

Appalachian Mountain Advocates

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November 19, 2021

Sent by Electronic Mail to CELRP-MVP@usace.army.mil and Adam.E.Fannin@usace.army.mil United States Army Corps of Engineers, Huntington District ATTN: Adam Fannin & CELRH-RD-E Public Notice: LRH 2015-00592-GBR; LRP-2015-798; NAO-2015-0898 502 Eighth Street Huntington, WV 25701-2070

Re: Public Comments on Public Notice Nos. LRH-2015-00592-GBR, LRP-2015-798, and NAO-2015-0898 (the Mountain Valley Pipeline Project) and on the FERC Environmental Assessment for the Mountain Valley Pipeline Project

Dear Mr. Fannin:

On September 30, 2021, the United States Army Corps of Engineers (the "Corps") published a public notice announcing virtual public hearings on the permit application submitted by Mountain Valley Pipeline, LLC ("Mountain Valley"), and soliciting written comments on that application through November 19, 2021. Allegheny-Blue Ridge Alliance, Appalachian Voices, Blue Ridge Environmental Defense League, Center for Biological Diversity, Chesapeake Climate Action Network, Defenders of Wildlife, Indian Creek Watershed Association, Mothers Out Front Roanoke, National Parks Conservation Association, Natural Resources Defense Council, Preserve Bent Mountain, Preserve Craig, Inc., Preserve Franklin, Preserve Giles County, Preserve Montgomery County VA, Preserve Salem, Protect Our Water Heritage Rights, Sierra Club, Virginia Conservation Network, West Virginia Highlands Conservancy, West Virginia Rivers Coalition, and Wild Virginia (the "Commenters") respectfully submit the following comments on Mountain Valley's application.¹

Moreover, on August 13, 2021, the Federal Energy Regulatory Commission (the "Commission" or "FERC") solicited public comments on an Environmental Assessment ("EA") for the Mountain Valley Pipeline ("MVP").² As you know, the Corps is a cooperating agency on that EA. The Corps' review of Mountain Valley's pending application for a Department of the Army ("DA") permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act ("CWA") requires the Corps to take a hard look at the environmental impacts from Mountain Valley's proposed actions and at the alternatives to those actions under the National Environmental Policy Act ("NEPA").

Most of the Commenters submitted comments to you on the EA and the Corps' NEPA obligations attendant to its consideration of Mountain Valley's pending application on September 13, 2021. Because there was not a Corps-specific public

¹ We incorporate into our comments by reference, as if they were fully set forth herein, the exhibits cited herein.

There are a total of 43 exhibits to these comments, some of which are large electronic files. Because attempting to provide them via email is fraught with potential technical difficulties, including potential "bounce back" due to file-size issues, we are sending the exhibits on a DVD-ROM via the United States Postal Service.

² Fed. Energy Regul. Comm'n, Office of Energy Projects, Mountain Valley Pipeline Amendment Project: Environmental Assessment, Docket No. CP21-57-000, Cover Letter at 2 (Aug. 2021) (Accession No. 20210813-3009).

comment period formally open at that time, the Commenters are resubmitting an updated version of those comments at this time out of an abundance of caution.³

I. THE CORPS MUST DENY MOUNTAIN VALLEY'S PERMIT APPLICATION BECAUSE IT CANNOT COMPLY WITH THE SECTION 404(B)(1) GUIDELINES.

Notwithstanding efforts by Mountain Valley to fix fatal flaws in its Section 404 permit application, the fundamental problems have not been resolved. The basic situation is the same as it was in May 2021: Mountain Valley's application cannot satisfy the Section 404(b)(1) Guidelines. Consequently, the Corps must deny the permit application.

- Joint NEPA Scoping Comments on the Environmental Issues for the Proposed Amendment to the Certificate of Public Convenience and Necessity for the Mountain Valley Pipeline Project by Allegheny Blue-Ridge Alliance et al. (Apr. 15, 2021) (Accession No. 202104145-5319) (attached as Ex. 1) [hereinafter "Scoping Comments"];
- Letter from Derek Teaney, Appalachian Mountain Advocates, Inc., et al., to Adam Fannin, U.S. Army Corps of Eng'rs, Re: Public Comments on Mountain Valley Pipeline, LLC's Application for a Department of the Army Permit Under Section 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act; Public Notice Nos. LRH-2015-00592-GBR, LRP-2015-798, and NAO-2015-0898 (May 28, 2021) (Accession No. 20210603-5141) [hereinafter "404 Comments"]; and
- Joint Supplemental NEPA Scoping Comments on Environmental Issues for the Proposed Amendment to the Certificate of Public Convenience and Necessity for the Mountain Valley Pipeline Project by Allegheny Blue-Ridge Alliance et al. (Aug. 2, 2021) (Accession No. 20210802-5192) (attached as Ex. 2) [hereinafter "Supplemental Scoping Comments"].

To the extent that the EA inadequately responds—or entirely fails to respond—to issues raised in those comments, Commenters reiterate those issues here in their comments on the EA and request that the Corps address them before acting on the various pending applications related to the MVP Project.

³ We incorporate into our comments by reference the following previously submitted comments, as if they were fully set forth herein:

A. MOUNTAIN VALLEY'S PROPOSED OPEN-CUT, DRY-DITCH CROSSINGS ARE NOT THE LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE.

1. THE SECTION 404(B)(1) GUIDELINES REQUIRE A MORE ROBUST ALTERNATIVES ANALYSIS.

The Section 404(b)(1) Guidelines prohibit the issuance of a permit where "there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem[.]"⁴ The process of identifying such an alternative is commonly referred to as the "least environmentally damaging practicable alternative"—or "LEDPA"—analysis. The burden to demonstrate that the proposed alternative is the least environmentally damaging alternative lies on the applicant.⁵ In performing the LEDPA analysis, the Corps has "an obligation to independently verify the information supplied to it" by the applicant.⁶

Under the Section 404(b)(1) Guidelines, there are at least two classes of practicable alternatives that must be considered:

- (i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters; [and]
- (ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters.⁷

⁴ 40 C.F.R. § 230.10(a).

⁵ Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152, 1187 (10th Cir. 2002), modified on reh'g, 319 F.3d 1207 (10th Cir. 2003); see also All. for Legal Action v. U.S. Army Corps of Eng'rs, 314 F. Supp. 2d 534, 543 (M.D.N.C. 2004) (holding that "the burden to clearly demonstrate a lack of practicable alternatives lies with the project applicant").

⁶ Friends of the Earth v. Hintz, 800 F.2d 822, 835 (9th Cir. 1986).

⁷ 40 C.F.R. § 230.10(a)(1)(i)–(ii).

Mountain Valley's presentation of each of these types of alternatives is so severely flawed that the Corps must deny Mountain Valley's application.

This is not just the Commenters' position—it is that of the Environmental Protection Agency ("EPA") as well. On May 27, 2021, EPA Region 3 submitted comments to the Corps on Mountain Valley's pending application for an individual Section 404 permit for the MVP's waterbody crossings.⁸ In those comments, EPA Region 3 warned that the MVP "may not comply with the [Section 404(b)(1)] Guidelines," and recommended "that the permit not be issued until modifications described in the attachment . . . have been addressed and incorporated into the project."⁹ Among the explicit reasons underlying EPA's recommendations were its concerns about Mountain Valley's presentation of crossing alternatives.¹⁰

EPA recognized that alternatives to the proposed action should include "not only geographical siting but also operational options, such as design modifications."¹¹ To accomplish a robust alternatives analysis, EPA recommended that "a full range of practicable alternatives" be considered for each crossing.¹² Indeed, EPA specifically

 12 Id.

⁸ Letter from Jeffrey Lapp, Chief, Wetlands Branch, U.S. Envtl. Prot. Agency Region 3, to Michael Hatten, Chief, Regul. Branch, Huntington Dist., U.S. Army Corps of Eng'rs, Re: LRH-2015-00592-GBR, LRP-2015-798, NAO-2015-0898, Mountain Valley Pipeline, LLC; Mountain Valley Pipeline, Wetzel County, West Virginia to Pittsylvania County, Virginia at 2 (May 27, 2021) (attached as Ex. 3) [hereinafter "Lapp Letter"].

⁹ *Id.* at 2.

¹⁰ *Id.* at 4–6.

¹¹ *Id.* at 4.

recommended further consideration of trenchless crossings "at streams where [such methods are] not currently proposed, particularly streams that will be crossed multiple times, streams that are of good quality, and/or streams that may contain threatened or endangered aquatic species"¹³ EPA's assessment was based on Table 15 to Mountain Valley's application, which has not substantively changed since EPA's review.¹⁴

EPA's recommendations echo the Commenters' consistent refrain: the Corps' review must include a site-specific, crossing-by-crossing alternatives analysis to ensure that there are not less environmentally damaging practicable alternatives available.

2. THE CORPS MUST CONSIDER ROUTING ALTERNATIVES IN ITS REVIEW OF MOUNTAIN VALLEY'S APPLICATION; MOUNTAIN VALLEY'S ASSERTIONS TO THE CONTRARY ARE LEGALLY INCORRECT.

Make no mistake: the Corps cannot lawfully issue a 404 permit for the MVP unless it first considers whether any alternative routing realignments constitute the LEDPA—an obligation that Mountain Valley's application and legal arguments ignore. The Section 404(b)(1) Guidelines require that analysis, and the Natural Gas Act ("NGA") does not displace the Corps' authority or its obligation. As the Fourth Circuit recently observed, consideration of "*a possible alternative route* that would

 $^{^{13}}$ *Id.* at 5.

¹⁴ Attachment 1 at n.1 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

result in less substantial impact on its waterbodies is plainly" permissible.¹⁵ That is so, notwithstanding FERC's siting authority under the NGA,¹⁶ because "the NGA yields to the CWA."¹⁷

Under the Section 404(b)(1) Guidelines, the Corps must "[e]xamine practicable alternatives to the proposed discharge, that is, **not discharging into the waters of the U.S. or discharging into an alternative aquatic site with potentially less damaging consequences**[.]" ¹⁸ Moreover, the Corps "must address all of the relevant provisions of the Guidelines in reaching a Finding of Compliance in an individual case."¹⁹

As discussed above, the Section 404(b)(1) Guidelines expressly prohibit the issuance of a Section 404 permit for a discharge "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem[.]" ²⁰ For purposes of that requirement, "practicable alternatives include . . . (i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters [and] (ii) Discharges of dredged

¹⁵ Mountain Valley Pipeline, LLC v. N. Carolina Dep't of Envtl. Quality, 990 F.3d 818, 829 n.9 (4th Cir. 2021) (quoting Constitution Pipeline Co., LLC v. N.Y. State Dep't of Envtl. Conservation, 868 F.3d 87, 101 (2d Cir. 2017); emphasis added).

¹⁶ Washington Gas Light Co. v. Prince George's Cnty. Council, 711 F.3d 412, 423 (4th Cir. 2013) ("[T]he NGA gives FERC jurisdiction over the siting of natural gas facilities[.]").

¹⁷ Sierra Club v. U.S. Army Corps of Eng'rs, 981 F.3d 251, 264–65 (4th Cir. 2021); see also 15 U.S.C. § 717b(d)(3).

¹⁸ 40 C.F.R. § 230.5(c) (emphasis added).

¹⁹ *Id.* § 230.5.

²⁰ Id. § 2301.10(a).

or fill material at other locations in waters of the United States or ocean waters."²¹ Here, realignments that avoid crossing wetlands or streams would fall under Section 230.10(a)(1)(i), and routing realignments that result in discharges into less sensitive sites would fall under Section 230.10(a)(1)(ii). The Section 404(b)(1) Guidelines further require the Corps to make express findings of compliance or noncompliance with the practicable alternatives requirements of Section 230.10(a).²²

The applicant bears the "burden of proof to demonstrate compliance with the § 404(b) permit Guidelines[,]" including the practicable alternatives requirements.²³ If "insufficient information is provided to determine compliance, the Guidelines require that no permit be issued."²⁴

In short, the Section 404(b)(1) Guidelines codify the Corps' obligation to consider routing alternatives. An agency acts unlawfully when it fails to undertake analyses required by law, even when another agency has similar obligations to consider alternatives, and especially where the other agency is tasked with applying a different substantive standard.²⁵

Even in the face of the clear requirements of the Section 404(b)(1) Guidelines, Mountain Valley denies that the Corps has an obligation to consider routing

²¹ Id. \$230.1(a)(1)(i)-(ii).

²² 40 C.F.R. § 230.12(a).

²³ Utahns for Better Transp, 305 F.3d at 1187.

²⁴ Id.; see also 40 C.F.R. § 230.12(a)(3)(iv).

²⁵ Cowpasture River Pres. Ass'n v. Forest Serv., 911 F.3d 150, 169 (4th Cir. 2018), rev'd and remanded on others grounds sub nom. U.S. Forest Serv. v. Cowpasture River Pres. Ass'n, 140 S. Ct. 1837 (2020).

alternatives that would avoid discharges or relocate discharges to less-sensitive locations.²⁶ Mountain Valley contends that "the Corps is not required to consider routing alternatives that have been ruled out by the lead agency, the Federal Energy Regulatory Commission (FERC). Thus it is appropriate for the Corps to rely on the routing alternatives identified and selected by FERC."²⁷ Mountain Valley also contends that "[i]t is proper for the Corps, as a cooperating agency, to rely on FERC's exhaustive analysis in evaluating alternative routes for the Project," and that, "because FERC has already selected a route . . . , the Corps need not consider alternative pipeline locations outside of FERC's approved limit of disturbance."²⁸ In Mountain Valley's view, because FERC's alternatives analysis in the 2017 FEIS was upheld on judicial review, the Corps may continue to rely on that analysis.²⁹ Mountain Valley is wrong on all counts.

First, as noted above, the Fourth Circuit has held that "the NGA yields to the CWA[,]" ³⁰ and the CWA requires the applicant to prove—and the Corps to independently verify—that the proposed alternative is the LEDPA.³¹ That FERC may have also considered routing alternatives is irrelevant under the circumstances

²⁶ Attachment 6 at 21–22, 40, 44, 47 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

²⁷ Id. at 21–22.

²⁸ *Id.* at 40, 44.

²⁹ *Id.* at 47.

³⁰ Sierra Club, 981 F.3d at 264–65.

³¹ Greater Yellowstone Coal. v. Flowers, 359 F.3d 1257, 1269 (10th Cir. 2004); Utahns for Better Transp., 305 F.3d at 1186; Hintz, 800 F.2d at 835.

because, among other things, FERC did not even attempt to apply the LEDPA standard in the 2017 FEIS. "The Natural Gas Act gives FERC the authority over construction and operation of interstate gas pipelines, but it does not limit or modify other agencies' authority or obligations."³² For that reason, the Fourth Circuit has remanded agency alternative analyses that merely adopted FERC's alternatives analyses for this very pipeline where the agency did not apply its own substantive and specific standard.³³ In that case, the Bureau of Land Management ("BLM") was supposed to have considered whether alternatives were impractical; instead it adopted FERC's Final Environmental Impact Statement ("FEIS") standard of whether an alternative "offered a significant environmental advantage over the proposed pipeline route." ³⁴ Because BLM did not satisfy its own regulatory obligations, and instead simply relied on FERC's application of a different substantive standard, BLM's regulatory approval of the MVP was vacated and remanded.³⁵ The Fourth Circuit similarly rejected an agency's alternatives analysis that ignored the agency's own substantive alternatives standard in favor of adopting FERC's standard in a case involving the Atlantic Coast Pipeline.³⁶

- 34 Id.
- 35 Id.

³² Sierra Club v. U.S. Forest Serv., 897 F.3d 582, 604 (4th Cir. 2018).

³³ *Id.* at 604.

³⁶ Cowpasture River, 911 F.3d at 168.

The Fourth Circuit's conclusions in those cases are bolstered by other federal appellate court holdings.³⁷ For example, the Tenth Circuit rejected the Corps' effort to rely on another agency's alternatives analysis in *Utahns for Better Transportation v. U.S. Dep't of Transportation*.³⁸ There, although an alternatives analyses was upheld for NEPA purposes, the Tenth Circuit held that it failed to satisfy the CWA's different and more stringent standard of identifying the LEDPA.³⁹ In short, there remains work for the Corps to do on route alternatives analyses, even after FERC's certificate decision.

Second, the Section 404(b)(1) Guidelines themselves make clear that the Corps cannot simply treat FERC's alternatives analysis as conclusive. Section 230.10(a)(4) requires the Corps to ensure that NEPA documents are supplemented to include sufficient detail to respond to the requirements of the Guidelines.⁴⁰ And Section 230.10(a)(5) requires alternatives analysis considered by another permitting authority to be supplemented when less complete than the analysis contemplated under Section 230.10(a).⁴¹ Those regulations combine here to require the Corps to

³⁷ See, e.g., Greater Yellowstone Coal. v. Flowers, 321 F.3d 1250, 1262 n.12 (10th Cir. 2003) (recognizing distinction between standards applicable to alternative analysis under NEPA and the more stringent standards applicable to an alternatives analysis under the Section 404(b)(1) Guidelines).

³⁸ 305 F.3d 1152 (10th Cir. 2002).

³⁹ *Id.* at 1167, 1188–89; *see also Utahns for Better Transp. v. U.S. Dep't of Transp.*, No. 01-4216, 2001 WL 1739458, at *5 (10th Cir. Nov. 16, 2001) (criticizing the Corps' summary acceptance of a NEPA alternatives analysis without conducting an independent NEPA review).

⁴⁰ 40 C.F.R. § 230.10(a)(4).

⁴¹ *Id.* § 230.10(a)(5).

give closer scrutiny to routing alternatives affecting streams and wetlands than FERC provided in the FEIS.

Mountain Valley points to two pages in FERC's FEIS where it contends that FERC conducted a LEDPA analysis sufficient to satisfy the Corps' obligations: 4-149 and 4-159.⁴² But Page 4-149 does not describe any attempts to *avoid* stream impacts through routing alternatives; rather, it focuses on *mitigating* impacts through various construction plans. ⁴³ And Page 1-159 sweepingly asserts that "[t]he Applicants routed their respective pipelines and sited their associated aboveground facilities to avoid wetlands to the extent practicable. . . . Based on the proposed and recommended pipeline routes and configuration of aboveground facilities, we have determined that wetland impacts have been avoided to the extent practicable." ⁴⁴ That conclusory statement is devoid of any analysis, and there is no wetlandcrossing-by-wetland-crossing analysis. Indeed, the description is so general, it applies to *both* Mountain Valley's efforts with regard to the MVP and the related Equitrans Expansion Project proposed by Equitrans, LP. That is, **the description is not even specific to the MVP's wetland crossings.**

⁴² Attachment 6 at 39 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

⁴³ FERC, Mountain Valley Project and Equitrans Expansion Project: Final Environmental Impact Statement at 4-149 (June 2017) [hereinafter "FEIS"]. Indeed, Commenters have not located any description of efforts to avoid stream impacts in the FEIS.

⁴⁴ FEIS at 4-159.

In the FEIS, FERC simply accepted Mountain Valley's word as to whether it had avoided wetlands impacts through routing alternatives, and did not even consider whether Mountain Valley had avoided stream impacts through routing alternatives. There was no independent analysis, and the LEDPA requirement was not before FERC at the time anyway. The Corps cannot satisfy its recognized obligation to independently verify an applicant's identification of the LEDPA by laundering it through another agency's conclusory determination. That is particularly so where, as here, the agency in question (FERC) did not analyze the alternatives in sufficient detail (on a crossing-by-crossing basis) to satisfy the Section 404(b)(1) Guidelines.

In short, the Corps cannot rely on FERC's analysis to satisfy its own CWA obligations. Because the FEIS's treatment of routing alternatives that would avoid streams and wetlands is not sufficiently detailed to satisfy the Section 404(b)(1) Guidelines, the Corps must independently verify that there are not less environmentally damaging practicable routing alternatives.⁴⁵

3. MOUNTAIN VALLEY STILL HAS NOT REBUTTED THE PRESUMPTIONS APPLICABLE TO SPECIAL AQUATIC SITES.

In its response to public comments, Mountain Valley contends that the information in Table 15 is "sufficient to overcome the regulatory presumptions relating to special aquatic sites."⁴⁶ That is not so.

⁴⁵ 40 C.F.R. § 230.10(a)(4)–(5).

