August 7, 2017

Sent via email

To: Reviewing Officer Tony Tooke
Regional Forester, USDA Forest Service
1720 Peachtree Street
Atlanta, GA 30309
objections-southern-regional-office@fs.fed.us

RE: Objection to the

Final EIS and Draft Record of Decision for the Mountain Valley Land and Resource Management Plan Amendment for the Jefferson National Forest, Monroe County, West Virginia and Giles and Montgomery Counties, Virginia

Responsible Official:

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

Pursuant to 36 C.F.R. Part 218, the Sierra Club, Wild Virginia, Appalachian Voices, and Protect Our Water Heritage Rights (collectively, "Objectors") object to the Draft Record of Decision for the Mountain Valley Project Land and Resource Management Plan Amendment for the Jefferson National Forest. Objectors' names and addresses are provided below. In accordance with 36 C.F.R. § 218.8(d)(3), the lead objector for this objection is Nathan Matthews, on behalf of the Sierra Club.

The undersigned strongly object to the Draft Record of Decision and to the Mountain Valley Pipeline project proposal. The proposed Mountain Valley Project will have severe, wide-ranging, and lost-lasting impacts on the environment and on recreational and aesthetic enjoyment of the Jefferson National Forest, Appalachian National Scenic Trail, and surrounding areas. The Final Environmental Impact Statement ("FEIS" or "Final EIS") fails to disclose many of these impacts, and the FEIS and Draft ROD do not justify any of them. Moreover, the process by which the FEIS was developed has failed to provide the statutorily-required opportunities for meaningful public input. FERC circulated a draft environmental impact statement ("DEIS") that was woefully incomplete, and many of these deficiencies remain uncured in the final. For the reasons stated below, Objectors request that the Forest Service reject the proposed amendments and refuse to authorize the pipeline. If the Forest Service does not do so, then prior to taking any action to

approve the amendments or pipeline, the Forest Service must ensure that a new draft EIS, which cures the deficiencies identified below, is prepared and that the public is given a full and meaningful opportunity to comment.

Table of Contents

I.		Oraft Record of Decision Violates the Procedural Requirements of NEPA by ng on a Draft EIS That Was Woefully Incomplete	2
II.	The Final EIS Also Unlawfully Relies on Analyses That Have Not Been Completed		8
III.	The FEIS Fails to Take A Hard Look At the Effects of Creating A New Right-of-Way, Including Forest Edge Effects and Fragmentation		. 10
IV.	The Forest Service's Analysis of Alternatives Is Arbitrary		. 12
	A.	The Forest Service Cannot Amend the Plan to Allow a New Right-of-Way Because Alternatives That Do Not Require a New Right-of-Way Are Feasible	. 13
	B.	The FEIS Does Not Support The Conclusion That Alternative Routes Are Not Environmentally Preferable	. 15
	C.	The Record Does Not Support Rejection of the No Action Alternative and the Draft ROD's Identification of the Proposal as Environmentally Preferable	. 17
V.	The Amendments to Jefferson National Forest Plan Standards for Soil, Riparian, and Old Growth Are "Directly Related" to Substantive Provisions of the 2012 Planning Rule		. 20
VI.	The FEIS Understates Impacts of Erosion and Sedimentation by Relying on Unreasonable Assumptions about the Efficacy of BMPs and Mitigation Measures		. 22
VII.	Conc	lusion	. 26

I. The Draft Record of Decision Violates the Procedural Requirements of NEPA by Relying on a Draft EIS That Was Woefully Incomplete

The Forest Service's decision to amend the Jefferson National Forest Plan is a major action subject to NEPA. 36 C.F.R. § 219.14(a). The Draft ROD claims that the Forest Service satisfied NEPA's requirements by participating as a cooperating agency in the Federal Energy Regulatory Commission's ("FERC") NEPA process and by adopting the FERC FEIS. Draft ROD at 5, 25-26. However, FERC violated NEPA's procedural requirements, including 40 C.F.R. § 1502.9, in that the DEIS, which FERC and the Forest Service circulated for public comment, was woefully incomplete; indeed, the Forest Service explicitly determined that the DEIS provided "no data to

support analysis" of numerous important issues. FS Comment on DEIS at 2-4 (Dec. 20, 2016), *see also id.* at 5-7. This procedural NEPA violation renders the FEIS defective as well; a new and complete DEIS must be circulated before approval can proceed. Allegheny Defense Project, *et al.*, Comment on DEIS at 3 (Oct. 19, 2016)¹ (explaining incompleteness of the DEIS and calling for circulation of a complete draft). Insofar as the Forest Service has implicitly abandoned its own previous determination that the DEIS was inadequate, this unexplained reversal is itself arbitrary.²

In order to provide a meaningful opportunity for public comment, a DEIS "must fulfill and satisfy to the fullest extent possible the requirements" for a final EIS. 40 C.F.R. § 1502.9. If the DEIS is incomplete, it is impossible for public comments on the draft to provide meaningful analysis. *See id*.

Here, the DEIS recognized its own incompleteness. The DEIS itself provided a long list of information that was not yet available, and that project applicant would be required to provide to FERC after issuance of the draft. DEIS at 5-20 to 24. This included information about:

- Visual simulations of "leaf on" and "leaf off" scenarios of Appalachian Trail crossing
- Surveys of alternative routes
- Information about water bodies near the proposed route, and potential need to re-align the route to avoid waterbodies
- Information impacts on wetlands, including the potential to avoid impacts
- A plan describing impacts on migratory bird habitat and mitigation thereof
- A plan for avoidance of active mines
- A revised landslide mitigation plan that addressed potential hazards and debris flows.
- Site-specific plans regarding road culverts and waterbody fill
- Quantitative modeling of turbidity and sedimentation impacts of proposed river crossings
- Plans to minimize and mitigate impacts to public surface water supplies

_

¹ All Objectors here were signatories to comment.

² Because this implicit reversal was not announced in any document for which the Forest Service provided a public comment period, Objectors could not have commented on this issue previously. 36 C.F.R. § 281.8(c).

- Documentation of consultation with other agencies
- Information regarding the location of drinking water sources near the pipeline and related facilities
- Additional surveys for federally listed species.

