis.

Consultation with Other Agencies

Section 1.5 of the Final EIS discusses the permits, approvals, and regulatory requirements pertaining to the MVP Pipeline Project. Within this discussion, Table 1.5-1 lists the major permits, approvals, and consultations required, and the Final EIS has been used by numerous Federal agencies for this purpose. The geographic scope and complexity of the project necessitated extensive data gathering, consultation and analysis with agencies at all levels of government.

The MVP pipeline route will cross about 60 feet of the Weston and Gauley Bridge Turnpike Trail, owned in fee by the USACE, in Braxton County, West Virginia. 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. The USACE adopted the Final EIS and provided a concurrence letter to BLM on December 12, 2017.

Additionally, FERC initiated formal and informal consultation with the USFWS pursuant to Section 7 of the ESA, as amended (7 U.S.C. 136, 16 U.S.C. 1531 *et seq.*). Information from the draft BA was used to prepare the Final EIS. The BA and USFWS’s Biological Opinion (BO) dated November 21, 2017 (Attachment D) were considered by the DOI in issuing this ROD.

As described in the Cultural Resources section of this ROD, FERC also engaged in formal consultation with the Virginia and West Virginia SHPOs and the ACHP pursuant to Section 106 of the NHPA.

Tribal Consultation

Section 106 of the NHPA requires each Federal agency to take into account the effects of its actions on historic properties prior to approving expenditure of Federal fund on an undertaking or prior to issuing any license. Historic properties include historic sites, districts, buildings, structures, objects, or properties of traditional religious or cultural importance to an Indian tribe that are listed or eligible for listing on the NRHP.

Using basic ethnographic sources, such as the Handbook of North American Indians (Trigger 1978), and data provided by the applicants, the FERC identified Indian tribes that historically used or occupied the project areas. The FERC's environmental mailing lists included Indian tribes that may have an interest in the projects and their mailing lists also included regional Native American organizations and state-recognized tribes.

The FERC sent copies of its April 17, 2015 NOI for the MVP and the August 11, 2015 NOI for EEP to Native Americans and tribes listed on table 4.10.5-1 of the Final EIS. As part of the FERC's government-to-government consultation program with Indian tribes, on July 21, 2015, FERC sent individual letters to tribal leaders informing them about the MVP and requesting comments or information about resources important to tribes that may be affected by the project (see Final EIS, Table 4.10.5-1). The Stockbridge-Munsee Band of the Mohican Nation responded on May 4, 2015 to the letter, indicating that the MVP is not located within their area of tribal interest. The Eastern Band of Cherokee Indians in North Carolina filed a letter with FERC on October 31, 2017 accepting the Treatment Plan for site 44GS0241 and requesting the presence of tribal monitors during data recovery excavations at the site. The Cherokee Nation of Oklahoma, in a letter to FERC dated October 31, 2017, stated that it does not object to the Project, if tribal monitors are employed at site 44GS0241 during data recovery excavations. As reflected in the Grant, Mountain Valley has agreed to employ tribal monitors at this site. FS will require the use of Eastern Band of Cherokee Indians and Cherokee Nation of Oklahoma monitors on site 44GS0241. The Cherokee Nation of Oklahoma also requested to be a consulting party to the PA and signed the PA as a concurring party.

Public Outreach and Comments

On October 27, 2014, Mountain Valley filed a request with the FERC to initiate the Commission's pre-filing environmental review process for the MVP. During the pre-filing process, Mountain Valley sponsored 16 public open house meetings held at various locations throughout the project areas between December 2014 and April 2015. Representatives of the FERC staff also attended those open house meetings to answer questions from the public. FERC reported that about 1000 people attended those public meetings. During the pre-filing process, FERC also received 597 comments from the public about the MVP.

FERC's Notice of Intent (NOI) to prepare an EIS was published in the Federal Register on April 28, 2015, and mailed to more than 2,800 interested parties (80 FR 23535). The NOI initiated a 60-day formal public comment period and announced the timing and location of six public scoping meetings. The scoping period ended June 16, 2015. The scoping meetings were held during May 2015 in Pine Grove, Weston, Summersville, and Lindside, West Virginia; and Ellison and Chatham, Virginia. Approximately 650 people attended the public scoping meetings, with 169 of those attendees providing oral comments. FERC received a total of 964 comments during the formal public scoping period.

