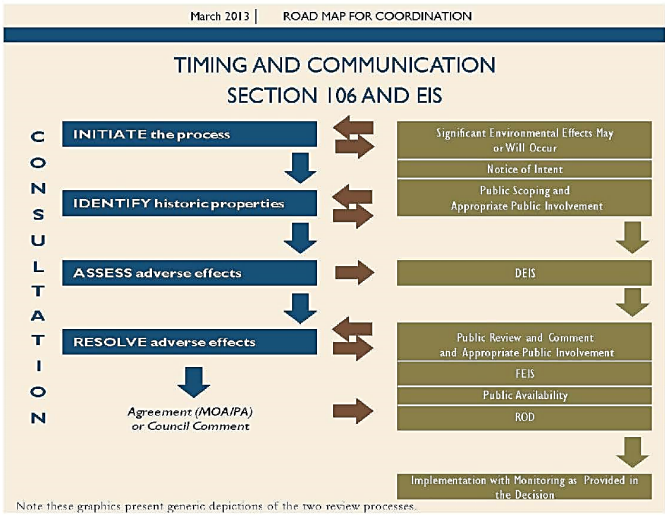


CO13-10
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CEQ and ACHP, *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*, at p.26 (Mar. 2013). (The Handbook can be accessed at: www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf.)

As the chart illustrates, to properly coordinate the timing of Section 106 review and preparation of an EIS, the agency should have completed the identification of historic properties prior to the issuance of the DEIS. The DEIS should also include an initial assessment of effects. Failure to include this information renders the DEIS ineffective in disclosing potential impacts of the project to the public.

CO13-11

- **FERC is unlawfully allowing identification of historic properties to be deferred until late in the review process, even until after issuance of a certificate.**

Section 106 of the NHPA requires agencies to take into account the effects of their decisions on historic properties “prior to” issuing any license. 54 U.S.C. § 306108. In cases where, for some reason, “effects on historic properties cannot be fully determined prior to approval of an undertaking,” 36 C.F.R. § 800.14(b)(1)(ii), the appropriate approach is to develop a programmatic agreement pursuant to the Section 106 regulations.

The whole point of the Section 106 review process is to develop and evaluate alternatives and modifications to the project that would avoid, minimize, or mitigate harm to historic

CO13-11

36 CFR 800.4(b)2 allows for the lead agency to use a phased process to conduct identification and evaluation efforts. The ACHP and courts have supported the concept of completing the Section 106 process after project authorization, but prior to construction (see *Grapevine v DOT*).

COMPANIES AND NGOs

CO13 – National Trust for Historic Preservation

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CO13-11
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properties. *Id.* §§ 800.1(a), 800.6(a). This is why the agency is required to “ensure that the section 106 process is initiated early in the undertaking’s planning, so that a broad range of alternatives may be considered during the planning process.” *Id.* § 800.1(c). FERC’s approach of deferring Section 106 consultation until after key decisions have already been made severely limits the consideration of alternatives that could avoid, minimize or mitigate harm to historic resources. FERC’s approach also creates a serious risk of foreclosing altogether the ACHP’s opportunity to comment on the undertaking. *Id.* § 800.9(b).

CO13-12

- **FERC has failed to adequately consider cumulative impacts.**

Both NEPA and Section 106 explicitly require the consideration of cumulative impacts. *Id.* § 800.5(a)(1) (“Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative”); 40 C.F.R. § 1508.7 (“Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions”).

As shown in the Comment and Objection filed by the Committee on October 24, 2016 (pp. 23-24), the easements being acquired by the applicant for this project call for the ultimate installation of two pipelines, rather than one. This certainly makes the future expansion of the pipeline “reasonably foreseeable,” 40 C.F.R. § 1508.7. As a result, the potential impacts of future expansions should be considered, and a larger Area of Potential Effects (APE) should be defined. See *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, 1319-20 (D.C. Cir. 2014).

CO13-13

- **FERC has failed to adequately evaluate alternatives.**

The evaluation of alternatives is the “heart” of the EIS, 40 C.F.R. § 1502.14, and FERC is required to “[r]igorously explore and objectively evaluate all reasonable alternatives,” *id.* § 1502.14(a). In addition, “the duty imposed upon the Commission by Section 7 of the Natural Gas Act is . . . also to give proper consideration to logical alternatives which might serve the public interest better than any of the projects outlined in the applications.” *Minisink Residents for Envtl. Preservation & Safety v. FERC*, 762 F.3d 97, 107 (D.C. Cir. 2014) (quoting *Northern Natural Gas Co. v. Federal Power Comm’n*, 399 F.2d 953, 973 (D.C. Cir. 1968)).

The Comment and Objection filed by the Committee on October 24, 2016 summarizes the fact that Hybrid Alternative 1A would dramatically reduce the adverse effects of the project on historic districts, avoiding 15 miles of intrusions on those districts, while also reducing impacts on other resources as well. This alternative is not discussed in the DEIS. Thus Hybrid Alternative 1A should be considered in detail as part of the Section 106 review, and in further NEPA documentation.

Thank you for considering these comments. We look forward to participating in the Section 106 consultation and helping FERC to resolve the issues identified in this letter.

CO13-12

You have incorrectly characterized the project. If the Commission authorizes the MVP, it would only allow one pipeline, as described in section 2 of the EIS, and as recommended by condition 4 in section 5.2. The EIS addresses cumulative impacts in section 4.13.

CO13-13

Alternatives are analyzed in section 3 of the EIS.

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CO13-13
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Sincerely,



Elizabeth S. Merritt
Deputy General Counsel

cc: Heather Campbell, Federal Preservation Officer, FERC
John Eddins, Charlene Vaughn, and Reid Nelson,
Advisory Council on Historic Preservation
Ted Boling, Council on Environmental Quality
Roger Kirchen, Virginia Department of Historic Resources

COMPANIES AND NGOs
CO14 - Smith Mountain Lake Association



SMITH MOUNTAIN LAKE ASSOCIATION
 400 Scruggs Road, Suite 2100 - Moneta, VA 24121

PROTECTING THE INVESTMENT OF SML RESIDENTS

November 22, 2016

Kimberly D. Bose, Secretary
 Federal Energy Regulatory Commission
 888 First Street NE, Room 1A
 Washington, DC 20426

References:

- OEP/DG2E/Gas 3
- Mountain Valley Pipeline LLC - FERC Docket No. CP16-10-000
- Equitrans LP - FERC Docket No. CP16-13-000
- FERC/DEIS-D0272

CO14-1 The Smith Mountain Lake Association (SMLA) has completed a review of the referenced draft environmental impact statement (DEIS) for the proposed Mountain Valley Pipeline Project. We have identified what we believe to be three significant deficiencies in the DEIS that are relevant to our community and its human environment:

- Deficiency No. 1** in FERC DEIS D0272: The Mountain Valley Pipeline Impact on FERC Project 2210-169 and Smith Mountain Lake Levels
- Recommendation:** Retain a hydrologist knowledgeable about surficial groundwater flows in the Franklin and associated counties to conduct a detailed quantitative analysis on the potential impact of the MVP Project on surficial groundwater flow and its potential impact on FERC project 2210-169 and SML levels.

CO14-2 **Deficiency No. 2** in FERC DEIS D0272: The Potential Spread of Zebra Mussel and Other Aquatic Invasion Species (AIS)

Recommendation: Establish a Program for the Effective AIS Decontamination of MVP Equipment and Other Items

CO14-1 Impacts to Smith Mountain and Leesville Lakes water levels are not expected given that Smith Mountain Lake is 1.9 miles from the MVP pipeline and Leesville Lake is more than 5 miles. As stated in section 2 of the EIS, Mountain Valley would install erosion control devices to prevent sedimentation off the construction right-of-way. Impacts on groundwater are addressed in section 4.3.1.

CO14-2 Invasive species are discussed in section 4.5 of the EIS, and fisheries in section 4.6. Mountain Valley responded to your comments about zebra mussels and other aquatic invasive species in a filing on March 30, 2017. Transmission of zebra mussels must involve transfer of live adults or contaminated water. Mountain Valley would use mostly municipal water sources for hydrostatic testing; and equipment used for construction of the MVP would not come into contact with contaminated waters of the Ohio, Monongahela, Buckhannon, or Kanawah River systems.

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CO14-3

Deficiency No. 3 in FERC DEIS D0272: Lack of Containment Plan for the Accidental Discharge of Fuels, Oils, Coolants or Lubricating Greases into Stream and Rivers during Construction Phases

Recommendation: Develop and implement a comprehensive plan for the containment of potential spills caused by accidents, breakdown and routine servicing of construction machinery

These deficiencies and associated concerns are detailed in the attachment. Each of these deficiencies poses important risks to Smith Mountain Lake and to our members. We believe they deserved to be addressed by the FERC prior to a decision on the subject application. Whenever possible, we have suggested remedial measures that we consider to be reasonable and appropriate. We have conducted our review with particular attention to our scoping comments of June 8, 2015, and our December 16, 2015, correspondence to you following publication of the project application.

The SMLA is a membership organization representing its more than 1100 members on issues that affect Smith Mountain Lake (SML) and its watershed. The SML includes territories of Bedford, Franklin, and Pittsylvania Counties in Virginia.

Thank you,

Pete Lewis

Peter Lewis, President

Larry Iceman

Larry Iceman, Chair

Water Quality Monitoring Committee

CO14-3

The potential for spills would be limited to fuel and oil from equipment used during construction of the projects. As discussed in section 4.3 of the EIS, the Applicants would implement their respective spill plans during construction to prevent, contain, and clean-up accidental spills.

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Smith Mountain Lake Association Comments on FERC/DEIS-D0272 FERC Docket No. CP16-10-000

ATTACHMENT: COMMENTS ON THE FERC DEIS D0272

Submitted by

SMITH MOUNTAIN LAKE ASSOCIATION

CO14-4

Deficiency No. 1 in FERC DEIS D0272: The Mountain Valley Pipeline Impact on FERC Project 2210-169 and Smith Mountain Lake Levels

Executive Summary

Near-surface groundwater flow in the soil overlying bedrock is a major source of the water flowing into Smith Mountain and Leesville Lakes in Franklin County. However, the FERC DEIS did not discuss or analyze the possibility that the MVP pipeline could disrupt this groundwater flow. Consequently, it is recommended that a hydrologist knowledgeable about near-surface groundwater flows in the Franklin and the associated counties be retained to quantitatively analyze and assess these issues before a decision about the MVP pipeline is made by FERC. The planned MVP pipeline route through Franklin County could cause an irreversible loss of water to the two lakes in several different ways, endangering both the economic viability of the FERC pumped storage project 2210-169 and the Franklin and Bedford county economic benefits from the two lakes. Based on the draft relicensing EIS for FERC project 2210-169 (FERC report DEIS-023D), the total economic loss could be as much as \$1.6 to \$7.2 million annually, and possibly even more, as well as the potential loss of an important component of the nation's energy grid. In addition, the current predictive model used by AEP to predict low lake levels may no longer work, requiring significant revisions.

Deficiency in the Draft EIS (DEIS-D0272)

Smith Mountain Lake (SML) and Leesville Lake in FERC Project 2210-169 (Ref. 1) are fed primarily by streamflow from the Roanoke, Blackwater and Pigg Rivers and runoff from precipitation near the lake shores. The operation of the FERC pump-back project for electricity generation during the fairly dry summer/early fall time period depends on sufficient water entering these two lakes to enable pumpback operations while simultaneously supporting required releases from Leesville Lake and evaporation from the lakes.

Approximately 33 to 67 percent (50 percent on the average) of the streamflow in these rivers is attributed to groundwater flow (Ref. 2). However, other studies have suggested that the groundwater flow is higher, around 60 percent - 70 percent in the major rivers feeding SML and Leesville Lake (Ref. 3). The majority of this groundwater flow occurs in the soil layer overlying the bedrock. Reference 2 states: "Much of the recharge in the Piedmont and the

CO14-4

Groundwater is discussed in section 4.3.1 of the EIS. It is not likely that the pipeline would block groundwater flow. The MVP should not affect water levels at Smith Mountain and Leesville Lakes, given their distance away from the pipeline, and use of the FERC's Plan and Procedures to protect water resources. As discussed in sections 2 and 4.1, Mountain Valley would follow the measures of its *General Blasting Plan* to reduce impacts in areas of bedrock. Sections 2 and 4.2 of the EIS discuss how Mountain Valley would deal with soil compactions.

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Blue Ridge Provinces takes place in interstream areas. Almost all recharge is from precipitation that enters the aquifers through the porous regolith. Much of the recharge water moves laterally through the regolith and discharges to a nearby stream or depression shortly after a storm or precipitation event." This near-surface groundwater flow is technically called interflow, but will be referred to in this paper as near-surface or surficial groundwater flow.

Franklin County area is primarily in the Blue Ridge Province, with the geology characterized by fairly thin soil layers (regolith) over the bedrock, ranging from 0 feet to about 150 feet in thickness, with a median thickness of 57 feet (Ref. 4). The FERC draft EIS, D-02072 (Ref. 5), recognizes that the "Regolith and fractured bedrock make up the transmissive layers of the Blue Ridge..." for water transmission, but fails to recognize the importance of these regolith flows for maintaining SML and Leesville Lake levels: The DEIS-D0272 further states: "Water quality within the surficial aquifer system is somewhat variable, but generally is suitable for municipal purposes. The surficial aquifer system is discontinuous, and as a result, has not been mapped by state agencies."

Finally the FERC Draft EIS concludes for the Mountain Valley Pipeline that "... construction and operation of the projects would result in limited adverse environmental impacts, with the exception of impacts on forest." without ever conducting any analysis to demonstrate that the MVP pipeline would not disrupt this critical surficial groundwater flow into SML and Leesville Lakes. The SMLA considers this lack of analysis a major deficiency in the EIS that needs to be corrected before a decision about whether the MVP pipeline can be built without disrupting FERC project 2210-169 and causing economic losses to Franklin and Bedford counties can be properly made.

Possible Impact of the MVP on surficial groundwater flows into SML and Leesville Lakes

An estimate of the drainage area potentially affected by the MVP can be made using the USGS (US Geological Survey) streamflow gages closest to where the MVP cuts the rivers and streams of interest. These gages are the Lafayette gage for the Roanoke River in Montgomery County, the Rocky Mount gage for the Blackwater River in Franklin County and the Sandy Level gage for the Pigg River in Pittsylvania County. These gages represent drainage areas of 254, 115 and 351 square miles, respectively, totaling 720 square miles or 50 percent of the total SML/Leesville drainage area. Since surficial groundwater flow comprises ~ 50 percent or more of the total stream flow on the average at these USGS gage sites, a significant portion of the groundwater flow into SML and Leesville Lakes may be "upstream" of the MVP route though Franklin and Pittsylvania Counties and consequently compromised by the MVP pipeline.

Three possible ways that MVP could disrupt this groundwater flow were proposed in the filing by SMLA (Ref. 6).

1. The blasting in areas where the pipeline trench must cut into the bedrock in Franklin County may create additional fractures in the bedrock, allowing a greater fraction of the near-surface or surficial groundwater flow to enter the deeper bedrock, bypassing the

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lakes. From Appendix 6B of the MVP FERC filing, locations in Franklin County where the bedrock can potentially lie within the depth of the pipeline trench occur 43 times, for a total distance of 15.9 miles, about 44 percent of the total pipeline 36 mile path through Franklin County (Ref. 7). This number is further supported by Appendix M of the FERC Draft EIS which states that 11.3 miles, or 31 percent of the Franklin County pipeline path crosses streams where the bedrock is within 7 feet of the surface. The Draft EIS does not address stream crossing conditions in Pittsylvania County, but the MVP pipeline route does cut the Pigg River in that county, suggesting the possibility of groundwater losses there as well.

While the FERC Draft EIS states blasting will only be used if ripping, rock trenching, rock sawing, hydraulic rams and jack hammers are insufficient to cut the bedrock in these areas, no discussion or analysis is provided in the EIS that addresses whether any of these methods, and particularly blasting, could increase bedrock fractures and thereby result in greater groundwater loss. Under this first possibility, there may be some loss of the surface runoff component of streamflow as well.

2. Depending on the degree of compaction in the fill material used to fill the pipeline trenches after pipeline installation, the pipeline trench may act as a partial block to groundwater flow past the pipeline. Given the shallow depth of soil in the Franklin County area, having a median depth of 57 feet with a pipeline trench that is 5.5 to 9 feet deep, this partial blockage may allow a greater fraction of the surficial groundwater "upstream" of the pipeline to enter fractures in the deeper bedrock, thereby reducing groundwater flow into the lakes. Moreover, since bedrock is within 7 feet of the surface for 31 percent of the pipeline path through Franklin County, the median depth of soil along the pipeline route is likely to be substantially less than 57 feet. In addition, a blocking effect by the pipeline could raise the water table upstream from the pipeline, resulting in a greater water loss through increased evapotranspiration.
3. There is also a significant vertical drop in the land elevation crossed by the pipeline path in Franklin County, going from about 2700 ft. where it enters the County to about 900 feet where it exits the County and to about 750 feet at the terminal point in Pittsylvania County. Depending on the degree of compaction in the fill, the pipeline trench may also act as a conduit to shift groundwater flow from the Smith Mountain Lake drainage areas to the Leesville Lake drainage areas. The MVP project does plan to install low permeability trench plugs at stream and waterbody crossings and on slopes greater than 5 percent with trench plug spacing depending on the slope (Ref. 8). However, these plugs are not necessarily watertight and are intended to prevent or slow the movement of water along the trench. In addition, the flow of surficial groundwater through the porous regolith in this region may simply see these trench plugs as partial restrictions, with the groundwater flowing around the plugs and continuing down the trench. Consequently, it is not clear the trench plugs will prevent the trench from functioning as a groundwater conduit from Franklin to Pittsylvania counties.

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None of these three groundwater disruption possibilities were discussed or analyzed in the Draft EIS. Instead, the approach seemed to be taking the position that since there are no state surveys of surficial groundwater, any impacts of the MVP on surficial groundwater flow don't need to be considered as an issue. These three possibilities are also not mutually exclusive; there is no reason they could not occur together in varying degrees.

Potential Economic Impacts

The FERC estimate for the beneficial economic impacts of the pumpback project 2210-169 is about \$8.6 million annually for electricity generation (\$48.4 million operating costs and \$57 million in power value), depending on the specific project alternative selected, and \$13.3 million annually for Bedford, Campbell, Franklin and Pittsylvania counties in 2005 (\$32.1 million in revenue and \$18.8 million in costs, Ref. 1).

The first two possibilities for groundwater disruption discussed above would affect both electricity generation and economic benefits of the four counties. Since groundwater loss to the lakes would be most serious during the summer/early fall season, about 1/4 of the electricity generation benefit could be lost, resulting in a net loss of \$5.6 million (assuming the power value drops to \$42.8 million while operating costs stay the same).

The economic benefit to the counties is more difficult to estimate. The benefit from recreational lake use occurs during the summer/early fall period, with Franklin and Bedford counties being the primary beneficiaries. Table 46 of Ref. 1 indicates these two counties receive 93 percent of the property tax revenues. It is assumed this 93 percent share applies to other economic benefits as well, and that seasonal residents and visitors might be most affected by chronic low lake levels in the summer/fall period. If these two groups stop coming to the lakes, their \$16 million dollar benefit (Table 47 of Ref. 1) would be reduced by \$14.9 million, turning the \$13.3 million benefit into an annual loss of \$1.6 million. A drop in property values for the permanent residents would also be likely, further increasing this loss, but it is difficult to accurately estimate how much this additional drop might be. Again it is assumed the county expenses for the four counties remain the same, at \$18.8 million. The total economic loss for either of the first two possibilities would then be \$7.2 million annually (\$1.6 million plus \$5.6 million), and possibly more depending on property value decreases.

For these first two possibilities, calculations of groundwater loss using the USGS streamflow gages nearest the pipeline also indicate that the SML adjusted level could drop as much as 12 feet on the average over a year, if the water releases from Leesville remain the same. Whether this drop in lake level could be offset by reduced releases from Leesville Lake without violating required Leesville releases is not addressed in the DEIS, nor are downstream economic costs resulting from reduced Leesville releases addressed.

The third possibility, transfer of water from SML to Leesville Lake via leakage down the pipeline trench, does not affect electricity generation. Although this transfer of groundwater from SML to Leesville does keep the SML adjusted level the same (adjusted SML level is the SML

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level if all the water in Leesville above 600 ft. were pumped back to SML) , it also makes the actual SML levels much more dependent on AEP regularly pumping back water from Leesville Lake to SML. Without the AEP pumpback, calculations of groundwater loss using the USGS streamflow gages nearest the pipeline indicate that the SML adjusted level could drop as much as 8 feet on the average over a year. Consequently, this third possibility would affect primarily the Franklin and Bedford County economic benefits by significantly reducing actual SML Lake levels during the prime recreation periods of summer/early fall, with a greater dependence on AEP electrical generation and pumpback schedules. Using the numbers from the earlier paragraph, this loss could be \$1.6 million, and possibly more depending on property value losses.

There may also be a strategic impact for the nation from possibilities 1 and 2 discussed above, in that the SML/Leesville pumpback project may not be available at all times during the year to generate electricity on short notice (within 10 minutes), which is identified as an important part of maintaining electrical grid stability (Ref. 1).

AEP is also required to use a predictive model to help predict low lake levels before they occur and employ various trigger warnings and reduced releases from Leesville to minimize these effects (Ref. 1). The reductions or redistributions of streamflow associated with all three possibilities means the assumptions of the current predictive model are no longer valid and a modified model will be needed. Under the first two possibilities, the current model will likely predict lower lake levels than actually occur, resulting in unnecessary trigger point warnings and reduced water releases from the Leesville dam. The economic costs to revise the predictive model and the downstream economic costs resulting from these unnecessary Leesville release reductions are also not addressed in this DEIS.

Recommendations

The potential economic losses associated with groundwater loss to the SML-Leesville pumpback project for electrical generation and county benefits can be as much as \$1.6 to \$7.2 million annually, and possibly more. This potential economic loss, together with the fact that it may be impossible to remedy changes in groundwater flow once they occur, is considered a major deficiency that the FERC Draft EIS has not seriously addressed. Consequently, it is recommended that the final EIS include a detailed quantitative analysis on the impact of the MVP Project on surficial groundwater flow and its potential impact on FERC project 2210-169 and SML lake levels. Furthermore, it is also recommended that a hydrologist knowledgeable about surficial groundwater flows in the Franklin and the associated counties be retained to quantitatively analyze and assess these issues before a decision about the MVP pipeline is made by FERC.

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2. Ground Water Atlas of the United States, HA 730-L, Piedmont and Blue Ridge Aquifers, U.S. Geological Survey, H. Trapp, Jr. and M.A. Horn, 1997, available at <http://pubs.usgs.gov/ha/ha730/gwa.html>
3. Estimated Hydrological Characteristics of Shallow Aquifer Systems in the Valley and Ridge, the Blue Ridge, and the Piedmont Physiographic Provinces based on Analysis of Streamflow Recession and Baseflow, A.T. Rutledge and T.O. Mesko, USGS Professional Paper 1422- B, 1996
4. Groundwater Resources of the Blue Ridge Geologic Province, Virginia, B.A White, Virginia Department of Environmental Quality, OWS Technical Bulletin 12-01, September 2012
5. Mountain Valley Project and Equitrans Expansion Project, FERC/DEIS-D0272, FERC Office of Energy Projects, September 2016
6. Smith Mountain Lake Association (SMLA) Comments on the Mountain Valley Pipeline, document 201511130-5400 filed in the FERC eLibrary under docket CP16-10, Nov 30, 2015
7. Mountain Valley Pipeline application to FERC requesting authorization of the MVP, Appendix 6B: Blasting Plan, filed October 23, 2015, available at <https://www.mountainvalleypipeline.info/current-news>
8. Mountain Valley Pipeline application to FERC requesting authorization of the MVP, Resource Report 1 and Drawing MVP-20, filed October 23, 2015, available at <https://www.mountainvalleypipeline.info/current-news>

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CO14-5

Deficiency No. 2 in FERC DEIS D0272: The Potential Spread of Zebra Mussel and Other Aquatic Invasion Species (AIS)

Basis for Concern

The proposed route of the MVP passes within close proximity to known infestations of Aquatic Invasive Species (AIS) and Nuisance Aquatic Species (NIS). Nowhere in the DEIS has MVP addressed the need for active decontamination because of potential transmittal of AIS, other than a partial, non-specific reference to generic methods of addressing pressure-test water.

The areas of highest concern are driven by the facts that:

1. The proposed MVP route crosses the Monongahela River close to its known points of infestation with zebra mussels thereby potentially contaminating any and all construction and related equipment used to construct and test the pipeline. This type of equipment, can, and has been shown in many locations, to be a vector (source of transmittal) for additional infestations of zebra mussels (*Dreissena polymorpha*).
2. The MVP intends to draw water from the Kanawha River, another river with known infestations of zebra mussels and employ that water for pressure testing of the pipeline, thereby potentially contaminating any and all construction and related equipment used to construct and test the pipeline. This type of equipment can, and has been shown in many locations, to be a vector (source of transmittal) for additional infestations of zebra mussels.
3. The proximity of the proposed MVP route to known infestations of zebra mussels including within 30 miles of known infestations of the Buckhannon, Monongahela and Ohio Rivers, within 40 miles of known infestations of the Kanawha River is a major risk to the spread of AIS. The movement of MVP equipment, supplier and service equipment and even workers' private transportation and clothing can serve as vectors (sources) of zebra mussel contamination of additional streams, rivers and lakes.
4. The plan of the proposed MVP to return potentially infested pressure-test water back to the environment poses a major risk for the spread of AIS. Both adult mussels and their early life stage (referred to as veligers), can remain viable even with significant concentrations of 'cleaning and decontamination' agents. The concentration and holding (treatment) time for such decontamination must meet the specific requirements associated with zebra mussel and veliger decontamination.
5. Traditional, low temperature (less than 140°F) cleaning of equipment and clothing to prevent the spread of zebra mussels historically referenced drying times of 3 to 5 days,

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See Mountain Valley's response to your letter filed on March 30, 2017.

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depending on local, for effective treatment. These drying times have been demonstrated to be invalid by U.S. Army Corps of Engineers funded research. *State-of-the-art guidelines for drying periods after low temperature (less than 140°F) cleaning, given the temperatures and humidity present in West Virginia and Virginia, can exceed 45 days in certain months.*

The negative impact of zebra mussel infestations on currently uninfested waterways include, but are not limited to:

- Reduced recreational activities due to beaches impacted by mussel colony growth on the beach sand substrate
- Impacted fishing due reduced feed stock for brood stage fish (black bass, etc.)
- Safety and health issues associated with cuts and subsequent infections caused by the very sharp edges of zebra mussel shells on beaches, boat docks, floaters and any other structure
- Economic impact due to binding of, and ultimately loss of operation, of boat dock floaters
- Economic impact due to mussels clogging irrigation pumps and distribution systems
- Economic impact due to mussel colony growth on boat hulls thereby requiring periodic hauling and cleaning
- Economic impact of mussel growth interfering with the proper operation of the internal components of boats including, but not limited to, cooling systems, lower units and outdrives, propellers, ballast tanks of wake surf boats, ancillary air conditioning systems, live wells for bait.
- Economic impact due to reduced property values on and near infested waterways
- Economic impact to counties and cities due to loss of property tax revenue driven by reduced property valuations

Background Information

Known Specific Methods of Infestation Transmittal

The adult zebra adult mussels, and their early life stage (referred to as veligers), can remain viable in excess of 30 days in the environmental conditions present along the MVP route (see detailed evidence below). Because of this significant viability these mussels have demonstrated the ability to spread via a wide variety of vectors, including but not limited to trailers, boats, all forms of construction-related equipment, ropes and clothing.

Due to daily, weekly and even once-only commutes from any stream-crossing or from contact with nearby infested waterway, can potentially lead to an infection vector.

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Therefore, equipment and machinery of concern includes but is not limited to construction equipment; service trucks such as water tankers, fuel trucks, maintenance equipment; transportation equipment including tractors and trailers; grading and mowing equipment; hauling equipment used to move or remove vegetation, soil, etc.; personnel and personal transportation vehicles such as cars, trucks, buses, vans. (See detailed references below)

Unfortunately, even dive and swim gear have been demonstrated to be vectors for an infestation e.g. Millbrook Quarry, Prince William County, VA (Citation: Virginia Department of Game and Inland Fisheries, <http://206.16.194.16/zebramussels/>)

Further, mud-encrusted footwear can be a source of contamination via very small adult mussels and veligers (Citation: 'Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species', Technical Memorandum No. 86-68220-07-05, U.S. Department of the Interior, Bureau of Reclamation Policy and Administration, Denver, Colorado).

The Need for Significant Actions By MVP to Perform AIS Decontamination is Supported by Requirements That the US Department of the Army, U.S. Army Corps of Engineers Is Required to Perform Such AIS Decontamination

See separate list of 'Sources of Authority' that have created specific applicable policies and directives relative to reducing the spread of AIS and NIS.

As evidenced by just one of many such acquisitions, the US Army is subject to AIS decontamination procedures when performing work in areas where there is a risk of transportation and hence the spread of AIS, including zebra mussels. As an illustration, we cite the acquisition titled 'AIS Decontamination Unit' dated July 12, 2016 with submittal deadline on July 21, 2016. This particular acquisition is for equipment decontamination units to be used in construction and maintenance in and around the town of Federal Dam, Minnesota 56641 located on the Leech Lake River, including zebra mussels on nearby Lake Winnibigoshish.

Decontamination Program Essentials

The need for specific decontamination actions including, but not limited to inspection and cleaning, to impede the spread of AIS is clearly documented in Federal regulations (See separate list of 'Sources of Authority' below).

For example, 'Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species', Technical Memorandum No. 86-68220-07-05, U.S. Department of the Interior, Bureau of Reclamation Policy and Administration, Denver, Colorado, amongst other topics specifically:

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1. Defines cleaning and decontamination procedures for Targeted Equipment at risk of spreading invasive species, including

- Rubber-tired land vehicles
- Tracked land vehicles
- Personal use equipment
- Construction and facility equipment
- Watercraft

2. Sets forth a policy regarding administration of inspecting and cleaning of Targeted Equipment, including:

- 'Generally, equipment of all types should be cleaned at the location of last use before being moved to a new location. If this is not possible, arrange for cleaning at a facility 'that is specifically designed for equipment cleaning
- 'If equipment is used at a location known to be infested with an invasive species, the equipment should undergo a preinspection, followed by thorough cleaning, and a final inspection before being moved off the worksite'
- 'At the new location, the equipment should be inspected again, preferably by someone other than the original inspector before the equipment is placed into service'
- 'If, on reinspection, contamination is found on the equipment, do not allow the equipment entry on the new worksite; either return the equipment to the location of last use for additional cleaning or arrange for cleaning at a location that is specifically designed for equipment cleaning'

Specific Recommendation: MVP Establish a Program for the Effective AIS Decontamination of MVP Equipment and Other Items

1. Scope of the Decontamination Effort

- Establishing a decontamination policy mirroring the content and style of Technical Memorandum No. 86-68220-07-05 referenced above.
- A decontamination protocol covering all internal and external surfaces, including but not limited to equipment, engines and engine compartments, trailers, sanitary equipment, portable toilets, containers, storage containers, storage areas, ropes, cables, materials, storage wells etc.

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2. Types of Decontamination

Derived from Preventing Invasive Species: Cleaning Watercraft and Equipment', U. S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service,
http://www.habitat.noaa.gov/pdf/best_management_practices/Cleaning%20of%20Watercraft%20and%20Equipment.pdf

- Physical removal followed by thermal or chemical treatment as outlined immediately below
 - Brushing
 - Vacuuming
 - Adhesive roller
- Thermal treatment:
 - Low-temperature, low-pressure wash (not preferred, but adequate with sufficient drying times)
 - High-temperature, high-pressure wash: Recommended approach is to use steam, hot air, or hot water to clean vehicles and field equipment by bringing the surface temperature of the up to 140 °F for 30 seconds. A hand-held infrared thermometer should be used to verify the surface temperature
- Chemical treatment
 - Undiluted white vinegar for 20 minutes.
 - 1% potassium permanganate solution at 24-hour exposure.
 - 5% quaternary ammonium solution for 10 minutes.
 - 250 mg/L ROCCAL (benzalkonium chloride) for 15 minutes
 - 500 mg/L hydrogen peroxide for 60 minutes
 - 167 mg/L formalin for 60 minutes

Decontamination Notes

- **All Treatment methods:** All of the decontamination methods outlined here-in and elsewhere result in the production of a waste-water stream contaminated with not only residual zebra mussels and veligers but other substances including oils, greases and decontamination chemicals. These wastewater streams must be contained and appropriately cleansed before returning the wastewater to the environment.
- **Thermal Treatment:** Field equipment such as jackets, pants, boots, waders, etc. can be effectively decontaminated by soaking in water kept above 140°F for one minute or for 20 minutes in water that is at least 110°F. Note that hot water can de-laminate Gore-Tex® fabric and damage other sensitive clothing items.

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- **Chemical Treatment:** Field equipment can also be cleaned by soaking, dipping in, or scrubbing with one of the chemical decontamination solutions listed above. If adult mussels are found during inspection, the equipment should be steam cleaned, washed with hot (140°F), high-pressure water, or dip-treated in hot water (140°F), and allowed to dry completely before the next use.
- **Clothing, boots, etc.:** Felt-soled waders and wading shoes, which have been identified as a potential vector, are difficult to disinfect. Rubber or studded soles are recommended as they are much less likely to transport invasive species. They should be cleaned using one of the methods outlined above.

3. Drying Times for Equipment Decontamination via Thermal Methods

For the specific vicinity of the closest potential sources of AIS infestation to the MVP within West Virginia, drying times have been calculated based on the recommendations of the 100th Meridian Initiative which is funded by a consortium of states, the Bonneville Power Administration, The U.S. Army Corps of Engineers, The U.S. Bureau of Reclamation, the U.S. Fish & Wildlife Service, the U.S. Geological Survey, The U.S. Forest service and the U.S. National Park Services.

The 100th Meridian Initiative is a widely recognized effort to 1) prevent the spread of zebra mussels and other aquatic nuisance species (NAS) in the 100th Meridian jurisdictions and west and 2) monitor and control zebra mussels and other aquatic nuisance species if detected in these areas.

High Temperature, High Pressure Wash with Ancillary Wands and Nozzles

It is recommended that decontamination cleaning be applied to all internal and external surfaces, including but not limited to equipment, engine and engine compartments, trailers, sanitary equipment, portable toilets, containers, storage containers, storage areas, ropes, cables, materials, storage wells etc.

If the cleaning procedures follow the decontamination equipment formal procedures for zebra and quagga mussel-specific AIS, as detailed in Susceptibility of Quagga Mussels (*Dreissena rostriformis bugensis*) to Hot-water Sprays as a Means of Watercraft Decontamination, published 07 March 2011, by WIT/WDT training, no additional drying time is required.

These procedures, at a minimum, must expose every at risk container, surface, area, item etc., to continuous temperatures of 140° F for a minimum of 10 seconds. It is recommended that fluid temperature of operation be controlled at a minimum of 160°F for flushing procedures since mass thermal transfer during these procedures will cause surface temperature to drop quickly.

Cleaning pressures of 3,000 psig are recommended for complete removal of live mussels.

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Low Temperature, Low Pressure Wash

These recommended drying intervals, for northern portions of West Virginia, after cleaning with water less than the recommended system of using 140° F water or without specialized high pressure wash wands and nozzles, is:

January	46 days, or 3 consecutive days with continually freezing temperatures
February	46 days, or 3 consecutive days with continually freezing temperatures
March	46 days, or 3 consecutive days with continually freezing temperatures
April	19 days
May	19 days
June	7 days
July	7 days
August	7 days
September	12 days
October	19 days
November	29 days
December	73 days, or 3 consecutive days with continually freezing temperatures

Source: <http://www.100thmeridian.org/emersion.asp>

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In order to reduce the threat of transmission of zebra mussels, or any stage of their larval forms including veligers, to Virginia *if low temperature cleaning (below 140°F), or cleaning without the use of specialized high-pressure nozzles and fittings*, the recommended drying intervals, for the **southern portions of West Virginia**, where the MVP proposed route crosses into Virginia are:

January	46 days, or 3 consecutive days with continually freezing temperatures
February	46 days, or 3 consecutive days with continually freezing temperatures
March	46 days, or 3 consecutive days with continually freezing temperatures
April	29 days
May	19 days
June	12 days
July	7 days
August	7 days
September	12 days
October	19 days
November	29 days
December	46 days, or 3 consecutive days with continually freezing temperatures

Source: <http://www.100thmeridian.org/emersion.asp>

Both sets of the above recommended drying times are based on findings published in the U.S. Army Corps of Engineers Contract Report EL-93-1 "Use of Emersion as a Zebra Mussel Control Method" by Robert F. McMahon, Thomas A. Ussery, and Michael Clarke, The University of Texas at Arlington.

Humidity Zones are based on the United Nations Environment Program's World Atlas of Desertification, 2nd Edition, 1977. Nick Middleton & David Thomas (Editors).

Temperature Zones are based on archived 2005 data from NOAA/National Weather Service, Climate Prediction Center

Note: for drying times in excess of one month, as the actual drying period crosses into a subsequent month, drying time shall be changed to the LONGER of the original drying time and that of the subsequent month or months.

4. Treatment of Potentially Contaminated Waste-Water from Cleaning and / or Testing Operations

This includes any water used for Targeted Equipment (as defined above) cleaning or decontamination, pipeline pressure testing, dust control, etc.

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Waste water from the cleaning of Targeted Equipment (as defined above) by its nature, is contaminated with residue from, but not limited to fuels, lubricants, other fluids and greases associated with the Targeted Equipment.

Existing EPA guidelines call for treatment of all such water according to EPA approved guidelines for discharge into waterways and streams including, but not limited to:

- Solids removal
- Oil coalescing
- Bio-mechanical
- Polishing

These types of waste-water capture and decontamination systems are widely employed by both Federal and State Agencies to capture and process waste water associated with decontamination of boats and trailers suspected of harboring AIS, including zebra mussels, quagga mussels and their respective larval forms and veligers.

Examples of off-the-shelf AIS waste-water decontamination systems include, but are not limited to:

1. Hydro Tek Wash Trailer by Hydro Tek US
2. Hydro Tek Mobile Wash Skid by Hydro Tek US
3. ProTowWash® Portable Commercial Pressure Washer Trailers by Hydro Tek US
4. Hydrosite® Integrated System by Hydro Engineering, Inc.
5. HydroBlaster® by Hydro Engineering, Inc.

Partial List of Sources of Authority

For the Imposition of AIS Monitoring and Cleaning of Potentially Contaminated Items

National Invasive Species Act of 1996, 16 U.S.C. 4701

**Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, 16 U.S.C. 4701
Plant Protection Act of 2000, 7 U.S.C. 7701 et seq. (supersedes the Federal Noxious Weed Act of 1974, except Sections 1 and 15)**

Executive Order 13112, Invasive Species, Federal Register, February 3, 1999

U.S. Department of the Interior's Departmental Manual

- 517 DM 1: *Integrated Pest Management Policy: Pesticides*
<http://elips.doi.gov/ELIPS/DocView.aspx?id=1744> (Provides policy to all U.S. Department of the Interior bureaus, including the Bureau of Reclamation, for Integrated

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Pest Management activities involving the prevention, detection, and management of native and nonnative pest species, including invasive species, on Interior properties)

- 609 DM 1: *Policy and Responsibilities: Weed Control Program*
<http://elips.doi.gov/ELIPS/DocView.aspx?id=1829> (Prescribes the policy to control undesirable or noxious weeds on the lands, waters, or facilities under its jurisdiction to the extent economically practicable, and as needed for resource protection and accomplishment of resource management objectives and the protection of human health)

Bureau of Reclamation's Reclamation Manual

- ENV PO2 (Policy), *Pest Management*, December 23, 1996
<http://www.usbr.gov/recman/env/env-p02.pdf> (Reclamation is responsible for the identification and proper management of pests on Reclamation lands and at Reclamation-owned facilities in accordance with the national policies set out in Federal Insecticide, Fungicide and Rodenticide Act; Federal Noxious Weed Act; Carlson-Foley Act; and applicable State and local laws and standards. This responsibility is to be fully considered in the development of a local Integrated Pest Management Program.)
- ENV 01-01 (Directives and Standards), *Pest Management – Resource Protection (Integrated Pest Management) Program*, October 17, 1996
<http://www.usbr.gov/recman/env/env01-01.pdf> (Provides directives and standards for Reclamation personnel involved with the implementation of Pest Management/Resource Protection plans for the operation and maintenance of Reclamation lands and facilities)
- PEC 10-29 (Directives and Standards), *Reclamation Standard Water-Related Contract Articles, Article 29: Pest Management*, PEC 10-29, December 21, 2006
<http://www.usbr.gov/recman/pec/pec10-29.pdf> (This article requires contractors to effectively control undesirable plants and animals on Federal project lands, project waters, and project works for which they have operation and maintenance responsibilities.)

Bureau of Reclamation's Acquisition Contract Guide Specifications

- Provides guide specifications and standard drawings used for preparing Reclamation construction and supply specifications. The guide specification adopts this Inspection and Cleaning Manual as the Reference Standard for equipment inspection and cleaning. <http://intra.usbr.gov/guidespecs> Path: CSI Masterformat 04; Division 1 - General Requirements; Use of Site - Section 01 14 10; 1.02 Reference Standards, and paragraph 3.01 —Cleaning

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Required Coordination with National-Level Plans

- National Invasive Species Management Plan, 2008-2012. National Invasive Species Council, 2008. (Satisfies Plan performance element CM. 2.1.1., for increased cleaning treatments to slow the spread of invasive species.)
- Strategic Plan 2007-2012, Aquatic Nuisance Species Task Force. 2007. (Satisfies Plan action 1.1a to develop strategies identifying and reducing the risk of harmful aquatic species being introduced into U.S. waters.)
- Quagga-Zebra Mussel Action Plan for Western U.S. Waters, Aquatic Nuisance Species Task Force. Prepared by the Western Regional Panel on Aquatic Nuisance Species, 2010. (Satisfies Plan action items B.3. to develop Standard and Effective Equipment Inspection and Decontamination Protocols; and E.1. to Develop Tools and Best Management Practices for Preventing and Minimizing Mussel Movement and Settlement Within Water Distribution Systems and Other Infrastructure.)

Federal Noxious Weed Act of 1974 (sections 1 and 15), 7 U.S.C. 2814

Federal Insecticide, Fungicide and Rodenticide Act, as amended by the Food Quality Protection Act of 1996, 7 U.S.C. 136

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CO14-6

Deficiency No. 3 in FERC DEIS D0272: Lack of Containment Plan for the Accidental Discharge of Fuels, Oils, Coolants or Lubricating Greases into Stream and Rivers during Construction Phases

Basis for Concern

The proposed route of the MVP crosses numerous rivers and streams. Nowhere in the DEIS is there a requirement for MVP to address the need for containment of likely spills at construction sites from construction machinery fluids, including but not limited to diesel engine fuels, gasoline engine fuels, lubricating oils, greases, hydraulic system fluids, coolants, etc. (collectively referred to here-in as 'machinery-related fluids').

This concern is driven by the facts that:

1. The proposed MVP route crosses 1,021 bodies of water in Virginia and West Virginia. According to the FERC classification scheme, these bodies of water include minor, intermediate and major bodies of water.
2. It is a well-known fact the construction and other related equipment experiences periodic accidents and breakdowns.
3. It is standard operating procedure to lubricate construction-related equipment such as, but not limited to: bucket loaders, track-hoes, trenchers, skid-steer loaders, scrapers and cranes on a daily basis at their places of use.
4. These breakdowns, accidents and routine lubrication activities can result in the unintended release of machinery-related fluids, as defined above.
5. Because machinery-related fluid spills can quickly spread along the surface of water and into the surrounding ground, making cleanup and containment time-critical, there is a need for fast and effective response actions, thereby requiring pre-positioning of spill-response equipment and supplies as well as prior training of personnel in the recognition of and reaction to machinery-related fluids spills.
6. The US Environmental Protection Agency, amongst other US Federal agencies, has applicable regulations concerning the release of these environment-damaging machinery-related fluids (both petrochemical and non-petrochemical based), such as the National Pollutant Discharge Elimination System (NPDES). Additionally, the "Clean Water Act" of 1972 and its subsequent amendments established regulations including but not limited to the 'sheen rule'.

CO14-6

See response to CO14-3.

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Negative Impacts

The negative impacts of the release of construction machinery-related fluids include, but are not limited to:

1. Negative impact on general fish populations
2. Negative impact on general waterfowl population,
3. Negative impact on general invertebrate populations,
4. Negative impact to human drinking water supplies
5. Negative impact to farm animals in proximity to the bodies of water
6. Negative impacts to recreational use of the bodies of water

Specific Recommendation:

MVP develop and implement a comprehensive plan for the containment of potential spills caused by accidents, breakdown and routine servicing of construction machinery with the scope of the plan including but not limited to detection, containment, mitigation, decontamination, and disposal of both construction machinery-related fluids and any contaminated soils, water and materials. Additionally, the plan should include having the necessary supplies and equipment at hand to treat wildlife, farm animals and domestic animals that may become negatively affected by a machinery-related fluid spill.

This plan should include, but be not limited to pre-positioning appropriate mitigation equipment and supplies (e.g. absorbent materials, booms, dispersants, and animal cleaning supplies, etc.) and training of staff in detection of any spill and the appropriate use and deployment of the mitigation equipment and materials.

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CO15-1

UNITED STATES OF AMERICA
 BEFORE THE
 FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of the Application of:
 Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

COMMENT

Preserve Craig and Save Monroe hereby provide comments in response to the Notices of Availability of the Draft Environmental Impact Statement for the Proposed Mountain Valley Pipeline (“MVP”). In particular, these Interveners address the jurisdiction of the Forest Service on the Jefferson National Forest (“JNF”) and the Forest Service obligations to manage the National Forest System “to sustain the multiple use of its renewable resources in perpetuity while maintaining the long-term health and productivity of the land.” 36 CFR § 219.1(a). The comments specific to the Forest Service jurisdiction follow the general comments below on the inadequacy of the DEIS.

Overview of the Inadequacy of the FERC DEIS

Like many other individuals and organizations, Preserve Craig and Save Monroe, and its members, have submitted numerous comments on the MVP that provide factual information about the impacts threatened by the MVP as well as professional expertise on the assessment of the impacts. Despite the public’s efforts to utilize the NEPA process as conducted by FERC, the information and analysis provided by the public is largely ignored in the DEIS. The DEIS has been developed in a vacuum, all in violation of the intent and purpose of NEPA. The only information that is included in the appendices is information fabricated by MVP. The DEIS lacks substantive qualitative and quantitative analysis. The recommendations are based entirely on unsupported conclusions.

The DEIS appears to be drafted around a skeletal framework that FERC has used over and over again to disguise a sham process. FERC’s canned DEIS formula avoids focusing on impacts and threats that are unique to the proposed routing, and presents information in a manner that detracts from the extraordinary impacts the proposed MVP would have across a 300 mile course of mostly mountainous terrain that supplies remarkable water resources. Finally, in terms of form, the DEIS is intentionally misleading in that it is unclear as to which parts are based on Forest Service jurisdiction and which parts are based on FERC jurisdiction. It appears that FERC has made assessments on impacts to the Jefferson National Forest resources for which it has no authority. On the face of the DEIS, it is unclear which agency is responsible for which drive.

Regardless of which agency is responsible for the DEIS, it is inadequate. The appendices are nothing more than lists of data together with a handful of self-serving

CO15-2

CO15-3

CO15-1

See the response to FA11-2 regarding the adequacy of the draft EIS.

CO15-2

The FS is a cooperating agency and assisted in preparation of the EIS.

CO15-3

Section 4.8 of the final EIS has been revised to provide an updated analysis of visual impacts to the Jefferson National Forest.

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CO15-3 cont'd	<p>photographs for the purported purpose of illustrating visual impacts in select locations across the 300 mile route. There is nothing analytic about the appendices, in violation of 40 CFR §1502.18(c). There are no photographs that represent the visual degradation of the Jefferson National Forest, its recreational resources, and the surrounding communities.</p>
CO15-4	
CO15-5	<p>The DEIS presents conclusory statements without substantive analysis. There is no objective assessment of the beliefs that are represented in the DEIS. Moreover, FERC mistakenly believes that the public is not entitled objective assessment. For example, on page 1-9 of the DEIS, section 1.2.3, FERC asserts that it need not disclose the basis for its conclusion that there is a lawfully supported need for the project until it issues its final Order granting the certificate.¹ A DEIS is not a placeholder. A DEIS must both inform and involve the public. The public has been shut out, and all the public knows is that FERC is going to grant a certificate regardless of the impacts. FERC says so on page 1-9: it will tell us why the MVP is needed when it grants the certificate.</p>
CO15-6	<p>The members of Preserve Craig and Save Monroe are familiar with manner in which the Forest Service ordinarily performs its duties. The MVP DEIS is not a representative work-product for the Forest Service. The Forest Service is quite skilled at drafting appeal-proof environmental analysis documents, and this one fails that test. On the other hand, FERC need not concern itself with appeal-proof analyses because FERC routinely grants certificates and issues construction orders while FERC suspends the appeal process with a procedural tool, called a tolling order, that is entirely unique to FERC's authority. FERC made it up, and many gas pipelines have been constructed before FERC ever gets around to completing its administrative appeal process, termed "rehearing", because FERC suspends the process.</p> <p>A DEIS cannot suspend the public participation requirements of NEPA in the same manner that FERC uses the tolling orders to suspend its administrative process to deny interveners due process.</p> <p>(a) Draft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process. The lead agency shall work with the cooperating agencies and shall obtain</p> <hr/> <p>¹ FERC has stripped the Forest Service and BLM of its authority to determine the need for the activity, as these agencies' purpose and need statements in the Notice of Availability are absurd. "The BLM's purpose and need for the proposed action is to respond to a Right-of-Way Grant application submitted by Mountain Valley on April 5, 2016....The FS's purpose and need for the proposed action is to consider issuing a concurrence to the BLM for the Right-of-Way Grant and to evaluate the amendments to the LRMP for the Jefferson National Forest that would make provision for the MVP pipeline if the FS decides to concur and BLM decides to issue a Right-of-Way Grant." 81 Fed. Reg. 66269 (2016).</p>

CO15-4 See comment CO31-1 regarding draft EIS conclusions. See comment CO16-1 regarding the FERC decision process.

CO15-5 See the response to FA11-2 regarding the adequacy of the draft EIS.

CO15-6 See the response to FA11-2 regarding the adequacy of the draft EIS.

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CO15-6
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comments as required in Part 1503 of this chapter. The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action.

40 CFR § 1502.9(a.). Section 102(C) of NEPA requires:

- a detailed statement by the responsible official on --
 - (i) the environmental impact of the proposed action,
 - (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
 - (iii) alternatives to the proposed action,
 - (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
 - (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

CO15-7

42 USC § 4332(C).

The record is loaded with comments and information that document the adverse environmental impacts (42 USC § 4332(C)(ii)), but because FERC either generally denies impacts or does not identify and describe the impacts, the impacts are not disclosed or assessed in the DEIS. Moreover, there is no analysis of the effects of waiving the Forest Service standards to legalize the proposed activity. The DEIS is so inadequate it precludes meaningful analysis and must be revised.

CO15-8

CO15-9

Where the applicant and FERC admits adverse impact, the impacts are discounted because it is claimed that mitigation will be employed to minimize the impacts. Without knowledge of the effectiveness of mitigation, the impacts cannot be assessed by either the decision maker or the public. 40 CFR § 1502.16(h). Furthermore, neither FERC, the Forest Service, or the BLM can rely on mitigation to discount impacts where the mitigation has not been demonstrated to be effective and the analysis of purported effectiveness been vetted in the public participation process.

NEPA requires agencies to "discuss potential mitigation measures in their EISs and decision documents." *Pacific Coast Fed. of Fisherman's Assocs. v. Blank*, 693

CO15-7

See the response to FA11-2 regarding the adequacy of the draft EIS.

CO15-8

See the response to FA11-2 regarding the adequacy of the draft EIS.

CO15-9

Impact avoidance, minimization, and mitigation measures are discussed in each resource section.

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CO15-9
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F.3d 1084, 1103 (9th Cir. 2012) (citing 40 C.F.R. §§ 1502.14(f), 1502.16(e)–(h), 1505.2(c), 1508.25(b)(3)). An EIS must discuss mitigation "in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Id.* (citing *Methow Valley*, 490 U.S. at 353. The discussion "necessarily includes an assessment of whether the proposed mitigation measures can be effective." *Id.* (citing *S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 588 F.3d 718, 727 (9th Cir. 2009)). Without a discussion of mitigation, "neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects." *Methow Valley*, 490 U.S. at 352.

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. Compare *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1381 (9th Cir. 1998) (disapproving an EIS that lacked such an assessment) with *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 477 (9th Cir. 2000) (upholding an EIS where "[e]ach mitigating process was evaluated separately and given an effectiveness rating"). The Supreme Court has required a mitigation discussion precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided. *Methow Valley*, 490 U.S. at 351-52 (citing 42 U.S.C. § 4332(2)(C)(ii)). A mitigation discussion without at least some evaluation of effectiveness is useless in making that determination.

S. Fork Band Council of W. Shoshone v. United States DOI, 588 F.3d 718, 727 (9th Cir. 2009). Most fundamentally, NEPA requires that the public be informed of, and participate in, the entire decision making process, including the analysis of mitigation. There is no evidence in the record for the MVP that any corrective mitigation measures that are routinely imposed by FERC or any other state or federal agency are effective in the construction of a 42 inch gas pipeline in the extreme soils, geologic, and slope conditions presented by the proposed route.