As Objectors explained, the information to be provided in these future submissions was essential to the analysis of the Mountain Valley Pipeline's impacts, and therefore needed to be provided in the DEIS, not afterward. *See also* Allegheny Defense Project Comment on DEIS at 4, 7-9. For example, Objectors' comments on the DEIS explained that the analysis of erosion and sedimentation was incomplete because it included no discussion of how effective mitigation measures or best management practices would be, or of erosion and sedimentation resulting from long-term replacement of forest with herbaceous cover along the operational pipeline right of way. Appalachian Mountain Advocates, *et al.*, Comment on DEIS at 45-51 (Dec. 22, 2016) ("Appalmad DEIS Comment").³ Although the FEIS added, as appendix O-3, a "Hydrologic Analysis of Sedimentation," *see also* FEIS 4-146, 4-221, that purports to address the efficacy of mitigation measures and erosion and sedimentation from long-term vegetation change, Objectors and the public at large were not provided with meaningful opportunity to review and comment on this analysis. This is significant because Objectors have serious concerns as to whether, for example, the data relied upon in this analysis is representative of conditions involved in constructing a pipeline of this size in this landscape. *See infra* pages 22 to 26.

The DEIS also failed to include information that would need to be provided by various agencies, rather than the project applicant. For example, the DEIS did not determine whether the Mountain Valley Pipeline was needed or would provide public benefits; the DEIS explicitly stated that this analysis would be postponed until FERC orders issued *after* the NEPA analysis was complete. DEIS at 1-9. NEPA, however, requires that the EIS provide a statement of purpose and need, 40 C.F.R. § 1502.13, and the DEIS's failure to address this issue undermines the development of alternatives and the public's ability to comment. Allegheny Defense Project Comment on DEIS at 3-4, Appalmad DEIS Comment at 5.

³ All Objectors here were signatories to this comment.

Similarly, the DEIS provided an incomplete analysis of impacts on threatened and endangered species, stating that this analysis would be provided in future evaluations undertaken pursuant to the Endangered Species Act. See Appalmad DEIS Comment at 3, 72. NEPA regulations provide that "[t]o the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analysis and related surveys and studies required by ... the Endangered Species Act," 40 C.F.R. § 1502.25(a) (emphasis added). Guidance from the Council on Environmental Quality explains that Endangered Species Act analysis should be "concurrent" with, rather than "sequential" to, NEPA review. 4 Here, however, the analysis was entirely sequential: FERC issued the *final* EIS before completing the *first step* of the Endangered Species Act analysis, the Biological Assessment. FEIS at ES-8 ("we are *currently* preparing a Biological Assessment.") (emphasis added); see Draft ROD at 26 (Forest Service will rely on FERC's Endangered Species Act review). Moreover, the information provided in the DEIS fails to provide a basis for meaningful assessment or discussion of impacts on endangered or threatened species. Appalmad DEIS Comment at 72-73. That is, for the species mentioned, the DEIS provides no discussion of the current status and trends in population and habitat, and, for species likely to be affected by the project, no discussion of the severity or consequences of the impact. DEIS at 4-183 to 4-189.

Numerous other federal agencies agreed with Objectors' contention that the DEIS was deficient. For example, BLM explained that:

the analyses of alternatives, cumulative effects, and cultural, visual, aquatic, geological, and biological resources are deficient because information has not been provided, was provided after the release of the DEIS, or was not incorporated into the DEIS.... Analyses, reports, and mitigation plans referenced in the DIES ... are still [as of December 22, 2016, the close of the public comment period] in draft form or not yet available. BLM is concerned this precludes a thorough analysis and *public review and comment* on project materials.

-

⁴ Council on Environmental Quality, Improving the Process of Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act, 11-12 (March 6, 2012), *available at* https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Improving_NEPA_Efficiencies_06Mar2012.pdf.

BLM Comment on DEIS (Dec. 22, 2016) reprinted as FEIS Appendix AA-Part-1, FAA11-12 (emphasis added).

Even the Forest Service itself filed comments stating that the DEIS failed to provide information necessary to support meaningful analysis of the project's impacts. For example, the Forest Service shared Objectors' view that the DEIS did not provide information sufficient to determine "the extent to which the pipeline would be noticed and/or potentially affect culture, landscape, or environment" because visual impact analysis remained outstanding. FS Comment on DEIS at 9; Appalmad DEIS Comment at 33, 154. Similarly, both the Forest Service and Objectors explained that the DEIS failed to provide information regarding existing karst features that was essential to "support impact analysis from the project." FS Comment on DEIS at 2, see id. at 4; accord Appalmad DEIS Comment at 53-57. The DEIS provided "no data to support impact analysis for this project" regarding aquifers, springs, swallets, source water protection areas, and brine pits, FS Comment at on DEIS at 2-4; and lacked "information sufficient to support an analysis" of impacts to wetlands. Id. at 7; see also Allegheny Defense Project Comment on DEIS at 4. The Forest Service repeatedly stated that missing information needed to be provided "PRIOR to," "through," or "in" "the DEIS" specifically. FS Comment on DEIS at 2, 3, 5, 7; cf. id. at 1, 4, 9, 10 (referring instead to the final EIS).

The FEIS's defense of the DEIS's incompleteness misunderstands NEPA's requirements and is arbitrary. The FEIS argued that issuance of the DEIS was not "premature" because "the FERC staff spent about two years on its analysis." FEIS Appendix AA, FAA11-2. The amount of time FERC spent is irrelevant; what matters is whether the contents of the document FERC produced described the project in enough detail to enable the public to meaningfully understand and comment on the impacts. That is, the draft should closely resemble what FERC expects the final to be, subject of course to revisions in response to comments on the draft. 40 C.F.R. § 1502.9. The agency or the applicant may be impatient with the time required to prepare the final, but the agency cannot shortcut the NEPA process by releasing a draft before the agency has substantially

-

⁵ The remaining arguments in this section concern the FEIS's response to comments. Objectors had no prior opportunity to comment on these responses. 36 C.F.R. § 281.8(c).

completed its own analysis. "[T]he purpose of the final EIS is to respond to comments rather than to complete the environmental analysis (which should have been completed before the draft was released)." *Habitat Educ. Ctr. v. U.S. Forest Servs.*, 680 F. Supp. 2d 996, 1005 (E.D. Wis. 2010), *aff'd by.* 673 F.3d 518 (7th Cir. 2012).