The BLM and FS, serving as cooperating agencies in the development of the EIS, assisted FERC in using comments from the public, other agencies, elected officials, interested Native American tribes, affected landowners, and non-governmental organizations, to identify several issues regarding the effects of the proposed action. Main issues of concern included potential impacts to biological resources, cultural resources, karst topography, water quality, slope stability, and

visual resources, including visual effects to the ANST (see Final EIS Table 1.4-1). To address these concerns, FERC, in consultation with cooperating agencies, created the alternatives described in the Final EIS Section 3.

FERC issued a Notice of Availability (NOA) for the Draft EIS on September 27, 2016, that listed the dates, times, and locations of seven public sessions to take verbal comments on the DEIS, and established a 90-day public comment period on the Draft EIS, ending December 26, 2016 (81 FR, 66268). The sessions were held during November 2016 in Chatham, Rocky Mount, and Roanoke, Virginia; Peterstown, Summersville, and Weston, West Virginia; and Coal Center, Pennsylvania. In total, 261 people presented verbal comments at the sessions. FERC sent the Draft EIS to about 4,400 parties on their environmental mailing list. During the formal public comment period, FERC received 1,237 written individual letter or electronic filings commenting on the Draft EIS or about the project, not including repeats and form letters. Comments received during the formal comment period are reprinted in Appendix AA of the Final EIS. FERC continued to accept public comments after December 22, 2016, up until the staff completed writing the Final EIS. Comments received after the close of the public comment period are not included in Appendix AA of the Final EIS, but to the extent possible, FERC addressed these comments in the narrative text of the Final EIS.

The FS and BLM also issued a joint NOA for the MVP DEIS, which was published in the *Federal Register* on October 14, 2016 (81 FR 71041). This notice included additional information on the Forest Service LRMP amendment that will be needed to make the proposed pipeline construction and operation consistent with the JNF LRMP (36 CFR 219.15). It also included additional information on the BLM's involvement and actions regarding the MVP Project.

The FS published a "Notice of Updated Information Concerning the Mountain Valley Pipeline Project and Equitrans Expansion Project and the Associated Forest Service Land and Resource Management Plan Amendments" in the *Federal Register* on June 5, 2017 (82 FR 25761). The notice also informed the public that a change to the administrative review procedures was applicable (see the "Administrative Review/Objections" section).

The EPA published its NOA of the Final EIS for the MVP Pipeline Project in the *Federal Register*, Document Number 017-13598, on June 29, 2017. With the publication of that NOA, BLM initiated an additional 30-day public review and comment period. The BLM has considered all comments received (approximately 650) on the Final EIS in the development of this ROD. Attachment H summarizes the comments received by the BLM on the Final EIS.

Copies of the Final EIS were mailed to FERC's MVP mailing list, including elected officials, government agencies, interested Native American and Indian tribes, regional environmental groups and non-governmental organizations, affected landowners, intervenors, local newspapers and libraries, and individuals who attended FERC-sponsored public meetings or sessions, or who submitted comments on the projects or on the FERC's DEIS. The Final EIS has been placed in the public files of the FERC and is available for public viewing on the FERC's Web site at <http://www.ferc.gov>. A limited number of copies are available for distribution and public inspection at: Federal Regulatory Energy Commission, Public Reference Room, 888 First St., NE.; Room 2A, Washington, DC 20426, (202) 502-8371.

After FERC's release of the Final EIS the BLM initiated an additional 30 day comment period, from June 30 – July 31, 2017. The BLM received 61 unique comment letters and 584 form letters. BLM responded to issues raised in the Public Comment Summary and Response Report attached to this ROD (Attachment H).

As mentioned above, as part of FERC's government-to-government consultation program, Native American and Indian tribes were included in all project notifications. The Stockbridge-Munsee Band of the Mohican Nation responded on May 4, 2015 to FERC's letter, indicating that the MVP is not located within their area of tribal interest (Final EIS, Section 4.10.5). The Eastern Band of Cherokee Indians in North Carolina filed a letter with FERC on October 31, 2017 accepting the Treatment Plan for site 44GS0241 and requesting the presence of tribal monitors during data recovery excavations at the site. The Cherokee Nation of Oklahoma, in a letter to FERC dated October 31, 2017, stated that it does not object to the Project, if tribal monitors are employed at site 44GS0241 during data recovery excavations. As reflected in the Grant, Mountain Valley has agreed to employ tribal monitors at this site. FS will require the use of Eastern Band of Cherokee Indians and Cherokee Nation of Oklahoma monitors on site 44GS0241. The Cherokee Nation of Oklahoma also requested to be a consulting party to the PA and signed the PA as a concurring party.

