



Glen Casamassa, Reviewing Officer Associate Deputy Chief USDA Forest Service 1400 Independence Ave SW, Mailstop #1104 Washington, DC 20250 objections-chief@fs.fed.us Submitted Via Email

Re: Notice of Objection to: Draft Record of Decision, Atlantic Coast Pipeline Project Special Use Permit/Land and Resource Management Plan Amendments, Monongahela National Forest, Pocahontas County, West Virginia, George Washington National Forest, Highland, Bath, and Augusta Counties, Virginia, July 2017

Dear Mr. Casamassa:

Wild Virginia, Heartwood, Dominion Pipeline Monitoring Coalition, Ernest Q. Reed, Jr. Misty Boos, and David Sligh (collectively "Objectors") hereby object to the subject draft Record of Decision ("ROD"). The lead objector is Ernest Q. Reed, Jr., pursuant to 36 C.F.R. § 218.8(d)(3).

The objectors' addresses are:

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Wild Virginia requests that you, as the Reviewing Officer, convene a meeting to discuss issues raised in this objection, in accordance with 36 C.F.R. § 218.11(a).

The Responsible Officials for the draft ROD are Tony Tooke, Regional Forester, Southern Region, and Mary Beth Borst, Acting Regional Forester, Eastern Region.

Wild Virginia is a non-profit organization, incorporated in the Commonwealth of Virginia, with the mission of protecting and conserving the wild and natural values of Virginia's National Forests. Heartwood is a non-profit organization, incorporated in the state of Indiana, with the mission of protecting National Forests throughout the central and eastern United States. Dominion Pipeline Monitoring Coalition is a non-profit organization with organizational and individual members in Virginia and West Virginia. Ernest Q. Reed, Jr., Misty Boos, and David Sligh are Virginia residents and long-time advocates for healthy forests.

Each of the organizations and individuals have important interests in the George Washington and Monongahela National Forest lands and the associated ecosystems that are affected by this action. These interests include past and ongoing uses of these public lands for recreational, scientific, and educational activities.

The parties have been actively involved in the processes through which the George Washington National Forest Land and Resource Management Plan ("Forest Plan") was developed, in its implementation, and in the reviews addressing the Atlantic Coast Pipeline ("ACP") proposal. Each filed comments on the Draft Environmental Impact Statement and to the Forest Service.

We incorporate by-reference all documents and all evidence and assertions pertinent to the points of objection discussed herein that were "previously provided to the Forest Service by the objector during public involvement opportunities for the proposed project where written comments were requested by the responsible official," as allowed at 36 C.F.R. § 218.8(b)(4), including but not limited to the following:

• Wild Virginia, Comments on DEIS for the Atlantic Coast Pipeline Proposal, FERC Docket No.CP15-554-000, In Response to Notice of Availability of Draft Environmental Impact Statement for the Atlantic Coast Pipeline, January 6, 2017, April 9, 2017 (hereafter in this objection "Wild Va. Comments"). FERC Docket CP15-554-000 Accession No.

- 20170410-5062. Also, FERC Docket CP15-554-000 Accession No. 20170130-5069 and FERC Docket CP15-554-000 Accession No. 20170308-5213.
- Appalachian Mountain Advocates, Comments on the Draft Environmental Impact Statement for the Proposed Atlantic Coast Pipeline and Supply Header Project, Submitted on behalf of Wild Virginia, Dominion Pipeline Monitoring Coalition, et al., April 6, 2017 (hereafter in this objection "Appalmad Comments"). FERC Docket CP15-554-000 Accession No. 20170407-5203.
- Dominion Pipeline Monitoring Coalition, FERC Docket CP15-554-000 Accession Nos. 20170207-5072 and 20170405-5208.

I. Introduction

Atlantic Coast Pipeline, LLC ("Atlantic") has applied to the United States Forest Service ("USFS" or "Service") for a Special Use Permit ("SUP") to allow the Atlantic Coast Pipeline ("ACP") to cross approximately 21 miles of National Forest lands in the Monongahela National Forest and the George Washington National Forest with a 42-inch natural gas pipeline and to construct, upgrade, and maintain associated roads and work areas. In addition, the Service has been asked to adopt a project-specific Forest Plan amendment to the Monongahela National Forest's Land and Resource Management Plan ("Forest Plan") and a project-specific amendment to the George Washington National Forest's Forest Plan.

<u>Legal Deficiencies in Draft ROD and Supporting NEPA Process and Documents</u>

In succeeding sections of this document, Objectors provide the following for each of the issues that provide the bases for this Objection:

- 1) "A description of . . . specific issues related to the proposed project" for which "the environmental analysis or draft decision specifically violates law, regulation, or policy." 36 C.F.R. 218.8(d)(5),
- 2) "suggested remedies that would resolve the objection," Id., and
- 3) descriptions of the connections "between prior specific written comments on the particular proposed project or activity and the content of the objection." 36 C.F.R. 218.8(d)(6).

II. The DEIS Violates NEPA and Implementing Regulations

The Federal Energy Regulatory Commission ("FERC") published a Draft Environmental Impact Statement ("DEIS") and a notice requesting public comments on the DEIS on December 30, 2016. The United States Forest Service ("USFS" or "Service") issued a Federal Register notice on January 6, 2017, stating that any "comments related to the FS consideration of the authorization of ACP to cross NFS lands and/or the FS consideration of LRMP amendments" were to be "submitted to the FERC, the Lead Federal Agency, within 90 days following the date of publication of the FERC Notice of Availability." The FERC Notice was published in the Federal Register on January 9, 2017. Objectors submitted timely comments to the FERC docket addressing the USFS actions, as included in the various documents listed above and incorporated herein by-reference.

The legal standard for a DEIS is expressed in federal regulations which command that a DEIS "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 C.F.R. § 1502.9(a).