⁴⁶ Attachment 6 at 18 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

"The presumption of practicable alternatives 'is *very* strong[.]" ⁴⁷ "The presumption for a non-water dependent project that a practicable alternative exists is not an automatic bar on issuance of a permit, but it does require that an applicant make a persuasive showing concerning the lack of alternatives." ⁴⁸ As the Tenth Circuit has observed, "[t]he Corps' burden in finding the least damaging practicable alternative under the CWA guidelines is heaviest for non-water dependent projects planned for a 'special aquatic site,' such as a wetlands area." ⁴⁹ For special aquatic sites, "the burden is on the applicant . . . , with independent verification by the [Corps], to provide detailed, clear and convincing information *proving* impracticability." ⁵⁰ "[T]he applicant's assessment must be critically evaluated by the Corps." ⁵¹

With regard to "construction method alternatives," as discussed in Commenters' May 28, 2021 comments,⁵² Mountain Valley's analysis in Table 15 falls woefully short of establishing that an open-cut, dry-ditch crossing is the LEDPA at any location, regardless of whether special aquatic sites are present or not. For the same reasons, Mountain Valley has failed to carry its heavy burden to *prove* by clear and convincing evidence that a practicable trenchless method is not available at any

⁴⁷ Nat'l Wildlife Fed'n v. Whistler, 27 F.3d 1341, 1344 (8th Cir. 1994) (quoting Buttrey v. United States, 690 F.2d 1170, 1180 (5th Cir. 1982) (emphasis original).

⁴⁸ Utahns for Better Transp., 305 F.3d at 1163 (italics original; bold added).

⁴⁹ Greater Yellowstone Coal., 359 F.3d at 1269.

⁵⁰ Utahns for Better Transp., 305 F.3d at 1186 (italics original; bold added).

⁵¹ Greater Yellowstone Coal., 359 F.3d at 1270.

⁵² See 404 Comments at 14–51.

of the wetlands impact sites or at any stream reach with riffle and pool complexes. The Corps must presume such alternative methods are available, and Mountain Valley's failure to rebut that presumption means that its application must be denied.

With regard to the routing alternatives required to be examined, Mountain Valley concedes that it only looked at shifting the pipeline alignment "within the current route."⁵³ That is insufficient to overcome the presumptions applicable to special aquatic sites. Because there is a presumption that there are alternative offsite locations that would not affect special aquatic sites, Mountain Valley must *prove* by clear and convincing evidence that there are not. Mountain Valley does not do so. Instead, it contends that data on locations outside the current right-of-way "are not readily available."⁵⁴ Avoiding the question in that manner falls far short of proving that alternative realignments that do not affect special aquatic sites are not available. Even assuming the correctness of Mountain Valley's assertion that such data are not "*readily* available," data regarding those locations are nonetheless required to rebut the presumption in 40 C.F.R. § 230.10(a)(3). ⁵⁵ Mountain Valley's choice is to undertake the work necessary to obtain the data and to make the requisite showing or to have its permit denied.

⁵³ Attachment 6 at 21 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

 $^{^{54}}$ Id.

⁵⁵ Utahns for Better Transp., 305 F.3d at 1186 (holding the burden is on the applicant to "provide detailed, clear and convincing information *proving* impracticability" (emphasis original)).

Mountain Valley's reliance on conclusory statements by FERC in the FEIS about wetland avoidance do not help it overcome the presumption either. As discussed above, FERC's discussions of wetlands are at such a high level of generalization, they are not even solely about the MVP.⁵⁶ And they certainly do not address routing alternatives that would avoid wetlands on a crossing-by-crossing basis.⁵⁷ But that is what is required by the Section 404(b)(1) Guidelines.⁵⁸ The Corps' obligations under the CWA are different from FERC's obligations. "[U]nder the CWA, it is not sufficient for the Corps to consider a range of alternatives to the proposed project; the Corps must rebut the presumption that there are practicable alternatives with less adverse environmental impacts." ⁵⁹ Neither Mountain Valley's 404 application, nor FERC's FEIS can carry the heavy burden to rebut the presumptions. The Corps must deny Mountain Valley's application because of those failures.

4. MOUNTAIN VALLEY'S EXCUSE FOR ITS CHANGING STANCE ON THE PRACTICABILITY OF BORING UNDER THE GREENBRIER RIVER DOES NOT HOLD WATER, UNDERMINING ALL OF ITS OTHER ASSERTIONS ABOUT PRACTICABILITY.

Mountain Valley's application and track record reveal that the company has no credibility on whether particular crossing methods are or are not practicable. For example, in 2016, Mountain Valley predicted a "likely insurmountable" "risk of

⁵⁶ FEIS at 4-159.

⁵⁷ Id.

⁵⁸ See 40 C.F.R. § 230.12(a) (requiring the Corps to make compliance findings for "proposed disposal sites", not for projects as a whole).

⁵⁹ Greater Yellowstone Coal., 321 F.3d at 1262 n.12.

failure" of a trenchless crossing of the Greenbrier River.⁶⁰ And it rejected any use of the Direct Pipe[®] method because of "the relative newness of the Direct Pipe[®] technology, potential risk associated with geologic formations, and larger impact area on the launch side."⁶¹ Today, Mountain Valley admits (1) that the Direct Pipe[®] stream crossing method is practicable and (2) that the risks of a failure of a trenchless crossing at the Greenbrier River are *not* "insurmountable."⁶²

To defend its superficial rejection of Direct Pipe[®] technology in 2016, Mountain Valley insists that method "was a relatively new technology" in 2016, but that "[o]ver the past five years, the technology has been used successfully, giving Mountain Valley and its contractors comfort that it can be used safely for this crossing."⁶³ As it did in 2016, Mountain Valley continues to misrepresent the novelty of Direct Pipe[®] technology. By 2016, Direct Pipe[®] had been in use for nearly a decade. The technology was first presented "at the Hanover Fair 2006," and was proved in practice with a

⁶⁰ WCR at 10.

⁶¹ *Id.* at 5.

⁶² Table 15 (October 2021 Revision) at 20.

⁶³ Attachment 6 at 27 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

464-meter-long crossing of the Rhine River in Germany in 2007.⁶⁴ Even in its first application, "the new method exceeded even the most optimistic expectations."⁶⁵

In short, contrary to Mountain Valley's claims, Direct Pipe[®] was not unproven in 2016. Rather, it was more expensive and time-consuming than other methods, leading Mountain Valley to avoid seriously considering it as an alternative to its preferred open-cut, dry-ditch method. Given that Direct Pipe[®] had been successfully used for nearly a decade before Mountain Valley rejected it out of hand in 2016, its excuse rings hollow, and its assertions about practicability cannot be credited.

5. MOUNTAIN VALLEY'S EXCUSES FOR ITS CHANGING POSITION ON THE PRACTICABILITY OF BORING UNDER THE WATERBODIES IN THE FIRST 77 MILES OF THE MVP'S ROUTE UNDERMINE ITS COMPETENCE AND CREDIBILITY.

In recent correspondence with the Corps, Mountain Valley struggles to explain its about-face on the crossings in its November 2020 amendment application. It insists that it was only after it submitted that application that it identified "constructability and logistical challenges associated with trenchless crossings at most of the locations."⁶⁶ Even if that explanation were accepted as true, it should not comfort the Corps. In making that excuse, Mountain Valley *admits* that it is willing to make representations to a federal agency about its engineering judgment—such as

⁶⁴ Dr. Mark Peters, *Direct Pipe: Latest Innovation in Pipeline Construction – Technology and References* at 1, 4, Pipeline Technology Conference (2008) (attached as Ex. 4).

⁶⁵ *Id.* at 6.

⁶⁶ Attachment 6 at 28 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

telling FERC that all the crossings along the first 77 miles of its route "are well suited for conventional bores"—without having first done an analysis of whether that statement is true. Because Mountain Valley is concededly willing to shoot from the hip with its statements to agencies about the constructability of its pipeline crossings, the Corps cannot give credence to any assertion by Mountain Valley about the constructability of a crossing; rather, the Corps must demand and independently verify an exacting and detailed analysis.

Mountain Valley also concedes in recent correspondence with the Corps that the challenging crossings in the first 77 miles "may be technically practicable," but it steadfastly refuses to employ those less environmentally damaging and practicable alternatives.⁶⁷ The clear implication of that concession is that Mountain Valley is willing to reject trenchless crossings that *are technically practicable*, but in its view not worth the effort, without presenting its analysis of why the less damaging option was not selected.

Given Mountain Valley's apparent willingness to say anything about any particular crossing to justify its preferred-method-of-the-day, nothing the company says about the practicability of trenchless methods can be trusted. Accordingly, the Corps must conclude that Mountain Valley has failed to carry its burden to establish

⁶⁷ Id. at 29.

that *any* open-cut, dry-ditch crossing is the least environmentally degrading practicable alternative at any particular crossing.⁶⁸

6. MOUNTAIN VALLEY'S DEFENSE OF ITS LEDPA ANALYSIS IN TABLE 15 IS UNPERSUASIVE.

As discussed in the Commenters' May 28, 2021 Comments, Mountain Valley made decisions of convenience in selecting stream-crossing methods, rather than taking the requisite hard look on a crossing-by-crossing basis. Accordingly, reliance on Mountain Valley's alternatives analysis—and its "failure of explanation"—risks employing "an arbitrary and capricious technology selection process."⁶⁹

Mountain Valley responded to those criticisms in recent correspondence with

the Corps.⁷⁰ In that response, Mountain Valley admits that Table 15 only summarizes

⁶⁸ Hintz, 800 F.2d at 835; see also Colo. Fire Sprinkler, Inc. v. Nat'l Lab. Rels. Bd., 891 F.3d 1031, 1041 (D.C. Cir. 2018) (holding agency decision to be arbitrary and capricious because of its reliance on "demonstrably untrustworthy" information); Friends of Boundary Waters Wilderness v. Bosworth, 437 F.3d 815, 825 (8th Cir. 2006) (holding an agency cannot rely on questionable data without independently validating it); Menorah Med. Ctr. v. Heckler, 768 F.2d 292, 295–96 (8th Cir. 1985) (reliance on untrustworthy survey rendered decision arbitrary and capricious); St. James Hosp. v. Heckler, 760 F.2d 1460, 1467 n.5 (7th Cir. 1985) ("[I]t is an agency's duty to establish the statistical validity of the evidence before it prior to reaching conclusions based upon that evidence.").

⁶⁹ Catherine Dare and Timothy McAuley, Mountain Valley Pipeline (MVP) Project, Individual Permit Application – Virginia and West Virginia: Stream Crossing Cost Evaluation at 5 (2021) (attached as Ex. 2 to Commenter's May 28, 2021 Comments); *see also* Starr Silvis, Review of Mountain Valley Pipeline, LLC's Application for an Individual Section 404 Permit from the U.S. Army Corps of Engineers at 8 (May 27, 2021) ("Mountain Valley has not substantiated why its crossing choice at any given site is the least environmentally damaging practicable alternative.") (attached as Ex. 1 to Commenter's May 28, 2021 Comments).

⁷⁰ Attachment 6 at 29–33 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

a multi-factor analysis performed by "Mountain Valley's engineering and construction staff (in consultation with other subject-matter experts as appropriate)." ⁷¹ But conclusory summaries are insufficient to satisfy Mountain Valley's burden as an applicant to *establish* that its proposed project is the LEDPA. If other detailed analyses exist, it is incumbent on Mountain Valley to provide them to the regulatory authorities (and to the public) for their review. Instead, Mountain Valley says, "Trust us, we looked at each crossing and considered multiple factors." But these analyses were performed by the same individuals who assured FERC that certain locations were "well suited" for conventional boring based on the relevant factors, before later changing their minds. The Corps cannot just take Mountain Valley at its word that its "summaries" in Table 15 are the result of engineering judgment—it must demand that Mountain Valley justify its claims.

For example, in contrast to the barebones summaries provided for most crossings, with regard to crossing C-029, Mountain Valley provided to the Corps additional context for its decision to use an open-cut, dry-ditch crossing at that location.⁷² But that need for explanation only serves to highlight the deficiencies in Table 15. Mountain Valley must provide more robust explanations for every crossing before the Corps can lawfully conclude that the proposed project avoids and minimizes adverse impacts.

⁷¹ *Id.* at 30.

 $^{^{72}}$ Id. at 33. Specifically, Mountain Valley quantified the spoil-haulage distance and clarified the types of equipment that would be required. Id.

Mountain Valley further attempts to defend its "methodology" in Table 15 by emphasizing its reliance on the "judgment" of "engineers, pipeline construction specialist, and other expert consultants" as a catch-all that frequently determined its preferred crossing methodology.⁷³ The Fourth Circuit has upheld invocations of best professional judgment in Corps permitting decisions where the decision documents "include **substantial analysis and explanation**" of that judgment—not simply where "best professional judgment" is uttered like a talisman in lieu of analysis.⁷⁴ That is what is missing from Table 15—substantial analysis and explanation of Mountain Valley's choice of stream crossing method. Rather, what Mountain Valley presents is summary and conclusory. Mountain Valley appears to be disguising its methodology preferences as professional judgment, without robustly explaining how it exercised that judgment. Agency actions that invoke professional judgment without explanation, however, are subject to judicial remand.⁷⁵ Stated simply, where professional judgment is invoked, evidence of that judgment must be more than a conclusory assertion.⁷⁶ It is not sufficient for Mountain Valley to say, "trust us; we're

⁷³ Attachment 6 at 30–31 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

⁷⁴ Ohio Valley Envtl. Coal. v. Aracoma Coal Co., 556 F.3d 177, 201 (4th Cir. 2009) (emphasis added). Indeed, as the assertions of a private party—as opposed to a government agency— Mountain Valley's invocation of "best professional judgment" must be subject to an even higher standard of proof, especially given its credibility-undermining history of inconsistent "judgments" and the Corps obligation to independently verify its assertions.

⁷⁵ Nat. Res. Def. Council, Inc. v. Muszynski, 268 F.3d 91, 102–03 (2d Cir. 2001).
⁷⁶ Monroe v. Beard, 536 F.3d 198, 207 (3d Cir. 2008).

professionals."⁷⁷ Rather, Mountain Valley bears the burden of establishing that its proposed crossings constitute the LEDPA, and Table 15 does not carry that burden.

7. MOUNTAIN VALLEY CANNOT DISMISS TRENCHLESS CROSSINGS ON THE BASIS OF ITS COST ESTIMATES.

In response to criticisms about the transparency of its alternatives analysis, Mountain Valley recently stated that, "[a]s a general matter, Mountain Valley did not consider it reasonable or appropriate to utilize a trenchless alternative to avoid minimal and temporary impacts to an environmental resource that would exceed the construction cost^[] of an open cut by a **factor of roughly five.**"⁷⁸ But what Mountain Valley still fails to explain is why that particular threshold is the appropriate one in the context of a natural gas pipeline. Mountain Valley must provide a thorough and supported explanation for why it selected that threshold. Otherwise, the Corps' reliance on Mountain Valley's self-serving 5:1 ratio would be entirely arbitrary. Moreover, because a 10:1 threshold was apparently on the table at some point,⁷⁹ Mountain Valley must explain why it rejected that 10:1 threshold it discussed with

⁷⁷ That is particularly so given the wide swings and reversals in the company's "professional judgment" as to the viability of stream crossing methods to date.

⁷⁸ Attachment 6 at 34 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021) (internal footnote omitted; emphasis added). Although Mountain Valley "updated the cost estimates" in its alternatives analysis to include costs of mitigation and monitoring, it did so in such a way that it apparently increased cost estimates for open-cut, dry-ditch crossings and trenchless crossings roughly proportionally. *Id.* at 6–7, 34 n.14. Accordingly, the Commenters' May 28, 2021 comments on Mountain Valley's cost estimates are still relevant and on point.

⁷⁹ Call Notes of January 22, 2021 MVP Pre-Application Meeting at 4 (attached as Ex. 5).

the Corps in favor of a 5:1 threshold. Furthermore, as discussed in Commenters May 28, 2021 404 Comments, Mountain Valley rejected scores of trenchless crossings with a cost ratio less than 5:1.⁸⁰ Mountain Valley must provide a detailed, crossing-by-crossing explanation of those rejections.

Moreover, the Corps cannot simply accept Mountain Valley's unsubstantiated cost estimates without independently verifying them. In *Utahns for Better Transportation*, the Tenth Circuit concluded that an alternatives analysis is arbitrary and capricious where the Corps rejects alternatives based on cost without independently verifying the applicant's cost estimates.⁸¹

8. NEITHER MOUNTAIN VALLEY NOR THE CORPS CAN LIMIT THEIR ROUTING ALTERNATIVES ANALYSIS TO REALIGNMENTS WITHIN THE EXISTING RIGHT-OF-WAY.

Mountain Valley and the Corps must evaluate routing alternatives that would avoid stream reaches with sensitive plant and animal species, special aquatic sites, and other sensitive resources. And they must do so on a crossing-by-crossing basis. That is, they must look at each crossing and determine whether modest alignment changes would allow Mountain Valley to select a crossing location with fewer environmental impacts. They have not done so.

Instead, at most Mountain Valley only considered minor realignments "within the [approved] route," and even then, it only gave close consideration to 15

⁸⁰ 404 Comments at 44–45 n.142.

⁸¹ Utahns for Better Transp., 305 F.3d at 1187.

crossings.⁸² That is not enough. Mountain Valley's application *does not* (as it must) consider off-route realignment options to avoid sensitive aquatic resources, or establish that such realignments are impracticable. Instead, Mountain Valley contends that data on locations outside the current right-of-way "are not readily available."⁸³ Mountain Valley's avoidance of the relevant question in that manner requires the Corps to deny the permit application. An applicant must provide sufficient information to allow the Corps to verify that the proposed discharges constitute the LEDPA.⁸⁴ Because Mountain Valley has not done so, a permit cannot issue.

Mountain Valley avoids grappling with the necessary details by focusing instead on alignment decisions it made years ago. The question today, however, is whether there are practicable alternative *crossing locations* with fewer environmental impacts. Because that requires analyzing alternatives using a different standard (*i.e.*, whether each crossing method and location is the least environmentally damaging practicable alternative) from the standard applied by FERC (*i.e.*, whether an alternative confers a significant environmental advantage), Mountain Valley cannot point to FERC's analysis to excuse the Corps from

⁸² Attachment 6 at 41 & Attachment 6-6 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021) (emphasis added). Mountain Valley contends, without explanation, that it was able to identify and scrutinize only 15 potential in-route modifications. It must explain why in-route modifications are not practicable at the hundreds of other crossings.

 $^{^{83}}$ *Id*.

⁸⁴ 40 C.F.R. § 230.12(a)(3)(iv); 61 Fed. Reg. 20,990, 30, 998 (June 18, 1996); Utahns for Better Transp., 305 F.3d at 1187.

performing its duties.⁸⁵ Because Mountain Valley does not grapple with the proper questions, its application fails to provide sufficient detail to determine whether there are practicable routing alternatives.

Mountain Valley's proposed Blackwater River crossing perfectly illustrates the flaws in Mountain Valley's application. The Blackwater River is a Section 10 River that Mountain Valley intends to trench through using an open-cut, dry-ditch crossing method.⁸⁶ In the October 2021 Revision to Table 15, Mountain Valley attempts to explain its choice of crossing method this way:

The Blackwater River's banks at the crossing location are rapidly eroding due to natural conditions unrelated to pipeline construction. Instream work will be necessary to permanently restore and stabilize the banks, which will provide greater protection for the pipeline and have the benefit of reducing long-term sediment loads in the stream. That work can be done efficiently and effectively after completion of an open-cut crossing. Therefore, temporary stream impacts are unavoidable at this location. A trenchless crossing at this location also faces significant constructability constraints. The bore pits for this crossing would be just short of 40-feet deep. Site conditions do not allow sufficient space to stockpile spoils from bore pits of that size.⁸⁷

A trenchless crossing of the Blackwater River would only exceed the cost of an open-

cut, dry-ditch crossing by a factor of 2.612-well below Mountain Valley's newly

declared 5:1 threshold for selecting a trenchless crossing.⁸⁸

⁸⁵ See Cowpasture River, 911 F.3d at 168 ("In the EIS, FERC considered only whether a route alternative 'confers a significant environmental advantage over the proposed route.' This is a significantly different standard than [the governing standard for the Forest Service].").

⁸⁶ Table 15 (October 2021 Revision) at 39.

⁸⁷ Id.

⁸⁸ Id.