Nor can FERC excuse the incomplete nature of the draft EIS by asserting that missing information would become publicly available on FERC's e-Library website. FERC contended that the DEIS did not fail to provide an adequate opportunity for comment because "[t]he Applicants must file information requested in the draft EIS on our e-Library system which is available to the public. Therefore, the public can comment on that information at the time of its filing." FEIS Appendix AA, FAA11-2. As a practical matter, the public could not submit comments on all this post-DEIS material, because extensive material was submitted too late for comments to be drafted by the public and reviewed by FERC in development of the FEIS. The Applicant filed more than four thousand of pages of material on June 14, 2017, nine days before the scheduled June 23, 2017 release of the FEIS. It was implausible to expect the public to review and comment on this material in this short time period. Indeed, FERC itself failed to do so: for example, the FEIS cited and discussed the March 2017 Plan of Development, without recognizing that a revised draft was file in June 2017. Furthermore, for these materials submitted after the DEIS was issued, the public did not have any indication of when public comments would need to be submitted: the FEIS explained that FERC "considered and addressed" "Letters received after the close of the comment period, up until staff began production of this final EIS," but FERC did not provide the public with notice of when this production would begin, and thus, when comments would need to be submitted in order to be considered. FEIS Appendix AA, FA15-5. Moreover, the process of submitting material is ongoing: even important materials submitted in June are still in "draft" form and subject to revision. See, e.g., Draft Plan of Development (June 14, 2017). Because these late-filed (and not yet filed) materials describe the applicant's actual proposals, they are essential to evaluating the project's impacts.

Putting this timing concern aside, FERC's suggestion that the public can respond directly to the applicant's post-DEIS filings fundamentally misunderstands NEPA's requirements. NEPA

obliges the agency, not the private project applicant, to assess and disclose the impacts of the project: thus, the public needs to know not only what the applicant contends the impacts will be, but whether the agency agrees. The applicant submissions provide no information as to whether FERC, the Forest Service, or other agencies agree with the applicant's assessment or with the completeness thereof. In addition, FERC's statement that it would informally accept comments submitted on applicant submissions is not a substitute for the formal comment period and procedure provided for the DEIS. FERC failed to provide any clear framework for when or how members of the public could comment on these applicant submissions, or how such comments would be considered. *See* FEIS appendix AA, FA15-4 (comment of EPA).

II. The Final EIS *Also* Unlawfully Relies on Analyses That Have Not Been Completed

The Forest Service is further precluded from relying on the FEIS because this, like the DEIS, document continues to state that certain information, analyses, and decisions will be provided by documents that are not yet complete or available.

First, the FEIS does not cure the DEIS's failure to demonstrate the purpose or need for the project. NEPA requires that an EIS "specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. § 1502.13, Appalmad DEIS Comment at 4. But the FEIS here candidly acknowledges that FERC has not yet determined whether there is a need for the Mountain Valley Pipeline. FEIS at 1-9. The FEIS "does not address in detail the need or public benefits of" the Mountain Valley Pipeline; instead, FERC states that it will provide this analysis in a future order. *Id.* This omission and postponement is particularly problematic here, where Objectors have raised significant concerns as to whether there is a need for the pipeline. Appalmad DEIS Comment at 6-30. Failure to address these concerns in or prior to the FEIS interferes with the Forest Service and the public's ability to analyze the choice between the available alternatives, including the no-action alternative. In other words, because the FEIS does not address whether the pipeline will actually provide benefits, it is difficult to determine whether the benefits warrant the significant environmental costs. *Id.* at 4-7. Failing to examine project purpose also interferes with selection

and analysis of other action alternatives. For example, the FEIS's dismissal of various system alternatives (*i.e.*, use of other existing or proposed pipelines in lieu of the Mountain Valley Proposal) rests, in part, on the contention that these alternatives would be unable to satisfy the project purpose of transporting about 2 billion cubic feet per day of natural gas from production areas in the Appalachian Basin to markets in the Mid-Atlantic and Southeastern United States. FEIS 3-10 to 3-11, 3-15 to 3-16. However, the FEIS does not demonstrate that there is, in fact, a need for this level of capacity between these markets. Appalmad DEIS Comment at 29-30. Failure to clearly analyze the project need also interferes with analysis of the relative merits of alternatives that would only partially satisfy this need, perhaps by delivering a fraction proposed gas volumes. *See Nat. Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 93 (2d Cir. 1975) ("the EIS must nevertheless consider such alternatives to the proposed action as may partially or completely meet the proposal's goal and it must evaluate their comparative merits"), *N. Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1542 (11th Cir. 1990).

Second, the FEIS omits crucial information regarding impacts on listed species, stating that this analysis is still forthcoming. The FEIS has not remedied the DEIS's deficient species analysis: the FEIS repeats the conclusion that multiple listed species are likely to be adversely affected, but provides no analysis of existing population levels, number of individuals likely to be harmed, the species' ability to tolerate the harm, etc. FEIS 4-228 to 4-240; 5-24 (some species surveys have not yet been conducted); see Appalmad DEIS Comment at 72-73. The FEIS states that a "detailed assessment regarding the effects of the project on federally listed species" will not be provided until FERC completes a biological assessment, which FERC was still preparing at the time the FEIS was released. FEIS ES-8. This failure to analyze and disclose impacts to species in the EIS violates NEPA. In addition, consultation with the Fish and Wildlife Service must be completed before finalization of the EIS or issuance of the Record of Decision. The Fish and Wildlife Service, through consultation, both offers its expert opinion as to the expected impacts on protected species and identifies reasonable and prudent measures and alternatives that can lessen these impacts. 16 U.S.C. § 1536(b)(3)(A), (b)(4). "[A]ction agencies must give great weight to the Services' biological opinion before deciding on a proposed action." U.S. Fish & Wildlife Serv. & Nat'l Marine Fisheries Serv., Endangered Species Consultation Handbook at 2-11 (March 1998)

(emphasis added). To ensure that this is done, and that these measures can be incorporated into the action, the Fish and Wildlife Service has explained: "At the time the Final EIS is issued section 7 consultation should be completed. The Record of Decision should address the results of section 7 consultation." *Id.* at 4-11.⁶ Here, consultation with the Fish and Wildlife Service was not even *initiated* until July 10, more than two weeks after the FEIS and Draft ROD were issued, and consultation is not expected to be complete until November 22, 2017.⁷ Needless to say, the Draft ROD does not address the Fish and Wildlife Service's biological opinion.

The FEIS recognizes that extensive additional information is still missing, including data on the "location of all water wells, springs, and other drinking water sources," FEIS 4-108, 5-22; whether Mountain Valley proposes to use permanent fill in wetlands along access roads, FEIS at 4-120; "environmental surveys (water resources, wetlands, cultural resources, and threatened and endangered species) for all cathodic protection groundbeds," *id.* at 5-24; and final mitigation plans, *id.* Crucially, the Plan of Development discussed in the FEIS, and subsequent plans filed by the applicant, are still in draft form, and it appears that basic questions about mitigation measures required therein have not yet been answered.