CO15-10

One example of the inadequate treatment of significant impacts with unproven mitigation is the discussion of soils and landslides. Based on MVP's assessment, landslide conditions span 63 miles of the route. DEIS, p. 4-68. There is no analysis of the impacts of landslides. The DEIS does not describe the harms caused by landslides. FERC then describes measures that will be used "to prevent hazards" in section 4.1.2.4, but there is no analysis or documentation that the measures used will be effective against impacts that have not been described. Nonetheless, without any analysis, FERC summarily concludes, "Based on our analysis of the Applicants proposed measures, we conclude that potential impacts on soils would be effectively minimized." DEIS, p 5-3.

CO15-10

Steep slopes and landslides are addressed in sections 4.1 and 4.2 of the EIS, respectively. See the response to IND177-1 regarding landslides and Mountain Valley's revised Landslide Mitigation Plan.

CO15-11

The soils and landslide treatment is just one example of the DEIS missing the core of environmental analysis. The same is true for the coverage of karst geology and impacts to water resources. Karst-feature identification is limited to

CO15-11

Section 4.1 discusses karst terrain..

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CO15-11 cont'd	within 0.25 miles of the proposed route, which limit is not only unsupported and arbitrary, MVP seems to fail to recognize the characteristics and qualities of karst geology by limiting identification of features within 0.25 miles, particularly since other information indicates that exceeding the construction width will be the rule rather than the exception. The DEIS lacks assessment of impact, the efficacy of mitigation, and the impact that remains even after mitigation is utilized.
CO15-12	Furthermore, soils conditions, karst geology, landslide hazard and impacts to water are all interrelated on the proposed pipeline route. The common denominator is impacts to water. The impacts are never disclosed and never analyzed, therefore, the impacts are never combined in proper assessments of direct, indirect and cumulative impacts to water resources. All while the riparian standards on the National Forest must be waived in order to legalize the proposed action.
CO15-13	There is no treatment of the following requirements in NEPA: “any adverse environmental effects which cannot be avoided should the proposal be implemented,” “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity,” and “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented”. 42 USC § 4332(C)(ii)(iv)(v); <i>see also</i> , 40 CFR § 1502.16 .
CO15-14	The DEIS also fails to address “possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned.” 40 CFR 1502.16(c). The need to waive Forest Service riparian standards to make the project legal is an actual conflict, not a possible conflict, between the proposed action and the objectives of the Jefferson National Forest management plan, Forest Service regulations, and the Forest Service Strategic Plan. Furthermore, the fact that riparian standards on the National Forest must be waived to legalize this unbelievably destructive project translates to imposing no riparian standards across the entire route -- which violates countless state and federal laws and policies. There is no explanation or analysis of the regulatory intersection of allowing headwater streams to be obliterated and the jurisdiction of the US Army Corps of Engineers and the Virginia Department of Environmental Quality. Instead, the decision makers appear to pretend that the extraordinary impacts are not real and that there are no conflicts of law.
CO15-15	<p>The Forest Service and The Jefferson National Forest</p> <p>The proposed MVP is inconsistent with the Revised Land and Resource Management Plan (“LRMP”) for the Jefferson National Forest (“JNF”). The</p>

CO15-12	Section 4.3 of the EIS discusses groundwater, springs, and water supplies.
CO15-13	The EIS concluded that the projects would have limited adverse environmental impacts on most resources, except for clearing of forest. See the response to comment FA15-5 regarding forest impacts.
CO15-14	See response to comment FA10-1 regarding Amendment 2. Section 4.8.2.6 discusses the legality of making these plan amendments with respect to the 36 CFR 219 regulations.
CO15-15	See response to comments FA8-1 and FA10-1 regarding Amendments 1, 3 and 4. See response to comment CO74-7 regarding the Brush Mountain Inventoried Roadless Area.

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CO15-15
cont'd

Forest Service proposes to amend the LRMP to established a 500 foot wide utility corridor and to undermine the function and purpose of the LRMP by “waiving” protections for watersheds and soil resources in the LRMP, as well as waiving and modifying standards to conserve old growth forests, protect the Appalachian Scenic Trail, Wilderness values, and an Inventoried Roadless Area. The DEIS does not contain adequate information to consider any of these decisions, which proposals are absurd on their face and represent the usurpation of public resources only for corporate profit. This is by far the most egregious assault on the Jefferson National Forest and the wide-ranging ecosystem services and public benefits for which it provides that has ever been proposed. Nevertheless, FERC says it’s okay, just because it says so.

CO15-16

The Extraordinary Duty of the Forest Service to Conserve Both Forest and Water Resources

The lands of the Jefferson National Forest were acquired by an act of Congress that created the Eastern National Forests. The Weeks Law was enacted in 1911. The express purpose of the Weeks Act is to protect watersheds and conserve forests and water supplies. 36 Stat. 961. See, <http://www.fs.fed.us/land/staff/Documents/Weeks%20Law.pdf>. The reason that the Jefferson National Forest was established is straight forward: protect watersheds and conserve water supplies. The Weeks Act established a responsibility to the public for watershed and water supply protection that is paramount to other uses of the forest resources.

It is mind boggling that we have even come this far and countless resources have been expended, when the obvious response to a request to waive riparian standards on the Jefferson National Forest is, “No.” The answer to the question is obvious on the face of the question. No one at the FERC public meeting in Roanoke, Virginia in November 2016 told the Forest Supervisor that they supported the proposal; most people said, “You aren’t going to do that, right?” It’s a matter of common sense.

CO15-17

Information about the lands that would become the Eastern National Forests was gathered to support the acquisition of the lands. In the early 1900’s, the lands were described as follows:

The entire region is characterized by extremely heavy rainfall in very short periods of time, and owing to the steep slopes and the absence of lakes, ponds, or marshes, which could act as reservoirs and hold back the storm waters, protracted heavy precipitation is followed by a rather rapid increase in the flow of the streams, the rise lasting generally for only a few hours, and the stream soon

CO15-16

Section 4.8.2.6 discusses the legality of making these plan amendments with respect to the 36 CFR 219 regulations.

CO15-17

Comment noted.

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CO15-17
cont'd

assuming its normal stage of flow. This is more especially the case where there are forest clearings. Consequently these violent rains, under certain conditions i. e., where rains are excessive and clearings extensive, or where forest areas are burned over so as to destroy the humus and undergrowth-give rise to floods which are very destructive to property and which cause occasionally the loss of human life. To a certain extent the forest acts as a reservoir, for it keeps the soil porous, allows it to absorb and hold the water for a time, and gradually gives it forth in the form of springs and rivulets. Where the areas have been deforested, however, the rain water forms small but swift-flowing torrents down the sides of the mountains, and quickly reaches the streams below. Deep channels are cut in the mountain sides, and all of the top fertile soil is carried off, leaving only the underlying clays, which are of poor quality and do not yield to cultivation.

After a storm the streams rising in the deforested areas are extremely turbid with mud from the mountain sides, while those from the forest areas are comparatively clear. This erosion can be noted by the most casual observer, and it forms one of the greatest menaces to the region. The soil is deep and fertile, as is shown by the splendid growth of forest trees and by its yield under the first cultivation, but it is only a question of time, if the forests are wantonly cut, when all of the soil and vegetation will be washed from the mountain sides and nothing will remain but the bare rock.

These floods, due to protracted rains, are also destructive in strips of valley lands bordering the streams in the mountain region and in the wider valleys along their courses across the lowlands beyond. Bridges, mills, settlements, public roads, dams for developing water power, indeed, everything in the course of such a mountain stream is liable to be swept away by its rapidly increasing force.

Senate Document 84, Message from the President of the United States Transmitting A Report of the Secretary of Agriculture in Relation to the Forests, Rivers, and Mountains of the Southern Appalachian Region, THE HYDROGRAPHY OF THE SOUTHERN APPALACHIANS, PHYSIOGRAPHIC FEATURES OF THE REGION,
http://www.foresthistory.org/ASPNET/Publications/region/8/southern_app/appc1.htm.

The scientists who investigated the lands that would become the Eastern National Forests knew how to describe environmental impacts. This excerpt

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CO15-17
cont'd | from the Report of the Secretary of Agriculture in Relation to the Forests, Rivers, and Mountains of the Southern Appalachian Region is descriptive of impacts that will be caused by the MVP, and was the basis for conserving the Eastern National Forests.

CO15-18 | The MVP would create a scar that would never heal, and cause permanent erosion conditions that the National Forest was established to prevent. Comments submitted by Preserve Craig under a separate filing include supporting documentation of the inability of gas pipeline right-of- ways to maintain vegetation or ever stop eroding. The record is full of references to the slope failure on a 10-inch gas pipeline that was constructed on the Jefferson National Forest in 2014. See, Reports/Analysis of the Columbia Gas Construction Project by the Dominion Pipeline Monitoring Coalition, <http://pipelineupdate.org/case-study-no-1/>. It is incredible that the Forest Service would ever contemplate waiving riparian standards and granting concurrence for a right-of-way for a 42-inch pipeline that will cause far greater impacts than the Columbia Gas pipeline.

CO15-19 | The duty to protect watersheds and conserve water supplies has been adopted in the most recent Forest Service Strategic Plan which sets forth a Strategic Objective to provide abundant clean water as a component of delivering benefits to the public. The means and strategies to achieve the objective to provide abundant clean water are:

Conserve, maintain, and restore watersheds, ecosystems, and the services they provide to people.

Use the Forest Service's Watershed Condition Framework to classify watershed conditions, identify restoration priorities, and monitor program accomplishments.

Maintain water of sufficient quantity and quality to sustain aquatic life and support terrestrial habitats, domestic uses, recreation opportunities, and scenic character.

Deliver the knowledge, tools, and technologies to restore, sustain, and enhance watersheds in a changing future.

Facilitate partnerships that foster water conservation and citizen stewardship.

Illustrate the importance of the link between forests and faucets from both surface and groundwater sources through educational programs.

USDA Forest Service Strategic Plan 2015-2020,
https://www.fs.fed.us/sites/default/files/strategic-plan%5B2%5D-6_17_15_revised.pdf.

CO15-18 | See response to comment FA10-1 regarding Amendment 2.

CO15-19 | See response to comment FA10-1 regarding Amendment 2. See response to comment CO33-1 regarding hydrogeologic studies.

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CO15-19
cont'd

The Forest Service Manual requires Regional Foresters and Supervisors to ensure that (1.) Each land management plan or amendment complies with laws, regulations, and policy, including 36 CFR part 219, FSM 1920, and FSH 1909.12, and including requirements for threatened and endangered species, and (2) Each land management plan is aligned with the goals and objectives of the Forest Service Strategic Plan. FSM 1921.12.

Not only would the MVP impact water resources, authorizing the construction of the MVP will degrade partnerships that foster water conservation and citizen stewardship. Any good will that has been fostered between the Forest Service and the communities whose water supplies flow cleanly from the National Forest will be destroyed. The same is true of the values to recreational resources set forth in the Strategic Plan. The MVP makes a mockery of the tag line "Leave No Trace" and will erode good will between the public and the Forest Service.

The Forest Service has been using the term "stakeholders" to describe people who have voiced their concerns about the MVP. The term is extraordinarily offensive in the context of the proposal to construct a 42 inch gas pipeline in complex geologic systems that are critical to an undocumented number of people who rely on the water supplies stored in those systems. The people who rely on the water supplies are the public whose interests are paramount in the management of the National Forest. The Forest Service has a duty to the public as a whole to manage the National Forests to protect watersheds and conserve water resources. All of the people in the areas surrounding the JNF rely on the water, as well as those downstream. They are not stakeholders, they are the people for whom the National Forest exists.

CO15-20

MVP's Arbitrarily Selected Route Is Proposed As A 500 Ft Wide Utility Corridor By Default Rather Than By Design

Prior to the release of the DEIS, FERC and the Forest Service were bombarded with requests to perform a Programmatic EIS which requests were rejected out-of-hand. Preserve Craig submitted a legal memorandum that explains why the conduct of Programmatic EIS is appropriate before determining where any gas pipeline should cross the Southern Appalachians. See, Accession Number 20161221-5359. Then, with the release of the DEIS, the Forest Service revealed the proposal to create a 500 feet wide utility corridor for the purpose of encouraging collocation -- all while at least two other major gas pipeline proposals are under proposal.

So instead of the resource agencies studying and determining whether and where any 42 inch gas pipeline should be routed through the George Washington and Jefferson National Forests, MVP's arbitrary line drawing on a map is the basis for determining the location of a utility corridor on the Jefferson National Forest. The industry selected the route for its convenience rather than the route being selected to

CO15-20

See the response to comment FA8-1 regarding the 500-foot-wide utility corridor on the Jefferson National Forest.

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CO15-20 cont'd	avoid sensitive areas and geographic features that make 42-inch gas pipeline construction threatening, harmful and hazardous. A properly performed PEIS would have identified the routes and specific geography that should be avoided, e.g., the karst topography that is common on the route selected by the applicant, as well as identified the preferred location for a 500 feet utility corridor through the National Forest.
CO15-21	Amending the LRMP for the MVP solely to allow a single project turns the model of decision making on its head. It is inconsistent with the goals and purpose of utility corridors, and it violates the 2012 Planning Rule. Suitability of utility corridors must be analyzed and determined pursuant to 36 CFR 219.15(d)(4). To designate a utility corridor in response to the applicant's choices about where the corridor should be located when there is no information supporting an additional public need for that location will serve only the corporate interests of the applicant and the public needs which have yet to be defined. Rather, an appropriate tool for identifying a corridor across federal lands is found in Section 36S(c) of the Energy Policy Act of 2005. This mechanism provides for appropriate environmental analysis and NEPA review.
CO15-22	Although the DEIS indicates that the proposed pipeline route through the JNF must be designated as a utility corridor, the DEIS does not address the environmental, resource, or cultural impacts of this Forest Service action. The DEIS specifies the acres and areas where this will require re-designation of lands from one prescription to another, but there is no analysis of these re-designations. MVP proposes to use buttress for stability on slopes, however, there is no description or analyses of the impacts and compatibility of the construction of buttresses on the National Forest. The DEIS is inadequate to support this Forest Service action.
CO15-23	Furthermore, the Forest Service authorized the collection of data only for a limited width, and not the 500 feet corridor proposed. The impact of the entire width of the proposed corridor and whether the corridor conflicts with any of the standards and conditions established in the LMRP must be fully evaluated before a change to the LRMP is considered or proposed.
CO15-24	The scope of the draft EIS does not support a Forest Service decision regarding utility corridors. The level of analysis, the area of analysis and the resulting lack of public input are all inadequate. FERC relies on data collected by the applicant and the analysis of these data, which understandably focus on the impacts of a single project, not multiple uses of the entire corridor. And FERC has frequently stated that its analysis of "cumulative impacts" under NEPA does not include future projects that are not before it -- whether or not its policy encourages multiple uses of existing rights-of way. The scope and methods used in the FERC process for review of a project proposal differ significantly from those which would be used by the Forest Service to identify, document, analyze, and designate a utility corridor.

CO15-21	See the response to comment LA14-3 regarding the need and siting of the corridor on the Jefferson National Forest.
CO15-22	See the response to comment FA8-1 regarding the 500-foot-wide utility corridor on the Jefferson National Forest.
CO15-23	See the response to comment FA8-1 regarding the 500-foot-wide utility corridor on the Jefferson National Forest.
CO15-24	See the response to comment FA8-1 regarding the 500-foot-wide utility corridor on the Jefferson National Forest..

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CO15-25

There is No Authority to Waive LRMP Standards

The geology and hydrology in this region are complex. The impacts of the construction of a 42 inch gas pipeline cannot be discounted or minimized when the hydrologic systems themselves are not even known or understood. There is no authority in the law for the Forest Service to waive riparian and soils standards, and certainly not without first characterizing the hydrology and full disclosing and analyzing the impacts and all potential threats and hazards. Preserve Craig and Save Monroe adopt and incorporate the comments of the Indian Creek Watershed Association that documents the prevalence of springs near MVP corridors in Monroe County, West Virginia and confirms the need for hydrogeological studies. Accession # 20160902-5165. In addition, the comments of Dana Olson, MD, filed on December 22, 2016 are adopted and incorporated by reference.

The DEIS Fails to Analyze Impacts of the Proposed Forest Plan Amendments Pursuant to the 2012 Planning Rule Which Prohibits Amendments Contrary to the Requirements of the Rule.

As argued above, proposing to waive riparian standards for the construction of a for-profit gas pipeline is absurd on its face. None of the waivers or proposed amendments to the LRMP for the NF have been analyzed pursuant to the 2012 Planning Rule (36 CFR Part 219), and the Forest Service Handbook 1901.12. Nor does the DEIS include an analysis of achieving the goals and objectives of the LRMP.

The Planning Rule requires every forest plan to contain riparian standards to maintain or restore the ecological integrity of riparian areas. 36 CFR 219.8(3). The Rule also requires standards to maintain or restore soils and soil productivity, water quality, and water resources. 36 CFR 219.8(2). Each of these requirements is related to the social, economic, and ecological sustainability in the plan area. These are required elements of all forest management plans. The purpose of the assuring sustainability is in part to provide people and communities with ecosystem services. The FS obligation does not stop at the boundary of the National Forest.

The purpose of this part is to guide the collaborative and science-based development, amendment, and revision of land management plans that promote the ecological integrity of national forests and grasslands and other administrative units of the NFS. Plans will guide management of NFS lands so that they are ecologically sustainable and contribute to social and economic sustainability; consist of ecosystems and watersheds with ecological integrity and diverse plant and animal communities; and have the capacity to provide people and communities with ecosystem services and multiple uses that provide a range of social, economic, and ecological benefits for the present and into the future. These benefits

CO15-25

See response to comment CO33-1 regarding hydrogeologic studies. See section 4.8.2.6 for a discussion regarding developing the amendments under the 36 CFR 219 regulations.

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include clean air and water; habitat for fish, wildlife, and plant communities; and opportunities for recreational, spiritual, educational, and cultural benefits.

36 CFR 219.1(c). The duties of the Forest Service are broad and encompassing, and includes not only the requirement to assure that the National Forests provide the public with clean air, water, and healthy ecosystems, but also spiritual benefits. There is nothing science-based or collaborative about the proposal to waive riparian and soils standards to allow the JNF to be used as a pipeline corridor for corporate profit and against the public interest.

There is no legal mechanism to waive the required components of the LRMP, rather all projects are subject to the standards. A final rulemaking for a clarifying amendment to the Planning Rule was published on December 15, 2016. The clarification does not change the substantive plan requirements, instead it clarifies that the deciding officer does not have the discretion to eliminate required components.

At the same time, the responsible official's discretion to tailor the scope and scale of an amendment is not unbounded; the 2012 rule does not give a responsible official the discretion to amend a plan in a manner contrary to the 2012 rule by selectively applying, or avoiding altogether, substantive requirements within §§ 219.8 through 219.11 that are directly related to the changes being proposed. Nor does the 2012 rule give responsible officials discretion to propose amendments "under the requirements" of the 2012 rule that actually are contrary to those requirements, or to use the amendment process to avoid both 1982 and 2012 rule requirements (§ 219.17(b)(2)).

81 Fed. Reg. 90723, 90726. Waiving riparian and soils standards when it is known that the soils, geology, and steep terrain all put water resources at certain risk of harm is illegal.

CO15-26

The Forest Service Manual sets forth the policy in regard to plan amendments:

- See FSM 1903 and FSM 1920.03 for general policy for planning activities.
- 1. Responsible Officials shall follow policy direction stated in FSH 1909.12 for all phases of land management planning: assessments, plan development, plan revisions, plan amendments, and monitoring.
- 2. Responsible Officials shall ensure that new or revised plans provide for ecological sustainability and contribute to social and economic sustainability, and must:
 - a. Use available information pertaining to ecosystem composition, structure, function, and connectivity when developing plan components to

CO15-26

The FS has revised the amendment discussion in the EIS and has complied with the requirements of the 36 CFR 219 regulations and FS Handbook and Manual direction.

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cont'd

contribute to ecological sustainability (36 CFR 219.8 (a), FSM 1921.5, and FSH 1909.12, ch.10 and 20).

b. Use available information pertaining to social and economic systems when developing plan components to contribute to social and economic sustainability (36 CFR 219.8 (b), and FSH 1909.12, ch. 10 and 20).

c. Use the Scenery Management System (SMS) in all plan revisions to address scenic character and develop scenery-related plan direction unless the Responsible Official provides written justification and obtains concurrence from the Regional Forester.

3. Responsible Officials shall conduct all aspects of land management planning (assessment; development, amendment or revision; monitoring) in a timely and efficient manner.

4. The Forest Service's goal is to complete plan revisions within 4 years from initiation of assessment to plan approval.

5. Responsible Officials shall use a continual assessment, planning, and monitoring process that provides a feedback loop that allows the Forest Service to adapt to changing conditions and to improve plans based on new information and monitoring (36 CFR 219.5(a)).

FSM 1921.03. None of these requirements have been documented in the DEIS.

It is unbelievable to the communities in and around the JNF that the Forest Service would consider destroying the good will that it has with the people who live in and around the JNF to accommodate a gas pipeline. Regardless of the incredulity on the public's part, the Forest Service is required to follow the 2012 Planning Rule and the applicable components of the Forest Service Handbook and Manual. The DEIS lacks the required analysis under the applicable Planning Rule.

CO15-27

The DEIS Fails to Address the Forest Service Obligations to Implement and Enforce the *Federally Listed Threatened and Endangered Fish and Mussel Conservation Plan*

In cooperation with the US Fish and Wildlife Service, the FS developed, adopted and agreed to implement the *Federally Listed Threatened and Endangered Fish and Mussel Conservation Plan* (March 2004). The plan establishes more protective riparian standards than the standards in the LRMP. There are two streams that are subject to the *Conservation Plan*, that are identified by stream code numbers 0208020108119 and 0301010101L02, that are impacted by the proposed pipeline route.

The *Conservation Plan* demonstrates that “all the factors contributing to the jeopardized status of Southeastern native freshwater fishes, non-point source pollution (primarily siltation) and alteration of flow regimes (primarily impoundment) are the largest contributors to fish imperilment.” *Conservation Plan*, p 6.

CO15-27

The FS has worked intensely with Mountain Valley on resource inventories, analyses, including the sedimentation analysis, project design and mitigation measures to minimize impacts to aquatics in the project area. In particular, the Craig Creek crossing had several minor variations studied. See section 3.5.3.1 regarding Brush Mountain Minor Route Variations. See also the response to comment CO74-7.

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Fish are directly affected by sedimentation through abrasion on the gills and body surface. They are indirectly affected through reduced visibility for feeding, reduced oxygen in sediment-laden water, substrate alteration for spawning sites, and increased egg mortality (Jenkins and Burkhead 1994). McDougal et al. (2001) state that:

“Sediment is probably the most pervasive nonpoint pollution that affects streams on national forests. Sedimentation is caused by soil erosion from ground-disturbing activities such as roads, poorly designed or nonbuffered land use activities, mining, and construction. Many historic roads on national forest were built in poor locations (i.e. along streams): many of which are still in use today. Sedimentation can negatively affect aquatic ecosystems by reducing habitat complexity and diversity.”

CO15-28

Conservation Plan, p 8. The *Plan* goes on to describe the negative impacts from compaction from vehicles and cattle, which level of compaction is nothing compared to the compaction that will occur from pipeline construction. *Id.*

CO15-28

See the response to CO14-2 regarding compaction.

CO15-29

The *Conservation Plan* succinctly describes the conservation values of a riparian area. The impacts to these values are not assessed in the DEIS.

CO15-29

Riparian areas are discussed in sections 4.3, 4.4, 4.5, and 4.6 of the EIS.

Forests within the *Conservation Zone* are important because they provide aquatic coarse woody debris recruitment, aquatic particulate and dissolved organic matter input, water temperature and light regulation, bank stability, regulation of sediment, nutrient, and organic matter movement or uptake, and terrestrial habitat for riparian species. They also provide conditions for natural floodplain function. The *Conservation Zone* will serve as a 1) filter strip to impede surface runoff, trap sediment, and filter and adsorb pollutants, 2) vehicle exclusion zone to prevent major ground disturbance adjacent to stream channels, and 3) shade strip to help maintain ambient stream water temperatures, moist habitats, and sources for large woody debris.

CO15-30

Conservation Plan, p 10. The DEIS fails to acknowledge the Forest Service obligations it made in partnership with the US FWS. The record on the *Conservation Plan* will show that the US FWS wanted the *Conservation Plan* to be even more protective than it is. The FS must obtain authorization from the US FWS to violate the *Plan*.

CO15-30

It is the lead agency’s (FERC) responsibility to coordinate all project activities with the US Fish and Wildlife Service. See response to comment CO114-27.

CO15-31

Failure to Assess Direct, Indirect, and Cumulative Impacts to Water Resources

Springs, seeps, and streams run down the mountains to stream courses between and below each ridge. All of the streams on each side of each mountain then flow

CO15-31

Impacts on water resources, and measures to reduce those impacts, are discussed in section 4.3 of the EIS. See the response to comment FA11-15 regarding sedimentation and turbidity modeling.

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CO15-31 cont'd	<p>either to the New, James or Roanoke River basins. The direct, indirect, and cumulative impact analyses must consider effect of concurrent sediment loads from every drainage through which the MVP would be constructed into each of these major Rivers. If mud is flowing on the east side of the mountain, it is likely flowing on the west side of the mountain and the DEIS fails to consider the impacts in each and all of the various combinations to the water resources that are born in the region that will be devastated by the MVP.</p>
CO15-32	<p>In accordance with the Weeks Act, the Strategic Plan, and the 2012 Planning Rule, the Forest Service obligations to manage the JNF in the public interest does not stop at the National Forest boundary.</p> <p>The DEIS Fails to Recognize the Wholesale Downgrade of the JNF</p> <p>But for the proposal to unlawfully waive the riparian and soils standards, no other impacts would not occur. The DEIS fails analyze the impacts on a cumulative level of waiving standards that protect soils and water quality, and diminishing standards to protect scenic quality from the valleys and the ridgetops. It's a wholesale downgrade of the Jefferson National Forest. The manner in which the DEIS carves up the issues detracts from the impact to an extraordinary public resource as a whole unit. As such, the MVP would not impact only 3.4 linear miles, it impacts the acreage of the National Forests from which the pipeline can be seen, private property from which the pipeline can be seen, the surrounding communities, the residents qualities of life, water resources and all of the lives that depend on the water supplies. Quite a legacy for career FS employees who have dedicated their careers to serving the public to now sacrifice the extraordinary values of the JNF for private financial profit.</p>
CO15-33	<p>The DEIS Fails to Analyze Impacts to the Peters Mountain Wilderness Area</p> <p>The DEIS fails to address impacts to Peters Mountain Wilderness from the construction of an enormous gas pipeline immediately adjacent to the Wilderness area. Preserve Craig and Save Monroe adopt and incorporate by reference the comments of Discover Monroe, dated August 26, 2016, at Accession number 20160829-5096.</p> <p>In regard to the impacts to the Wilderness Area, the Appalachian Trail, and the Inventoried Roadless Area, Preserve Craig and Save Monroe also adopt and incorporate by reference the comments by the Pacific Northwest Trail Association, Accession number 20161212-5211, and by the Appalachian Trail Conservancy, Accession Number 20161208-5043.</p>
CO15-34	<p>The DEIS Fails to Analyze Impacts to the Inventoried Roadless Area</p> <p>MVP proposes to route a 42-inch gas pipeline through an Inventoried Roadless</p>

CO15-32 The FS has worked to minimize resource effects on NFS lands, not only to protect NFS resources but also to lessen impacts on other lands.

CO15-33 The Peters Mountain Wilderness is discussed in section 4.8 of the EIS.

CO15-34 The 2001 Roadless Area Conservation Rule does not prohibit the construction and operation of a natural gas pipeline within an IRA (36 CFR Part 294). The Roadless Rule specifically mentions two activities that are prohibited. The Rule prohibits new road construction, and timber harvest.

COMPANIES AND NGOs

CO15 – Save Monroe and Preserve Craig

CO15-34
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Area. The discussion omits analysis of the prohibitions in the Roadless Rule, 36 CFR Part 294 (69 Fed Reg 3244 (2001)).

The scant case law interpreting the Roadless Area Conservation Rule make clear that the agency has discretion to interpret and apply the Rule. Most importantly, the courts have stressed that each case is fact specific, resource specific, and that the overlaps between uses and management prescriptions are important in applying the facts to the regulation, including the interpretation of what constitutes a road under the Rule.

Wilderness Workshop v. United States BLM, 531 F.3d 1220 (10th Cir. 2008) involved a decision to grant a right-of-way for a pipeline through an IRA, Bull Mountain. The definition of a road is at issue in the case of the MVP just as it was in the Bull Mountain decision. In this case, however, the Forest Service has both the facts and the discretion to interpret the rule to determine that the construction of the MVP in the IRA would create an unclassified road.

Road. A motor vehicle travelway over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified, or temporary.

(2) Unclassified road. A road on National Forest System lands that is not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization.

(3) Temporary road. A road authorized by contract, permit, lease, other written authorization, or emergency operation, not intended to be part of the forest transportation system and not necessary for long-term resource management.

36 CFR 294.11.

The relevant facts are that the Jefferson National Forest is plagued by illegal off-road-vehicle and ATV use. Our understanding is that there are more miles of unclassified roads than classified roads on the GW&Jeff. Videos of illegal ATV use on new pipeline corridors in West Virginia are easily found on the internet. The UPS driver who delivered a package to this author on December 22, 2016, called the proposed pipeline corridor a "red-neck highway" and admitted that he would use it for ATV use. Such users can't wait for the corridors to be left unattended. The IRA proposed to be crossed by the MVP is in a populated area, and the access roads built on adjacent

CO15-34
(cont'd.)

The Preamble of to the Roadless Rule explained: "*Paragraph (b)(2) allows timber cutting, sale, or removal in IRAs when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include, but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified roads for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; **other authorized activities such as ski runs and utility corridors**; or for road construction and reconstruction where allowed by this rule.*" [emphasis added]

The Final Environmental Impact Statement for the Roadless Rule provides further support: "Timber harvest and access for fire suppression has historically generated the need for most road construction on NFS lands. Furthermore, these activities occur throughout the National Forest System. Other activities identified by the public, such as motorized vehicle use, grazing, mining, and developed recreation facilities, were determined by the Agency to either not pose the same level of national risk for adversely impacting inventoried roadless areas, as do road construction, reconstruction, and timber harvesting, or the impacts are not as widespread. This same holds true for utility corridors, power lines, pipelines, water developments, and other special uses." (page 1-16)

See also the response to comment CO107-13 regarding illegal motorized use.

COMPANIES AND NGOs
CO15 – Save Monroe and Preserve Craig

CO15-34
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private lands will make the pipeline corridor even more inviting and accessible.

Even the DEIS admits that the pipeline corridor will provide access similar to that on power line rights-of-way, though deceptively stopping short at calling the access illegal. DEIS, p 4-251. The DEIS admits it will create illegal access, but does not analyze the impacts and the socio-economic impacts of burdens of the increased need for law enforcement.

CO15-35

The other relevant, however ignored, component of the Roadless Rule is the prohibition against timber cutting. *Hogback Basin Preservation Ass'n v. United States Forest Serv.*, 577 F. Supp. 2d 1139, (W.D. Wash. 2008) the logging prohibition in the context of a ski area. This case, too, makes it clear that the agency has discretion to interpret the Rule together with the relevant facts surrounding the issue.

Removal of timber is prohibited by the Roadless Rule with certain exceptions. The only potentially applicable exception is "(2) The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited by this subpart;..." 36 CFR 294.13(b)(2).

First, and obviously, construction of a pipeline is not a management activity. The judge in the *Hogback* aptly noted the comments in the preamble that is a less-than-clear list of examples of what incidental logging might be:

Paragraph (b)(2) allows timber cutting, sale, or removal in inventoried roadless areas when incidental to implementation of a management activity not otherwise prohibited by this rule. Examples of these activities include, but are not limited to trail construction or maintenance; removal of hazard trees adjacent to classified roads for public health and safety reasons; fire line construction for wildland fire suppression or control of prescribed fire; survey and maintenance of property boundaries; other authorized activities such as ski runs and utility corridors; or for road construction and reconstruction where allowed by this rule.

66 Fed. Reg. at 3258.

A reasonable interpretation is that this is again a list of activities that are management in nature, not construction in nature. Removal of incidental trees, but not for full on construction. The district court ultimately ruled that the Forest Service had the discretion to interpret the timber cutting as incidental to the ski development project because the IRA at issue must also be managed for developed recreation, in combination with the efforts the FS had made to minimize the timber losses in reaching its dual management purposes.

CO15-35

The Roadless Area Conservation Rule and impacts to roadless areas under this regulation are discussed in section 4.8 of the EIS.

COMPANIES AND NGOs
CO15 – Save Monroe and Preserve Craig

CO15-35
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In the case of the MVP, there is nothing in the Roadless Rule that gives a brand new utility corridor a free pass to violate the Roadless Rule. The rulemaking discussion instead makes it clear that the rights under existing grants of utility corridors are preserved. In the case of the MVP, the timber removal is not incidental -- the timber will be removed not only for the permanent right-of-way but also for the construction easement. There is no other aspect of the management prescription, 4J, that is compatible with timber removal for a utility corridor, nor is a utility corridor compatible with the management prescription.

Again, fundamentally, the Forest Service has both the duty and the authority to interpret the Roadless Rule in the case of the MVP in the manner that is true to the implementation of both the Rule and the Revised LRMP in the fact specific context of the MVP.

The Bull Mountain case is only precedential in the context that it gives the agency discretion. The case is not precedential for allowing gas pipelines in any IRA, any time, any where. The proposal to construct the MVP violates the Roadless Rule in a manner that has not been addressed in the DEIS.

Rather than granting a pipeline right-of-way, the Brush Mountain IRA should be designated as a Wilderness Study Area with the plan amendment underway, and if not, the DEIS must address the irretrievable commitment of resources of establishing a "red-neck highway" on an IRA.

CO15-36

The DEIS Fails to Analyze Impacts to Cultural Attachment

Preserve Craig raised the issue of Cultural Attachment early in the MVP proposal process. The following documents submitted by Preserve Craig in the pre-application process have been resubmitted to the current docket, number CP16-10-000, by letter with accession number 201612215446 which includes hyperlinks to the original documents.

On May 5, 2016, Preserve Craig, Save Monroe, and others submitted a letter requesting the complete study of Cultural Attachment in the vicinity of Peters Mountain. Accession number 20160505-5090. Preserve Craig and Save Monroe also adopt and incorporate by reference the comments of Richard Ettelson, Accession number 20161121-0301.

The Cultural Attachment analysis in the DEIS is wholly unprofessional. The analysis completely disregards the report submitted by Preserve Craig at Accession number 201612215346 as well as the adulterated study performed by MVPs cultural anthropologist, ACE. The DEIS baldly states that Cultural Attachment is not specific to the project area and can occur anywhere in the world: this turns the issue on its head.

CO15-36

Cultural attachment is addressed in section 4.10 of the EIS.

COMPANIES AND NGOs
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CO15-36 cont'd	<p>Attachment to the landscape is specific to the project area by definition. The Peters Mountain community is not going to be culturally attached to Poor Mountain in Roanoke County, Virginia. There may be other communities who identify with, and whose values and lifestyles are intertwined with, their surroundings, but the community at Peters Mountain is attached to that mountain's landscape and the manner in which that mountain defines their characters and lifestyles. Of course other communities experience Cultural Attachment, but the community that has previously been identified and for which there is already precedent is the community of Peters Mountain.</p>
CO15-37	<p>On page 4-367 of the DEIS, FERC states that in the ROD for the APCO power line project, "the FS used cultural attachment as a reason to reject certain route alternatives." The statement is intentionally misleading, and the tone is disrespectful of both the Forest Service and the communities whose Cultural Attachment to the land was found to be not capable of being mitigated. FERC cannot undo the precedent set in the APCO power line project, especially since the independent contractor hired by MVP confirmed what the Forest Service found in the past.</p>
CO15-38	<p>The unsupported assertion that the impacts of this unprecedented intrusion on the landscape, and into the community, can be mitigated reflects complete disregard for cultural attachment. The decision makers obviously have no understanding of Cultural Attachment, therefore they are unqualified to consider discounting impacts with mitigation.</p> <p>The DEIS describes mitigation in a condescending manner. The outsiders, the carpetbaggers, telling the locals what's good for them. Whom ever drafted the mitigation section knows nothing about people who are culturally attached to the dirt upon which they trod. The only thing MVP knows about the culturally attached is that those people are an impediment to its profit making. Once violated, once tainted, the spirit is killed, and it can't be mitigated. That's always been the objective, though, hasn't it. Resource exploitation always involves genocide. In this case, however, the Forest Service is required to provide, sustain, and account for spiritual values. 36 CFR 219.1(c).</p>
CO15-39	<p>Peters Mountain is eligible for consideration as a Rural Historic Landscape. The DEIS lacks analysis of the impacts to this status. The DEIS also fails to address the irretrievable commitment of resources, required by 40 CFR § 1502.16, that the eligibility represents should the MVP be granted a right-of-way.</p>
CO15-40	<p>The DEIS fails to treat Cultural Attachment as a genuinely significant issue, and MVP has not completed the study recommended by its own expert. The assessment of Cultural Attachment is therefore inadequate.</p>
CO15-41	<p>Federal Law Prohibits the Grant of a Right-of-Way Across the JNF.</p>

CO15-37	<p>The FS is a cooperating agency and assisted in preparation of the EIS.</p>
CO15-38	<p>Cultural attachment is addressed in section 4.10 of the EIS.</p>
CO15-39	<p>The Peters Mountain Wilderness is discussed in section 4.8 of the EIS.</p>
CO15-40	<p>Cultural attachment is addressed in section 4.10 of the EIS.</p>
CO15-41	<p>In 1947, the Mineral Leasing Act (30 USC § 351 et seq.) was extended to acquired lands by changing the definition of the "acquired lands" and "lands acquired by the United States" to specifically apply to lands acquired under the Act of March 1, 1911. The Act of March 1, 1911 is more commonly known as the "Weeks Act", but is also known as the "Appalachian Lands Act."</p>

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CO15 – Save Monroe and Preserve Craig

CO15-41
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Section 185 of Title 30 of the United States Code authorizes the grant of rights-of-way for pipelines through Federal lands:

Rights-of-way for pipelines through Federal lands
(a) Grant of authority
Rights-of-way through any Federal lands may be granted by the Secretary of the Interior or appropriate agency head for pipeline purposes for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced therefrom to any applicant possessing the qualifications provided in section 181 of this title in accordance with the provisions of this section.

30 U.S.C § 185 (emphasis added). Section 181 of Title 30 excludes lands acquired under the Weeks Act.

Deposits of coal, phosphate, sodium, potassium, oil, oil shale, gilsonite (including all vein-type solid hydrocarbons), or gas, and lands containing such deposits owned by the United States, including those in national forests, *but excluding lands acquired under the Appalachian Forest Act, approved March 1, 1911 (36 Stat. 961)*, and those in incorporated cities, towns, and villages and in national parks and monuments, those acquired under other Acts subsequent to February 25, 1920, and lands within the naval petroleum and oil-shale reserves, except as hereinafter provided, shall be subject to disposition in the form and manner provided by this chapter to citizens of the United States, or to associations of such citizens, or to any corporation organized under the laws of the United States, or of any State or Territory thereof, or in the case of coal, oil, oil shale, or gas, to municipalities. Citizens of another country, the laws, customs, or regulations of which deny similar or like privileges to citizens or corporations of this country, shall not by stock ownership, stock holding, or stock control, own any interest in any lease acquired under the provisions of this chapter.

30 U.S.C § 185 (emphasis added). The law is straight-forward. Rights-of-way cannot be granted for pipeline construction across the Jefferson National Forest.

CO15-42

The proposed MVP violates other aspects of rights-of-way laws and regulations that the DEIS fails to address.

The DEIS fails to address the following components of 30 U.S. Code § 185:
(d) Width limitations

CO15-42

As stated in section 2 of the EIS, the MVP would consist of a 125-foot construction nominal right-of-way and a 50-foot-wide permanent right-of-way. Section 1.0 of the EIS discloses the partners in Mountain Valley. See response to PS3A1-95 regarding company ownership.

COMPANIES AND NGOs

CO15 – Save Monroe and Preserve Craig

CO15-42
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The width of a right-of-way shall not exceed fifty feet plus the ground occupied by the pipeline (that is, the pipe and its related facilities) unless the Secretary or agency head finds, and records the reasons for his finding, that in his judgment a wider right-of-way is necessary for operation and maintenance after construction, or to protect the environment or public safety. Related facilities include but are not limited to valves, pump stations, supporting structures, bridges, monitoring and communication devices, surge and storage tanks, terminals, roads, airstrips and campsites and they need not necessarily be connected or contiguous to the pipe and may be the subjects of separate rights-of-way. . . .

(i) Disclosure

If the applicant is a partnership, corporation, association, or other business entity, the Secretary or agency head shall require the applicant to disclose the identity of the participants in the entity. Such disclosure shall include where applicable (1) the name and address of each partner, (2) the name and address of each shareholder owning 3 per centum or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote, and (3) the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and, in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate. . . .

(j) Technical and financial capability

The Secretary or agency head shall grant or renew a right-of-way or permit under this section only when he is satisfied that the applicant has the technical and financial capability to construct, operate, maintain, and terminate the project for which the right-of-way or permit is requested in accordance with the requirements of this section.

30 U.S. Code § 185; *see also*, FSM 2726.31c (limiting right-of-way width to 50 feet). In regard to the technical capability, Preserve Craig submitted to the record the documentation of the applicant's criminal environmental record in the Commonwealth of Pennsylvania. *See*, Letter (incorporating by reference and hyperlink text previously filed documents), Accession number 201612215446. The Forest Service and the BLM have a duty to fully and openly assess whether MVP can be considered capable based on its history of committing environmental crimes.

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CO15 – Save Monroe and Preserve Craig

CO15-43	Conclusion
	<p>The Federal Energy Regulatory Commission has offered a DEIS that is not only inadequate, it demeans the public process and undermines the collaborative approach established by the 2012 National Forest System Land Management Planning Rule. The DEIS is a sham. Fundamentally, there is a dearth of information upon which any conclusions or recommendations can be made. Without the information necessary to perform an environmental analysis, it is impossible for any decision maker to conclude anything from the DEIS.</p>
CO15-44	<p>Even the Forest Service asserts that the DEIS is inadequate to assess the effects on the National Forest. See, Forest Service letter, December 21, 2016, Accession number 20161221-5281 (identifying information necessary for the analysis of the project effects on the National Forest). FERC is pressing forward with a pipeline construction certification process, on a pre-set timetable, with the grant of the certification in the end while there are still Forest Service analyses, US Army Corps of Engineers analyses, and US Fish and Wildlife Service Endangered Species consultation processes all underway.</p> <p>There is an interagency agreement between USDA Forest Service, FERC and other Federal agencies (May 2002) to rely on a single EIS for which FERC has primary responsibility. The FERC DEIS not only lacks sufficient information and analysis for the Forest Service to take the proposed actions under its jurisdiction, FERC flouts the duty to rely on a single EIS and taunts the Forest Service in regard to its duties:</p> <p>The federal cooperating agencies may adopt the EIS per 40 CFR 1506.3 if, after an independent review of the document, they conclude that their permitting requirements and/or regulatory responsibilities have been satisfied. However, these agencies would present their own conclusions and recommendations in their respective and applicable records of decision. Otherwise, they may elect to conduct their own supplemental environmental analysis, if necessary.</p> <p>DEIS, p 5-1 (FERC’s disregard of the MOU and its sole reliance on CEQ regulation). FERC is avoiding its responsibility as the lead agency to produce a DEIS that complies with all legal requirements to avoid preparation of either a revised or draft DEIS. As the lead agency responsible for the production of the DEIS the whole document must be revised due to its inadequacies. Instead, however, FERC is deflecting its duty and imposing the burden on the Forest Service to revise the document. A supplemental EIS is not what is called for in this circumstance. We are not faced with new information after this comment period, we are demanding that the information that should have been provided in the first instance be analyzed in a revised DEIS.</p>
CO15-45	<p>Additional information and analysis is required for the Forest Service to make a lawful decision, which should include a public meeting or hearing proceeding. However, there is no time in the pre-set timetable to perform a supplemental analysis before</p>

CO15-43 See the response to FA11-2 regarding the adequacy of the draft EIS.

CO15-44 The FS is a cooperating agency and assisted in preparation of the EIS.

CO15-45 The permits that would be required are addressed in section 1.5 of the EIS. The FERC would not issue a notice to proceed for construction until all required permits have been obtained.

COMPANIES AND NGOs
CO15 – Save Monroe and Preserve Craig

CO15-45
cont'd FERC grants the certificate. The appears evident that the Corps of Engineers will have the same timing issue because the US FWS must complete the consultation process for the Roanoke Loggerch before the Corps of Engineers can assert its permitting authority. The DIES does not include a time line or schedule for the consultation process.

CO15-46 The cooperating agencies should be insisting that FERC not issue construction orders until all of the ancillary analyses and permitting processes are complete, through the respective appeals processes. A proper and complete analysis is likely to change the outcome. Furthermore, the Forest Service and the US Army Corps of Engineers have obligations to address climate change impacts that have not been addressed, including the sustainability and resiliency of forest and water resources in the face of climate change. There should be no rush to authorize the extraction, release, and use of a carbon fuel that no longer has an economic rationale in the market place, and instead puts forest and water resources at further threat of harm.

CO15-48 Preserve Craig and Save Monroe request that the Forest Service invoke 40 CFR Part 1504 and issue a predecision referral to the Council on Environmental Quality of proposed federal actions determined to be environmentally unsatisfactory.

CO15-49 Notwithstanding the inadequacies of the DEIS, the BLM has all the information it needs to deny the grant of a right-of-way pursuant to 43 CFR § 2884.23. The proposed use is inconsistent with the purpose for which Forest Service manages the JNF. The proposed is not in the public interest. MVP has not demonstrated that it is qualified to hold a grant. Issuing the grant would be inconsistent with the laws, regulations, and the Strategic Plan. MVP cannot demonstrate the technical or financial capability to construct the pipeline or operate facilities within the right-of-way without destroying public resources.

PRESERVE CRAIG AND SAVE MONROE,
By Counsel

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CO15-46 The permits that would be required are addressed in section 1.5 of the EIS. The FERC would not issue a notice to proceed with construction until all required permits have been obtained.

CO15-47 Climate change, GHGs, and cumulative impacts are discussed in section 4.13

CO15-48 The FS is a cooperating agency in the MVP and is working under the 2002 MOU. The FS has filing numerous letters in the FERC docket to obtain needed information and analysis but has not experienced such difficulty that would require CEQ intervention.

CO15-49 See the response to FA11-2 regarding the adequacy of the draft EIS.

COMPANIES AND NGOs
CO16 – Sierra Club Virginia Chapter

Federal Energy Regulatory Commission
 888 First Street NE, Room 1A
 Washington DC 20426

Re: Petition to reject the Mountain Valley Pipeline DEIS, Docket # CP16-10

TO WHOM IT MAY CONCERN:

CO16-1

We urge the Federal Energy Regulatory Commission to reject the proposed Mountain Valley Pipeline. Necessity for the pipeline has not been demonstrated. The failure to comply with the National Environmental Policy Act's "purpose and need" requirement is especially problematic because the MVP would have significant adverse impacts to public lands and require the taking of private property through the use of eminent domain. Additional information is necessary to adequately assess the impacts of the project on a wide range of resources, including: streams, wetlands, threatened and endangered species, cultural resources, and recreation resources. The absence of this information prevents meaningful public participation in the review process.

The FERC's assessment of both climate-altering greenhouse gas emissions and the effect of those emissions on the environment are woefully inadequate. Further analysis is necessary to determine whether there would be significant environmental impacts from additional fracking in the Marcellus and Utica shale formations of West Virginia and Pennsylvania to supply the Mountain Valley Pipeline with gas throughout its lifetime. These are just a few of the most glaring deficiencies in the DEIS that must be rectified in order to comply with the National Environmental Policy Act.

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CO16-1

The EIS clearly satisfies the requirement of the NEPA, as spelled out in the CEQ's implementing regulations at 40 CFR 1500-1508. However, the EIS is not a decision document, and the Commission will more fully explain its opinions on public necessity in its Project Order. Part 1502.13 recommends that an EIS should only briefly describe the underlying purpose and need for a project, which we did in section 1.2. Further, the draft EIS adequately addressed impacts on a range of environmental resources, including streams and wetlands in section 4.3, threatened and endangered species in section 4.7, cultural resources in section 4.10, and recreational resources in section 4.8. The inclusion of this information in the draft EIS promotes the meaningful participation of the public in our environmental review process, as explained in section 1.4 of the EIS. The EIS concluded that the project would not have significant long-term adverse impacts on public lands. The U.S. Congress passed a law that provided that companies that receive a Certificate from the FERC may use eminent domain. However, as discussed in section 4.9 of the EIS, the FERC would prefer if the company would negotiate mutual agreements with landowners for its easement. Greenhouse gas (GHG) emissions and climate change are discussed in sections 4.11 and 4.13 of the EIS. There is no "fracking" associated with the MVP. The pipeline is for the transportation of natural gas. See the response to comment IND2-3 regarding hydraulic fracturing.

COMPANIES AND NGOs

CO17 – Appalachian Trail Conservancy

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Ronald J. Tipton
Executive Director
Appalachian Trail Conservancy
799 Washington Street, Harpers Ferry, WV

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Comments on the Draft Environmental Impact Statement for the proposed Mountain Valley Pipeline.
Docket No. CP16-10-000

Ms. Bose,

CO17-1

I am writing on behalf of the Appalachian Trail Conservancy to provide you with comments on the Draft Environmental Impact Statement (DEIS) for the proposed Mountain Valley Pipeline (MVP) project. The Appalachian Trail Conservancy (ATC) was formed in 1925 to build and protect the Appalachian Trail and was critical in establishing the Appalachian Trail as a unit of the National Park System in 1968 and the first National Scenic Trail. The Appalachian National Scenic Trail (ANST) is a resource beloved by generations and visited by over 3 million people annually. It represents a public investment of hundreds of millions of dollars and requires thoughtful partnership to protect the irreplaceable resource that is the Trail.

It is difficult to provide substantive comment on the DEIS due to the fact that the document is fundamentally deficient and lacks even the most basic analysis of impacts to the Appalachian National Scenic Trail. Further, much of the information that is included is incorrect and in no way meets the needs of the National Environmental Policy Act or the National Forest Management Act. I do not make these assertions lightly, or without context. We review many NEPA documents annually, from Categorical Exclusions to Environmental Impact Statements. Given our extensive experience analyzing potential impacts to the Appalachian Trail from a variety of proposed developments, this is a fundamentally deficient NEPA in terms of analyzing impacts to the ANST.

As a result, we feel there are only two ways in which FERC and its cooperating agency, the United States Forest Service, can meet their legally required responsibility. FERC must withdraw this DEIS until it is ready for public comment, or offer a supplemental DEIS focused on potential impacts to the Appalachian National Scenic Trail.

Major Areas of Deficiency

1. The absence of any Visual Impact Assessment

The United States Forest Service made repeated comments on Resource Reports and FERC documents clearly identifying the need for additional visual impact assessment. None of the standards required in the USFS comments have been met. As a result, the DEIS cannot be utilized by the USFS to determine

CO17-1

We disagree. The draft EIS was not deficient; nor is the information it contained incorrect. The EIS absolutely satisfies the requirements of NEPA, as spelled out in the CEQ's implementing regulations at 40 CFR 1500-1508. See responses to comments FA11-2, LA5-1, and LA13-1. Impacts on the ANST are analyzed in section 4.8, including a discussion of visual impacts. The ANST crossing was verified and is correctly described in the EIS. Visual simulations of alternative routes are not necessary, since the FERC dismissed them for other reasons, as given in section 3. New visual simulations from other multiple KOPs along the ANST were filed by Mountain Valley on February 17, 2017, April 7, 2017, and May 11, 2017 and these data were incorporated into the final EIS. The final EIS addresses comments on the draft.

COMPANIES AND NGOs

CO17 – Appalachian Trail Conservancy

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impacts to the Appalachian Trail from the proposed project or from an amendment to the Forest Plan. The discrepancies between the USFS stated requirements and the DEIS are demonstrated below:

A. In USFS comments dated June 16 2015 (over a year prior to the DEIS publication)

“The analysis should include visual simulations for all route alternatives on NFS land as they would be seen from a variety of viewpoints on and off NFS lands... The EIS should analyze the project impacts to national forest scenery in terms of achieving the SIOs (scenic integrity objectives) contained in the Forest Plan. It is critically important that the visual impacts analysis conducted meet the standards and use the definitions of the Forest Service’s Scenery Management System

Of particular note, the specific location of the A.T.... should be verified, as it may not be correctly shown on...project maps.

Viewing the pipeline may impact the scenery viewed by people accessing multiple trailheads including several for the Appalachian National Scenic Trail... as well as potentially impacting the scenery viewed from those trails. The analysis should consider impacts such as a change in character and scenic integrity of the surrounding landscape...”

Resulting deficient outcomes in the DEIS

- **Visual simulations for all route alternatives were not included**
- **Visual impact analysis does not meet the standard of the USFS Scenery Management System**
- **Specific location of the A.T. was not verified and remains incorrect in the DEIS**
- **Analysis does not include any trailheads or any scenery viewed from the A.T.**

B. In comments dated March 9th 2016 the United States Forest Service reasserts:

“Information provided in this report is deficient about the process to choose the location and number of Key Observation Points for the ANST. The number of KOPs is likely insufficient. ... a “seen area” map is needed that includes national forest boundaries, topography, the ANST and the preferred route alternative, at a minimum.

The photo provided in Appendix 8f for the ANST on Peters Mountain is not informative and is deficient for use in determining potential impacts to scenery as viewed from the ANST.

Also, additional photo simulations may be needed for middle ground and background views from the ANST”.

Resulting deficient outcomes in the DEIS

- **DEIS does not include multiple KOPs for the ANST**
- **The DEIS does not include a “seen area” map**
- **Referenced Peters Mountain photo remained in use for purposes of scenery impact analysis despite USFS identifying the photo as severely deficient.**
- **No photo simulations for middle ground or background views were included**

C. In comments dated April 26 2016 the United States Forest Service again reasserts:

“Per our earlier comments, a much more detailed description of a much more detailed analysis {of visual impacts} must be conducted and documented. Forest Service Field Review, including a very basic visual analysis, in October 2015 found that the proposed ANST crossing will result in a significant visual impact to users of the Appalachian National Scenic Trail.”