EPA objected to Mountain Valley's selection of an open-cut, dry-ditch crossing

for the Blackwater River in its May 2021 comments to the Corps. EPA stated that

[w]hile EPA appreciates the relocation of the Blackwater River crossing to downstream of the Rocky Mount water intake, EPA also recommends that the applicant use one of the new or established trenchless methods to cross Blackwater River instead of open cut methods to further avoid or minimize impacts. If not practicable, then additional rationale for crossing the river by a trench method should be provided.⁸⁹

EPA reiterated its objections to the use of an open-cut, dry-ditch crossing for the

Blackwater River in its September 2021 comments on FERC's Environmental

Assessment of Mountain Valley's plans to bore under numerous streams. 90

Specifically, EPA stated:

EPA continues to have concerns with the crossing on the Blackwater River. The Blackwater River is proposed to be crossed by an open-cut method. The amendment states, "At the Blackwater River crossing, Mountain Valley stated that site conditions do not provide adequate space to stockpile spoil from bore pits that would be almost 40-feet-deep. We reviewed the Blackwater River crossing location and confirmed that there may not be space for spoil storage within the limits of disturbance and the slope on one side of the stream may not be conducive to a trenchless crossing (emphasis added)."

EPA recommends that the applicant clarify the specific constraints of the slope at the Blackwater River crossing, citing the slope measurements that may not be conducive to a trenchless method. In addition, should the slope prove to be favorable for a trenchless method, then EPA recommends further analysis of an offsite or upland alternative for the stockpiled spoil associated with the bore hole pits.

⁸⁹ Lapp Letter at 5.

⁹⁰ Letter from Stepan Nevshehirlian, Environmental Assessment Branch Chief, U.S. EPA Region 3, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Mountain Valley Pipeline Amendment Project Environmental Assessment, August 2021 West Virginia, and Virginia (FERC Docket Nos. CP21-57-000) at 3 (Sept. 13, 2021) (emphasis inn EPA letter) (attached as Ex. 6) [hereinafter "Nevshehirlian Letter"].

Should a practicable alternative be available, EPA recommends the Blackwater River be crossed via a trenchless method. 91

In response to comments on the Blackwater River crossing, Mountain Valley provided an expanded (one-page vs. one paragraph, and still inadequate) "Summary of Impracticability of Using a Trenchless Crossing for the Blackwater River."⁹² As a threshold matter, Mountain Valley's submission of additional information regarding the Blackwater River crossing is essentially a concession that the rationale summaries in Table 15 are insufficient on their own to establish that the LEDPA will be implemented at each crossing location. Mountain Valley has supplemental information available to it for each crossing, and must submit that information to the Corps in order to carry its burden to establish that it has selected the LEDPA at each crossing.⁹³

But even Mountain Valley's supplemental information falls short for the Blackwater River crossing. Much of Mountain Valley's complaint about the Blackwater River crossing centers on the requirements of a 39-foot-deep bore pit.⁹⁴ But Mountain Valley is going to use deeper bore pits at other locations, establishing

⁹¹ *Id.* (emphasis added).

⁹² Attachment 6-3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

⁹³ And those rationales must be subjected to supplemental public notice and comment. *Ohio Valley Envtl. Coal. v. U.S. Army Corps of Eng'rs*, 674 F.Supp.2d 783, 804–814 (S.D. W. Va. 2009); *Nat'l Wildlife Fed'n v. Marsh*, 568 F.Supp. 985, 994 (D.D.C. 1983).

 $^{^{94}}$ Id.

that the depth is not categorically impracticable.⁹⁵ Mountain Valley also complains that it would have to transport spoil approximately 750 feet (2.5 football fields), but does not explain why that short spoil-haulage distance makes trenchless crossing impracticable or compare it to other crossings where it may be transporting spoil similar distances.⁹⁶ Accordingly, the supplemental information provided by Mountain Valley fails to establish that a trenchless crossing at the Blackwater River is impracticable.

Mountain Valley further attempts to justify its selection of an open-cut, dryditch crossing at the Blackwater River because it will have to do in-stream work in the Blackwater to restore the streambanks to protect its buried pipeline.⁹⁷ But saying "we're going to be in the stream anyway" categorically **does not** establish that an open-cut, dry-ditch crossing is the least environmentally damaging practicable alternative. Bank restoration is a fundamentally different activity from blasting a 10foot trench in a streambed. Mountain Valley's argument is one of convenience, not practicability.

⁹⁵ See Table 15 (October 2021 Revision) at 6 (using 49-foot-deep bore pits at Elk River bore), 12 (using 57-foot-deep bore pits at Gauley River bore), 29 (using 39-foot-deep bore pits for crossing H-017), 42 (using 39-foot-deep bore pits for crossing I-060B).

⁹⁶ Attachment 6-3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021). Moreover, the slope in question does not appear to be 750 feet long, based on a 2020 photograph accompanying Mountain Valley's Stream Form for the Blackwater River. That photograph is embedded in the text below.

⁹⁷ Table 15 (October 2021 Revision) at 39.

Compounding the problem, Mountain Valley's claim that streambank work is required at the Blackwater River crossing is undermined by the fact that the photos it includes in its efforts to substantiate its claims in Table 15 and persuade the Corps that the Blackwater River's streambank conditions require in-stream work **are not actually of the Blackwater River**. In Attachment 6-3 to its October 11, 2021 response to an information request from the Corps, Mountain Valley contends:

In addition, regardless of the crossing method selected, instream work will be necessary to permanently restore and stabilize the banks of the Blackwater River, which are rapidly eroding due to natural conditions unrelated to pipeline construction. Stabilization of the stream banks will reduce long-term sediment loads in the Blackwater River, and the stabilization work can be done efficiently and effectively after completion of an open-cut crossing.

The following pictures highlight the stream bank conditions following a severe storm event in 2020.



The problem is **those photographs are indisputably** *not* **of the Blackwater River.** That is, Mountain Valley attempts to substantiate its claims in Table 15 and to make the case that in-stream work is inevitable at the Blackwater River crossing by attaching photos of streambank conditions at an entirely different stream.

⁹⁸ Attachment 6-3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

Mountain Valley refers to the Blackwater River as stream S-F11,⁹⁹ and the coordinates of the proposed crossing of S-F11 are 37.052843 N, -79.825711 W.¹⁰⁰ But the photographs that Mountain Valley represents as showing the Blackwater River crossing include coordinates that place them 4.6 miles west of that location. The photograph on the left bears the coordinates 37.049146 N, -79.908454 W, and the photograph on the right bears the coordinates 37.049311 N, -.79.908422 W.¹⁰¹ Those coordinates are consistent with the location of the proposed crossing of S-II2,¹⁰² commonly known as Little Creek.¹⁰³ The following figure shows the relative location of the Blackwater River crossing and the location where the photographs were taken:

⁹⁹ Table 15 (October 2021 Revision) at 39.

¹⁰⁰ Attachment 1 at 14 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁰¹ Attachment 6-3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁰² Attachment 1 at 14 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁰³ Table 15 (October 2021 Revision) at 37.



Figure 1: Screenshot of Google Earth measuring straight line distance between coordinates of proposed Blackwater River crossing and coordinates on photographs in Mountain Valley's summary of its Blackwater River crossing.

Whether intentional or not, this stupefying error in Mountain Valley's explanation of its stream-crossing methodology determinations calls into question its competence and is further evidence of its lack of credibility. The Corps has an obligation to independently verify information provided by the applicant for the LEDPA analysis,¹⁰⁴ and that obligation is heightened in a case such as this where Mountain Valley has repeatedly shown that it cannot be trusted to provide accurate characterizations of its proposed discharge sites or the practicability of its proposals.

¹⁰⁴ *Hintz*, 800 F.2d at 835.

Mountain Valley's application includes three additional photographs (attached to its Stream Form for the Blackwater River in Attachment I-5 to its application)¹⁰⁵ that it represents are of the proposed Blackwater River crossing. One of those photos was taken in 2015, before Mountain Valley cleared its right-of-way:



Figure 2: April 4, 2015 Photograph from Mountain Valley's Blackwater River Stream Form.

This photo suggests that Mountain Valley's descriptions of the Blackwater River at the crossing location are inaccurate. First, the streambanks in this image

 $^{^{105}}$ That stream form and the associated photographs are attached as Ex. 7 to these comments.

appear to be intact and stable, further undermining Mountain Valley's assertions in its recently submitted justification for an open-cut, dry-ditch crossing.¹⁰⁶ Second, the stream depth in this photograph appears to be deeper than the 7-inch depth indicated on the 2015 stream form.¹⁰⁷ That is significant because even Mountain Valley admits that open-cut, dry-ditch crossings are not practicable where stream depths exceed 36 inches.¹⁰⁸

The other two photos of the proposed Blackwater River crossing location were taken post-construction, the first in 2019, and the second in 2020:

 $^{^{106}}$ Those stable streambanks are consistent with the 2015 stream form, which states that there is no stream erosion at the crossing location. Ex. 7 at 1.

 $^{^{107}}$ Id.

¹⁰⁸ Application at 58.



Figure 3: November 8, 2019 Photograph from Mountain Valley's Blackwater River Stream Form.



Figure 4: December 3, 2020 Photograph from Mountain Valley's Blackwater River Stream Form.¹⁰⁹

These photos also call into question Mountain Valley's estimate that the Blackwater River is only 7 inches deeps at the crossing location. And, to the extent that these photographs might indicate a need for stream-bank restoration, when compared to the 2015 photograph, any stream bank issues appear to be related to damage to the

 $^{^{109}}$ This photograph of the short slope on the bank of the Blackwater River is the photograph referenced in footnote 96, supra.
riparian area from pipeline construction, not from "natural conditions unrelated to pipeline construction" as Mountain Valley asserts.¹¹⁰

But even assuming that Mountain Valley were able to establish that a trenchless crossing is technically impracticable at the current Blackwater River crossing location, it would still have to show that a trenchless crossing would be impracticable at an alternate crossing location. It has not done so.

The Virginia Department of Environmental Quality ("DEQ") agrees that Mountain Valley should consider a routing realignment that would allow Mountain Valley to use a trenchless crossing method for the Blackwater River.¹¹¹ Because of the Blackwater River's status as a tributary of an important recreational reservoir, and because that river is subject to a total maximum daily load for sediment under Section 303 of the Clean Water Act, ¹¹² DEQ submitted comments to FERC

¹¹⁰ Attachment 6-3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹¹¹ Letter from Bettina Rayfield, Va. Dep't of Envtl. Quality, to Kimberly D. Bose, Fed. Energy Regul. Comm'n, Re: Federal Energy Regulatory Commission Draft Environmental Assessment for the Mountain Valley Pipeline Amendment Project (OEP/DG2E/Gas 3, Mountain Valley Pipeline, LLC, Docket No. CP21-57-000, DEQ 21-102F), Att. A, page 16 (Sept. 8, 2021) (attached as Ex. 8).

¹¹² Those facts also demonstrate that the environmental impacts that would be avoided by a trenchless crossing justify any excess cost or inconvenience that such a crossing would entail.

Moreover, the Corps cannot determine that Mountain Valley's proposed open-cut Blackwater River crossing is the least environmentally damaging practicable alternative without thorough consideration of the documented deterioration of baseline conditions at that location since construction began. Virginia DEQ's water quality monitoring team authored several reports on elevated turbidity between June 2018 and August 2019, and concluded that the fact that the downstream station was detecting higher turbidity levels than the upstream indicates that the source of the turbidity was disturbance within the watershed (*i.e.*, upland pipeline construction).

recommending that Mountain Valley "[r]eevaluate the location of the Blackwater River crossing and move it to a location that permits the trenchless crossing technique." ¹¹³

Examining routing alternatives for the Blackwater River crossing—as well as the rest of Mountain Valley's proposed crossings—is required under the Section 404(b)(1) Guidelines. If the Corps were to accept Mountain Valley's invitation to skip that crucial analysis, any permit the Corps issued would be vulnerable to vacatur and remand on judicial review.

9. MOUNTAIN VALLEY STILL HAS NOT PROVIDED SUFFICIENT INFORMATION TO ALLOW A PROPER LEDPA ANALYSYS FOR ITS ROAD CROSSINGS.

Without explaining what technique it will use at each road crossing, and justifying that selection as the least environmentally damaging practicable alternative at each crossing, Mountain Valley cannot carry its burden to provide sufficient information to establish that the proposed discharges associated with its road crossings are the LEDPAs. Mountain Valley's response to public comments does not remedy that defect. In correspondence with the Corps, Mountain Valley provides a generic, high-level discussion of how it designed its road crossings of aquatic

See Andrew L. Garey, PhD., DEQ Water Quality Monitoring Team Leader, "High turbidity events at Blackwater River Near MVP Pipeline Corridor" (Aug. 12, 2019) (attached as Ex. 9); Andrew L. Garey, PhD., DEQ Water Quality Monitoring Team Leader, "High turbidity events at Ramsey's Draft, near proposed ACP Corridor and Blackwater River, Near Proposed MVP Corridor" (Aug. 3, 2018) (attached as Ex. 10); Andrew L. Garey, PhD., DEQ Water Quality Monitoring Team Leader, "High turbidity events at Ramsey's Draft, near proposed ACP Corridor and Blackwater River, Near Proposed MVP Corridor" (Aug. 3, 2018) (attached as Ex. 10); Andrew L. Garey, PhD., DEQ Water Quality Monitoring Team Leader, "High turbidity events at Ramsey's Draft, near proposed ACP Corridor and Blackwater River, Near Proposed MVP Corridor" (June 2018) (attached as Ex. 11).

¹¹³ Ex. 8, Att. A, page 16.

features, but without the crossing-by-crossing specifics required the Section 404(b)(1) guidelines.¹¹⁴ Accordingly, the Corps cannot permit Mountain Valley's proposed road crossings.

10. MOUNTAIN VALLEY'S PROJECT PURPOSE REMAINS IMPERMISSIBLY NARROW.

Mountain Valley defines its project purpose in an impermissibly narrow way: to complete construction of a natural gas pipeline as approved in its FERC Certificate.¹¹⁵ And in its response to public comments regarding its reliance on already-completed construction to pressure the Corps to approve its selected route, Mountain Valley erroneously contends that "the Corps need not consider alternative pipeline locations outside of FERC' approved limit of disturbance."¹¹⁶

But it is well settled by the federal appellate courts that "an applicant cannot define a project in order to preclude the existence of any alternative sites and thus make what is practicable appear impracticable."¹¹⁷ Indeed, the Ninth Circuit has described that principle as "[o]bvious[]."¹¹⁸ As the Eighth Circuit has observed, "[t]he cumulative destruction of our nation's wetlands that would result if developers were permitted to artificially constrain the Corps' alternatives analysis by defining the

¹¹⁴ Attachment 6 at 42–43 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹¹⁵ Application at 10.

¹¹⁶ Attachment 6 at 44 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹¹⁷ Audubon Soc'y of Greater Denver v. U.S. Army Corps of Eng'rs, 908 F.3d 593, 607 (10th Cir. 2018).

¹¹⁸ Sylvester v. U.S. Army Corps of Eng'rs, 882 F.2d 407, 409 (9th Cir. 1989).

projects' purpose in an overly narrow manner would frustrate the statute and its accompanying regulatory scheme."¹¹⁹ To prevent that, the Corps cannot accept Mountain Valley's impermissible narrowing of the project's purpose to the construction of the MVP as approved by FERC. Mountain Valley's actual purpose is to construct a natural gas pipeline between Wetzel County, West Virginia, and Pittsylvania County, Virginia. That purpose must be without regard to whether completion will require changes to the project alignment in its FERC certificate, as evidenced by, among other things, the company's application for a certificate amendment to conduct trenchless crossings and the numerous variance requests it has submitted over the years.

B. BECAUSE THE MVP WOULD CAUSE OR CONTRIBUTE TO VIOLATIONS OF WATER QUALITY STANDARDS, MOUNTAIN VALLEY'S APPLICATION MUST BE DENIED.

The Section 404(b)(1) Guidelines prohibit the issuance of a permit where the discharges would cause or contribute to violations of water quality standards.¹²⁰ Regardless of whether West Virginia and Virginia certify the project under Section 401 of the CWA, the Corps will retain an obligation to consider the project's effects on water quality standards. The Corps must make factual findings regarding, among other things, the sedimentation and turbidity that will be caused by the discharge and the effects on the aquatic ecosystem.¹²¹ And it must use those factual

¹¹⁹ Nat'l Wildlife Fed'n v. Whistler, 27 F.3d 1341, 1346 (8th Cir. 1994).

¹²⁰ 40 C.F.R. § 230.10(b).

¹²¹ *Id.* § 230.11(c), (h).

determination to make findings of compliance or noncompliance with the prohibition against permit issuance for discharges that would cause or contribute to violations of water quality standards under Section 230.10(b).¹²²

The requirements of the Section 404(b)(1) Guideline cannot be modified without rulemaking by EPA.¹²³ Accordingly, the Corps' general permitting regulation at 33 C.F.R. § 320.4(d) that purports to allow it to rely on state Section 401 certifications as conclusive as to water quality issues cannot override the Section 404(b)(1) Guidelines' requirements that the Corps make factual determination and compliance findings with regard to water quality standards.

But in any event, with regard to this permit, because EPA in its May 27, 2021 letter expressly directed the Corps to consider water quality impacts, including, even if 33 C.F.R. § 320.4(d) were applicable to Section 404 permits, by its own terms it would not apply here.¹²⁴ Accordingly, for the following reasons, and those set out in the May 28, 2021 404 Comments, the Corps must determine that Mountain Valley's proposed discharges will cause or contribute to violations of water quality standards and find that Mountain Valley's application cannot comply with 40 C.F.R. § 230.10(b).

¹²² Id. § 230.12.

¹²³ Id. § 230.2(c).

¹²⁴ Lapp Letter at 4 ("EPA is concerned that the applicant has not yet demonstrated that the discharges from the project, as proposed, will not cause or contribute to water quality standards exceedances"); *id.* at 7 (requiring sedimentation monitoring criteria to be protective of water quality standards).

1. MOUNTAIN VALLEY CONTINUES TO UNDERSTATE THE DURATION AND SEVERITY OF THE WATER QUALITY IMPACTS THAT WILL RESULT FROM ITS PROPOSED OPEN-CUT, DRY-DITCH CROSSINGS.

As the Commenters established in their May 28, 2021 comments, Mountain Valley misrepresented the conclusion reached by the Fish and Wildlife Service ("FWS") about the duration of the aquatic impacts from the MVP. In its 404 application, Mountain Valley falsely represented that FWS concluded that benthic effects would be "temporary." ¹²⁵ But, in its September 2020 Biological Opinion ("BiOp") for the MVP, FWS concluded that it should assume that "effects to benthic invertebrates in aquatic areas that receive significant increased sedimentation as a result of the MVP will persist for up to four years."¹²⁶

Remarkably, Mountain Valley continues to willfully mischaracterize the BiOp in its response to public comments. Mountain Valley insists that FWS's four-year conclusion was based on potential impacts from "upland clearing, grading, and trenching."¹²⁷ But the BiOp is clear in attributing its four-year conclusion to scientific literature examining stream-crossing impacts. FWS expressly cited scientific literature describing impacts from open-cut crossings that persisted for four years when it reached the conclusion benthic impacts from the pipeline would persist for

 $^{^{125}}$ Application at 38.

¹²⁶ U.S. Fish and Wildlife Serv., Mountain Valley Pipeline, LLC; Revised Biological Opinion 96 (Sept. 4, 2020) [hereinafter "BiOp"]

¹²⁷ Attachment 6 at 49 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

four years.¹²⁸ The literature that FWS cited to support its four-year conclusion was *stream-crossing* literature. Thus, FWS has concluded that the effects of Mountain Valley's open-cut crossings will persist for four years. There is no other reasonable interpretation of FWS's conclusion.

Moreover, per Reid (2004), there are a multitude of ways that open-cut, dryditch crossings can go wrong¹²⁹ and, given Mountain Valley's track record, the Corps cannot rationally assume that Mountain Valley will flawlessly construct hundreds of such crossings. ¹³⁰ Rather, the Corps should expect multiple incidents with impermissible adverse effects, individually and cumulatively, on water quality and aquatic life.¹³¹

¹²⁸ BiOp at 96, 109–10, 138–39 (citing Armitage & Gunn (1996) and Lévesque and Dubé (2007)—both of which documented multi-year impacts from open-cut crossings—as the authority to support their assumption that benthic effects would persist for four years). The Armitage and Gunn (1996) article was attached as Exhibit 15 to the Commenters May 28, 2021 404 Comments, and the Lévesque and Dubé (2007) article was attached as Exhibit 18 to those comments.

¹²⁹ S. M. Reid et al., Sediment Entrainment During Pipeline Water Crossing Construction: Predictive Models and Crossing Method Comparison, 3 J. ENVIRON. ENG. & SCI. 81, 867 (2004) (attached as Ex. 13 to Commenter's May 28, 2021 404 Comments).

¹³⁰ See, e.g., Animal Legal Def. Fund v. Perdue, 872 F.3d 602, 620 (D.C. Cir. 2017) (holding it to be arbitrary and capricious for an agency to accept company's certification of compliance and ignore its history of violations).