The FEIS is missing crucial information, including an examination of the project purpose, any discussion of the magnitude of impacts on federally listed species, or discussion of measures to reduce those impacts. The FEIS's insistence that this information will be provided in future documents is not a substitute for NEPA review. Accordingly, the FEIS fails to meet NEPA's requirements, and the Forest Service cannot reach a decision until these violations are corrected.

III. The FEIS Fails to Take A Hard Look At the Effects of Creating A New Right-of-Way, Including Forest Edge Effects and Fragmentation

Placing the pipeline right of way through contiguous forest has numerous adverse environmental effects that extend far beyond the immediate impact on the land cleared during pipeline

-

⁶ Accord https://www.fws.gov/endangered/what-we-do/faq.html, attached as Exhibit 1.

⁷ https://www.permits.performance.gov/projects/mountain-valley-and-equitrans-expansion-project-n (as of August 7, 2017), attached as Exhibit 2.

construction or maintained as an operational right of way. The open right of way changes the character of the forest on either side, creating permanent edge effects that extend into the forest. Appalmad DEIS Comment at 61-63. On a broader scale, the right-of-way represents a barrier that fragments formerly connected forest, reducing the size of contiguous forest cores and creating isolated smaller fragments. *Id.* at 62-63, 77. The Forest Service has repeatedly recognized the importance of these issues—for example, the Final EIS for the operative 2004 Jefferson National Forest Plan explains that fragmentation and edge effects have important and adverse effects on habitat quality. JNF LRMP FEIS at 3-121 to 3-122 (2004). Here, FERC's FEIS fails to take the required hard look at the impacts of a new right-of-way on forests and forest habitat.

Beginning with edge effects, the DEIS failed to provide any meaningful analysis of this issue. *See id.* at 61-63. The FEIS added an acknowledgement of the significance of edge effects and a quantitative estimate of the number of acres that would be converted from interior forest habitat to edge habitat along the proposed route. FEIS at 4-182 (entire route), 4-186 (Jefferson National Forest in particular). However, the FEIS's discussion of edge effects falls far short of a hard look. Edge effects are omitted from much of the FEIS's analysis. The FEIS's discussion of impacts on vegetation begins by stating "Constructing the MVP and the EEP would *impact* 4,827 acres of vegetated land," *id.* at 4-177 (emphasis added), *accord id.* at 4-180, a statement that cannot be reconciled with the FEIS's later recognition of the fact that the actual impacts will many times greater. *Id.* at 4-182. Edge effects are omitted from the table identifying impacts by project component; the FEIS only discusses edge impacts of the project as a whole. *Id.* at 4-178 to 179, 4-182.

Most importantly, the FEIS violates NEPA by only discussing edge effects of the preferred alternative. One of the primary benefits of the route alternatives that would follow existing rights-of-way is that these alternatives avoid impacts to interior forest. Co-location along an existing right of way reduces, if not outright eliminates, creation of new edge effects, because the forest bordering the right of way is already edge forest. But the FEIS provides no discussion of the

⁸ Because this discussion was added to the FEIS, Objectors did not have a previous opportunity to comment on it.

extent to which impacts resulting from edge effects would be reduced by any of the route alternatives. Discussion of how the impacts would differ under the available alternatives is the heart of NEPA analysis. Simply describing the edge effects of the preferred alternative, without discussing how these effects could be avoided or how they would differ under the alternatives, fails to provide a hard look.

Edge effects are not the only impact on interior forest. The pipeline right-of-way would reduce the size of contiguous forest blocks and cause previously connected habitat to become isolated. These effects were essentially ignored by the DEIS. Appalmad DEIS Comment at 62-65, 69, 77. Although the FEIS added limited discussion recognizing these issues, focused on the character of the interior forest that would be impacted, the FEIS failed to provide analysis of the impacts of the proposed route or of any alternative. FEIS 4-181 to 4-183. The FEIS provides no discussion of the amount by which the pipeline will reduce the size of contiguous forest patches or the significance of such reductions. Nor does the FEIS discuss the number or character of fragments that will be created. Instead, the FEIS simply identifies the number of acres of direct disturbance that will occur within various categories of existing interior forest.

FERC and the Forest Service have the tools to provide a more thorough analysis of the effects on interior forest. Objectors encourage the agencies to revise the EIS using the tools described in the Virginia Forest Conservation Partnership's letter dated July 21, 2017.

IV. The Forest Service's Analysis of Alternatives Is Arbitrary

The Forest Service cannot approve the Mountain Valley Pipeline or related plan amendments without rigorously evaluating alternatives that would avoid new utility corridors or rights of way within the Jefferson National Forest, instead co-locating the route within the forest with existing rights-of-way. Appalmad DEIS Comment at 144. This analysis of re-use of existing rights of way is required by both NEPA and multiple Forest Service authorities. *Id.* Here, the FEIS and Draft ROD give short shrift to such alternatives, and thus fail to support the creation of a new right of way. These documents also fail to support rejection of the no action alternative. *Id.* at 6-30.

A. The Forest Service Cannot Amend the Plan to Allow a New Rightof-Way Because Alternatives That Do Not Require a New Rightof-Way Are Feasible

The Forest Service cannot amend the plan to authorize the proposed route because the Forest Service has not demonstrated that co-location with an existing right-of-way is infeasible. Appalmad DEIS Comment at 144. Multiple legal authorities create presumptions against authorization of a new pipeline right-of-way or corridor. The Mineral Leasing Act provision applicable to natural gas pipelines states that

In order to minimize adverse environmental impacts and the proliferation of separate rights-of-way across Federal lands, *the utilization of rights-of-way in common shall be required to the extent practical*, and each right-of-way or permit shall reserve to the Secretary or agency head the right to grant additional rights-of-way or permits for compatible uses on or adjacent to rights-of-way or permit area granted pursuant to this section.

30 U.S.C. § 185(p) (emphasis); *see also* 43 U.S.C. § 1763 (FLPMA provision imposing same requirement on non-Mineral Leasing Act rights-of-way).

In Forest Service authorities implementing these statutes, the Forest Service has adopted multiple overlapping limits on right-of-way placement. Regulations implementing these statutes provide gas pipelines are a "special use," 36 C.F.R. § 251.53(e), which, according to the Forest Service Manual, may be authorized only if "[t]he proposed use cannot reasonably be accommodated on non-National Forest System lands." FSM 2703.2(2)(b); *see also* JNF LRMP FEIS Appendix J-178 (recognizing applicability of this provision to gas pipelines). Notably, this Manual provision does not distinguish between new and co-located rights of way—the Manual states that pipelines should not be approved at all if they can reasonably avoid National Forest System lands. The Jefferson National Forest Plan adopted standard FW-274, which the Forest Service does not

_

⁹ Here, the Forest Service is not responsible for issuing the special use permit and easement—that role formally belongs to the Bureau of Land Management. However, BLM will not approve the pipeline absent Forest Service concurrence, and the Forest Service can and must use its authority to withhold concurrence to effectuate the Manual's policy.

propose to amend, which requires expansion of existing corridors when "feasible," in order to avoid creation of new corridors. And the Plan supplements the Manual and forestwide standard's command to avoid impacts where "feasible" with an unqualified prohibition on new corridors in certain management prescriptions, such as those concerning old growth. *See* LRMP FEIS at 3-434.