Summary of Comments on Final Environment Impact Statement

The main issues raised in public comments on the Final EIS

- Concerns regarding NEPA process and BLM adoption of FEIS
- Concerns regarding purpose and need and consideration of alternatives
- Concerns regarding specific resources analyzed in the EIS, including:
 - forest fragmentation,
 - visual impacts,
 - surface waters and groundwater, and
 - impacts to endangered and threatened species.
- Concerns about cumulative impacts
- Concerns about climate change impact analysis

The BLM has reviewed and considered the comments on the Final EIS in the preparation of this ROD.

In addition to the concerns directed towards BLM's action, several commenters included objections to the FS Draft ROD for a plan amendment to the JNF to accommodate the MVP. The FS completed its own internal objection process prior to release of their final ROD and concurrence with the BLM. The BLM does not have any jurisdiction over the FS objection process or the FS decision to amend the JNF LRMP.

Regulatory Requirements

The objective of BLM's ROW program is to grant rights-of-way under the regulations to any qualified entity and to direct and control the use of rights-of-way in a manner that: (1) protects

the natural resources associated with Federal lands and adjacent lands, whether private or administered by a government entity; (2) prevents unnecessary or undue degradation to public lands; (3) promotes the use of rights-of-way in common considering engineering and technological compatibility, national security, and land use plans; and (4) coordinates, to the fullest extent possible, all BLM actions with state and local governments, interested individuals, and appropriate quasi-public entities. 43 C.F.R. 2881.2.

Before issuing a ROW or TUP, BLM must: (1) complete or approve a NEPA analysis, (2) determine whether or not the proposed use complies with applicable Federal and State laws and regulations, (3) consult, as necessary, with other governmental entities, (4) hold public meetings, if sufficient public interest exists to warrant their time and expense, and (5) take any other action necessary to fully evaluate and decide whether to approve or deny an application. 43 C.F.R. 2884.21. In accordance with these regulatory requirements:

- BLM served as a cooperating agency, assisted FERC in preparing a Final EIS which meets the agency's needs and allows BLM to fulfill the objectives of the regulations, and adopted FERC's NEPA analysis;
- BLM's Grant requires the operator to comply to the extent practicable with Federal and State standards for public health and safety, environmental protection and siting, construction, operation and maintenance;
- BLM has consulted appropriate governmental entities including the FS and USACE;
- After review of public interest and comments on the need for meetings, FERC's 13 public meetings (6 scoping meetings and 7 DEIS public comment meetings) BLM's attendance at FERC public meetings, FERC's extensive public engagement and record for the project, and BLM's comment period on Federal lands, BLM determined that the public interest in the project did not warrant the time and expense of duplicative public meetings.
- BLM took other necessary actions to fully evaluate the project including frequent inter-agency calls and coordination, detailed review of the record, and frequent communication with the project proponent regarding impacts to Federal lands.

BLM's actions satisfy the requirements of 43 C.F.R. 2884.21.

BLM has discretion to deny an application if: (1) the proposed use is inconsistent with the purpose for which BLM or other Federal agencies manage the lands described in the application; (2) the proposed use will not be in the public interest; (3) the proponent is not qualified to hold a grant or TUP; (4) issuing a grant or TUP will be inconsistent with the Mineral Leasing Act, other laws, or BLM's regulations; (5) the proponent does not have or cannot demonstrate the technical or financial capability to construct the pipeline or operate facilities within the ROW Grant or TUP area; (6) the proponent does not adequately comply with a deficiency notice or is unable to meet the requests from the BLM for additional information. 43 C.F.R. 2884.23. If an applicant is unable to meet the requirements of 43 C.F.R. 2884.23, the applicant may request an alternative from the BLM. 43 C.F.R. 2884.30. BLM has determined that denial is not warranted:

- Based on the concurrence of the FS and USACE (Attachment G), BLM has determined that the proposed use is consistent with the purpose for which the Federal agencies manage the lands described in the application.
- Based on FERC's Certificate (Attachment A), the record supporting FERC's decision, the FS and USACE's concurrence, and the BLM's independent review of the project, BLM concludes that the proposed use will be in the public interest.
- Based on the information Mountain Valley submitted in its application, BLM has determined that Mountain Valley is qualified to hold a grant and can demonstrate the technical and financial capability to construct the pipeline and operate facilities within the ROW.
- BLM has not issued a deficiency notice related to this project, and Mountain Valley complied with all of FERC's Environmental Information Requests.
- BLM has determined that issuing a Grant as conditioned will be consistent with the MLA, BLM's regulations, and other relevant laws. BLM's stipulations require the operator to comply with Federal and State standards for public health and safety, environmental protection and siting, construction, operation and maintenance, if these State standards are more stringent than Federal standards for similar projects.