¹³¹ See Evan Hansen & Meghan Betcher, Sediment Generation and Impacts from Dry-Ditch Open-Cut Stream Crossings Such as Those Proposed for the Mountain Valley Pipeline at 6 (May 26, 2021) (attached as Ex. 3 to Commenters' May 28, 2021 404 Comments) ("Due to the importance of proper installation and maintenance of isolation structures while constructing dry-ditch crossings and MVP's record of sediment-related violations, sediment impacts due to dry-ditch stream crossings are likely.").

To counter that reality, in its response to public comments, Mountain Valley doubles down on its reliance on Reid and its assertions that water quality impacts from open-cut, dry-ditch crossings will be temporary.¹³² Mountain Valley continues to ignore the fact that Reid himself acknowledges that the effects of open-cut, dryditch crossings can persist for years.¹³³ That makes them more than temporary. For FERC projects like the MVP,

[t]emporary impacts generally occur during construction with the resource returning to pre-construction condition almost immediately afterward. Short-term impacts could continue for up to 3 years following construction. This could include the time it takes for herbaceous/shrub vegetation to grow on the right-of-way after restoration. *Impacts were considered long-term if the resource would require more than 3 years to recover*.¹³⁴

Accordingly, a four-year impact from Mountain Valley's proposed crossings—like those reported in Lévesque and Dubé (2007)—would be long-term. Reid quite simply does not establish that the open-cut, dry-ditch crossings would have only temporary impacts.

Moreover, even Reid admits that the state-of-the-science is not developed enough to predict the consequences of open-cut, dry-ditch crossings with accuracy. In a piece published in 2008, Reid and his co-authors lamented that "[a] lack of suspended sediment and associated biological effect monitoring during *open cut and*

¹³² Attachment 6 at 48–57, to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹³³ Scott M. Reid & Paul G. Anderson, *Effects of Sediment Released During Open-Cut Pipeline Water Crossings*, 24 CANADIAN WATER RES. J. 235, 243 (1999) (attached as Ex. 14 to Commenters' May 28, 2021 404 Comments).

¹³⁴ FEIS at 4-1 (emphasis added).

isolated water crossing has prevented defensible statements to be made regarding the level of environmental protection provided by [open-cut, dry-ditch] crossing methods."¹³⁵ That remains true today, as reflected in a 2019 publication by Courtice and Naser. That article observes that, as late as 2019, "there is a paucity of research related to in-stream construction activities and their effects on aquatic ecosystems." ¹³⁶ Accordingly, in Reid's own words, Mountain Valley's characterizations of open-cut, dry-ditch crossings as having minimal adverse effects on water quality are not "defensible."

Finally, Mountain Valley attempts to dismiss its abysmal erosion and sediment control history by insisting that it somehow hit a reset button after Virginia's 2018 enforcement action. Mountain Valley contends that, "in light of . . . increased monitoring efforts and enhanced BMPs, it is appropriate for the Corps to conclude that Mountain Valley's E&S control measures will function as designed and

¹³⁵ S. M. Reid, S. Metikosh and J. M. Evans, *Overview of the River and Stream Crossings Study*, *in* Proceedings of the Symposium at the 8th International Symposium of Environmental Concerns in Rights-of-Way Management 714 (Elsevier 2008) (attached as Ex. 12). That statement is based in part on the limited number of reported case studies, and the fact that even in those case studies, stream crossings could not be implemented as planned by the pipeline company. For example, a 2002 Reid article examined two planned open-cut, dry-ditch crossings in Ohio, one of which had to be converted to a wet crossing after an aqua barrier failed and the other of which had multiple problems with the implementation of the dam-and-flume structures. S. Reid et al., *Effects of Natural Gas Pipeline Water Crossing Replacement on the Benthic Invertebrate and Fish Communities of Big Darby Creek, Ohio*, in Environmental Concerns in Rights-of-Way Management: Seventh International Symposium (2002) (attached as Ex. 13).

¹³⁶ Gregory Courtice & Gholamreza Naser, *In-stream Construction-induced Suspended Sediment in Riverine Ecosystems* 36 RIVER RES. APPLIC. 327 (2019) (attached as Ex. 14).

will be effective in reducing impacts to waters of the U.S.^{"137} Mountain Valley's assertions are belied by its actual performance record. Erosion and sediment violations have continued to occur since 2018 despite Mountain Valley's "increased" and "enhanced" efforts.¹³⁸ And to the extent that violation frequency may have decreased after October 2019, that is likely due to the fact that *all* pipeline construction was halted at that time. In short, Mountain Valley's difficulties controlling erosion and sediment in the steep mountains along its pipeline route have continued, and the Corps cannot simply assume that measures that Mountain Valley

¹³⁷ Attachment 6 at 56 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹³⁸ Laurence Hammack, Environmental Regulators Seek More Fines Against Mountain Vallev Pipeline, ROANOKE TIMES (June 29.2020). https://roanoke.com/business/environmental-regulators-seek-more-fines-againstmountain-valley-pipeline/article_31c30aa8-37d8-559a-8009-274ea19e00ae.html (reporting on Virginia's demand for payments from Mountain Valley for erosion and sediment violations that occurred between September 19, 2019, and March 10, 2020); App. B at 2 to Weekly Report No. 156 (documenting May 4, 2020 slip that overtopped silt fence and allowed material to enter a stream) (attached as Ex. 15); W. Va. Dep't of Envtl. Prot. Complaint Investigation (Nov. 2019) (confirming that notice of violation for violations of water quality standards would be issued for a slip that resulted in sedimentation of Elliot Run) (attached as Ex. 16); Table 1 in Comments to the West Virginia Department of Environmental Protection by West Virginia Rivers Coalition et al. on the Section 401 Water Quality Certification for Mountain Valley Pipeline (June 22, 2021) (documenting cited violations in 2019) (attached as Ex. 17); W. Va. Dep't of Envtl. Prot., Notice of Violation No. W20-34-005-JTL (Sept. 16, 2020) (notice of violation to Mountain Valley concluding that erosion and sediment controls "were either not being implemented to reduce sheet flow rates and/or if present not being maintained") (attached as Ex. 18); W. Va. Dep't of Envtl. Prot., Notice of Violation No. W20-34-004-JTL (Aug. 17, 2020) (notice of violation to Mountain Valley for failure to "properly operate and maintain all systems of treatment and controls") (attached as Ex. 19); W. Va. Dep't of Envtl. Prot., Notice of Violation No. W20-34-003-JTL (Aug. 11, 2020) (notice of violation to Mountain Valley concluding that "Permittee failed to properly operate and maintain all systems of treatment and controls") (attached as Ex. 20); see also Ex. 21 (compilation of notices of violation and complaint investigations by DEP).

proposes to employ to reduce stream impacts during open-cut crossings will be implemented correctly or will function as designed.

2. MOUNTAIN VALLEY'S INTERPRETATION OF WHAT IS REQUIRED TO ESTABLISH A VIOLATION OF NARRATIVE WATER QUALITY STANDARDS IS INCORRECT.

Mountain Valley contends—notwithstanding the unambiguous language of West Virginia's narrative water quality standards that prohibit "[d]istinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks"¹³⁹ and "[d]eposits or sludge banks on the bottom"¹⁴⁰—that visible turbidity and sediment deposits do not violate West Virginia's narrative water quality standards unless they cause a significant adverse impact.¹⁴¹ To make that argument, Mountain Valley relies on *dicta* in *Ohio Valley Environmental Coalition v. Elk Run Coal Co.*¹⁴²

As an initial matter, the *Elk Run Coal Co.* court was attempting resolve an ambiguity it perceived in a *different* narrative water quality standard in West Virginia that prohibits "[m]aterials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life."¹⁴³ In the course of doing so, the court did state that a provision of W. Va. C.S.R. § 47-2-3.2.i that prohibits "no significant adverse impacts" to the aquatic ecosystem could "inform[] each of the specific subsections

¹³⁹ W. Va. C.S.R. § 47-2-3.2.a.

¹⁴⁰ Id. § 47-2-3.2.b.

¹⁴¹ Attachment 6 at 8 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁴² 24 F.Supp.3d 532 (S.D. W. Va. 2014).

¹⁴³ *Id.* at 544–45 and n.6.

listed before it."¹⁴⁴ Mountain Valley relies on that statement to contend that it can cause as much visible turbidity and as many sediment deposits on the bottoms of the streams it crosses, so long as it does not cause "significant adverse impacts." But the quote on which Mountain Valley relies is *dicta* because the federal district court was not required to construe the narrative water quality standards prohibiting visible turbidity or sediment deposits in order to reach its decision.¹⁴⁵ That is, Sections 3.2.a and 3.2.b were not at issue in that case. As a result, the case on which Mountain Valley relies is not a binding construction of Sections 3.2.a and 3.2.b.

Nor is the case particularly persuasive. If, as the language on which Mountain Valley relies contends, all of West Virginia's narrative water quality standards that set out the conditions not allowable in state waters are modified by the requirement in Section 3.2.i of "significant adverse impacts," such a construction would render Section 3.2.a and 3.2.b superfluous. That is, there would have been no need for West Virginia to expressly prohibit visible turbidity and sediment deposits that cause significant adverse impacts in Section 3.2.a and 3.2.b since such conditions are also prohibited by Section 3.2.i. In other words, all West Virginia would have had to do was enact Section 3.2.i. But that is not what it did. Rather, the state expressly prohibited visible turbidity and sediment deposits that cause

¹⁴⁴ *Id.* at 545.

¹⁴⁵ United States v. Pasquantino, 336 F.3d 231, 328–29 (4th Cir. 2003) (en banc) (noting that certain statement that are "not necessary to decide the case" are "pure and simple dicta, and therefore, cannot serve as a source of binding authority inn American jurisprudence").

interpretation that clauses, sentences, or words should not be rendered superfluous.¹⁴⁶ But that is precisely what Mountain Valley's proffered construction of Section 2.3.a and 2.3.b would do. Accordingly, it cannot be adopted.

Elk Run Coal Co. aside, Mountain Valley's argument is also contrary to the State of West Virginia's construction of its water quality standards, as evidenced by the dozens of notices of violation that it has issued to Mountain Valley for violating the state's water quality standards by causing conditions not allowable—such as visible turbidity and sediment deposits. One analysis concluded that, between May 9, 2018, and November 7, 2019, the West Virginia Department of Environmental Protection cited Mountain Valley **27 times** for violating Section 3.2.a and 3.2.b by causing conditions not allowable, *i.e.*, visible turbidity and sediment deposits.¹⁴⁷

In short, based on the plain language of West Virginia's narrative water quality criteria, and West Virginia's consistent enforcement of those criteria against Mountain Valley, visible turbidity and sediment deposits are prohibited by West Virginia's water quality standards without a requirement that such turbidity and sedimentation cause significant adverse impacts. Mountain Valley's legal arguments to the contrary are wrong. Consequently, it remains true that the open-cut, dry-ditch crossings proposed by Mountain Valley's permit application will impermissibly cause

¹⁴⁶ See, e.g., Espinal-Andrades v. Holder, 777 F.3d 163, 168 (4th Cir. 2015)

 $^{^{147}}$ Ex. 17, tbl. 1; Ex. 21 (compiling notices of violation issued by DEP for "conditions not allowable" (*i.e.*, water quality standards violations)).

violations of West Virginia's narrative water quality criteria by causing visible turbidity and sediment deposits downstream of crossing locations.

3. THE CORPS CANNOT RELY ON STATE STORMWATER REGULATIONS TO ENSURE COMPLIANCE WITH TIER 2 ANTIDEGRADATION REQUIREMENTS, WHICH ARE PART OF STATE WATER QUALITY STANDARDS

In their previous submissions, Commenters explained the type of review required to satisfy West Virginia and Virginia's antidegradation requirements for Tier 2 waters and the information needed to conduct such a review, and noted that Mountain Valley had failed to supply that information. In response, Mountain Valley claims that no such review is required for its "temporary" discharges of sediment and other pollutants, and that that its compliance with state stormwater regulations satisfies any Tier 2 antidegradation requirements.¹⁴⁸ Setting aside the fact that Mountain Valley has not demonstrated it is capable of complying with even those minimal requirements, Mountain Valley is wrong on the law.

Regardless of the nature of the discharge, Mountain Valley remains subject to the requirement that,

[w]here the quality of the waters exceeds levels necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is

¹⁴⁸ Attachment 6 at 68–70 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021) ("Compliance with the terms and conditions of the construction stormwater permitting programs in both Virginia and West Virginia will ensure that the Project will cause only minor, temporary water quality impacts.").

necessary to accommodate important economic or social development in the area in which the waters are located. 149

Even if Mountain Valley is not subject to the exact types of effluent limitations contemplated by the states' implementation procedures, it must nonetheless demonstrate that it will provide an equivalent level of protection sufficient to "maintain and protect" the existing level of water quality, absent a showing of socioeconomic necessity. It has not done so.

Mountain Valley claims that the procedures that West Virginia and Virginia have established to implement the states' respective antidegradation policies have "no practical relevance to short-duration construction activities" such as Mountain Valley's waterbody crossings, but rather apply only to "continuous wastewater discharges regulated by NPDES permits." ¹⁵⁰ But the policies and procedures themselves do not support this claim, which Mountain Valley appears to have fabricated out of whole cloth. In fact, Virginia's procedures state clearly that "[a]ny

¹⁴⁹ 40 C.F.R. § 131.12(a)(2). *See also* W. Va. C.S.R. § 47-2-4.1; 9 Va. Admin. Code § 25-260-30(A)(2).

¹⁵⁰ Attachment 6 at 69 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021) (discussing Virginia's policy); *see also id.* at 70 ("Similar to the Virginia program, the provisions that commenters rely upon to contend that individualized antidegradation review is required for each crossing draw on [West Virginia] rules written for measuring the potential impacts of NPDES-regulated discharges from point sources where the volumes and concentrations of flows and pollutants can be readily measured and controlled. Those provisions do not apply to and have never been applied to stormwater construction.). Commenters note that, were it not for a specific exemption granted to oil and gas operations (see 33 U.S.C. §§ 1342(l)(2), 1362(24)), Mountain Valley's project would be required to obtain an NPDES permit. Furthermore, as explained elsewhere, though Mountain Valley's activities may be "temporary," the impacts of those activities are anything but.

action undertaken by the Board, DEQ or its staff requires application of the antidegradation policy."¹⁵¹ Likewise, West Virginia's procedures mandate that "[a]ny regulated activity in a Tier 2 water segment is required to go through the Tier 2 antidegradation review process" if that activity would significantly degrade water quality, and expressly references water quality certifications. ¹⁵² Indeed, West Virginia's the regulations specifically list "degradation resulting from a single discharge over time" as one of the factors to be considered when determining whether Tier 2 review is required.¹⁵³

In an attempt to overcome the plain language of those policies and procedures, Mountain Valley claims that its compliance with state stormwater requirements is sufficient to prevent any lowering of water quality in Tier 2 waters, such that individualized review is unnecessary. For Virginia, Mountain Valley claims that compliance with the state's Annual Standards and Specifications ("AS&S") program ensures compliance with water quality standards, including antidegradation requirements.¹⁵⁴ For support, it points to the Fourth Circuit's decision upholding Virginia's previous Section 401 certification for Mountain Valley's *upland* activities,

¹⁵¹ Va. Dep't of Envtl. Quality, Guidance Memo No. 00-2011, Guidance on Preparing VPDES Permit Limits (Aug. 24, 2000), at 7 (emphasis added) (attached as Ex. 5 to Commenter's May 28, 2021 Comments).

¹⁵² W. Va. C.S.R. § 60-5-5.6.a, -5.6.f (emphasis added).

¹⁵³ *Id.* § 60-5.6.a.2.

¹⁵⁴ Attachment 6 at 69 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

which relied on that program to satisfy Tier 2 review requirements.¹⁵⁵ In response to comments on that certification, DEQ explained that it "determined that compliance with the Annual Standards and Specifications approval generally is sufficient to satisfy Tier 2 and Tier 3 antidegradation requirements because the controls will not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary."¹⁵⁶ Regardless of whether that determination was correct as to impacts from upland activities,¹⁵⁷ it is certainly inapplicable to the proposed impacts from the MVP's waterbody crossings, for several reasons.

First, DEQ made clear in that response to comments that it was relying on the AS&Ss to satisfy antidegradation review requirements only with respect to impacts from upland activities; its review of waterbody crossing impacts was limited to its certification of NWP 12.¹⁵⁸ Because Mountain Valley is now seeking an individual permit, the Corps may not rely on the previous certification of NWP 12, which did not involve project-specific review for compliance with water quality standards, including antidegradation requirements.

¹⁵⁵ Id. (citing Sierra Club v. State Water Control Bd., 898 F.3d 383 (4th Cir. 2018)).

¹⁵⁶ See Melanie Davenport, Va. Dep't of Envtl. Quality, Proposed 401 Water Quality Certification Mountain Valley Pipeline, LLC Certification No. 17-001 (Nov. 9, 2017), Attachment C: Response to Comments at C13.

¹⁵⁷ The widespread failures of Mountain Valley's erosion and sediment control efforts and attendant impacts to water quality suggest that DEQ's reliance on Mountain Valley's AS&Ss was not well-founded.

¹⁵⁸ *Id.* at C10 ("DEQ has already established reasonable assurance that activities in streams and wetlands (April 7, 2017 DEQ 401 Water Quality Certification of Corps NWP 12), and land disturbing activities (June 20, 2017 DEQ approval of Annual Standards and Specifications) will be conducted in a manner that will not violate applicable water quality standards.").

Second, DEQ's reliance on the AS&Ss was primarily founded on the fact that the AS&Ss were equally as protective as the measures to control stormwater pollution found in EPA's General Permit for Discharges of Stormwater from Construction Activities, which the Richmond Circuit Court determined was sufficiently protective to satisfy antidegradation requirements.¹⁵⁹ That permit, however, is focused entirely on stormwater from land disturbance, *i.e.*, the type of impacts associated with upland construction activities.¹⁶⁰ There is no connection between the protections in the Stormwater General Permit and the impacts of Mountain Valley's proposed dredge and fill activities within waterbodies.¹⁶¹ The Corps thus may not rely on any parallels between the AS&Ss and that permit to avoid its antidegradation review responsibilities here.

Third, the AS&Ss on their face provide no assurance that Mountain Valley's proposed waterbody crossings will not cause significant degradation to Tier 2 waters. In its application for a Section 401 certification from Virginia, Mountain Valley claims that the AS&Ss "outline procedures and practices that will be implemented for stream and wetland crossings," citing specifically to Sections 4.1, 4.2.6, 4.2.7, and 5.2.2.¹⁶² Section 4.1 consists of very general, noncommital statements as to how Mountain Valley will cross waterbodies, such as "MOUNTAIN VALLEY intends to

¹⁵⁹ *Id.* at C11.

¹⁶⁰ *Id.* at C11–12.

 $^{^{161}}$ Id. at C12 (listing relevant elements of the General permit, none of which relate to in-stream activities).

¹⁶² Mountain Valley Pipeline, LLC, Water Quality Certification Request to Virginia Department of Environmental Quality at 5 (March 4, 2021).

employ one of the Utility Stream Crossing (VESCH STD & SPEC 3.25) methods to complete open water crossings. The method selected during planning and surveying may need to be altered based on field conditions at the time of construction."¹⁶³ They say nothing about how sediment from the trench through the waterbody, as opposed to sediment from upland areas, will be controlled. There is no analysis whatsoever showing that the measures Mountain Valley intends to use, to the extent that they are even specified, will prevent a significant degradation of water quality in the numerous Tier 2 streams to crossed by the MVP. In the face of the robust body of scientific literature discussed in Commenters' previous submissions showing that degradation of waterbody crossings have a high likelihood of causing significant degradation of waterbodies, it would be arbitrary for the Corps to rely on Mountain Valley's AS&Ss to avoid its Tier 2 antidegradation review responsibilities.