FERC orders similarly establish a general preference, not limited to federal lands, for "pipeline routing along existing road or utility rights-of-way, *whenever possible*, over creating a new greenfield pipeline right-of-way." *Islander East Pipeline Co.*, 102 FERC ¶ 61,054, at P 133 (2003) (emphasis added); *accord Entrega Gas Pipeline, Inc.*, 112 FERC ¶ 61,177, at P 19, *order on reh'g*, 113 FERC ¶ 61,327 (2005) (citing *Portland Natural Gas Transmission System*, 83 FERC ¶ 61,080 (1998)). *See* Appalachian Mountain Advocates *et al.* Motion to Intervene and Protest in CP16-10 at 51 (Nov. 27, 2015).

Here, neither the FEIS nor the Draft ROD demonstrate that alternative routes that would avoid new rights-of-way are infeasible, impractical, or unreasonable. The FEIS does not explicitly address whether any of the route alternatives would stay within existing Rx5C utility corridors. *See* Appalmad DEIS Comment at 144 (calling for this analysis). This omission itself renders the FEIS inadequate: the FEIS must clearly and explicitly address the extent to which alternatives would be collocated with existing corridors within the Jefferson National Forest specifically, rather than only quantifying collocation in total and providing vague narratives regarding collocation within the Forest. Nonetheless, it appears that at least four route alternatives would be within existing Rx5C corridors: alternatives 1, Hybrid 1A, Columbia Gas of Virginia, and AEP-ANST. FEIS at 3-22, 3-25, 3-48, 3-55. The FEIS does not conclude that any of these alternatives are technically infeasible; instead, the FEIS's sole reason for dismissing each is the conclusion that these alternatives do "not offer a significant environmental advantage." FEIS at 3-22, 3-25, 3-50 to 3-51, 5-16 to 5-17, but see Part IV.B infra (FEIS does not support showing of no

¹⁰ FEIS states that "The variation would cross the ANST in the area of an existing right-of-way; however this area is subject to the restrictions of the recently executed easement agreement between the FS and Celanese." FEIS 3-50 to 3-51. The FEIS provides no discussion of the relevance of this easement. The Mineral Leasing Act and Federal Land

environmental advantage). The Draft ROD does not provide any additional information or analysis showing these alternatives to be impractical.

Accordingly, neither the FEIS nor the Draft ROD even purport to make the showing the Mineral Leasing Act and various Forest Service authorities require for designation of a new utility right-of-way: that use of existing rights-of-way is infeasible. Appalmad DEIS Comment at 144. To the contrary, the information in the record demonstrates that these alternatives *are* feasible. The Forest Service therefore cannot amend the Plan to enable a new right-of-way.

B. The FEIS Does Not Support The Conclusion That Alternative Routes Are Not Environmentally Preferable

The FEIS states that none of the alternative routes offered "significant environmental advantages" over the proposed route. FEIS at 5-16 to 5-17. This conclusion is arbitrary because the FEIS's comparison of the proposed routes failed to adequately consider important impacts, and because it is contrary to the analysis that is presented.

First, the FEIS's comparison of alternatives ignores many of the impacts that co-location with existing corridors serves to reduce or avoid. Appalmad DEIS Comment at 61-65, 69, 77. For example, while the Mineral Leasing Act and various Forest Service authorities have determined that is better to impact previously-disturbed areas than new sites, the FEIS, in discussing impacts on forest, wetlands, *etc.*, simply discloses impact in terms of linear distance or area, without addressing whether the area was previously disturbed. *See, e.g.*, FEIS at 3-22 to 3-25, 3-48 to 3-55. Similarly, the FEIS does not address how the alternatives differ in terms of edge effects, or address the impact of fragmentation. ¹¹ *See supra* Part III. Nor does the FEIS provide *any*

Policy and Management Act provisions concerning issuance of easements require that all easements for rights of way across federal land "shall reserve to the Secretary concerned the right to grant additional rights-of-way or permits for compatible uses on or adjacent to rights-of-way granted pursuant to this Act." 30 U.S.C. § 185(p), 43 U.S.C. § 1763.

¹¹ Although the FEIS calculates "interior forest crossed" for Alternatives 1, Columbia Gas of Virginia, and AEP-ANST, taking a hard look at impacts of fragmentation requires far more than merely identifying the amount of interior forest crossed: the FEIS must consider edge effects, the size of the forest fragments on either side of the crossing, and the resulting fragments' suitability for habitat and other purposes. *Supra* Part III. Moreover, the FEIS

assessment of how visual impacts of the alternatives differ. Appalmad DEIS Comment at 137, 143, 155. Without this information, the FEIS cannot sharply define or provide a rigorous exploration of the alternatives, nor can the FEIS support the determination that these alternatives do not provide significant advantages over the proposed route. 40 C.F.R. § 1502.14.

Second, even the limited information presented in the FEIS undermines the FEIS's assertion that alternative routes would not have significant environmental advantages. The FEIS's evaluation of the impacts of each alternative amounts to a superficial observation that each alternative would have some environmental benefits and some drawbacks; in general, the FEIS states that alternative routes reduce impacts to interior forest, old growth, roadless and semi-primitive areas, and (for Alternatives 1 and Hybrid 1A) forested area overall, while increasing impacts on nonforested land, wetlands, steep slopes, karst, and (for the Columbia Gas of Virginia and AEP-ANST alternatives) forested land other than the above categories. FEIS at 3-24 to 3-55. These tradeoffs are likely to be inherent in any decision between co-location, which will almost always require a longer route in order to detour toward existing corridors, and a new right-of-way, which can take a more direct route. The Forest Service and FERC, by adopting presumptions favoring co-location, have concluded that although both options have impacts, the former is generally environmentally preferable. Appalachian Mountain Advocates et al. Motion to Intervene and Protest in CP16-10 at 51 (Nov. 27, 2015), Appalmad DEIS Comment at 143-144. Here, the FEIS's alternatives analysis provided no discussion whatsoever of the magnitude or severity of these impacts. Because it failed to provide this discussion of severity, the FEIS's alternatives analysis does not support the conclusion that alternative routes would not offer significant environmental benefits.