COMPANIES AND NGOs

CO17 – Appalachian Trail Conservancy

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CO17-1
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Resulting Deficient outcomes in the DEIS

- No additional visual impact analysis was conducted
- The DEIS stated, in direct opposition to this statement by the USFS, that visual impacts to the ANST would be “none”

REQUESTED ACTIONS:

Due to these repeated deficiencies, incorrect information and mischaracterization of the project’s impact, the USFS cannot utilize this document to meet their legal NEPA requirement to issue a special use permit or amend the Forest Plan. Further, FERC should not utilize this level of deficient analysis to issue a certificate of public need or permit the project.

As a result of the deficient level of visual impact analysis, the ATC has developed the analysis for two of the nineteen potential sites along the A.T. that may be impacted by this proposed project, included here as attachment 1. These simulations show impacts that fundamentally change the National Scenic Trail experience at these locations. The images show the landscape-scale scope of impact associated with this proposed project. Finally, they clearly demonstrate the need for additional simulations to be developed so that the range of impacts to the A.T. is fully understood.

- This deficient DEIS should be withdrawn or a supplemental DEIS should be published and the public given the legally required 90 days to comment.
- The supplemental DEIS should evaluate the 19 locations where impacts to the Appalachian National Scenic Trail may occur and provide visual impact simulations depicting leaf-off environments as previously instructed to by the USFS and ATC that describe points of visual impact.
- FERC must require the applicant to provide information sufficient to make a decision.

CO17-2

2. Weakening Current Forest Service Policy for Protection of the ANST

- A. Protection of the ANST via the Forest Planning Process is the standard for all National Scenic Trails in the country where they traverse National Forests. This erosion of that protection will set a negative precedent for protection of all National Scenic Trails.
- B. The DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the A.T. which the public has spent millions of dollars to protect.
- C. Proposed Amendment 4 is of significant concern to the ATC. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the standard for scenic integrity along the Trail in this area. This amendment also allows 5-10 years following completion of the project for this SIO of “Moderate” to be achieved — this implies that the scenic integrity will be below “Moderate” for up to a decade.
- D. FERC states incorrectly that there are no crossings of the A.T. where major impacts already exist. Within the surrounding area there is an electricity transmission line, road crossings, and a separate natural gas pipeline that constitute opportunities for colocation.

CO17-2

In section 3.5.1.6 of the draft EIS, we recommended that Mountain Valley provide additional visual simulations of the crossing of the ANST, and document communications with the NPS, FS, ATC, and other appropriate stakeholders. We made a similar request in our EIR dated January 26, 2017. These data are included in the final EIS.

See the response to comment FA8-1 regarding Amendment 1. See the response to comment FA10-1 regarding Amendment 4. The FS also reviewed the additional visual simulations the Appalachian Trail Conservancy conducted that were filed in the FERC docket.

COMPANIES AND NGOs
CO17 – Appalachian Trail Conservancy



CO17-2
cont'd

- E. Proposed Amendment 4, if approved, will create an approved utility corridor leading up to the A.T. that could be used for future utility projects — providing the possibility of further degradation of the scenic and experiential value of the Trail.
- F. Amending the plan in the manner proposed would negatively impact other prescription areas protecting Wilderness, Old Growth Forest, Inventoried Roadless areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the A.T. on both sides.
- G. The 2012 Forest Planning Rule directs the land use planning process for national forests and grasslands. A proposed amendment to that Rule was under public review and comment until November 14, 2016. This amendment will clarify how the responsible Forest Service official determines which topics are (and are not) required for an amendment, as well as how to document the rationale for the amendment determinations.
- H. On page 3-51, Sec. 3.5.1.6 the MVP DEIS states:

“Prior to the end of the draft EIS comment period, Mountain Valley should file with the Secretary documentation of continued coordination with the FS and other ANST stakeholders (NPS, ATC, Local ATC chapters) regarding the newly adopted {proposed} pipeline crossing of the ANST including visual simulations modeling both “leaf-on” and “leaf-off” scenarios at the crossing”

- As of this filing, NO COORDINATION WITH THE ATC OR LOCAL AT CLUB HAS OCCURRED.
- Local AT Clubs are independent organizations and not “ATC Chapters”
- Modeling visual simulations at only the pipeline crossing location is grossly inadequate in determining impacts to the Appalachian Trail as stated multiple times by the USFS, ATC, RATC and other partners. The need to conduct additional visual simulation modeling at multiple locations is clearly demonstrated in the visual impact simulations provided as attachment 1.

REQUESTED ACTIONS:

- Any Forest Plan standard that would not be met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that “ the Forest Service retains decision making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a).
- No Amendment to the Forest Plan should be considered that lowers the Scenic Integrity Objectives of the Appalachian National Scenic Trail.

CO17-3

3. Incomplete Analyses of Cumulative Impacts

- In conducting its National Environmental Policy Act (NEPA) review, FERC must consider the cumulative effects of multiple actions in a given area (such as the permitting of multiple pipelines) — see 40 C.F.R. §§ 1508.7, 1508.25(a); Delaware Riverkeeper Network v. FERC,

CO17-3

Cumulative impacts are addressed in section 4.13. The ATC is incorrect in writing: “It is the policy of the Bureau of Land Management, which governs the FERC process...” In no way whatsoever does the BLM govern the FERC’s process, which is determined under the Natural Gas Act. In fact, it is the exact opposite, as the lead federal agency, in accordance with the Energy Policy Act and the 2002 Interagency Agreement, the FERC guides the BLM through the NEPA process.

COMPANIES AND NGOs

CO17 – Appalachian Trail Conservancy

20161208-5043 FERC PDF (Unofficial) 12/8/2016 11:03:09 AM



CO17-3
cont'd

753 F. 3d 1304 (D.C. Cir. 2014). We are not asking FERC to consider the possibility of any other project that may be proposed or approved in the future, but rather specific projects that are under review in the same landscape, affecting the same resources .FERC is already aware of the multitude of proposed and recently approved projects in the area, as well as the potential demand to transport fracked gas from the Marcellus shale play. For FERC to limit its review to the impacts of this particular project — without *also* considering the impacts of these temporally and geographically related projects— contravenes the underlying purpose of NEPA reviews and the Council on Environmental Quality NEPA regulations.

- It is the policy of the Bureau of Land Management, which governs this FERC process, to establish the geographic scope of impact based on the nature of the impacted resource, not the proposed project. In ascribing an arbitrary geographic scope for this DEIS of 100 miles, FERC avoids properly documenting cumulative impacts to the A.T., while simultaneously admitting that other proposed pipeline projects on the National Forest would, without question, contribute to cumulative impacts. The issue of cumulative impacts is especially important to the A.T. given the number of long distance hikers on the Trail.
- Due to the nature of the Appalachian Trail, a linear National Park wherein each year tens of thousands of people travel more than 200 miles at one time, it is important to assess the impacts from MVP and any similar projects which may contribute to cumulative impact such as the currently proposed Atlantic Coast Pipeline (ACP). The MVP DEIS states: “the **ACP would cross both the BRP and the ANST thereby potentially contributing to cumulative impacts**” (MVP DEIS p. 4-508 sec. 4.13.2.5).

Attachment 2 is a map depicting the significant cumulative impacts to the A.T. that MVP and ACP would cause. These two similar projects are within a distance commonly traveled at one time by thousands of people each year. The two proposed projects have the potential to impact: 20% of the A.T. in the state of Virginia, 26% of the A.T. in George Washington and Jefferson National Forest and 29 managed scenic vistas. This map clearly identifies the need for FERC and the USFS to complete a cumulative impact analysis including both MVP and ACP.

REQUESTED ACTIONS:

- FERC must consider the cumulative impacts of the currently proposed pipeline and infrastructure projects affecting the region and the Trail corridor, including the indirect effects of this expansion through the Appalachian Trail region. The best and most efficient way to consider such cumulative impacts is through a programmatic or regional review under NEPA.
- USFS must address cumulative impacts to the AT from the MVP and ACP projects now proposed on the George Washington and Jefferson National Forest given that:
 - Both projects impact the A.T. prescription area.
 - Both projects may require the same Forest Plan amendments.
 - 26% of the A.T. in the George Washington and Jefferson National Forests are in the impact zone of these projects.

The Appalachian Trail Conservancy (ATC) recognizes the need for smart energy development to fuel growing and diverse economies, and has a history of success in partnering with utilities to minimize the impact of energy development to the Appalachian Trail (A.T.). As a National Scenic Trail, the A.T.

COMPANIES AND NGOs

CO17 – Appalachian Trail Conservancy

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CO17-3
cont'd

embodies irreplaceable cultural and historical value. The ATC seeks to avoid, minimize, or eliminate the visual and experiential impacts caused by utilities on the A.T. and its surrounding landscapes. Avoidance, minimization and elimination of impacts to the trail remain possible if proper impact analysis is conducted.

Respectfully,

A handwritten signature in blue ink that reads "Ronald J. Tipton".

Ronald J. Tipton
Executive Director
Appalachian Trail Conservancy
799 Washington Street, Harpers Ferry, WV 25405

Cc:

Wendy Janssen
National Park Service
Appalachian National Scenic Trail Park Superintendent

Mike Caldwell
National Park Service
Northeast Regional Director

Job Timm
George Washington and Jefferson National Forests
Forest Supervisor

Clyde Thompson
Monongahela National Forest
Forest Supervisor

Tony Tooke
USFS Region 8
Regional Forester

Jennifer Adams
George Washington and Jefferson National Forests
Special Projects Coordinator

Karen Mouritsen
Bureau of Land Management
Eastern States Director

Julie Langan
Commonwealth of Virginia
State Historic Preservation Officer

COMPANIES AND NGOs

CO18 – Preserve Giles County

20161212-5032 FERC PDF (Unofficial) 12/11/2016 2:54:53 PM

December 11, 2016

Ms. Kibberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Dear Ms. Bose and Members of the Commission:

Subject: MVKCP CP16-10-000 Draft Environmental Impact Statement

CO18-1

Preserve Giles County submits the following protest on behalf of Dr. Ernst Kastning, a renowned expert on the geology of the Appalachian Mountains. Dr. Kastning submitted to the FERC, prior to the publication of the DEIS, a thorough and comprehensive document on the hazards of attempting to build a 42" gas pipeline through the Appalachian counties of Monroe Co., WVA, Giles, Montgomery and Roanoke Co., Va.

With the publication of the DEIS, it is clear that the Commission and its consultants either failed to study that document, or chose to ignore the hard science behind it, mentioning the document only in passing on page 4-72 as part of the discussion of groundwater. This was a flagrant disregard of a respected scientist's knowledge and advice based on his detailed study and publications on the subject matter.

Due to this biased and unconscionable disregard for serious scientific evidence presented by a known expert in the field, Preserve Giles County submits this protest and comment.

Respectfully,

Donna S. Pitt
Preserve Giles County
216 Zells Mill Rd.
Newport, VA 24128

Neil Kornze, Director
BLM Washington Office
1849 C St. NW Rm 5565
Washington, DC 20240

Joby Timm, Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

CO18-1

Karst terrain is discussed in section 4.1 of the EIS. See also the response to comment IND62-1 regarding Dr. Kastning's report.

COMPANIES AND NGOs

CO18 – Preserve Giles County

20161212-5032 FERC PDF (Unofficial) 12/11/2016 2:54:53 PM

CO18-1
cont'd

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Washington, DC 20314 – 1000

US Army Corps of Engineers
South Atlantic Division
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US Army Corps of Engineers
Huntington District
502 Eighth St.
Huntington, WVA 25701

Giles County Board of Supervisors
315 N. Main Street
Pearisburg, VA 24134

Montgomery County Board of Supervisors
755 Roanoke St. Ste. 2E
Christiansburg, VA 24073

Roanoke County Board of Supervisors
5204 Bernard Dr.
4th Floor
Roanoke, VA 24018-0798

Monroe County Commission
PO Box 350
Union, WVA 24983

Other Officials:
VA Governor, Terry McAuliffe
WV Governor, Earl Ray Thomblin

COMPANIES AND NGOs

CO18 – Preserve Giles County

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CO18-1
conf'd

Senator Tim Kaine
Senator Mark Warner
Representative H. Morgan Griffith
Representative Bob Goodlatte
VA Senator John Edwards
VA Delegate Joseph Yost

COMPANIES AND NGOs
CO19 – Pacific Northwest Trail Association

Jeff Kish
Executive Director
Pacific Northwest Trail Association
1851 Charles Jones Memorial Circle #4
Sedro-Woolley, WA 98284

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Negative impact to the Congressionally designated National Trails System from potential forest plan amendments associated with the proposed mountain valley pipeline. Docket No. CP16-10-000

Ms. Bose,

CO19-1

The National Trails System consists of 11 National Scenic Trails and 19 National Historic Trails designated by Congress “in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.” National scenic trails are “extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.”

FERC has proposed Forest Plan (FLRMP) amendments which downgrade decades-old visual resource protections to accommodate a poor route for the Mountain Valley Pipeline (MVP) on the Jefferson National Forest – a route with significant impacts to the Appalachian National Scenic Trail (ANST). These proposed FLRMP amendments represent a significant threat to all National Scenic and Historic Trails on lands managed by the USDA Forest Service because the current protections afforded the ANST in FLRMPs serve as a model for Forest Planning nationwide. Numerous energy transmission projects have crossed National Scenic and Historic Trails without requiring amendments to the respective FLRMPs, which has been achieved through thoughtful planning, impact analysis and partnership. Inadequate planning has resulted in a poor route proposal for the MVP project which maximizes visual impacts; the resulting attempt to deal with this issue with slackened regulations instead of actual, successful on the ground mitigation is an unacceptable solution leading to significant impacts and degradation of the nature and purposes of the ANST and will significantly impair the resources and values of the Appalachian National Scenic Trail, a unit of the National Park System.

Threats to the National Trails System from the proposed amendments to the Jefferson Forest Plan

CO19-1

The effects of the MVP on the ANST and its user community has been one of the primary concerns of the FS. See the response to comment FA10-1 regarding Amendment 4.

COMPANIES AND NGOs

CO19 – Pacific Northwest Trail Association

CO19-1
cont'd

- A. Protection of the ANST via the Forest Planning Process is the standard for all National Scenic Trails in the country where they traverse National Forests. This erosion of that protection will set a negative precedent for protection of all National Scenic Trails.
- B. The DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the A.T. which the public has spent millions of dollars to protect.
- C. Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the standard for scenic integrity along the ANST. This amendment also allows 5-10 years following completion of the project for this SIO of “Moderate” to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below “Moderate” for up to a decade.
- D. Proposed Amendment 4, if approved, would create an approved utility corridor leading up to the A.T. in a very poor location that could be used for future utility projects — providing the possibility of further degradation of the scenic and experiential value of the Trail.
- E. Amending the plan in the manner proposed would negatively impact other FLRMP prescription areas protecting Wilderness, Old Growth Forest, Inventoried Roadless areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the A.T. on both sides.

REQUESTED ACTIONS:

- All FLRMP standards not met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that “the Forest Service retains decision making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a).
- No Amendment to the FLRMP should be considered that lowers the Scenic Integrity Objectives of the Appalachian National Scenic Trail.

Sincerely,

Jeff Kish

COMPANIES AND NGOs

CO20 – Trout Unlimited

20161213-5108 FERC PDF (Unofficial) 12/13/2016 12:13:30 PM

Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

December 12, 2016

CO20-1

This communication is submitted to the Federal Energy Regulatory Commission (FERC) in response to the Mountain Valley Pipeline (MVP) proposal by the New River Chapter of Trout Unlimited.

The mission of Trout Unlimited is to conserve, protect and restore North America's coldwater fisheries and their watersheds. As such, with this communication, the New River Chapter of Trout Unlimited goes on record as strongly opposing this project. Several reasons for our opposition are listed below.

The Appalachian Trail Conservancy has indicated it would not respond to the DEIS due to the many flaws and omission in that document. We agree that the DEIS is superficial and deeply flawed. We future agree that public input has been very limited. However, we would like to highlight several points of concern.

Stream / River Sedimentation and Water Quality. A major concern of Trout Unlimited New River Valley Chapter is sedimentation and water quality. Several landowners have reported and we have observed that there are streams in the path of the proposed line that are not even in the DEIS report. MVP proposes to cross some 97 streams and large rivers in VA and WV by simply burying the pipeline a few feet into the river bottom.

The depth of the trench is critical due to flooding events. In a well cited error, MVP proposed crossing the Greenbrier River, reporting floods would remove no more than 46.5 inches of the 48 inches of soil with which they planned to cover the pipe in the stream bottom. Their claim, evaluated by independent experts, found that MVP underestimated flood-stage flows by 600-1800%. Had the pipeline been built to MVP's initial plan, a flood similar to what occurred in the region in 2016 would have completely exposed the pipe to flood waters and debris. It is likely that could have resulted in multiple catastrophic pipeline ruptures.

The draft environmental report submitted by MVP (EIS) ignored numerous threats to water supplies and water quality as a result of erosion and sedimentation. The proposed line will cross steep mountain slopes where it is difficult, if not impossible, to effectively control erosion. From Monroe WV to Roanoke VA, over half of the pipeline spans slopes of 20% grade or more!

To assess the threat posed by erosion in our mountainous region, the U.S. Department of Agriculture weighed seven key variables influencing rain-induced erosion. These include the following: slope gradient, slope length, soil type, rainfall amount, vegetation condition, and truck and equipment traffic. The Department's modelling predicted soil loss in tons per acre per year during construction as follows:

- 10 percent slope — expected erosion is 34 tons of soil per acre per year.
- 20 percent slope — expected erosion is 105 tons of soil per acre per year.
- 30 percent slope — expected erosion is 183 tons of soil per acre per year.

These losses are totally unacceptable. MVP and FERC claim that mountainside erosion and sedimentation to local streams will be effectively controlled, but in the environmental review (DEIS), MVP and FERC offered no credible support or proof that their construction techniques

CO20-1

We disagree. The draft EIS was neither superficial nor deeply flawed. See responses to comments FA11-2, LA5-1, and LA13-1. Public input to the environmental review process is detailed in section 1.4 of the EIS. The location and number of waterbodies crossed by the MVP will be verified by the COE during its permitting process. On March 30, 2017 Mountain Valley filed supplemental information about the crossing of the Greenbrier River that has been incorporated into this final EIS. Section 4.3 of the final EIS has been revised to include updated scour analysis information provided by Mountain Valley in October 2016. See the response to comment FA11-15 regarding sedimentation and turbidity at waterbody crossings. See the response to IND 70-1 regarding upland runoff. See the response to IND 62-1 regarding Dr. Kastning's report. See the response to IND 155-2 regarding forest impacts. The EIS discusses seismic activity in section 4.1.

COMPANIES AND NGOs

CO20 – Trout Unlimited

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CO20-1 cont'd	<p>will be any more effective than the numerous examples of failed pipeline construction methods that have damaged ecosystems elsewhere.</p> <p>MVP's own report, <i>Hydrologic Analysis of Sedimentation</i>, prepared at the request of the U.S. Forest Service, predicts that construction and operation of the MVP along just 40 miles of its length upstream could deposit more than 9,000 tons of sediment annually into the New River, the James River, and the Roanoke River.</p> <p>Fifty-three miles of the proposed pipeline go over karst-type soil. Over half the pipeline will be on 20% slope grade or more. One of the country's leading experts on this type of soil, Dr. E. Kastning, has reported that this pipeline cannot be safely built due to the nature of the soil and the mountainous terrain.</p> <p>Sediment problems could also occur in higher elevation watersheds where small streams transported sediment to the larger streams. By crossing the severe slopes of the Appalachian Mountains in VA and WV, MVP will cause erosion, sedimentation, and degradation of water quality that could negatively impact a host of aquatic organisms, including some endangered fish and freshwater mussels. Indeed, this project puts 3 endanger species at risk, violating federal law.</p> <p>The Mountain Valley Pipeline would remove more than 7,000 acres of forested land, thus potentially adding significantly to the potential for erosion and sedimentation. Additionally, its route in Giles County lies directly over a maximum seismic zone, the location of the largest earthquake to ever occur in VA.</p>	
CO20-2	<p>Toxic pollutants. Pipelines and compressor stations can emit a range of volatile organic compounds that can enter the groundwater. These include benzene, toluene, ethyl benzene and xylene. Additionally, the release of methane (a green house) is a greater contributor to climate change than carbon dioxide.</p> <p>We find that this project represents a large potential risk of damaging, degrading and deteriorating our natural resources.</p>	CO20-2 Emissions from pipelines and compressor stations are discussed in section 4.11 of the EIS. Groundwater is discussed in section 4.3.1.
CO20-3	<p>Need. FERC requires a "public need" for permitting a pipeline. However, the only need required is that the company demonstrate that they have contracts for gas transport. There is no requirement to suggest the need for additional gas.</p> <p>According to the Department of Energy study (2015), our region already has enough pipeline capacity. A study conducted by Synapse Energy Economics (2015) concluded that, with some minor upgrades, the current gas line infrastructure could supply the region at least through 2030 or beyond.</p>	CO20-3 See responses to comments FA11-12 and CO16-1.
CO20-4	<p>Economics. FERC considers each line separately, with no consideration to regional impacts. There are currently two proposed for Virginia cross within 20 miles of each other. FERC does not consider the cost to the region for pipelines. There is no economic review of the impacts to secondary or adjacent land owners, or municipalities.</p> <p>Pipelines result in about a 10% decline in economic development in each region impacted according to Key-Log Economics (2016). For every \$1 spent by the pipeline company, the region will lose \$3 (Key-Log Economics, 2016) as a result of loss of property values, tax revenues, road and infrastructure damage caused by construction, slow-down of economic development as a result of a reduction in aesthetic view shed, etc. This is the opposite of what MVP claims. Loss of visual quality due to the pipeline will result in a three-quarter billion dollar annual loss to the Blue Ridge region, according to David Hill, Hill Architecture (2016)</p>	CO20-4 Cumulative impacts are discussed in section 4.13 of the EIS. Socioeconomics are discussed in section 4.9. See the response to IND137-1 regarding the KeyLog report.

COMPANIES AND NGOs

CO20 – Trout Unlimited

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CO20-4
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Our New River Valley Trout Unlimited Chapter believes our land is part of our common heritage and part of our mental and physical well being. We believe we have a responsibility to ourselves and our children to preserve our natural environment. Future, we believe this project is contrary to the mission of our organization. As such, we oppose the construction of the Mountain Valley Pipeline.

Respectfully Submitted,

New River Trout Unlimited

CC Trout Unlimited National

Regional Trout Unlimited Chapters

Sierra Club

COMPANIES AND NGOs
CO21 – Sierra Club – Virginia Chapter

December 11, 2016

Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington DC 20426

Re: Comments on Draft EIS, Mountain Valley Pipeline, Docket No. CP16-10-000

TO WHOM IT MAY CONCERN:

- CO21-1 | We request that the Federal Energy Regulatory Agency reject the Environmental Impact Statement for the Mountain Valley Pipeline. It would place our water, mountains, and communities at risk as it cut a 125 foot wide swath across hundreds of miles.
During and after construction of the Mountain Valley Pipeline mud would flow into our streams and pollute our water and kill fish and plants. County and state agencies don't have the resources to inspect and prevent erosion -- taxpayers cannot afford the cost of the cleanup to protect our environment.
- CO21-2 | Rural communities rely on wells and ground water to provide their drinking water. Blasting and construction of the pipeline blocks the flow of water underground. The possibility that access to drinking water will be compromised is real. Our wells will flow dry. Water is our most valuable resource.
- CO21-3 | The blast radius for the Mountain Valley Pipeline is 1,400 feet on both sides of the pipeline. The Mountain Valley Pipeline would threaten thousands of people living near the pipeline within its blast radius. A recent pipeline explosion in Sissonville, WV, destroyed three homes and melted a part of Interstate 77.
- CO21-4 | We urgently request you to reject the Environmental Impact Statement for the Mountain Valley pipeline! It will be difficult to build the Mountain Valley Pipeline safely across steep mountains and in areas with active sinkholes. Lives, the environment, and property will be at risk.

- CO21-1 | The final EIS addresses comments on the draft. The EIS concludes that except for the clearing of forest, the MVP would not have significant impacts on most other resources. That means that water resources, mountains, and communities along the pipeline route are not at risk. Impacts on streams are discussed in section 4.3 of the EIS, fisheries in section 4.6, and plants in section 4.4. Section 2 outlines measures that would be implemented to prevent or reduce erosion.

Section 4.3 of the EIS discusses water wells and groundwater resources. It details how drinking water sources would be protected. Blasting is discussed in sections 2 and 4.1. On March 23, 2017, the WVDEQ issued a Water Quality Certificate to Mountain Valley to satisfy Section 401 of the CWA.
- CO21-2
- CO21-3 | See the response to comment IND2-1 regarding safety.
- CO21-4 | Steep slopes and sinkholes are addressed in section 4.1 of the EIS.

COMPANIES AND NGOs

CO22 – Preserve Giles County

December 11, 2016

Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Dear Ms. Bose and Members of the Commission:

Subject: MVKKP CP16-10-000 Draft Environmental Impact Statement

CO22-1

Preserve Giles County submits the following protest on behalf of Dr. Ernst Kastning, a renowned expert on the geology of the Appalachian Mountains. Dr. Kastning submitted to the FERC, prior to the publication of the DEIS, a thorough and comprehensive document on the hazards of attempting to build a 42" gas pipeline through the Appalachian counties of Monroe Co., WVA, Giles, Montgomery and Roanoke Co., Va.

With the publication of the DEIS, it is clear that the Commission and its consultants either failed to study that document, or chose to ignore the hard science behind it, mentioning the document only in passing on page 4-72 as part of the discussion of groundwater. This was a flagrant disregard of a respected scientist's knowledge and advice based on his detailed study and publications on the subject matter.

Due to this biased and unconscionable disregard for serious scientific evidence presented by a known expert in the field, Preserve Giles County submits this protest and comment.

Respectfully,

Donna S. Pitt
Preserve Giles County
216 Zells Mill Rd.
Newport, VA 24128

Cc:

Neil Kornze, Director
BLM Washington Office
1849 C St. NW Rm 5565
Washington, DC 20240

Joby Timm, Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway

CO22-1

Karst terrain is discussed in section 4.1 of the EIS. See also the response to comment IND62-1 regarding Dr. Kastning's report.

COMPANIES AND NGOs

CO22 – Preserve Giles County

CO22-1
cont'd

Roanoke, VA 24019

Jennifer P. Adams, Special Project Coordinator
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
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Union, WVA 24983

Other Officials CC:

COMPANIES AND NGOs

CO22 – Preserve Giles County

CO22-1 cont'd	VA Governor, Terry McAuliffe WV Governor, Earl Ray Tomblin Senator Tim Kaine Senator Mark Warner Representative H. Morgan Griffith Representative Bob Goodlatte VA Senator John Edwards VA Delegate Joseph Yost
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COMPANIES AND NGOs

CO23 – Preserve Greenbrier County

CO23-1

Dear Federal Energy Regulatory Commission, The West Virginia State House, The West Virginia State Senate, Governor Earl Ray Tomblin, The United States House of Representatives, The United States Senate, and President Barack Obama,

We are pleased to present you with this petition affirming this statement:

"Stop the destruction of our finest natural resources!

The Mountain Valley Pipeline Project plans the largest natural gas pipeline (42 inches in diameter) to take gas from Pennsylvania to the Carolinas. The pipeline will cross the Greenbrier River and many of its tributaries. It will cause untold environmental damage to the longest untamed river in the Eastern United States, and pass through a national forest, old-growth forests, and wildlife. Stop this and any other pipeline that threatens our environment."

Attached is a list of individuals who have added their names to this petition, as well as additional comments written by the petition signers themselves.

Sincerely,
Ronald Tobey

CO23-1

The MVP pipeline terminates in Virginia (not the Carolinas). See the response to IND47-1 regarding existing 42-inch-diameter pipelines. See the response to IND432-1 regarding the Greenbrier River. The EIS concludes that, except for the clearing of forest, the MVP would not have significant adverse impacts on most other environmental resources. Water resources are discussed in section 4.3 of the EIS, vegetation in section 4.4, and wildlife in section 4.5. See the response to comment IND95-1 regarding the Jefferson National Forest.

COMPANIES AND NGOs

CO24 – Trout Unlimited

Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Joby Timm, Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Neil Kornze, Director
BLM Washington Office
1849 C Street, NW, Rm. 5565
Washington, DC 20240

CO24-1

This communication is in regard to the proposed actions of the Forest Service in response to the right-of-way application submitted by Mountain Valley Pipeline (MVP). MVP is seeking permission to build and operate a pipeline across the Jefferson National Forest. This response is provided by the New River Valley Chapter of Trout Unlimited.

The mission of Trout Unlimited is to conserve, protect and restore North America's cold water fisheries and their watersheds. The members of the New River Valley Chapter of Trout Unlimited strongly oppose granting MVP's request for a right of way change to the Land Resource Management Plan for the forest. The chapter opposes the creation of a utility corridor in the Jefferson National Forest, which we understand would be required if the application is approved.

The forest is a complex ecosystem that supports rich and diverse animal and plant life and a valuable watershed, and provides recreation and economic benefit to our region. The forest is a major economic engine generating tourism revenue from activities such as hunting, fishing, hiking, and biking, which promotes the health and well-being of local residents.

We must preserve unspoiled and pristine environment for future generations, and, therefore, land management is vital to our region. The Jefferson National Forest land contains old growth trees, grasslands that support many species, critical habitats for threatened and endangered species, and many water bodies.

All of the proposed amendments to the Jefferson National Forest management plan, described below, are unsettling.

Plan Amendment 1 Proposal. management prescription (Rx) 5-C Designated Utility Corridors from these Rx's: 4J, 6C, and 8A1.

This amendment allows for a 500-foot corridor, (except across the Appalachian Trail and Peter's Mountain Wilderness).

In addition to the degradation of the forest, Plan Amendment 1 could put private farms out of business. It is simply not economically viable to farm small sub-plots of divided land. A 500-foot right of way would create a wasteland pipeline alley through not simply a national forest, but through private land as well!

CO24-1

See the response to comment FA8-1 regarding Amendment 1.
See the response to comment FA10-1 regarding Amendments 2 and 4.

COMPANIES AND NGOs

CO24 – Trout Unlimited

CO24-1 cont'd	<p>The impact of a 500 foot-wide utility corridor should pose significant conflicts with the LRMP to say nothing of the impacts to private landowners, local communities and the entire region. Such a corridor would open the door for additional pipelines and further degradation of the forest and surrounding lands. If this amendment were to be allowed, the result would be a significant negative impact on adjacent landowners by putting farms out of business.</p> <p>A proposed Federal Legislation (House Resolution 2295) would allow streamlining any environmental reviews. This would mean that landowners, cultural areas, historic districts would be ignored!</p>
CO24-2	<p>Amendment 2 - Proposed to permit exceedance of soil and riparian corridor conditions.</p> <p>This proposal is also not acceptable. Buffer zones must be maintained to minimize siltation and stream sedimentation. Given the steep slopes of our mountains (Peters Mountain, Sinking Creek Mountain, and Brush Mountain) the loss of buffer zones will negatively impact the watersheds of these regions and potentially damage drinking water sources. It could also detrimentally impact habitats. For example, Slussers Chapel Cave is home to a rare millipede and isopods which would be negatively impacted.</p> <p>At the base of Brush Mountain, the Slussers Chapel Conservation site would be negatively affected by wash water resulting from soil erosions. Buffer zones should remain intact to minimize water siltation.</p> <p>An additional concern regarding Amendment 2 and the loss or diminishing of buffer zones is sedimentation and water quality. To assess the threat posed by erosion in our mountainous region, the U.S. Department of Agriculture weighed seven key variables influencing rain-induced erosion. These include slope gradient, slope length, soil type, rainfall amount, vegetation condition, and truck and equipment traffic. The Department's modelling predicted soil losses in tons per acre per year during construction as follows:</p> <ul style="list-style-type: none">• 10 percent slope - expected erosion is 34 tons of soil per acre per year.• 20 percent slope - expected erosion is 105 tons of soil per acre per year.• 30 percent slope - expected erosion is 183 tons of soil per acre per year. <p>These losses are totally unacceptable.</p>
CO24-3	<p>Proposed Amendment 3 –This amendment would allow the removal of old growth trees within the construction corridor.</p> <p>Old growth forests are unique ecological features that have not been disturbed and are a rare natural resource that cannot be replaced, having taken hundreds of years to develop. It is our responsibly to retain these for subsequent generations.</p> <p>Proposed Amendment 4 - This proposal crosses the Appalachian National Scenic Trail (ANST) at Peter's Mountain.</p> <p>This is totally unacceptable.</p> <p>Our New River Valley Trout Unlimited Chapter, along with other conservation-oriented groups such as the Sierra Club, Appalachian Trail Conservancy and others believes our national forest lands are part of our common heritage and our mental and physical wellbeing. We further believe we have a responsibility</p>

CO24-2

See also the response to comment FA10-1 regarding Amendment 2.

CO24-3

See also the response to comment FA10-1 regarding Amendment 4.

COMPANIES AND NGOs

CO24 – Trout Unlimited

CO24-3 | to ourselves and our children to preserve our natural environment. We cannot damage or fragment this
cont'd | wonderful resource for any purpose, but particularly for short-term economic gain.

Respectfully Submitted,

New River Trout Unlimited

CC Trout Unlimited National
Regional Trout Unlimited Chapters
Sierra Club

COMPANIES AND NGOs
CO25 – Pacific Crest Trail Association

20161228-0070 FERC PDF (Unofficial) 12/27/2016



December 19, 2016

ORIGINAL

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2016 DEC 27 12 48 36
RECORDS & COMMUNICATIONS DIVISION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Negative impact to the Congressionally- designated National Trails System from potential forest plan amendments associated with the proposed Mountain Valley Pipeline. Docket No. CP16-10-000

Ms. Bose,

CO25-1

I am writing on behalf of the 11,500 member Pacific Crest Trail Association (PCTA). PCTA is the U.S. Forest Service's primary private partner in the management, maintenance, and protection of the Pacific Crest National Scenic Trail. As such, it is our role to work with our partnering forests to ensure that the Pacific Crest Trail is managed in a manner consistent with the Trail's Congressional designation as a National Scenic Trail. PCTA's Memorandum of Understanding between the U.S. Forest Service, National Park Service, Bureau of Land Management and California State Parks is the foundation for our partnerships across the trail's 2,650-mile length. Along with the Appalachian National Scenic Trail (ANST), the Pacific Crest Trail was designated as one of our nation's first two National Scenic Trails with the passage of the 1968 National Trails System Act. This Act has been in place for almost 50 years, and people from every state in the country and all around the world seek out the ANST and Pacific Crest Trail, as well as the other nine National Scenic Trails, to have a world-class trail experience.

We are deeply concerned about the impact of the actions proposed in the DEIS. The ANST's management codified in Forest Land and Resource Management Plans (FLRMPs) has been in place for more than 30 years; it is the model on which protection of Pacific Crest National Scenic Trail on U.S. Forest Service-managed lands is modeled as we move into a new set of FLRMPs driven by the new Forest Planning Rule and Directives. The existing direction in ANST Management Areas in the National Forests traversed by the ANST is likewise being used as a planning model for many of the other National Scenic Trails across the nation where they cross National Forests. The Pacific Crest Trail crosses 25 National Forests in its 2650-mile length. The proposal that a single project would change the usefulness of National Scenic Trail protection all across the nation is a related action that must be addressed in NEPA compliance if this proposal moves forward as it is currently written.



Pacific Crest Trail Association
1331 Garden Highway · Sacramento, CA 95833
(916) 285-1846 (Phone) · (916) 285-1865 (Fax) · www.pcta.org

CO25-1

Section 3 of the EIS discusses a range of alternatives, including route alternatives for the Jefferson National Forest and route / crossing locations and construction method options for the ANST. Cumulative effects, including for the ANST, are discussed in section 4.13 of the EIS.

COMPANIES AND NGOs

CO25 – Pacific Crest Trail Association

20161228-0070 FERC PDF (Unofficial) 12/27/2016

CO25-1
cont'd

The proposed changes in the George Washington and Jefferson National Forests FLRMPs effects not just the portion of the ANST in proximity to the proposed project, but protections for the ANST experience for every project proposed near the ANST throughout these forests. These cumulative and related results must be analyzed. Changing the current ANST Management Area direction would result in non-compliance with the spirit and letter of the National Trails System Act and related agency direction.

Also, the author of these comments for PCTA, PCTA's Director of Trail Operations, spent more than 20 years leading the Appalachian Trail Conservancy's office in Southwest and Central Virginia from 1980 to 2001. As a result, we have intimate knowledge of the section of the ANST in question and the history of ANST protection through FLRMP direction since the first FLRMP for the George Washington and Jefferson National Forests were put in place in the early 1980s. After review of the alternative considered in the DEIS and comparison with the processes used to analyze the effects of other linear utilities crossing the ANST on these forests, we have come to the conclusion that there is an inadequate range of alternatives considered in the DEIS. The exclusion of all routes crossing National Park Service lands purchased for the protection of the ANST, is arbitrary and capricious, and is a major factor in the unallowable restriction of alternatives. As the National Park Service is the lead administering agency for the entire ANST, the idea that they place value in one crossing more than another solely based on the agency that is charged with managing these lands, when they are all lands held by the federal government for protection of the ANST is not based on any federal regulation or direction and indeed is contrary to the authorities and responsibilities given to the National Park Service by Congress.

There are a number of alternatives that should be considered in the DEIS that have significantly less impact on the overall ANST experience; so many that it would be difficult to enumerate them here. It is the duty of Federal Energy Regulatory Commission (FERC) to identify the best of these alternatives and to analyze them in this DEIS.

As mentioned before there are clear ways to deal with modest impacts of an alternative without the necessity of modifying the ANST Management Area directions as proved by major utility line projects in this area in the past without having the trailwide overarching impacts of the proposed changes in the current FLRMP. Even if modest changes in direction were needed, the current proposal is far more than is necessary to accomplish that and is clearly an overreach of authority with a cascading impact on these forests, along the entire ANST, and potentially on all National Scenic Trails in the National Forest System.

What follows are additional substantive comments that you may also find in comments from other groups with interest in the National Trails System. We include them here as a part of our submission. They provide additional information and proposed actions which we have reviewed and in some places modified, as they support our view of this situation.

FERC has proposed FLRMP amendments which downgrade decades-old visual resource protections to accommodate a poor route for the Mountain Valley Pipeline on the Jefferson National Forest – a route with significant impacts to the ANST. These proposed FLRMP amendments represent a significant threat to all National Scenic and Historic Trails on lands

COMPANIES AND NGOs

CO25 – Pacific Crest Trail Association

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CO25-1
cont'd

managed by the U.S. Forest Service because the current protections afforded the ANST in FLRMPs serve as a model for Forest Planning nationwide. Numerous energy transmission projects have crossed National Scenic and Historic Trails without requiring amendments to the respective FLRMPs, which has been achieved through thoughtful planning, impact analysis, and partnership. Inadequate planning has resulted in a poor route proposal for the Pipeline project which maximizes visual impacts; the resulting attempt to deal with this issue with slackened regulations instead of actual, successful on the ground mitigation is an unacceptable solution leading to significant impacts and degradation of the nature and purposes of the ANST and will significantly impair the resources and values of the ANST, a unit of the National Park System.

Threats to the National Trails System from the proposed amendments to the Jefferson Forest Plan:

- A. Protection of the ANST via the Forest Planning Process is the standard for all National Scenic Trails in the country where they traverse National Forests managed lands. This erosion of that protection will set a negative precedent for the protection of all 11 National Scenic Trails.
- B. The DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for forest management. These amendments would not only be unprecedented but would significantly erode the protection of the ANST which the public has spent millions of dollars to protect.
- C. Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the standard for scenic integrity along the ANST. This amendment also allows five to 10 years following completion of the project for this SIO of “Moderate” to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below “Moderate” for up to a decade.
- D. Proposed Amendment 4, if approved, would create an approved utility corridor leading up to the ANST in a very poor location that could be used for future utility projects — providing the possibility of further degradation of the scenic and experiential value of the ANST.
- E. Amending the plan in the manner proposed would negatively impact other FLRMP prescription areas protecting Wilderness, old growth forest, Inventoried Roadless Areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Congressionally-Designated Wilderness and terminating immediately adjacent to the ANST on both sides.

Requested Actions:

- All FLRMP standards not met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that “the Forest Service retains decision-making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a).
- No amendment to the FLRMP should be considered that lowers the Scenic Integrity Objectives of the ANST.

CO25-2

CO25-2

See the response to comment FA10-1.

COMPANIES AND NGOs

CO25 – Pacific Crest Trail Association

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CO25-2
cont'd

This proposal is a matter of significant controversy nationally with regard to the National Trails System and, we are sure, many other nationally-significant resources such as Wilderness, old growth forest, Inventoried Roadless Areas, and fragile successional habitats. All of these are an integral part of a National Scenic Trail experience as identified in the National Trails System Act, its legislative history and subsequent direction and management. We look forward to involvement in all subsequent phases of this NEPA compliance including, but not limited to, a supplemental DEIS from the U.S. Forest Service regarding the overreaching proposals included in the current DEIS regarding amendments to the FLRMPs as it is clear that the current DEIS is inadequate for making such decisions at this point.

Sincerely,



Mike Dawson
Director of Trail Operations

Cc: Jennifer Adams, Special Projects Coordinator, George Washington and Jefferson National Forests
Beth Boyst, PCT Program Manager, U.S. Forest Service
Mike Caldwell, Northeast Regional Director, National Park Service
Wendy Janssen, Appalachian National Scenic Trail Park Superintendent, National Park Service
Joe Meade, Director Recreation Heritage & Volunteer Resources, U.S. Forest Service
Randy Moore, Regional Forester, U.S. Forest Service Pacific Southwest Region
Karen Mouritsen, Eastern States Director, Bureau of Land Management
Karen Overcash, Forest Environmental Coordinator, George Washington and Jefferson National Forests
Jaime Schmidt, Acting National Trails Program Manager, U.S. Forest Service
Job Timm, Forest Supervisor, George Washington and Jefferson National Forests
Clyde Thompson, Forest Supervisor, Monongahela National Forest
Tony Tooke, Regional Forester, U.S. Forest Service Southern Region
Leslie Weldon, Deputy Chief of the National Forest System, U.S. Forest Service

COMPANIES AND NGOs

CO26 – Wilderness Watch

20161214-5071(31824613)

Kevin Poescholdt, Missoula, MT.
December 12, 2016

Joby Timm, Forest Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

Re: Amendments to the Land and Resource Management Plan and the proposed Mountain Valley Pipeline adjacent to the Brush Mountain Wilderness

Dear Supervisor Timm,

CO26-1

The following comments come from Wilderness Watch regarding the above-referenced matters. Wilderness Watch is a national wilderness conservation organization focused on the protection of all units of the National Wilderness Preservation System, including the Brush Mountain Wilderness.

As you know, Congress designated the 4,795-acre Brush Mountain Wilderness in 2009. It borders the Brush Mountain East Wilderness (3,745 acres) to the east. These Wildernesses, and the entire National Wilderness Preservation System, are governed by the 1964 Wilderness Act, 16 U.S.C. 1131-1136. The Wilderness Act requires the Forest Service and the other wilderness-administering agencies to preserve the wilderness character of the Wildernesses in their care.

The project, as we understand it, would place a 500-foot-wide utility corridor next to the Brush Mountain Wilderness through an Inventoried Roadless Area. The pipeline company proposes to clear a minimum 125-foot construction right-of-way, a 500-foot cleared permanent right-of-way, and various access roads to construct and maintain the pipeline.

While we understand that this construction and clearing will not occur within the boundaries of the Brush Mountain Wilderness, the Forest Service must still insure that none of the work damages the wilderness character of the Wilderness. The Forest Service has identified many qualities of wilderness character, including:

1. Untrammeled
2. Natural
3. Outstanding opportunities for solitude or a primitive and unconfined recreation
4. Undeveloped

The federal courts have interpreted the mandate of the Wilderness Act (preserving wilderness character) to also include actions outside of the boundaries of designated Wilderness that may impact the Wilderness. See, for example, Izaak Walton League of Am., Inc. v. Kimbell, 516 F.Supp. 2d 982. Therefore, we expect the Forest Service to carefully analyze the impacts of the proposed pipeline project on the Brush Mountain Wilderness, even though the proposed project would occur just outside the wilderness boundaries.

CO26-1

There are no MVP project activities proposed within Brush Mountain Wilderness. However, the pipeline would cross about one mile within Brush Mountain Inventoried Roadless Area. The Roadless Area Conservation Rule and impacts to roadless areas under this regulation are discussed in section 4.8 of the EIS.

COMPANIES AND NGOs

CO26 – Wilderness Watch

CO26-1
cont'd

Please keep Wilderness Watch informed of your analysis of the project on the wilderness character of the Brush Mountain Wilderness, and other developments with this project.

Sincerely,

Kevin Proescholdt
Conservation Director

COMPANIES AND NGOs
CO27 – Blue Ridge Parkway Foundation



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Dec. 7, 2016

Federal Energy Regulatory Commission
C/o Kimberly Bose, Secretary
888 First Street N. E. Room 1A
Washington, D. C. 20426

Re: Docket Number CP16-10-000
Proposed Mountain Valley Pipeline

Dear Members of the Commission:

Attached is the position of the Blue Ridge Parkway Foundation opposing the proposed Mountain Valley Pipeline. As you can see, the Foundation's opposition is predicated upon our responsibility to enhance, protect and preserve the Blue Ridge Parkway. Scars left permanently by pipeline construction and clear-cut easements between two connecting federal parks – Shenandoah National Park and Great Smoky Mountains National Park – will degrade the visitor experience and damage the unparalleled beauty found along the way.

If you have any questions please contact me at 540-593-2048, or Foundation Board Chair Emeritus Broadbent Fitzpatrick at 540-344-3680.

Thank you for your consideration.

Jack Betts
Jack Betts
Board Chair
Blue Ridge Parkway Foundation

CO
27-1

CO27-1

Our analysis of the proposed pipeline crossing of the BRP is discussed in section 4.8 of the EIS. Mountain Valley would reduce impacts by boring under the parkway. After construction, the pipeline right-of-way would revegetated and restored to its original condition; not degrading the visitor experience or damaging the landscape. Mountain Valley conducted a visual simulation analysis of its crossing of the BRP, which has been incorporated into the final EIS. The BRP is currently crossed by existing infrastructure, including other pipelines, powerlines, and roads.

COMPANIES AND NGOs

CO27 – Blue Ridge Parkway Foundation

CO27-1
cont'd

BLUE RIDGE PARKWAY FOUNDATION POSITION STATEMENT RE: PROPOSED PIPELINES

The beautiful Blue Ridge Parkway, the unique ribbon of roadway which follows mountaintops for 469 miles through 29 counties in Virginia and North Carolina, is under attack. This most visited unit of our National Park system is threatened by two proposed fracked gas pipelines, The Mountain Valley Pipeline (“MVP”) and the Atlantic Coast Pipeline (“ACP”) slated to cross the Parkway in Roanoke County and Augusta/Nelson counties respectively. If allowed, these huge 42 inch high-pressure lines will not only scar the Parkway, but also permanently degrade the view sheds and landscapes around it.

The U.S. Forest Service has already denied the ACP a permit to cross 50 miles of Monongahela and George Washington National Forests because the proposed route failed to protect “highly sensitive resources, including Cheat Mountain salamanders, West Virginia northern flying squirrels, Cow Knob salamanders, and red spruce ecosystem restoration areas.” And while pipeline proponents seek alternative routes, the pipelines will cross the Blue Ridge Parkway.

The Parkway is world renowned for its majesty and sense of place as it was specifically designed to immerse travelers into the cultural, historic and aesthetic aspects of the Blue Ridge region. The Blue Ridge Parkway was built to connect the Great Smoky Mountains National Park and the Shenandoah National Park, maintaining the mood and magic of the region, but scars left permanently by pipeline construction and clear-cut easements between the two parks will degrade the visitor experience and damage the unparalleled beauty found along the way.

The Blue Ridge Parkway Foundation, a 501 (c) (3) non-profit, has provided more than \$11 million in donations to the Parkway to enhance, protect and preserve our national treasure. It does so by providing support for initiatives along the 469-mile route, including historical and cultural preservation, environmental protection, visitor amenities, and educational outreach. The Foundation has a duty to protect the Blue Ridge Parkway for the millions of visitors to this national jewel each year.

Therefore, the Blue Ridge Parkway Foundation, as primary fundraiser and trusted steward of the Blue Ridge Parkway, opposes the building of the fracked gas pipelines across the Parkway.

For further information about the impact of the proposed pipelines on this scenic motorway, contact Carolyn Ward, CEO of the Blue Ridge Parkway Foundation, at 828-505-8494, or Broaddus Fitzpatrick, Chair Emeritus of the Foundation's Board of Trustees, at 540-344-3680.

COMPANIES AND NGOs
CO28 – Friends of the Lower Greenbrier River

	<p>20161215-5246(31836510)</p> <p>Chris Chanlett, Alderson, WV.</p> <p>Submitted by FOLGR Board Member on behalf of FOLGR:</p> <p>FOLGR comments to FERC under docket # CP 16-10-000</p>
CO28-1	<p>The Friends of the Lower Greenbrier River (FOLGR) has concern and alarm at the proposed Mountain Valley Pipeline. We are an organization dedicated to protecting the Greenbrier River with over 300 members and have been in existence for 25 years. Reviewing the DEIS has not been reassuring in regard to our water, soil, and cultural resources.</p> <p>The pipeline proposes to cross the Greenbrier River and other waterbodies along 16.7 miles in Summers County, WV, the focus of our concern. Table 4.1.1-1 lists the elevation changes in the path. Summers County apparently has the distinction of the highest grade along the route in West Virginia, 3733' high topping Keeney Mountain. Within a couple miles the line reaches the river at 1503'. That is a 2233' drop! Table 4.1.1-11 on Susceptibility to Landslide by excavation or fill failure does not take note of a situation we consider completely predictable. Namely, it will be tremendously difficult to stabilize the steep rocky terrain that the MVP wants to cut through.</p> <p>Where is all that stone going to go? How are they going to cover that pipe on cliff faces? Failure to stabilize the loose backfill, plus the repeated crossings of Hungard Creek and Kelly Creek which immediately feed the main stem of the river, means we can anticipate a long-term problem of landslides in and sedimentation from our immediate tributaries.</p>
CO28-2	<p>Secondly, we do not see a clear engineering plan on crossing the river itself. The sections 4-108 and 4-110 are riddled with breath taking understatements beginning with, "Impacts on waterbodies could occur as a result of construction activities..." COULD OCCUR? "In-stream blasting [the presumed but unspecified plan for the main river bed] has the potential to injure or kill aquatic organisms..." HAS THE POTENTIAL? "Chemical by-products from blasting materials could be released and contaminate the water." COULD BE RELEASED AND CONTAMINATE? A honest technical writer would have used "will" instead of "could" for each of those statements.</p> <p>All these conditional formulations cloud the fact that the DEIS does not contain an engineering plan of how to cross the Greenbrier River floodplain. We cannot tell how long the gash under the water will be, how it will actually be made, and how long it will take to accomplish. Nor does it detail how the MVP will return the river bed to its natural stone bottomed stability without long-term disturbance. Statements to the effect of "minimizing the impact" are completely relative and not reassuring to the thousands of river residents and users.</p>
CO28-3	<p>Finally FOLGR notes that, consistent with the sloppiness of this DEIS, the existence of the Lower Greenbrier River Byway and the Lowell Backway crossings are absent in section 4.8.2.4 of Land Use and Visual Resources. While other scenic byways are listed, these state-recognized roads of visual significance are ignored. The Corridor Management Plan (CMP) in 2003 for these byways did not include invasion-by-pipeline.</p>

CO28-1 On March 30, 2017 Mountain Valley filed supplemental information about the crossing of the Greenbrier River that has been incorporated into this final EIS. See the response to IND432-1 regarding the Greenbrier River. See the response to FA11-15 regarding sedimentation and turbidity at waterbody crossings. See the response to IND 70-1 regarding upland runoff. Steep slopes are addressed in section 4.1 of the EIS. See the response to IND177-1 regarding landslides and Mountain Valley's revised Landslide Mitigation Plan.

CO28-2 Section 4.3.2 of the EIS addresses potential project impacts on surface waterbodies. See the response to IND245-5 regarding instream blasting. Note that Mountain Valley has proposed mitigation measures to reduce potential impacts upon aquatic species and water quality during instream blasting such as pre-blast removal of fish and mussels from the work zone and compliance with applicable blasting permits, respectively. The FERC staff typically does not use the word "will" in describing project impacts in an EIS because there is no guarantee that the project would be authorized by the Commission. A description of the methods for waterbody crossings is provided in sections 2.4.2.10 and 4.3.2 of the EIS.

CO28-3 In a filing on February 17, 2017 Mountain Valley identified State Road 3 and County Roads 12, 15 and 17 as part of the state-designated Lower Greenbrier River Byway and the Lowell Backway. We updated section 4.8 of the final EIS accordingly.

COMPANIES AND NGOs

CO28 – Friends of the Lower Greenbrier River

CO28-3
cont'd

FOLGR believes that neither the promoters nor FERC have adequately studied the consequences of what this project will do to Summers County and the Greenbrier River. FERC needs to consider the problems raised in this comment and many others, then to issue a revised DEIS and give us the necessary time to comment on it.

COMPANIES AND NGOs

CO29 – Indian Creek Watershed Association

20161215-5271 FERC PDF (Unofficial) 12/15/2016 4:31:56 PM



Indian Creek Watershed Association
P.O. Box
711 Union, WV 24983
www.IndianCreekWatershedAssociation.org

December 15, 2016

TO: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission

RE: Massive Post-DEIS Supplemental Information Submitted by MVP Requires Revised or Supplemental Environmental Impact Statement for the Mountain Valley Pipeline (Docket No. CP16-10-000) and Equitrans Expansion Project (Docket No CP16-13-000)

CO29-1

Indian Creek Watershed Association fully supports the important comment submitted October 19, 2016 on behalf of Allegheny Defense Project, Appalachian Mountain Advocates et al. (Accession #20161019-5061), and we would like to offer some additional perspective and information.