In turn, NEPA requires that an EIS be "a detailed statement," describing environmental impacts and alternatives. 42 U.S.C § 4332(C) [section 102(2)(C)]. The courts have described the standards by which the sufficiency of EISs is to be judged:

An EIS is deficient, and the agency action it undergirds is arbitrary and capricious, if the EIS does not contain "sufficient discussion of the relevant issues and opposing viewpoints," *Nevada*, 457 F.3d at 93 (quoting *Nat. Res. Def. Council v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988)), or if it does not demonstrate "reasoned decisionmaking," *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (quoting *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985)). The overarching question is whether an EIS's deficiencies are significant enough to undermine informed public comment and informed decisionmaking. See *Nevada*, 457 F.3d at 93. This is NEPA's "rule of reason." See *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004).

Sierra Club v. FERC, No. 16-1329, at 12 (DC Cir. 2017).

FERC's DEIS for this project was grossly deficient in numerous aspects and, therefore, the Forest Service was obligated to ensure that a revised DEIS was published to remedy those deficiencies. The illegality of the DEIS could not be and was not remedied by subsequent submittals by the applicant or by the Final Environmental Impact Statement ("FEIS") issued by FERC. The reasons for the mandate that the DEIS "fulfill and satisfy" the requirements for an FEIS "to the fullest extent possible" are clear. Deferral of information-gathering and analysis until later in the NEPA process prevents the public and agencies from adequately understanding the proposed project, critiquing the proposal effectively based on the best available information, and supplementing the record with information that is within their special knowledge and competencies.

The USFS expressed that the DEIS was incomplete and insufficient to allow it to complete its analyses in relation to a number of issues, as Objectors described in our comments. For example, the Service was quoted to state that "[t]he direct, indirect, and cumulative effects related to" several proposed and potential forest plan amendments could not be determined because Atlantic had failed to provide sufficient information. Appalmad Comments at 52. Objectors also noted:

In addition to concluding in the draft EIS itself that it had insufficient information on which to base an assessment of environmental impacts of the proposed route through the national forests, the Forest Service has also recognized the insufficiency of information in a November 28, 2016, letter to the Commission. The letter notified the Commission that the Forest Service does not concur with the draft permitting timetable setting the final completion date for consideration of the SUP application as September 28, 2017.144 In addition to detailing its own required administrative review process that would extend the Forest Service's decision process past the prospective timeframe set forth by the Commission, the Forest Service noted that its ability to adhere to any timetable is contingent on receipt of adequate data and analysis from the Commission and Atlantic.

The USFS proposal to approve the SUP and plan amendments based on the flawed NEPA process, after the Service itself explained that the DEIS and the information available at that time was insufficient for its purposes and for the public, is the very definition of an arbitrary and capricious act. The Service's compliance with NEPA and its own regulatory mandates cannot be upheld on such a basis.

The only acceptable remedy for the insufficiency of the DEIS in specific aspects described below is for the USFS to issue its own revised DEIS and include the necessary information that was omitted by FERC. Objectors insist that the Service deny the application for a Special Use Permit ("SUP") and amendments to the Forest Plans for the Monongahela National Forest ("MNF") and the George Washington National Forest ("GWNF"). After gathering public comments on the revised DEIS, the Forest Service must then issue a new FEIS and a draft ROD must then be issued. For each of the issue areas discussed below in this section, Objectors cite some but not all comments related to these subjects that were previously submitted to the FS.

A. Purpose and Need

In the DEIS FERC failed to conduct its own analysis of the need for this project but merely repeated Atlantic's claims in this regard. See e.g.: Appalmad Comments at pages 13-45. FERC relied on evidence that Atlantic had formed "precedent agreements" to supply natural gas to users through the pipeline but refused to gather other information about market changes, competing energy sources, or other factors that bear on the question of need for this proposed pipeline.

As stated in Objector's previous comments, "[u]nder NEPA, an agency cannot base an EIS on inaccurate or incomplete information that undermines informed agency decision-making and informed public comment. Courts recognize that inflated or inaccurate market information can skew agency decisions about a project and mislead the public in its evaluation of project impacts. Thus, inaccurate market information can render the EIS defective when it is a barrier to "a well-informed and reasoned decision." Id. at 14 - 15.

Just as FERC's refusal to gather adequate information and conduct a professionally-credible needs analysis fails to meet the legal requirements of NEPA, the USFS also violates NEPA if it fails to remedy this deficiency. The Service must assemble the necessary information and must issue a revised DEIS with a valid needs analysis.

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¹ See *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 603 (4th Cir. 2012); *Hughes Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996); *Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 811-12 (9th Cir. 2005).

² See *Hughes Watershed Conservancy*, 81 F.3d at 446 ("Misleading economic assumptions can defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of the proposed project. . . . Similarly, misleading economic assumptions can also defeat the second function of an EIS by skewing the public's evaluation of a project.").

³ Nat. Res. Def. Council v. U.S. Forest Serv., 421 F.3d at 812. See also Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 235 F.Supp.2d 1143, 1157 (W.D. Wash. 2002) ("An EIS that relies on misleading economic information may violate NEPA if the errors subvert NEPA's purpose of providing an accurate assessment upon which to evaluate the proposed project."), overruled on other grounds by Winter v. Nat. Res. Def. Council, 555 U.S. 7 (2008).

B. Alternatives Analysis

Federal regulations mandate that agencies are to analyze "all reasonable alternatives," explaining that this analysis forms "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. Of course, the range of alternatives that may be considered reasonable and for which detailed analyses are needed depends in part on the purpose and need determinations. In all cases, agencies must consider a "no action" alternative. 40 C.F.R. § 1502.14(d). As explained above, the needs analysis was unacceptably narrow and incomplete, thereby arbitrarily limiting the alternatives analysis.

One of Atlantic's stated purposes for the ACP that FERC cites in the EIS is "to serve the growing energy needs of multiple public utilities and local distribution companies in Virginia and North Carolina by using the natural gas to generate electricity for industrial, commercial, and residential uses." ACP DEIS, Vol. 1 at 1-2. As explained above, FERC blindly accepts and promotes the applicant's assertions as to future energy needs in the subject areas but FERC also has endorsed the concept that any such needs must be met by ACP and/or other natural gas pipelines.