Other portions of the FEIS actively undermine the superficial assertion that alternative routes would not be environmentally preferable to the proposed route. The FEIS concludes that the pipeline's only significant impacts would be impacts on forested land; in particular, impacts on interior forest and the creation of edge habitat. FEIS at 5-1, 5-5. The FEIS acknowledges that

does not identify interior forest crossed for Alternative Hybrid 1A. FEIS at 3-27.

construction and operation of the pipeline will have the potential to impact geology, soils, groundwater, surface water, wildlife and aquatic species, and visual resources, but concludes that proposed mitigation measures will "adequately" or "effectively" "minimize" these impacts to insignificant levels. FEIS at 5-2 to 5-5, 5-7, 5-10. 12 Thus, the FEIS indicates that available alternatives would reduce the only impacts that the FEIS found to be significant, while increasing impacts that the FEIS determined could be adequately mitigated. These findings cannot be squared with the FEIS's conclusion that the route alternatives discussed above would not provide significant environmental benefits compared to the proposed route. While Objectors disagree with the FEIS's conclusion that impacts on resources other than forests are insignificant, and Objectors contend that FERC has overstated the likely efficacy of mitigation measures, we nonetheless believe that the forest, visual, habitat, and other impacts of a new right-of-way are particularly significant, Appalmad DEIS Comment at 39 to 159, and that the above alternatives would be environmentally preferable to the proposed route. Appalmad DEIS Comment at 143-144. 13

C. The Record Does Not Support Rejection of the No Action Alternative and the Draft ROD's Identification of the Proposal as Environmentally Preferable

The Draft ROD discusses alternatives on pages 24-25, and purports to identify the proposed project as the environmentally preferable alternative. This discussion and conclusion are arbitrary and unsupported by the record.

The Forest Service's decision to limit it analysis to "the proposal and the no action alternative," Draft ROD at 24, violated NEPA. ¹⁴ NEPA requires the Forest Service itself to identify, in the record of decision, all alternatives that the agency considered, and to provide an explanation as to which of these alternatives was determined to be environmentally preferable. 40 C.F.R. §

17

¹² The FEIS also concludes that the project will not have "significant" impacts on socioeconomics, air quality, or noise. FEIS 5-11, 5-14.

¹³ To be clear, while Objectors contend that these alternative routes would be preferable to the proposal, our ultimate position is that FERC and the Forest Service should adopt the no action alternative and deny the proposal outright.

¹⁴ Because these objections concern the Draft ROD specifically, Objectors could not have raised this issue previously.

1505.2(b) and 36 C.F.R. § 220.3. If the Forest Service did not actually consider alternatives beyond the proposal and no action, notwithstanding those alternatives' inclusion in the FEIS, then the Forest Service violated the NEPA obligation to consider a reasonable range of alternatives which includes alternatives the Forest Service itself did not have jurisdiction to adopt. 40 C.F.R. § 1502.14(c). The record demonstrates that the Forest Service has already insisted upon numerous changes to the original proposal; the Forest Service plainly could have also adopted projectspecific Plan amendments that would have required an alternative route. See Draft ROD at 5 (explaining that Forest Service has the authority to "modify the proposed project to make it consistent with the Forest Plan."). For example, the Forest Service could have permitted the project to proceed, but required use of an existing utility corridor and Appalachian National Scenic Trail crossing, which might have led the Forest Service to adopt part of the proposed package of amendments, omitting amendments to Standards FW-248, 6C-007, 6C-026, and 4A-028. However, the Draft ROD provides no indication that the Forest Service considered such an alternative. On the other hand, if the Forest Service did consider alternatives beyond the proposal and no action, the Draft ROD violates NEPA by failing to identify these alternatives and explain why they are not environmentally preferable. 40 C.F.R. § 1505.2(b). 15

Even the limited discussion of the proposal and no action alternative is arbitrary. As the Forest Service recognizes, the proposal would have significant adverse environmental impacts. Draft ROD at 24. The FEIS states that impacts on forest resources will be long-term and significant. FEIS 5-1, 5-5. The Forest Service has previously disagreed with FERC's conclusion that other impacts would be insignificant—for example, the Forest Service has explained that the project will have long-term and potentially significant impacts on water resources. FS Comment on DEIS at 7; *see also* Allegheny Defense Project Comment at 4. The Forest Service has provided no explanation as to how these significant impacts can be squared with the Draft ROD's conclusion that the Mountain Valley Pipeline proposal "can be implemented without impairing the long-term

¹⁵ Although the Draft ROD discusses several route variations in the context of discussing impacts on the Appalachian National Scenic Trail, Draft ROD 21-22, these variations were not included in the Draft ROD's alternatives analysis, and the discussion of them suffered the same flaws described in Part IV.B, *supra*. The Draft ROD entirely failed to mention Alternatives 1 and Hybrid 1A.

productivity of National Forest System lands." Draft ROD at 24. ¹⁶ The admittedly significant impacts have not been "avoid[ed], rectif[ied], ... or eliminate[d]," and a finding that they have been "reduce[d]" or "mitigated to the extent practical" does not entail the conclusion that these nonetheless-significant impacts will not impair long-term productivity. Draft ROD at 11.

Conversely, the record does not support the Draft ROD's statements regarding the no action alternative. Because the FEIS has not demonstrated a need for the project, *supra* pages 8-9, Appalmad DEIS Comment at 6-30, the FEIS does not support the Draft ROD's dismissal of the no action alternative as failing to meet the project purpose. Draft ROD at 25. Nor does the record support the speculation that the no action alternative would lead to expansion or construction of an alternative pipeline that "may result in equal or greater environmental impacts." Draft ROD at 24-25. Because there has been no showing of a need for the gas transportation service that would be provided by the Mountain Valley Pipeline, there is no reason to believe that rejection of this proposal will lead to construction or expansion of some other pipeline that would not otherwise occur. Appalmad DEIS Comment at 7 n.23, see also Appalachian Mountain Advocates et al., Scoping Comment at 10-12 (June 16, 2015). ¹⁷ Nor is there any support for the suggestion that such a consequence would have environmental impacts "equal or greater" to the Mountain Valley Pipeline. Draft ROD at 24-25. Objectors encouraged FERC to prepare a programmatic EIS that evaluated the impacts of other potential pipelines, which would have enabled a determination as to which pipelines would have greater or lesser impacts. Appalachian Mountain Advocates et al., Scoping Comment at 4-12. FERC declined to do so, and there is no evidence in the FEIS regarding impacts of potential alternative pipelines. Insofar as denial of the proposal here leads to expansion of an existing pipeline, applicable legal authorities create a presumption that this would have lesser impacts than the greenfield proposal here. Supra page 13.