As noted in the opening statement of that comment:

Public scrutiny of environmental decisionmaking, informed by high quality and accurate information, is essential to Compliance with the National Environmental Policy Act ("NEPA"). 40 CFR §1500.1(b). ... FERC must supply information and analysis regarding the MVP Project in a manner that facilitates meaningful analysis and public participation.

By its premature issuance of the DEIS, which was followed shortly by a massive set of new materials submitted by MVP, the FERC has created confusion with respect to what set of materials (and what version of MVP's pipeline corridor proposals) is under consideration, thereby significantly undermining "meaningful analysis and public participation."

1. On September 16, 2016, the Federal Energy Regulatory Commission (FERC) issued its Draft Environmental Impact Statement (FERC/DEIS-D0272) for the Mountain Valley Pipeline. This material consists of the main DEIS document plus 23 Appendices, totaling 2,671 pages in the FERC-generated PDF.

The DEIS was issued by FERC at that time despite specific requests from individuals, organizations and officials not to release the Draft Environmental Impact Statement for the Mountain Valley Pipeline (MVP) project until MVP had provided information required to fulfill data requests by the FERC staff, agencies such as the U.S. Forest Service, and members of the public. The FERC staff knew in advance that significant amounts of data and analysis would be missing if they published the DEIS in mid-September, since MVP itself had reported that it would not be able to supply some data requested by FERC staff until September 30, 2016.

CO29-1

See the response to LA3-1. We will not be producing a supplemental draft EIS; but, instead will be addressing comments on the draft in a final EIS.

COMPANIES AND NGOs

CO29 – Indian Creek Watershed Association

20161215-5271 FERC PDF (Unofficial) 12/15/2016 4:31:56 PM

CO29-1 cont'd	<p>2. Within one month of the DEIS issuance, MVP began to submit massive amounts of “supplemental information” and continued to do so into early November.</p> <ul style="list-style-type: none">• <u>On October 14, 2016</u> (Accession #20161014-5022), the Mountain Valley Pipeline submitted “supplemental information” in the form of 161 separate files, with a total file size of more than 2 thousand megabytes (2,379.75MB).• <u>On October 20, 2016</u> (Accession #20161020-5175), MVP submitted another cache of supplemental information, five files, totaling 1,062 pages in the FERC-generated PDF.• <u>On October 27, 2016</u> (Accession #20161020-5212), MVP submitted yet another cache of supplemental information, 16 files totaling 248 pages in the FERC-generated PDF• <u>On November 2, 2016</u> (Accession #20161102-5046) MVP submitted a response to data request, totaling 8 pages.	
CO29-2	<p>3. Issues with the newly submitted MVP materials include the following:</p> <ul style="list-style-type: none">• The materials submitted by MVP <i>after</i> the FERC issued its DEIS are based on <u>a newly revised “October 2016 Proposed Route.”</u> complete with revised milepost numbers, new alignment sheets, revised tables, etc.• The 161 MVP files posted on October 14 are <u>presented in the FERC’s elibrary in random order, rendering them virtually useless.</u> (See Attachment 1 for a downloaded copy of the FERC e-library page for this Accession.) For example, the second file in the list is titled “Attachment H – Date [sic] Responses – Public Part 1 of 2.” To locate Part 2 of this document, you need to scan to the last of the 161 files. A massive disorganized data submission such as this is commonly referred to as a “data dump.” Lack of transparency and inaccessibility have been typical of materials submitted by MVP and/or presented by FERC throughout the application process.• Despite the huge amount of data, however, <u>critical information is still missing</u>, including for example, the crossing lengths for 68% of the proposed waterbody crossings (1258 of 1848 identified crossings in MVP’s revised tables—a number dramatically at odds with the DEIS, which reports 986 waterbody crossings in its Executive Summary).	CO29-2 We will produce a final EIS that addresses new information and comments on the draft.
CO29-3	<p>4. What MVP submitted shortly after the DEIS was issued validates the public’s assertion <u>last spring</u> that the FERC should require MVP to submit a comprehensive, coordinated amended application <i>before</i> the FERC’s preparation of the DEIS.</p> <ul style="list-style-type: none">• <u>On April 19, 2016</u>, Indian Creek Watershed Association and Preserve Craig, of Craig County, VA, submitted a comment requesting that the FERC “require Mountain Valley Pipeline, LLC to submit one complete, cohesive application with corrected Resource Reports and other addenda in finished form and included in sequential order before the FERC contractor and federal and state agencies complete their administrative reviews and before setting a schedule for the DEIS.” ... The comment outlined some of the issues and noted: “To allow the MVP application in its current disjointed state poses an undue burden on the stakeholders who are trying to understand the potential consequences of this pipeline on	CO29-3 See the response to LA3-1.

COMPANIES AND NGOs

CO29 – Indian Creek Watershed Association

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CO29-3
cont'd

the environment.” (Accession # 20160419-5119, p. 1; See **Attachment 2** for a description of deficiencies, inaccuracies, and inaccessibility of MVP application materials.)

- On May 6, 2016, 15 organizations and 367 individuals submitted a comment in support of this request. (Accession # 20160509-5043; see **Attachment 3**.)
- On August 10, 2016, Roanoke, Giles, and Craig Counties requested that the FERC staff direct MVP to “undertake measures to coordinate the record of information it has filed” in support of its application. (Accession # 20160810-5194.)

CO29-4

5. **MVP’s October 14 Transmittal document disingenuously implies that MVP was providing the public with a “service.” In fact, their submittal impedes the stakeholders’ complicated task of responsibly reviewing the DEIS and MVP’s proposed route(s).**

- MVP states: “By submitting the October 2016 Proposed Route at this time, interested stakeholders will have the opportunity to review and comment on the October 2016 Proposed Route at the public meetings in November 2016 ... By the end of this month, Mountain Valley expects to file all revised DEIS tables with strikeouts and underlines” (MVP transmittal p. 2).
- MVP’s October submittals make mockery of a comment period of 90-day duration which was established by the FERC for this DEIS. The public meetings for the MVP route were scheduled for November 1, 2, 3 in West Virginia and Virginia. Clearly, this did not provide adequate time for the public to “review and comment” on the avalanche of files posted by MVP between October 14 and November 2.
- Furthermore, the November meetings were intended for public comment on the DEIS, not on a set of revised materials from MVP that the FERC staff had not reviewed and factored into their environmental impact analysis.

CO29-5

6. **To comply with the NEPA requirements, the FERC must prepare a Revised or Supplemental DEIS for the MVP Project** and provide for reasonable access, review, and comment by the public. The public opportunity to meaningfully analyze and provide comment on the proposed route has been undermined at nearly every stage of the MVP application.

7. **One point should not be forgotten: The extended timeframe now required has not been caused by the public.** It has been caused by the inadequacies and inaccuracies of MVP’s application materials and by the deficiencies of the FERC/DEIS-D0272. The public should not have to pay the price of incompetence or inattention by the Applicant or the FERC.

CO29-6

Affected landowners and public citizens are rightfully concerned about the project’s potential negative impacts and have every right to the considerations required by NEPA. Construction of a 42-inch high-pressure natural gas pipeline has never been attempted over the rugged terrain and the unique hydrogeological challenges and vulnerabilities of this region. The risks to pipeline integrity and the potential for environmental damage are significant. (See, for example, Dr. Ernst Kastning’s report on geologic hazards in the karst regions crossed by the MVP, Accession #20160713-5029, and Dr. Pamela

CO29-4 See the response to LA3-1.

CO29-5 We will not be producing a supplemental draft EIS. We will produce a final EIS that addresses new information and comments on the draft.

CO29-6 See the response to LA1-4 regarding existing pipelines in steep terrain. See the response to IND62-1 for Dr. Kastning’s report. We will not be producing a supplemental draft EIS. We will produce a final EIS that addresses new information and comments on the draft.

COMPANIES AND NGOs

CO29 – Indian Creek Watershed Association

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CO29-6
cont'd

Dodds' assessment of hydrogeological impacts of MVP construction on watersheds of Summers and Monroe Counties in West Virginia, Accession # 20160815-5135.)

Given the significant information required by NEPA that was missing in the DEIS, as detailed in the comment by Allegheny Defense Project, Appalachian Mountain Advocates et al. cited above, and the massive amount of new and revised information submitted by the Applicant *after* the DEIS was issued, the draft statement is clearly "so inadequate as to preclude meaningful analysis" and therefore requires that the agency prepare and circulate a revised draft. NEPA 40 CFR §1502.9(a)

If the application for the proposed route is so difficult for the Applicant to prepare and for the FERC staff to evaluate, maybe that is another indication that the route under consideration is not a prudent or feasible alternative.

Respectfully,

Indian Creek Watershed Association Board of Directors

Judy Azulay, President; Scott Womack, Vice President;
Howdy Henritz, Treasurer; Nancy Bouldin, Secretary

Email: info@IndianCreekWatershedAssociation.org

CC: US Environmental Protection Agency, Region 3

Mr. Jon M. Capacasa, Director, Water Protection Division, Capacasa.jon@epa.gov
Barbara Rudnick, NEPA Team Leader, rudnick.barbara@epa.gov

Appalachian Mountain Advocates

Ben Lockett, Staff Attorney, blockett@appalmad.org

Attachments:

- 1 (pp. 5-16) – Downloaded copy of the FERC e-library page for MVP "Supplemental Information" dated October 14, 2016 (Accession #20161014-5022)
- 2 (pp. 17-19) – April 19, 2016 Comment of Indian Creek Watershed Association and Preserve Craig calling for FERC to require MVP to submit a comprehensive amended application *before* setting a schedule for the DEIS (Accession # 20160419-5119)
- 3 (pp. 20-33) – May 6, 2016 Comment of 15 organizations and 367 individuals in support of the ICWA/ Preserve Craig request (Accession # 20160509-5043)

COMPANIES AND NGOs

CO30 – Virginia Outdoors Foundation

20161219-5102 FERC PDF (Unofficial) 12/19/2016 10:02:36 AM



December 19, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, D.C. 20426

**RE: Mountain Valley Pipeline, LLC
Docket No. CP16-10-000
Access Easement Application**

Dear Secretary Bose:

CO30-1

The Virginia Outdoors Foundation (VOF) would like to file additional comments in response to the Mountain Valley Pipeline, LLCs (MVP) Draft Environmental Impact Statement (DEIS) regarding recent changes revealed in an updated access easement application received on December 14, 2016.

Prior to the receipt of this revised application VOF understood that an access easement for a temporary road would be needed across the northern portion of the cross-county open-space easement identified by control number: ROA-02563/MON-2563. Based on information within the modified application MVP is now seeking a permanent access easement for a road over the same portion of the property to be used during construction and operation of the pipeline.

It is unfortunate that we have received this critical information at such a late date and we respectfully ask FERC to take note of this situation and recognize that due to limited time and resources we will be unable to fully assess the information within the revised application before the December 22, 2106 DEIS comment deadline. Nonetheless, we offer the following comments based on errors found in a cursory review of the revised access easement application and maps:

1. The Tax Map Parcel # for the subject property is 102.00-01-01.02-0000, not 130.00-02-01.00-0000 as listed in the application.
2. The parcel encumbered by the VOF open-space easement should be clearly identified on the maps and the name of the state road should be changed from Cove Hollow Trail to Honeysuckle Road.

virginiaoutdoorsfoundation.org

Main Street Centre, 600 East Main Street, Suite 402, Richmond, VA 23219

CO30-1

See response to comment LA15-17.

COMPANIES AND NGOs

CO30 – Virginia Outdoors Foundation

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CO30-1
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VOF appreciates the opportunity to provide comments and we hope this information will assist FERC in its analysis and preparation of the Final Environmental Impact Statement (FEIS). Please contact me at 804-577-3337 or via email at mlittle@vofonline.org with any questions, comments or concerns.

Respectfully,



Martha Little
Deputy Director

CC [EMAIL ONLY]:

- Lindsey Hesch, Senior Environmental Specialist, Nextera Energy Resources
- Brett Glymph, Executive Director, VOF

virginiaoutdoorsfoundation.org

Main Street Centre, 600 East Main Street, Suite 402, Richmond, VA 23219

Page 2 of 3

COMPANIES AND NGOs

CO31 – Blue Ridge Land Conservancy

20161219-5225 FERC PDF (Unofficial) 12/19/2016 1:08:35 PM



BOARD OF TRUSTEES

December 15, 2016

Betty H. Lesko
President

William M. Hackworth
President-Elect

Re: Docket Number CP16-10-000
Proposed Mountain Valley Pipeline

F. Fulton Galer
Treasurer

Whitney H. Feldmann
Secretary

Federal Energy Regulatory Commission
C/o Kimberly Bose, Secretary
888 First Street N. E. Room 1A
Washington, D. C. 20426

C. Whitney Brown
Frank G. Carter
Diana K. Christopoulos
Stephen M. Claytor
M. Rupert Cutler
Ruth T. Dickerson CO31-1
Thomas M.

Dear Members of the Commission:

Dunkenberger, Jr.
Broadus C. Fitzpatrick
Joshua C. Gibson
Anne M. Jennings
George A. Kegley
Nelson W. Lafon
Linda W. Pharis

The Blue Ridge Land Conservancy is in its twentieth year of protecting land in southwestern Virginia, including Montgomery, Craig, Roanoke, and Franklin Counties, all of which are threatened by the proposed Mountain Valley Pipeline (MVP). The Conservancy currently protects with conservation easements over 17,000 acres and over 39 miles of stream and river frontage. On June 1, 2016, the Conservancy's Board adopted a resolution (copy attached) expressing its opposition to the adverse impacts of the MVP on the land and landscapes that the Conservancy is charged with protecting. On October 20, 2016, the Conservancy filed a letter opposing the suggestion of the Virginia Department of Conservation and Recreation that the proposed route of the MVP be shifted to a two-mile stretch of the forested ridgeline atop Brush Mountain, immediately adjacent to the Brush Mountain Wilderness Area and in the viewshed of the Appalachian National Scenic Trail, which routing the Conservancy had previously gone on record as opposing. The October 2016 letter also opposed the routing of the MVP through the Mt. Tabor area in Montgomery County, VA, due to the presence of karst resources and potential to impact drinking water supplies for area residents.

ADVISORY COUNCIL

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Project Manager

Deborah Ullmer
Office Manager

Erica Reed
Outdoor Educator

The Conservancy's Board has prioritized its conservation efforts to concentrate on preservation of the following: ridgetops and mountains, rivers and streams, farmland, scenic views, and parcels around existing conserved land (National Forests, land already protected by conservation easements, etc.) The proposed MVP

CO31-1

We stand by the conclusions in the EIS, which are based on facts. While there would be impacts on specific environmental resources caused by the construction and operation of the MVP, measures would be implemented, some required by the FERC, to reduce or mitigate those impacts to non-significant levels, except for clearing of forest. Section 4 contains our definition of significant impacts.

COMPANIES AND NGOs

CO31 – Blue Ridge Land Conservancy

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CO31-1
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would have an adverse impact on each of these.

The Conservancy writes to express its dismay over the Draft Environmental Statement (DEIS) released by FERC in September for the proposed MVP (DEIS-DO272) (which includes an EIS for the Equitrans Expansion Project for natural gas facilities in Pennsylvania and West Virginia) (Docket No. CP16-13-000) (EEP) and its conclusion that “construction and operation of the projects would result in limited adverse environmental impacts, with the exception of impacts on forest.” (“Forest,” according to the DEIS, constitutes 81% of the land that would be crossed by the proposed MVP in its 301-mile-long route!)

This simplistic conclusion simply flies in the face of the findings in the DEIS itself, which concludes, along with many other findings of detrimental impacts of the proposed pipeline, that:

*“Construction and operation of the projects [including the EEP] could result in impacts on environmental resources, including on geology, soils, groundwater, surface water, wetlands, vegetation, wildlife, fisheries, special-status species, land use, visual resources, socioeconomics, cultural resources, air quality, noise, and safety.”

Specific findings in the DEIS include the following:

*The MVP would be within 0.25-mile of 62 mines and 233 oil and gas wells.

*About 30 percent of the MVP would cross topography with slopes greater than 15 percent grade.

*About 67 percent of the MVP would cross areas susceptible to landslides. The construction and operation of the MVP could result in unstable slopes including cut slope failures and fill slope failures. Construction of the MVP could alter the surface and near surface drainage along the pipeline trench, which could increase pre-existing landslide hazard potential on natural slopes.

*The MVP would cross about 51 miles of karst terrain.

*Construction of the MVP would disturb about 4,189 acres of soils that are classified as having the potential for severe water erosion.

*Construction of the MVP would disturb about 2,353 acres of prime farmland or farmland of statewide importance.

*The MVP would traverse about 118 miles of shallow bedrock, which might require use of jack hammers and blasting.

COMPANIES AND NGOs

CO31 – Blue Ridge Land Conservancy

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CO31-1
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*The DEIS contains no information on the potential impact of the MVP on water wells and springs within 150 feet of construction workspaces (500 feet in karst terrain).

*The MVP would result in 986 waterbody crossings and the EEP would result in 35 waterbody crossings. Of these crossings, 377 would be perennial waterbodies that could support fisheries. The MVP would cross 33 waterbodies classified as fisheries of special concern.

*Construction of the MVP and the EEP would impact a total of 39.3 acres of wetlands, including 10.3 acres of forested wetlands, 26.9 acres of emergent wetlands, and 2.1 acres of shrub-scrub wetlands. For the MVP, about 126 wetlands would be crossed by the pipeline, and 548 wetlands would be crossed by other project components (including access roads).

*The MVP would cross about 245 miles of forest, 0.3 mile of shrublands, and 3.6 miles of grasslands.

*“While forest would be allowed to regenerate in temporary workspaces, this would be a long-term impact because it would take many years for trees to mature. The 50-foot-wide operational easement for the pipelines would be kept clear of trees, which would represent a permanent impact. Construction of the MVP and the EEP would affect about 4,856 acres of upland forest. The construction and operation of aboveground facilities would also have permanent impacts on vegetation, as those sites would be converted to industrial use and maintained as gravel yards without vegetation. Operation of the aboveground facilities for the MVP and EEP combined would impact 25 acres of upland forest. The MVP would impact about 2,485 acres of contiguous interior forest ranging from Small Core (less than 250 acres) to Large Core (greater than 500 acres) forest areas in West Virginia. In Virginia, the MVP would impact about 938 acres of contiguous interior forest during construction classified as High to Outstanding quality. In considering the total acres of forest affected, the quality and use of forest for wildlife habitat, and the time required for full restoration in temporary workspaces, we conclude that the projects would have significant impacts on forest.”

*In Virginia, the MVP would pass through 17 high to outstanding ecological core areas, with permanent impacts on about 195 acres of forest within those core tracts.

*The MVP would impact two Important Bird Areas.

*The MVP would mostly cross forest (81 percent), followed by agricultural land (13 percent), and open land (5 percent). Pipeline construction would affect about 2,897 acres in West Virginia, and 1,551 acres in Virginia. The operational permanent easement for the MVP and EEP pipelines combined would cover a total of about 1,868 acres. Operation of the pipelines would affect 46 acres in Pennsylvania, 1,185 acres in West Virginia, and 639 acres in Virginia.

*Federally owned or managed recreational and special use areas that would be crossed by the MVP include the Weston and Gauley Bridge Turnpike, the Blue Ridge Parkway, and the Jefferson National Forest [about 3.4 miles, involving 80 acres for construction and 37.8 acres for

COMPANIES AND NGOs

CO31 – Blue Ridge Land Conservancy

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CO31-1
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"operation" – Table 1.3-1; this impact would increase if the "500-foot utility corridor" which is now proposed is implemented – and this would permit cutting of old growth forest]. Within the Jefferson National Forest, the pipeline would cross the Appalachian National Scenic Trail and the Brush Mountain Inventoried Roadless Area.

*Mountain Valley proposes to use 365 roads to access the construction right-of-way, including 247 existing roads, 27 new access roads, and 1 access road that is both existing and new. 883.1 acres would be used by MVP for access roads during construction, and 247.1 acres during operations. TABLE 2.3-1 "However, many existing roads are not suitable for construction traffic. Where necessary, the Applicants would improve existing roads, through widening and/or grading." "Mountain Valley would use 365 private roads to access the construction right-of-way. The majority of the private access roads (247) are existing. Virtually all of the existing private roads would require improvements." "Improvements to existing roads, or new access roads built for this project, would affect a total of about 883 acres during construction. Permanent use of access roads would utilize 247 acres."

*Construction of the MVP and the EEP would require the temporary use of a total of about 6,524 acres of land. This includes the pipeline construction right-of-way, ATWS, aboveground facilities, staging areas, contractor and storage yards (yards), cathodic protection areas, and new and improved access roads (see table 2.3-1). Operation of both the MVP and the EEP combined would utilize a total of about 2,179 acres. This includes the permanent pipeline easements, aboveground facilities, and permanent access roads. TABLE 2.3-1

CO31-2
The Conservancy is also concerned about four proposed rule changes prompted by the MVP by the US Forest Service to the Jefferson National Forest Plan. These proposals would:

- * Create a 500-foot "utility corridor" in the Jefferson National Forest (JFN) that would encourage co-location of additional large utility projects within the JNF.
- * Reduce standards for siltation and water quality within the JNF because steep slopes (30-60 degrees) on the pipeline corridor will make it impossible to protect water quality.
- * Allow the removal of old growth forest (trees over 100 years old) within the construction corridor.
- * Dramatically downgrade the scenic requirement for the Appalachian National Scenic Trail where the MVP would cross it.

Since the release of the DEIS by FERC on September 16, 2016, FERC has made literally thousands of poorly organized changes to the DEIS, and the actual proposed routing of the MVP itself remains up in the air, but the findings in the original DEIS, as outlined above, adequately demonstrate that the proposed MVP would have far more than a "limited adverse environmental impact." It is clear that the pipeline would have an adverse impact on the very lands that our Conservancy is charged with protecting, especially the viewsheds from our

CO31-2 See the responses to comments FA8-1 and FA10-1 regarding Amendments 1, 2, 3, and 4.

COMPANIES AND NGOs

CO31 – Blue Ridge Land Conservancy

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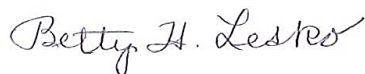
CO31-2
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homes and farms and businesses, from the Blue Ridge Parkway and the Appalachian National Scenic Trail, and from properties on which we hold conservation easements, which is why we continue to oppose it.

We join with other organizations in requesting that the present DEIS be withdrawn and replaced with a more thorough one, or that it be comprehensively revised, with a new 90-day period for public comment.

We would invite members of the Commission and representatives of FERC to come and tour our beautiful mountains with us so that we can show you the adverse impact that the MVP would have on us.

Sincerely,



Betty H. Lesko, President

cc: Joby Timm, Forest Supervisor, George Washington and Jefferson National Forests

Hon. Robert Goodlatte

Hon. Morgan Griffith

Hon. Robert Hurt

Mr. Thomas Garrett, Jr.

Hon. Mark Warner

Hon. Tim Kaine

The Roanoke Times

COMPANIES AND NGOs

CO32 – Save Monroe, Inc.

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Stephen M Miller, Peterstown, WV.
Save Monroe, Inc.
Rt. 1 Box 665-A
Peterstown, WV 24963

Joby Timm
Forest Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019
Email: jtimm@fs.fed.us

RE: Docket No. CP16-10-000 Mountain Valley Pipeline

December 18, 2016

Dear Mr. Timm:

I am writing on behalf of Save Monroe, Inc. in Monroe County, West Virginia and approximately 4,500 people who are provided water by the Red Sulphur Public Service District (RSPSD).

Save Monroe, Inc. strongly opposes Forest Plan amendment 1 for the creation of a 500-foot utility corridor along the proposed route of the Mountain Valley Pipeline (MVP) across Peters Mountain.

Approval of this corridor would likely result in multiple gas pipelines similar to the MVP crossing the national forest with large-scale excavations and denuded, permanently unsightly landscape. It would create long term erosion problems for the Jefferson National Forest and adjacent communities.

The protected watershed area of the Red Sulphur Public Service District (RSPSD) in adjacent Monroe County extends to the border of the Jefferson National Forest. The proposed route of the MVP crosses within feet of the most fragile part of the watershed area. Approval of a 500 foot corridor by the USFS will result in the same 500 foot corridor through the protected watershed area. This will likely result in catastrophic sedimentation and erosion problems for the RSPSD, as this area of Peters Mountain is categorized as a "high erosion area".

While the USFS is responsible for managing public land, there is also an ethical and moral responsibility to examine how decisions of the USFS will impact adjacent communities.

Approval of this amendment would result in a disaster for 4,500 people who depend on this watershed for clean water. I encourage you to reject

CO32-1

CO32-1

See the response to comment FA8-1 regarding Amendment 1.

COMPANIES AND NGOs

CO32 – Save Monroe, Inc.

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CO32-1 | this amendment and to also reject any pipeline corridor crossing the
cont'd | Jefferson National Forest.

Dr. Stephen Miller
President, Save Monroe, Inc.

Cc:

Jennifer Adams
Special Project Coordinator
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019
Email: jenniferpadams@fs.fed.us

Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission
Norman Bay, Chairman; Members of the Commission
RE: Docket No. CP16-10-000 Mountain Valley Pipeline

COMPANIES AND NGOs

CO33 – Save Monroe, Inc.

20161220-5014 FERC PDF (Unofficial) 12/19/2016 10:12:59 PM

Stephen M Miller, Peterstown, WV.
Save Monroe, Inc.
Rt. 1 Box 665-A
Peterstown, WV 24963

Joby Timm
Forest Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019
Email: jtimm@fs.fed.us

RE: Docket No. CP16-10-000 Mountain Valley Pipeline

December 18, 2016

Dear Mr. Timm:

CO33-1

I am writing on behalf of Save Monroe, Inc. in Monroe County, West Virginia and several thousand people who are provided water by the Red Sulphur Public Service District (RSPSD).

The current proposed route of the Mountain Valley Pipeline (MVP) travels through the protected watershed area of the Red Sulphur Public Service District, passing dangerously close to the Zone of Critical Concern before entering the Jefferson National Forest.

This is only a few hundred yards from the headwaters of Rich Creek. The Red Sulphur PSD is a surface water facility. Excavation for the MVP in this area has the potential to disrupt underground and surface water channels permanently. This can potentially compromise the water supply of approximately 4,500 people. This is nearly one third of the population of Monroe County. Included in this number are a nursing home, assisted living facility, two medical clinics, several day care facilities and three public schools.

In addition, the portion of Peters Mountain containing the RSPSD protected watershed area is interconnected with Peters Mountain water channels, karst and aquifers as far as north as Sweet Springs. This has been confirmed by an ongoing independent hydrogeological study currently in progress being performed by the West Virginia University Department of Geology. The majority of Monroe County residents depend on the Peters Mountain watershed area either directly or indirectly for water.

As you are aware, a portion of the Jefferson National Forest (JNF) area on Peters Mountain is a part of the watershed area of the RSPSD. The decision made by the USFS will significantly impact the neighboring RSPSD and thousands of citizens in Monroe County. The USFS has a moral and ethical obligation to consider how its decisions will affect adjacent

CO33-1

See the response to CO34-1 regarding hydrogeologic studies. The FS recognizes the concerns associated with the hydrogeologic resources, both known and unknown, on Peters Mountain. However, the FS does not feel it is appropriate for the agency to require an independent hydrogeologic study based on the small amount of NFS lands affected by the MVP project. The FS has made requests for additional hydrological and geological resource information and analyses and has had an independent third party contractor review the materials.

COMPANIES AND NGOs

CO33 – Save Monroe, Inc.

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CO33-1
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communities. Therefore, this is to request that the USFS require an independent comprehensive hydrogeological study before making a decision to grant a special permit to MVP. This is necessary to determine the potential impact of the MVP on the Jefferson National Forest and to determine its secondary impact on the RSPSD.

Two formal requests have been submitted to FERC by the Monroe County Commission for a comprehensive hydrogeological study. Requests have also been submitted by citizen community groups including Save Monroe, Inc., Preserve Monroe, the Indian Creek Watershed, the Border Conservancy and thousands of private individuals. These requests have been ignored by FERC. Therefore, it is imperative that the USFS take a strong stance and require this study.

Dr. Stephen Miller
President, Save Monroe, Inc.

Cc:

Jennifer Adams
Special Project Coordinator
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019
Email: jenniferpadams@fs.fed.us

Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission
Norman Bay, Chairman; Members of the Commission
RE: Docket No. CP16-10-000 Mountain Valley Pipeline

COMPANIES AND NGOs

CO34 – Save Monroe, Inc.

20161220-5015 FERC PDF (Unofficial) 12/19/2016 10:14:13 PM

Stephen M Miller, Peterstown, WV.
Save Monroe, Inc.
Rt. 1 Box 665-A
Peterstown, WV 24963

Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission
Norman Bay, Chairman; Members of the Commission
RE: Docket No. CP16-10-000 Mountain Valley Pipeline

December 18, 2016

Dear Ms. Bose:

CO34-1

I am writing on behalf of Save Monroe, Inc. in Monroe County, West Virginia and several thousand people who are provided water by the Red Sulphur Public Service District (RSPSD).

The current proposed route of the Mountain Valley Pipeline (MVP) travels through the protected watershed area of the Red Sulphur Public Service District, passing dangerously close to the Zone of Critical Concern north of the Peterstown area.

This is only a few hundred yards from the headwaters of Rich Creek. The Red Sulphur PSD is a surface water facility. Excavation for the MVP in this area has the potential to disrupt underground and surface water channels permanently. This can potentially compromise the water supply of over 4,000 people. This is nearly one third of the population of Monroe County. Included in this number are a nursing home, assisted living facility, two medical clinics, several day care facilities and three public schools.

Recently, the RSPSD water supply was contaminated with diesel runoff from an existing gas pipeline corridor which runs through the protected watershed area. This forced complete shutdown of the RSPSD water plant and necessitated Monroe County purchasing water from Giles County, VA for a period of time. During this time, all water tanks had to be completely drained and cleansed and water mains had to be flushed until residual contaminant was at a safer level. This caused significant stress to over 4,000 customers of the RSPSD and resulted in significant expense to Monroe County.

In addition, the portion of Peters Mountain containing the RSPSD protected watershed area is interconnected with Peters Mountain water channels, karst and aquifers as far as north as Sweet Springs. This has been confirmed by an ongoing independent hydrogeological study currently in progress being performed by the West Virginia University Department of Geology. The majority of Monroe County residents depend on the Peters Mountain watershed area either directly or indirectly for water.

CO34-1

The draft EIS discussed the Red Sulphur Public Service District in sections 1.4, 4.3.2.1, and 4.3.2.2. While the FERC did not conduct a full independent hydrogeologic study, we asked a number of questions (and reviewed the responses) that would be normally included in such a report, including Mountain Valley's submittal of the fracture trace analysis. Additional information and analyses has been included in the final EIS.

COMPANIES AND NGOs

CO34 – Save Monroe, Inc.

20161220-5015 FERC PDF (Unofficial) 12/19/2016 10:14:13 PM

CO34-1
cont'd

Therefore, an independent comprehensive hydrogeological study on this area is essential and necessary prior to FERC permitting MVP to use this route. If this route is deemed to pose a significant risk to the RSPSD public water supply or to the Peters Mountain watershed, an alternate solution must be required.

Two formal requests have been submitted to FERC by the Monroe County Commission for a comprehensive hydrogeological study. Requests have also been submitted by citizen community groups including Save Monroe, Inc., Preserve Monroe, the Indian Creek Watershed, the Border Conservancy and thousands of private individuals.

The Draft Environmental Impact Statement (DEIS) fails to address the issue of a hydrogeological study. No hydrogeological study has been done or planned. No plan has been made to ensure that this route will not compromise the RSPSD public water supply or the Peters Mountain watershed. Thus, there is insufficient data in the DEIS to allow permitting of the MVP along its current proposed route through the protected watershed area of the RSPSD.

This is to request that a thorough, comprehensive hydrogeological study on the protected watershed area of the RSPSD be performed to ensure public health and safety and a revised DEIS be produced containing this data.

Dr. Stephen Miller
President, Save Monroe, Inc.

COMPANIES AND NGOs

CO35 – The Nature Conservancy

20161219-5368 FERC PDF (Unofficial) 12/19/2016 3:54:39 PM



The Nature Conservancy in Virginia
490 Westfield Road
Charlottesville, VA 23413

tel (434) 295-6106
nature.org

December 19, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC
20426

RE: Docket Nos. CP16-10-000 and CP16-13-000; Draft Environmental Impact Statement for the Mountain Valley Project and Equitrans Expansion Project.

Dear Ms. Bose:

CO35-1

The Nature Conservancy (the Conservancy), appreciates the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) that has been prepared for the Mountain Valley Pipeline (MVP).

The Nature Conservancy’s Mission and Investment in the Central Appalachian Region

The mission of The Nature Conservancy is to conserve the lands and waters on which all life depends. The Conservancy is a leading conservation organization working in all 50 states and more than 35 countries. We have helped conserve nearly 15 million acres of land in the United States and more than 118 million acres with local partner organizations globally.

The proposed route of the MVP crosses through the Central Appalachian Whole System Project, which is an area of deep investment for The Nature Conservancy. Within this region, the Conservancy has worked with public agencies, corporations, private landowners, and local communities to undertake land protection, management, and restoration actions across public and private lands. We have worked with others to rigorously develop and implement strategies to protect the best large, intact habitats that will continue to support a diversity of species in the face of a changing landscape and a changing climate.

Background on Proposed MVP Impacts to Conservancy Preserves and Easements

The proposed Alternative 1 shown in the December 2014 Draft Resource Report 10 intersected the Conservancy’s Blake Preserve and a conservation easement held by the Conservancy within its Bottom Creek Gorge Conservation Site (the Poor Mountain easement).

In October 2015, MVP included the Poor Mountain East Variation in its final filing for Resource

CO35-1

We analyze, in section 3 of the final EIS, a minor route alternative on Poor Mountain that would avoid the TNC conservation easement. Section 4.8 of the final EIS was revised accordingly.

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CO35-1
cont'd

Report 10. This Route Variation significantly increased the impact of the pipeline on the Poor Mountain easement, effectively bisecting the property. The final filed version of Resource Report 10 states:

“Because the variation would be closer to Spring Hollow Reservoir and Camp Roanoke, MVP does not consider the Poor Mountain East Variation environmentally preferable to the corresponding segment of the Proposed Route.”

We assume this to be a typo as the Poor Mountain East Variation was incorporated into the proposed route.

The preferred alternative filed in October 2016 would:

- 1) Bisect the Poor Mountain easement, which is part of a 5,489-acre complex of preserves and easements established and designed by the Conservancy to protect the lands surrounding Bottom Creek, a stream in Montgomery and Roanoke Counties, VA, listed by the Virginia Department of Environmental Quality (VDEQ) as an Exceptional State Water; and
- 2) Avoid, by integrating the Mt. Tabor Route Alternative, the Conservancy’s Blake Preserve, over which the Virginia Department of Conservation and Recreation (VDCR) also holds a conservation easement.

In previous correspondence on this docket, the Conservancy has requested that the recommended alternative for the Mountain Valley Pipeline avoid all preserves, easements, and Critical Habitats for conservation. The preferred alternative addresses some of these concerns, but intensifies others. In particular, we are uneasy with the lack of attention and inaccuracy regarding the treatment of the Poor Mountain easement in the DEIS. Also, while we are pleased to see that the Route Alternatives adopted in October 2016 avoid impacts to the Conservancy’s Blake Preserve and easements held by the Virginia Department of Conservation and the Virginia Outdoors Foundation, we are seriously concerned that the proposed alternative creates additional impacts that cannot be mitigated.

Rationale for Avoidance of Preserves and Conservation Easements

Conservation easements have a clear public benefit, documented in many state and federal statutes and regulations. The donation of perpetual conservation easements has been incentivized both by the Commonwealth of Virginia and the federal government in the form of tax benefits to the donor of the easement.

Conservation easements are individually tailored to meet conservation objectives and the needs of the landowner. A conservation easement can be designed to accomplish specific objectives, such as protection of water quality or wildlife habitat; or an easement can be designed more broadly, to protect farmland, open space, views, or land that buffers more sensitive core conservation areas, all of which can offer significant biodiversity conservation benefits, as well as benefits to people. These benefits include protection of water quality; preservation of open space, farmland, ranchland, and timberland; and maintenance of rural community character and landscapes for tourism.

Specific Comments on Poor Mountain Easement

CO35-2

The Conservancy has determined that a pipeline crossing this property would violate Sections 2.1 and 2.2 of the Poor Mountain easement (Attachment 1) and would have an adverse impact on the conservation values that the Conservation Easement is designed to protect.

The Conservancy is obligated to uphold the terms of the Conservation Easement, which prohibit activities necessary for the emplacement of a pipeline. Consequently, the Conservancy must oppose the placement of the pipeline through this property.

As noted above, the Poor Mountain easement is one of ten tracts comprising 5,489-acres, which include the Conservancy's nearby 1,657-acre Bottom Creek Gorge Preserve. Together, this patchwork of fee ownership and permanent conservation easement properties represents decades of conservation actions taken by the Conservancy since the mid-1980s to protect Bottom Creek and the gorge through which it flows. Bottom Creek supports a number of rare fish species, including the orangefin madtom (*Noturus gilberti*), bigeye jumprock (*Moxostoma valenciennium*), riverweed darter (*Etheostoma podostemone*), and the Roanoke darter (*Percina roanoka*). The creek has a very high species richness, supporting 10% of all fish species known from Virginia, including native brook trout.

As noted above, Bottom Creek is listed as an Exceptional State Water, or Tier III stream. According to the VDEQ, the Exceptional State Waters Program identifies and protects high quality waters for the benefit and enjoyment of future generations by prohibiting new or increased point source discharges to the designated waterbody. The equivalent regulatory terms are "Outstanding National Resource Waters" for the EPA and "Exceptional State Waters" for Virginia. The designation of a waterbody as an "Exceptional State Water" is a regulatory amendment to the Antidegradation Policy section of Virginia's Water Quality Standards.

The Conservancy sought the easement over the Poor Mountain tract to protect the headwaters of Bottom Creek. The easement was designed to ensure that the property will be retained in its natural, scenic, and forested condition; to protect any rare plants, animals, or plant communities on the property; and to prevent any use that will significantly impair or interfere with the property's conservation values or interests.

The Conservation Easement expressly prohibits the construction or placement of utility lines on or above the property. Section 2.1 of the easement states that "there shall be no constructing or placing of any...antenna, utility pole, tower, conduit, line...on or above the Protected Property". Section 2.2 states that "there shall be no ditching, draining, diking, filling, excavating, dredging, mining or drilling, removal of topsoil, sand, gravel, rock, minerals or other materials, nor any building of roads or change in the topography or surface hydrology of the Protected Property in any manner...". This language prohibits any excavation on the property other than excavation related to the construction of three allowed single family homes and activities related to the construction, use, and maintenance of logging roads related to timber harvesting under an approved forest management plan. Furthermore, the conservation easement prohibits the removal, harvesting, destruction, or cutting of trees, shrubs, or plants without a forest management plan; any activity that would be detrimental to water purity, such

CO35-2

See response to CO35-1. As noted in section 4.3 of the EIS, the proposed MVP pipeline route would cross Bottom Creek outside of the area where it is designed as Tier III Exception State Waters.

COMPANIES AND NGOs

CO35 – The Nature Conservancy

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CO35-2
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as the use of biocides; and changing of topography through the placement of soil or other material.

In conversations with MVP, we were informed that the rationale for this Variation was to avoid the watershed of the Spring Hollow Reservoir. The Conservancy of course understands the need for avoidance of drinking water supplies, and supports this objective. At the same time, we believe that it is possible to avoid both the reservoir and the Poor Mountain easement (Attachment 2).

Detailed Comments on DEIS

CO35-3

- **4.4.2.4 Special Areas.** This section details multiple conservation areas including a conservation easement held by the New River Conservancy (NRC) and the VDCR easement over the (Nature) Conservancy's Blake preserve, but omits reference to the Conservancy's Poor Mountain easement. The Poor Mountain easement should be included in this section.
- **4.8.2.4 Recreation and Special Interest Areas.**
 - The Conservancy's easement is listed under Non-Governmental Organization-Managed and Other Recreational and Special Use Area. The Conservancy believes this to be inappropriate. Private property subject to a conservation easement remains in private ownership. In Virginia, properties subject to conservation easements are not open to public access unless otherwise specified in the easement.
 - The text states "*The proposed route of the MVP pipeline would cross one NRC-managed property for approximately 7,025 feet*". This is a typo that should be corrected.
 - The text further states "*Mountain Valley stated that it originally proposed to locate the pipeline adjacent to an existing powerline, but after communications with TNC the route was shifted south to lessen impacts on environmental resources.*" The Conservancy is unaware of any changes MVP has made to the alignment of the pipeline across our property, and have no record of such communication. In addition, the alignment data we received from MVP in October 2015 is identical to the current alignment filed in October 2016.

CO35-3

Section 4.8 of the final EIS has been updated as appropriate.

CO35-4

- **Table 3.5.3-1 Status of Minor Route Variations Reported by Stakeholders that Are As Yet Unresolved.** This table, as revised on October 20, 2016, includes the following text.

CO35-4

The subject table in the final EIS has been updated as appropriate.

FERC ID / Accession Number	Parcel Number	MP	Summary of Issues	Mountain Valley's Response / Current Status
20150616-5100;	VA-RO-5149, VA-RO-4118	239.3, 242.5	Landowner requested a re-route to avoid property which has a conservation easement and to minimize impacts of sedimentation related to construction.	Mountain Valley is currently not allowed to survey this property, but once access is allowed it will coordinate with the property owner to better ascertain re-route alternatives or other measures. No change

COMPANIES AND NGOs

CO35 – The Nature Conservancy

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CO35-4
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					of tract status.
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- In the "Summary of Issues" cell, while these comments may also be those of the fee landowner, they are certainly those of the Conservancy and should be attributed as such.
- In the "Mountain Valley's Response / Current Status" cell, we note that the Conservancy is not the fee simple landowner and therefore does not have the right to grant access to the property for survey by MVP.
- We find Mountain Valley's response to be inadequate. It is an established fact that the property is a conservation easement. On the ground surveys are not necessary to determine the conservation purpose of this property, nor to examine the impacts of the proposed project on the intact forests and watershed of Bottom Creek and to engage seriously in an effort to avoid and minimize them.

CO35-5

Specific Comments on Blake Preserve

As noted above, the proposed alternative filed on October 20, 2016 would avoid the Blake Preserve and several easements held by the Virginia Outdoors Foundation. This is consistent with the Conservancy's request that FERC ensure the project avoid all preserves and conservation easements, and we appreciate this effort. We are concerned, however, that the Mt. Tabor Variation creates impacts to very significant biological resources harbored in the Old Mill Conservation Site (Attachment 3). Given the nature of cave and karst systems, impacts such as alteration of water flow, nutrient regime or sediment regime cannot be remediated once they occur. The Conservancy defers to the highly qualified expertise of the staff of the Virginia Department of Conservation and Recreation, Division of Natural Heritage, in its assessment of the significance of these impacts and incorporates their stated concerns on the record here, by reference.

Specific Comment on DEIS

- **4.4.2.4 Special Areas.** This section details multiple conservation areas including a conservation easement held by the NRC and the VDCR easement over the Conservancy's Blake Preserve, but fails to state explicitly that the Conservancy is the fee simple owner of the Blake Preserve. The Conservancy's legal interest in this property should be clearly stated.

CO35-5

The Mount Tabor Variation was adopted by Mountain Valley in October 2016, to reduce impacts on the Old Mill Conservation Site and the Mount Tabor Sinkhole Plain. Section 4.8 of the final EIS has been updated as appropriate. In addition, other alternative routes that may avoid or reduce impacts on VADCR-designated conservation sites are explored in section 3.

COMPANIES AND NGOs

CO35 – The Nature Conservancy

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CO35-5
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Conclusions and Recommendations

The DEIS for the proposed Mountain Valley Pipeline does not adequately consider the impact the project would have on the Conservancy's Poor Mountain Easement. Given the significance of Bottom Creek, the public benefit of the easement, and the incompatibility of the project with the easement terms, **the Conservancy requests that FERC direct the applicant to develop a route variation that fully avoids this property.**

Thank you for the opportunity to provide comments to FERC on this important issue. If you have any questions about these comments, please contact Judy Dunscomb, Senior Conservation Scientist at jdunscomb@tnc.org or (434) 951-0573.

Sincerely,



William A. Kittrell
Acting Virginia Executive Director

Enclosures

Cc: Nels C. Johnson, N. American Energy by Design Project Director, The Nature Conservancy
Jason Bullock, Director, VA Dept. of Conservation and Recreation, Division of Natural Heritage

COMPANIES AND NGOs

CO36 – Green Mountain Club

20161219-5370 FERC PDF (Unofficial) 12/19/2016 3:56:18 PM

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426
eFiled – December 20, 2016

Re: Proposed Mountain Valley Pipeline Comments: Docket No. CP16-10-000 - 81 FR 71041

Ms. Bose,

CO36-1

I am writing on behalf of the Green Mountain Club regarding the proposed Mountain Valley Pipeline project. The Green Mountain Club was formed in 1910 and is a non-profit organization that maintains, protects, and defends the Long Trail System in Vermont, including 144 miles of the Appalachian National Scenic Trail.

The National Trails System consists of 11 National Scenic Trails and 19 National Historic Trails designated by Congress “in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.” National scenic trails are “extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.”

The Appalachian National Scenic Trail is a resource beloved by generations and visited by over three million people annually. It represents a public investment of hundreds of millions of dollars and requires thoughtful partnership to protect the irreplaceable resources that is the Trail.

FERC has proposed Forest Plan amendments that would allow activities that would substantially interfere with the nature and purposes and impair the resources and values of the Appalachian National Scenic Trail (ANST). These proposed Forest Plan amendments represent a significant threat to all National Scenic and Historic Trails on lands managed by the USDA Forest Service because the current protections afforded the ANST in Forest Plans serve as a model for Forest Planning nationwide. Numerous energy transmission projects have crossed National Scenic and Historic Trails without requiring amendments to the respective Forest Plans, which has been achieved through thoughtful planning, impact analysis and partnership.

The FERC DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the ANST, which the public has spent millions of dollars to protect.

Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the standard for scenic integrity along the ANST. This amendment also allows 5-10 years following completion of the project for this SIO of “Moderate” to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below “Moderate” for up to a decade.

CO36-1

See the response to comment FA10-1 regarding Amendment 4.

COMPANIES AND NGOs

CO36 – Green Mountain Club

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CO36-1
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This would be substantial interference to the nature and purposes and impair the resources and values of the ANST.

Amending the plan in the manner proposed would negatively impact other Forest Plan prescription areas and require the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the both sides of the ANST.

REQUESTED ACTIONS:

- All Forest Plan standards not met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that “the Forest Service retains decision making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a).
- No Amendment to the Forest Plan should be developed that lowers the Scenic Integrity Objectives of the Appalachian National Scenic Trail.
- The National Park Service is the responsible administering agency for the ANST and therefore must concur with the required substantial interference determination for this project (16 U.S.C. 1246(c)).

Thank you for accepting and considering these comments.

Sincerely,

Mike DeBonis
Executive Director
Green Mountain Club, A.T. Club

COMPANIES AND NGOs

CO37 – Preserve Bent Mountain

20161220-5042 FERC PDF (Unofficial) 12/19/2016 10:41:19 PM

Preserve Bent Mountain

December 19, 2017

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

RE: Docket Number CP16-10-000; Mountain Valley Pipeline

Dear Ms. Bose,

CO37-1 Please find enclosed a statement by Preserve Bent Mountain regarding Cultural Attachment. The DEIS for Mountain Valley Pipeline does not include information sufficient for a full and complete analysis of cultural attachment in Bent Mountain, Poor Mountain and surrounding areas.

We ask that FERC specialists consider the attached information in support of a REVISED DEIS which should include expert inquiry and analysis of the Cultural Attachment of our community. Consistent with the enclosed document, we adopt and incorporate the expert report on Cultural Attachment by James Kent Associates on behalf of Preserve Craig, Inc.

Thank you for your considerate attention in this matter.

Sincerely,

Rebecca Dameron /s/
Roberta Bondurant /s/
Intervenors for Preserve Bent Mountain

www.PreserveRoanoke.org

CO37-1

Cultural attachment is discussed in section 4.10.9 of the final EIS; including our assessment of the James Kent Associates report. In section 4.10.7.1 we also consider if cultural attachment to land can be applied to the Bent Mountain Rural Historic District.

COMPANIES AND NGOs
CO38 – Blue Ridge Parkway Foundation



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President, Leading the Way, LLC

Dec. 7, 2016
 Federal Energy Regulatory Commission
 C/o Kimberly Bose, Secretary
 888First Street N. E. Room 1A
 Washington, D. C. 20426

Re: Docket Number CP16-10-000
 Proposed Mountain Valley Pipeline

Dear Members of the Commission:

CO
 38-1

Attached is the position of the Blue Ridge Parkway Foundation opposing the proposed Mountain Valley Pipeline. As you can see, the Foundation's opposition is predicated upon our responsibility to enhance, protect and preserve the Blue Ridge Parkway. Scars left permanently by pipeline construction and clear-cut easements between two connecting federal parks — Shenandoah National Park and Great Smoky Mountains National Park — will degrade the visitor experience and damage the unparalleled beauty found along the way.

If you have any questions please contact me at 540-593-2048, or Foundation Board Chair Emeritus Broadus Fitzpatrick at 540-344-3680.

Council of Advisors

- Becky Anderson
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- Kent Tarbutton
- Dan Walls
- Dr. Anne Whitman
- Richard 'Sack' Williams

Thank you for your consideration.

Jack Betts
 Board Chair
 Blue Ridge Parkway Foundation

- cc: Joby Timm, Forest Supervisor, George Washington and Jefferson National Forests
- Hon. Robert Goodlatte
- Hon. Morgan Griffith
- Hon. Robert Hurt
- Mr. Thomas Garrett, Jr.
- Hon. Mark Warner
- Hon. Tim Kaine
- The Roanoke Times

CO38-1

The commentor's statements are noted.

COMPANIES AND NGOs
CO39 – National Parks Conservation Association

20161221-5002 FERC PDF (Unofficial) 12/20/2016 6:00:52 PM

Pamela E Goddard, Washington, DC.
December 20, 2016

Kimberly D, Bose
Federal Energy Regulatory Commission

Dear Secretary Bose:

CO 39-1 I am writing on behalf of the National Parks Conservation Association (NPCA) which since 1919 has been dedicated to the preservation and enhancement of America’s national parks for present and future generations. NPCA has more than one million members and supporters who care deeply about our more than 400 national parks. I am writing to provide our comments on the Draft Environmental Impact Statement (DEIS) for the proposed Mountain Valley Pipeline (MVP).

We are deeply concerned with the lack of analysis done in the DEIS on several critical issues and how this proposed pipeline would negatively impact the Appalachian National Scenic Trail (ANST) and the Blue Ridge Parkway (BLRI), units of our National Park System. The Blue Ridge Parkway was added to the National Park System in 1936 and is visited by over 15 million people each year, making it the most visited national park. The Appalachian National Scenic Trail is the longest hiking-only footpath in the world, enjoyed by over three million people yearly. The ANST became a unit of the National Park System in 1968 and its first National Scenic Trail.

Lack of Visual Impact Analysis

Although the U.S. Forest Service (USFS) Field Review found that “the proposed ANST crossing will result in significant visual impacts to users of the ANST,” the DEIS fails to address visual impacts this proposed project would have on the ANST and the BLRI. And previous comments submitted but the USFS on visual impacts have yet to be addressed. This includes analyzing visual impacts from a variety of viewpoints; including Key Observation Points, leaf-off assessments, and developing visual simulations for all route alternatives. In addition, the specific location of the AT has not been correctly included on project maps, making accurate impact analysis impossible. Despite this complete lack of data, the DEIS states that the visual impacts would be “none”.

CO 39-2 Lack of Cumulative Impacts Analysis

Although FERC is well aware of multiple proposed projects in the project area, including up to five proposed pipelines, there has been no assessment of the cumulative effects of these multiple actions. FERC should not limit its review to this project alone. FERC knows that both the Mountain Valley Pipeline and the Atlantic Coast Pipeline will cross the AT and the BLRI. At a minimum, FERC should complete a cumulative impact analysis of both the MVP and the ACP. FERC arbitrarily limits the geographic scope of the DEIS to 100 miles, further limiting a proper assessment of cumulative impacts. Both the ANST and the BLRI traverse

CO39-1 See the responses to FA11-4 and FA11-5 regarding the ANST. See the response to FA11-10 regarding the BRP. We have incorporated newly created visual simulations for the ANST and BRP into the final EIS.

CO39-2 Cumulative impacts in general are discussed in section 4.13 of the EIS and in section 4.13.2.5 for the ANST and BRP. We conclude that our geographic scope is appropriate for the analysis of cumulative impacts.

COMPANIES AND NGOs
CO39 – National Parks Conservation Association

20161221-5002 FERC PDF (Unofficial) 12/20/2016 6:00:52 PM

CO 39-2 cont'd | hundreds of miles and visitors typically travel hundreds of miles during each visit, making the 100-mile scope irrelevant to cumulative impacts to the visitor experience. There has been no assessment of cumulative impacts to wildlife due to habitat fragmentation. There is no assessment of indirect impacts or the risk of further industrialization of the landscape if this project moves forward. In light of the multiple proposals and multiple impacts, FERC must conduct cumulative impacts analysis. FERC should also look closely at co-location of these projects, should they go forward, to further limit cumulative impacts.