Management Considerations

The BLM administers its ROW program to: 1) authorize ROW uses on Federal lands in the most efficient and economical manner possible; 2) manage ROW use of Federal lands through a system of ROW corridors; 3) maximize the use of performance stipulations through the use of construction, operation, and maintenance plans (POD); and 4) assure to the greatest extent possible that all identified impacts are mitigated and that the terms and conditions of the Grant are complied with (BLM Manual Section 2801).

The Final EIS for the MVP Pipeline Project identified and addressed the impacts associated with Mountain Valley's proposed alternative across all land jurisdictions, including Federal lands. The BLM, with concurrence of FS and USACE, has selected the proposed action analyzed in the Final EIS as modified by mitigation measures required by FERC, BLM, FS, USFWS, and other Federal agencies. Review of data supplied for the project; field investigations; scoping; literature research; alternatives analysis; and contacts with Federal, tribal, state, and local agencies and members of the public indicates that construction and operation of the selected alternative will result in some adverse environmental impacts. As detailed in the Final EIS, these impacts will be reduced or mitigated with the implementation of Mountain Valley's proposed mitigation measures (Attachment B).

Throughout the application permitting process, FERC and the Cooperating Agencies (including BLM, FS, USFWS, and USACE) used information derived from interaction with interested parties and data from resource surveys to modify and refine Mountain Valley's proposed pipeline route to mitigate adverse impacts. FERC evaluated a No Action Alternative, Postponed Action Alternative, several system alternatives and energy alternatives, 15 re-route proposals, and 16 additional minor route variations. The No Action and Postponed Action Alternatives were

evaluated and dismissed because they did not meet the purpose and need of the project. The system and energy alternatives were evaluated and dismissed because they will not offer an environmental advantage or reduce impact on the communities in which they will be located, will pose significant constructability constraints, will be uneconomic, or will create additional safety and reliability concerns when compared to their corresponding segments of the selected alternative. Three of the identified re-route proposals and all but one of the minor route variations were recommended for inclusion in the proposed route and subsequently adopted by Mountain Valley because they were deemed to generate less environmental impact to sensitive environmental and cultural resources.

Mountain Valley will design, construct, test, and operate its pipeline in accordance with U.S. Department of Transportation regulations specified in 49 C.F.R. 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards." Mountain Valley will also be subject to other applicable Federal and state regulations, including U.S. Department of Labor, Occupational Safety and Health Administration requirements. Also, Mountain Valley has prepared a Plan of Development with numerous resource specific plans for construction and maintenance (see Table 1). These documents provide detailed environmental protection measures that will be implemented in the construction process.

The FS has issued a Record of Decision to amend the JNF LRMP. The FS also concurs with the BLM's decision to issue a Grant for the MVP project, and has determined that this decision is consistent with FS policies and LRMP, as amended. The decision is supported by the analysis documented in the MVP Pipeline Project Final EIS prepared by FERC to fulfill the requirements of NEPA, and the commission's implementing regulations under Title 18 of the Code of Federal Regulations, part 380 (18 C.F.R. 380). FS issued its concurrence on December 13, 2017 (Attachment G).

Similarly, USACE concurs with BLM's decision to issue a ROW Grant for the MVP project and has determined that this decision is consistent with USACE policies. Mountain Valley indicated that the MVP will have no adverse effects on the Weston and Gauley Bridge Turnpike Trail, a finding that the WVDCH concurred with in a letter dated April 7, 2016. Measures incorporated into this ROD for the Grant are further stipulated in the attached concurrence letter issued by USACE on December 12, 2017 (Attachment G) to ensure conformance with agency standards.

Notification of this Record of Decision

The following steps have been taken to notify the public of this decision:

1. Distributed a news release about the ROD to local and regional media;
2. Published the ROD on BLM's ePlanning website;
3. Provided a copy of the ROD to all who requested it.

Concurrence Letters for the following are provided in Attachment H:

US Army Corps of Engineers
George Washington-Jefferson National Forests

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