In summary, the record demonstrates that the proposal will have significant adverse

_

¹⁶ Objectors could not have raised this issue previously. The DEIS did not provide any discussion as to whether the significant impacts to forests and vegetation identified therein would impair the long-term productivity of the Jefferson National Forest.

¹⁷ Objectors Sierra Club and Wild Virginia were signatories to this comment.

environmental impacts. The record does not support the suggestion that the no action alternative will lead to similar impacts, or the conclusion that the no action alternative will not meet a demonstrated need for the project. Accordingly, the Forest Service's statement that the proposal is the environmentally preferable alternative is arbitrary.

V. The Amendments to Jefferson National Forest Plan Standards for Soil, Riparian, and Old Growth Are "Directly Related" to Substantive Provisions of the 2012 Planning Rule

Forest Service regulations require the Forest Service to determine whether proposed plan amendments are "directly related" to the substantive provisions of the Forest Planning Rule. 36 C.F.R. § 219.13(b)(5). The provision titled "sustainability" provides that:

A plan developed or revised under this part must provide for social, economic, and ecological sustainability within Forest Service authority and consistent with the inherent capability of the plan area, as follows:

- (a) ecological sustainability ...
 - (1) ... The plan must include plan components, including standards or guidelines, to maintain or restore the ecological integrity of terrestrial ... ecosystems and watersheds in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, ...
 - (2) ... The plan must include plan components, including standards or guidelines, to maintain or restore: ...
 - (ii) <u>Soils and soil productivity</u>, including guidance to reduce soil erosion and sedimentation. ...
 - (iv) Water resources in the plan area, including lakes, streams, and wetlands; ground water; public water supplies; sole source aquifers; source water protection areas; and other sources of drinking water (including guidance to prevent or mitigate detrimental changes in quantity, quality, and availability).

(3) ...

(i) The plan must include plan components, including standards or guidelines, <u>to maintain or restore the ecological integrity of riparian areas</u> in the plan area, including plan components to maintain or restore structure, function, composition, and connectivity, taking into account: [seven enumerated factors, including "Deposits of sediment."].

36 C.F.R. § 219.8 (emphases added). Here, the Forest Service contends that the proposed amendments to six "soil and riparian" plan standards are not "directly related to" the planning rule's substantive provisions calling for protection of "soils" and "riparian areas." Draft ROD at 6, 18-20. This contention is contrary to the plain meaning of "directly related." For example, the Forest Service has stated that an amendment that "focuses on" an issue is directly related to that issue. An amendment can directly relate to a rule provision even without "substantial adverse effects" or a "substantial lessen[ing of] protections"; the Forest Service must also consider "the purpose of the amendment" and beneficial effects. 36 C.F.R. §§ 219.13(b)(5)(i), (b)(5)(ii)(A). Here, where the amendments replace soil and riparian protections adopted in the 2004 plan with a drastically different set of proposed mitigation and protections, these amendments plainly are directly related to the planning rule's substantive soil, water resources, and riparian provisions. Similarly, the Forest Service's decision to simply waive Standard 6C-026, Draft ROD at 20-21, which protects old growth ecosystems by prohibiting new utility corridors in prescription 6C, is plainly directly related to the planning rule's requirement to preserve the integrity of terrestrial ecosystems.

Because these amendments directly relate to these substantive provisions of the planning rule, the Forest Service must determine whether the amendments satisfy the substantive provisions. 36 C.F.R. § 219.13(b)(5). This requires more than a mere determination that the amended rules will not cause adverse effects or a lessening of protections: in adopting the planning rule, the Forest

¹⁸ Because the Forest Service's position is articulated in the Draft ROD, Objectors could not comment on it before now.

¹⁹ 81 Fed. Reg. 90723, 90725 (Dec. 15, 2016) ("For example, the 2012 Rule's requirements to establish a riparian management zone (36 CFR 219.8(a)(3)) would apply only if the plan amendment *focuses on* riparian area guidance.") (emphasis added, quoting FSH 1909.12, chapter 20, section 21.3).

Service contemplated that application of the rule's substantive provisions would require an *increase* in protection beyond what the prior plan provided. *See, e.g.*, 81 Fed. Reg. at 90725. The Forest Service has not made this required assessment here. The Forest Service has not determined whether the amended rules will suffice to "maintain *and restore*" the protected values. 36 C.F.R. § 219.8(a) (emphasis added). Absent such a determination, the Forest Service cannot adopt the proposed amendments.

Although the Forest Service's findings of no adverse effect are not sufficient for purposes of the planning rule, we further note that these findings are themselves unsupported. With regard to old growth, the Draft ROD's conclusion that there would be no "substantial adverse effects" rests on an understatement of what the effects will actually be. Draft ROD at 21. The Draft ROD states that "[a] total of 4.6 acres of old growth trees within Rx 6C will be affected by constructing the pipeline." Id. Although the FEIS and Draft ROD are not clear in this regard, it appears that 4.6 acres within this prescription will be *eliminated*, as they are cleared from the construction right of way, but that additional acres will be affected by edge effects and fragmentation. See supra Part III. The FEIS further indicates that additional old growth areas, apparently outside the 6C prescription, will also be directly affected. FEIS at 3-24, 4-173 (14.9 acres affected). The FEIS's sole purported explanation as to why impacts on Rx 6C lands would not be substantially adverse, however, is to assert without explanation that "only 2 acres of Rx 6C would be affected by the pipeline," without explaining why this number diverges from those used elsewhere, and to presume that this impact would be de minimis. FEIS at 4-332. See also Appalmad DEIS Comment at 151 (discussing somewhat different, but equally unconvincing, characterization of impacts to old growth in DEIS). With regard to soils and riparian areas, see the following section.

VI. The FEIS Understates Impacts of Erosion and Sedimentation by Relying on Unreasonable Assumptions about the Efficacy of BMPs and Mitigation Measures

Construction of the Mountain Valley Pipeline has the potential to cause vast amounts of sedimentation and erosion, as the FEIS recognizes:

Construction activities such as clearing, grading, trench excavation,

backfilling, contouring, and the movement of construction equipment along the right-of-way would affect soil resources. Clearing removes the protective cover and exposes the soil to the effects of wind and rain, which increases the potential for soil erosion and sedimentation of sensitive areas. Grading, spoil storage, and equipment traffic can compact soil reducing porosity and increasing runoff potential. Excess rock or fill material brought to the surface during trenching operations could hinder restoration and revegetation of the right-of-way. Contaminated soils could pose hazards if disturbed and ground heaving due to freezing could pose hazards to the pipeline.