CO 39-3 | Lack of Analysis of Impacts to Water and Air Quality
 The proposed route would cross three major aquifers and come within one tenth of a mile of two public water supplies and numerous private drinking wells. It would cross 377 perennial waters in Pennsylvania, Virginia, and West Virginia. Three large compressor stations have been proposed to move gas along the route in West Virginia and a fourth may be sited in Virginia. These compressors are expected to violate local air quality standards and will require permitting by the VA Department of Environmental Quality. Again there has been no adequate analysis of these potential impacts.

CO 39-4 | Lack of Analysis of Economic Impacts
 Both the ANST and the BLRI host millions of visitors each year. Together these parks contribute hundreds of millions of dollars to their regional economies and support tens of thousands of jobs. Millions of dollars have been invested to protect the parks and to build regional tourism in the gateway and adjacent communities. Yet no analysis of the potential economic impacts to the area should this project proceed has been done. There are peer-reviewed methodologies to analyze economic impacts. FERC should require these studies to determine impacts.

CO 39-5 | Weakening Current US Forest Service Policy
 A most troubling aspect of the DEIS are the proposals to amend the Jefferson National Forest Plan, the foundational document for forest management. One proposed amendment would downgrade the standard for scenic integrity along the AT by changing the Scenic Integrity Objective. Another would create an approved utility corridor leading up to the AT. A 3.4 mile section of the proposed pipeline would run through Jefferson National Forest, requiring the clearing of 125-foot wide corridor of forest lands currently protected by the USFS Roadless Area Conservation Rule. Not only are these proposed changes damaging to the resource directly, they would institute terrible precedents for other protected areas and lead to further industrialization of our national forests and parks.
 Next Requested Steps
 Given the numerous omissions in the DEIS, we respectfully request that FERC withdraw the DEIS until it is ready for public comment. Numerous studies, outlined above, must be conducted to truly show the many impacts this proposal would have on our national parks and forests. FERC should

CO39-3 | Impacts to water resources and air quality are discussed in sections 4.3 and 4.11.1, respectively. No compressor station is proposed in Virginia.

CO39-4 | Socioeconomics and tourism are discussed in section 4.9 of the EIS.

CO39-5 | See the response to comments FA8-1 and FA10-1 regarding the FS' proposed amendments. See the response to FA11-2 regarding the need for a revised draft EIS. The FERC staff addressed comments on the draft in the final EIS.

COMPANIES AND NGOs

CO39 – National Parks Conservation Association

20161221-5002 FERC PDF (Unofficial) 12/20/2016 6:00:52 PM

CO
39-5
cont'd

revise their plan to conduct the missing but necessary studies, including how to avoid impacts to the resources. When a new and complete draft plan is ready, it should be released to the public with a minimum of 90 days for the public to submit comments.

Thank you for your consideration.

Pamela Goddard
NPCA

COMPANIES AND NGOs
CO40 – Friends of the Second Creek, Inc.

20161220-0041 FERC PDF (Unofficial) 12/19/2016



Friends of the Second Creek, Inc.
1331 Second Creek Road
Second Creek, WV 24974
304.645.4229

ORIGINAL

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SECRETARY OF THE
FEDERAL ENERGY REGULATORY COMMISSION
2016 DEC 19 P 4:23
FEDERAL ENERGY REGULATORY COMMISSION

December 11, 2016

Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First St. NE, Room 1A
Washington, DC 20426

Docket No. CP16-10 Mountain Valley Pipeline

Dear Ms. Bose:

CO
40-1

This letter is being submitted to the Federal Energy Regulatory Commission (FERC) to document our official opposition to the Mountain Valley Pipeline (MVP). This 42" pipeline is being proposed by the corporation EQT/Next Era to cross through West Virginia and Virginia including Monroe and Greenbrier Counties, WV where we live.

Friends of The Second Creek, Inc. (FOTSC) is a 501(c)(3) non profit organization dedicated to the preservation of our clean water and precious history in and around Second Creek which flows in both Monroe and Greenbrier Counties, WV. FOTSC, staffed fully by volunteers, is funded by individual donations and gifts as well as by grants from WV Department of Environmental Protection (WVDEP).

FOTSC is serious in our efforts to protect our waters' quality and quantity. After reading some of the information about MVP it is our consensus this 42" pipeline has the unquestionable potential to forever harm our local waters. Over the years WVDEP has provided not only financial support to FOTSC but more importantly has instilled in our members the many ways people must protect our water and local environment. We are taught to step into the water; take water samples; catch and count and release macroinvertebrates; and become aware of potential hazards and threats to our waters' health. **MVP is a direct and immediate threat to FOTSC's mission for clean water.**

Second Creek begins on Peters Mountain, and although it is not located on MVP's current route, our water is threatened. Recent studies indicate that **ALL water on Peters Mountain is connected.** Blasting and construction of MVP, which is slated to cross Peters Mountain, could very well disrupt the water flow of all its springs. In fact 67% of Monroe County's incorporated municipalities have their water sources on Peters Mountain as do 75% of Monroe's Public

CO40-1

Water resources are discussed in section 4.3 of the EIS.

COMPANIES AND NGOs

CO40 – Friends of the Second Creek, Inc.

20161220-0041 FERC PDF (Unofficial) 12/19/2016

CO 40-1 cont'd | Service Districts. The private springs and wells from which a vast number of local homes and businesses obtain their water are directly threatened by contamination and/or permanent flow disruption if MVP is permitted to proceed.

CO 40-2 | **MVP threatens the documentation of our history, a critical factor in preserving our local culture.** FOTSC is actively documenting the history in our Second Creek watershed. Although this endeavor is worthwhile and rewarding, it is a slow and tedious process. The history in Monroe County is strongly connected by water, as is well documented in the numerous early 19th century resorts centered around healing springs. Along its 26 mile course, Second Creek had many water-powered mills, including grain and woolen mills, their products served local communities and resorts. These resorts were used by the wealthy populace when it was necessary to escape unhealthy conditions festering in many Southern cities, as well as providing places to socialize and strengthen political and business dealings.

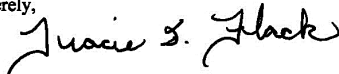
MVP threatens to blast, bulldoze and industrialize our historical lands, forever destroying sites that were once used by indigenous people. US Rt 219, now named Seneca Trail, bisects Monroe County north to south and was once the trade and hunting route used by Native Americans. Unknown locations protect the many sacred sites, villages and other trails which were certainly used for thousands of years before white man landed on this continent. Most of Monroe County's early history has yet to be documented. The proposed construction of MVP would run roughshod over multiple sites, this before any true survey process is completed and before any archeological documentation could occur.

The Draft Environmental Impact Statement (DEIS) is a shoddy and incomplete document. It certainly does not fully address important environmental and cultural issues in our area. The application's extremely short time frame, with the favored method for "public involvement" clustered around holidays, is a sham. Many people still think MVP means Most Valuable Player, and FERC and FRACK are simply obscene and vulgar words.

The FERC's application process requires the general public to generate vast amounts of data and statistics. Currently FERC's court has made corporations "the worthy party" and we-the-people must defend our rights to clean water and air and personal property. Furthermore, FERC's process requires the people to GIVE newly researched data to EQT/First Energy at NO CHARGE. The majority of the public-submitted data is of a confidential nature, mandated to be on public display, nonetheless, it is given freely to the corporations. The entire FERC process puts people under severe and unwarranted financial and emotional duress. Well, it is downright unAmerican.

The FERC must reject the application for MVP. Action to the contrary will forever meld our United States government as an accomplice in the corporate takeover of our land, our water, our property and our very way of life.

Sincerely,



Tracie Shrader Flack
FOTSC President

CO40-2

Historic and archaeological resources are discussed in section 4.10 of the EIS. See the response to FA11-2 regarding the adequacy of the draft EIS.

COMPANIES AND NGOs

CO41 – American Hiking Society

20161220-5309 FERC PDF (Unofficial) 12/20/2016 3:20:25 PM



Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Negative Impact to the Congressionally designated National Trails System from potential forest plan amendments associated with the proposed mountain valley pipeline. Docket No. CP16-10-000

Ms. Bose,

CO
41-1

I am writing today in regards to the proposed Forest Plan (FLRMP) amendments that would allow the Mountain Valley Pipeline (MVP) to impact the outdoor recreational experience for thousands of hikers on the Appalachian National Scenic Trail (ANST). American Hiking Society seeks to speak on behalf of the millions of Americans who hike – many of them on this iconic trail that travels near some of our nation’s most densely populated areas.

That the DEIS would require amendments to the Jefferson NF Plan is of particular concern to us as it seems to break precedent and could result in unintended consequences for other trails across our nation as well as on the ANST itself. We strongly encourage FERC to require that any aspect of the proposed project that does not meet any Forest Plan standard be identified in a supplemental DEIS and the public be afforded a minimum of 90 days to assess and comment.

CO
41-2

American Hiking Society is also troubled that any crossing could lower the Scenic Integrity Objectives (SIO) of the ANST considerably (proposed Amendment 4). These Objectives were selected and approved after significant thought, input, and review and should not be done away with for mere convenience or without a thorough review of placement alternatives. The Appalachian Trail Conservancy states that there exist within the surrounding area other opportunities to collocate the pipeline. Such areas include a separate natural gas pipeline, road crossings, and an electricity transmission line.

It is incumbent upon FERC and the USDA Forest Service to also understand the economic impact of lowering the SIO. Hiking is immensely popular in our country (30 million Americans hiked in 2015¹) and is a significant part of the \$81 billion Americans spend on trail recreation each year². These trails create jobs that cannot be shipped overseas and are vital to the many small communities that exist along the ANST. Degrading the hiking experience along the ANST

¹ 2015 Outdoor Recreation Participation. (2016). Outdoor Participation Report 2015.

² The Outdoor Recreation Economy, 18-18. (2012).

CO41-1

See the response to comment FA10-1 regarding Amendment 4.

CO41-2

Visual resources relating to the ANST are discussed in section 4.8 of the EIS.

COMPANIES AND NGOs

CO41 – American Hiking Society

20161220-5309 FERC PDF (Unofficial) 12/20/2016 3:20:25 PM

CO 41-2 cont'd would no doubt impact where and how numerous families choose to spend their free time and their money.

AHS recognizes and appreciates our nation's need for efficient energy transmission but with a little effort and consideration, as well as consulting with the Appalachian Trail Conservancy, we are sure routes can be found that have little impact on such popular public outdoor resources.

Sincerely,



Peter Olsen
American Hiking Society
Interim Executive Director

Cc:
Wendy Janssen
National Park Service
Appalachian National Scenic Trail Park Superintendent

Mike Caldwell
National Park Service
Northeast Regional Director

Job Timm
George Washington and Jefferson National Forests
Forest Supervisor

Clyde Thompson
Monongahela National Forest
Forest Supervisor

Tony Tooke
USFS Region 8
Regional Forester

Jennifer Adams
George Washington and Jefferson National Forests
Special Projects Coordinator

Karen Mouritsen
Bureau of Land Management
Eastern States Director

8605 Second Avenue, Silver Spring, MD 20910 | 301-565-6704 | AmericanHiking.org

COMPANIES AND NGOs
CO42 – Georgia Appalachian Trail Club

20161220-5262 FERC PDF (Unofficial) 12/20/2016 2:41:34 PM

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426
eFiled – December 20, 2016

Re: Proposed Mountain Valley Pipeline Comments: Docket No. CP16-10-000 - 81 FR 71041

Ms. Bose,

CO
42-1

The National Trails System consists of 11 National Scenic Trails and 19 National Historic Trails designated by Congress “in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.” National scenic trails are “extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.” One of our nation’s greatest treasures are our protected public lands and the national scenic trails that are within them. Tens of thousands use these trails each year as a way to mentally and physically recharge themselves. This ability to escape from our electronically connected world is vital to a healthy society. Anything that threatens this experience should be avoided and if unavoidable all measures should be taken to protect this experience by following the standards that have already been established through Forest Plans.

FERC has proposed Forest Plan amendments that would allow activities that would substantially interfere with the nature and purposes and impair the resources and values of the Appalachian National Scenic Trail (ANST). These proposed Forest Plan amendments represent a significant threat to all National Scenic and Historic Trails on lands managed by the USDA Forest Service because the current protections afforded the ANST in Forest Plans serve as a model for Forest Planning nationwide. Numerous energy transmission projects have crossed National Scenic and Historic Trails without requiring amendments to the respective Forest Plans, which has been achieved through thoughtful planning, impact analysis and partnership. Inadequate planning has resulted in a poor route proposal for the MVP project that does not adequately protect visual quality leading to substantial impacts and degradation of the nature and purposes of the ANST.

The FERC DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the ANST, which the public has spent millions of dollars to protect. In Georgia the USDA Forest Service has just concluded a public comment period to see what we want and need out of our public landscapes. If these amendments are allowed to pass it would undermine the goals of this process by all user groups including the efforts by our local USDA Forest Service partners. To lose the confidence that this work could simply be nullified due to improper planning and analysis would erode the partnerships that have been formed. This potential action in Virginia will set an unhealthy precedent for all future protection and management of the ANST on USDA Forest Service lands.

CO42-1

See the response to comment FA10-1 regarding Amendment 4.

COMPANIES AND NGOs

CO42 – Georgia Appalachian Trail Club

20161220-5262 FERC PDF (Unofficial) 12/20/2016 2:41:34 PM

CO 42-1 cont'd Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the standard for scenic integrity along the ANST. This amendment also allows 5-10 years following completion of the project for this SIO of “Moderate” to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below “Moderate” for up to a decade. This would be substantial interference to the nature and purposes and impair the resources and values of the ANST.

Amending the plan in the manner proposed would negatively impact other Forest Plan prescription areas protecting Wilderness, Old Growth Forest, Inventoried Roadless areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the both sides of the ANST.

REQUESTED ACTIONS:

- All Forest Plan standards not met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that “the Forest Service retains decision making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a).
- No Amendment to the Forest Plan should be developed that lowers the Scenic Integrity Objectives of the Appalachian National Scenic Trail.
- Perform visual quality analyses following the Scenery Management System process, which would provide for scientific integrity of the analysis (40 CFR 1502.24).
- Provide for extensive onsite and offsite mitigation to reduce impacts created by this project if approved. Offsite mitigation could include commensurate financial support to maintain the travelway and protect the ANST corridor within the region.
- The National Park Service is the responsible administering agency for the ANST and therefore must concur with the required substantial interference determination for this project (16 U.S.C. 1246(c)).

Thank you for accepting and considering these comments.

Happy Hiking,

Eric Graves
Conservation Director
Georgia Appalachian Trail Club

COMPANIES AND NGOs

CO42 – Georgia Appalachian Trail Club

20161220-5262 FERC PDF (Unofficial) 12/20/2016 2:41:34 PM

Cc: Job Timm, George Washington and Jefferson National Forests
Forest Supervisor
jtimm@fs.fed.us

Wendy Janssen, National Park Service
Appalachian National Scenic Trail Park Superintendent
wendy_janssen@nps.gov

Karen Overcash
George Washington and Jefferson National Forest
Forest Environmental Coordinator
kovercash@fs.fed.us

COMPANIES AND NGOS

CO43 – Preserve Giles County

Before the
 Federal Regulatory Commission (FERC)
 In the matter of
 Mountain Valley Pipeline, LLC, Docket Nos. CP16-0010
 Supplementary information to
 The Motion to Intervene and Protest 20151130-5432(31052486)
 Submitted by the parties listed below, collectively the “Protestants”
 Affiliated with Protect Our Water Heritage Rights (POWHR)

Protestants:

- Brian Murphy, Ph.D, Certified Fisheries Professional, Craig County landowner
- Bruce Zoeckle, Emeritus Professor of Enology Grape Chemistry, Montgomery County landowner
- Carl Zipper, Professor of Crop & Soil Environmental Science, Craig County landowner
- Carol Geller, Professor Emeritus of Education, Giles County landowner
- Culy Hession, Professor of Biological Systems Engineering, Montgomery landowner
- Darlene Cunningham, Giles County landowner
- David A. Brady, Giles County landowner
- Donna Pitt, Giles County landowner
- Felicia Etzkornk, Professor of Chemistry, Montgomery County landowner
- Guy W. Buford, Civil Engineer, retired, Franklin County landowner
- Howdy Henritz, Former manager Sweet Spring Valley Water Co., Monroe County landowner
- Jean Porterfield, Landowner and 6th generation resident of Giles County
- Jennifer Fenrich, Reading Specialist in public education, Montgomery County Landowner
- Joseph C. Pitt, Ph.D., Giles County landowner
- Joseph L. Scarpaci, Emeritus Professor of Geography, Montgomery County landowner
- Nan Gray, Master of Science in Agronomy, Certified Soil Scientist, Craig County landowner
- Paul E. Washburn, Chemical and computer engineer, instrumentation and process control, Giles County landowner
- Rebecca Dameron, COP-CD, Roanoke County landowner
- Roberta Motherway Bondurant, Roanoke County landowner
- Rick Shingles, Emeritus Associate Professor of Political Science, Giles County landowner
- Russell Chisholm, Giles County landowner
- Tina Smusz, MD, MSPH, Montgomery County landowner
- Tom J. Bondurant, Jr., Roanoke County landowner
- Tom Hoffman, Giles County landowner
- Victoria Jordan Stone, landowner and organic farmer in Giles County

CO
43-1

The Protestants reviewed the eleven MVP Resource Reports for Docket Nos. CP16-0010-000 and submitted them to the FERC: 20151130-5432(31052486). All the Protestants are residents of counties in Virginia and West Virginia that are directly impacted by the proposed MVP. Collectively they represent the following organizations: Preserve Giles County, Preserve Craig County, Preserve Montgomery County, Preserve Bent Mountain, Preserve Roanoke County, Preserve Franklin, Preserve Monroe, Preserve Greenbrier, Preserve the NRV, The Greater Newport Historical District Committee, and ICAP/POWHR.

All communications related to this proceeding should be addressed to:
 Rick Shingles, Coordinator, Preserve Giles County
 Email: shingles@vt.edu

CO43-1

The FERC staff reviewed Mountain Valley’s application and subsequent filings. We have issued multiple EIRs to Mountain Valley in order to obtain additional information and clarifications.

COMPANIES AND NGOs

CO43 – Preserve Giles County

Supplementary Material: Introduction

CO 43-1
cont'd

On October 23, 2015, Mountain Valley Pipeline, LLC, submitted its application to the FERC to construct the Mountain Valley Pipeline.

As authorized by 18 C.F.R. §157.10, 385.211, 385.212, and 385.214, and the FERC's Notice of Application dated November 5, 2015, the Protestants submitted document 31052486 to intervene in the Mountain Valley Pipeline proceeding and protest the application. We filed to oppose the issuance of a Certificate of Convenience and Necessity under Section 7 of the Natural Gas Act, 15 U.S.C. §717f, for the Mountain Valley Pipeline. At that time we reserved the right to obtain and develop additional factual evidence and arguments and to submit those materials to FERC as they are developed.

This document supplements our original submission, providing an introduction and restatement. A thorough reading and analysis of the eleven resource reports submitted as part of MVP LLC's application for a certificate of necessity and convenience leads us to the conclusion that the applicant has done the minimum it thought necessary to receive the certificate. In our view it has miscalculated. The resource reports are substandard - by almost any criterion.

The resource reports are blatantly biased. They make sweeping unsubstantiated claims of the need for this pipeline, which is primarily to support the export of natural gas, while dismissing any and all potential adverse effects, no matter how serious or well documented by independent sources.

The applicant provides perfunctory, cursory responses to many of the detailed Environmental Information Requests made by the FERC and other federal and state cooperating agencies. It responds to data requests in a perfunctory manner without analyses or serious consideration for how they bare on issues of the adverse effects of the proposed pipeline. Too often information pertaining to adverse effects is fragmented and scattered across resource reports in a manner that makes it difficult to pull together. The reports do one thing consistently well: they obfuscate and obscure any information that might jeopardize the application. They are replete with knowledge claims repudiating the possibility of serious adverse effects, confidently assuring the reader that adversity can be either avoided and/or successfully mitigated. Much too often such assertions are completely unsubstantiated by reason or facts. This is supercilious and disrespectful of the FERC.

In conclusion, after carefully and objectively reviewing the resource reports for Docket No. CP16-0010-000, we find the application is fatally flawed. It does not meet the minimum criteria of the National Environmental Protection Act, nor section 106 of the National Historic Preservation Act, nor yet 18 CFR 380.12 - Environmental reports for Natural Gas Act applications.

The applicant's resource reports do not provide even the minimal, reliable information necessary to make a reasonable decision as to the necessity and convenience. As such, the applicant has failed to make reasonable efforts to avoid when possible, and minimize otherwise, adverse effects the project will have on communities, landowners and ecology impacted by the proposed

COMPANIES AND NGOs

CO43 – Preserve Giles County

CO 43-1
conf'd

pipeline. In light of the incompetent and unprofessional manner in which the application has been handled by MVP LLC, it is incumbent on FERC to reject the application at this time. At a minimum it essential that the FERC schedule evidentiary hearings to allow for an open and balanced discussion of disputed facts by independent, credentialed specialists.

This document provides reviews of eleven Resource Reports accompanying the application for a Certificate of Necessity and Convenience submitted by the applicant for Docket No. CP16-0010-000.

COMPANIES AND NGOs

CO44 – Lewis and Clark Trail Heritage Foundation

20161220-5157 FERC PDF (Unofficial) 12/20/2016 11:37:48 AM



Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Comments received by the Appalachian Trail Conservancy on the proposed mountain valley pipeline.
Docket No. CP16-10-000

Ms. Bose,

CO
44-1

Attached is a letter submitted to the Appalachian Trail Conservancy on the subject of the proposed mountain valley pipeline and the associated impacts to the Appalachian National Scenic Trail.

Should the Appalachian Trail Conservancy receive any additional comments on the project, we will submit those to FERC as well.

If you have any questions please contact Andrew Downs utilizing the information provided below.

A handwritten signature in black ink that reads "Andrew Downs". The signature is written in a cursive, flowing style.

Andrew Downs
Appalachian Trail Conservancy
Regional Director
Roanoke, Virginia
(540) 904-4354
adowns@appalachiantrail.org

SOUTHWEST AND CENTRAL VIRGINIA REGIONAL OFFICE
5162 Valleypointe Parkway, Roanoke, VA 24019 | Phone: 540.904.4393 | Fax: 540.904.4368 | www.appalachiantrail.org

CO44-1

See the responses to FA11-4 and FA11-5 regarding the ANST. Sections 3.5 and 4.8 of the final EIS have been updated to reflect new information about the ANST.

COMPANIES AND NGOs

CO44 – Lewis and Clark Trail Heritage Foundation

20161220-5157 FERC PDF (Unofficial) 12/20/2016 11:37:48 AM

Lewis & Clark
TRAIL HERITAGE FOUNDATION
www.lewisandclark.org



Keepers of the Story – Stewards of the TrailSM
We preserve, promote and teach the diverse heritage of Lewis and Clark for the benefit of all people

December 15, 2016

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Negative impact to the Congressionally-designated National Trails System from potential forest plan amendments associated with the proposed mountain valley pipeline. Docket No. CP16-10-000

Dear Ms. Bose,

CO
44-1
cont'd

The National Trails System consists of 11 National Scenic Trails and 19 National Historic Trails designated by Congress “in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.” National scenic trails are “extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.”

FERC has proposed Forest Plan (FLRMP) amendments which downgrade decades-old visual resource protections to accommodate a poor route for the Mountain Valley Pipeline (MVP) on the Jefferson National Forest – a route with significant impacts to the Appalachian National Scenic Trail (ANST). These proposed FLRMP amendments represent a significant threat to all National Scenic and Historic Trails on lands managed by the USDA Forest Service because the current protections afforded the ANST in FLRMPs serve as a model for Forest Planning nationwide. Numerous energy transmission projects have crossed National Scenic and Historic Trails without requiring amendments to the respective FLRMPs, which has been achieved through thoughtful planning, impact analysis and partnership. Inadequate planning has resulted in a poor route proposal for the MVP project which maximizes visual impacts; the resulting attempt to deal with this issue with slackened regulations instead of actual, successful on the ground mitigation is an unacceptable solution leading to significant impacts and degradation of the nature and purposes of the ANST and will significantly impair the resources and values of the Appalachian National Scenic Trail, a unit of the National Park System.

Threats to the National Trails System from the proposed amendments to the Jefferson Forest Plan

- A. Protection of the ANST via the Forest Planning Process is the standard for all National Scenic Trails in the country where they traverse National Forests. This erosion of that protection will set a negative precedent for protection of all National Scenic Trails.
- B. The DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the ANST which the public has spent millions of dollars to protect.
- C. Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from “High” to “Moderate,” downgrading the

COMPANIES AND NGOs

CO44 – Lewis and Clark Trail Heritage Foundation

20161220-5157 FERC PDF (Unofficial) 12/20/2016 11:37:48 AM

CO
44-1
cont'd

standard for scenic integrity along the ANST. This amendment also allows 5-10 years following completion of the project for this SIO of "Moderate" to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below "Moderate" for up to a decade.

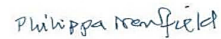
- D. Proposed Amendment 4, if approved, would create an approved utility corridor leading up to the ANST in a very poor location that could be used for future utility projects — providing the possibility of further degradation of the scenic and experiential value of the Trail.
- E. Amending the plan in the manner proposed would negatively impact other FLRMP prescription areas protecting Wilderness, Old Growth Forest, Inventoried Roadless areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the ANST on both sides.

REQUESTED ACTIONS:

- All FLRMP standards not met by any aspect of the proposed project must be identified in a supplemental DEIS, and the public must be afforded a minimum of 90 days to assess and comment. The 90 days must be provided after all relevant filings and information have been provided by the applicant as required by the National Forest Management Act, 36 CFR 219 part A §219.16(2), noting that "the Forest Service retains decision making authority and responsibility for all decisions throughout the {plan amendment} process 36 CFR 219 part A §219.4(a)."
- No Amendment to the FLRMP should be considered that lowers the Scenic Integrity Objectives of the Appalachian National Scenic Trail.

While this issue is specific to the Appalachian Trail, we are concerned that it will make precedent for all National Scenic and Historic Trails that pass through National Forest system lands. We believe that given thoughtful planning, a utility corridor should be able to be located with the least impact to the significant resources associated with a National Trail instead of solving the problem merely by amending the Forest Plan as a way to absolve the project from making unacceptable impacts. That is backward planning. Our National Scenic and Historic Trails are national treasures and the Forest Service should be managing them according to the National Trails Act and to protect the resources associated with these trails to protect them for future generations. We fully support the Appalachian Trail Conservancy's requested actions.

Sincerely,



Philippa Newfield
President

Cc:
Mark Weekley
National Park Service
Lewis and Clark National Historic Trail
601 Riverfront Drive
Omaha, NE 68763

Leanne Marten
Regional Forester
Northern Region
PO Box 7669
Missoula, MT 59807-7669

COMPANIES AND NGOs
CO45 – Pacific Crest Trail Association



Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Comments received by the Appalachian Trail Conservancy from the Roanoke Appalachian Trail Club on the proposed mountain valley pipeline. Docket No. CP16-10-000

Ms. Bose,

CO
45-1

Attached is a letter submitted to the Appalachian Trail Conservancy on the subject of the proposed mountain valley pipeline and the associated impacts to the Appalachian National Scenic Trail.

The Pacific Crest Trails Association’s comments here should serve as notice that the proposed Mountain Valley Pipeline project is a threat to the purpose and values of the entire National Trails System.

A handwritten signature in black ink that reads "Andrew Downs".

Andrew Downs
Appalachian Trail Conservancy
Regional Director
Roanoke, Virginia
(540) 904-4354
adowns@appalachiantrail.org

CO45-1

See the responses to FA11-4 and FA11-5 regarding the ANST. Sections 3.5 and 4.8 of the final EIS have been updated to reflect new information about the ANST.

COMPANIES AND NGOs

CO46 – Roanoke Appalachian Trail Club



Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426

Re: Comments received by the Appalachian Trail Conservancy from the Roanoke Appalachian Trail Club on the proposed mountain valley pipeline. Docket No. CP16-10-000

Ms. Bose,

CO
46-1

Attached is a letter submitted to the Appalachian Trail Conservancy on the subject of the proposed mountain valley pipeline and the associated impacts to the Appalachian National Scenic Trail.

The Roanoke Appalachian Trail Club has a delegated authority of over 120 miles of the Appalachian National Scenic Trail identified in the National Trails System act of 1968.

Their comments further establish the Mountain Valley Pipeline proposal as a grave threat to the purpose and values of the Appalachian National Scenic Trail and an existential threat to the entire National Trails System.

A handwritten signature in black ink that reads "Andrew Downs".

Andrew Downs
Appalachian Trail Conservancy
Regional Director
Roanoke, Virginia
(540) 904-4354
adowns@appalachiantrail.org

CO46-1

See the responses to FA11-4 and FA11-5 regarding the ANST. Sections 3.5 and 4.8 of the final EIS have been updated to reflect new information about the ANST.

COMPANIES AND NGOs

CO46 – Roanoke Appalachian Trail Club

CO

46-8

cont'd

Further comments on water quality and the USFS

As noted in a 2011 US Forest Service [press release](#) celebrating the 100th year of its founding under the terms of the Weeks Act, the primary mission of the US Forest Service is: "to protect and enhance forests, grasslands and watersheds from fire and other threats. About one-fifth of the nation's clean drinking water has its origins in forests preserved under the Weeks Act." The US Forest Service's interest therefore goes beyond the direct impacts of a proposed pipeline within a national forest to include impacts on the entire impacted watershed if a project is allowed through the forest.

Our RATC members live and work in the watersheds that would be affected by the proposed changes in the Forest Plan. They also maintain and enjoy the numerous ANST scenic vistas that would be severely impaired by construction of the proposed pipeline.

At the request of JNF, the developer (MVP) contracted CSI to analyze the potential impact of the pipeline on the watersheds of the James, New and Roanoke rivers, taking into account only the portions of those watersheds that would be directly affected by the route proposed through the JNF. For the Roanoke River, this included only the Dry Run-North Fork Roanoke River subwatershed. Nevertheless, the report identified significant downstream impacts during construction, with greater impacts on the Roanoke River than on the James or New rivers. It concluded that during construction:

- Sediment loads would be significantly greater on the Roanoke River due to continued crossing of steep slopes in the Roanoke River basin: "soil yields within the study area are projected at 82.1 tons per square mile per year. Expected soil yields are greatest within the Upper Roanoke portion of the study area (87.4 tons/mi² yr)."
- There would be an increased runoff of 3,288.62 TONS of sediment for the North Fork – a total of total of 7,768.62 tons in the subwatershed downgradient of the pipeline construction - 73.41% above current amount. [equivalent to 206 dump trucks full of sediment]
- The consulting report noted that impacts on the James and New rivers would largely be confined to headwaters, but that the Roanoke basin would be different: "[on] the North Fork Roanoke River. . . a substantial amount of sediment detached from cumulative actions on private and JNF lands is expected to continue to downstream areas outside the hydrologic study area. Given the additional areas of the LOD within the upper Roanoke downstream of the hydrologic study area, increased sediment loads are likely to continue downstream until the sediment is arrested behind the first dam (i.e., Niagara Dam) or is deposited into Smith Mountain Lake."

FERC and the developer initially withheld the results of this study from the public, but it was publicly filed on July 25, 2016 (it was published confidentially on June 7, 2016).

On August 16, 2016, the US Forest Service (JNF) filed comments to FERC on the CSI/MVP partial hydrologic analysis of sedimentation (the full text is included as an attachment to this report). JNF was extremely critical of the report, especially

- The assumption that impacts of the pipeline would be a one-time construction event and
- The implication that 85% of excess sediment could be contained

JNF began by noting that the Proposed Action Erosion and Soil Loss portion of the study "has multiple fundamental problems," and specifying its concerns:

"In the first sentence, the applicant makes the statement that the actions proposed would 'temporarily' increase sediment yields. This is an incorrect premise and unfortunately is the foundation of the effects discussion. The applicant states that pipeline construction will generate sediment loads well above background, but treats the disturbance as a single-year occurrence. The reality is that the sediment yields will continue to be elevated, decreasing over subsequent years to a new normal that is dependent on the persistence of the waterbars and other structural BMPs and the cover and type of revegetation of the pipeline corridors. The pipeline corridors will likely be maintained in a shrub/grass/forb state for the life of the pipeline. As Table 2 (p. 7) shows, this kind of land cover would have a different Management Factor that will be more than three times the current condition. Please discuss outyear sediment production from all proposed disturbance annually until you estimate when (if ever) sediment yields return to predisturbance levels. All sediment produced during the life of the project must be estimated in order to inform the biologists and eventual decision maker of the full effects of the project.

COMPANIES AND NGOs

CO47 – Lewis and Clark Trust, Inc.



Lewis and Clark Trust, Inc.

Official Friends Group and Partner with the Lewis and Clark National Historic Trail



14 December 2016



James L. Mallory, Vice Chairman
Lewis and Clark Trust, Inc.
1867 Bellefonte Drive
Lexington, KY 40503

Ms. Kimberley D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1 A
Washington, DC 20424

ORIGINAL

Vertical stamp: JAN 17 12 59

RE: Comment for the Mountain Valley Pipeline (Docket #CP 16-10-000)

Ms. Bose:

Thank you for sharing our comments with the Federal Energy Regulatory Commission.

The Lewis and Clark Trust, Inc., an Official Friends Group of the National Park Service - Lewis and Clark National Historic Trail (LCNHT), appreciates the opportunity to comment on the above proposed pipeline project. As a member of the Partnership for the National Trails System, supporting all of the 30 scenic and historic trails, we are a stakeholder in the proposed pipeline project. Additionally, we are the lead national organization advocating for completion of the LCNHT, an auto tour route, which would cross and parallel the Appalachian National Scenic Trail. Interstate 81 and US Highway 11 cross the Appalachian National Scenic Trail (ANST or AT) between exits 50 and 54 and are within 13 miles of Bland, VA and 23 miles of Pearsburg, VA, both trail towns are on the AT and in the very near area of the proposed pipeline. As an auto tour route trail, we encourage our trail traveler to take advantage of other trail opportunities along the Lewis and Clark National Historic Trail.

We support clean reliable, efficient and sustainable energy, but do not feel transmission pipelines and related pump stations should adversely impact national scenic or historic trails and other park lands in a "shotgun effect". The transmission right of way should be confined to a transmission corridor and not scattered along the impacted trail's view shed.

It is clear that the Appalachian Trail Conservancy and other organizations have correctly documented significant concerns and flaws in the Mountain Valley Pipeline application and other documents relating to the view shed, therefore we will not repeat those same clear arguments. We do want to point out that irreparable damage beyond the visual impact and the long slow mitigation will not repair damage or loss of old growth forest. The long term riparian damage and the adverse impact on wildlife in the region will

Telling the Lewis and Clark story and preserving the entire trail in cooperation with the Lewis and Clark National Historic Trail

a nonprofit corporation



CO 47-1

CO47-1 Comment is descriptive in nature.

CO 47-2

CO47-2 See the response to comment FA10-1 regarding Amendments 2, 3, and 4.

COMPANIES AND NGOs

CO47 – Lewis and Clark Trust, Inc.

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47-2
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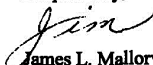
be equally impacted. The terrain itself makes this a very challenging region for construction and related mitigation that will be necessary for decades. The noise of pump stations never ends and will certainly have a negative impact on human and wildlife within several miles of each station. As a result of these situations we are compelled to urge all Federal Agencies that will be impacted to comment on the proposed pipeline. It is time for us as a society to look beyond the short term cost and impact of any given project, especially those projects that will have mitigation issues for decades.

CO
47-3

We respectfully request that this be considered as more than a simple regulatory commission ruling for a pipeline authorization. Your decision will be setting a precedent for the location of future transmission facilities on or near Congressionally authorized Scenic and Historic Trails. Please take into account the environmental impact of the proposed pipeline and then authorize it only within a corridor of other transmission right-of-ways. While your mission statement does not directly address environmental concerns, we are confident that you have no interest in "trashing" pristine America. Please consider an onsite hearing during the winter when the view is not encumbered.

We appreciate your time and ask that we be apprised of future rulings and developments in the particular matter.

Respectfully,



James L. Mallory, Vice Chairman
Lewis and Clark Trust, Inc.
859-278-7723

Copy:

Stephenie Ambrose Tubbs, Chairman, Lewis and Clark Trust, Inc.
Honorable Morgan Griffith, 9th District VA
Andrew Downs, Regional Director, Appalachian Trail Conservancy
Wendy K. Janssen, Superintendent, Appalachian National Scenic Trail
Jess Jones, US Fish and Wildlife, Blacksburg Office
Joby P. Timm, Forest Service Supervisor, Washington and Jefferson National Forest
Denise Nelson, Environmental Specialist, Appalachian National Scenic Trail

CO47-3

The comment is noted.

COMPANIES AND NGOs

CO48 – Save Monroe, Inc.

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Save Monroe, Inc.
Rt. 1, Box 665-A
Peterstown, WV 24963
www.savemonroewv.org

December 20, 2016

Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission 888 First Street NE,
Room 1A
Washington, D.C. 20426
Docket: PF16-10-000

RE: Mitigation of Land Movement in Steep and Rugged Terrain for Pipeline Projects: Lessons Learned from Constructing Pipelines in West Virginia
Docket No. CP16-10-000

CO48-1

Dear Ms. Bose,

Attached is a copy of the report "Mitigation of Land Movement in Steep and Rugged Terrain for Pipeline Projects: Lessons Learned from Constructing Pipelines in West Virginia."

Please file this report in the appropriate manner to supplement the record.

Thank you,

Nancy Bouldin,
Project Coordinator

CO48-1

Steep slopes and landslides are addressed in section 4.1 of the EIS. See the response to IND177-1 regarding landslides and Mountain Valley's revised Landslide Mitigation Plan.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

December 21, 2016

TO: Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street, N.E.
Washington, DC 20426

FROM: Sherman Bamford
Forests Chair, Virginia Chapter, Sierra Club

Re: Mountain Valley Pipeline proposal, Docket No. CP 16-10
Draft Environmental Impact Statement Comments

Dear Ms. Bose and Members of the Commission,

I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the Mountain Valley pipeline application. My comments concern the adverse effects on forest resources that are described by the DEIS and the lack of substantive information in the DEIS.

The proposed Mountain Valley Pipeline would facilitate increased development of hydraulically fracked natural gas throughout the eastern United States. The proposed pipeline is proposed through important habitat on Peters Mountain, Sinking Creek Mountain and Brush Mountain on the Jefferson National Forest and would have a devastating impact on the New River Valley and surrounding areas of Virginia and adjacent states.

Hydraulic fracking is a controversial issue. Here as elsewhere, natural gas development accelerates the impacts of climate change, and discourages the development and use of renewable energy. It encourages hydraulic fracturing and increases methane emissions that are 80 times more harmful than CO2 emissions.

The Mountain Valley Pipeline (MVP) would cut a path through the Jefferson National Forest in Giles County and Montgomery County, Virginia - passing through highly sensitive karst geology, dense forests, across trout streams, and steep mountainous terrain. The proposed route would run through (a) a remote and undeveloped section of the Appalachian Trail between the newly-expanded Peters Mountain Wilderness and the Rice Field Shelter/Vista, (b) an area between the Cascades and the New River, (c) the outer edge of the Brush Mountain Roadless Area, a roadless area which directly adjoins Brush Mountain Wilderness, (d) the headwaters of Craig Creek, home to federally endangered freshwater mussels, and (e) through the middle of a residential neighborhood between the national forest and Blacksburg. The purpose of the pipeline is to deliver fracked natural gas from Midwest over the mountains. Ultimately, if hydrofracking begins in Virginia, the pipeline could also be used to transport fracked gas from Virginia as well.

We request that you deny the application for the permit to build the Mountain Valley Pipeline. This EIS is based on incomplete information. A new full DEIS needs to be released and another 90 day comment period should be offered.

National Environmental Policy Act

CO49-1

CO49-1

See the response to comment FA15-5 regarding forest impacts. See the response to FA11-2 regarding the adequacy of the draft EIS. See the response to IND2-3 regarding hydraulic fracturing. Climate change, GHGs, and cumulative impacts are discussed in sections 4.11.1 and 4.13 of the EIS. Karst terrain is discussed in section 4.1 of the EIS. Various resources associated with the Jefferson National Forest are discussed throughout the EIS. See responses FA11-4 and FA 11-5 regarding the ANST.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

CO49-1
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The National Environmental Policy Act ("NEPA") is the nation's basic charter for the protection of the environment. NEPA makes it national policy to "use all practicable means and measures * * * to foster and promote the general welfare [and] to create and maintain conditions under which [humans] and nature can exist in productive harmony." NEPA's purposes are to "help public officials make decisions that are based on [an] understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment."

"Hard Look"

To accomplish these purposes, NEPA requires all agencies of the federal government to prepare a "detailed statement" regarding all "major federal actions significantly affecting the quality of the human environment." This statement is commonly referred to as an Environmental Impact Statement ("EIS"). NEPA further provides that agencies "shall * study, develop, & describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

An EIS must describe (1) the "environmental impact of the proposed action," (2) any "adverse environmental effects which cannot be avoided should the proposal be implemented," (3) alternatives to the proposed action, (4) "the relationship between local short- term uses of [the] environment and the maintenance and enhancement of long-term productivity," and (5) any "irreversible or irretrievable commitment of resources which would be involved in the proposed action should it be implemented."

NEPA's disclosure goals are two-fold: (1) to ensure that the agency has carefully and fully contemplated the environmental effects of its action, and (2) to ensure that the public has sufficient information to challenge the agency's action. The Council on Environmental Quality ("CEQ") – an agency within the Executive Office of the President – has promulgated regulations implementing NEPA that are binding on all agencies.

The CEQ regulations provided that the direct, indirect, and cumulative effects of the proposed action must be analyzed under NEPA. When the agency prepares an EIS, it must take a hard look at the impacts of the action and ensure "that environmental information is available to public officials and citizens before decisions are made and before actions are taken," and the "information must be of high quality." In preparing NEPA documents, federal agencies "shall insure the professional integrity, including scientific integrity, of the discussions and analyses" and "identify any methodologies used and * * * make explicit reference by footnote to the scientific and other sources relied upon for conclusions * * * ."

NEPA requires that the Environmental Impact Statement contain high-quality information and accurate scientific analysis. If there is incomplete or unavailable relevant data, the Environmental Impact Statement must disclose this fact. If the incomplete information is relevant and essential to a reasoned choice, and costs are not "exorbitant," the information must be

COMPANIES AND NGOs
CO49 – Sierra Club, VA Chapter

CO49-1 cont'd	compiled and included.
CO49-2	<p><u>Page numbers are based on page numbers from the DEIS.</u></p> <p>p. 44 "Thirty-three unevaluated archaeological sites along the MVP would be avoided. Mountain Valley would conduct archaeological testing to assess the NRHP eligibility of another 52 archaeological sites which are currently unevaluated. Additional research would also be conducted at three historic architectural sites. "</p> <p>When will they be evaluated and how will the public be allowed to comment on? What is meant by "unevaluated"? "Currently evaluated"? What is the difference? What is meant by "additional research"? There is no mention of NRHP sites. Is doesn't look like any evaluation or review has occurred and we are at the DEIS stage.</p>
CO49-3	<p>p. 146 "Mountain Valley and Equitrans would manage unauthorized off-road vehicle and ATV use on their operational rights-of-way by adhering to Section VI of the FERC Plan and Equitrans' Plan, which includes measures such as "signs, fences/gates, and slash, timber, and boulder barriers" have not proven effective across many sites on the GWJNFs. For example, in the Patterson Mtn ATV site (formerly a FS official site for ATV use), the FS was forced to erect boulders, steel barriers and other deterrents, but ATV riders continued to ride ATVs off-trail. The site eventually had to be closed.</p> <p>FERC and MV need to provide measures that are demonstrated to be effective. Evidence-based effectiveness of measures has not been disclosed.</p> <p>There is nothing in the statement as to what monitoring would occur, how often it would occur, how thorough it would be, or how long it would last (i.e., for the life of the pipeline and/or the open-space corridor). There is nothing in the statement as to whether FERC and MV would provide any additional funding for law enforcement officers who would patrol the area. FS budgets have been cut drastically over the past two decades and the GWJNFs is understaffed. How would existing LEOs be able to patrol the additional linear corridor provided by the pipeline footprint?</p> <p>Also, does MV have the financial ability to pay for LEO staffing and patrols over the foreseeable future? What financial guarantee or bond will be required to ensure that if the partnership dissolves, if MV goes bankrupt, or if MV is sold, transferred, or otherwise ceases to exist, the forest around the pipeline will be protected from illegal motorized use facilitated by the infrastructure in place?</p> <p>In April 2003, Forest Service Chief Dale Bosworth identified unmanaged off-road vehicle use as one of the four greatest threats to America's National Forests, along with fire, the spread of invasive species and habitat fragmentation. The Chief catalogued the damage and the other negative impacts caused by uncontrolled off-road vehicle use: "We're seeing more and more erosion, water degradation and habitat destruction. We're seeing more and more conflicts</p>

CO49-2 Information about archaeological and historic sites is discussed in more detail in section 4.10 of the EIS.

CO49-3 In accordance with the FERC Plan (section VI), and as discussed in section 2.6.1 of the EIS, Mountain Valley would offer to install and maintain measures for off-road vehicle (ORV) control to all owners/managers of forested lands, including the Jefferson National Forest.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

between users. We're seeing more damage to cultural sites and more violation of sites sacred to American Indians. And those are just some of the impacts."

On July 26, 2002 the GWNF's head LEO, Mr. Woody Lipps stated that "the number 1 threat on the Forest is illegal ATV use." In a letter dated July 1, 2004, Lipps stated, "so far this year, cross-country motor vehicle operation is the most reported violation occurring on the GW/Jeff."

Illegal motorized use is a very serious threat within the Jefferson National Forest. In a letter dated July 1, 2004, Woody Lipps, the George Washington and Jefferson National Forests' chief law enforcement officer stated, "so far this year, cross-country motor vehicle operation is the most reported violation occurring on the GW/Jefferson National Forests]." Illegal motorized use has been a highly serious problem since this time.

According to Brian Webb, the forest's current chief law enforcement officer, recently, illegal motorized users have gone so far as tearing out Forest Service gates in some cases, literally pulling them out of the ground to get around them or simply to damage them. In the Roaring Branch mountain treasure, a network of user created motorized trails has been built and a makeshift cabin was built on public land near ATV trails.

Unfortunately, as Forest Service budgets have been cut, the number of law enforcement personnel has also dwindled and it has become harder to apprehend illegal motorized users and vandals. In the 1990s, there were 23-25 law enforcement officers distributed throughout the ranger districts of Virginia's two national forests. In recent years there have only been 10-12 officers. Meeting with Brian Webb, Patrol Captain, Supervisors Office, February 11, 2011)

ENVIRONMENTAL IMPACTS OF OFF-HIGHWAY VEHICLES

Over the past several decades as wages and leisure time have increased, more and more Americans are participating in outdoor recreation. From hiking to mountain biking, from snowmobiling to off-road motorcycle use, and from hunting to birdwatching millions of Americans spend their time and money participating in one or more of these and other activities. While some forms of outdoor recreation are experiencing an overall decline in the number of participants (e.g., hunting) most other outdoor recreational pursuits are increasing in popularity. This increase, however, is not without an environmental cost.

The concept of a "non-consumptive" user is a myth. Each and every form of outdoor recreation exacts an impact on the environment. The severity, significance, and degree of impact is variable depending on the recreational activity. In general, the most damaging of the outdoor recreational activities on the environment is the use of ORVs. Perhaps as a consequence of America's love affair with the automobile, the popularity of ORV use has increased substantially over the past several decades. Today, motorcycles, all-terrain vehicles, snowmobiles, and wheel drive vehicles invade our public lands, including National Forests. In their wake, these vehicles leave a trail of destruction involving the soils, vegetation, wildlife, and air and water quality.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

CO49-3
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The impacts are not the same across the board. Different ecosystems with different soil types, different floral assemblies, and which are subject to different climatic patterns experience variable levels of ORV impacts. Nevertheless there are no ecosystems which are immune to the adverse impacts of ORVs. As stated by Sheridan (1979), "ORVs have damaged every kind of ecosystem found in the United States: sand dunes covered with American beach grass on Cape Cod; pine and cyprus woodlands in Florida; hardwood forests in Indiana; prairie grasslands in Montana; chapparral and sagebrush hills in Arizona; alpine meadows in Colorado; conifer forests in Washington; arctic tundra in Alaska." Many ecological communities have a relatively low threshold to impacts of recreational use (Frissell and Duncan 1965). Moreover, as ORV technologies have advanced, ORVs are more comfortable and reliable, able to travel greater distances, and able to access areas that were previously inaccessible, thereby exacerbating their impacts on the environment.

Indeed, the impacts of ORVs are complex and interrelated and they frequently interact synergistically, producing a "whole" more damaging than the sum of the individual impacts which can result in substantial degradation to the ecology of disturbed habitats to the detriment of the biotic community occupying those habitats. Thus, ORV impacts to soil are not limited to the appearance of a tire tread, but include an increase in soil bulk density (compaction), a decrease in soil permeability to water, increased water runoff, increased erosion, and a decrease in vegetation density and productivity. Similarly, ORV impacts on wildlife are not limited to a simple disturbance, but may include increased stress, increased energy use, displacement from important habitat, and interruption of feeding activities. The cumulative effect of these impacts may adversely impact animal production and survival. Indeed, while the pass of one ORV can result in adverse impacts, the collective impacts of thousands of ORVs can be environmentally devastating. In many ecosystems these impacts, particularly to the soils, cannot simply be erased by prohibiting ORV use, but may actually require decades, if not centuries, for nature to repair.

The adverse impacts of ORVs are not limited to soils, vegetation, and wildlife. As Berry (1980) reported, ORV management problems include illegal trespass into areas in which ORV use is not authorized, widening of trails, fragmentation of wildlife habitats through unauthorized proliferation of trails, increased access to sensitive habitat and resources, and increased vandalism associated with increased visitor use. Moreover, though not widely reported, ORVs have also been implicated in damaging archaeologic and geologic sites (Stebbins 1974a, Stebbins and Cohen 1976, Wilshire and Nakata 1976) while others have noted that ORV trails frequently serve as dumps for human trash (Kalisz 1996).¹

As reported by Wilshire et al. (1977):

ORVs have now invaded an enormous variety of natural settings, from deserts and coastal dunes to forested mountains, and from fertile habitats for wildlife to unique refuges for relict flora

¹In an ORV site in Laurel County, Kentucky, Fritsch (1994) reported over a thousand discarded truck and heavy machinery tires littering ten or more acres of countryside.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

CO49-3
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and fauna. The capability of the land and its biota to sustain this impact is as varied as the invaded habitats, but damage by ORVs in even the least vulnerable areas will require periods for recovery measured in centuries or millennia. Losses of soil and changes in the land surface will be long lasting, and certain natural life systems will never recover from the intensive ORV impacts already sustained. Archaeological and historical features, relict landforms, primitive soils, and other legacies of irreplaceable cultural, aesthetic, and scientific value have also been permanently lost.

The scientific literature indisputably demonstrates that ORVs cause significant and severe direct, indirect, and cumulative adverse impacts on the environment.² These impacts include soil compaction, accelerated soil erosion, denudation and loss of floral species diversity and production, reductions in animal populations, degradation of aesthetic and visual qualities, and adverse impacts on non-motorized forest users.³ Evaluating and interpreting ORV impacts involves a variety of factors including terrain topography, soil moisture content, soil substrate, plant habitat type, types of vehicle, weight of vehicles, wheel configuration, types of tires/treads (i.e., low pressure, lugs, cleats, ribbed), time of year, and the amount and timing of ORV use (Ahlstrand and Racine 1993, Wooding and Sparrow 1979). Each of these factors may attenuate or amplify the environmental impacts of ORVs.

These impacts and others are not limited to the pages of scientific publications, but have been documented on a large number of National Forests. Though many National Forests fail to properly monitor the effects of ORVs on their lands as required by law, records obtained by Wildlands Center for Preventing Roads through the Freedom of Information Act provide numerous examples of the adverse impacts of ORVs on USFS lands. This evidence, which is summarized in the ORV Impacts on National Forests section of this document, represents the minimum impacts of ORVs on USFS lands based on current, and frequently insufficient, monitoring data. If the USFS properly monitored ORV effects, the evidence of adverse ORV impacts would be even more staggering than that gleaned from the records obtained through FOIA.

See also the following Reviews of the Environmental, Social and other impacts of ORVs:

Havlick, D.G. 2002. No Place Distant: Roads and Motorized Recreation on America's Public Lands. Foreword by Mike Dombeck. Island Press, Washington, DC.

² The scientific literature on ORV impacts to the environment is substantial, but not complete. Much of the ORV literature was published in the 1970s and focused on the adverse impacts of ORV recreation on arid lands. Other literature is available documenting adverse ORV impacts on other ecosystems, including coastal, tundra, forest, grassland, and marshland, but, until recently, there has not been a substantial demand to assess the totality of ORV impacts on the ecosystems in which they are used. Consequently, the petition relies on the full range of scientific literature to document the adverse impact of ORVs on the environment. There is no reason to believe that the impacts documented in these papers are not consistent with the potential impacts of ORVs. Similarly, though there have been some studies which have examined the adverse impacts of ORVs on wildlife, the majority of studies, including studies cited in this petition, have focused on non-ORV caused human disturbance. While the type of disturbance may be different, there is no rational reason to believe that the general impacts would significantly differ.

³ A comprehensive review of the impact of recreation on wildlife, focusing on wildlife in the Rocky Mountains, has recently been published by the Montana Chapter of The Wildlife Society (Joslin and Youmans 1999).

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

Stokowski, P.A. and C.B. LaPointe. 2000. Environmental and social effects of ATVs and ORVs: an annotated bibliography and research assessment. School of Natural Resources, University of Vermont. 31p.

http://www.anr.state.vt.us/anr/atv_nov20_final.pdf

Wildlands CPR, The Wilderness Society, et al. 1999. Petition to enhance and expand regulations governing the administration of recreational off-road vehicle use on National Forests. Published by Wildlands CPR, Missoula, MT 188p.