Mountain Valley's rationale for why it need not provide information necessary for a site-specific Tier 2 antidegradation review in West Virginia fails for similar reasons. There, Mountain Valley relies on West Virginia's Oil & Gas Construction Stormwater General Permit and the West Virginia Department of Environmental Protection's ("DEP") discussion of antidegradation requirements in a "Responsiveness Summary" associated with Mountain Valley's registration under

¹⁶³ Mountain Valley, Annual Standards and Specifications for Projects in Virginia April 2017 (rev. Mar. 2021), *available at https://www.mountainvalleypipeline.info/news-info*. The other sections cited are even more general and provide no assurance that Mountain valley's activities will not lower water quality.

that permit.¹⁶⁴ But, as with the EPA construction stormwater permit, the West Virginia permit does not and cannot authorize in-stream activities and the discharge of dredged and fill materials. And DEP's vague descriptions of crossing techniques and gestures towards enhanced best management practices in upland areas cannot support a finding by the Corps that the discharges associated with Mountain Valley's crossings will lead to no lowering of water quality given the robust body of contrary evidence that Commenters have provided.¹⁶⁵ Indeed, although DEP includes some discussion of antidegradation review in the 2017 "Responsiveness Summary" on which Mountain Valley relies, the agency expressly disclaims any obligation to satisfy antidegradation requirements when authorizing a project pursuant to its Construction Stormwater General Permit.¹⁶⁶ Compliance with that permit thus in no way ensures compliance with West Virginia's Tier 2 antidegradation requirements.

4. MOUNTAIN VALLEY'S BASELINE DATA MUST INCLUDE BENTHIC INFORMATION AND MUST BE SUBJECTED TO MEANINGFUL PUBLIC NOTICE AND COMMENT.

In response to comments by EPA and others, Mountain Valley purports to be

gathering additional baseline data for the streams and wetlands it will impact.

¹⁶⁴ Attachment 6 at 70 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁶⁵ In addition to lacking factual support, DEP's conclusions in the November 1, 2017 Responsiveness Summary are more than four years old. As explained in Section III.B.1, *infra*, significant information that has come to light since that time precludes any reliance on DEP's stale conclusions, particularly its determination that Mountain Valley's activities will have only short-term impacts.

¹⁶⁶ Attachment 6-18 at 78 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021) ("Further, specific to West Virginia law pursuant to per Section 3.7 of the Antidegradation Rule 60CSR5, a Tier 2 review is not required for general permit registrations. Section 3.7 states that

Specifically, Mountain Valley claims to have devised a "Baseline Assessment Plan" under which it will gather pre-crossing data at each stream and wetland impact, "including all data necessary to calculate the West Virginia Stream Wetland Valuation Metric." ¹⁶⁷ Among the data necessary to complete the West Virginia Stream Wetland Valuation Metric are benthic stream condition index data to "[i]ndicate the biological condition of the stream" such as West Virginia Stream Condition Index or Virginia Stream Condition Index scores.¹⁶⁸ It is unclear from the public records currently available to the Commenters whether Mountain Valley has provided the data gathered under its Baseline Assessment Plan to the Corps.¹⁶⁹

Because the baseline data Mountain Valley touts is not available to the public at this time, it is impossible for the Commenters to determine whether it is sufficient.

^{&#}x27;On or after July 2, 2001, the effective date of these implementation procedures, new and reissued WV/NPDES general permits will be evaluated to consider the potential for significant degradation as a result of the permitted activity. Regulated activities that are granted coverage by a WV/NPDES general permit will not be required to undergo a Tier 2 antidegradation review as part of the permit registration process.' Although EPA has not approved this section for use in federal Clean Water Act NPDES permits the Oil & Gas Construction Stormwater General Permit is a stateonly permit issued under the authority of the WV Water Pollution Control Act. As part of 60CSR5, which was passed by the Legislature and signed into law by the Governor in 2008, it is in effect and the law for state only permits."); *id.* at 7 ("DEP's authority to permit this particular activity is derived from state code, as oil & gas construction activity is exempt from federal NPDES permitting.").

¹⁶⁷ Attachment 6 at 8 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁶⁸ W. Va. Interagency Review Team, The West Virginia Stream and Wetland Valuation Metric at 4 (Feb. 2010), *available at* https://www.lrh.usace.army.mil/Portals/38/docs/regulatory/West%20Virginia%20Str eam%20and%20Wetland%20Valuation%20Metric%20Instructions.pdf.

¹⁶⁹ Attachment 6 at 9 n.3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

Moreover, the baseline conditions of the streams and wetlands that would be affected by the MVP is pivotal data for the Corps' factual determinations under the Section 404(b)(1) Guidelines.¹⁷⁰ Accordingly, the Corps must solicit public comment on those supplemental data.¹⁷¹

The Corps cannot make a lawful decision on Mountain Valley's application before it has an opportunity to review the baseline data with an eye towards compliance with water quality standards. And if that data does not include benthic stream conditions index scores for each waterbody, then it would remain incomplete and insufficient to allow the Corps to make any predictive judgment about compliance with water quality standards.¹⁷²

5. CURRENT REAL-WORLD CONDITIONS AT MOUNTAIN VALLEY'S COMPLETED OPEN-CUT CROSSING OF THE NORTH FORK OF THE ROANOKE RIVER CONTRADICT MOUNTAIN VALLEY'S PREDICTIONS THAT ITS PROPOSED OPEN-CUT CROSSINGS WILL HAVE ONLY SHORT-TERM AND MINIMAL WATER QUALITY EFFECTS.

Mountain Valley's predictions of short-term and minimal impacts from its open-cut, dry-ditch crossings cannot be squared with the actual observed effects of its completed crossings. The Corps cannot issue Mountain Valley's requested permit without giving close examination to Mountain Valley's already completed crossings.

 $^{^{170}}$ See, e.g., 40 C.F.R. § 230.11(a) (physical substrate determinations); id. § 230.11(c) (suspended particulate/turbidity determinations); id. § 230.11(e) (aquatic ecosystem and organism determinations).

 ¹⁷¹ Ohio Valley Envtl. Coal., 674 F.Supp.2d at 804–814; Marsh, 568 F.Supp. at 994.
 ¹⁷² Ohio Valley Envtl. Coal., Inc., 716 F.3d at 124–27.

Take for example Mountain Valley's crossing S-G36. In Virginia, Mountain Valley constructed its open-cut, dry-ditch crossing of S-G36—the North Fork of the Roanoke River—on July 19, 2018.¹⁷³ Mountain Valley's inspectors reported problems with sedimentation and turbidity from the pump-around outlet.¹⁷⁴ Citizen inspectors, trained by Trout Unlimited in turbidity monitoring, documented sediment deposits and consistent turbidity increases downstream from the crossing location throughout their sampling period from July 19, 2018, through September 9, 2018.¹⁷⁵ Indeed, one citizen inspector, responding to a report of a sudden increase in turbidity that morning from a riparian landowner on the North Fork of the Roanoke River, videotaped conditions at monitoring locations upstream and downstream of the crossing location July 19, 2018—the day of the crossing's construction.¹⁷⁶ Stream

¹⁷³ Mountain Valley Pipeline, Visual Site Inspection Report #4841 (July 19, 2018) (attached as Ex. 22). Mountain Valley failed to include its crossing of S-G36 in its table of completed crossings. Application, tbl. 10.

 $^{^{174}}$ Id.

¹⁷⁵ Elizabeth Struthers Malbon, Changes in Turbidity of the North Fork of the Roanoke River in Catawba Valley After the Start of Construction of the Mountain Valley Pipeline (2018) (attached as Ex. 23). DEQ's water quality monitoring team received the Malbon report on the North Fork Roanoke, and wanted to examine it for "discernible patterns of increase," but was frustrated in doing so because it did not have access to the dates of specific construction activities in the watershed. Email from Andrew Garey, Va. Dep't of Envtl. Quality, to Sandra Mueller, Va. Dep't of Envtl. Quality, et al., Re: Turbidity and pipelines (Sep. 14, 2018) (attached as Ex. 24). Because the Corps can discern from Ex. 22 that the crossing was completed on July 19, 2018, it can associate the increased turbidity observed by Malbon with the crossing activity.

 $^{^{176}}$ Video of the downstream location from July 19, 2018 is available at https://drive.google.com/file/d/156heeWKyHv64LgOfkWiD2kD-_vV2-

MQb/view?usp=sharing. Video of the upstream location from July 19, 2018, is available at https://drive.google.com/file/d/12FYLqlqy1cj8jbu8pHlBAvC7qoqwbjKQ

conditions at the upstream location were clear, but at the downstream location, the water was noticeably turbid and there was fine sediment coating rocks and stream vegetation during the crossing construction.

Those sedimentation conditions have persisted. Another citizen monitor, who has frequently visited the monitoring location downstream of the N. Fork of the Roanoke River crossing, regularly observes sediment deposits at that location to this day.¹⁷⁷ That citizen monitor—who visited the downstream monitoring location as recently as November 12, 2021—reports that if she wades on the previously cobbled streambed, she now kicks up sediment plumes with each step.¹⁷⁸ Her narrative reports are corroborated by pictures taken at that site on November 12, 2021, which show "[w]hat was once a cobbled streambed . . . now embedded and clogged with sediment." ¹⁷⁹ Those photographs and videos constitute real-world evidence of sedimentation effects persisting downstream of a completed MVP open-cut, dry-ditch crossing for **nearly 40 months after the completion of the crossing.** Such evidence categorically refutes Mountain Valley's contention that, "[e]xcept for shortterm and localized increases in suspended sediment and turbidity in the water

[/]view?usp=sharing. The videos are also in the Corps' administrative record as submissions from the videographer, Bob Massingale. Ex. 25.

¹⁷⁷ Comments by Elizabeth Struthers Malbon on Mountain Valley Pipeline, LLC's Application to the U.S. Army Corps of Eng'rs at 2–6 (Nov. 2021) (attached as Ex. 26).
¹⁷⁸ Id. at 2, 6.

 $^{^{179}}$ Id. at 3–5.

quality, material secondary impacts to downstream hydrogeomorphology, sedimentation, compaction, and embeddedness are not expected."¹⁸⁰

Bizarrely, Mountain Valley responds to the evidence of its failure to protect the North Fork of the Roanoke River as a "good example of the system working as intended." ¹⁸¹ Mountain Valley acknowledges that it failed to properly control sedimentation during the crossing of the North Fork of the Roanoke River, but insists that the sedimentation observed was "minor" and "temporary." ¹⁸² That characterization is contradicted by the record, which shows downstream sedimentation persisting for almost 3.5 years. Because sediment deposits and turbidity are harmful to aquatic life and interfere with the aquatic life use by smothering benthic macroinvertebrates, what the citizen inspectors observed constitutes violations of Virginia's narrative water quality criterion.¹⁸³

In response to a request for information from the Corps, Mountain Valley has apparently performed a limited investigation to assess the physical condition of its

¹⁸⁰ Attachment 6 at 15–16 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁸¹ *Id.* at 66.

 $^{^{182}}$ *Id.* at 67.

¹⁸³ See 9 Va. Admin. Code § 25-260-20(A) (prohibiting "waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of [state] water or which are inimical or harmful to human, animal, plant, or aquatic life"); *id.* § 25-260-10(A) (designating all waters of the State for "the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them").

completed crossings and submitted that information to the Corps.¹⁸⁴ However, that information falls woefully short of the physical, biological, and chemical assessments necessary to monitor for impacts from crossings.¹⁸⁵ That defect may stem in part from the Corps' information request, which did not clearly seek evidence of physical and biological conditions in the reaches downstream of completed crossings.¹⁸⁶ For example, Mountain Valley did not perform any benthic sampling to quantify the present biological conditions at already-crossed streams.¹⁸⁷ Photographs of stream crossings documenting their *form* cannot establish whether those streams continue to serve their prior *functions*—such as the propagation of aquatic life. Moreover, even the physical assessments fall short of what should be done to determine crossing impacts because they did not include any quantification or evaluation of embeddedness or sediment deposits *downstream* of crossing locations.¹⁸⁸

¹⁸⁴ See generally Attachment 2 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁸⁵ Lévesque & Dubé (2007) at 405.

¹⁸⁶ Letter from Teresa Spagna, U.S. Army Corps of Eng'rs, to Mountain Valley Pipeline LLC, Request No. 2 (Aug. 31, 2021).

¹⁸⁷ See generally Attachment 2 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).
¹⁸⁸ Id.

6. MOUNTAIN VALLEY STILL HAS NOT SUFFICIENTLY ADDRESSED THE LITERATURE-PREDICTED EFFECTS ON STREAMS THAT IT WILL CUT MULTIPLE TIMES OR THE CUMULATIVE EFFECTS OF ITS HUNDREDS OF PROPOSED CROSSINGS.

In response to comments by EPA and others on the potential for permanent effects on streams and watersheds cut multiple times by the MVP, Mountain Valley provided some quantification of those impacts, but little qualitative analysis,¹⁸⁹ let alone enough to rebut the science establishing the potential for permanent effects.¹⁹⁰ Mountain Valley asserts that, even if all the impacts to streams like Teels Creek were added together, those effects would be less than the 0.5-acre threshold for approval under Nationwide Permit 12.¹⁹¹ Mountain Valley has not identified the correct question, let alone answered it. Instead, it raises a red herring.

Stating whether the aggregated impacts on an individual stream exceed or comply with the 0.5-acre threshold for the use of Nationwide Permit 12 is not a proxy for determining the stream's capacity to recover from multiple crossings in close proximity for many reasons. For example, meeting the 0.5-acre threshold is not sufficient for Nationwide Permit 12 approval. Rather, a district engineer must also examine a Nationwide Permit 12 preconstruction notice to ensure that the proposed activity will not "result in more than minimal individual or cumulative adverse

¹⁸⁹ Attachments 4 and 6-2 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

¹⁹⁰ Lévesque & Dubé (2007) at 406–07.

¹⁹¹ Attachment 6 at 3 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

environmental effects[.]"¹⁹² In making that determination, the district engineer must consider the direct and indirect effects of the authorized activity, as well as

site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects . . . , the importance of the aquatic resource functions to the region . . . , and mitigation required by the district engineer.¹⁹³

In other words, to be eligible for Nationwide Permit 12, an activity must do more than meet certain thresholds; it must avoid causing more-than-minimal adverse impacts, and whether an activity does so is resolved based on site-specific analysis. And Mountain Valley's prior—and since-invalidated—verifications under Nationwide Permit 12 are not conclusive evidence that the project's impacts would fall below that threshold in reality given Mountain Valley's track record and its manifest credibility problems. As a result, Mountain Valley is right back where it started: it has not presented information that could allow the Corps to conclude that the streams and wetlands it will cross multiple times can withstand those multiple crossings and avoid the permanent impacts predicted by the literature.¹⁹⁴

Moreover, Mountain Valley's presentation of the potential cumulative effects of its project on a watershed scale remain half-baked based on the information

¹⁹² 86 Fed. Reg. 2744, 2874 (Jan. 13, 2021); 82 Fed. Reg. 1860, 2004 (Jan. 6, 2017).

¹⁹³ 86 Fed. Reg. at 287; 82 Fed. Reg. at 2005.

¹⁹⁴ Lévesque & Dubé (2007) at 406–07.

currently available. Mountain Valley has submitted to the Corps a "[s]upplemental evaluation of cumulative impacts within each HUC12 watershed." ¹⁹⁵ Mountain Valley concedes that the document is incomplete, asking the Corps to "note that this document only addresses impacts associated with the Project and not other potential impacts that may have occurred in the listed 12-digit HUC (HUC 12) watersheds."¹⁹⁶ And Mountain Valley told the Corps in its cover letter accompanying the HUC 12 attachment that "Mountain Valley is working with the Corps to identify proposed and completed discharges that are not related to the Mountain Valley project that may be relevant to an assessment of cumulative effects (40 C.F.R. § 320.11(g)) and will supplement this response as necessary." ¹⁹⁷ Because information related to the cumulative effects of the proposal are pivotal data in the Corps' Section 404(b)(1) Guidelines analysis, the Corps must solicit public comment on any supplemental cumulative effects information on which it relies.¹⁹⁸

Even those portions of the HUC 12 cumulative effects analysis that are provided are inadequate. They are largely quantitative in nature, and present conclusions without any scientific support. For example, the analysis concludes that "the Project will have negligible impacts in each 12-digit watershed," based in part on calculations of "the percentage of stream impacts in the 12-digit HUC watersheds

¹⁹⁵ Attachment 4 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).
¹⁹⁶ Id. at 1.

¹⁹⁷ Letter from Todd Normane to Adam Fannin at 2 (Oct. 11, 2021).

¹⁹⁸ Ohio Valley Envtl. Coal., 674 F.Supp.2d at 804–814; Marsh, 568 F.Supp. at 994.

with aquatic resources in the Project area."¹⁹⁹ But the report does not cite any scientifically defensible thresholds of watershed percentages that can be affected before adverse impacts are expected. Moreover, the report is devoid of any qualitative analysis of the capacity of the watersheds in question to bounce back from the predicted impacts.

In sum, based on the scientific literature establishing potentially permanent impacts to watersheds from multiple trenched crosses in the same watershed, and the silence of Mountain Valley's application on those issues, the Corps must deny the pending application.²⁰⁰

C. MOUNTAIN VALLEY'S RESTORATION PLANS IMPERMISSIBLY FOCUS SOLELY ON STRUCTURE AND IGNORE FUNCTION.

In its response to public comments, Mountain Valley insists that the scientific

literature showing that restoration of stream form does little to restore stream

¹⁹⁹ Attachment 4 at 29 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

²⁰⁰ Also missing from Mountain Valley's application is any discussion of the cumulative impacts that would result from the combination of Mountain Valley's upland activities and proposed stream crossings. Mountain Valley's upland activities have already led to substantial sediment deposits along streams in its path. One example of an affected stream is the Blackwater River. Virginia DEQ has documented deterioration of baseline conditions at that location since construction began. Specifically, DEQ's water quality monitoring team authored several reports on elevated turbidity between June 2018 and August 2019, and concluded that the fact that the downstream station was detecting higher turbidity levels than the upstream indicates that the source of the turbidity was disturbance within the watershed (i.e., upland pipeline construction). See Exs. 9, 10, & 11.

As a result, the Corps must consider whether the locations that would be affected by sedimentation from Mountain Valley's proposed open-cut stream crossings have also been affected by sedimentation and runoff from Mountain Valley's upland activities and determine the cumulative effects of those discharges on water quality standards.

function "has little relevance" to its project.²⁰¹ In Mountain Valley's view, its impacts will be to "discrete sections of streams," and its objective is simply to restore stream function to what it was before Mountain Valley blasted through the streambed.²⁰²

Mountain Valley demonstrates the tunnel vision common to the view that functional restoration will follow physical restoration. Mountain Valley ignores that its stream-crossing locations are not isolated ecosystems (i.e., discrete sections of stream), but rather are part of a functioning whole. The success of its restoration efforts will turn on a number of factors—including the water quality effects on the streams in question from upland construction or multiple cuts. The scientific literature recognizes that Mountain Valley's error is a common one, and one that "comes in part from failing to consider local habitat restoration within a broader spatial and temporal context (or scope)."²⁰³ Factors that may hinder the biological response to Mountain Valley's restoration efforts include "(i) barriers to dispersal of biota, (ii) temporal changes in habitat use, (iii) introduced species, (iv) long-term or large-scale driving processes, and (v) inappropriate scales of restoration." ²⁰⁴

²⁰¹ Attachment 6 at 89 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

 $^{^{202}}$ Id.

²⁰³ Bond & Lake, Local Habitat Restoration in Streams: Constraints on the Effectiveness of Restoration for Stream Biota, ECOLOGICAL MGMT. & RESTORATION 193, 194 (2003) (attached as Ex. 27).

 $^{^{204}}$ Id.

Accordingly, Mountain Valley must analyze those issues at each crossing location to determine their effect on its restoration plans.²⁰⁵

D. MOUNTAIN VALLEY HAS NOT REMEDIED THE INADEQUACIES EPA IDENTIFIED IN ITS COMPENSATORY MITIGATION PLANS.

In its May 27, 2021 comments, EPA Region 3 concluded that, "[d]ue to the significant amount of temporary impacts caused by this project and the potential for secondary and cumulative effects," it was "unclear if the proposed mitigation will be sufficient to offset the loss of function of the impacted and downstream aquatic resources."²⁰⁶ In addition, EPA laid out two specific deficiencies in Mountain Valley's compensatory mitigation plan.²⁰⁷ Although Mountain Valley has made some attempt to respond to the deficiencies identified by EPA, it has not remedied the deficiencies.

First, EPA noted that

Section 332.3(b)(1) of the 2008 Mitigation Rule states that the required compensatory mitigation should be located within the same watershed as the impact site and should be located where it is most likely to successfully replace lost functions and service. To ensure a timely and functional replacement of aquatic resources in the impacted watershed, EPA recommends using a mitigation bank whose primary service area encompasses the project locations. Additionally, basic information about the work performed at the bank, how the credits were generated (e.g. restoration, enhancement, preservation, etc.), and the credit type should be provided to ensure adequate compensation for the proposed impacts.²⁰⁸

Second, EPA states that

²⁰⁸ *Id.* at 8–9.

 $^{^{205}}$ Id. (concluding that the key issues must considered "early in the planning and goal setting stages of restoration").