By arbitrarily and capriciously refusing to consider whether any valid energy needs in the target areas can be met through means other than new supplies of natural gas and, by extension, through a connection with and promotion of further shale gas development, FERC has violated both regulatory commands listed above. Accepting, without analysis, that a need exists and dismissing other options for meeting any such needs without serious consideration, FERC has foreclosed the "no action" alternative out-of-hand. As Objectors previously noted, "the Commission rejected the "no-action alternative," seemingly concluding that it must approve the project because the pipeline is necessary to meet growing gas demand and to avoid supply constraints." Appalmad Comments at 42.

FERC has also not properly analyzed a pipeline route that avoids any crossing of National Forest lands. As explained in detail in Section IV. below, Forest Service regulations specifically define the standards by which the adequacy of "non-National Forest" alternatives must be judged and FERC's analysis in the DEIS blatantly ignored those requirements.

The USFS will violate NEPA if it adopts the FEIS FERC has published. The USFS can remedy the illegality of the DEIS only by producing a revised version that analyzes a proper range of alternatives, including a valid assessment of the "no action" option and proper consideration of a non-National Forest route.

C. Forest Fragmentation

Objectors submitted substantial and detailed information in comments on the DEIS, including those in Appalmad Comments (pages 94 - 128 and 369 - 385) and Wild Va. Comments (pages 9 - 10). Virginia state agencies provided a detailed and authoritative critique of the analyses provided by Atlantic and FERC's in the DEIS and supporting documents. FERC Docket No. CP150-554-000, Accession No. 20170406-5489.

All of the above sources describe the ways the DEIS analyses of impacts to core forests vastly under-represent the damages to wildlife and the functioning of ecosystems. By ignoring established and up-to-date scientific findings and authorities and performing incomplete and professionally-unsound analyses, FERC has violated its duty under NEPA to provide a valid basis for "reasoned decision-making."

Additions to the record including revised analysis of fragmentation and other impacts on core forest areas have been included in the record since the DEIS was completed. While those newer discussions still have major flaws, as described in Section III. below, the public was deprived of the chance to review and make informed comments on the DEIS, even on those minimally-improved analyses. The deficiencies in the DEIS violate federal regulations at 40 C.F.R. § 1502.9(a). and the statutory provisions at 42 U.S.C § 4332(C) [section 102(2)(C)]. As with the other deficiencies in the DEIS discussed in this objection, the Forest Service has the independent duty to ensure that core forest impacts and fragmentation of habitats are addressed at the DEIS stage of the NEPA process. The inadequacies in FERC's DEIS can only be remedied by issuance of a revised DEIS by the USFS.

D. Visual Impacts Analysis

As objectors noted in comments on the DEIS for this project, the analyses of visual impacts were incomplete and failed to properly look at such impacts from the ACP project in combination with other pipelines that would affect the Appalachian Trail, the Blue Ridge Parkway, and National Forest recreational opportunities.

Objectors noted in DEIS comments, among other deficiencies, that: "although there will be significant visual impacts on the AT, important visual impacts analyses were not submitted in time for the issuance of the draft EIS in December 2016." Appalmad Comments at 78; "with respect to Potential Amendments 4, 5, and 6 in the GWNF, the draft EIS contains no analysis at all of environmental impacts, noting only that the potential impacts are contingent on the completion of old growth surveys, the final location of access roads, and the *completion of visual analyses*." Id. at 79 (emphasis added); "the draft EIS does not assess the impacts of Potential Amendment 6, which would allow the Atlantic Coast Pipeline to temporarily violate Scenic Integrity Objectives (SIOs). The amendment is contingent on completion of visual analyses that were, again, incomplete at the time the draft EIS was published." Id. at 85.

These and other deficiencies in the DEIS's treatment of visual impacts violate the regulatory requirement at 40 C.F.R. § 1502.9(a). that a DEIS must fulfill the requirements for a final EIS "to the fullest extent possible." Both FERC and the Forest Service recognized and acknowledged that the visual impacts analyses supporting the DEIS were far from complete. Because FERC has refused to remedy the DEIS's inadequacies in this aspect, it is incumbent on the Service to do so. We insist that the USFS issue a revised DEIS that includes the complete and adequate assessments for which the agencies allowed Atlantic to defer submittals.

Another important duty in regard to visual quality impacts from ACP is that the agencies conduct proper cumulative impacts reviews under NEPA. Cumulative impacts must be assessed in light of the particular characteristics of each issue of concern. Given the linear nature of important public resources such as the Appalachian Trail and the Blue Ridge Parkway, which traverse long distances parallel to the Appalachian mountain chain in Virginia and beyond, a proper cumulative impacts assessment must look at combined impacts of various activities up and down that chain. The public's use and enjoyment of these extremely popular and heavily-used resources may be damaged to a much greater degree by multiple pipelines, such as the ACP in combination with the MVP and other projects proposing to cross the mountains.

As Objectors noted in previous comments, "[the DEIS makes no attempt to assess the impacts of this proposed pipeline on the Appalachian Trail in context with other pipelines and other existing or potential impacting activities/existing projects that would damage the AT's character and value. Thus, any conclusions related to the scenic, recreational, or economic impacts on the AT, from crossings or viewing areas, are without great value. This failure violates FERC's duty to perform an adequate cumulative impacts analysis under NEPA." Wild Va. Comments at 8.

E. Impacts to Surface Water and Groundwater

Objectors provided a large body of evidence and analyses demonstrating the inadequacy of the DEIS to properly describe the potential water quality damages this project would cause and the near certainty that the construction and pollution-control measures proposed could not properly protect water resources. A more extensive discussion of water quality threats is included in Section III. below but we note here some of the major deficiencies in information and analyses that existed and were acknowledged by the USFS at the time the DEIS was issued. Particular comments Objectors filed that are pertinent to this discussion are found in: Wild Va. Comments, at 6 - 9 and in numerous sections of Appalmad Comments.