<http://www.wildlandscpr.org/orvs/ORVpetition.doc>

Wilkinson, T. 2000. Loud, Dirty, and Destructive. Wilderness, Pp. 26-31, 2000.

Abstract: Off-road vehicles (ORVs) could be the largest growing threat to America's wilderness. The Forest Service estimates that from 1979 to 1987 the number of ORVs using national forests has grown from 5.3 million visitors-days to 80 million visitor-days. The threat to wilderness will continue to grow given that between 1991 and 1997 the annual ORV sales have doubled.

Wilderness supporters are outraged over the escalating problems of ORV use on public lands. The four federal agencies involved have ignored these threats to wilderness on large areas of undeveloped public land. Snowmobiles, four-wheelers, dirt bikes, and other ORVs leave their mark on back-country wilderness areas. Trails, both legal and illegal, disturb the natural wilderness and character of the land. The noise can drive away birds and harm the sensitive hearing of small mammals. Amphibians, reptiles, and plants become crushed when up against ORVs. Big game hunters worry that the proliferation of machines will scare off wildlife. Two-stroke engines cause water and air pollution, sometimes spilling fuel directly into soil and water. ORVs scar the land and harm wildlife with noisy, polluting, trail-mangling machines. ORVs are transforming recreation in national forests, especially in western lands. A coalition of over 100 groups filed a petition with the Forest Service urging the management of ORV use and the definition of the recreational standards. The ORV lobby, well-organized with financial support, maintains a good relationship with land managers who traditionally have supported ORV recreational uses. Grassroots and environmental efforts are bringing national attention to the ORV issue. The National Park Service has proposed a ban on snowmobiles in parks such as Yellowstone, and have other plans to limit ORV use. Environmentalists call for more actions limiting ORV use and want untouched areas undisturbed, unpolluted, and populated with wildlife.

Wilkinson, T 2001. On the beaten path. National Parks 75(3-4): 34-8.

Abstract: The National Park Service (NPS) has developed a new strategy to combat the damage caused by off-road vehicles (ORVs) in Big Cypress National Preserve in Florida. Across the National Park System, there is a noisy and increasing multitude of people using motorized recreation, causing a wide range of detrimental effects on wildlife and habitat. In Big Cypress National Preserve, which features some 22,000 miles of unregulated ORV trails, ORVs have caused massive destruction to the preserve's impressive biological diversity. The NPS'

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COMPANIES AND NGOS

CO49 – Sierra Club, VA Chapter

CO49-3
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new bold, multiyear strategy will close trails to secure habitat, deploy scientists to assess damage, establish 400 miles of ORV trails, and limit the number of permits to 2,000. The NPS will also increase regular patrols of rangers to prevent illegal incursions. However, ORV groups, which have until now enjoyed de facto primacy over the backcountry and have hunting privileges there, intend to fight the new regulations.

Foltz, R.B., D. Meadows, C. Napper, R. Gonzales, C. Aldrich. Study proposal. Impacts of All Terrain Vehicles (ATV) on National Forest Lands and Grasslands. May 2004.

Abstract: The US Forest Service will conduct a study to determine the potential impacts of All Terrain Vehicles (ATVs) on National Forest Lands and Grasslands. The objective is to determine which ATV mechanical components and equipment may cause potential impacts to the natural environment. The tests will be conducted on existing trails and areas open to cross country travel. Locations for the study are in Louisiana, Missouri, Kentucky, Minnesota, Montana, and Washington. Parallel trails dedicated to a single combination of ATV type and tire combination will be located at each site. ATV traffic will occur until three levels of soil disturbance, Low, Medium, and High, have been achieved. Key indicators for the soil disturbance classes will be presence or absence of vegetation cover, trail condition, and potential erosion condition. Following the ATV traffic, measurements of the erosion potential will be taken on each disturbance class. At the conclusion of the study we will be able to demonstrate the ATV vehicle and tire combinations that produce each level of soil disturbance, the erosion implications of those classes, and a method to predict soil erosion from ATV traffic in climates different from the test areas. 7 last paragraphs above Compiled by Adam Switalski

Due to the extensive damage that the Forest Service has documented, it is simply not legal for the Forest Service to allow any ORV use on the Forest. The Forest Service is required to:

The respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence.

Section 9 of E.O. 11644 as amended by E.O. 11989.

The effects of use by specific types of vehicles off roads on National Forest System lands will be monitored. If the results of monitoring, including public input, indicate that the use of one or more vehicle types off roads is causing or will cause considerable adverse effects on the factors and resource values referred to in Sec. 295.2, the area or trail suffering adverse effects will be immediately closed to the responsible vehicle type or types until the adverse effects have been eliminated and measures have been implemented to prevent future recurrence as provided in 36 CFR part 261.

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CO49-4	<p>p. 147: "The Applicants stated that the expected useful lifespan of the projects would be about 50 years. While there is no termination date for a FERC natural gas Certificate, at the end of the 50- year period, the Applicants may need to repair, replace, or abandon facilities." The DEIS does not provide a reasonable estimate of the actual period of time this infrastructure and the clearings around them would be in place. What is the longest period of time the pipeline, infrastructure and clearings could be expected to exist? How would this be expected to affect wildlife, water quality, scenic resources, and other resources over time, given the long period it is expected to be in place? How would future generations be affected? If there is no termination date for a FERC natural gas Certificate, could the pipeline route be used in perpetuity? Could it be used for any other purposes? What effect does such effective privatization of public land have on resources and people in the area?</p>
CO49-5	<p>pp. 154-163. There is not an adequate discussion of single-pipe or co-location alternatives. Missing from the discussion is the question of whether there is enough supply or demand for utilization of all of the multiple pipelines proposed to criss-cross the eastern US. The degree to which these pipeline ventures are speculative in nature or redundant is not explored. This flaw in the DEIS makes it imperative for FERC or the land agencies affected to conduct a programmatic EIS as suggested on p. 70-71. FERC uses circular logic to avoid such an exploration, which is required if FERC is to take the hard look at the issue that NEPA requires.</p>
CO49-6	<p>p.162: In discussing the ACP co-location alternative, FERC says: "there is insufficient extra space available along the ridgelines of the ACP route to accommodate the additional construction right-of-way width and additional temporary workspaces that would be required." FERC obviously recognizes that there are limitations (in terms of space and environmental impacts) for constructing a pipeline in the mountainous terrain of Virginia and West Virginia. FERC needs to further disclose what these constraints are in terms of size and in terms of resources impacted, as it applies to the MVP itself and its infrastructure and clearings. There is no discussion or analysis of this in the DEIS. FERC also needs to disclose what these constraints are in terms of size and in terms of resources impacted, as it applies to the ACP itself and its infrastructure and clearings. Please incorporate this comment into our formal comments on the Atlantic Coast Pipeline.</p>
CO49-7	<p>p. 172: "In addition, a significantly greater length of FS lands (approximately 16 more miles), side slopes (approximately 22 more miles), and landslide prone areas (approximately 35 more miles) would be crossed by the Northern Pipeline – ACP Alternative." If the ACP is also built, there would be <u>even more</u> construction in landslide prone areas (considering both pipeline systems). This is all the more reason to avoid construction in both locations. Please consider the combined impacts of the two pipeline system in landslide prone areas as portions of both are in the Chesapeake Bay watershed system and the New River/Ohio River watershed system.</p>
CO49-8	<p>p. 174: 1700 (linear) feet of the proposed MVP would impact known old growth forest.</p>

CO49-4	<p>Potential abandonment of the proposed facilities is discussed in section 2.7 of the EIS. Any abandonment, modification, or re-purposing of the proposed facilities would require an environmental review and authorization from the FERC.</p>
CO49-5	<p>Alternatives are discussed in detail in section 3 of the EIS. See the response to FA11-12 regarding project need.</p>
CO49-6	<p>The impacts associated with the need for additional temporary workspace, due to steep slopes and for other reasons, are integrated into the impacts discussions for all resources throughout the EIS.</p>
CO49-7	<p>Cumulative impacts, including the ACP, are discussed in section 4.13 of the EIS.</p>
CO49-8	<p>The EIS analyzes impacts on forest, including old growth and core/interior forest, in detail in section 4.4 and 4.5.</p>

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CO49-8 cont'd	<p>According to the Forest Service's Southern Region guidance on old growth (FR-62), old growth in the eastern U.S. comprises approx 0.5% of the old growth that historically existed in the southeastern US. Much of it was cut down in the early part of the 20th century.</p> <p>As part of this analysis, the Decision makers should identify all old growth of any size (including within-stand old growth and old growth partially within multiple stands). Old growth components and old growth habitat value of all old growth of any size should be adequately protected. The FS should protect mature forest adjacent to or near existing old growth may be important ecological components that should be protected, as well. FERC should have provided figures on the size, distribution, and age of trees to be cut. FERC should have provided figures on the size, distribution, and age of trees to be cut. FERC should have disclosed the impacts on old growth and disclose whether the treatments could preclude or delay the attainment of old growth status.</p> <p>The agency should examine whether there is any within-stand patches of OG or relic trees that should be protected or buffered from disturbance. It is possible that some old growth may exist within whole stands, partial stands, or portions of stands adjoining other stands. If any inclusions of an older age are found in the course of surveys, it would be proper to change the stand layouts and dimensions and numbers to incorporate this new data also</p> <p>The agency should examine the spatial arrangement of OG and surrounding mid- late-successional habitat, to determine whether any such areas should be protected or buffered from disturbance. Even if these areas did not meet operational criteria for old growth, given the obvious shortage of old growth in this area (and throughout the Appalachians) FERC should also consider designating some of the best areas as small, medium or large old growth tracts.</p> <p>In FR-62, the Southern Region of the FS includes the following "considerations for old-growth forests during project-level planning:" "When developing overall management strategies for an area, care should be taken not to isolate the medium- and small-sized old growth patches from the mid- and late-successional forests." (pp. 26-7). National Forests need to "provide for ... representation of all old growth forest community types" (FR-62 p14) and "consider underrepresented old growth forest community types" (FR-62 p17) in planning.</p> <p>Thorough old growth surveys should be conducted which include a record of where each of the plots were taken, a record of how each of the criteria for old growth were determined, and whether the FERC ensured that the criteria used were appropriate for this geographical area and the old growth types found here.</p>
CO49-9	<p>p. 187. This map doesn't show any JNF lands in Monroe Co., WV, although there are FS lands in this county.</p>
CO49-10	<p>p. 189: Virginia Division of Natural Heritage recommendations for conservation sites are – Sinking Creek Mtn. "The rare community is partially if not entirely edaphically maintained and</p>

CO49-9 The depiction of NFS lands on maps in the final EIS will be updated as appropriate.

CO49-10 As discussed in the EIS, the two conservation sites would be avoided by the proposed pipeline route.

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<p>CO49-10 cont'd</p>	<p>appears to persist in absence of management." "Invasive plants should .. be monitored and control measures taken in necessary and feasible." P. 101.</p> <p>Mudlick Branch Woodland "Monitoring of the community over time is warranted to ascertain long-term trends in condition and any successional patterns." P. 74.</p> <p>See Virginia Division of Natural Heritage Nat. Her. Tech. Rpt. 00-11</p>		
<p>CO49-11</p>	<p>p. 199: FERC would minimize impacts to "concentration of sinkholes" at Mt. Tabor, but avoids analysis of how it would avoid individual sinkholes/karst systems/caves that are not concentrated. If the pipeline avoids concentration of sinkholes but impacts numerous other karst features throughout the route, there may be cumulative impacts to karst.</p>	<p>CO49-11</p>	<p>Karst terrain and sinkholes are discussed in section 4.1 of the EIS.</p>
<p>CO49-12</p>	<p>p. 205: MVP can't mitigate the visual impacts to the Blue Ridge Parkway if it does not" affect more landowners, cross more forest including interior forest, side slopes, landslide-prone areas, and steep terrain as compared to the proposed route." Something is wrong about this statement. Perhaps this is the wrong location to cross the BRP or perhaps the pipeline should not cross the BRP altogether if there is no way to mitigate the deleterious impacts of the project without causing greater impacts.</p>	<p>CO49-12</p>	<p>See the response to FA11-10 regarding the BRP.</p>
<p>CO49-13</p>	<p>p. 220: "We asked Mountain Valley to coordinate with these landowners and to develop measures to eliminate or minimize these concerns, if possible." After the project is already approved? This does not seem like a fair or open process.</p> <p>"If landowners refuse coordination and/or access, Mountain Valley should utilize available desktop data to evaluate the landowners' stated concerns." What exactly is available desktop data? Is it accurate? Thorough? How is this demonstrated?</p>	<p>CO49-13</p>	<p>Desktop data is information that can be found in published documents, through resource agencies databases, and on the internet. While desktop data very useful for identifying environmental resources, it is not as accurate as on-the-ground surveys.</p>
<p>CO49-14</p>	<p>p. 248: Is this map accurate? Esp. re. carbonate rock formations. Seems to be missing large areas with carbonate rock formations, e.g. Monroe Co, WV, Sinking Creek valley, and Burkes Garden. Others?</p>	<p>CO49-14</p>	<p>Mapping has been updated, as appropriate, in the final EIS.</p>
<p>CO49-15</p>	<p>p. 258 et seq. Is the 1897 Giles County earthquake the design standard for construction of the pipeline? How close is the pipeline to earthquake epicenters and felt areas mapped in fig 9 & 11 of Bollinger and Wheeler, the Giles County Seismic Zone, USGS Paper 1355.</p>	<p>CO49-15</p>	<p>Seismicity is discussed in sections 4.1.1 and 4.1.2 (see design specifications) of the EIS.</p>
<p>CO49-16</p>	<p>p. 370 - 372: What is the difference between the Virginia system for identifying core areas and the West Virginia system? FERC seems to be using two different systems, simply because of artificial political boundaries.</p>	<p>CO49-16</p>	<p>Interior forest designation data are state-specific, as described in section 4.4.1 of the EIS.</p>
<p>CO49-17</p>	<p>p. 371-372: Va. Core # 1 and W Va. Core #24 should be looked at as one area if they in fact are contiguous.</p>	<p>CO49-17</p>	<p>The Peters Mountain Wilderness, which would not be crossed by the proposed pipeline route, is discussed in section 4.8 of the EIS.</p>
<p>CO49-17</p>	<p>In Mar. 1999, James Ohear of the FS conducted a spatial analysis of "Total Road Density Across the Jefferson National Forest." The area of Peters Mtn just to the NE of the pipeline</p>		

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CO49-17 cont'd	route was one of the core areas with the lowest amount of road density identified. How would the pipeline and infrastructure affect this area in terms of remoteness? How would wildlife be affected?
CO49-18	<p>p. 386: "Additional surveys for locally rare plant species within the Jefferson National Forest will be conducted in August 2016" August is not the most ideal time for identifying these plants. Some plants will have dried up and withered away. Flowers may not be present on many plants. This seems more like an afterthought or a "check the box" than a serious analysis of biological communities in the proposed pipeline's path.</p> <p>p.386. These surveys were supposedly conducted in August and the DEIS was released in Sept. but there is no information about the surveys. Another indication that this is a rush job and that the DEIS was released prematurely.</p>
CO49-19	<p>p. 375 et seq.: The disclosure of information on key forest types is a mere listing of the acreage. This is supposed to be a site-specific EIS. One would expect more detailed analysis, including location (maps, discussion) of forest types, significance of forest types, presence of important biological communities. The discussion is too simplistic. It breaks forest types into the broadest of categories. In reality there many more forest types than listed based on soils and numerous other factors. Some of these are quite rare or unusual. The Virginia Division of Natural Heritage can provide more information on this.</p> <p>The discussion should have also analyzed the degree to which wildlife species utilize different types of biological communities during different stages of their lives.</p>
CO49-20	<p>p. 390: Likewise, the list of wildlife species on this page is merely a rote list of some wildlife species. We would expect a more detailed discussion of the impact of the pipeline on wildlife species found in the area, particularly wildlife species that are indicators of certain types of habitat, keystone species, rare and listed species, and species that are disturbance species (e.g. salamanders, trout, etc)</p> <p>FERC should sufficiently examine and consider the potential impacts upon salamanders. This concern is significant here given the project's potential to destroy, degrade, or fragment suitable salamander habitat in some locations. Populations in the project area could be centered in, perhaps even be only found at, the particular places targeted for intense manipulation. They have very small home ranges with limited abilities of mobility (see attachments). They are susceptible and vulnerable to severe site-specific harm to their habitat and numbers; harm that would occur should the decision be implemented.</p> <p>Their life history requirements and characteristics greatly restrict their abilities to "recolonize" areas. Since this project area does not contain Peaks of Otter salamander (POS) habitat, then the MIS (viz., black bears, pileated woodpeckers) and other species listed in the JNF Plan are of limited, even misleading, use for gauging impacts to site-sensitive salamander populations. <i>Additional salamander/amphibian/reptile MIS need to be considered in this analysis.</i></p>

CO49-18

Rare plant species surveys are conducted within the appropriate timeframe based on input from the federal or state agencies. It is not uncommon for some environmental survey data to be obtained after the issuance of a draft EIS. Data filed after the issuance of the draft EIS are addressed in the final.

CO49-19

Forest types, including interior/core forests, are discussed in section 4.4 of the EIS.

CO49-20

Wildlife and fisheries habitats are discussed in sections 4.3, 4.4, 4.5, 4.6, and 4.7 of the EIS. Salamanders are listed/discussed in sections 4.4, 4.5, and 4.7 of the EIS.

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The use of these species does not accurately gauge the impacts to small site-sensitive species of low mobility such as salamanders and turtles. Management plans must insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land.

Present MIS do not allow for the accurate monitoring and assessment of management impacts to salamander populations in the Eastern Divide Ranger District where POS do not occur. Then some other indicator of effects needs to be used; the project's and Plan's MIS are deficient. 16 U.S.C. 1604(g)(3)(C).

Impacts to site-sensitive creatures such as salamanders should be properly monitored and assessed. These creatures are very important components of forest ecosystems. The biomass of salamanders in a northern hardwood forest was twice that of the bird community during the breeding season and nearly equal to that of small mammals (see Burton and Likens, 1975, *Copeia*: 541-546). While in southern Appalachian forests, salamander biomass may exceed that of all other vertebrates combined (see Hairston, 1987, *Community Ecology and Salamander Guilds*). It is clear that they play key roles in ecosystem dynamics.

Impacts to site-sensitive creatures such as salamanders are also not being properly monitored and assessed. These creatures are vitally significant components of forest ecosystems. The biomass of salamanders in a northern hardwood forest was twice that of the bird community during the breeding season and nearly equal to that of small mammals (see Burton, T.M. and G.E. Likens, 1975, "Salamander populations and biomass in the Hubbard Brook Experimental Forest, New Hampshire", *Copeia* (1975): 541-546). While in southern Appalachian forests, salamander biomass may exceed that of all other vertebrates combined (see Hairston, N.G., 1987, *Community Ecology and Salamander Guilds*, Cambridge University Press, Cambridge, UK. It is clear that they play key roles in ecosystem dynamics.

Abundant studies reveal the severe impacts of logging upon salamander populations and their preference for older forest sites. See "The Relationship Between Forest Management and Amphibian Ecology", 1995, deMaynadier and Hunter, *Environmental Reviews* 3:230-261 (incorporated by reference). See also "Effects of Timber Harvesting on Southern Appalachian Salamanders", Petranka et al, 1993, *Conserv. Biol.* 7:363-370; "Effects of Timber Harvesting on Low Elevation Populations of Southern Appalachian Salamanders", Petranka et al., 1994, *Forest Ecology and Management* 67:135-147; and "Plethodontid Salamander Response to Silvicultural Practices in Missouri Ozark Forests", 1999, Herbeck and Larsen, *Conservation Biology* 13:3, 623-632 (these are standard journals readily available to the agency; the agency is already in possession of most if not all of this info as the studies took place on and were funded by NFs).

Also, James Organ, "Studies on the Life History of the Salamander, *Plethodon welleri*," *Copeia* 1960 No. 4. Also R.G. Jaeger, "Moisture as a Factor Influencing the Distributions of Two

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Species of Terrestrial Salamanders," Oecologia (Berl.)6, 191-207 (1971); "Competitive Exclusion and Environmental Tolerances in the Distribution of Two Species of Salamander (Genus Plethodon) in Virginia, U.Md. Doc. Dissertation, 1969; and Jaegar, Bioscience Vol. 24, No.1 (33-39) regarding the effects of competition on salamanders, including effectiveness of moisture and environmental tolerances on competing salamanders.

Terrestrial salamander abundances are affected by forest thinning (Grialou, J.A., West, S.D., and R.N. Wilkins. 2000. The effects of forest clearcut harvesting and thinning on terrestrial salamanders. Journal of Wildlife Management 64(1): 105-113).

Harpole and Haas, "Effects of Seven Silvicultural Treatments on Terrestrial Salamanders, For. Ecol. & Mgmt. 114:349-356 (1999) found that relative abundance of salamanders based on area-constrained searches decreased on group selection cuts, 12-14 sq. m shelterwood cuts, 4-7 sq. m shelterwood cuts, leave tree cuts, and clear cuts.

Nearcuts , Harpole and Haas, "Effects of Seven Silvicultural Treatments on Terrestrial Salamanders, For. Ecol. & Mgmt. 114:349-356 (1999). Large plethodontid populations declined in group selection cuts after the Daves Ridge TS (Mt Rogers NRA). See the 1994 SO monitoring and evaluation report, section on Daves Ridge TS and James Organ's report on salamanders and related issues in the Daves Ridge area ("Salamander Survey in Connection with Daves Ridge Timber Sale").

These documents, already in possession of the GWJNFs are incorporated by reference

FERC has not sufficiently examined and considered the potential impacts upon salamanders. Another pertinent study that the agency needs to incorporate in its analysis and decision is "Determinants of salamander distributions along moisture gradients" by M. Grover in Copeia 2000 (1): 156-168.

The present MIS, except for some TES species, are all large mobile vertebrates. The use of these species does not accurately gauge the impacts to small site-sensitive species of low mobility such as salamanders. Management plans must insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land. Present MIS (outside of the limited ranges of the Peaks of Otter Salamanders) do not allow for the accurate monitoring and assessment of management impacts to salamander populations. Then some other indicator of effects needs to be used.⁴

CO49-21

p. 392: The cerulean warbler is not only found in "river valleys." The cerulean is recognized by the FS and others as an area-sensitive species (Southern Appalachian Assessment, Terrestrial Rept, Robbins et al., Cove Creek BE, 1995, Clinch RD, J&GWNFs, Maple Springs Branch BE,

⁴ ." (Congdon et al 1993, op cit.)

CO49-21

Cerulean warblers are listed and discussed in sections 4.5 and appendix O of the EIS. Migratory birds are also discussed in section 4.5 of the EIS.

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Clinch RD, J&GWNFs). Other species are listed as area sensitive species in the SAA. The FS should consider the impacts to these area-sensitive species.

The FS found that cerulean warblers "tended to be older, large diameter stands with tall trees, a deciduous understory, multiple layers and ages..." ((Cerulean Warbler Interim Mgmt Strategy, Clinch RD, GWJNFs, p. -7) "Trees 18.2 in. in diameter composed greater than one-fourth of the overstory trees in the stands." (CW IMS-7) The IMS documents that research characterized "suitable cerulean warbler habitat as mature forest with a high, closed canopy and a large number of stems greater than 12 in. diameter..." (CWS IMS-8) The cerulean warbler is found in the PA and vicinity. The cerulean warbler, is an area-sensitive bird (Southern Appalachian Assessment, Terrestrial Report); the cerulean warbler is experiencing the greatest annual decline of any of the warbler species and this significant decline is continuing. (Robbins, Fitzpatrick and Hamel, 1989, "A warbler in trouble: Dendroica cerulea") Studies have found cerulean warblers chiefly in "large tracts of mature, semi-open deciduous forest." Robbins, Fitzpatrick and Hamel, 1992. The authors of one study, affirm that there is a "need to protect extensive tracts of mature deciduous forest," especially on publicly owned land. See also excerpts from the Maple Springs Branch BE on the cerulean warbler (Clinch RD, GWJNFs, already in the agency's possession, incorporated by reference).

- The cerulean is recognized by the FS and others as an area-sensitive species (SAA, Terrestrial Rept, Robbins et al., Cove Creek BE, 1995, Clinch RD, J&GWNFs, Maple Springs Branch BE, Clinch RD, J&GWNFs). The Southern Appalachian Assessment Terrestrial Report lists the cerulean warbler among "area sensitive, mid- to late-successional deciduous forest species" (SAA/TR-70, in the agency's possession, incorporated by reference). It predicts that "based on past trends in land use, it is expected that, over the next 15 years, suitable acreage [for these area sensitive species] and associated forest interior habitats will continue to decrease due to loss of forestland to other uses such as agricultural pasture and development."(SAA/TR-72) The cerulean warbler is found in a variety of deciduous forest types, usually in extensive woods. (Brandt, 1947; Peterjohn and Rice, 1991; Andrie and Carroll, 1988; Brooks, 1908; Mengel, 1965; Cadman et al., 1987; Torrey, 1896; Kirkwood, 1901; Maxon, 1903; Hann, 1937) Most often, its occurrence is recorded in forests with large, tall trees. (Lynch, 1991; Robbins et al, 1989; Wilson, 1811; Oliarnyk, 1996; Mengel, 1965; Andrie and Carroll, 1988; Robinson, 1996; Torrey, 1896; Schorger, 1927) "A change to shorter rotation periods and even-aged management," one of the 6 "chief constraints on the breeding ground" listed in Robbins et al., 1989.

According to USF&WS, "Ceruleans are routinely identified with large tracts, tall trees, and mature forest." (Cerulean Warbler Status Assessment April 2000) For example, Lynch (1981) indicates minimum habitat requirements of the birds along the Roanoke River of North Carolina "to include: (1.) a closed canopy, (2.) presence of scattered, very tall old-growth canopy trees, and (3) good development of vegetation strata, i.e. distinct zonation of canopy, subcanopy, shrub, and ground-cover layers." (Cerulean Warbler Status Assessment April 2000). This project has the potential to alter or degrade these habitat characteristics in the project area removal of contiguous forest cover and removal of large, old trees that are potential cerulean

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warbler nest trees.

The Cerulean Warbler is in need of robust conservation planning, especially by the Forest Service. Cerulean Warbler populations have declined dramatically since the 1960s. Data from the Breeding Bird Survey show that the Cerulean population has decreased approximately 80% since 1966, with an average rate of decline of -4.1% per year from 1966 to 2007. (J. R. Sauer et al., *The North American Breeding Bird Survey, Results and Analysis 1966-2007* (updated 15 May 2008), Version 5.15.2008 (USGS Patuxent Wildlife Research Center, Laurel, MD, 2009) The U.S.

Fish and Wildlife Service's Cerulean Warbler Status Assessment concluded that this precipitous population loss represented the largest decline among any warbler species and one of the most significant declines among neotropical migratory birds. (J. R. Sauer et al) Much of this decline has occurred in the species' core breeding range. Dramatic habitat loss to mining, development, and logging throughout the Cerulean's breeding range, as well as loss of habitat in its winter range, are the primary causes of this decline. (Hamel (2000); Paul B. Hamel, *How We Can Learn More About the Cerulean Warbler (Dendroica Cerulea)*, *Auk* 121(1): 7, 9 (2004).)

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National forests like the JNF and other portions of the proposed MVP corridor are critical to the Cerulean Warbler's long-term survival, because of the Cerulean's habitat requirements. The Cerulean Warbler is an area sensitive forest-interior species, dependent on large tracts of mature forest to breed successfully. (C. Robbins., *A Warbler In Trouble: Dendroica Cerulea*, in Hagen, et al., *Ecology and Conservation of Neotropical Migrant Landbirds* at 555-56, 560. Smithsonian Inst. Pr. (1992); Nicholson, C.P. 2004. *Ecology of the Cerulean Warbler in the Cumberland Mountains of East Tennessee*, at 1. Dissertation, University of Tennessee, Knoxville, USA [hereinafter —Nicholson 2004]. See also C. Oliarnyk & R. Robertson, —Breeding Behavior and Reproductive Success of Cerulean Warblers in Southeastern Ontario, *Wilson Bull* 108(4): 673 (1996); R. Askins, "Relationship Between the Regional Abundance of Forest and the Composition of Forest Bird Communities," *Biological Conservation* 39: 144 Table 5 (1987); R. Connor and J. Dickson, "Relationships Between Bird Communities and Forest Age, Structure, Species Composition and Fragmentation in the West Gulf Coastal Plain," *Texas J. Sci. suppl.* 49(3): 131 (1997) ("Cerulean Warblers, ...are perhaps the most area-sensitive bird in this region and are likely the most vulnerable species to the forest fragmentation in this region"); Cathy A. Weakland & Petra Bohall Wood, —Cerulean Warbler (*Dendroica Cerulea*) Microhabitat and Landscape-Level Habitat Characteristics in Southern West Virginia, *Auk* 122(2): 497, 498, 506 (2005).

Cerulean Warblers require a minimum forested area of 700 hectares to sustain a viable population. (MTM EIS at III.F-15.) In a Tennessee study, Ceruleans were found only in forest tracts greater than 800 hectares (2,000 acres). (Chandler S. Robbins et al., *A Warbler in Trouble: Dendroica cerulea*, at 555, Manomet Symposium (1989)) Another study found that the probability of encountering a Cerulean reached its maximum when the area consisted of 3,000 or more unfragmented hectares (7,500 acres) of forest. (Robbins et al. 1992) Within the context

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of a fragmented landscape of private land, the unfragmented forest habitat provided by Hickory Flats VMT is of critical importance to area-sensitive species like the Cerulean Warbler. The landscape surrounding the George Washington-Jefferson National Forests is projected to continue to fragment for new housing density at the fastest rate of any national forests. (U.S. Forest Service, Forests on the Edge at 9.)

"For nest trees, cerulean warblers preferred white oaks, sugar maples, and cucumber magnolias and avoided red maples and oaks in the red oak group (scarlet, black, northern and southern red oak." (CEWA study p. 15). It is not clear that these preferences are used in determining tree species retention.

Prime Cerulean habitat should generally be protected from fragmentation, especially large unfragmented forest blocks of 7,500 acres or more that contain existing old growth forest.

There are viability concerns for cerulean warblers, other species of interior forest-dwelling warblers, species of cuckoos, and other interior-forest dwelling songbirds listed as declining in BBS (or other ornithological data) that must be taken into consideration.

Other species are listed as area sensitive species in the SAA. The FS should consider the impacts to these area-sensitive species.

The proposed activities could impact birds that have different stratigraphic preferences, niches, and life cycle needs. What are the stratigraphic preferences and vegetative preferences of cerulean warbler and other birds? How would the project affect birds with different stratigraphic preferences and vegetative preferences of birds other than and including cerulean warblers?

The proposed activities could impact birds during the time that birds are seeking mates, breeding, nesting, rearing their young, or migrating. During what period do forest interior birds seek mates? Breed? Migrate? How would the project affect these factors? The project may involve a taking under the MBTA if birds are killed in nest trees or nearby trees. What activities are affecting the forest interior birds throughout their breeding range? Wintering range? How do these activities cumulatively affect birds?

The 2001 Executive Order on Migratory Birds states: "Sec. 3. Federal Agency Responsibilities. (e) Pursuant to its MOU, each agency shall, to the extent permitted by law and subject to the availability of appropriations and within Administration budgetary limits, and in harmony with agency missions:

(1) support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;...

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CO49-21 cont'd	<p>(4) design migratory bird habitat and population conservation principles, measures, and practices, into agency plans and planning processes (natural resource, land management, and environmental quality planning, including, but not limited to, forest and rangeland planning, coastal management planning, watershed planning, etc.) as practicable, and coordinate with other agencies and nonfederal partners in planning efforts;...</p>
	<p><i>(6) ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern;...</i></p>
	<p>(9) identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. With respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service. These principles, standards, and practices shall be regularly evaluated and revised to ensure that they are effective in lessening the detrimental effect of agency actions on migratory bird populations. The agency also shall inventory and monitor bird habitat and populations within the agency's capabilities and authorities to the extent feasible to facilitate decisions about the need for, and effectiveness of, conservation efforts;"...</p>
	<p>Sec. 2 i) "Species of concern" refers to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States," priority migratory bird species as documented by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 C.F.R. 17.11." Several birds listed in Bird Species of Conservation Concern 2002 are found in this area (see project file notes and BSCC p. 51). Impacts to these NTMBs should be analyzed.</p>
CO49-22	<p>p.390: Black Bear habitat, black bear populations and JNF Black Bear management (8C) areas are found in the areas of the proposed corridors and areas surrounding the proposed corridors.</p>
	<p>Some of the activities in this proposal would take place in JNF black bear habitat areas designated in the JNF Forest Plan. FERC should analyze the impact of this project on bears, bear habitats, and on those who might utilize the additional roads and infrastructure for illegal access. We are concerned about the intensive activities planned in this area and the removal of forest cover.</p>
	<p>Consistent with the JNF Plan for 8C areas, how does this project: Provide optimal habitat for black bears and other wide-ranging area sensitive species? Ensure adequate den sites? Provide secluded and diverse habitat? Meet road densities?</p>

CO49-22

Black bear habitats and potential impacts on black bears (including in the Jefferson National Forest) are discussed in section 4.5 of the EIS. No MVP actions would occur within Rx 8C-Black Bear Habitats. Remaining comments are outside the scope of this project.

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CO49-22
cont'd

Affect any core areas that provide SPM or SPNM recreation opportunities?
 Affect backcountry recreation or recreation associated with nearby wilderness areas?
 Affect ovenbirds, northern saw-whet owls, cerulean warblers, wood thrushes, pileated woodpeckers, hooded warblers, southern pigmy shrews, and eastern wood peewees?
 Affect forests in prime mast-producing years?
 Affect late-successional and old growth forests?
 Affect portions of this MRxA managed through natural processes?
 Affect solitude and feelings of challenge and risk experienced by forest users here?
 Affect forests 40-100 yrs old?
 Manage forests consistent with rotation requirements?
 Meet SIO and Scenic Class requirements?
 Affect OHV use and mountain bike use and wildlife affected by such use?
 Manage pests consistent with Integrated Pest Management methodologies?

CO49-23

Since 2007, a disproportionate amount of logging and roadbuilding taking place in these areas compared to other MRxAs across the JNF. Since 2007, the major logging proposals I am aware of are (from past SOPAs and other sources):
 Fry Hill (Mt R) 7E2
Interior (Eastern Divide) 8C
 Big Mtn (Eastern Divide) 8A1
Johns Cr Mtn (Eastern Divide) 8C
 Back Valley (Clinch) 8A1
Olean (Eastern Divide) 8C
SR 622 Bear (Mt R) 8C/6C/4A
Goldbond (Eastern Divide) 8C
Laurel Cr (Eastern Divide) 8C
 Wells Branch (Clinch)
 Mine Mountain (Eastern Divide)
 White Rocks (Eastern Divide)
 Wallen Ridge (Clinch)
 Clinch Hardwood Restoration (Clinch)
 Flatwoods (Clinch)
 Rich Mountain (Eastern Divide)
Fork Mountain (Eastern Divide) 8C

I have included some timber projects not in 8C areas that are smaller timber projects in this list. Even so, about 41% of the timber sales above have been in MRxA 8C areas. Given the fact that this is rudimentary list, I hope the FS will examine how many timber sales of all the timber sales planned in the JNF during this period have been in 8C areas, how many acres of logging has taken place in 8C areas and in the JNF as a whole during this period, and how many miles of permanent, temporary, and reconstructed roads have been built in 8C areas and in the JNF as a whole during this period.

Looking at what has transpired during this period, it appears that a disproportionate amount of the logging and roadbuilding is still taking place in 8C areas today. According to the JNF Plan, "this management area is allocated to approximately 57,300 acres (8%) across the Jefferson

CO49-23

These comments are outside the scope of this project.

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National Forest." (3-120). Yet according to the management prescription, the emphasis and desired condition for these areas are: "to provide a secluded and diverse habitat," "the landscape character of this area retains a natural, forested appearance," "forest visitors...may experience solitude in portions of these prescription areas and feelings of challenge and risk are expected." (JNF Plan 3-120 to 122).

CO49-23 cont'd
Is a disproportionate amount of logging and roadbuilding taking place in these areas compared to other MRxAs across the JNF? What are the cumulative impacts of this combined with the MVP proposal? How is it possible to provide for these attributes if this management prescription is receiving a disproportionate amount of the logging across the JNF? Why are management prescription areas closer to roads not receiving a higher proportion of logging than these areas? What are the cumulative impacts on black bears and their habitat? What monitoring has taken place? Why are so many roadbuilding and logging projects being selected in this MRxA? How does this affect semiprimitive areas, backcountry areas, wildlife corridors between roadless or Virginia Mountain Treasure areas or other such habitat, remote areas utilized by black bears forest wide? If road densities for the MRxA 8C area in Olean are above Forest Plan objective levels, why not decrease the amount of roadbuilding in this area to compensate? Have vehicle collisions with black bears, nuisance complaints, poaching incidents, or other black bear-human incidents increased or decreased in these other areas where roadbuilding and logging has taken place? An analysis of the cumulative effects of the MVP pipeline and this logging and roadbuilding regime across the JNF should take place as part of the analysis for this project, in order to better inform the public and decisionmakers before this project proceeds.

CO49-24
The Hickory Flats area of Giles and Monroe Counties, where one of the pipeline routes is proposed, is the largest black bear management area in the JNF(See Fork Mountain EA). This is also the area with the "highest portion of radio collared sows in the southern portion of the Cooperative Allegheny Bear Study" (See Fork Mountain EA 26). FERC has not examined the degree to which proposed activities, done in a short period of time, could adversely affect black bear populations. And it is possible that bear bears from this population or other population may utilize the Peters Mountain, Little Stony, Craig Creek watersheds, Sinking Creek watersheds and other areas of the JNF where the MVP is proposed. Studies of black bear movements in this area need to be conducted.

Monitoring activities should include studying impacts to black bear populations and should incorporate management of past Forest Service project such and the Fork Mountain and . There are no feedback provisions in black bear monitoring to ensure that if there are impacts to black bears at certain stages, the project can be altered to protect black bears. The cumulative impacts of pipeline construction and this project on black bear populations are not analyzed.

Black bear is an MIS here and throughout the JNF (JNF Plan MIS List) and an important featured species in this bear management area and adjacent areas. Issues of negative impacts to the MIS black bear due to increased disturbance, stress, vulnerability, and deaths which the project could foreseeably facilitate should receive a hard look. See also 36 CFR 219.19(a)(4). "It is evident that hunting is a stronger influence on the dynamics of the local population than is habitat capability... Potential biotic increases in habitat quality resulting from timber harvest may easily be outweighed by the potential effects on population dynamics...We believe that habitat capability models, no matter how complex, cannot predict the status of bear

CO49-24 Black bear habitats and potential impacts on black bears (including in the Jefferson National Forest) are discussed in section 4.5 of the EIS.

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populations by themselves. Population dynamics must be explicitly considered in evaluating the long-term effects of habitat manipulation on bears." - Brody and Stone "Timber Harvest And Black Bear Population Dynamics" (previously submitted with appeal of the West Dry Branch TS on this GW National Forest - the agency is already in receipt of this information - we incorporate it by reference into the AR - including the Powell declaration - "To date I have not been able to document that logging...ha[s] any positive effects on black bears or black bear habitat..."). Black bears occupy only 5-10% of their former range in the southeast and "would now likely be totally extirpated in this region were it not for federal lands containing designated wilderness or de facto wilderness" (Pelton, "Habitat needs of black bears in the east," in Wilderness and Natural Areas in the Eastern United States, Kulhavy and Conner, eds., 1984) FERC should analyze the negative impacts to populations that the proposal would foreseeably result in (e.g., increased legal and illegal disturbance, facilitated poaching and hunting). See also 40 CFR 1507.2(d) and 1508.27 and FSH 1909.15.ch.05.

CO49-24
cont'd

Foreseeable negative impacts from the proposed action to most MIS must be thoroughly analyzed in the EIS. For example, agency planners must use the latest scientific information when assessing impacts to MIS black bears and their habitat. A report published in 1991 by Steven Reagan, "Habitat use by female black bears in a southern Appalachian bear sanctuary", analyzes how removal of forest cover adversely affects black bears. The agency is already in receipt of this information; it was delivered to the JNF Supervisor's office (currently the GW&JNFs SO) several years ago by the Southern Appalachian Biodiversity Project. We incorporate it by reference into the administrative record. One significant finding of this research was that black bears were not taking advantage of food and habitat in even-age logging sites as was anticipated. He also found that such logging results in a dramatic increase in female black bears' home range. The same potential result can reasonably be expected to occur here from this proposed even-age logging. The outcome would be increased competition for a limited food and habitat supply. Having to roam over a greater area would also make them potentially more vulnerable to legal, illegal, and accidental killing, injury, or stress by humans. These foreseeable direct, indirect, and cumulative impacts must be adequately considered and analyzed by the planners. The best and most accurate scientific information must be used - per NEPA. The potential clearly exists for significant impacts to black bear viability here. There must be hard inventory and population data for this MIS to provide an accurate picture.

Bears need security. Black bears are classified as "wide ranging area sensitive species" (SAA Terr Rpt 154&158). Areas of grapevines and large denning trees are key habitat components. Large hollow den trees are the preferred den sites of black bears (see eg JNF Plan Rev DEIS 3-177). Grapes are a soft-mast food source of black bears (see JNF Plan Rev DEIS 3-177). Hollow trees, existing stumps, snags, shallow holes, and rock outcrops are potential bear den sites. These must be protected. There must be analysis of the loss of interior and remote habitat that will occur and has already occurred here. The road density, when both legally and illegally used motor routes are considered, may be in excess of that found to be desirable for bears. (there is little info in the DEIS) And the effects of miles of nearby access roads. must be properly analyzed. Use of these routes (and associated noise, disturbance, and partying) create constant disturbance which may impact black bears. And "closed" roads are known to be

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violated by vehicle use here and elsewhere. Temporary and closed roads facilitate more access and disturbance and mortality.). Road densities must meet Plan objectives for these important habitat components in the PA. And the agency's own "Wildlife Population Data Working Paper" (Goetz and McEilwane - incorporated by reference) shows that the impacts to bears becomes negative when the proportion of suitable acreage in regen areas exceeds 10%. If recent clearings, even-aged cuts, grassy areas around roads existing and proposed roads, existing and proposed landings, and natural within stand openings are included in these figures, the criteria data and amount of suitable land here should be disclosed to the public.

CO49-24
cont'd

Above ground den trees are important to black bears in the Appalachians. Data from a study in the Allegheny mountains of Virginia, for example, "show 93 percent of denned bears denned above ground in standing hollow trees." (GWNF Hoover Creek timber sale EA-57; incorporated by reference) Trees of sufficient size for bears to den are old large trees. Yet, in spite of good intentions, the agency's action would remove these key elements, habitat significant to viability. Even if a few den trees are protected these trees are vulnerable to accidental or intentional damage by logging operators and may topple over in windstorms if left standing in a much more exposed location in the middle of a timber cut. The analysis must fully and fairly consider this factor. This is omission particularly glaring since there is no information in the project record as to amounts of trees in the area suitable for bears to den in, and given that the agency claims old growth is not present which would mean that such trees can be expected to be scarce.

A clear goal for black bear conservation is "promoting remote forest conditions when managing forests (e.g., minimizing forest fragmentation, limiting road development)." Rudis, V.A., and J.B. Tansey. 1995. Regional Assessment of Remote Forests and Black Bear Habitat from Forest Resource Surveys. J. Wildl. Management 59(1): 170-180 (written by FS researcher; incorporated by reference).

Clearing, roads, and other operations can be seen to make an area more desirable for Bear hunters (e.g., providing easier access for humans, attracting Bears to so-called "escape" habitat that does not actually provide an escape), but this does not equate to being better for Bears. Roadways and clearings can foreseeably be used for legal and illegal access. See also Jefferson NF Wilson Mtn. TS EA-69 - "roads and forwarder trail could increase hunting/poaching pressure". Poaching and other wildlife disturbing activities must be fully and fairly considered.

CO49-25

These foreseeable direct, indirect, and cumulative impacts must be adequately considered and analyzed by the planners. FERC should provide hard inventory and population data for this MIS.
p. 393: Discussion of birds and Important Bird Areas omits the potential impact of the pipeline on the Hanging Rock Raptor Observatory, near one of the alternatives.

CO49-25

The Hanging Rock Raptor Observatory, located about 12 miles from the proposed route, would not be affected by the MVP.

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CO49-26	<p>Water crossings in the JNF: FERC should have examined the impact of the pipeline on waterways identified in 9 VAC 25.60 Virginia Water Quality Stds., Jan 6, '11. The New River, Stony Creek, Curve Branch, and Clendenin Creek are nutrient enriched waters under 9 VAC 25.260.350. How will the project exacerbate water quality problems in these waterways?</p> <p>Little Stony Creek is not just a Tier III stream <u>above</u> the pipeline project area. It is a class II trout stream "from the confluence of the New River." Class II trout streams "contain a good wild trout population" "would represent a major portion of Virginia's wild trout waters." 9 VAC 25.60 Virginia Water Quality Stds.,</p> <p>Curve Branch is not discussed at all among Va trout streams in 9 VAC 25.60 Virginia Water Quality Stds., even though it flows directly from Peters Mountain. DEQ and FERC should evaluate this stream to determine what kind of trout population it has and was classification of trout stream it falls under.</p>	CO49-26	<p>Waterbody crossings in the Jefferson National Forest are listed and discussed in section 4.3.2 of the EIS. Impaired waterbodies affected by the MVP are discussed in section 4.3.2 and appendix F of the EIS. Little Stony Creek's status as a trout stream is listed in appendix F. According to the data presented in appendix F, Curve Branch is not listed as a trout stream at the MVP pipeline crossing location.</p>
CO49-27	<p>p. 421 Indiana bats and Northern Long-eared bats</p> <p>These two federally listed bats are vulnerable because of white nosed syndrome and their reliance on summer roosting habitat found on national forests.</p> <p>The DEIS does not seem to recognize the precariousness of the species' population in Virginia. Here on the periphery of their range, the Bats' numbers have plummeted. A net loss of 1300 Bats since counts were initiated in VA winter hibernacula (IBat EA-11), a decline of approximately 75% in this state. Bat populations in Starr Chapel Cave plummeted from 600 bats in the early 60s to 54 bats by 1996-97. . Bat populations in Mtn. Grove Cave have declined from 23 bats in 1992 to 2 bats by 1997- 98 (IBat EA-11).</p> <p>The Brack and Brown (2002) study discloses that less than half of identified roost trees are shagbark hickory, but the FS mainly only protects shagbark hickories in its inadequate mitigation measures with no assurance that adequate other potential roost trees are protected. Research in Indiana and Kentucky indicates that bats range up to 5 mi. from hibernacula during fall and spring swarming periods (ibid p. 25). Clawson(2002) reported an 80% decrease in bat populations over the last 40 years in the southern portion of the bats' range (Alabama, Arkansas, Kentucky, Missouri, Tennessee, and Virginia) (ibid, 13).</p> <p>FERC and the FS should perform the needed surveys and inventories of the area and its habitat (the proper site-specific good faith "hard look" by qualified personnel using valid methods) necessary for clearly establishing the status of the Bat here, it is clear the agency would not be placing the requisite highest priority on the Indiana Bat and other T&E bats and their habitat</p> <p>Forest clearing proposed in the Alternatives could adversely affect roosting (sheltering), maternity (breeding), foraging (feeding), and swarming habitat of the Indiana Bat and other T&E bats. Logging could remove the very trees (large mature with broken tops and cavities and snags and exfoliating bark) with the characteristics known to be used or favored by the Bats.</p>	CO49-27	<p>The Indiana bat and northern long-eared bat are discussed in section 4.7 of the EIS and in more detail in our BA. We are consulting with the FWS regarding these species.</p>

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Top priority should be given to the Bats.

This felling/removal also ignores the Bats' known loyalty to habitat. The agency must address the impact of removing a roost tree when the bats are not there. There is the need to consider, loyalty to the roost trees, stress of finding new roosts, and the impacts of removing trees next to roosts or potential roosts (i.e., making the tree more susceptible to windthrow and changing the thermal dynamics).

Ignored also is the fact that the Bats are known to especially use riparian and stream corridors for dispersal and feeding. All forested habitat is not "equal". The agency is proposing to disturb and degrade areas of Forest that are particularly important to the Bats. Most, if not all, of the tracts proposed for clearing are adjacent to streambeds.

Efficacy of proposed mitigation measures for the Bat must be explained, and they must completely compensate for potential adverse effects. For example, the increased susceptibility of remnant leave trees to windthrow should be assessed. Efficacy of retaining only shagbark hickory trees is unsubstantiated; the Bats are known to use other tree species that are present here that the cuts will remove. See Table 4 at pg. 21 of GWJNF IBRS. White, chestnut, and northern red oaks, species which are prevalent here, are "Class 1 Tree Species" and are likely to be used for roosting and maternity sites. The effectiveness of retaining a certain number of snags per acre should be substantiated. If the Bats were receiving the required "top priority" all snags and large potential den trees would be retained. See *Bensman v. USFS (1997)*. The mitigation may not necessarily retain the large old or dead/damaged trees of greatest benefit to the Species. And concern over low snag amounts (and quality) are not merely conjectural. See the information found in USDA FS General Technical Report SE-94 "Biodiversity and Coarse Woody Debris in Southern Forests" (incorporated by reference).

Another mitigation often offered for Bat roost trees is in effect no mitigation. "If during implementation active roost trees are identified. . ." Loggers or timber officers can not be expected to be qualified at identifying or locating TESLR species or roost trees. And there is no assurance that they would notify proper authorities if they did find anything. Reliance upon such mitigation for a FONSI is unreasonable and/or arbitrary and capricious.

There is no mitigation requirement for examining cut trees to ascertain if "incidental take" or significant harm to Bats should occur. In a meeting attended by members of the appellants on July 26, 2002 at the GWNF Deerfield RD office, the agency timber sale administrators and contract inspectors present made it quite clear that they "do not monitor or track wildlife killed" at logging sites.

Of particular concern are cumulative impacts to the IB. The proposed action, in concert with other past, present and future actions, could result in CIs to the Bat. Past actions have already harmed Bat habitat in this analysis area. There is clear evidence that further habitat modification (e.g., cutting of trees for sale) is foreseeable here and elsewhere in the Bats' habitat in this Forest and ranger district. The agency's assertion that CIs will not result to the Bat's populations here or in Virginia must be explained & substantiated. The Bats' viability is particularly at risk

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here due to it being on the edge of its range and its small population in Virginia.

The agency is at present modifying and/or damaging and/or degrading and/or destroying IB habitat (or contemplating such) throughout its range.

The planners often do not seem to recognize the precariousness of the species' population on this Forest. Here on the periphery of their range, the Bats' numbers have plummeted. A net loss of 1300 Bats since counts were initiated in Virginia winter hibernacula (GWJNF IBat EA-11), a decline of approximately 75% in this state.

Northern Long-eared Bat

CO49-27
cont'd

The DEIS states that the northern long-eared bat, a proposed endangered species could be adversely impacted. The northern long-eared bat has declined 99% in the Northeast, 96% in Virginia, roughly 68% in West Virginia. Unlike the little brown bat, which is showing signs of stabilization in areas longest affected by white nosed syndrome, the northern long-eared bat population does not appear to be stabilizing anywhere. Northern long-eared bat populations are starting to show increasing mortality in the Southeast and Midwest. Twenty- five states in its 38 state range are now affected by white nosed syndrome, and 5 Canadian provinces in its range are also now affected by white nosed syndrome.

- FERC should have analyzed the particular habitat needs of the long-eared bat and should have analyzed how the project would impact the bat and its habitat. Surveys should be conducted for the bat (and other PTESLR bats).

-FERC and the FS should consider the differences between northern long-eared bats and Indiana bats and their use of habitats.

p. 422: Equitrans not likely to affect the Indiana bat and NELB is West Virginia? There are some large cave systems in W. Va. Utilized by these bats and some areas have had historically large populations. How is the pipeline not likely to effect these bats?

CO49-28

Not likely to adversely affect the James spiny mussel. When the project is proposed near the headwaters of Craig Creek and near the eastern continental divide? What about high water events, blowouts w/ high sediment levels? This is a species highly sensitive to sedimentation. Limited to only 10% of its original range.

- *The requisite full, intensive, and competent surveys, inventories, and data gathering for endangered species must be performed. Cumulative impacts must be analyzed and accounted for.*

- According to a study commissioned by the American Fisheries Society Endangered Species Committee, there are "297 native freshwater mussels [in the U.S. and Canada], of which 213 taxa (71.7%) are considered endangered, threatened, or of special concern... and only 70 (23.6%) as currently stable... Freshwater mussels (also called naiads, unionids or clams) of the

CO49-28

The James spiny mussel is discussed in section 4.7 of the EIS and in more detail in our BA. We are consulting with the FWS regarding this species.

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families Margaritiferidae and Unionidae are worldwide in distribution but reach their greatest diversity in North America with about 297 recognized taxa... During the past 30 years, numbers both of individual and species diversity of native mussels have declined throughout the United States and Canada. Freshwater mussels (as well as other aquatic species) are imperiled disproportionately relative to terrestrial species... This alarming decline, the severity of which was not recognized until recently, is primarily the result of habitat destruction and degradation associated with adverse anthropogenic activities." (Williams, Warren, Cummings, Harris and Neves, 1993)

- At its peak, the James spiny mussel (*Pleurobema collina*) was distributed from a location a few miles upstream of Richmond, Va. and throughout the James River basin upstream. Since that time, its range has been reduced by approximately 90% (Clarke and Neves, 1984) The James spiny mussel now survives in a few tributaries of the James. (Terwilliger, 1990)

CO49-28
cont'd

- Water quality can greatly affect the suitability of mussel habitat. Road construction is one of the most detrimental activities impacting mussels (Hove and Neves, 1994, see enclosure) A section of Virginia's Endangered Species edited by Dr. Neves acknowledged poor logging and roadbuilding practices within the national forest are a threat to the spiny mussel in one watershed. He stated that "activities in Jefferson National Forest likely to affect the streams in which *Pleurobema collina* lives should be monitored by the United States Forest Service." (Terwilliger, 1990).