²⁰⁶ Lapp Letter at 8.

²⁰⁷ Id. at 8–9.

Should a bank be used whose secondary service area (SSA) includes the project, EPA recommends that the applicant provide the Corps a narrative documenting how the use of that bank is offsetting the project impacts since SSAs are geographically large and sometimes drain to different river basins.²⁰⁹

Mountain Valley's response to both comments on October 15, 2021, states that "[i]nformation about the sources of proffered mitigation credits is included in the *Supplemental Credit Determination Methodology*. Refer specifically to Section 3.0 and Exhibit A of that document."²¹⁰

But those sections of the Supplemental Credit Determination Methodology which were only recently made available to Commenters, as addressed in Section I.E.5 below—offer an incomplete response. First and foremost, this response does not at all address EPA's explicit concern that the proffered mitigation would not be adequate to offset temporary, secondary, or cumulative impacts. Section 3.0, and the tables it refers to, list the mitigation credits that have been purchased alongside the number of credits that Mountain Valley claims are required. Of course, the recitation of these figures does not constitute a response to EPA's concern that this mitigation may not be sufficient to offset all of the negative impacts of the project. Exhibit A of the Supplemental Credit Determination Methodology states in Section 1.0 that

Mountain Valley has purchased credits from several different banks and contributed to one In-Lieu-Fee Fund (ILF). In each case, the proposed impact is within the [Interagency Review Team]-approved primary or secondary service area of the relevant bank. The following sections provide additional information on the mitigation banks that have supplied credits for permanent and conversion impacts associated with

 $^{^{209}}$ *Id.* at 9.

²¹⁰ Attachment 6 at 17 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

the Project and/or are expected to be utilized for temporal losses associated with temporary impacts.

Basically, this response amounts to a statement that the state interagency review teams approved the service areas. However, that limited response does not even assert that the mitigation is in the location, as EPA stated it should be, "where it is most likely to successfully replace lost functions and service."²¹¹ Furthermore, for the substantial number of credits purchased in secondary service areas ("SSAs"), Mountain Valley has not, as EPA recommended, "provide[d] the Corps a narrative documenting how the use of that bank is offsetting the project impacts[.]" ²¹² Mountain Valley's references to the aforementioned sections of its *Supplemental Credit Determination Methodology* do not provide an adequate response to EPA's concerns dating back to May of 2021.

Besides EPA's lack of confidence in the adequacy of Mountain Valley's mitigation and its identification of specific inadequacies in the application that have not been remedied, there is an additional reason to doubt Mountain Valley's efforts to compensate for its project's negative impacts on streams and wetlands: its lack of respect for protecting the very mitigation bank sites from which it purchases credits. Mountain Valley's response to a FERC Environmental Information Request reveals that it plans to cross the Kincheloe Mitigation Bank; thus, it will dig up wetlands that

²¹¹ Lapp Letter at 8–9.

 $^{^{212}}$ *Id.* at 9.

were previously used to mitigate the impacts of a different project.²¹³ Mountain Valley justifies the creation of a 50-foot permanent right-of-way across the Kincheloe Mitigation Bank, thus making it unavailable for mitigation credit purposes, by stating that its impacts on this wetland will be temporary.²¹⁴ But Kincheloe Mitigation Bank has stated that the right-of-way will be permanently unavailable as a credit, rendering it a permanent loss.²¹⁵ This is a common refrain that takes us back to EPA's concern that Mountain Valley's compensatory mitigation will not offset all of the permanent, temporary, secondary, and cumulative impacts of the project.

E. MOUNTAIN VALLEY'S RECENTLY SUBMITTED DRAFT "MITIGATION FRAMEWORK" IS INSUFFICIENT TO ENSURE THAT POTENTIAL ADVERSE IMPACTS ARE MINIMIZED.

The Section 404(b)(1) Guidelines prohibit the issuance of a Section 404 permit "unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." ²¹⁶ On September 20, 2021, Mountain Valley submitted to the Corps a draft document entitled "Comprehensive Stream and Wetland Monitoring, Restoration, and Mitigation Framework" ("Draft Mitigation Framework").²¹⁷ That document was not

²¹³ Mountain Valley Pipeline, LLC, Response to Post-Draft Environmental Impact Statement Environmental Information Request #2 Issued March 20, 2017, at 32 (attached as Ex. 28).

 $^{^{214}}$ Id.

 $^{^{215}}$ Id.

²¹⁶ 40 C.F.R. § 230.10(d).

²¹⁷ Potesta & Assocs., Inc. et al., Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework: Mountain Valley Pipeline Project *Draft* (Sept. 20, 2021) [hereinafter "Draft Mitigation Framework"].

made available to the Commenters for review until its partial release in a November 10, 2021 response to a Freedom of Information Act request.²¹⁸

Because it was only made available to them on November 10, 2021—and then only partially—Commenters have not had an adequate opportunity to evaluate the document and comment on it.²¹⁹ Some Commenters requested an extension of the public comment period to allow for meaningful public comment on the Draft Mitigation Framework, ²²⁰ but that request was not granted. Nonetheless, even Commenters' rushed review reveals that the Draft Mitigation Framework is insufficient to ensure that the MVP's adverse impacts are minimized for multiple reasons.

1. MOUNTAIN VALLEY'S BASELINE ASSESSMENT PLAN IS INSUFFICIENT.

The Baseline Assessment Plan included in the Draft Mitigation Framework ²²¹

is flawed in a number of ways.

 $^{^{218}}$ Importantly, Appendix B – a "Restoration Work Plan" – was omitted from the release. Therefore, Commenters have not had an opportunity to review that document.

²¹⁹ Since the Draft Mitigation Framework was produced only to Commenters in response to a Freedom of Information Act Request, other interested parties have had no opportunity to perform even a cursory review of it.

²²⁰ Letter from Derek Teaney, Appalachian Mountain Advocates, to Adam Fannin, U.S. Army Corps of Eng'rs, Re: Request for (1) Extension of Deadline for Public Comments on Mountain Valley Pipeline, LLC's Application for a Department of the Army Permit Under Section 10 of the Rivers and Harbors Act of 1889 and Section 404 for the Clean Water Act to at Least December 10, 2021 and (2) Issuance of Supplemental Public Notices for that Application as Appropriate; Public Notice Nos. LRH-2015-00592-GBR, LRP-2015-798, NAO-0898 (Nov. 11, 2021) (attached as Ex. 29).

²²¹ Draft Mitigation Plan, App. A.
First, it contemplates only desktop reviews to establish baseline conditions in the wetlands that would be impacted by the MVP.²²² But the structure and function of impacted wetlands, and their baseline conditions, cannot be determined from a desktop review.²²³ Rather, a field evaluation is required. For example, one crucial metric on which the success or failure of Mountain Valley's restoration plan will be measured is the wetland area. That metric cannot be determined with either precision or accuracy from a desktop review.

Second, Mountain Valley has built in to its Baseline Assessment Plan many "outs" to allow it to excuse itself from gathering baseline data. The Draft Mitigation Framework asks the Corps to "[p]lease note that it may not be possible to collect these data at every crossing."²²⁴ And the Baseline Assessment Plan excuses Mountain Valley from collecting data "where impracticable or unsafe" based on weather or flow conditions.²²⁵

Mountain Valley has no excuse for not gathering needed baseline data. It has had nearly unfettered access to these sites for almost four years, and frequently had

²²⁵ *Id.* at 7, 10.

 $^{^{222}}$ *Id.* at 1.

²²³ See, e.g., U.S. Fish & Wildlife Serv., Wetland Characterization and Landscapelevel Functional Assessment for Long Island, New York at 6 (Feb. 2015). ("Functional assessment of wetlands can involve many parameters. Typically, such assessments have been done in the field on a case-by-case basis, considering observed features relative to those required to perform certain functions or by actual measurement of performance. The preliminary assessments based on remotely sensed information do not seek to replace the need for field evaluations since they represent the ultimate assessment of the functions for individual wetlands.").

 $^{^{224}}$ *Id.* at 3.

access to survey its proposed route before that time. The company cannot now be allowed to make a minimal effort to obtain data, encounter an adverse weather or flow event, and shrug. If Mountain Valley is unable to obtain baseline data, such as baseline information on the benthic macroinvertebrates at crossing locations before the relevant sampling periods closed in the fall of 2021,²²⁶ **then both application review** and **permit issuance must wait until Mountain Valley obtains such data when the sampling window reopens in the spring of 2022**.²²⁷ Mountain Valley cannot be rewarded for delaying obtaining even basic information about the streams it wants to trench through until the last minute. Any delay caused by an absence of information is solely the fault of Mountain Valley, especially given the number of years it has had to gather the necessary data.

Third, the geographic scope of Mountain Valley's Baseline Assessment data is impermissibly narrow. To understand the potential adverse impacts of its proposed open-cut crossings, baseline information about stream reaches *downstream* of crossing locations is required. But Mountain Valley only proposes to obtain baseline data within its limits of disturbance.²²⁸ That limits the Corps' ability to understand baseline conditions downstream from the crossing locations, where sedimentation impacts are likely to occur according to the scientific literature. Obtaining baseline

²²⁷ The spring sampling period will reopen on April 15, 2022, in West Virginia, and will reopen on March 1, 2022, in Virginia. *Id*.

 $^{^{226}}$ The fall sampling period closed on October 15, 2021, in West Virginia, and will close on November 30, 2021, in Virginia. *Id.* at 9.

 $^{^{228}}$ Id. at 7.

data on downstream locations may present greater challenges than obtaining the same data within its easements, but if Mountain Valley wants to trench through the streams in its path, it must find a way to obtain data on the condition of those streams.

2. MOUNTAIN VALLEY'S PERFORMANCE STANDARDS FOR RESTORATION ARE TOO LAX.

Appendix C to the Draft Mitigation Framework purports to set out performance standards to assess Mountain Valley's restoration efforts.²²⁹ The Performance Standards are flawed in the following ways.

First, Mountain Valley's proposed Performance Standard for specific conductivity is that "specific conductivity must be between 0-1,500 μ S/cm, the typical range of freshwater resources in the ecoregion, to meet the performance criteria."²³⁰ That performance standard is wholly unacceptable. Although there may not be numeric criteria for conductivity in West Virginia or Virginia, EPA has determined that the appropriate aquatic-life conductivity benchmark for streams in the central Appalachian Region is 300 μ S/cm.²³¹ In developing the 300 μ S/cm benchmark, EPA used its standard method for deriving water quality criteria.²³² Under that method, EPA sets the benchmark at the level needed to protect 95% of macroinvertebrate

²²⁹ Draft Mitigation Plan, App. C.

 $^{^{230}}$ *Id.* at

²³¹ See generally U.S. E.P.A., A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams (Mar. 2011) (attached as Ex. 30)[hereinafter "Benchmark"].

 $^{^{232}}$ Id. at xiv.

species. Figure 8 in the Benchmark graphs the species sensitivity distribution and shows that extirpation increases as conductivity increases.²³³

Accepting a conductivity measurement of 1500 μ S/cm as evidence of successful restoration is scientifically indefensible. Approximately 40% of macroinvertebrate species are lost at a conductivity of 1500 μ S/cm.²³⁴ Conductivity levels "> 1200 μ S/cm would have major restructuring effects on benthic communities." ²³⁵ EPA determined that the probability of biological impairment, based on a failing stream condition index score, is 59% at 300 μ S/cm and 72% at 500 μ S/cm.²³⁶ Research since the development of the Benchmark has shown that 85% of streams with specific conductivity measurements between 1001 and 1500 μ S/cm had failing WVSCI scores, and 97% of streams with specific conductivity measurements greater than 1500 μ S/cm had failing WVSCI scores.²³⁷

Mountain Valley's restoration should not be considered acceptable unless the specific conductivity of the affected stream is $300 \ \mu\text{S/cm}$ or less based on EPA's peer-reviewed Benchmark. If specific conductivity levels exceed $300 \ \mu\text{S/cm}$ post-

²³⁶ Benchmark at A-36.

²³³ *Id.* at 18.

 $^{^{234}}$ Id.

²³⁵ William H. Clements & Chris Kotalic, Effects of Major Ions on Natural Benthic Communities: An Experimental Assessment of the U.S. Environmental Protection Agency Aquatic Life Benchmark for Conductivity, 35 FRESHWATER SCI. 126 (2016) (attached as Ex. 31).

²³⁷ Ryan S. King, Expert Comment on the Principal Cause of Biological Impairment in Stillhouse Branch Below Fola Surface Mine No. 3, Clay County, West Virginia tbl. 1 (Jan. 16, 2014) (attached as Ex. 32).

construction, then further restoration actions must be required of Mountain Valley, unless it can establish that conductivity levels exceeded that action threshold prior to its initiation of construction in 2017.

Second, the so-called "performance standards" for rapid bioassessment protocol scores, benthic macroinvertebrate scores, and hydrogeomorphic assessment scores are not standards at all.²³⁸ Unlike the other performance standards that set objective, measurable criteria, here Mountain Valley makes no commitments to meet any particular threshold. Rather, Mountain Valley sets aspirational goals, for which determination of whether the results are acceptable will be "based on the application of best professional judgment and expertise."239 That is unacceptable. Performance standards must be objective and enforceable, or they are not standards at all. The "standards" proposed by Mountain Valley for rapid bioassessment protocol scores, benthic macroinvertebrate scores, and hydrogeomorphic assessment scores are insufficient as performance standards. Mountain Valley should be required to ensure that the post-construction rapid bioassessment protocol scores, benthic macroinvertebrate scores, and hydrogeomorphic assessment scores meet or exceed the baseline metrics. Only then would its restoration efforts be successful.

²³⁸ Draft Mitigation Plan, App. C at 7–8.

 $^{^{239}}$ Id.

3. MOUNTAIN VALLEY'S MONITORING PLAN WILL NOT FULLY CAPTURE THE EFFECTS OF ITS ACTIVITIES.

Appendix D to the Draft Mitigation Framework purports to set out Mountain Valley's Monitoring Plan.²⁴⁰ That plan is flawed in the following ways.

First, Mountain Valley shirks its duty to monitor the effects of its crossings on downstream locations by limiting its monitoring plans to the width of its easement.²⁴¹ As with downstream baseline data, downstream monitoring data is essential to assessing the impacts of Mountain Valley's stream crossings. If the company wants to cross through the streams in its path, it must gather monitoring data. If it cannot do so, it cannot trench through streams.

Second, Mountain Valley states that its "[b]enthic collections will be streamflow dependent."²⁴² The Monitoring Plan does not say how many efforts Mountain Valley will make to collect benthic data. But the company cannot be permitted to simply go out to collect data, encounter adverse flow conditions, and throw up its hands. The company must return to crossing locations until it obtains the benthic samples it needs.

²⁴⁰ Draft Mitigation Plan, App. D.

 $^{^{241}}$ Id. at 1.

 $^{^{242}}$ Id. at 5.

4. MOUNTAIN VALLEY'S MAINTENANCE AND ADAPTIVE MANAGEMENT PLAN WILL NOT SUFFICIENTLY ENSURE RESTORATION.

Appendix E to the Draft Mitigation Framework purports to set out Mountain Valley's Maintenance and Adaptive Management Plan.²⁴³ That plan is flawed in the following ways.

First, the plan provides that, "[c]onsistent with sound adaptive management principles, the suggested response actions outlined in this AMP may be revised, omitted, supplement, or substituted when warranted by the circumstances."²⁴⁴ As worded, the plan vests too much discretion in Mountain Valley to unilaterally change the plan without regulatory oversight. The Corps must retain authority to approve deviations from the plan.

Second, the absence of true performance standards for rapid bioassessment protocols, benthic macroinvertebrates, and hydrogeomorphic assessments makes the Maintenance and Adaptive Management Plan difficult to enforce.²⁴⁵ Moreover, the elements of the plan addressing rapid bioassessment protocols, benthic macroinvertebrates, and hydrogeomorphic assessments allow Mountain Valley to too easily attribute deterioration in those elements to causes other than its construction activities.²⁴⁶ The Corps should impose a rebuttable presumption that Mountain Valley's construction activities are the cause for deterioration in rapid bioassessment

²⁴⁶ *Id.* at 8.

²⁴³ Draft Mitigation Plan, App. E.

 $^{^{244}}$ *Id.* at 1.

²⁴⁵ *Id.* at 7–8.

protocol scores, benthic macroinvertebrates scores, or hydrogeomorphic assessment scores.

5. DATA SUBMITTED PURSUANT TO MOUNTAIN VALLEY'S SUPPLEMENTAL CREDIT DETERMINATION METHODOLOGY WILL NEED FURTHER REVIEW BY THE PUBLIC.

Appendix F to the Draft Mitigation Framework purports to set out Mountain Valley's Supplemental Credit Determination Methodology.²⁴⁷ Mountain Valley states that it will calculate additional compensatory mitigation for its impacts to streams and wetlands in its path, and that "[t]ables identifying the proposed supplemental mitigation for each impact will be provided to the Corps, WVDEP, and VADEQ concurrently with the submission of the Baseline Assessment Plan data."²⁴⁸ Because those tables are not yet available, and because they are pivotal to the determination of whether a permit should issue, the tables that Mountain Valley submits documenting its supplemental compensatory mitigation must be publicly noticed and subjected to meaningful public comment.²⁴⁹

F. THE CORPS MUST ISSUE SUPPLEMENTAL PUBLIC NOTICE OF PIVOTAL DATA AND ALLOW TIME FOR MEANINGFUL PUBLIC COMMENT.

"[U]nder Section 404 of the CWA, the opportunity to comment and the right to a hearing both necessarily require that the Army present for public scrutiny the rationale and pivotal data underlying its proposed action *before* the close of the

²⁴⁷ Draft Mitigation Plan, App. F.

 $^{^{248}}$ Id. at 8.

²⁴⁹ Ohio Valley Envtl. Coal., 674 F.Supp.2d at 804–814; Marsh, 568 F.Supp. at 994.

comment and hearing period.²²⁵⁰ When such rationales and pivotal data are only included "in the administrative record *after* the close of the comment and hearing period" it has "the effect of shielding essential data and the agency's rationale from public hearing and comment.²⁵¹ Rationales and pivotal data that support the Corps' factual determinations under the Section 404(b)(1) Guidelines are among the types of information that must be subjected to public comment.²⁵²

Much of the pivotal data that will be crucial to the factual determinations made by the Corps under the Section 404(b)(1) Guidelines—and any findings of compliance or noncompliance therewith—has not yet been publicly noticed and subjected to public comment. Accordingly, to comply with its CWA obligations, the Corps must issue supplemental public notice of pivotal data. Such data and information include, but are not limited to:

• Appendix B to the Mitigation Framework. Mountain Valley's "Restoration Work Plan" has not been made available to the public. The information in that attachment is of the type that must be subjected to public comment under Marsh and Ohio Valley Envtl. Coal. because the applicant relies primarily upon its restoration plan to mitigate what it deems the "temporary" impacts of its proposal.²⁵³ "[I]nformation on proposed mitigation . . .must be . . . released for public review and comment before the close of comment on a [section] 404 permit "²⁵⁴ (emphasis original)). Accordingly, the Corps must allow a 30-day

²⁵⁰ Ohio Valley Envtl. Coal., 674 F.Supp.2d at 805 (quoting Marsh, 568 F.Supp. at 994 (emphasis in Marsh)).

²⁵¹ Marsh, 568 F.Supp. at 994 (emphasis original).

²⁵² Ohio Valley Envtl. Coal., 674 F.Supp.2d at 805 (holding that data critical to Corps' finding of no significant degradation must be subjected to public notice and comment).

²⁵³ See Draft Mitigation Framework, App. F at 5 ("[C]ompensatory mitigation of for [sic] temporary impacts is typically provided by the restoration of the resources.").

²⁵⁴ Ohio Valley Envtl. Coal., 674 F.Supp.2d at 805 (emphasis original).

comment period on the Restoration Work Plan once it is made available. $^{\rm 255}$

- **Baseline Assessment Data.** The Corps must issue a supplemental public notice once all the baseline data gathered under the applicant's "Baseline Assessment Plan" is available. Even Mountain Valley expects that such data will play a role in the Corps' Section 404(b)(1) Guidelines factual determinations. ²⁵⁶ Accordingly, the baseline data that the applicant submits to the Corps is "pivotal data" under *Marsh* and *Ohio Valley Envtl. Coal.* and must be made available for meaningful public comment.²⁵⁷
- *LEDPA Rationales.* Any additional information that Mountain Valley submits to supplement its deficient LEDPA analyses must be subjected to public comment because it will be fundamental to the Corps' findings of compliance or noncompliance with the Section 404(b)(1) Guidelines.²⁵⁸
- *Cumulative Effects Analyses.* Any additional information that Mountain Valley submits to remedy its deficient cumulative effects analysis must be subjected to public comment because it will be pivotal in the Corps' Section 404(b)(1) Guidelines analysis.²⁵⁹
- **Tables Identifying Supplemental Compensatory Mitigation.** The tables Mountain Valley has committed to provide to outline its supplemental compensatory mitigation must be subjected to public comment because "information on proposed mitigation . . . must be . . . released for public review and comment *before* the close of comment on a [section] 404 permit "²⁶⁰
- *Final Mitigation Framework.* Mountain Valley has made clear that it intends to submit revisions to the Mitigation Framework.²⁶¹ Once the

²⁵⁵ 30 C.F.R. 325.3(d)(2)(i).