The USFS has relied in large part on the contents of a *Construction, Operation, and Maintenance Plan* ("COM Plan") as a basis for its assessment of potential environmental impacts, including those on water quality. However, the COM Plan was far from complete at the time the DEIS was issued and provided no adequate basis for the public's review at that time. As explained by the Service in the draft ROD, "[t]he COM Plan has undergone a number of changes from the DEIS to FEIS as described in Section 4 of the FEIS" and "is still undergoing refinement as we are continuing work with Atlantic to enhance the effectiveness of mitigation measures and will incorporate additional mitigation as needed." Draft ROD at 7. And the Draft ROD promises that "[a] version of the COM Plan that incorporates measures and mitigation to ensure consistency with the LRMPs will be included in the SUP the Forest Service issues to implement the project." Thus, the USFS admits that one of the central sources upon which it has relied was incomplete at the DEIS stage and remains so.

In comments on the DEIS, Virginia state agency experts described a program of intensive pre-impact study for proposed crossings of stream and wetland sites that were considered necessary to provide "sufficient evidence that the system[s] will be able to maintain [their] original functions indefinitely after restoration," because they were "concerned that the proposed temporary impacts could result in a permanent alteration of the impacted systems post construction." FERC Docket CP15-554-000, Letter from Virginia Department of Environmental Quality, Federal Energy Regulatory Commission Draft Environmental Impact Statement for the Atlantic Coast Pipeline and Supply Header Project (Docket Nos. CP15-554-000, CP15-554-001, CP15-555-000 and CP15-556-000; FERC/EIS-0274D; OEP/DG2E/Gas Branch 4; DEQ 16-248F), April 6, 2017, Attach. 1. at 4. FERC failed to require these types of assessments and so the DEIS failed to include vital information as to whether the integrity of these waterbodies could be maintained or address the need for specific mitigation measures that would be necessary to fully support all designated and existing uses under Virginia's Water Quality Standards ("WQS") regulations. The absence of these findings at the DEIS stage prevented the public and resource agencies from being able to make well-informed comments on the project's impacts as is required under NEPA. To remedy this deficiency, the USFS must require these studies to be completed and discuss the information in a revised DEIS that is then opened to public review before a valid FEIS can be produced.

Likewise, as explained in Objector's comments on the DEIS (See e.g. Wild Va. Comments at 8 - 9), The Virginia agency comments explained that dye tracing of flows into and through karst formations was necessary to prevent pollution and disruption of supplies to wells, springs, and surface waters due to pipeline-related activities. Id. at Attach. A page 5. Again, FERC did not require such studies to be completed before publication of the DEIS and the public was deprived of the chance to review these data and make effective comments on potential impacts or on the measures needed to maintain the quality and uses in groundwater and surface waters. Given that streams flowing over National Forest lands will impact karst areas, either directly or through flows to downstream areas, the Service is obligated to acquire this information and produce a revised DEIS to analyze the potential impacts.

As addressed further in Section III of this Objection, Wild Va. also commented on the need to perform cumulative impact assessments to describe all pipeline-related activities and other conditions within watersheds of a size that would reveal true impacts. Wild Va. Comments at 6 - 8. Neither FERC nor any other state or federal agency made such assessments or included discussions of combined or synergistic effects on water quality from the combination of all sources of potential impairment to waterbodies. The Service's failure to insist that these assessments be included in the DEIS violates its duties under NEPA and can only be remedied by publication of a revised DEIS.

III. The FEIS Violates NEPA and Fails to Provide Evidence to Support the ROD

On July 21, 2017, FERC issued a Final Environmental Impact Statement (FEIS) for the ACP and the USFS issued the draft ROD. In the draft ROD, the USFS Responsible Officials announced that they had "adopted the environmental analysis conducted by FERC (in accordance with 40 Code of Federal Regulations [CFR] 1506 (a) and (c)) to support this ROD."

Many of the deficiencies in the DEIS that are discussed above remain in the FEIS. While additional information on certain aspects of the project was incorporated into the FEIS analyses and FERC addressed some of the DEIS comments, a number of issues were discussed in FERC documents in a cursory fashion and some not at all. The Service's explanation of the bases for its draft ROD fails to explicitly address most of Objector's prior complaints.

A. Purpose and Need

The deficiencies described in the assessments of purpose and need described in Section II. above remain in the FEIS and provide an inadequate basis for NEPA review. The USFS must conduct a thorough and appropriate analysis of purpose and need for this project that reflects the requirements of NEPA and is adequate to support the Service's ROD.

B. Alternatives Analysis

The arbitrarily limited range of alternatives examined in detail for this project that were described above in Section II remain in the FEIS. Also, and of particular importance, the failure to examine one or more alternative routes that avoid the use of National Forest lands, based on the proper regulatory standard, as discussed in Section IV. prevents the USFS from meeting its obligations under NEPA and under Forest Service regulations.

C. Forest Fragmentation

One of the few environmental impacts FERC acknowledged would be significant was the removal of intact forests and associated changes in ecosystems and natural processes. Thus, a proper analysis of these types of impacts is particularly important and must be paramount in the Forest Service's deliberations to protect National Forest lands. Despite very detailed and well-documented concerns about the methods used to assess forest fragmentation and loss of core forest values submitted by Virginia state agencies, FERC relied on incomplete and professionally incompetent reports and analyses from the Applicant for completion of the FEIS.

A letter from the Virginia Department of Conservation and Recreation to FERC, dated July 21, 2017, explains a multitude of reasons why FERC should have rejected the Applicant's approach to these analyses and why the Forest Service must do so. Clyde E. Cristman, Director, VADCR, *Comments on ACP FEIS and Forest Fragmentation Impacts and Mitigation Recommendations of Virginia State Agency Staff*, July 21, 2017 (submitted as Attachment 1 to this objection). Based on their analyses of the FEIS and supporting record, three state agencies with great expertise in the issues addressed, designated the Virginia Forest Conservation Partnership, have explained in significant detail and depth the flaws in methods FERC relied upon. Given the great importance of core forest areas on many aspects of ecosystem health, these concerns must be given very serious consideration by the Forest Service.