- The James spiny mussel depends on fish species such as the bluehead chub (*Nocomis leptoccephalus*), rosyside dace (*Clinostomus funduloides*), satinfish shiner (*Cyprinella analostana*), rosefin shiner (*Lythurus ardens*), central stoneroller (*Camptostoma anomalum*), blacknose dace (*Rhinichthys atralulus*) and mountain redbelly dace (*Phoxinus oreas*) in order to reproduce, so potential impacts to these fish species should have been considered as well. These fish serve as the prime fish hosts for young developing mussel larvae, called glochidia (Terwilliger, 1990, p. 254; Hove and Neves, 1994) See also George Washington and Jefferson National Forest T & E Mussel and Fish Conservation Plan (Mussel and Fish Conservation Plan), 6 & 31: "The decline of fish host species may present a problem in mussel reproduction." There is no monitoring or analysis of impacts to host fish.

- James spiny mussel females usually produce significantly fewer glochidia than other mussels. Female mussels release glochidia during a short period from early June to through late July. Water temperature and springtime water flows are believed to be important factors as far as James spiny mussel reproduction is concerned. (Hove and Neves, 1994, p. 34 & 37) The timing of activities and longevity of impacts should be of concern. There is no attempt to mitigate such effects or monitor such effects over the long term.

- Pesticides and contaminants have long been recognized as a threat to mussels (Williams et al 1993; see also EPA, "Protecting Endangered Species," EPA Rpt. #21T-3055, June 1992, for example, for the adjacent county in Va., Craig County) There is no information in the DEIS on

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what contaminants from the sites might flow into waterways inhabited by mussels or the impacts of herbicide release necessitated by this project, or cumulative impacts.

- It is not clear that all provisions of the Mussel and Fish Conservation Plan, adopted into the Plan revision, are being fully implemented. For example, the Mussel and Fish Conservation Plan requires that minimum conservation zone widths be measured based on stream type and slope (MFC Plan 12). Conservation Zones used in the project may not adequately take into account the steep slopes found in the cutting units (EA Aquatics). FERC never discloses how steep the slopes are in and around waterways inhabited by the James spiny mussel, and their upper reaches.

CO49-28
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- The Mussel and Fish Conservation Plan objectives require the FS to manage streams " in a manner that results in a minimum of 200 pieces of large woody debris (LWD) per stream mile (125 LWD/km)." Minimum diameters of LWD pieces are specified (MFC Plan 12). The FS does not disclose whether LWD levels are adequate and whether they would be maintained or improved as a result of this project.

- The MFC Plan objectives require the FS to manage streams in a manner that meets or exceeds State Water Quality Standards (MFC Plan 12). Theoretically, this would be accomplished by implementing BMPs, but FERC does not demonstrate the effectiveness of BMPs at meeting state water quality standards in this ranger district and NF, or that timber sale administrators could assure that BMPs are fully adhered to.

- And FERC has not demonstrated that current monitoring requirements are being followed, including, eg, direct monitoring of T&E mussel populations and habitat, or development of a proper protocol.

CO49-29

- The past and current state of biotic populations and water quality of perennial streams, and intermittent and ephemeral tributaries, even if a "fishery" may be absent, are undisclosed. Some populations may be close to threshold levels of tolerance for sediment; but who knows, the agency discloses no information on this relevant factor. Total amounts of sediment estimated to enter these streams along with the proposed cutting are tabulated but not meaningfully analysed. How many tons would enter precisely what stream segments? On this the table and discussion in the DEIS are silent. Monitoring information as to effects to intermittent stream populations and water quality from previous cutting are absent. Exceeding the threshold levels for certain intermittent tributary "resources" may be at risk.

- "The effects of sediment delivered to a stream channel diminish as watershed size increases. Most vulnerable are small sensitive headwaters catchments where concentrated timber harvest activity can have profound results. . . . After four years, sediment rates are normally back to pre disturbance levels. However, once sediment is deposited in a stream channel, its effects can persist for decades or even centuries (Frissel, 1996)." (JNF Enterprise TS EA-42; incorporated by reference) So this project may result in significant impacts to channel condition and

CO49-29

Impacts to streams and aquatic life, including runoff and sedimentation, are discussed in sections 4.3 and 4.6 of the EIS.

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CO49-29 cont'd	population viability or distribution.
CO49-30	There is evidence of illegal and environmentally destructive use of roads and off-roads areas in the project area. How has FERC demonstrated that existing problems will be reduced, that closures are effective, that enforcement is effective, and that similar (or greater) problems from off-road motorized use will not occur on the roads and other infrastructure proposed for this project?
CO49-31	Has MA 11 (Riparian area) been mapped, verified, and delineated in the field? Where are these areas located, how close are cutting units and other logging and burning infrastructure from them and how will they be protected? What stream surveys have been conducted in the area and what reaches did they cover?
CO49-32	p. 189: Yellow lance occurs in the James River drainage. This species may also potentially be affected by this project. The JNF Plan documents that orangefin madtom occurs in the Upper Craig watershed (JNF Plan 4-10) and documents that Atlantic pigtoe mussel and roughhead shiner are also found in the upper James watershed (JNF Plan 4-10). Atlantic pigtoe is found in the Craig Creek drainage (see Terwilliger, Virginia's Endangered Species 275 to 276). See also Terwilliger pp.356 to 357 regarding the range of the roughhead shiner. See GWJNFs TESLR lists. p. 423: Simple time of year restrictions will protect the Candy darter and orangefin madtom? What about high water events, blowouts w/ high sediment levels. These are two species that are highly sensitive to sedimentation.
CO49-33	The results of the bog turtle surveys are not disclosed. TURTLES VIABILITY: Bog turtles may be impacted by the project. Field studies and statistical analyses clearly show that even modest mortality rates (intentional or incidental) of adult turtles can lead to strong declines in populations. See J.D. Congdon et al, 1993, "Delayed sexual maturity and demographics of Blanding's turtles (<i>Emydoidea blandingii</i>): Implications for conservation and management of long-lived organisms", <i>Conservation Biology</i> 7: 826-833; and J.D. Congdon et al, 1994, "Demographics of common snapping turtles (<i>Chelydra serpentina</i>): Implications for conservation and management of long-lived organisms", <i>American Zoologist</i> 34: 397-408; and J.P. Gibbs and G.D. Amato, 2000, "Genetics and Demography in Turtle Conservation", pp. 207-217 in M.W. Klemens (ed.), <i>Turtle Conservation</i> , Smithsonian Institution Press Washington D.C. Researchers found that the accidental loss of even one adult box turtle every year could not be sustained by the population; see Doroff, A.M. and L.B. Keith, 1990, "Demography and ecology of an ornate box turtle (<i>Terrapene ornata</i>) population in south-central Wisconsin", <i>Copeia</i> 1990: 387-399.

CO49-30

See the response to CO49-3 regarding ORV.

CO49-31

Riparian areas are discussed in sections 4.3, 4.4, 4.5, and 4.6 of the EIS. Appendix F denotes which waterbodies have been surveyed and which are represented by desktop data (due to a lack of access).

CO49-32

Potential impacts to aquatic habitats, mussels, and fish are discussed in sections 4.3, 4.6, and 4.7 of the EIS as well as our BA.

CO49-33

The bog turtle is discussed in section 4.7 of the EIS.

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CO49-33
cont'd

Also, "studies demonstrate how relatively subtle shifts in plant community structure, resulting in shifts in microclimate and altering life history, can lead to steep population declines." Curtin, C.G., 1997, "Biophysical Analysis of the Impact of Shifting Land Use on Ornate Box Turtles, Wisconsin, USA", pp. 31-36 i

"Effective management and conservation programs will recognize the integrated nature of life histories and the extreme limitation that the evolution of longevity has placed on the ability of populations of long-lived organisms to withstand and respond to increased mortality or reduced fecundity of any life-history stage. In addition, programs developed to aid in the recovery of depleted populations of long-lived organisms must recognize that there will be long delays before population responses can be detected." (Congdon et al 1993, op cit.)

The candy darter, a Forest Service sensitive species, inhabits the Stony Creek watershed (JNF Plan 2-3) .

CO49-34

"Habitat - The candy darter inhabits rocky, typically clear, cold and warm, small to large creeks. Adults generally occupy unsilted runs, riffles, and swift pockets of current in and around large rubble and boulders. ... Threats - Turbidity and siltation are assumed to be limiting factors..." (Terwilliger (ed), 1991, Virginia's Endangered Species, p. 385) "In Virginia, Etheostoma osburni (candy darter) is generally distributed in Big Stony Creek only. Although six other systems of the New River drainage have its critical habitat requirements, recent records do not indicate the presence of candy darter. Furthermore, the fish is endemic to the New River drainage in the Ridge and Valley of Virginia and the Appalachian Plateaus of West Virginia and is experiencing declines throughout its range. Stony Creek provides essential habitat in preventing this species from becoming federally listed." (JNF Plan FEIS D-12).

For example, the following is from NatureServe (regarding the candy darter):
"Degree of Threat: Substantial, imminent threat
"Threat Scope: High
"Threat Severity: Moderate
" Threat Immediacy: High
"Threats: Primary threats may be turbidity and siltation resulting from human activities. Stocking of trout may be detrimental (trout probably eat E. OSBURNI). Also, anglers may limit populations by wading through possible spawning sites (Burkhead and Jenkins 1991). Jenkins and Burkhead (1994) stated that they previously (Burkhead and Jenkins 1991) may have underrated the jeopardy of this species in Virginia by recommending it for only special concern status; in 1994 they rated it as endangered or threatened in Virginia due to "localization or extirpation of most populations." Warren et al. (2000) rated this species as vulnerable.
"Environmental Specificity: B
"Endemism: endemic to a single nation
"U.S. & Canada State/Province Distribution
"United States - VA, WV
"Global Range: EF

CO49-34

The candy darter is discussed in section 4.7 of the EIS.

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CO49-34 cont'd	<p>"Global Range Comments: New River drainage, in the Ridge and Valley of Virginia and the Appalachian Plateaus of West Virginia (Jenkins and Burkhead 1994). See Jenkins and Burkhead (1994) for corrections of identifications affecting the known ranges of this species and E. KANAWHAE. In Virginia, generally distributed only in Big Stony Creek, perhaps solely above the gypsum plant at Kimbalton; extremely localized in Laurel Fork of the Wolf Creek system; limited range in the New River. Known also from Reed, Big Walker, Little Stony, and Sinking creeks, and Spruce and Pine runs, but there are no recent records from these streams (Burkhead and Jenkins 1991)....</p>
	<p>"Reproduction Comments: Spawning typically peaks mid-to-late May in the Greenbrier River, West Virginia (Lee et al. 1980). Spawners were found in late April at a water temperature of 15.5 C in Big Stony Creek, Virginia; adults were in breeding condition on 20 June at 18 C in a different year (Burkhead and Jenkins 1991). Sexually mature in 2 years, lives up to 3 years.....</p>
	<p>"Habitat Comments: Swift water over stones and boulders in cool montane streams. Rocky, typically clear, cold and warm, small to large creeks; adults generally occur in unsilted runs, riffles, and swift pockets of current in and around large rubble and boulders (Burkhead and Jenkins 1991). Fast rubble riffles of small to medium rivers (Page and Burr 1991). In three streams in West Virginia, occurred in fast current velocities and rock substrate in water depths of 20-30 cm (Chippis et al., 1994, Am. Midl. Nat. 131:175-180). May spawn in patches of sand in swift water? (Burkhead and Jenkins 1991)." (NatureServe. 2004. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.1. NatureServe, Arlington, Va. Available http://www.natureserve.org/explorer. (Accessed: November 23, 2004).)</p>
	<p>"Habitat - The candy darter inhabits rocky, typically clear, cold and warm, small to large creeks. Adults generally occupy unsilted runs, riffles, and swift pockets of current in and around large rubble and boulders. ... Threats - Turbidity and siltation are assumed to be limiting factors..." (Terwilliger (ed), 1991, Virginia's Endangered Species, . p. 385)</p>
	<p>FERC should have analyzed how the project (including forest clearing, roads, and other infrastructure) affect sediment-sensitive species such as trout, candy darter, and other aquatic species. Efficacy of proposed mitigation measures for the candy darter and other aquatic species must be explained, and they must completely compensate for potential adverse effects.</p>
	<p>Cumulative effects of the MVP pipeline, other land disturbing activities in combination with other past, present, and reasonably activities and events in this watershed should be analyzed in accordance with NEPA. There is a possibility that these activities in combination with non-FS activities or events may already be contributing significant levels of sediment, affecting the viability of the candy darter.</p>
CO49-35	<p>p. 424. What stretches were actually surveyed for James spinymussels? How far downstream?</p>

CO49-35

Details regarding the James spinymussel are discussed in section 4.7 of the EIS and in our BA.

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CO49-36	<p>p. 435. No mussels surveys of the Gauley River due to high water events? "Waived"? More evidence that this DEIS is incomplete.</p>
CO49-37	<p>p. 423 and 426/27: Why the differing treatment of Indiana Bat and NLEB in MVP and Equitrans? Are the Equitrans mitigation measures realistic?</p>
CO49-38	<p>p. 433: What timber rattlesnake roosting areas could be disturbed?</p>
CO49-39	<p>p. 437: Allegheny woodrat is found within 0.3 mi. of corridor. This is a species often found in remote habitat. The Allegheny woodrat is found on the JNF. New strategies such as "maintaining sufficient old growth mast producing canopies (Beck 1977; McShea 2000), maintenance of continuously forested corridors" " public education, maintenance of course woody debris such as large snags and fallen logs, and more <u>may be required to insure the long-term survival of the Allegheny woodrat</u>" See (See '01-'03 GWJNFs Monitoring & Evaluation (M&E) Rpt Mengak 2002 pp. 30-34, See also the entire '01-'03 GWJNFs M&E Rpt Mengak 2002 pp. 1-38).</p>
CO49-40	<p>p. 438: Wild trout was "not observed" at all in the course of the surveys? Really? How thorough were the surveys? There are numerous trout streams in the area. More evidence of an incomplete DEIS and incomplete surveying.</p>
	<p>FERC should pay particular attention to how ground disturbing activities and loss of shading and canopy near streams could affect trout habitat and trout populations in streams in the area - since this is an important area for trout. We are particularly concerned about the potential for forest clearing in this project to negatively affect water quality, sediment levels, and water temperature. FERC should analyze these issues and should fully mitigate all impacts. What are large woody debris levels along these streams and do they need to be augmented?</p>
CO49-41	<p>FERC should have also considered how it would protect the stream management zones, as laid out in the Virginia BMPs. These are different from the riparian zones established in the JNF Plan in some respects. For example, they require that the forest floor "remain essentially undisturbed" in the SMZ, which is 60-120 ft. along trout streams, dependent on slope of adjacent lands.</p> <p><i>Wider stream buffers should have been considered. Many species and biological communities rely on the health of riparian areas. See Jan 13, '04 USF&WS BO for the JNF p. 2 bottom paragraph and p. 3 top paragraph; and Seth Wenger, 1999, "A Review of the Scientific Literature on Riparian Buffer Width, Extent and Vegetation", Institute of Ecology, University of Georgia, 59 pp. (both incorporated by reference). The Virginia Department of Game and Inland Fisheries (VDGIF) stated its position that the proposed riparian corridors in the draft revised Jefferson LRMP were not sufficient to protect threatened and endangered aquatic species. See Comment letter 2575 on the draft revised Jefferson LRMP, William Woodfin, Jr., Virginia Department of Game and Inland Fisheries, already in the FS's possession, incorporated by reference. Instead of the proposed riparian standards, the VDGIF recommended increasing the standard buffers with an allowance to reduce the buffers on a site-specific bases after</i></p>

CO49-36	<p>The WVDNR waived the mussel survey for the Gauley River.</p>
CO49-37	<p>The Indiana bat and northern long-eared bat are subject to the same requirements, but the project specifics of the MVP and the EEP are different.</p>
CO49-38	<p>Timber rattlesnake is not a federally listed species.</p>
CO49-39	<p>The Allegheny woodrat is discussed in section 4.7 and appendix O of the EIS.</p>
CO49-40	<p>As stated in section 4.6.1 of the EIS, the MVP would cross waterbodies containing populations of wild brown and brook trout, stocked rainbow trout, and freshwater mussels. The VADGIF restricts construction within waterbodies that contain wild trout from October 1 through March 31 and in waterbodies that contain stocked trout from March 15 through May 15. As stated in section 4.6.2 of the EIS, Mountain Valley would adhere to all federal and state permit conditions regarding the minimization of impacts on fisheries of special concern including adhering to recommended work windows for in-water construction (or requesting a work-window modification, if needed). Mountain Valley would also attempt to minimize impacts on fisheries by relocating fishes from the construction areas following guidance from the VADGIF, who requested that fish be relocated during waterbody crossings in Virginia. Finally, aside from a temporary disruption of fishing in the vicinity of the waterbody crossings during construction, we do not expect the project to impact recreational fisheries in West Virginia or Virginia.</p>
CO49-41	<p>Riparian areas are discussed in sections 4.3, 4.4, 4.5, and 4.6 of the EIS.</p>

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CO49-41
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consultation with all cooperating agencies. Id. Wider streamside buffers than those proposed here (EA 13&14) should have been considered and implemented.

Headwaters and small streams are particularly sensitive: "The effects of sediment delivered to a stream channel diminish as watershed size increases. Most vulnerable are small sensitive headwaters catchments where concentrated timber harvest activity can have profound results. . . . After four years, sediment rates are normally back to predisturbance levels. However, once sediment is deposited in a stream channel, its effects can persist for decades or even centuries (Frissel, 1996)." (JNF Enterprise TS EA-42; incorporated by reference). "Generally the headwater fish populations are the most threatened." (GWNF FEIS J-8). For information regarding salamander use of headwater stream habitat see <http://www.epa.state.oh.us/dsw/wqs/headwaters/TechRep_FishAmphibian_2002.pdf> (incorporated by reference). This information needs to be fully considered and incorporated into the analysis. Expanded no cutting or no disturbance zones around stream courses needs to be implemented here.

The JNF Plan requires the FS to delineate riparian areas (manage prescription area (RxA) 11 areas) and this should be done as part of the MVP proposed project through maps and other documentation.

CO49-42

- Springs and seeps are a component of landscape diversity and are very important for maintaining the population viability and distribution of salamanders, frogs, crayfish, box turtles, ruffed grouse, turkeys, and other species (see JNF Hagan Hall Timber Sale EA -43, 44, 46; incorporated by reference). Removal of their canopy cover impedes and disrupts the natural ecological succession of these areas. Implementation of the proposed alternative/mitigation is not compliant with the DFC for these microhabitats. These areas should be absolutely off-limits to cutting and removal and vehicles; and the no-disturbance zone should be more than just the "immediate" wet area due to hydrological, shade, and drying concerns.

"Elimination of terrestrial vegetation around aquatic breeding sites causes amphibian populations to decline [citations omitted]. Thus, maintenance of amphibian biodiversity depends on the protection and management of both aquatic breeding sites and the surrounding terrestrial habitat." "Factors influencing amphibian and small mammal assemblages in central Appalachian forests", Mitchell et al, Forest Ecology and Management 96: 65-76 (1997). (research conducted on the GWNF, incorporated by reference).

"Downed material in these spots is providing cover which was formerly provided by a forest canopy. This downed material is retaining the cooler temperatures and higher humidity associated with springs and seeps." (Hagan Hall Wildlife Existing Condition report, Aug. 1998). "Removal of material from these sites [seeps, springs, bogs, and forested wetlands], particularly where most of the tree canopy is now gone, would increase the solar radiation causing warming temperatures and less humidity. . . . increased temperatures and drier air can affect the presence of certain amphibians and small mammals." (Hagan Hall EA-47). Ecosystem

CO49-42

Springs and seeps, particularly in regard to karst areas, are discussed in sections 4.1 and 4.3 of the EIS.

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CO49-42 cont'd	<p>management should recognize that there is more to seeps, springs, bogs, and forested wetlands than just their physical characteristics. If these locations become unusable or unattractive to some amphibians, mammals, or other taxa that would be expected here, then they are not fully functional. There should be analysis or citation to studies to corroborate the assertion that retention of 5-15% (or whatever basal area the cutting method retains) of the overstory cover shading these sites is enough to maintain their full functioning and attain their DFC.</p> <p>Surveys to identify these areas should have been carried out during wet periods when they can be properly detected (see state BMP manual). "Seeps and other wetlands ... are best located during rainy season as many wetlands are difficult to identify during dry periods." - Forestry Best Management Practices for Water Quality in Virginia Technical Guide at pg. 42 (incorporated by reference). If the habitats are not properly identified and inventoried, they cannot be properly protected, mitigated, and monitored.</p> <p>Seep areas provide critical riparian habitat. A VDGIF biologist states they should be protected "by a minimum of 100 feet on each side (preferably 200-300 feet)" (see GWNF Johnson Mtn. timber sale project file at tab 20; incorporated by reference). This 200-300' zone should be applied here. See also Jan 13, '04 USF&WS BO for the JNF p. 2 bottom paragraph; and Seth Wenger, 1999, "A Review of the Scientific Literature on Riparian Buffer Width, Extent and Vegetation", Institute of Ecology, University of Georgia, 59 pp. (both in your possession and incorporated by reference).</p>
CO49-43	<p>p. 454. Peters Mountain itself should be considered a special interest area. This landform is the dominant feature of the this part of the Ridge and Valley.</p>
CO49-44	<p>p. 467. No mention of the Allegheny Trail, a trail of over 300 mi. from Va. to Pennsylvania.</p>
CO49-45	<p>No mention of Hanging Rock Raptor Observatory.</p>
CO49-46	<p>Where is the consideration of alternatives in this discussion? Discussion seems to be limited to one alternative, the MVP chosen alternative. Does this mean there is effectively only one alternative? Will effects on other alternatives be considered if another alternative or variation of the proposed alternative is chosen? Precludes an examination of full range of alternatives required by NEPA.</p>
CO49-47	<p>Impacts to Peters Mtn WA is "none" when pipeline 75 ft away?</p>
CO49-48	<p>p. 470: Where is the evidence of "gravel... FS roads... transmission lines" etc. on NFS lands. It sounds like these roads, lines, disturbances are everywhere. Is this the case? Not explained or demonstrated.</p>
CO49-49	<p>p. 471: what are the scenic impacts to the Pandapas Pond to Caldwell Fields route?</p>
CO49-50	<p>p. 474: Riparian corridors (Rx 11) should be mapped and analyzed as part of the DEIS.</p>

CO49-43	Peters Mountain and the Peters Mountain Wilderness are discussed in section 4.8 of the EIS.
CO49-44	The MVP pipeline route does not cross the Allegheny Trail.
CO49-45	See the response to CO49-25 regarding the Hanging Rock Observatory.
CO49-46	Numerous project alternatives are discussed in section 3 of the EIS.
CO49-47	Peters Mountain and the Peters Mountain Wilderness are discussed in section 4.8 of the EIS.
CO49-48	This sub-section was authored/reviewed by FS staff of the Jefferson National Forest.
CO49-49	The meaning of this comment is unclear.
CO49-50	Riparian areas are discussed in sections 4.3, 4.4, 4.5, and 4.6 of the EIS.

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CO49-51	<p>p. 597: Only 78% of the proposed route in Virginia was surveyed from cultural resources.</p> <p>P. 604: An evaluation of cultural attachment should not have been conducted only limited areas, such as the Peters Mtn area. The evaluation should have looked at areas surrounding all of the proposed corridors. As the DEIS says, "Cultural attachment is not specific to the project area, and could apply anywhere in the world."</p> <p>Pp. 610-617: Even though this is a DEIS, and presumably our last chance to get informed comments in during the administrative stage of the project, a vast number of potential cultural/archaeological sites have not been evaluated.</p> <p>"Thirty-one archaeological sites that are currently unevaluated or presumed potentially eligible would be avoided." (p. 610)</p> <p>What is meant by "presumed"? They will not be required to be protected and/or will not be affirmatively protected?</p> <p>"Thirty-two archaeological sites in the direct APE in West Virginia, and 22 archaeological sites in the direct APE in Virginia are unevaluated or are presumed potentially eligible, cannot be avoided, and testing was recommended to assess their NRHP eligibility. Additional research was recommended at three historic sites in Franklin County, Virginia." (p. 611).</p> <p>Thus, a large number sites "cannot be avoided" and since they have not been evaluated, FERC has no idea of their significance. Some of these sites may be highly significant.</p>
CO49-52	<p>p. 638: Greenhouse gases. Virtually the only discussion of greenhouse gases (and climate change) in this DEIS is in terms of meeting the greenhouse gas reporting rules. There is nothing on the life cycle effects of gas development on climate change. Cumulative effects analysis is arbitrarily truncated. It cannot be said that natural gas is transported with no intention to burn it or that methane is not released at various points in the life cycle of natural gas (from extraction, to preparation for distribution, to distribution, to its end use.) Without such an analysis, it cannot be said that a hard look at the issue is taken, as required by NEPA.</p>
CO49-53	<p>p. 723-26: Maps of cumulative effects (and cumulative effects analysis) are lacking, esp. regarding forested habitat. There are numerous Forest Service timber project (past, present, and in planning stages) in this area. Other activities include road construction, prescribed burning projects, powerlines, gas lines, utilities, communication tower construction, herbicide spraying projects, etc.). The key to the maps ostensibly includes "other projects," but none of these are shown. These include, for example the Olean, Upper Craig Creek, Fork Mountain, and other timber sale projects. One has only to look at past and present Schedules of Proposed Actions and past decision notices/decision memos for the Eastern Divide Ranger District to begin this analysis. Apparently this was not done. Nor was a full analysis of the issue.</p>
CO49-54	<p>Maps:</p>

CO49-51

As of February 2017, cultural surveys have been completed by Mountain Valley for about 96 percent of the pipeline route where access has been granted. Information for archaeological and historic sites is discussed in section 4.10 of the EIS. Based on Mountain Valley’s cultural resources investigations reports, we have determined that 220 of the newly recorded archaeological sites and 107 of the historic architectural sites in the direct APE are not eligible for the NRHP, are not historic properties, and require no additional work. A total of 46 archaeological sites are unevaluated, and avoidance was recommended. As of February 2017, no historic properties outside of Historic Districts have been identified in the direct APE that would be adversely affected by the MVP. The FS requested a study of cultural attachment for the Peters Mountain area.

CO49-52

GHG emissions are discussed in section 4.11 and 4.13 of the EIS. Climate change and cumulative impacts are discussed in section 4.13.

CO49-53

Other projects depicted in the maps for the cumulative impacts analyses are keyed to appendix U.

CO49-54

Features are depicted on the EIS maps to the extent possible, while still keeping the maps readable. Visual impacts on the ANST, including updated simulation information, are discussed in section 4.8 of the final EIS.

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CO49-54 cont'd	In general, all streams and rivers are not labeled on these maps. This makes it difficult to evaluate proposal's impact on waterways in the area.
CO49-55	<p>p. 884: What are the visual impacts to the Appalachian Trail and Allegheny Trail, including the valley and mountain around Little Mtn from MP 191 to MP 195?</p> <p>The area on Peters Mountain to the west of the proposed pipeline MP 195 to 196 is the remote area in Ohear map Mar. 1999 described above. How would the corridor impact the remoteness of this core area?</p> <p>p. 885 FERC and the FS should examine whether there are any areas that qualify as roadless areas (or potential wilderness areas) east of the existing Peters Mountain Wilderness? How would the pipeline route (buried and unburied sections) and the permanent and temporary roads shown on this map impact this area?</p>
CO49-56	<p>Fish in Stony Creek and other streams on this map may travel upstream to national forest lands during different parts of their life cycles. How would the project (pipeline, roads, and other infrastructure) impact fish populations on national forest lands and private lands?</p> <p>p. 886 Fish in Little Stony Creek and other streams on this map may travel upstream to national forest lands during different parts of their life cycles. How would the project (pipeline, roads, and other infrastructure) impact fish populations on national forest lands and private lands?</p>
CO49-57	<p>What visual impacts would the project have on the approach road to the Cascades area? How would this impact the recreational experience?</p> <p>p. 887: What visual impacts would the project have on Mountain Lake Wilderness, the approach road to the Mountain Lake Wilderness area or the approach road to Mountain Lake Lodge? How would this impact the recreational experience?</p>
CO49-58	<p>p.888: Brush Mountain – Rugged backyard wilderness close to Blacksburg.</p> <p>The Wilderness Act defined wilderness as any "area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." Although it took a long time, people gradually began to realize that this did not only apply to large expanses of territory in the Western US. "In passing the Endangered Wilderness Act [in 1978], Congress further established that areas previously influenced by man should not be precluded from consideration for wilderness classification, nor should roadless areas near major cities, as they could provide much-needed primitive recreation for the nearby population." Browning at al. 103 Wilderness Laws: Milestones and Management Direction in Wilderness Legislation 1964-1987.</p> <p>Brush Mountain Wilderness is located entirely along an 8-mile stretch of the north side of Brush Mountain. This 4794-acre wilderness is expanded by the 1126-acre Brush Mountain roadless area that runs another mile and a half to the southwest. To its northeast lies 3743-acre Brush Mountain East Wilderness.</p>

CO49-55	<p>Visual impacts to the ANST, including updated simulation information, are discussed in section 4.8 of the final EIS. The Allegheny Trail would not be crossed by the proposed MVP pipeline route. However, the pipeline corridor would be visible from the Allegheny Trail during bare-earth conditions. Impacts to roadless areas are discussed in section 4.8 of the EIS. The entire MVP pipeline would be buried underground (see section 2 of the EIS).</p>
CO49-56	<p>Impacts to aquatic habitats and fish, including within the Jefferson National Forest, are discussed in sections 4.3, 4.6, and 4.7 of the EIS.</p>
CO49-57	<p>The Cascades Trail and the Mountain Lake Wilderness would not be crossed by the proposed MVP pipeline route. The MVP pipeline corridor would not be visible from the Cascade Trail, even during bare-earth conditions.</p>
CO49-58	<p>The Brush Mountain Wilderness would not be crossed by the proposed MVP pipeline route. An analysis of visual impacts is presented in section 4.8.2 of the EIS.</p>

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CO49-58
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The rock strata are tilted upward to the north, so as you walk over Brush Mountain from the Blacksburg side on the south to the wilderness side on the north, you are walking backwards in geological time. To the south (and mostly outside the wilderness) are Mississippian layers formed between 320 and 360 million years ago. On the upper reaches of the mountain is tough Devonian sandstone formed between 360 and 408 million years ago. It caps Brush Mountain and juts out to the north at the top of the wilderness slope. Below it, one encounters more brittle layers of older and more crumbly Devonian shale subject to erosion. And as you enter the lower reaches of Craig Creek valley you walk over Silurian sandstone formed between 408 and 438 million years ago before it slopes upward to form Sinking Creek Mountain.

The steeper wilderness side of the mountain on the north is shaped by geology. Because the southern slopes of Brush Mountain lie with the layers of rock like the top of a wave, because the northern slopes go against the layers of rock, and because of variations in the hardness of the rock, the wilderness side is much more rugged than the south side. Rock formations at the top of the mountain jut at sharp angles. Below it are more brittle layers of older Devonian rock and Silurian sandstone. This combination is quite unusual and makes for interesting terrain. About two dozen side-ridges crisscross the mountain forming narrow, sharp ridges with deep coves. The result is a tremendous amount of variety across the wilderness area. These make great places to explore.

One of the key species of the backcountry is table mountain pine, a stalwart pine that thrives in harsh conditions and out-of-the-way places where few other trees will grow. It is found on dry southwestern slopes along Brush Mountain. The wilderness area lies in the heart of an area with some of the highest concentrations of this pine in the world. Table mountain pine has serotinous cones, or cones that spring open in the presence of fire and produce seedlings.

Old growth oak-pine forests play an important role amongst the natural communities here. There is a fairly large amount of old growth scattered across the western half of the wilderness. Rarities on Brush Mountain include two parasitic plants: sweet pinesap and piratebush. Both live off of the roots of plants. Sweet pinesap is an aromatic plant with subtle rose-pink flowers. The plant doesn't leaf out; instead it lives off of a fungus growing on roots of other plants. Piratebush, on the other hand, saps the nutrients from roots of conifers. Look for a small shrub with pale green compound leaves. The only two other related species in piratebush's genus are found halfway around the world in China and Japan.

The wilderness is located just a few miles downstream from the eastern continental divide. The divide, at this point, is a relatively flat gap near Route 460 and Pandapas Pond. Because of its location near the headwaters of Craig Creek, Brush Mountain Wilderness protects habitat for the James spinymussel, an endangered mussel. The mussel was once found throughout much of the entire James River basin from the Richmond area to the mountains. Today, the range of this mussel has been reduced by 90%. Only a few streams, like Craig Creek, still provide good habitat for the James spinymussel. Mussels act as natural water filters, purifying streams and

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CO49 – Sierra Club, VA Chapter

CO49-58 cont'd	other waterways. Some of the rarest mussels depend on clear, flowing water rushing over small rocky bars and riffles. Wilderness areas like Brush Mountain Wilderness protect aquatic species like mussels by reducing the release sediment into streams.
CO49-59	<p>The Craig Creek bottoms are full of life. The lower portion of Brush Mountain Wilderness is bordered by Craig Creek, a stream that has seen intense flooding from time to time, carrying with it logs and debris. Along this section of the wilderness, you may find small rocky cliffs, such as those near Caldwell Fields, a popular group camping area. At the right time of year, people who rock-hop near these cliffs can find bleeding heart and other wildflowers and ferns.</p> <p>What effect would the pipeline and associated infrastructure proposed in the steep terrain here have on Craig Creek or endangered mussels downstream?</p> <p>Temporary access roads are planned directly beside Craig Creek here. How close are these to the stream? What effects would these have on Craig Creek or endangered mussels downstream?</p>
CO49-60	p. 889-90: How far is this from Falls Ridge Nature Conservancy Preserve? Karst areas? Fault lines – all found in Falls Ridge and perhaps other areas throughout this area?
CO49-61	<p>Why is the extensive roadwork proposed between MP 223-25?</p> <p>The proposed route crosses Paris Mountain just west of Half Acre of Rocks and Acre of Rocks. Are there any areas of rocky terrain, boulder fields, scree slopes, cliffs, outcrops or other such areas? What wildlife species are associated with such areas?</p> <p>Throughout the project area –</p>
CO49-62	<p>A number of units may contain boulder fields or very rocky areas. These are important elements of biodiversity and are important habitat for various species (e.g. Allegheny Woodrats, amphibians, reptiles). Forest clearing and ground disturbing activities must be avoided in these areas. But merely not performing actions within the outcrops and slopes themselves does not avoid impacts to these unique areas. Without proper buffer zones (such as extending out at least a tree height or approximately 150') the habitat conditions and populations within the outcrops would not be protected. See the above discussion regarding habitat conditions, functionality, and no-disturbance zones around springs and seeps. <i>The present mitigation is not sufficient for avoiding significant impacts to these areas and the decision does not protect the Forest's diversity.</i></p> <p>Rocky outcroppings, rocky ridge spines, cliffs, and rocky slopes are known to be extremely important habitat for various species such as Timber Rattlesnakes, Coal Skinks, Allegheny Woodrats, peregrine falcons, and salamanders, as well as mosses and lichens and others. Implementation of the proposed cutting would significantly alter the ecological conditions at these rocky sites (e.g., temperature and moisture regimes). In addition, the operation of logging equipment would alter the soil conditions and the rocks. Small site-sensitive species of limited</p>

CO49-59	Craig Creek, and its mussels, are discussed in sections 4.3, 4.5, 4.6, and 4.7 of the EIS.
CO49-60	The EIS has been updated to address the Falls Ridge Nature Conservancy Preserve as appropriate.
CO49-61	Access roads are needed to provide equipment access to the construction right-of-way.
CO49-62	Rocky outcrops are discussed in sections 4.2 and 4.8 and appendix N of the EIS. Wildlife is discussed in section 4.5 of the EIS. Species of concern to the FS are documented in the BE and MIS reports appended to this EIS.

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

CO49-62 cont'd	<p>mobility would also be killed or maimed directly.</p> <p>This relevant environmental factor must be given a hard look. FERC must fully and fairly consider the impacts of the proposed activities upon these areas.</p> <p>The proposed operations could significantly affect their distribution and mortality (degrade or destroy den conditions, road kills and crushing, increased motorized use, draw more people to area, habitat displacement, etc.). Their security and viability may be significantly worsened. Den sites are ecologically critical areas, like bird rookeries or Indiana Bat hibernacula. The snakes are even more vulnerable because unlike birds and bats they cannot fly away. There is a clear need to establish what their status is here. Harm to a relatively small area could actually affect an area or population for miles around.</p> <p>They should be searched for during the time of spring egress (from the den) or fall ingress (into den). During these times they stay in close proximity to their den sites. Then their status and the possibility of the presence of dens here can be ascertained.</p> <p>We are particularly concerned about the harm implementing this project could have on "Timber Rattlesnakes (<i>Crotalus horridus</i>). This is a species of viability concern on this Forest and elsewhere throughout its range (see, e.g., 2003 JNF DEIS at Appendix E). See <u>Reptiles of Virginia</u> by Joseph Mitchell and "The Timber Rattlesnake: Its Distribution and Natural History" by W.H. Martin in <i>Conservation of the Timber Rattlesnake in the Northeast</i> published by the Massachusetts Audubon Society, incorporated by reference. Individuals of this species congregate in concentrated areas (i.e., den sites) during the winter and immediately pre- and post-hibernation. Many snakes may travel from a wide area (from 2.5 miles away and more) when migrating to one of these overwintering sites. Populations and individuals are especially vulnerable to direct and indirect disturbance during these denning times.</p>
CO49-63	<p>p.891: There is something wrong with the map of Spring Hollow Res. The terrain around the map does not match the blue area. Is the reservoir of a different configuration from that shown?</p> <p>How would the project (pipeline, road construction (brown) and infrastructure) impact the viewshed around the reservoir and the camp adjacent to the reservoir? How would water quality be impacted?</p>
CO49-64	<p>p. 892: How would the project affect the viewshed of the North Fork of the Blackwater River?</p>
CO49-65	<p>The area where the pipeline is located near Callaway Rd is one of the major access routes between the Blue Ridge Parkway and Rt. 221. What visual impacts would there be to this sensitive viewshed?</p>
CO49-66	<p>What hiking routes are there in the vicinity of the 3326 ft knob south of Callaway Rd.? How would these be impacted?</p>

CO49-63	<p>We will update the map for Spring Hollow Reservoir as appropriate. Visual impact analysis of KOPs is included in section 4.8 of the EIS. Due to the distance of the reservoir from the project (0.8 mile) and the erosion and sedimentation control measures that Mountain Valley would implement, we conclude that the MVP would not have significant long-term impacts on water quality at the reservoir.</p>
CO49-64	<p>Visual impact analysis of KOPs is included in section 4.8 of the EIS.</p>
CO49-65	<p>Visual impact analysis of KOPs is included in section 4.8 of the EIS.</p>
CO49-66	<p>Relevant trails are discussed in section 4.8 of the EIS.</p>

COMPANIES AND NGOs

CO49 – Sierra Club, VA Chapter

CO49-67	p.893: How would water quality in the N Fk of Blackwater River be affected?
CO49-68	p. 894-5: How would the visual quality of the Grassy Hill Nature Preserve (Va. state lands) be affected?
CO49-69	p. 896-8: How would water quality in the Pigg River be affected?

CO49-67	The Blackwater River is discussed in section 4.3 of the EIS. The proposed pipeline route would not cross the Blackwater River. Given the erosion control measures that would be implemented the MVP would not have significant long-term impacts on water quality in the Blackwater River.
CO49-68	The Grassy Hill Conservation Site would not be crossed by the proposed MVP pipeline route. Visual impact analysis of KOPs is included in section 4.8 of the EIS.
CO49-69	The Pigg River is discussed in section 4.3 of the EIS.

COMPANIES AND NGOs

CO50 – Potomac Appalachian Trail Club

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POTOMAC APPALACHIAN TRAIL CLUB

118 PARK STREET SE, VIENNA VA. 22180

(703) 242-0693

December 21, 2016

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First St. N.E. Room 1A
Washington, DC 20426

RE: Comments on Draft Environmental Impact Statement for Proposed Mountain Valley Pipeline
Docket No. CP16-10-000

Dear Secretary Bose:

I am writing on behalf of the Potomac Appalachian Trail Club, Inc. to provide our comments on the Draft Environmental Impact Statement (DEIS) for the proposed Mountain Valley Pipeline (MVP) project.

CO50-1

The Potomac Appalachian Trail Club (PATC) is a 501(c)(3) non-profit formed in 1927 to build and maintain the Appalachian National Scenic Trail (ANST) in southern Pennsylvania, Maryland, West Virginia, and Virginia. PATC is one of 31 clubs that preserve the ANST and its side-trails in cooperation with the Appalachian Trail Conservancy and the Appalachian Trail Park of the National Park System.

PATC is alarmed by the suggested dismissal of the Forest Management Plan process for this and all future such projects. We view this as a threat to all groups concerned about forest health and non-commercial forest users.

PATC will cooperate with coalitions of aligned groups and use our donor network and the considerable intellectual and professional capabilities of our 7,700 members to maintain the protections for the forest for which we have worked so hard.

PATC fully supports the position and concerns of the Appalachian Trail Conservancy about the MVP DEIS, submitted by Ron Tipton. PATC also fully supports the concerns of the U.S. Forest Service concerning the Proposed Crossing of the Appalachian National Scenic Trail submitted on March 9, 2016 by Mr. Joby B. Timm, Forest Supervisor of the George Washington and Jefferson National Forests.

PATC expects the developer to use existing technology to bore the needed access under the established Appalachian Trail Corridor rather than to disturb the forest with cut and fill construction.

PATC understands the benefits of infrastructure such as pipelines. However, projects such as the Mountain Valley Pipeline must not void existing and long standing working management processes or destroy protected areas when it can easily be avoided.

CO50-1

See the responses to FA11-4 and FA11-5 regarding the ANST. See the response to FA11-2 regarding the adequacy of the draft EIS. See the response to comments FA8-1 and FA10-1 regarding the FS' proposed amendments.

COMPANIES AND NGOs

CO50 – Potomac Appalachian Trail Club

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PATC strongly believes that FERC should either withdraw this DEIS until it is ready for further public comment or offer a supplemental DEIS that addresses our concerns over the impacts to the Appalachian National Scenic Trail.

Thank you for your consideration of this important matter.

Respectfully,



Don White
President

Cc:

Ms. Wendy Jansenn
Appalachian National Scenic Trail Park Superintendent
National Park Service

Mr. Mike Caldwell
Northeast Regional Director
National Park Service

Mr. Job Timm
Forest Supervisor
George Washington and Jefferson National Forests

Mr. Clyde Thompson
Forest Supervisor
Monongahela National Forest

Mr. Tony Tooke
Regional Forester
USFS Region 8

Ms. Jennifer Adams
Special Projects Coordinator
George Washington and Jefferson National Forests

Ms. Karen Mouritsen
Eastern States Director
Bureau of Land Management

Ms. Karen Overcash
Forest Environmental Coordinator
George Washington and Jefferson National Forest

Mr. Ron Tipton
Executive Director
Appalachian Trail Conservancy

Mr. Ronald S. Rosen
Chair, Mid-Atlantic Regional Partnership Committee
Appalachian Trail Conservancy

CO50-1
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COMPANIES AND NGOs
CO51 – Susquehanna Appalachian Trail Club

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Susquehanna Appalachian Trail Club
P.O. Box 61001
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FEDERAL ENERGY REGULATORY COMMISSION

Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary
888 First St. N.E. Room 1A
Washington, DC 20426
December 17, 2016

ORIGINAL

Re: Proposed Mountain Valley Pipeline Comments: Docket No. CP16-10-000 - 81 FR 71041

Ms. Bose,

Poor planning has resulted in a poor route proposal for the MVP project that does not adequately protect visual quality leading to substantial impacts and degradation of the nature and purposes of the ANST.


FERC has proposed Forest Plan amendments that would allow activities that would substantially interfere with the nature and purposes and impair the resources and values of the Appalachian National Scenic Trail (ANST). These proposed Forest Plan amendments represent a significant threat to all National Scenic and Historic Trails on lands managed by the USDA Forest Service because the current protections afforded the ANST in Forest Plans serve as a model for Forest Planning nationwide.

The FERC DEIS would require amendments to the Jefferson National Forest Plan, the foundational document for Forest management. These amendments would not only be unprecedented, but would significantly erode the protection of the ANST, which the public has spent millions of dollars to protect.

Proposed Amendment 4 is of significant concern. This amendment would change the Scenic Integrity Objective (SIO) for the Rx 4A area from "High" to "Moderate," downgrading the standard for scenic integrity along the ANST. This amendment also allows 5-10 years following completion of the project for this SIO of "Moderate" to be achieved (two years is the typical standard) — this implies that the scenic integrity will be below "Moderate" for up to a decade. This would be substantial interference to the nature and purposes and impair the resources and values of the ANST.

Amending the plan in the manner proposed would negatively impact other Forest Plan prescription areas protecting Wilderness, Old Growth Forest, Inventoried Roadless areas, and fragile successional habitats. Furthermore, it requires the establishment of a new utility corridor directly adjacent to Federally Designated Wilderness and terminating immediately adjacent to the both sides of the ANST.

Thank you for accepting and considering these comments.

Sincerely,

Cindy Badich, President
Susquehanna Appalachian Trail Club

CO51-1

CO51-1

See the response to comment FA10-1 regarding Amendment 4.

COMPANIES AND NGOs

CO52 – Preserve Craig

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P.O. Box 730, New Castle, VA 24127 Phone: (540) 309-9560
www.PreserveCraig.org Email: PreserveCraig@gmail.com

October 23, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

RE: Docket Number PF15-3-000; Mountain Valley Pipeline

Dear Ms. Bose:

Please find the attached expert report which establishes the scientific validity of Cultural Attachment as a social phenomenon and as a decision-making policy tool in addressing community concerns for the proposed Mountain Valley Pipeline.

Preserve Craig, Inc. is concerned that the proposed Mountain Valley Pipeline (MVP) will irreparably harm impacted communities, especially those that are "culturally attached." Preserve Craig, Inc., and representatives of other communities, have raised Cultural Attachment as a significant issue for analysis in the process of developing an Environmental Impact Statement (EIS) for the MVP.

We are concerned that the FERC project manager had initially rejected the possibility of including an assessment of Cultural Attachment in the EIS because, reportedly, he never heard about Cultural Attachment. We are further concerned that subsequently some type of concession was agreed to that FERC will require the EIS contractor to perform a Cultural Attachment study, but only on lands within the US Forest boundaries. As everyone knows who knows anything about Cultural Attachment, the focus is on the people who are impacted by decisions made by the Forest Service -- wherever they live -- and very few live within the National Forest boundaries.

As documented by our consultant, James Kent Associates, Cultural Attachment -- as experienced and measured beyond the National Forest boundaries -- can and must be analyzed in the EIS by MVP.

Respectfully submitted,

Sam Easterling, Co-Chair
Preserve Craig

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CO52-1

CO52-1

Cultural attachment, including the geographic scope of analysis, is discussed in section 4.10.9 of the final EIS.

COMPANIES AND NGOs

CO52 – Preserve Craig

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CO52-1
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Bill Wolf, Co-Chair
Preserve Craig

Attachment

COMPANIES AND NGOs

CO53 – Preserve Craig

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Preserve Craig ~ Sustaining the Quality of Life We Value

P.O. Box 730, New Castle, VA 24127 Phone: (540) 309-9560
www.PreserveCraig.org Email: PreserveCraig@gmail.com

19 December 2016

Ms. Victoria M. Craft, Project Manager
Bureau of Land Management
Southeastern States District Office
273 Market Street
Flowood, MS 39232
veraft@blm.gov

Mr. Joby Timm, Supervisor
Jefferson National Forest
U.S. Forest Service,
5162 Valleypointe Parkway,
Roanoke, VA 24019
jtimmm@usfs.gov

FERC Commissioners,
c/o Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

RE: Economic and Environmental Impacts of Invasive Plant Species, and related requests to withdraw the DEIS and reject proposed amendments to the Jefferson National Forest LRMP

Dear Ms. Craft, Mr. Timm, and Commissioners,

Faithful execution of your legal and moral obligations to the citizens of the United States require that you to take the following actions relative to the proposed Mountain Valley Pipeline project:

1. The sorely insufficient DEIS should be withdrawn, and not re-issued until FERC meets their legal obligation to fully analyze potential environmental impacts of the prosed MVP project, including a valid analysis of ALL alternative routes.
2. Likewise, significant new information has come to light since the issuance of the DEIS (e.g., route changes, and a new Herbicide Use Plan). The public is entitled to receive this information in a timely manner, and to have sufficient time to review and comment on it. A revised DESIS must sufficiently address these changes.
3. If the DEIS is not withdrawn for proper re-analysis, there is no justification for BLM and USFS to issue any permits for MVP construction on any Federal lands.

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CO53-1

See responses to comments FA11-2, LA5-1, and LA13-1 regarding the adequacy of the draft EIS. Minor route modifications were filed by Mountain Valley on October 14, 2016, and the public had until December 22, 2016 to comment; with the comment period extended to February 22 for newly affected landowners along the route modifications. Mountain Valley does not intend to use herbicides, except in limited cases were requested by landowners. Invasive species are addressed in section 4.4 of the EIS. Impacts on interior forest (and the creation of new edge habitat) is discussed in section 4.4 of the EIS. Migratory birds are discussed in section 4.5 of the EIS. The EIS acknowledges that new corridors favor deer movements in section 4.5.2.

COMPANIES AND NGOs

CO53 – Preserve Craig

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4. Furthermore, since the DEIS is sorely inadequate and unprofessional, consideration of any proposal to amend the Forest Plan (LRMP) for the Jefferson National Forest is premature and completely unjustified, and should be rejected.

I offer these comments as a practicing natural-resources management professional with more than that 40 years of experience in the field. I hold an M.S. in environmental toxicology and a PHD in fisheries & wildlife sciences, I have published 2 textbooks and more than 140 scientific articles in more than 25 different respected scientific journals on a wide array of natural-resource topics, including the population ecology of fishes, wildlife, and invasive plants; environmental fate of both aquatic and terrestrial contaminants (including aerially applied herbicides); the control of invasive plants using both herbicides and biological agents; and the effects of energy-industry blasting procedures on wild animals. As a scientist and a landowner involved in a range of habitat-restoration research and applied habitat-restoration projects on my own land, which happens to be located exactly in the steep, forested mountain slopes of Appalachia that the MVP proposes to cross, I would be willing to wager that I have far more experience with the local habitats and biota than any of the “consultants” that MVP has retained for advice on habitat protection and restoration.

CO53-1
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I am herewith re-filing **PF15-3-000 Submittal/Accession 20150616-5193, Economic and Environmental Impacts of Invasive Plant Species** (included as Attachment A on this document) because neither MVP nor FERC has adequately addressed all of the issues discussed therein. In fact, both MVP and FERC have ignored almost all of these issues, in both the MVP application materials (Resource Reports) and updates, and in the FERC’s quite-incomplete DEIS issued in September of 2016.

My earlier Submittal regarding **Economic and Environmental Impacts of Invasive Plant Species** comprised some 44 pages of technical and highly referenced text regarding a broad array of issues that will likely arise related to invasive plant species, should the MVP be built through the central Appalachian Mountains. Suffice it to say that the staff who conducted analyses for MVP and FERC did not show the same level of scientific thoroughness or conscientiousness, as their statements lack scientific references (and thus credibility), and in a large part they simply ignored my well-supported comments. Primary among the **issues that they ignored or insufficiently addressed**, from both my submittal and many related submittals that address ecological aspects of the proposed MVP project, are the:

- **Degradation of one of the most biodiverse regions in the USA** and a region that contains numerous endemic or restricted range species;
- **Creation of dozens, if not hundreds, of miles of new habitat edge and on both sides of the MVP corridor, and hundreds of acres of new and easily invaded early-successional habitat in the corridor itself;** MVP tries to put this habitat modification in positive light by claiming that it will help pollinators, but they completely ignore the significant impact of this change to interior forest habitat and the increasingly threatened species that such habitat supports;
- **Widespread death of what had been interior forest trees, once they are exposed to deleterious wind and sun conditions all along the MVP corridor;** such death will greatly expand the impact footprint of the proposed corridor, and such expansion has not been adequately addressed or evaluated by either MVP or FERC;

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COMPANIES AND NGOs

CO53 – Preserve Craig

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- **Changed microclimate and soil characteristics** that will deleteriously affect interior forest species of all types;
- **Invasion of interior forest habitats by invasive and detrimental plants along hundreds of miles of the MVP project**, which will multiply the negative ecological effects of forest clearing several fold;
- **The decline of plant and animal interior-forest species (including neotropical migratory birds)** that are dependent on isolation from such edge habitat that enables easy access of deleterious species to what once was critical interior-forest habitat;
- **Exacerbation of the deer overabundance problem in our region.** MVP's touted creation of early-successional habitat will actually favor an increase of deer. These and other animals will spread invasive plants rapidly both in and adjacent to the pipeline corridor. The pipeline right-of-way (ROW) will become travel corridors heavily used by deer, and every road crossed by the pipeline route will see an increase in deer-vehicle collisions and related human losses. Deer will be more locally abundant, they will be concentrated on the ROW, and they will cross roads and cause collisions in places where they were rarely seen previously. MVP responded to this issue with a simplistic and unsupported statement that "We do not foresee this happening," and FERC accepted this unsupported opinion without question;
- **The inevitable and rapid spread of invasive plants species**, which will be difficult and expensive to control both on and near the MVP project lands;
- **Increased difficulty and expense for control of these invasive species that will be passed to local governments and private landowners** subjected to invasion of their non-project lands;
- **Any attempt to integrate plans for controlling invasive plants on the MVP project with the numerous state and federal task forces and guidelines designed to coordinate such detection and control and maximize effectiveness.**

In my earlier filing (page 4, Attachment A, this document) I offered the following very-specific list of critical issues related to invasive plant species that *should* have been thoroughly analyzed in the DEIS, if it was going to be a valid critical analysis of potential environmental impacts of the MVP project.