²⁵⁶ Draft Mitigation Framework at 7.

²⁵⁷ See Ohio Valley Envtl. Coal., 674 F.Supp.2d at 814.

²⁵⁸ *Id.* at 805.

 $^{^{259}}$ Id.

 $^{^{260}}$ Id.

²⁶¹ Email from Matthew Hoover, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs Re: Draft Stream and Wetland Mitigation Framework (Sept. 20, 2021).

Corps receives a "final" version of the Mitigation Framework, its public participation obligations require it to issue a supplemental public notice to solicit comments on the final Mitigation Framework to the extent that it includes rationales or pivotal data not previously made available to the public.²⁶²

• Any Other Information or Pivotal Data That is Foundational Either to the Corps Review of the Application or to any Determinations or Findings the Corps Would Make Under the Section 404(b)(1) Guidelines.

Again, such information and data are pivotal because they will serve as the foundation for the factual determinations and findings of compliance or noncompliance that the Corps must make.

Respectfully, the Corps has an interest in ensuring a meaningful opportunity for robust public comments on all aspects of this controversial permit. The United States Court of Appeals for the Fourth Circuit has repeatedly emphasized the importance of the opportunities for public participation under the Clean Water Act.²⁶³ As a result, it is in the Corps' interest—as well as the public's—to ensure additional meaningful opportunities for public participation in this permitting process.

II. SECTION 7 CONSULTATION ON THE MVP MUST BE REINITIATED; AT MINIMUM, THE CORPS MUST MAKE AND SUBSTANTIATE A FINDING OF WHETHER THE MVP WILL AFFECT ATLANTIC PIGTOE OR ITS CRITICAL HABITAT

Although FWS issued a BiOp for the MVP in September 2020, recent developments prevent the Corps from relying on that BiOp to satisfy its obligations

²⁶² Ohio Valley Envtl. Coal., 674 F.Supp.2d at 814.

²⁶³ See Sierra Club v. U.S. Army Corps of Eng'rs, 909 F.3d 635, 654 (4th Cir. 2018) (noting "the critical importance of notice-and-comment requirements throughout the Clean Water Act," and citing United States v. Smithfield Foods, Inc., 191 F.3d 516 (4th Cir. 1999)).

under the Endangered Species Act. Consultation under Section 7 of the Endangered Species Act must be reinitiated "[i]f a new species is listed or critical habitat designated that may be affected by the identified action."²⁶⁴ Indeed, the BiOp itself recognizes that requirement.²⁶⁵

On November 16, 2021, FWS published a final rule listing the Atlantic pigtoe (*Fusconaia masoni*)—a freshwater mussel found only in Virginia and North Carolina—as a threatened species under the Endangered Species Act.²⁶⁶ That rule also designates critical habitat for the species—including a 29-mile long-stretch of Craig Creek downstream from Mountain Valley's Craig Creek crossings.²⁶⁷ The rule becomes effective on December 16, 2021.²⁶⁸ In the listing decision, FWS makes clear that its action on the Atlantic pigtoe may require "Federal agencies to reinitiate formal consultation on previously reviewed actions."²⁶⁹

The action for which Mountain Valley now seeks a permit may affect the Atlantic pigtoe. The "may effect" standard is a low threshold.²⁷⁰ In 2019, Mountain

 267 Id.

 268 Id.

²⁶⁴ 50 C.F.R. § 402.16(a)(4); see also Cottonwood Envtl. Ctr. v. U.S. Forest Serv., 789
F.3d 1075, 1088 (9th Cir. 2015).

²⁶⁵ BiOp at 185.

²⁶⁶ Endangered & Threatened Wildlife & Plants; Threatened Species Status With Section 4(d) Rule for Atlantic Pigtoe and Designation of Critical Habitat, 86 Fed. Reg. 64,000 (Nov. 16, 2021).

²⁶⁹ *Id.* at 64,029.

²⁷⁰ W. Watersheds Project v. Kraayenbrink, 632 F.3d 472, 496 (9th Cir. 2011) (holding that "[t]he minimum threshold for an agency action to trigger consultation" is "low" (quoting 51 Fed. Reg. 19,926, 19,949 (June 3, 1986)); Northern Plains Res. Council v. U.S. Army Corps of Eng'rs, 454 F.Supp.3d 985, 991 (D. Mont. 2020).

Valley retained a consultant to model the sedimentation effects of its project into certain streams, including Craig Creek—a tributary of the James River.²⁷¹ FWS considers Craig Creek to be inhabited by the Atlantic pigtoe,²⁷² and designated 29 river miles of Craig Creek as critical habitat for the species.²⁷³ Mountain Valley has stated that its project is "approximately 50 river kilometers"—or 31 river miles from the critical habitat.²⁷⁴ And the United States Forest Service has said that the MVP project is located about 30.2 miles from the closest known population of Atlantic pigtoe.²⁷⁵

²⁷¹ See generally Geosyntec Consultants, Inc., Hydrologic Analysis of Sedimentation for Streams near Suitable Habitat for Threatened and Endangered Aquatic Species, Virginia and West Virginia: Report of Findings – Version 1.2 (May 4, 2020) (attached as Ex. 33) [hereinafter "Geosyntec (2020)"]; Geosyntec Consultants, Inc., Hydrologic Analysis of Sedimentation for Streams near Suitable Habitat for Threatened and Endangered Species, Virginia and West Virginia: Report of Findings (June 21, 2019) (attaches as Ex. 34) [hereinafter "Geosyntec (2019)].

²⁷² 86 Fed. Reg. at 64,023.

²⁷³ *Id.* at 64,025.

²⁷⁴ Letter from Megan Neylon, Mountain Valley Pipeline, LLC, to James Martin, FERC, Re: Response to U.S. Fish and Wildlife Service's April 12, 2019 Request for Information Regarding the Mountain Valley Pipeline Project; Docket Number CP16-10-000; Project #05E2VA00-2016-F-0880 and #05E2WV00-2015-F-0046 at 20 (July 2, 2019) (attached as Ex. 35).

²⁷⁵ U.S. Forest Service, Mountain Valley Pipeline and Equitrans Expansion Project: Final Supplemental Environmental Impact Statement at 98 (Dec. 2020) (attached as Ex. 36) [hereinafter "USFS SEIS"]. Mountain Valley acknowledges that "the known presence of the species within the Upper Johns Creek Subwatershed (020802011101), a similarly sized watershed adjacent to the Trout Creek-Craig Creek Subwatershed, the species may exist closer to the Project area [than 30.2 miles]." Mountain Valley Pipeline, Biological Evaluation for Forest Service Sensitive Species, Mountain Valley Pipeline, Jefferson National Forest, Eastern Divide Ranger Station at 33 (June 2017) (attached as Ex. 37) [hereinafter "Biological Evaluation"].

That roughly 30-mile distance between known Atlantic pigtoe habitat and Mountain Valley's proposed crossings of Craig Creek is significant for this reason: Mountain Valley's model has predicted that sedimentation from pipeline construction will affect between 29.9 and 31.6 river miles in Craig Creek.²⁷⁶ Sedimentation and turbidity are among the stressors threatening the Atlantic pigtoe and its habitat.²⁷⁷ Indeed, FWS specifically identified "[a]ctions that would significantly increase sediment deposition within the stream channel" as actions that it would consider likely to destroy or adversely modify critical habitat because they could "increas[e] the sediment deposition to levels that would adversely affect [the Atlantic pigtoe's] ability to complete its life cycle."²⁷⁸ Given the low threshold for what "may affect" listed species and their habitat, ²⁷⁹ and given that modeling has predicted sedimentation effects will extend roughly the distance to the closest known Atlantic pigtoe population and its critical habitat, the Corps should determine that the project may affect the Atlantic pigtoe and its habitat.

²⁷⁶ Geosyntec (2020), tbl. 1-2 & 1-3 (predicting 29.9 total affected stream miles in Craig Creek); Geosyntec (2019), tbl. 1-2 & 1-3. Mountain Valley could insist that its consultant's prediction overstates the potential affected stream length because, at the time the modeling was conducted, Mountain Valley intended to use an open-cut, dry-ditch crossing on Craig Creek, but now the company intends to bore under the stream. But such a tactic would entirely undermine Mountain Valley's position that its proposed open-cut, dry-ditch crossings will have only minimal sedimentation effects.

²⁷⁷ 86 Fed. Reg. at 64,004, 64,011–012, 64,019, 64,021.

²⁷⁸ *Id.* at 64,029.

²⁷⁹ Kraayenbrink, 632 F.3d at 496; Northern Plains Res. Council, 454 F.Supp.3d at 991.

Moreover, Mountain Valley itself admits additional facts that support a conclusion that its proposed stream crossings may affect the Atlantic pigtoe. In its application, Mountain Valley admits that "state-listed freshwater mussels were identified along the Project route," ²⁸⁰ and in its response to public comments, Mountain Valley makes clear that the state-listed mussel it refers to in its application is the Atlantic pigtoe.²⁸¹ Table 2 to Mountain Valley's application identifies seven stream crossings where the Atlantic pigtoe is a sensitive resource to be considered.²⁸² And in 2017, Mountain Valley determined that construction of the MVP "[m]ay [i]mpact [i]ndividual" Atlantic pigtoe mussels based on the potential for sedimentation increases downstream from the project area.²⁸³

The Corps has an obligation to determine "at the earliest possible time" "whether any action may affect listed species or critical habitat."²⁸⁴ Indeed, Corps regulations require the District Engineer to make a finding of whether or not a proposed activity may affect listed species or their habitat.²⁸⁵ The District Engineer has not yet performed that duty. The March 29, 2021 Public Notice of Mountain Valley's application states that "[t]he Corps has reviewed the Biological Opinion (BO) issued on September 4, 2020 by the USFWS and has determined that it is inclusive

²⁸⁰ Application at 37.

²⁸¹ Attachment 6 at 77 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021).

 $^{^{282}}$ Application, tbl. 2 at 8.

²⁸³ Biological Evaluation at 33.

²⁸⁴ 50 C.F.R. § 402.14(a); see also 33 C.F.R. § 325.2(b)(5).

²⁸⁵ 33 C.F.R. § 325.2(b)(5).

of the Corps' area of responsibility and is sufficient to address the Corps' ESA action area."²⁸⁶ But the Public Notice also identifies all of the species considered by FWS and/or FERC in the BiOp, and the Atlantic pigtoe is not among them.²⁸⁷ That is not surprising because the 2020 BiOp and accompanying Incidental Take Statement are silent on the effects of the MVP on Atlantic pigtoe.²⁸⁸ Indeed, Mountain Valley expressly noted that it would not address the Atlantic pigtoe in its 2020 supplemental Biological Assessment.²⁸⁹

Based on the facts set out above, to fulfill its regulatory obligation, the Corps must determine whether the proposed activities may affect the Atlantic pigtoe.²⁹⁰ And based on Mountain Valley's modeled predictions of the extent of sedimentation effects in Craig Creek and its statements about its activities' potential effects on the Atlantic pigtoe, that determination must be that the activity may affect the species

²⁸⁶ U.S. Army Corps of Eng'rs, Public Notice Nos. LRH-2015-00592-GBR, LRP-2015-798, NAO-2015-0898 at 6 (Mar. 29, 2021).

 $^{^{287}}$ Id.

²⁸⁸ See generally BiOp. One consequence of that silence is that Mountain Valley and the Corps are unprotected from Section 9 liability for any take of Atlantic pigtoe. *Defenders of Wildlife v. U.S. Dep't of the Interior*, 931 F.3d 339, 343 (4th Cir. 2019).

²⁸⁹ Mountain Valley Pipeline, LLC, Supplement to the Biological Assessment at 4 (May 28, 2020). Mountain Valley claimed that it thought that FERC intended to confer with FWS on the Atlantic pigtoe under Section 7(a)(4) of the Endangered Species Act. *Id.* Conclusions from conferences are supposed to be documented under 50 C.F.R. § 402.10(e), and as noted above the BiOp is silent as to the Atlantic pigtoe. But even if a conference was completed, the Corps still cannot proceed on Mountain Valley's application without first asking FWS to turn the result of that conference into a biological opinion. 50 C.F.R. § 402.10(c)–(d).

²⁹⁰ 33 C.F.R. § 323.2(b)(5).

and its critical habitat. Accordingly, to comply with Section 7 of the Endangered Species Act, the Corps must reinitiate consultation on the MVP project with FWS.²⁹¹

Because Corps regulations (along with the Endangered Species Act)²⁹² place an obligation on the District Engineer to make an effects determination, it is of no import that FERC appears to have determined in July 2020 that the MVP will have no effect on Atlantic pigtoe.²⁹³ In all events, FERC's no effects determination is conclusory and unsupported. The agency stated nothing more than, "we have determined the Project will have *No Effect* on the Atlantic pigtoe or on proposed critical habitat for the Atlantic pigtoe."²⁹⁴ Such a bare assertion does not reflect reasoned decision-making, particularly in light of Mountain Valley's sediment modeling and statements about the potential for impacts of its pipeline on the species. Accordingly, Corps reliance on FERC's no effects determination would be arbitrary and capricious.²⁹⁵ Under its own regulation and basic principles of administrative law, the Corps must reach an independent conclusion, supported by evidence in the record.

²⁹¹ 50 C.F.R. § 402.16(a)(4); see also Cottonwood Envtl. Ctr. v. U.S. Forest Serv., 789
F.3d at 1088; Salmon Spawning & Recovery All. v. Gutierrez, 545 F.3d 1220, 1229
(9th Cir. 2008).

²⁹² Northern Plains Res. Council, 454 F.Supp.3d at 993–94.

²⁹³ Letter from James Martin, PhD, FERC, to Cindy Schulz, U.S. Fish & Wildlife Serv., Re: Updated Effects Determination for the Mountain Valley Pipeline Project (July 8, 2020) (attached as Ex. 38).

 $^{^{294}}$ Id.

²⁹⁵ Cf. Nat'l Wildlife Fed'n v. Fed. Emergency Mgmt. Agency, 345 F.Supp. 2d 1151, 1175 (W.D. Wash. 2004) (noting that the absence of support for a "no effect" determination "precludes any judicial review").

FWS's statements about the MVP's potential effects on Atlantic pigtoe are

similarly unpersuasive because they contradict the record. In June 2020, a FWS

biologist made a note to file regarding the Atlantic pigtoe that stated:

The below summarizes the basis for the determination of no effect to Atlantic pigtoe for the MVP project.

The Atlantic pigtoe (*Fusconia masoni*) was proposed federally listed as threatened on October 11, 2018. Critical habitat for the species was also proposed on the same date.

MVP's aquatic action area does not intersect with the following:

- current range HUC10 watershed maps in the Service's Species Status Assessment for Atlantic pigtoe (Service 2019)
- proposed critical habitat or any known occurrence of Atlantic pigtoe
- the Services Area of Influence for Atlantic pigtoe in IPaC, which is based on a species distribution model that predicts potential suitable habitat. Therefore, Atlantic pigtoe would not be on the official species list.
- Virginia Department of Conservation and Recreation's predicted suitable habitat for Atlantic pigtoe, based on a species distribution model.

In addition, Mountain Valley Pipeline, LLC, did not find any Atlantic pigtoe in any of their mussel surveys.

Based on the best scientific and commercial data available, the Service does not have any information to indicate that the Atlantic pigtoe occurs at or downstream of the MVP pipeline crossing of Craig Creek or any other MVP pipeline stream crossings. Therefore, the referenced project will have no effect on the Atlantic pigtoe.²⁹⁶

The FWS biologist's conclusion is contradicted by the evidence presented herein.

First, there is evidence from the Forest Service's Final SEIS that there are Atlantic

²⁹⁶ Jennifer Stanhope, U.S. Fish & Wildlife Serv., Note to File (June 29, 2020) (attached as Ex. 39).

pigtoe in Craig Creek downstream of the MVP crossing of that stream.²⁹⁷ Moreover, there is evidence (1) that Mountain Valley's sediment modeling shows that the project's aquatic action area extends downstream through approximately 30 sediment-affected stream miles, and (2) that known occurrences of the Atlantic pigtoe and its critical habitat are roughly that distance downstream from the project. Accordingly, there is evidence that the area affected by the project intersects both critical habitat and known occupied territory, contradicting the FWS biologist's contrary conclusion. Accordingly, the FWS biologist's conclusion runs contrary to the record and is unpersuasive.

In short, Section 7 of the Endangered Species Act has not yet been satisfied for the MVP. Because of the November 16, 2021 action by the FWS listing the Atlantic pigtoe and designating critical habitat for that species downstream from crossings Mountain Valley seeks to permit, the Corps must determine whether the proposed activity may affect Atlantic pigtoe or its habitat, and the evidence shows that low threshold is met. Accordingly, the Corps cannot issue Mountain Valley's requested permit until reinitiated consultation with the FWS about that species is complete.

III.THE CORPS CANNOT RELY ON THE EXISTING FERC NEPA DOCUMENTS TO SATISFY ITS OWN NEPA OBLIGATIONS.

Neither FERC's 2017 FEIS nor its 2021 EA, either individually or together, are sufficient to satisfy the Corps' obligations under either NEPA or the CWA. As a threshold matter, the supplemental NEPA document for this project must be a

²⁹⁷ USFS SEIS at 98.

Supplemental Environmental Impact Statement ("SEIS"), rather than an EA. Moreover, the EA's consideration of the impacts of open-cut, dry-ditch crossings on aquatic resources and its alternatives analysis are fatally deficient, and the EA fails to sufficiently examine geologic conditions and the risk of borehole collapse, the climate change impacts of the project, the cumulative effects of connected actions related to the MVP, and the impacts on special wetland resources like those on Bent Mountain in Virginia.

A. THE COMMISSION AND THE CORPS MUST PREPARE AN SEIS; AN EA WILL NOT SUFFICE.

In their previous comments, Commenters laid out the reasons why an SEIS is required here and why an EA will not suffice. Nonetheless, the Commission decided to proceed with an EA. That decision constitutes legal error. In these circumstances, an SEIS is required for at least two reasons.

First, because the MVP was subjected to an EIS when certificated in 2017, supplemental NEPA documentation for the project must take the form of an SEIS. Under the pre-2020 NEPA regulations—which, as Commenters explained in their April 15, 2021 scoping comments, are the applicable regulations—a supplement to a prior EIS for an action must be "prepare[d], circulate[d], and file[d] . . . in the same fashion as a draft and final statement"²⁹⁸ Even if the 2020 regulations were lawful and applicable to the MVP, the provision in those regulations that purports to

²⁹⁸ 40 C.F.R. § 1502.9(c)(4) (2019).

allow a Supplemental EA²⁹⁹ cannot validate the Commission's choice to prepare an EA rather than an EIS because of the Corps' NEPA regulations. Those regulations are relevant because the Corps is a cooperating agency in this NEPA process, as well as an agency that may attempt to adopt and rely on the product of this process to satisfy its own NEPA obligations if it were to grant Mountain Valley's pending application for an individual Section 404 permit. The Corps' regulations provide that "[a] supplement to a final EIS should be prepared and filed first as a draft supplement and then as a final supplement. Supplements will be filed and circulated in the same manner as a draft and final EIS"³⁰⁰ The Corps' regulations have not been modified to conform to the 2020 Council on Environmental Quality regulations and do not contemplate, let alone authorize, the use of an EA to supplement an EIS. Accordingly, the decision to proceed with an EA, rather than an SEIS, is unlawful and would result in a procedurally defective agency action.

Second, the use of an EA in these circumstances—as opposed to an SEIS does not allow for sufficient examination of alternatives to the proposed action. Because the Corps may attempt to rely on and adopt the product of this NEPA process if it were to decide to issue the individual Section 404 permit that Mountain Valley seeks, whatever NEPA document results from this process must take a hard look at and include a robust review of alternative stream crossing methods. The Corps'

²⁹⁹ 40 C.F.R. § 1502.9(d)(4) (purporting to authorize agencies to make a finding of no significant impact, supported by an environmental assessment, when examining changes to a proposed action).