One overriding problem the Virginia agencies identified with the Applicant's analyses is that methods grossly underrepresented indirect impacts of forest fragmentation from the pipeline proposal. The state scientists concluded that indirect impacts to "core integrity impacts areas" would affect a much larger area of core forests than that FERC relied on, based on an arbitrarily constricted analysis, which assumed without scientific support that indirect impacts of forest fragmentation would reach an area no more than 100 meters from the edges created by cutting.

D. Visual Impacts Analysis

Many of the deficiencies in the visual impacts analysis described in Section II above remain in the FEIS and require the Service to prepared a new EIS to properly describe the impairments that will be caused.

E. Impacts to Surface Water and Groundwater

All federal agencies, including FERC and the USFS, are obligated to ensure compliance with the Clean Water Act ("CWA") when taking regulatory actions. Neither the FEIS nor the draft ROD analyze the potential for violation of the CWA in any valid way and neither provides any assurance that water quality requirements can be met.

Objectors include as Attachment 2 to this Objection a report by a group of thirteen experts in all scientific and technical disciplines pertinent to an assessment of potential water quality impacts from the pipeline proposal. This report was submitted to the Virginia Department of Environmental Quality ("DEQ") as part of the state's consideration of Atlantic's application for a CWA section 401 Water Quality Certification. However, its analyses and conclusions are just as pertinent to the NEPA process and to the USFS review that is to support the ROD.

⁴ See Oregon *Nat'l Res. Council v. U.S. Forest Serv.*, 834 F.2d 842 (9th Cir. 1987) ("The CWA requires each state to develop and implement 'water quality' standards to protect and enhance the quality of water within the state. 33 U.S.C. § 1313. The Act also requires all federal agencies to comply with all state requirements. 33 U.S.C. § 1323.").

The authors of the cited report, based on their reviews of documents prepared by Atlantic and by both federal and state agencies and on their own analyses, concluded that a "reasonable assurance" cannot be given that water quality regulations under the CWA will be met by the proposed project. The authors wrote that for agency personnel to provide such an assurance "would be professionally incompetent and would fail to meet minimum standards of scientific proof." ⁵

The most glaring deficiency in both the FEIS and the Service's draft ROD is the failure to acknowledge and account for the cumulative impacts all pipeline-related activities will have on waterbodies and small watersheds, especially in headwater areas that are in and adjacent to the National Forests. The agencies' reviews discuss possible impacts and mitigation of water pollution in a piecemeal fashion but nowhere is there an assessment of the ways all project activities would combine with existing conditions and non-project-related impacts. Federal regulations require that an agency evaluate "the incremental impact of the action [under review] when added to other past, present, and reasonably foreseeable actions." 40 C.F.R. § 1508.7. As stated in the expert report cited above:

Any valid conclusion about the integrity and sustainability of a stream or aquatic ecosystem must be based on a review of all conditions and sources of potential impact. It is irresponsible and scientifically indefensible to claim that acceptable water quality will be maintained and Virginia Water Quality Standards met unless all project-related activities and impacts are considered along with non-project-related conditions that affect the same waterbodies. Contrary to this necessary holistic approach, DEQ has segregated analyses of potential causes of pollution from the pipeline into multiple reviews and has refused to acknowledge additive or synergistic effects that will result from multiple sources.

Many activities related to the construction, maintenance, and operation of this project will affect the quality of streams in the watersheds through which the pipeline would pass. These include work directly in the waterbodies at stream and wetland crossing locations, changes in the riparian areas along streams, and land disturbance and changes to terrestrial habitats throughout the watersheds. Changes to subsurface geologic structures and flows from digging and blasting will impact the quality and flows of groundwater and affect surface waters fed by groundwater sources.

Id. at 4.

Numerous other aspects of the proposed ACP pose serious threats to water quality. Many of these have not been addressed in the FEIS and, even those assessments and pollution control plans that have been submitted by Atlantic are woefully incomplete and conclusions are invalid and scientifically unsupported. The following documents submitted at attachments to this Objection provide extensive analyses demonstrating that insufficient data and analyses have been incorporated into the NEPA review. Further, the evidence in these reports and in other documents in the USFS record for this action demonstrate that WQS violations are likely or even certain to occur in some waterbodies that would be affected by this project. This incomplete record and the evidence of likely impairments cannot be accepted by the USFS and adequate assessments and pollution control plans must be prepared and

⁵ Expert Report (Attachment), at 2.

published for public review and comments. WQS violations that may be caused in any affected waterbody on the National Forest make the approval of the SUP and the Forest Plan amendments illegal.

Separate Water Quality-related Reports Attached Hirschman Report (Attachment 3) Dodds Report (Attachment 4) Hilderbrand Report (Attachment 5)

An additional submittal that has been submitted to the USFS on this date by Rick Webb, Program Coordinator, Dominion Pipeline Monitoring Coalition (DPMC), is also incorporated by-reference into this Objection. That submittal includes the following analyses:

- 1) Best In Class Program: deferred planning, analysis, and review
 - steep slope areas for which no detailed site-specific plans have yet been provided
- 2) Direct impact to National Forest streams
 - water crossings, in-stream blasting, brook trout streams at risk
- 3) Risk to karst system hydrology
 - discharge to sinkholes and sinking streams
- Clover Creek area on MNF where disturbance of highly erodible soil drains to karst and sinking creek
- Forest Road 281 area on GWNF (specifically mentioned in draft ROD), which will impact Browns Pond Special Biological Area (sinkhole complex)
- 4) Extreme excavation requirements
 - where substantial cuts and spoil handling will be required for ROW and access road construction

In addition to these reports, we note that the Service claims to rely on regulatory requirements from other state and federal agencies to ensure that CWA requirements will be met. Draft ROD at 17. This reliance is unacceptable for a number of reasons. First, Atlantic proposes that conditions in the U.S. Army Corps of Engineers Nationwide Permit No. 12 will adequately protect water quality from stream and wetland crossings. However, the Corps has yet to determine whether this project can be covered under the NWP. Further, the Corps' documents supposedly supporting coverage of waterbody crossings by utility line projects demonstrate that Virginia WQS will indeed be violated under the blanket conditions imposed by that permit. See Attachment 6, DPMC comments on Virginia's blanket CWA Section 401 Water Quality Certification of NWP 12.