FEIS at 4-81. The FEIS concludes that impacts of sedimentation and erosion, and resulting impacts on aquatic resources and habitat, will be insignificant, because of mitigation of these impacts. *See*, *e.g.*, FEIS at 5-1. But the FEIS does not support the conclusion that mitigation and use of BMPs will be effective enough to reduce these impacts to insignificance.

As Objectors explained in comments on the DEIS, mitigation and use of BMPs are never 100% effective. Appalmad DEIS Comment at 41, 44-49. But the DEIS failed to provide any analysis of the efficacy of the mitigation measures, including those relating to erosion and sedimentation. *Id.* Numerous examples show that pipeline construction has led to serious erosion and sedimentation impacts, despite the adoption of mitigation plans. *Id.* at 45-49. ²⁰ The Forest Service similarly filed comments on the DEIS explaining that "[i]t is unacceptable to say everything will be mitigated through the [erosion and sediment control] Plan. Literature has shown proven [sic]that BMPs have limited success, even when properly installed and maintained. This is a challenging project over rugged terrain. Truthful disclosure through the DEIS is necessary for the Forest Service." FS Comment on DEIS at 7. Objectors also explained that the DEIS did not appear to account for sedimentation resulting from long-term conversion of forest to herbaceous cover along the operational right-of-way, which will occur even if revegetation is successful. *Id.* at 49-51.

-

²⁰ This comment cited, *inter alia*, Johnson, Gagnolet, Ralls, and Stevens, The Nature Conservancy, Natural Gas Pipelines at 7 (2011), *available at* http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/pennsylvania/ng-pipelines.pdf and attached here as Exhibit 3, and J. Tanfani & C.R. McCoy, Environmentalists and sportsmen raise alarms over pipelines, Philadelphia Inquirer (December 12, 2011), *available at* http://www.philly.com/philly/news/special_packages/inquirer/marcellus-shale/
20111212_Environmentalists_and_sportsmen_raise_alarms_over_pipelines.html and attached as Exhibit 4.

In the FEIS, FERC adopts the Applicant's "Hydrologic Analysis of Sedimentation." *See* FEIS at 4-146 (citing this as FEIS Appendix O-3), 4-221 (explaining that this analysis was submitted by the Applicant). The FEIS's uncritical and wholesale adoption of this report, without discussion, is itself a violation of NEPA. ²¹

The body of the FEIS itself does not provide any analysis of the efficacy of the proposed BMPs or mitigation. *See also* FEIS Appendix AA CO105-18 (responding to Objectors' comment on this issue by citing the entirety of FEIS sections 4.2 and 4.3). Although the adopted hydrologic analysis purports to address this issue, its conclusion that erosion and sedimentation control measures are likely to be 79% effective, FEIS Appendix O3-13, is unsupported and arbitrary.

The adopted analysis acknowledges that "[r]eported estimates of the effectiveness of erosion and sediment controls vary widely among studies and have been reported to be between 10 and 90 percent." FEIS Appendix O3-12. However, the appendix assumes that the erosion and sedimentation control measures implemented by the Mountain Valley Pipeline will have a total efficacy of 79%. *Id.* at O3-13. Because this conclusion was not presented in the DEIS, Objectors did not have a meaningful opportunity to analyze and comment on the analysis purporting to support this conclusion. However, this conclusion is facially implausible, as the Forest Service itself has recognized:

the hydrological analysis clearly demonstrates the wide variety of effectiveness, even citing as low as 10% (EPA 1993). Yet the assumption chosen for the practice factor is very high. p=0.21 such that containment is 79%. Since many of the literature citations are laboratory based and proper installation is widely understood in the industry to be a limiting factor for effectiveness in the field, I believe this is a vast overestimate of containment. It is more appropriate to err on the side of the worst case scenario, rather than the best case (equal to or less than 48% containment). As such, for this section (and similar sections) in the BE and Table 4, erosion containment is likely over-estimated and sedimentation

²¹ Because this report was not included in the DEIS, Objectors did not have a formal opportunity to comment on the substance of the report, or the appropriateness of FERC's reliance thereon..

underestimated.

Forest Service Comment on Biological Evaluation at 2 (Apr. 24, 2017) (Accession No. 20170424-5097). The Forest Service's criticisms of the assumed 79% control rate are consistent with the findings of an analysis of the overall efficacy of BMP measures in the field. Thomas Simpson and Sarah Weammert, *Developing Nitrogen, Phosphorus and Sediment Reduction Efficiencies for Tributary Strategy Practices: BMP Assessment Final Report*, University of Maryland/Mid-Atlantic Water Program (Mar. 31, 2009). For the contexts that appear potentially relevant here – *e.g.*, urban erosion and sediment control, riparian forest buffers, and forest harvesting—this review found control efficacies ranging from 40 to 60 percent. *See id.* at 1-10.

Because the FEIS relies on assumptions about erosion and sediment control efficacy that the Forest Service itself has recognized are implausible and unrepresentative, the Forest Service cannot adopt the FEIS's conclusion that impacts relating to erosion and sediment will be insignificant. The Forest Service cannot adopt the amendments until a new draft or supplemental EIS is prepared that corrects these flaws and the public is provided with a meaningful opportunity to comment thereon.

-

²² Attached as Exhibit 5.

VII. Conclusion

For the reasons stated above, the Draft ROD and FEIS fail to meet the Forest Service's obligations under the National Forest Management Act and NEPA. Objectors request that the Forest Service reject the proposed amendments and refuse to authorize the pipeline. If the Forest Service does not do so, the Forest Service must ensure that a new draft EIS, which cures the deficiencies identified below, is prepared and circulated for public comment prior to taking any other action on the proposal.

Sincerely,

Nathan Matthews

Staff Attorney

Sierra Club Environmental Law Program

2101 Webster Street, Suite 1300

Oakland, CA 94612

(415) 977-5695

Nathan.Matthews@sierraclub.org

Ernst q Redi

Lead Objector

Ernest Q. Reed Jr.

President

Wild Virginia

971 Rainbow Ridge Rd

Faber, VA 22938

(434) 971-1647

lec@wildvirginia.org

Peter Anderson

Virginia Program Manager Appalachian Voices 812 E. High Street

Charlottesville, VA 22902

(434) 293-6446

peter@appvoices.org

Roberta M. Bondurant

Protect Our Water Heritage Rights

Bondurantlaw@aol.com

PO Box 96 Bent Mountain,

Virginia 24059

(540) 793-4769