- The proximity of nonnative invasive plant species to the proposed corridor route, and the threat of these species being spread by pipeline-corridor construction and maintenance.
- The mechanisms and chronology of likely spread of nonnative invasive plant species as a result of pipeline-related activities.
- Congruency of pipeline interactions with nonnative invasive plant species to existing county, state, and federal laws; and county, state, federal, NGO, and private-landowner efforts to control and even reverse the spread of invasive plants.
- Alternative approaches for the early detection, rapid response, and effective control of nonnative invasive plant species in the pipeline corridor, and the ecological and economic risks associated with each approach.
- Risk assessment of economic and ecological damage that would be caused by the accelerated spread of nonnative invasive plant species due to pipeline construction and maintenance.
- Valuation of the loss or damage to critical ecosystem services caused by pipeline construction and maintenance, and critical assessment of possible approaches to mitigating those losses.
- Risk assessment of human-health threats due to pipeline-linked increases in deer populations, increases deer-hosted tick populations, and herbicide use in the pipeline corridor.
- Specific critical analysis of the known and likely ecological, economic, and human-health impacts of extensive herbicide use for pipeline corridor maintenance.

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- Hidden costs to private landowners and the public (i.e., externalities: costs borne by individuals who made no choice to bear such cost) in terms of opportunity costs, loss of ecosystem services, loss of land productivity, loss of property values, loss of esthetic values related to their land and public lands in the County, threats to human health and well-being, loss of personal freedom and well-being), and assessment of possible mitigation approaches to compensate for these losses.
- MVP's corporate responsibility for effective mitigation of all negative effects of pipeline construction and maintenance for the life of the pipeline; clear identification and explanation of the succession of responsible parties at all stages of construction, operation and maintenance of the pipeline; and specific identification of parties who will bear responsibility for environmental and economic impacts that will extend well beyond the life of their pipeline project.

Virtually none of these issues were addressed in the DEIS, again indicating that the DEIS is severely deficient in its analysis and a clear disservice to the public who will be impacted by these issues. FERC should be required to fully analyze all of these issues, before BLM or USFS can even begin to effectively assess the DEIS. This project has the potential for widespread impacts on people and resources, and FERC should be held to a level of professional analysis and documentation that is expected of the most basic activities conducted by scientists. The public deserves nothing less.

RECENT CRITICAL DEVELOPMENTS

1. MVP's initial plan for monitoring and control of invasive plant species was both scientifically and practically simplistic, as I extensively documented in our earlier submittal.
2. Under the pressure of public concerns about pesticide use, MVP long ago pledged to forgo such use. That left them to propose an impossible-to-execute plan to use only mowing and hand labor to control invading plant species, even on steep and relatively inaccessible slopes.
3. The USFS recognized the impracticality of MVP's proposal for control of invasive plant species. In a letter to MVP of 15 November 2016, USFS directed:

“If the proposed MVP Project is approved, the Forest Service may require herbicide use along the permanent right-of-way to control non-native invasive plant species. The potential effects of the herbicide use must be disclosed to the public and analyzed in the EIS or in a supplemental analysis. To ensure that herbicide use is analyzed in the EIS and to avoid supplemental analysis at a later time, please update the MVP Project proposal with FERC to incorporate herbicide use.” (CP16-10-000, Accession No. 0161116-5006).
4. MVP responded to this request on 16 December 2016 by filing a new “Herbicide Use Plan” (CP16-10-000, Accession No. 20161216-5171), wherein they detailed plans to use herbicides to control invasive plants on the 3.4 miles of USFS lands included in the project route. This represents a *major* departure from both what was analyzed in the DEIS that was issued in September of 2016, and from what the public has been told for more than two years. The use of broad-spectrum herbicides (e.g., glyphosate) on USFS lands holds the potential to:
 - a. Reduce the effectiveness of planned restoration efforts that involve the planting of grasses, forbs, and shrubs, thereby further increasing erosion and sedimentation problems;

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COMPANIES AND NGOs

CO53 – Preserve Craig

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- b. Impact adjacent private lands and landowners, including unwilling exposure of residents to pesticides in air and water and invalidation of registration for organic farming operations;
- c. Introduce pesticides into municipal water supplies that are extracted from waterways downstream of the impacted USFS lands, along with an expensive-to-correct increase of sediment in those water supplies.
- d. Become a long-term (life-of-the-pipeline) controversy, as control of invasive plants on the disturbed corridor of the MVP will not be a temporary management issue. MVP naively proposes to monitor and treat invasive plants on USFS lands for only two years, and they make no mention at all of such control on private lands that they will disturb.

The Herbicide Use Plan is also *severely inadequate* in that it proposes that MVP will only monitor and treat invasive plant species on the pipeline ROW for a period of 2 years. Virtually all credible scientific literature indicates that invasive plants species can become long-term or even permanent problems once established, and utility ROWs are a particular problem in this sense because they are managerially maintained in a stage of early plant succession (see page 11 of Appendix A, attached). MVP and FERC offer no credible evidence that such will not indeed be the situation in the case of the MVP project. To propose a monitoring and control plan that extends for only 2 years is either scientifically naive or a blatant attempt to reduce pipeline operating costs at the expense of agencies and the public, who will be left to deal with a long-term environmental problem created by the MVP. Either case is a severe disservice to the public, and an egregious violation of the public trust by a federal agency (FERC) who should hold MVP and themselves to a high standard of scientific honesty, clarity, and thoroughness.

So to summarize: critical environmental issues related to invasive plants species were never analyzed in the DEIS, and now a major change to proposed MVP operations has been issued less than one week before the close of the public comment period for the DEIS. It would be unconscionable to allow this process to proceed along the previously charted schedule, and to not allow the public sufficient time to learn of, analyze, and respond to these significant changes.

The public has the legal right to be broadly informed of these changes, which again means that the current DEIS is deficient in effectively addressing major public and environmental concerns about the MVP project. The DEIS should be withdrawn to correct this and other deficiencies, or a supplemental DEIS should be issued that effectively analyzes all these issues that FERC failed to sufficiently evaluate in the present document.

In either case, the public needs a full 90-day comment period regarding any DEIS changes or supplements, which means that **FERC should not be allowed to move to finalize an EIS until these changes are made and the public has been afforded their full legal right for review and comment.**

Sincerely,



Brian R. Murphy, PhD, Certified Fisheries Professional (AFS), and Committee Chair

For the Scientific and Technical Committee of Preserve Craig, Inc., on behalf of the community

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New River Conservancy

Protecting the waters, woodlands and wildlife
of the New River Watershed

December 20, 2016

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
Room 1A East
888 First Street, N.E.
Washington, D.C. 20426

Re: Electronic Filing: Docket No. CP16-10-000; New River Conservancy Comments on Draft Environmental Impact Statement for the proposed Mountain Valley Pipeline.

Dear Secretary Bose:

New River Conservancy is a regional, three state, 501(c)(3) nonprofit that protects and ensures the health of the New River from its source in North Carolina to its confluence with the Gauley River in West Virginia. To fulfill our mission, New River Conservancy has offices in West Jefferson NC, Blacksburg VA and Fayetteville WV. New River Conservancy believes that clean water, healthy land, and empowered people benefit our communities by creating a watershed where people want to live, work and play. The watershed includes all the streams and brooks that feed the river and all of the forest, fields and communities that surround it.

Enclosed are New River Conservancy's comments on the Draft Environmental Impact Statement for the above-referenced proceedings, submitted by electronic filing. Please add those identified within as New River Conservancy's representative to the Commission's official service list for this project. Thank you.

Sincerely,

George Santucci
President

The Next Generation



post office box 1480 west jefferson, north carolina 28694 866-481-6267
www.newriverconservancy.org info@newriverconservancy.org

CO54-1

CO54-1

Comments noted.

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UNITED STATES of AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline Docket No. CP16-10-000

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT, FERC
DOCKET NUMBER CP16-10-000.

The following are comments New River Conservancy (NRC) is submitting after reviewing the Draft Environmental Impact Statement (DEIS) for the above referenced project.

CO54-2

GENERAL COMMENTS

NRC echoes comments made by many organizations that many subsequent addendums to the DEIS have been made while the comment period is ongoing. This forces us to comment on a moving target.

NRC completely agrees with comments submitted on December 15, 2016 on behalf of Indian Creek Watershed Association (ICWA). ICWA references comments made on behalf of Alleghany Defense Project, Appalachian Mountain Advocates et al. (accession #20161019-5061) which states:

“Public scrutiny of environmental decision-making, informed by high quality and accurate information, is essential to compliance with the National Environmental Policy Act (NEPA). 40 CFR § 1500.1(b). ... FERC must supply information and analysis regarding the MVP Project in a manner that facilitates meaningful analysis and public participation. ”

As stated in the comment submitted by ICWA, “By its premature issuance of the DEIS, which was followed shortly by a massive set of new materials submitted by MVP, the FERC created confusion with respect to what set of materials (and what version of MVP’s pipeline corridor proposals) is under consideration, thereby significantly undermining ‘meaningful analysis and public participation.’ ”

CO54-3

Section 1.5 – PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

FERC is required to comply with numerous federal statutes in addition to NEPA, and did review multiple federal acts in the DEIS. NRC contends that FERC ignored Executive Order 11988 (EO11988 or EO).

CO54-2

See responses to comments FA11-2, LA5-1, and LA13-1 regarding the adequacy of the draft EIS.

CO54-3

Floodplains are discussed in section 4.3.2 of the EIS. Although as an independent regulatory agency, not within the Executive Branch, the EO does not apply to FERC, we usually conduct operations in the spirit of the EO.

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FEMA's website, <https://www.fema.gov/executive-order-11988-floodplain-management>, states:

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements;
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

At no point in the 781-page DEIS is any consideration given to the requirements of EO 11988.

There are two references to floodplains in the DEIS. Table 4.1.1-9 which identifies 73 flood zones that would be crossed by the MVP where soil liquefaction could occur due to saturated soils and the potential for a significant seismic event. And only 4 100-year floodplains are documented Table 4.3.2-9 identifies FEMA 100-year floodplains crossed by MVP and EEP. NRC would like to know why the floodway and floodplain for Little Stony Creek, on our Sizemore Easement, is ignored. See attached map labeled "Little Stony Floodway and Floodplain."

FERC, as the federal agency licensing MVP, is responsible for complying with the directives of the EO to reduce the adverse impacts of both the MVP and EEP in each floodplain that is or may be affected by development.

Furthermore, regarding EO 11988, FEMA states that the following 8 steps must be followed:

The guidelines address an eight-step process that agencies should carry out as part of their decision-making on projects that have potential impacts to or within the floodplain. The eight steps, which are summarized below, reflect the decision-making process required in Section 2(a) of the Order.

1. Determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year).
2. Conduct early public review, including public notice.
3. Identify and evaluate practicable alternatives to locating in the base floodplain, including alternative sites outside of the floodplain.
4. Identify impacts of the proposed action.
5. If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate.
6. Reevaluate alternatives.

CO54-3
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- 7. Present the findings and a public explanation.
- 8. Implement the action.

Among a number of things, the Interagency Task Force on Floodplain Management clarified the EO with respect to development in flood plains, emphasizing the requirement for agencies to select alternative sites for projects outside the flood plains, if practicable, and to develop measures to mitigate unavoidable impacts.

DEIS fails to consider any adverse impact of construction and water-body crossing activities on floodplain management required by EO 11988. As stated above, EO 11988 requires federal agencies to avoid to the maximum extent possible both long and short-term adverse impacts associated with the occupancy and modification of flood plains.

CO54-3
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The proposed route has hundreds of water body crossings, with MVP requiring at least three wet open-cut crossings. The pipeline will transect numerous sensitive and protected areas of West Virginia and Virginia, increasing the risks of landslides, downstream turbidity, contamination of surrounding land and water bodies from fuel and gas leaks, fires and explosions. As a result, the proposed construction and completed pipeline easements will involve land use development affecting an unknown number of floodplains from such activities.

It is NRC's assertion that FERC's status as the sole federal authority capable of permitting or rejecting each pipeline project requires it to assume the responsibility of carrying out the specific eight-step process required by the EO, because FERC is conducting a federal program which affects land use, including but not limited to FERC's water and related land resources planning, regulation, and licensing activities. As a result, FERC must first determine if the proposed MVP and EEP development activities will occur in base floodplains, and then conduct a public review with appropriate notice. In addition, FERC must identify and evaluate alternatives to siting any development in base floodplains, and it must identify the potential adverse impacts associated with each site. Once the agency completes the process of analyzing alternatives and impacts, it would be required to present its findings and a public explanation of them.

Section 3.5.3 – Minor Route Variations

CO54-4

In Table 3.5.3-1, FERC addresses New River Conservancy's perpetual conservation easement on the Sizemore Property. While FERC's staff cannot conclude that the minor route variation, "New River Conservancy Variation", is preferable to the proposed route, the fact remains that this perpetual easement exists. Again, in a letter dated May 31, 2016, NRC stated "As the grantee of the perpetual conservation easement, NRC cannot grant MVP the right to cross this property." We're bound by IRC §170h which states:

To be deductible, donated conservation easements must be legally binding, permanent restrictions on the use, modification and development of property such as parks, wetlands, farmland, forest land, scenic areas, historic land or historic structures. Current and future owners of the easement and the underlying property are bound by the terms of the conservation easement.

CO54-4

Section 3.5 of the final EIS has been updated with new information regarding this parcel.

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Internal Revenue Code (IRC) § 170(h) states that a qualified conservation contribution is a contribution of a qualified real property interest (i.e., a restriction granted in perpetuity on the use which may be made of the real property) to a qualified organization exclusively for conservation purposes. The IRC and accompanying Treasury regulations outline the requirements to be met before a contribution is deductible.

NRC maintains its intent to defend this easement with all legal means necessary, including filing as an intervener in this process.

In her letter dated June 16, 2015, Anna Ziegler of Ziegler & Ziegler states:

“I represent the New River Conservancy, an accredited, 501(c)3 land trust (NRC). It has come to NRC’s attention that the proposed Mountain Valley Pipeline (MVP) will transect or directly impact property in Giles County, Virginia which is subject to a conservation easement held by NRC. The property is owned by Sizemore, Inc. a Virginia Corporation¹, subject to the conservation easement held by NRC.

The conservation easement protects important natural and environmental resources, including, but not limited to, water quality which have been identified by the landowner, NRC, the Commonwealth of Virginia and the citizens of Giles County, Virginia as worthy of perpetual protection. Furthermore, this piece of property abuts Cascades National Recreation Trail, a Division of the National Park system, and provides a critical buffer between federally owned property and property which would allow unfettered development. The deed of conservation easement expressly prohibits the type of activity contemplated by MVP during the construction and the permanent maintenance of the easement. The proposed 42-inch pipeline and the easement would be inconsistent with the intent and purpose of the conservation easement.”

FERC perpetuates the fluidity of the EIS, as stated above in General Comments, by saying in Table 3.5.3-1 FERC ID/Accession Number 20160601-5121:

“However, the FERC staff acknowledge the legitimate and ongoing concerns of the NRC as well as the value of continued coordination among the parties.”

Furthermore, NRC rejects that the only alternative is to route the pipeline through Mr. Sizemore’s property adjacent to the Sizemore Easement, see attached map “New River Conservancy Alternative.”

In Figure 3.5.1-7, State Route 635 – Appalachian Trail Route Variation or SR 635-ANST Variation as referred to in Table 3.5.1-6 avoids the Sizemore Conservation Easement altogether.

¹ The property owner has received correspondence in the name of Eagles Nest Ministries, Inc. though based on the maps provided by MVP and the geography of the land, Rick Sizemore, shareholder of both Sizemore, Inc. and Eagles Nest Ministries, Inc. is confident that the proposed pipeline corridor will transect or affect the Sizemore, Inc. property.

CO54-4
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Section 3.5.1.6 Alternatives for crossing Appalachian National Scenic Trail

CO54-5

While reviewing this alternative related to the Sizemore Easement, NRC noted inconsistencies with the perennial waterbody crossings in Table 3.5.1-6. The table states that the proposed route, over this 15.9 miles, crosses 22 perennial waterbodies. NRC determined this 15.9 miles actually crosses 5 perennial waterbodies, based on the National Hydrography Dataset. The 22 alleged crossings are actually composed of 5 perennial and 17 intermittent streams combined.

CO54-5

The subject table has been updated as appropriate.

NRC now wonders how many other inconsistencies exist throughout this 781 page document and the many addendums. Again, FERC hastily drafted these documents with numerous errors that are not consistent with NEPA and other federal act requirements.

Section 4.4.2.4 Special Areas

CO54-6

In the sub-paragraph that is titled New River Conservancy Easement, the EIS suggests the vegetation and erosion will be addressed but ignores the fact that the conservation easement states:

CO54-6

The conservation easement status is noted.

“Public or private utilities to serve permitted buildings or structures only may be constructed and maintained. Public or private utilities that do not serve the Property shall not cross the Property”

Again, NRC is legally bound to prevent MVP from crossing the Sizemore Easement.

Conclusion

CO54-7

In addition to the numerous other flaws and shortcomings catalogued by NRC and other interveners, MVP-EEP DEIS is fatally defective by failing to include any analysis of the potential adverse impacts on base floodplains. Neither project could be permitted on the basis of the DEIS without a violation of EO 11988. In light of this omission, FERC should deny the current permit applications for both the MVP and EEP, and require each applicant to identify proposed development which would occur in base floodplains. Any future DEIS must include a summary of the steps taken by the applicants to comply with the directives of Executive Order 11988.

CO54-7

Floodplains are discussed in section 4.3.2 of the EIS.

Respectfully submitted by,



George Santucci
President

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Preserve Craig ~ Sustaining the Quality of Life We Value

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19 December 2016

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CO55-1

FERC Commissioners,
c/o Ms. Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Dear Ms. Craft, Mr. Timm, and Commissioners,

As the Science and Technical Committee of Preserve Craig, Inc. we urge the Federal Energy Regulatory Commission (FERC) to withdraw **the Mountain Valley Pipeline (MVP) Draft Environmental Impact Statement as inadequate and incomplete**, and the Bureau of Land Management (BLM) and US Forest Service (USFS) to **not approve changes to the Jefferson National Forest Plan (USFS 2004) that would allow MVP to cross the USFS land**. Several alternate routes have already been judiciously denied by the USFS as incompatible with land designations (Parts of Alt 110 through a Wilderness Area) or rejected by MVP themselves (such as Alt 110J and 110R) as too environmentally damaging. We contend that all routes through the National Forest in this area (including Craig, Giles, Montgomery Counties in Virginia and Monroe County in West Virginia) are also incompatible with USFS land designations and goals. Additionally, the damage to water supplies and water resources and the living systems dependent on these resources is obvious, irreparable, and immitigable, and it effectively negates decades of protection and management. The incomplete and inadequate DEIS fails to address many of the most pressing concerns and does not provide the kind of information necessary to evaluate the damage or to make the critical decisions to change the Forest Plan. This comment specifically addresses water quality and sedimentation concerns associated with the pipeline.

Specifically, current facts demonstrate that MVP will 1) threaten the security of domestic water supplies, 2) violate longstanding management practices and policies, 3) violate multiple water

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CO55-1

See the responses to comments FA11-2, LA15-1, and LA13-1 regarding the adequacy of the draft EIS. The EIS concludes that, with the exception of the clearing of forest, the MVP would not have long-term significant adverse effects on most environmental resources. This means the project would not have irreparable damage on water resources (see section 4.3 of the EIS). Federally listed threatened and endangered species are discussed in section 4.7.

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CO55-1
cont'd | quality BMPs, 4) threaten federally listed species, 5) damage viewsheds, and 6) negatively impact longstanding relations between the USFS and the citizens of Craig, Giles and Montgomery Counties in Virginia.

CO55-2 | **At the same time, the exceptionally poor survey design executed by MVP to support their application provides no useful information to support sound decision-making:** the surveys were extensive rather than intensive (i.e. cover a wide area in a cursory way), and were extremely limited spatially (300-ft survey corridor) and temporally (4-5 months for 300+ miles). While the DEIS attempts to make definitive statements from such insubstantial data, the limited nature of their findings cannot adequately address concerns for rare taxa, water quality, and other issues noted in our assessment. **The environmental analyses conducted by both MVP and FERC are incomplete, essentially unreferenced, scientifically unsound, and professionally inadequate.**

What is at Stake?

CO55-3 | The central Appalachians are the most significant “hotspot” of biological diversity east of the Rocky Mountains, and are unrivaled in terms of aquatic species diversity. The area has been given numerous protections aimed at specifically managing individual species and locations, including creation of the National Forests to protect water quality, Wilderness designations to protect wild areas, and endangered and threatened protections to specific species that are endemic to this area. In spite of the many protections afforded to these nationally recognized natural resources, they are experiencing increased threats. Threats such as open-trenched 42-inch natural gas pipelines were not considered as likely to occur in this area when the protections were put in place, but clearly the intention was to protect the resources here. Currently, at least four interstate pipelines are being discussed for this area, and two are being actively developed. Pipelines serve as threats in many ways including fragmenting terrestrial resources, spreading invasive species and perhaps most importantly causing water quality and sedimentation problems. The current “gold rush” approach to building pipelines is forcing society to consider important ecological questions with inadequate data and without consideration of all of the appropriate options. Each of the pipelines under consideration will require changes to long-term planning documents and management strategies that specifically gave protections to resources we considered important enough to protect. Significant investment has gone into creating these management plans and protections, and changing them should only be done with high quality information and serious consideration. While transportation of natural gas is an important achievement, it must be done in ways that minimize the effects on critical environments, environmental services, and natural resources. The DEIS for the proposed MVP route is woefully inadequate and fails to take into account critical aspects of mitigation. Approval of this project based on inadequate information not only threatens one of the USA’s richest areas of biodiversity, but it opens the door to other similar projects and sets a precedent of making decisions based on poor information. This would effectively render past environmental protections meaningless.

CO55-2 | Mountain Valley conducted field surveys, where access was granted, in accordance with established agency (e.g., COE, FWS, SHPO) protocols. The FERC staff independently fact-checked Mountain Valley’s application and supplements.

CO55-3 | Comments noted.

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Sedimentation is a Statewide and Nationwide Problem

One of the most important environmental problems that should have been addressed in the DEIS is sedimentation. Sedimentation is the most commonly occurring environmental impact from pipeline construction, and an EIS must define and require proven, workable techniques for effectively controlling erosion and runoff on the steep slopes of the proposed route. The DEIS neither adequately addresses the limitations of mitigation strategies nor does it propose solutions to known mitigation failures.

EPA assessments have demonstrated that sediment accumulation is among the most common stressors in streams Nationwide (EPA 2013), and is estimated to negatively affect nearly half of the river-miles in Virginia (VDEQ 2013). Sedimentation is also one of the most commonly occurring stressors identified by the Virginia Department of Environmental Quality (VDEQ) as causing benthic impairments. Not only are sediment problems common but repeated analyses have demonstrated that, when sediment problems are present, the risk of having a degraded benthic community is much more likely (EPA 2013, VDEQ 2013).

The importance of streambed sediment size to stream organisms is well documented (Paul and McDonald 2005, Minshall 1984 and references therein), as are the mechanisms of human activities that cause changes in streambed sediments (VDCR 1992). There are two primary origins for fine sediment entering streams: overland flow transporting sediment off the land surface and into streams, and in-stream channel erosion of stream banks and bottoms. Sediment transport to streams by both overland flow and in-channel erosion are accelerated by many human activities including: poor land-use practices, failure to control runoff, compaction of soils, impervious surfaces, vegetation changes, and construction activities that disturb soils. All of these problems are expected to occur during construction and operation of the MVP project. It is generally accepted that the least erosion and most infiltration of water occurs on natural, forested landscapes like those occurring in the proposed MVP route. It is also known that these same natural, forested landscapes are among the most sensitive to disturbance and erosion.

Although some sediment naturally enters waterways, and there are undoubtedly instances where natural processes have caused substantial amounts of sediment to enter streams, human activities are estimated to be responsible for 80-90% of the sediment delivered to coasts today (Farnsworth and Milliman 2003). The most common anthropogenic sources of sediment are agricultural activities (Collins et al 1997, Walling et al 1999, Owens et al 2000), forestry (Mohta et al 2003), and construction and mining (Owens et al 2005).

The importance of watershed protection is clear, is well stated throughout the current Jefferson National Forest Plan (USFS 2004), and is effectively summarized in the following excerpts:

- a. *“Maintenance and restoration of healthy, diverse, and resilient watersheds, which include not only the water, but also the soil and air, will be given the highest priority in all of our management activities.”* (Page 2-2, paragraph 2, line 2)
- b. *“Water quality remains within a range that ensures survival, growth, reproduction, and migration of aquatic and riparian wildlife species; and contributes to the biological,*

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CO55-4

CO55-4

The FERC Plan, which has been adopted by Mountain Valley, contains erosion and sedimentation control measures, as discussed in sections 2.4, 4.2, and 4.3 of the EIS. Sedimentation effects and mitigation measures, including consideration of steep slopes, aquatic habitats, long-term maintenance, and routing, are discussed throughout the EIS. See the response to LA1-4 regarding pipelines built through mountainous terrain. Side slopes do present construction challenges as noted in the EIS, but they are not completely avoidable, and measures can be implemented to reduce impacts. Mountain Valley would be limited to the workspaces as proposed. Aquatic resources and endangered species are discussed in sections 4.6 and 4.7 of the EIS, respectively. Mountain Valley would be required to obtain necessary permits and fulfil the requirements of the Clean Water Act (CWA Sections 401 and 404).

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CO55-4
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physical, and chemical integrity of aquatic ecosystems. Water quality meets or exceeds State and Federal standards.” (p. 3-180)

- c. *“The biological integrity of aquatic communities is maintained, restored, or enhanced. Aquatic species distributions are maintained or are expanded into previously occupied habitat. The amount, distribution, and characteristics of aquatic habitats for all life stages are present to maintain populations of indigenous and desired nonnative species. Habitat conditions contribute to the recovery of species under the Endangered Species Act.” (p. 3-180)*
- d. *“Any human caused disturbances or modifications that may concentrate runoff, erode the soil, or transport sediment to the channel or water body are rehabilitated or mitigated to reduce or eliminate impacts. Channel stability of streams is protected during management activities.” (p. 3-181)*
- e. *“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.” (p. 2-7)*
- f. *“No herbicide is aerially applied within 200 horizontal feet, nor ground-applied within 30 horizontal feet, of lakes, wetlands, perennial or intermittent springs and streams.” (p. 2-28)*
- g. *“Use advanced harvesting methods on sustained slopes 45 percent or greater to avoid adverse impacts to the soil and water resources. Use advanced harvest systems on sustained slopes over 20 percent when soils have a high erosion hazard or are failure-prone.” (p. 2-33)*
- h. *“This Forest Plan meets or exceeds State Best Management Practices. Current State BMP handbooks or manuals are incorporated as direction in the Forest Plan and are implemented for those resource management activities that are covered by the handbooks/manuals. Standards for activities not included in BMP handbooks/manuals are included in Chapters 2 and 3 of this Forest Plan.” (p. A-3)*

If the proposed MVP project were approved, every goal and strategy listed above would be violated during both construction and operations.

Likewise, the Virginia Department of Environmental Quality Water Quality Standards (VDEQ 2011) state:

“All state waters, including wetlands, are designated for the following uses: recreational uses, e.g., swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e.g., fish and shellfish.”

and goes on to say:

“State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene

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established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.”

VDEQ has interpreted this to include sedimentation, especially when it negatively impacts aquatic life. This means sediment simply should not be allowed in streams at levels that have an effect on aquatic life.

BMPs – Tools for Controlling Sediment

Although sedimentation has been demonstrated to be one of the most common water quality problems affecting the aquatic life of streams, and policies have been adopted to control it, administrative processes to regulate sedimentation have been slow to develop. Historically, water quality contaminants from point sources have been managed with Water Quality Standards (WQS). WQS are in-stream limits (often measured as concentrations) set as law, and are not to be violated. Management of sedimentation has taken a completely different approach. Sediment problems occur on the stream bed, not in the water column, and therefore can't be managed as concentrations or suspended measures of effect. Therefore, traditional paradigms of suspended load do not work well. For this and other reasons, most sediment control measures have focused on utilizing a set of methods that are thought to adequately control sediment at its source rather than as limits on how much should be in a stream (WQSS). Best Management Practices (BMPs) are the preferred methods for controlling erosion and runoff. In Virginia, BMP enforcement is administered through local and/or state government entities, and recently the oversight of these programs has shifted to VDEQ. In a recent interview with The Recorder (Monterey, VA; www.therecorderonline.com), VDEQ officials were reported to say that the agency lacks sufficient resources to effectively and closely monitor water quality when pipeline construction is underway. In reference to the Atlantic Coast Pipeline, VDEQ exempted the company from filing an erosion and sedimentation control plan with the state. This is allowed under the oil and gas exemption of the U.S. Natural Gas Act for transmission pipelines and their associated facilities. But clearly, there is a problem with the administrative oversight of erosion and sediment control in general and especially in the regulation of pipelines when we cannot even monitor the problems.

Many construction activities have specific BMPs that apply to the specific activity. For example, forestry, road building, and general construction typically have activity-specific BMPs that apply. Many use-specific BMPs such as those for forestry or road construction limit construction to slopes well below 20%, because BMPs are much less effective on steep slopes. Pipelines are often administratively exempt from normal construction BMPs, due in part to the simple fact that there are no BMPs that can be effective on extreme slopes. Such an administrative solution is short-sighted, and does not reduce the actual environmental consequences of construction in this extreme topography. The exemption from normal construction BMPs does not exempt pipeline construction from protecting aquatic life, or controlling runoff and erosion from their construction sites. **The selection of routes and adherence to the erosion controls that are implemented are especially critical because pipelines are allowed to construct on steep slopes, don't follow BMPs required by other activities, and are not likely to be rigorously inspected by government agencies.**

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FOUR PRIMARY ISSUES CONCERNING SEDIMENTATION:

1. Steep Slopes and Side Slopes
2. Sensitive Aquatic Habitats and Species
3. Long-term Maintenance
4. Route Proposals

Steep Slopes and Side Slopes

The proposed route crosses extreme slopes even for pipeline construction (approximately 80% on Poor Mountain in Roanoke County for example). It should also be noted that steep slopes occur on USFS lands, and USFS policies should indeed apply. As clearly stated, “*Current Forest Service policy directs compliance with required CWA permits and State regulation and requires the use of BMPs to control nonpoint source pollution to meet applicable water quality standards and other CWA requirements*” (USFS 2012; p. v), which includes adherence to BMPs with respect to slope runoff. Pipeline construction activity on these steep slopes will create problems with slope failure, erosion, sedimentation, and ground-water and surface-water quality.

As we will demonstrate here from past cases, these problems are not merely *potential* effects – they are certainties, even with state-of-the-art mitigation practices observed. BMPs are implemented to minimize negative effects; they are never assumed to eliminate effects. Moreover, the effectiveness of BMPs is dependent on many factors, including the steepness of the landscape (which is generally ignored in pipeline construction). **The slopes involved on the proposed route are clearly outside the design limits of BMPs and are inappropriate places to build.** One need only consult BLM’s own “Gold Book” for energy infrastructure development (USDI and USDA 2007) to see that standard BLM requirements are highly restrictive of construction on “steep slopes” (~ >16%). BLM standards do not even address the question of BMPs appropriate on the extreme slopes that would be crossed by the MVP.

The sediment problems associated with erosion from pipelines on steep slopes are well documented by local examples: 1) the recent extension of the Columbia Gas Pipeline to the Celanese plant in Giles County, Virginia; and 2) the Jewell Ridge Lateral of the East Tennessee Gas Pipeline in Tazewell and Smyth Counties, Virginia. Both projects encountered (and in some cases still face) severe erosion problems.

In 2014, Columbia Gas of Virginia installed a new, 12-inch, 3.5-mile pipeline to the Celanese Acetate LLC plant in Giles County, Virginia. All appropriate permits were issued and required BMPs were utilized. Weekly site inspections were conducted by Columbia’s inspector. The inspector found problems on multiple visits and required the company to address the problems. Even with the Columbia Gas inspector’s efforts at correcting problems, severe erosion problems occurred. During inspections conducted by USFS inspectors, it was apparent the company was either unable to install workable BMPs or purposefully installed BMPs incorrectly. Excerpts from the USFS inspector’s field notes indicate the severity of the problems:

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- *Sept. 5, 2014 — "... checked a drain that showed signs of wash from the gas line corridor. I have never seen that much sediment move off site before."*
- *Sept. 15, 2014 — "... a new flow from ditch that looks like equipment took muck out and put on the downhill side. It looked like a lava flow, just barely got to stream."*
- *Sept. 26, 2014 — "Had a discussion (with others) about what has been going on with the line. It appears we had a period or an event where sediment left the site and got into a stream course on USFS. Since that event the contractor has made adjustments and it appears stopped additional offsite movement ... we intend to add large woody debris to the stream on the national forest to stabilize the soil that did make it there."*
- *Oct. 18, 2014 — "Looked at water bars on top on south side and talked about putting erosion control matting on water bars. (The material was there and they planned on doing it the next day). Also looked on north side and saw erosion on the lower slope. Water came off NF and ate out right of way on private (property)."*

Problems are still evident at this site. Clearly, the methods for controlling erosion, sedimentation, and water runoff and the administrative procedures for ensuring compliance through inspections are not working to protect the environment.

CO55-4
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A second example of the best intentions going awry occurred in 2006, during construction of a 20-inch gas pipeline for Duke Power. The Jewell Ridge Lateral of the East Tennessee Natural Gas, LLC's pipeline system was known to be crossing extremely sensitive aquatic habitats with 20 Federal and state listed species. The most critical of the aquatic systems to be crossed was Indian Creek. The US Fish and Wildlife Service (USFWS) issued a biological opinion (BO) that the construction of the pipeline would not jeopardize the existence of the endangered species in the streams because East Tennessee Gas agreed to make special efforts to control erosion, well beyond the BMP expectations of the Virginia Soil and Erosion Handbook (VDCR 1992). This level of effort was thought to represent extreme care to ensure that state-of-the-art erosion control measures were in place (TRC et al. 2009). In addition, hourly turbidity monitoring was conducted by the USGS during construction to provide nearly real-time feedback on construction activities (USGS 2009). In spite of the extreme attention to detail, slopes failed in two independent sedimentation events, and eroded fine sediment into Indian Creek and the North Fork Holston River. The cause of the events was heavy rains overwhelming the erosion control measures. The worst sediment problems originated high in the watershed where less effort was employed to monitor conditions. In this case, small streams transported heavy sediment loads to the larger streams where the mussels lived (USGS 2009, TRC et al. 2009). Again, even though well-documented BMPs were utilized they were overwhelmed largely because of the steep slopes.

These events document that commonly used BMPs do not work on steep slopes. During construction and after BMP failure is the wrong time to find solutions to erosion and sediment-control problems. The MVP should not be an experimental proving ground for new methods. The DEIS fails to address the lack of effectiveness of all methods used to date to control erosion

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from steep slopes in this area. In fact, USFS has expressed specific concerns that the MVP proposal lacks sufficient detail for anyone (including FERC) to effectively judge the likely impacts of the proposed construction. This USFS position is in direct contradiction to FERC's contention in the DEIS that MVP construction and operation will cause "no significant environmental impact." USFS has recently (24 October 2016; CP16-10-000, Accession No. 20161025-5044) directed MVP to produce site-specific construction plans for several example severe slopes that MVP would cross on USFS land, so that USFS engineers can judge the reality of MVP (and FERC's) claim that erosion and sedimentation can be satisfactorily controlled. MVP has not responded to date, so once again the DEIS is lacking relative to a major issue that is still being developed. **It is our position that there are not proven methods for controlling erosion on these slopes and mitigation is not possible.** In fact, the record clearly demonstrates that the slopes encountered on the proposed route cannot be crossed without predictable and severe erosion occurring. **To date, neither MVP nor FERC has offered any credible proof to the contrary.**

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Another slope-related issue for MVP is side slopes. Where the pipeline will cross side slopes, all of the construction-area dimensions described in the MVP application obfuscate the true impact that will be evident in these areas. The 300-ft survey corridor, the 125-ft construction corridor, and the permanent 50-ft maintenance corridor described by MVP are grossly misleading to the USFS and the public, as the ultimate corridor would necessarily be significantly wider than originally stated to accommodate construction and access roads. In their detailed route analysis of the initial Proposed Route and Alternative Route 1 (MVP 2014; filed 1 December 2014), MVP rejected using some existing transmission line right-of-ways along portions of Route Alternative 1 due to steep side slopes that would have to be traversed by the pipeline. MVP further stated that if such slopes were indeed to be traversed, then **the impact corridor for pipeline construction will necessarily be much wider than the 125-ft corridor initially described:**

"Initial flight reconnaissance and ground check revealed that much of the route that followed existing overhead electric transmission line rights-of-way was along severe side slopes. While the overhead transmission lines span significant areas of slide slope, these areas would be required to be crossed directly by the pipeline. As a result of this next phase of route analysis, MVP determined that Route Alternative 1 represented insurmountable construction challenges, as well as a high risk of slope failure and pipeline slips, once the pipeline was to be in operation." (MVP 2014: p. 1-4) . . . However, in areas where Route Alternative 1 is alongside slopes, the construction right-of-way would need to be significantly wider than 125 feet to accommodate significant cut-and-fill that would be required for construction, which would result in an even greater area of construction impact." (MVP 2014: p. 1-5)

In other words, MVP's own extensive route analyses (MVP 2014) ruled out portions of Route Alternative 1 as presenting "*insurmountable construction challenges*" because of steep slopes. Yet the current route crosses slopes that are as steep and even steeper than those encountered on Alternative 1.

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The project will need access roads, and pipeline corridors often become roadways whether intended as such or not. BMPs for road building promulgated by the Virginia Department of Forestry dictate that “roads should follow contour as much as possible, with grades between two percent and 10 percent” (VDOF 2011; p. 18). The “Gold Book” (USDI and USDA 2007) that governs oil and gas exploration on federal lands stipulates that:

“[road] gradient should fit as closely as possible to the natural terrain . . . The gradient should not exceed 8 percent . . . in order to minimize environmental effects. In mountainous or dissected terrain, grades greater than 8 percent and up to 16% may be permissible with prior approval of the surface management agency.” (USDI and USDA 2007; p. 25).

Pipelines themselves are a much-more-intense disturbance than road building because of the consistent depth of excavation and because they are oriented perpendicular to the slope. The combination of steep slopes and perpendicular-to-the-slope orientation will inevitably cause severe erosion, increased runoff, and sedimentation problems in the watersheds. Experience demonstrates no mitigation procedures are capable of eliminating these problems on these slopes. These problems will occur, thereby affecting water quality and the sensitive aquatic habitat in surface streams along the route. Sediment will also eventually find its way downstream to interfere with existing hydroelectric projects and related outdoor tourism, municipal water supplies relied upon by the Western Virginia Water Authority, the City of Salem, and Bedford County), recreation City of Salem), and longstanding state, regional, and national conservation efforts for the Chesapeake Bay.

Moreover, on the steep slopes crossed by the proposed route it will be impossible to engineer either construction-access roads or maintenance-access roads that meet required Virginia Department of Forestry or USFS BMPs (USFS 2012), even by utilizing the entire proposed 125-ft temporary construction corridor for switchbacks. Properly built roads that represent responsible land stewardship and meet BMP guidelines would necessarily have multiple switchbacks and a properly designed drainage network, which would be impossible to construct even within the larger 125-ft construction corridor, much less the considerably smaller 50-ft permanent right-of-way (ROW) to be controlled by MVP for pipeline maintenance. It should be noted that temporary access roads built for logging operations are considered roads in forestry management. To say corridors built for heavy equipment and vehicles to construct a pipeline are not roads is inaccurate at best, and disingenuous.

Therefore, if the pipeline were ever allowed to be constructed, either the corridor though the National Forest would be much wider than suggested, or MVP would have to violate accepted BMPs and the USFS would have to contradict its own policies to allow such egregious violations.

MVP has proposed to deal with steep slopes and sharp bends over ridge tops by notching the ridges. This form of mountain top removal has many ramifications that have not been adequately addressed in the EIS including:

1. The additional sedimentation that would be generated from such a drastic approach.

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2. The effects this would have on viewsheds, and resultant effects on the tourist-based economy and property values in the region.
3. The effects that notching the mountains would have on residents' well-documented (but ignored by FERC) cultural attachment to place.

Sensitive Aquatic Habitats and Species

Another key landscape feature is the abundance of sensitive aquatic habitats along the proposed route. The routes will negatively affect known sensitive aquatic habitats. Several of the streams to be crossed have exceptional water quality that supports species that are especially sensitive to sedimentation.

With respect to water quality, the proposed routes will remove forest cover that protects critical water resources on both public and private lands, and will destroy streamside buffers. These streamside buffers serve to filter sediment from entering the waterways, but straight-downhill pipeline orientation obviously removes those streamside buffers. Besides offering general protection for the aquatic environments, such buffers are a critical and long-standing component of conservation and restoration efforts for the Chesapeake Bay. Construction will compact the soil in the construction corridor, thereby causing increased runoff to nearby stream channels outside the corridor. This will result in channel erosion and sediment problems downstream away from the pipeline ROW. As was stated previously, these are known, predictable outcomes. Additionally, construction will likely destroy groundwater connections and clog underground drainage networks. This is especially a concern if construction plans include filling of caves encountered during construction. Even the small, un-named caves that are not accessible have unique cave faunas. Nearly the entire length of the proposed route in Giles, Craig and Montgomery Counties intersect karst geology that provides the supply and protection of clean water for wildlife, and virtually 100% of critical local residential and agricultural uses. Blasting in karst and other areas can have severe effects on both quality and quantity of these water supplies. MVP's proposal to monitor water supplies with only a few hundred feet of construction is disingenuous to the public, as construction impacts could be felt hundreds of yards (if not miles) away. The DEIS fails to address likely effects of construction and the filling of cave passages on water supplies and wildlife.

The proposed routes will run along and across innumerable small unnamed headwater streams that are essential for aquatic habitat, as well as the more well-known named streams. Earlier in our discussion of the Tennessee pipeline example, we demonstrated that the crossing of headwater streams was a major factor in slope failure and erosion that killed sensitive endangered species downslope. Open-cut construction of buried pipelines at stream crossings is known to cause negative impacts to stream ecosystems (Levesque and Dube 2007). In particular, construction of these crossings will directly impact stream beds and banks, increase suspended sediment and deposition and, thereby, impact fish and macroinvertebrate habitats (Tsui and McCart 1981, Reid et al. 2002).

The proposed route crosses several streams listed as Endangered Species waters; protected species include:

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1. James spinymussel (*Pleurobema collina*)
2. Roanoke Logperch (*Percina rex*)
3. Orange Finned Madtom (*Noturus gilberti*)
4. Atlantic Pigtoe (*Fusconaia masoni*)

These federally protected threatened and endangered species would be negatively impacted by any activities that increase erosion and resultant sedimentation into headwater streams. As previously shown there is no doubt that a pipeline on the severe slopes of the proposed routes will cause erosion. There are no BMPs that can possibly eliminate, or even hope to reasonably control, erosion caused by the proposed project. The potential for erosion from the MVP to jeopardize these populations must be considered in the decisions regarding approval of this route.

Assertions of the ineffectiveness of BMPs for pipelines on steep slopes and the problems this can cause for endangered species are confirmed by the case study of the East Tennessee Gas Pipeline in Tazewell and Smyth Counties, Virginia described above. In spite of the extreme attention to detail, slopes failed in two independent erosion events resulting in a kill of several hundreds of individuals and multiple species of endangered mussels in Indian Creek and N. F. Holston River (Dinkins 2011).

Because the effect of pipeline construction in this severe terrain is predictable, it violates the Federal Clean Water Act Mandated Best Management Practices, which state:

“Discharges must not take, jeopardize, adversely modify or destroy the critical habitat of threatened or endangered species as defined under the Endangered Species Act.”

Long-Term Maintenance

Long-term maintenance of the pipeline right-of-way (ROW) is a concern for several reasons. Erosion, sedimentation and increased runoff caused by compacted soils are concerns over the entire life of the pipeline, not just during construction. Related to those issues are problems with how to manage the ROW vegetative surface. Due to concerns expressed by private landowners regarding the potential use of herbicides, MVP has long stated that they intend to avoid herbicide use and instead manage the ROW with mechanical mowing and hand pruning of steep slopes. But, since the publication of the DEIS, this plan has run afoul of USFS’s position on control of invasive plant species. In a letter to MVP of 15 November 2016, USFS directed:

“If the proposed MVP Project is approved, the Forest Service may require herbicide use along the permanent right-of-way to control non-native invasive plant species. The potential effects of the herbicide use must be disclosed to the public and analyzed in the EIS or in a supplemental analysis. To ensure that herbicide use is analyzed in the EIS and to avoid supplemental analysis at a later time, please update the MVP Project proposal with FERC to incorporate herbicide use.” (CP16-10-000, Accession No. 0161116-5006

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CO55-5

CO55-5

Sections 4.1.2.5 and 4.4.2.4 of the draft EIS noted that herbicides would not generally be used, unless requested by a landowner or land managing agency. Only the use of herbicides in the Jefferson National Forest as recently changed, as addressed in the final EIS. See the response to CO53-1 regarding invasive species.

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CO55-5
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MVP responded to this request on 16 December 2016 by filing a new “Herbicide Use Plan” (CP16-10-000, Accession No. 20161216-5171), wherein they detailed plans to use herbicides to control invasive plants on the 3.4 miles of USFS lands included in the project route. This represents a *major* departure from both what was analyzed in the DEIS that was issued in September of 2016, and from what the public has been told for more than two years. The use of broad-spectrum herbicides (e.g., glyphosate) on USFS lands holds the potential to:

1. Reduce the effectiveness of planned restoration efforts that involve the planting of grasses, forbs, and shrubs, thereby further increasing erosion and sedimentation problems;
2. Impact adjacent private lands and landowners, including unwilling exposure of residents to pesticides in air and water and invalidation of registration for organic farming operations;
3. Introduce pesticides into municipal water supplies that withdraw water from waterways downstream of the impacted USFS lands, along with an expensive-to-correct increase of sediment in those water supplies.
4. Become a long-term (life-of-the-pipeline) controversy, as control of invasive plants on the disturbed corridor of the MVP will not be a temporary management issue. MVP naively proposes to monitor and treat invasive plants on USFS lands for only two years, and they make no mention at all of such control on private lands that they will disturb.
5. Glyphosate is widely known to harm amphibians and will directly affect the wetlands encountered along the route.

None of these issues was analyzed in the DEIS, and now this major change to proposed MVP operations has been issued less than one week before the close of the public comment period for the DEIS.

The public has the legal right to be broadly informed of these changes, which again means that the current DEIS is deficient in effectively addressing major public and environmental concerns about the MVP project. The DEIS should be withdrawn to correct this and other deficiencies, or a supplemental DEIS should be issued that effectively analyzes all issues not sufficiently covered in the present document.

In either case, the public needs a full 90-day comment period regarding any DEIS changes or supplements, which means that **FERC should not be allowed to move to finalizing an EIS until these changes are made and the public has been afforded their full legal right for review and comment.**

Chronic Erosion Scars

CO55-6

Another critical issue related to long-term maintenance is restoration of erosion scars. The EIS must address the effects of erosion and runoff away from the corridor on local streams. An administrative procedure must be developed to oversee the long-term maintenance and inspection of the pipeline corridor.

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CO55-6

Mountain Valley would inspect and maintain the permanent right-of-way in accordance with the FERC Plan and as described in section 2.6 of the EIS.

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CO55-6
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Again we don't have to look far for examples of pipelines not being maintained appropriately and causing erosion and runoff problems. In fact, we only have to look as far as the TRANSCO pipeline, the line MVP is proposed to connect to. The TRANSCO is a 30-inch pipeline, built in 1955. In Virginia, it is perhaps best known for exploding in 2008, injuring five people, and destroying two houses in Appomattox County.

The TRANSCO pipeline right-of-way in Appomattox County is also the location of severe erosion and sediment runoff. Aerial views of the pipeline in the area of latitude 37.48702 longitude -78.752346 (See Map 1 or search in Google Maps for a wider perspective) indicate severe erosion scars and lack of maintenance along this right-of-way. The map coordinates given represent the extreme upstream extent of a small watershed that was sampled in 2009 and again in 2014 in EPA's National Rivers and Streams Assessments. These surveys are intensive assessments of biological, chemical and physical habitat parameters for randomly selected locations on streams. The map coordinates sampled for EPA's watershed study were 37.49180 - 78.75650. The point sampled is approximately 0.5-mile downstream of the TRANSCO pipeline corridor. Even 0.5-mile downstream of the pipeline, the stream is identified as having a sedimentation problem originating as runoff from the pipeline.

The East Tennessee Gas Pipeline Company, previously discussed in this document, also offers another example of a persistent sedimentation problem. In this case the example comes from Tennessee where TV channel 11 WJHL reported a story of a pipeline corridor being left unmaintained after it was constructed. Severe erosion and un-vegetated surfaces still remained three years after construction. **The company blamed steep slopes and the need to change BMPs after construction** (www.wjhl.com/story/27159282/efforts-to-mend-scar-left-on-rogersville-hillside-after-3-years).

There is apparently no effective oversight for the maintenance of or sediment and erosion control on pipelines, and the effects can be observed well outside of pipeline rights-of-way. A long-term maintenance plan must be developed with third party inspection, and the lack of effective agency oversight issues addressed.

ROUTE PROPOSALS

As explained above, because pipelines are exempt from many BMPs then we must take even greater care in selecting routes. The routes that have been proposed by MVP have been selected based on expediency of construction, without enough consideration for environmental effects. By all indications MVP paid no attention to environmental concerns in choosing their proposed routes. Instead MVP chose to let environmental concerns sort out during the EIS development. The EIS should either require MVP to propose and analyze more route options, or seriously consider other options for moving gas that were proposed by others during the scoping process. FERC and MVP must accept that there are places pipelines do not belong and that the environmental costs outweigh the cost of a more appropriate route.

CO55-7

CO55-7

Pipelines are not exempt from implementing BMPs. Section 3 of the EIS evaluates numerous route alternatives.

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CO55-8

Preserve Craig believes that realistic assessment of the issues outlined in this document can only conclude that the proposed MVP route is unsuitable for a pipeline, and to move forward with the MVP proposal portends broad-scale and long-term environmental impacts that have not been fully analyzed (or, in some cases, even considered) and it is critical to consider other options for moving gas with lower risks of environmental calamity.

SUMMARY and CONCLUSION

- Severe erosion and sedimentation would undeniably result from MVP's proposed crossing of severe mountain slopes and innumerable headwater streams.
- Experience shows that no BMP's exist that can prevent these problems, and they will become long-term issues for responsible land management and water-quality protection in the project region.
- The current MVP Plan of Development offers no credible proof that such severe and permanent problems can be avoided with the construction methods proposed.
- The current DEIS ignores this deficiency and fails to adequately address these inevitable problems, and thus fails in its legal obligation to fully inform the public of the likelihood of these severe impacts to public resources and citizens.
- Major changes to the Plan of Development have occurred since the issuance of the DEIS, and the public has neither been fully informed of these changes nor have they had their full legal opportunity to comment on these changes.
- Thus the DEIS should be withdrawn and substantially revised, or a supplemental DEIS that thoroughly and honestly addresses the deficiencies of the current DEIS should be issued.
- Proposed amendments to the LRMP for the Jefferson National Forest cannot even be considered by USFS and BLM and effectively evaluated until such time as FERC and MVP correct all these deficiencies and fully inform the public of changes and environmental threats.
- Whatever action is taken to correct the severe deficiencies in the current DEIS, the public must be afforded their full legal opportunity to comment on both a revised DEIS and the proposed LRMP amendments for USFS.

FERC should NOT proceed to issue a final EIS for the MVP project until these DEIS deficiencies have been fully addressed, and the public has been afforded sufficient (and legally required) opportunity to comment.

BLM and USFS should not take any steps to consider the proposed amendments to the LRMP (Forest Management Plan) for the Jefferson National Forest until such time as FERC and MVP sufficiently address these glaring deficiencies in the Plan of Development and the DEIS, and the public has been sufficiently informed of critical changes and their likely environmental effects, and the public has had sufficient time to consider and comment.

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CO55-8

The EIS concluded that except for clearing of forest, the MVP would not have long-term significant adverse effects on most environmental resources. A realistic assessment of the facts would lead a reader to acknowledge that the pipeline route is suitable for meeting the goals of Mountain Valley to transport natural gas from the Mobley receipt point in Wetzel County, West Virginia to the delivery point at the Transco Station 165 in Pittsylvania County, Virginia.

CO55-9

Erosion control is addressed in section 2 of the EIS. Experience has shown that pipelines can be safely constructed on steep slopes. Water resources can be protected. In fact, the WVDEP issued a Water Quality Certificate to Mountain Valley under Section 401 of the CWA. The FS will independently review the POD. The draft EIS was not deficient, and fulfills our legal obligations under NEPA. Revisions to the POD are discussed in the final EIS. Because there are no good reasons for a revised or supplemental draft EIS, we issued a final EIS that addresses comments on the draft. See the responses to comments FA8-1 and FA10-1 regarding the FS' proposed amendments. The public already had its full legal opportunity to comment on the draft EIS and the proposed FS amendments to the Jefferson National Forest LRMP.

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We thank you for your consideration of these issues that are so critical to citizens who stand to be impacted by this project. We stand ready to work with you to resolve these issues in the interest of protecting citizens, their environment, and the critical environmental services on which we all rely.

CO55-9
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Sincerely,

The Scientific and Technical Committee of Preserve Craig, Inc., on behalf of the community

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W. Samuel Easterling, Ph.D., Civil Engineering
W. Cully Hession, Ph.D., P.E., Certified Ecological Designer
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