Second, the Virginia DEQ has yet to complete its reviews of potential impacts from so-called "upland" activities associated with the pipeline project. In fact, as noted in the report submitted as Attachment 2, the conditions in Virginia's draft recommendation for the individual CWA Section 401WQC, fail to provide a valid basis for the state to conclude that there is an assurance that Virginia WQS will be met.

Third, none of the reviews by the Corps or the Virginia DEQ include any analysis regarding the ability of construction and pollution control plans to meet the state's antidegradation requirements. These requirements, contained in the WQS regulations, require that all "existing uses" be fully protected and maintained. Further, as is particularly pertinent to many of the high quality streams on the National Forests, where conditions are currently better than those mandated by water quality criteria and necessary to support all designated and existing uses, those conditions must be maintained. These

conditions apply to both surface waters and groundwater.

Any action approved by the Forest Service must insure that all applicable water quality standards will be met. In the case of the ACP, these include standards adopted by the states of West Virginia and Virginia. Both states' standards include both surface water and groundwater standards and the Forest Service must ensure that analyses consider both in relation to the proposal. We note that all or nearly all of the waters on the Forest qualify as "high quality waters" under state antidegradation requirements and, as such, must be maintained in these high quality conditions without measurable impairments or lessening of quality. Antidegradation requirements for groundwater in Virginia prohibit the increase of any pollutant or any detrimental change in quality wherever groundwater is better than the minimum quality defined in criteria.

All parties have acknowledged that the environments the Applicant proposes to cross present serious challenges in construction and in implementation of pollution prevention and control measures. At the same time, many of these waterbodies including most on or affected by National Forests are of high quality and very sensitive to development and pollution impacts. Still, FERC maintains that measures proposed by the Applicant will adequately "minimize" negative water quality effects. There are a multitude of issues that refute any contention that conformance with all water quality standards is insured, as the statute governing the Forest Service's action requires. The following discusses some but by no means all the concerns and evidence regarding this issue.

F. Visual Impacts Analysis

The Appalachian Trail ("AT") is a national treasure enjoyed by millions of people each year. The proposed Mountain Valley Project threatens the AT with impacts at an unprecedented scale.

As explained above, Objectors submitted a range of comments demonstrating that FERC's DEIS was severely deficient, failing to include information that the Service itself deemed necessary for its purposes and for adequate public participation at that stage. Though some additional analyses are included in the FEIS, this document fails in many of the the same ways as the DEIS.

The proposed project represents a serious threat to the scenic value of the A.T., well beyond the scope of similar projects - prominent vistas including those from the crest of the Blue Ridge Mountains near Reeds Gap and may be severely impacted from this project, many of them viewing impacts as they occur on USFS land. These include Angels Rest, Kelly Knob, Rice Fields and Dragons Tooth — some of the most visited and photographed locations on the entire AT. The Appalachian Trail Conservancy estimates that the pipeline corridor could be viewed from up to 60 miles away at many viewpoints along the A.T.

As a result, the assessment of cumulative impacts to the AT is drastically insufficient. The scope of cumulative impacts must be 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 Appalachian Trail while admitting that other proposed pipeline projects on the National Forest, including but not limited to the proposed Atlantic Coast Pipeline would, without question, contribute to cumulative impacts. The issue of cumulative impacts is especially important to the AT given the nature of long-distance hiking.

The depth of inadequacy the FEIS exhibits is further apparent in the fact that FERC does not use the correct centerline of the Appalachian National Scenic Trail, repeatedly admits that coordination with AT management partners has been insufficient, falsely claims that there are no existing areas of impact on the AT in the immediate vicinity of the proposal, and fails to analyze impacts to any key observation points along the Appalachian Trail, despite the clear and repeated direction of their cooperating agency, the United States Forest Service.

The George Washington and Jefferson National Forest has more miles of Trail than any other National Forest and, as a result, contributes significantly to the preservation of AT experience by honoring their Forest Plan. The Record of Decision identifies project-specific Forest Plan Amendments that would have to be approved if this proposed project were to be permitted. These amendments would not only be unprecedented, but would significantly erode the value of the Appalachian Trail that the public has spent millions of dollars and devotes many thousands of volunteer hours to improve and protect. Amending the plan in the ways proposed would negatively impact prescription areas protecting the Appalachian Trail, Wilderness, Old Growth Forest, Inventoried Roadless areas and fragile successional habitats.

The USFS has deemed SIOs to be met on the National Forests when the standards, which are required under the Forest Plan, will be restored within five years after project construction is completed. Draft ROD at 14. However, the impairment of visual quality for such extended periods is unacceptable. The Service is obligated to maintain visual quality and protect uses by the public at all times. To allow impairment in this manner is an arbitrary and capricious action by the USFS and must be remedied by requirements in the ROD. Otherwise, issuance of the SUP and of Forest Plan amendments are legally unsupportable.

G. Endangered, Threatened, and Sensitive Species Assessments

Adequate analyses of potential impacts to endangered, threatened, and sensitive species must be complete before an FEIS is legally valid and formal consultation with the U.S. Fish and Wildlife Service (F&WS) must be completed before an ROD may be issued by the USFS. A letter from the F&WS dated March 30, 2017 and submitted to Docket No. 15-554-000 demonstrates that many of the required assessments were incomplete as of that date and meeting notes in the Service's record for this action indicate that formal consultation will commence at some unspecified date in the future.

H. Climate Change Analysis

FERC failed to make any credible analysis of the relationships between this proposal and the occurrence or consequences of climate change. Two aspects of this issue must be addressed by the Forest Service before it may comply with NEPA. First, the Forest Service must describe the project's incremental impacts on climate change while including both carbon dioxide and methane emissions from all parts of the system to which the pipeline would be tied. This would include the fracking operations, the pipeline and all associated facilities, and the end users of the gas. As stated above, fracking operations cannot be divorced from the pipeline. It is widely recognized that this and other proposed pipelines would not be built without the fracking boom occurring in West Virginia and nearby states and, conversely, the future of fracking in those areas is largely dependent on the availability of pipelines to transport the gas to U.S. and foreign markets.

Second, the forests and mountains of Virginia are particularly sensitive to warming trends and the associated ecological impacts. For a number of plant and animal species that are native to the areas to be affected by MVP, this area is at the extreme southern end of their ranges. The maintenance of cooler temperatures in these habitats, especially in higher elevations, will determine whether some of these species can survive in this region. Therefore, the impacts this project would cause to habitats and species that are sensitive to warming must be addressed in detail in the NEPA review and any possible mitigation measures to buffer these species from continuing and increasing warming must be discussed. Without question, the removal of forested tracts and shading of waterbodies, among other effects, must be assessed and Forest Service must analyze whether actions can or must be implemented to ameliorate those effects.

The U.S. Environmental Protection Agency ("EPA") has discussed important problems with FERC's analysis of climate change impacts from MVP, in its comments on the DEIS. EPA noted that FERC inappropriately compared the project greenhouse gas ("GHG") emissions from this project to the global GHG inventory and that FERC incorrectly asserted that no methodology was available for assessing how the project's incremental GHG contributions would translate to physical effects in the environment. FERC Accession Number 20161229-0033, U.S. EPA Letter, December 20, 2016.

I. Non-native and Invasive Species Analysis

The ACP corridor would be a conduit to introduce and spread harmful non-native invasive plant species (NNIS) along the entire length of the pipeline. This will destroy ecological integrity of private and public lands, threaten public health, and create land-management problems for the life of the pipeline and beyond. The totality of these individual and cumulative impacts remains insufficiently analyzed in the FEIS.

Nonnative invasive species (NNIS) are species intentionally or accidentally introduced by human activity into a region in which they did not evolve and cause harm to natural resources, economic activity, or humans. Invasive species can adapt to a wide range of environmental conditions. Such traits are part of the very reason that they become invasive, as they can outcompete native species with more limited environmental tolerances. Invasive plants often flourish in disturbed habitats and a pipeline corridor such that proposed by ACP is a major disturbance that will directly lead to a significant increase in ecological and land-management problems related to nonnative invasive plant species.

NNIS damage and degrade crops, pasture and forestlands, clog waterways, spread human and livestock diseases, and destroy trees. They proliferate and displace native plant species, reduce wildlife habitat and alter natural ecological processes. NNIS have spread to a wide range of ecosystems and now rank just behind habitat loss as the leading cause of rare species declines. Furthermore, impacts of invasive species are exacerbated by climate change so their effects may become more severe in the future. (Pimentel et al., Update on the environmental and economic costs associated with alien-invasive species in the United States, Ecological Economics, 2005). The Forest Service already devotes extensive resources to dealing with NNIS on the Forest but admits that its efforts are far from adequate. To increase the numbers and spread of invasive plants on these lands is irresponsible and will further tax public resources to deal with them in perpetuity.

Forest fragmentation has been associated with the spread of invasive plant species. Pipeline rights-of-way create environments particularly conducive to the spread of invasive plant species (Miller, J.H. 2003, 2010. Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and

Control. USDA Forest Service, Southern Research Station.). Removal of existing vegetation in a wide construction corridor, and extreme soil disturbance and compaction by excavation and construction traffic, create conditions that favor pioneer (early successional) species (ibid.). The linear nature of the disturbed pipeline corridor allows invasive species to expand quickly, often moved by birds and other animals that favor such habitats (Invasive Native Plants of New England, https://www.eddmaps.org/ipane/).

Construction techniques that fail to effectively preserve and replace existing topsoil and its natural structure will exacerbate invasive-plant problems even further (Thomas A. Monaco Invasive Plant Ecology and Management: Linking Processes to Practice Centre for Agricultural Bioscience International, 2012). Common management practices for rights-of-way (including mowing and the use of chemical herbicides) maintain the corridor habitat in a condition ripe for invasions. These practices, partly maintain edge and shrub habitats that are attractive to animal species that quickly and continually bring propagules of invasive plants from other areas (Yates et al. Recruitment of three non-native invasive plants into a fragmented forest in southern Illinois, Forest and Ecology Management, 2004).

Additionally, corridor managers typically limit their activities to within the corridor boundaries, and such a limited approach to management will allow deep penetration of invasive plants into the now-fragmented forest (ibid.). Once invasive plant species penetrate adjacent non-corridor habitats, those areas will serve as a continual source for corridor reinvasion (and, thus, increased maintenance expense and an increased timeframe where management for invasive plants will be necessary). The original forest structure and composition and even the soil will be changed by the invasive plants, and native vegetation (particularly what had been interior-forest trees) will be negatively impacted or even killed.

Many invasive species are associated with disturbance. Many thrive on bare soil and disturbed ground where native plants have been displaced. Some invasive species may initially enter forests on vehicles or equipment. Japanese stiltgrass (Microstegium vimineum), garlic mustard (Alliaria petiolata), shrub honeysuckles (Lonicera spp.), common privet (Ligustrum vulgare), Oriental Bittersweet (Celastrus orbiculatus), Multiflora Rose, (Rosa multiflora), Nandina (Nandina domestica), Tree-of-Heaven (Ailanthus altissima), Mimosa (Albizia julibrissin), and Russian, Silverthorn and Autumn Olive (Elaeagnus spp.) are all examples of invasive plants most likely to populate these areas.

The impacts of construction and maintenance would be extensive and the adverse effects to forest that would result from invasive species are significant. The extent of disturbance of forested areas through this project is especially significant, given that every square inch of area cleared would become immediate and long-term habitat for non-native and invasive species (NNIS) as well as a vector for further intrusion of NNIS from edge towards the remaining forest interior In summary, pipeline construction and maintenance will certainly change and likely reduce ecosystem services that had been provided by the native forest, resulting in both the pipeline corridor and a significant amount of native habitat being lost as a source of important services (e.g., erosion protection, watershed protection, environmental resilience, quality of outdoor recreation, habitat for uncommon or rare species, etc.). Thus, the right-of-way corridor serves to quickly spread invasive plant species along its length, it serves as source for invasives that penetrate and degrade adjacent habitats, and corridor management itself can exacerbate rather than control the spread and persistence of invasive plants species.

It is important to note that the Forest Service acknowledged that NNIS are already widespread on the George Washington National Forest and that the Service's efforts to eliminate or control these species are far from meeting even the current Forest Plan's goals and objectives. As Forest Service budgets continue to decrease, the agency's ability to address NNIS will fall as well and *any* increased threats or sources on the Forests may contribute to very serious and accelerating damages to these ecosystems.

Actions will affect previously undisturbed or minimally-disturbed National Forest lands; previously unbroken interior forest; steep, erodible forested mountain slopes; erodible remote mountain ridge tops; unique boulder field habitats; ephemeral and perennial streams and wetlands; conservation easements; critical watershed protection areas; private and public wildlife habitat restoration areas; pollinator conservation areas; threatened and endangered species habitats; private farms and grazing lands; sustainable forestry operations; organic farming operations; residential housing developments; and historical farms and battlefields.

Construction and maintenance of the pipeline corridor will exacerbate invasive-plant management problems in perpetuity. Deer populations will increase, as will vehicle-deer collisions and deer related damage to agricultural and home landscapes. Populations of deer-hosted ticks will increase, as will incidence of serious human diseases transmitted by these ticks. Increased deer activities will intensify the spread of invasive plants in all habitats. The pipeline corridor will directly link habitats currently infested with nonnative invasive plant species to public lands (George Washington National Forest) and private properties that are not currently infested.

Populations of interior forest species (both plant and animal) will decline on both public and private lands. Negative impacts of the pipeline corridor will reach much farther into interior forest areas than just the 125-foot construction corridor, effectively magnifying corridor effects to more than 700 feet (85 acres for each mile of corridor). Expensive control programs will be required to control nonnative invasive plant species, not only on the pipeline corridor but also on other public and private lands in the county. Yet, planned corridor-maintenance programs on the ACP will actually favor and spread nonnative invasive plant species.

Extensive use of chemical herbicides will likely be the only control method for nonnative invasive plant species in the pipeline corridor, and such control will be necessary for the lifetime of the pipeline and beyond. Use of chemical herbicides bring their own impacts to surface water quality, groundwater and invertebrate and fish and these impacts have not been adequately assessed, either as separate sources of water pollution or as contributors to cumulative waterbody impacts.

IV. Forest Service Regulations Violated

One issue that is not adequately addressed in the FEIS is the need to do a detailed analysis of any alternative route or route variation that avoids crossing National Forest Lands altogether. Given that construction and operation of this pipeline would be in direct conflict with and would destroy values for which the Jefferson National Forest is supposed to be managed, an alternative that avoids this result must be deemed reasonable and appropriate for detailed analysis; in fact, consideration of such an option must be considered necessary.

This contention is supported by Forest Service rules that would govern this case directly, if the FS were the party to grant or deny the ROW permit (in FS regulations, the ROW would be termed a Special Use Permit to occupy and use National Forest Lands, 36 C.F.R. § 251.54). The standard that must be met before a National Forest crossing can be allowed is that "[t]he proposed use cannot reasonably be accommodated on non-National Forest System land. . . ." 36 C.F.R. § 251.54(b). Throughout the NEPA process for MVP, the FS has repeatedly cited this regulatory requirement and insisted that the Applicant and FERC must provide a level of analysis that can satisfy the cited regulation.

However, FERC chose another and much less demanding standard by which to review non-Forest System land alternatives. FERC's analysis takes a simplistic approach in that it mechanically and arbitrarily compares alternatives based solely on mileage of crossings for the different routes and of miles of certain resource types affected. This approach fails to account for the various qualities of the resources that would be affected and is invalid from a scientific perspective. Natural systems and resources are not interchangeable parts and cannot be addressed in that manner. In its conclusion, based upon this invalid approach to the analysis, FERC merely states that the non-Forest alternatives do not have "significant environmental advantages."

Despite its persistent and rightful citation of its own regulation throughout its communications with the Applicant and FERC, the Forest Service has now seemingly abandoned the required standard. The draft ROD issued by the Service makes no mention of the correct standard and certainly does not hold the Applicant to that high bar. The Forest Service must not capitulate in the face of resistance by the Applicant and FERC to meeting a valid regulatory requirement which simply describes one type of reasonable alternative that is both available and preferable for protection of public resources. The detailed analysis must be completed or the Forest Service must reject the application for Forest Plan amendments.

In addition to the specific failure to adequately consider an alternative with no National Forest crossing, the alternatives analysis conducted by FERC and presented in the DEIS was inadequate in numerous respects. The failure to provide any meaningful analysis of needs analysis guaranteed that the range of alternatives deemed reasonable would be inappropriately limited. In addition, there were numerous route variations examined and/or presented after the DEIS was published that should have been factored into the larger alternatives analysis but were unavailable to the public.

V. Relief Requested

Wild Virginia asks that the Reviewing Officer issue a Record of Decision that rejects the applications for SUP and Forest plan amendments, based on the insufficiency of information in the record and on the evidence of unacceptable environmental impacts that would occur if the proposal were to proceed.

Sincerely,

Ernest Q. Reed, Jr.

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Lead Objector

On his own behalf and on behalf of Wild Virginia, Heartwood, Dominion Pipeline Monitoring Coalition, David Sligh, and Misty Boos