³⁰⁰ 33 C.F.R. § 230.13(b).

Section 404(b)(1) Guidelines prohibit the Corps from issuing a permit for the discharge of dredged and/or fill material unless it makes a factual determination that the proposed discharge is the LEDPA.³⁰¹ The Corps has acknowledged that the NEPA document produced through this process must be adequate to fulfill the Corps' regulatory obligations.³⁰² And, as discussed below, the EA does not meet those requirements.

Corps regulations explain that "the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines."³⁰³ However, "[o]n occasion, these NEPA documents . . . may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines," such that it is "necessary to supplement these NEPA documents with this additional information."³⁰⁴

³⁰¹ 40 C.F.R. § 230.10(a); see also generally Utahns for Better Transp., 305 F.3d at 1152.

³⁰² See, e.g., Letter from Jon T. Coleman, Pittsburgh Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n Re: Acceptance of Cooperating Agency Responsibility (Mar. 10, 2021) (Accession No. 20210310-5059) (acknowledging that the Commission's certificate amendment will require authorization under Section 404 and requesting that, "to ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR 320.4), . . . the topics listed in Enclosure 1 be included in the scoping and evaluation of any submitted NEPA document").

³⁰³ 40 C.F.R. § 230.10(a)(4).

 $^{^{304}}$ Id.

Mountain Valley's pending application presents just that situation, such that supplemental NEPA analysis is required. Consideration of alternatives "is the heart of the environmental impact statement."³⁰⁵ The "discussion of alternatives must rigorously explore and objectively evaluate all reasonable alternatives."³⁰⁶ The obligation to consider alternatives flows from NEPA itself and exists for any proposal, such as that for the MVP, "which involves unresolved conflicts concerning alternative uses of available resources."³⁰⁷

In its letters to the Commission accepting cooperating agency responsibility on Mountain Valley's application to modify the Commission's certificate to allow conventional boring at numerous waterbody crossings, the Corps itself acknowledged that additional information must be included in supplemental NEPA documentation. ³⁰⁸ In order to support the Corps' application of the 404(b)(1) Guidelines, including selection of the LEDPA, the Corps explained that this new NEPA document must "evaluate how the Project was designed to avoid and minimize the discharge of dredged and/or fill material into waters of the United States[,]"

³⁰⁵ *Id.* § 1502.14.

³⁰⁶ Union Neighbors United, Inc. v. Jewell, 831 F.3d 564, 568 (D.C. Cir. 2016).
³⁰⁷ 42 U.S.C. § 4332(2)(E).

³⁰⁸ Letter from Jon T. Coleman, Pittsburgh Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility (Mar. 10, 2021) at 1–2 (explaining that the information in the NEPA document must be "adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR § 320.4)").

including analysis of "on-site avoidance and minimization alternatives and avoidance and minimization alternatives for any off-site borrow, spoil, or mitigation areas."³⁰⁹

An EA is not the appropriate vehicle for the robust alternatives analysis that the Corps' regulations require. EAs have only ever had to include brief discussions of alternatives.³¹⁰ In contrast, EISs must "[r]igorously explore and objectively evaluate all reasonable alternatives" and "[d]evote substantial treatment to each alternative considered in detail."³¹¹ The Commission and the cooperating agencies cannot shortcircuit the requirement of taking a hard look at stream crossing alternatives by electing to perform an EA over an EIS. Accordingly, an SEIS—and its attendant rigorous and detailed alternatives analysis—is required.

B. THE CORPS MUST CONDUCT ITS OWN SUPPLEMENTAL ENVIRONMENTAL ANALYSIS UNDER NEPA BECAUSE THE 2017 FEIS AND THE EA ARE INSUFFFICIENT TO SATISFY THE CORPS' NEPA OBLIGATIONS.

The EA acknowledges that the Corps, as a federal cooperating agency,

may adopt this EA per 40 CFR 1501.8 if, after an independent review of the document, it concludes that their [sic] requirements and/or regulatory responsibilities have been satisfied. However, the [Corps] would present its own conclusions and recommendations in its respective and applicable records of decision or determinations.

³⁰⁹ *Id.* at 3; *see also id.* at 4 ("The NEPA document should provide a sufficient analysis to determine compliance with the Guidelines.").

³¹⁰ 40 C.F.R. § 1501.5(c)(2) ("An environmental assessment shall . . . [b]riefly discuss the . . . alternatives as required by section 102(2)(E) of NEPA"); 40 C.F.R. § 1508.9(b) (2019) ("Environmental assessment . . . [s]hall include brief discussions . . . of alternatives as required by section $102(2)(E) \dots$ ").

³¹¹ 40 C.F.R. § 1502.14(a)–(b) (2019); see also, e.g., Union Neighbors United, 831 F.3d at 569; Dubois v. U.S. Dep't of Agric., 102 F.3d 1273, 1286–90 (1st Cir. 1996); 40 C.F.R. § 1502.14(b) (2020) (requiring that the alternatives section of an EIS "[d]iscuss each alternative considered *in detail*" (emphasis added)).

Otherwise, it may elect to conduct its own supplemental environmental analysis. $^{\rm 312}$

As explained throughout these comments, the Corps *cannot* conclude that the EA satisfies its regulatory responsibilities and *must* conduct its own supplemental environmental analysis.

As the Fourth Circuit recently observed, "an agency may only adopt [another agency's NEPA document] if it 'meets the standards for an adequate statement' under the applicable regulations."³¹³ If a NEPA document precludes meaningful analysis of an issue, then the potential adopting agency must conduct an independent review of that issue.³¹⁴ If an agency acquiesces to an inadequate alternatives analysis, such an action is arbitrary and capricious.³¹⁵

Here, although the Corps may be tempted to simply adopt the 2017 FEIS and the EA and call it a day, such a course would leave the Corps' NEPA obligations unfulfilled and leave any DA permit it may issue to Mountain Valley vulnerable on judicial review. That is so for two reasons.

First, the Corps must conduct a supplemental environmental review of the environmental consequences of open-cut, dry-ditch crossings. The Commission's cursory statements in the 2017 FEIS and the EA about the environmental effects of trenching through hundreds of mountain streams and wetlands fail to constitute

- 314 Id.
- ³¹⁵ *Id.* at 173.

³¹² EA at 2–3.

³¹³ Cowpasture River, 911 F.3d at 170.

meaningful analysis, triggering the Corps' obligation to review those impacts independently.³¹⁶ That is particularly true given developments since the 2017 FEIS was completed.

Second, the Corps must supplement the alternatives analysis, and that must be done in an SEIS.³¹⁷ Under the Section 404(b)(1) Guidelines, where NEPA documents do not "consider[] alternatives in sufficient detail to respond to the requirements of these Guidelines," it is "necessary to supplement these NEPA documents with this additional information."³¹⁸ As explained below, the alternatives analysis in the EA—even if combined with the 2017 FEIS—is insufficient to satisfy the NEPA obligations of either the Commission or the Corps.

1. THE CORPS MUST PREPARE AN SEIS THAT EXAMINES THE ENVIRONMENTAL IMPACTS OF OPEN-CUT, DRY-DITCH CROSSINGS ON SURFACE WATER RESOURCES.

Although the Commission stated in its 2017 FEIS that "[n]o long-term or significant impacts on surface waters are anticipated" as a result of Mountain Valley's construction of open-cut, dry-ditch waterbody crossings,³¹⁹ developments since 2017—including recent determinations by environmental resource agencies, onthe-ground experience with Mountain Valley's construction activities, and the overwhelming weight of the scientific literature currently before the Corps undermine and preclude reliance on the Commission's 2017 conclusions. Given the

 $^{^{316}}$ See *id.* at 170–73.

³¹⁷ 33 C.F.R. § 230.13(b); see also Section I, supra.

³¹⁸ 40 C.F.R. § 230.10(a)(4).

³¹⁹ FEIS at 4-149.

significant differences in the information available to the Commission and the Corps today compared with that before the Commission in 2017, it would be unlawful for either the Commission or the Corps to rely on the Commission's stale 2017 analysis of these topics.³²⁰

Among the developments since 2017 that present a different picture of the environmental effects of the MVP from that considered by the Commission in the FEIS is the September 2020 determination by the U.S. Fish and Wildlife Service ("FWS"), based on its review of the scientific literature, that it must assume that "effects to benthic invertebrates in aquatic areas that receive significant increased sedimentation as a result of the MVP will persist for up to four years."³²¹ In the FEIS, the Commission itself defined impacts that persist for more than three years as "long-

³²⁰ See Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443 (4th Cir. 1996) (explaining that "[a]n agency must prepare a supplemental EIS when '[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts," particularly where the agency is faced with "a seriously different picture of the environmental impact of the proposed project from what was previously envisioned") (first citing 40 C.F.R. §1502.9(c)(1)(ii), and then citing *Hickory Neighborhood Def. League v. Skinner*, 893 F.2d 58, 63 (4th Cir. 1990)); see also Cowpasture River, 911 F.3d at 170–73.

³²¹ BiOp at 96. As discussed in Section I.B.1, *supra*, FWS's four-year estimate of impacts was of stream-crossing impacts, contrary to Mountain Valley's attempt to characterize the four-year estimate as one for *upland* impacts. Att. 6 at 171–72 to Letter from Todd Normane, Mountain Valley Pipeline, LLC, to Adam Fannin, U.S. Army Corps of Eng'rs (Oct. 11, 2021). FWS expressly cited scientific literature describing impacts from open-cut crossings that persisted for four years in making is assumption of a four-year impact period. BiOp at 96, 109–10, 138–39 (citing Armitage & Gunn (1996) and Lévesque and Dubé (2007)—both of which documented multi-year impacts from open-cut crossings—as the authority to support their assumption that benthic effects would persist for four years).

term."³²² Accordingly, by the Commission's own definition, its previous conclusion that there will be no long-term impacts to surface waters is erroneous.

And FWS is not alone among the federal agencies with concerns about significant, long-term aquatic impacts from the MVP. In May 2021, EPA Region 3 warned the Corps that "the direct, secondary, and cumulative impacts from the discharges associated with this project to those watersheds may result in significant degradation of the waters of the United States and reduce the ability for remaining aquatic resources to maintain hydrologic, geochemical, and biologic functions."³²³ Regarding Mountain Valley's proposed open-cut, dry-ditch crossings, EPA concluded that, "[w]hile many of the discharges of fill associated with the proposed construction may be considered temporary, **the impacts from those discharges may have lasting effects, particularly due to the sensitivity of the aquatic resources and the repetitive nature of impacts to some of the tributaries**."³²⁴

Moreover, Mountain Valley's track record since 2017 demonstrates that impacts from completed crossings have been greater than regulators predicted or authorized. Since 2017, Mountain Valley has completed a number of crossings using open-cut, dry-ditch methods, and available documents establish excessive sedimentation and other problems at a minimum of four completed crossings.

³²² FEIS at 4-1.

³²³ Lapp Letter at 2.

 $^{^{324}}$ Id. at 4 (emphasis added).

In Virginia, Mountain Valley constructed its open-cut, dry-ditch crossing of S-G36—the North Fork of the Roanoke River—on July 19, 2018.³²⁵ As discussed at length above, sedimentation continues to be a problem nearly 3.5 years after construction of this crossing.³²⁶ Accordingly, the present condition of this crossing conclusively demonstrates that Mountain Valley's open-cut, dry-ditch crossings have lasting—not temporary—effects.

In West Virginia, Mountain Valley constructed a pipeline right-of-way crossing through stream S-IJ64—an unnamed tributary of Little Stony Creek in Monroe County—and its attendant right-of-way bridge in May 2018.³²⁷ In an inspection on May 9, 2018, a DEP inspector documented "conditions not allowable" (that is, a narrative water quality standards violation) that resulted from MVP's neglect of "[b]ridge matting [that] failed contributing sediment laden water at the right-of-way crossing at S-IJ64."³²⁸ The inspector concluded that the resulting sediment deposits caused the "conditions not allowable."³²⁹

Also in West Virginia, a September 30, 2018 Commission inspection of the completed crossing of S-N8A in Nicholas County—a crossing that required blasting revealed that the dam for the dam-and-pump was installed outside the permitted

³²⁵ Ex. 22.

³²⁶ See Section I.B.5, supra.

 $^{^{327}}$ W. Va. Dep't of Envtl. Prot., Inspection Report (May 9, 2018) (attached as Ex. 40). 328 Id.

 $^{^{329}}$ Id.

area and contributed silt-laden water to the stream.³³⁰ On October 5, 2018, an inspection of the completed trench crossing through W-B51 in Lewis County, West Virginia revealed that Mountain Valley's initial topsoil restoration efforts had failed.³³¹ Preconstruction contours were not successfully restored—as required by the Commission's wetland procedures—resulting in an alteration to the hydraulic flow in W-B51 and its hydraulic connections to stream S-B70.³³²

Based on the recognition by the federal environmental resource agencies that the impacts of Mountain Valley's open-cut, dry-ditch waterbody crossings will be measured in years rather than days, and based on the evidence that Mountain Valley's completed crossings are causing long-term impacts and violations of water quality standards, the Corps must take a hard look at the environmental impacts of all of Mountain Valley's crossings and discuss those impacts in its NEPA documents. As discussed in Commenters' May 28, 2021 comments on the Corps' public notice of Mountain Valley's individual permit application, those impacts will include long-term and significant impacts, water quality standards violations, and significant degradation to waters of the United States.³³³

But the EA utterly fails to acknowledge the developments since 2017 that undermine the FEIS's conclusory assessment of the impacts of open-cut, dry-ditch

³³⁰ Fed. Energy Regul. Comm'n, Environmental Compliance Monitoring Program Weekly Summary Report for the Period September 30 through October 6, 2018, at 4 (attached as Ex. 41).

³³¹ *Id*. at 14.

³³² *Id.*; *see also id.* at 19 (compiling photos of the hydraulic problems at W-B51).
³³³ 404 Comments at 68–120.

crossings, despite Commenters having called the Commission's attention to those developments in their Supplemental Scoping Comments.³³⁴ Instead, the EA simply parrots the FEIS's conclusory assessment that "open-cut dry crossing methods would appropriately minimize turbidity and sedimentation and no long-term or significant impacts on surface waters are anticipated as a result of the Mountain Valley Pipeline Project[,]"³³⁵ without any additional analysis. As a result, the EA falls short, and an SEIS examining the environmental impacts of open-cut, dry-ditch crossings is required. At a bare minimum, the Corps must grapple with the litany of post-2017 evidence in the record that contradicts the EA's and FEIS's rosy mischaracterizations of impacts.

Moreover, it would also be arbitrary and capricious for the Corps to adopt the Commission's NEPA documents without conducting an independent review because the EA does not respond to the Corps' scoping comments. When a cooperating agency in a NEPA review submits scoping comments to the lead agency, and those comments are not addressed in the resulting NEPA document, the cooperating agency cannot simply adopt that resulting NEPA document without independent review.³³⁶

Here, when the Corps accepted the Commission's invitation to be a cooperating agency, it provided specific scoping comments "to ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the

³³⁴ Supplemental Scoping Comments at 65–102.

³³⁵ EA at 98.

³³⁶ Cowpasture River, 911 F.3d at 170–73; see also Sierra Club, 897 F.3d at 594–96.

Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR 320.4)[.]"³³⁷ Among the items that the Corps requested the Commission evaluate in the resulting NEPA document were issues related to compliance with the Section 404(b)(1) Guidelines, which includes whether discharges from the project would cause or contribute to violations to water quality standards or significant degradation of the waters of the United States—in other words, issues related to crossing impacts on surface waters.³³⁸ Indeed, the Corps insisted that "[t]he NEPA document should provide a sufficient analysis to determine compliance with the Guidelines." ³³⁹ Because the EA simply repeated a stale, four-year-old conclusion without addressing developments in the interim, it is not responsive to the Corps' scoping comments. Accordingly, the Corps cannot adopt the EA and must instead prepare an SEIS that examines the water quality effects of open-cut, dry-ditch stream crossings.

2. THE ALTERNATIVES ANALYSIS IN THE EA CANNOT SUPPORT AGENCY ACTION BY EITHER THE COMMISSION OR THE CORPS.

Neither the 2017 FEIS nor the EA, individually or together, include an alternatives analysis sufficient to satisfy the NEPA obligations of the Commission or the Corps. The Commission has arbitrarily and capriciously ignored important

³³⁷ Letter from Teresa D. Spagna, Chief, North Regul. Branch, Huntington Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility at 2 (Mar. 8, 2021) (Accession No. 20210311-5077).

³³⁸ *Id*. at 3–4.

³³⁹ Id.

comments it received on alternatives during the scoping period, resulting in an incomplete and inadequate alternatives analysis. And as discussed above, Corps regulations require any NEPA document on which that agency relies for an action to include an alternatives analysis that "consider[s] the alternatives in sufficient detail to respond to the requirements" of the Section 404(b)(1) Guidelines, including those Guidelines' requirements for a robust analysis and factual determinations that identify the LEDPA.³⁴⁰ Plainly stated, to support any issuance of an individual Section 404 permit by the Corps, the NEPA document must consider all the alternatives in sufficient detail to support the Corps' LEDPA analysis. This EA does not, for at least six reasons.³⁴¹

First, the alternatives analysis fails to consider *routing* alternatives. As Commenters explained above, in their May 28, 2021 comments on Mountain Valley's individual permit application to the Corps, and in their supplemental scoping comments, the alternatives analyses of Mountain Valley's trenching and boring plans must consider both construction method alternatives and routing alternatives.³⁴² The routing alternatives that must be considered—on a crossing-by-crossing basis—

³⁴⁰ 40 C.F.R. § 230.10(a)(4).

³⁴¹ In their comments on the Corps' public notice of Mountain Valley's individual permit application and their supplemental scoping comments, Commenters set forth a host of reasons why the Corps cannot rely on the 2017 FEIS to satisfy its NEPA obligations. 404 Comments at 57–68; Supplemental Scoping Comments at 50–60. The EA does not remedy the deficiencies. Accordingly, the Commission and the Corps must prepare NEPA documents responsive to the issues raised in Commenters' previous comments, as well as in those presented here.

³⁴² 404 Comments at 6, 12–13, 16–17, 48–49; Supplemental Scoping Comments at 41–42, 44, 53–54.

include, *inter alia*, routing alternatives that would allow Mountain Valley to avoid waterbodies or to cross stream reaches or wetlands at locations with lesser environmental impacts.

As discussed in detail above, Mountain Valley's proposed Blackwater River crossing perfectly illustrates the type of alternatives analysis that is unlawfully lacking from the EA. ³⁴³ Both EPA and DEQ recognize that there are less environmentally damaging practicable alternatives to Mountain Valley's proposed Blackwater River crossing. The alternatives recommended by EPA and DEQ are exactly the sort of alternatives that the Commission—as the lead agency—and the Corps—as a cooperating agency—should have included in the EA's alternatives analysis. And not just for the Blackwater River. Examining such routing alternatives for each and every waterbody crossing is required under both NEPA and the Section 404(b)(1) Guideline's LEDPA analysis. But the alternatives analysis in the EA does not do that. Accordingly, the Commission has failed to comply with NEPA, and the Corps cannot rely on the EA to satisfy its own NEPA and CWA obligations.

Second, the alternatives analysis is deficient for the Corps' purposes because the "no action" alternative is specific to the amendment application and does not look at alternatives to action by the Corps. As Commenters explained in their comments on the Corps' public notice for Mountain Valley's individual permit application, the Corps must consider a "No Section 404 Permit" alternative for each and every

³⁴³ See Section I.A.8, supra.

proposed open-cut, dry-ditch crossing.³⁴⁴ The alternatives analysis cannot operate at such a high level of generality that it is meaningless. Rather, the agencies must consider—on a crossing-by-crossing basis—an alternative that does not involve a Section 404 permit.

In this case, those "No Section 404 Permit" alternatives consist of trenchless crossings of *each* stream or wetland where Mountain Valley proposes an open-cut, dry-ditch crossing. In other words, the Corps cannot simply adopt the alternatives analysis in the EA because it does not consider substituting trenchless crossing methods at each individual crossing. Indeed, with the exception of the Blackwater River crossing, the EA does not even attempt such analyses, and its analysis of the Blackwater River crossing falls short for the reasons described elsewhere in these comments. Accordingly, the Corps must develop a supplemental NEPA document that includes a "no action" alternative for each requested crossing location.

Third, the EA's discussion of Mountain Valley's screening criteria for alternative crossing techniques at pages 94 through 97 applies a level of generality too high to be meaningful or provide any real examination of Mountain Valley's claims about technical and/or cost feasibility. The EA notes that

[t]he construction method proposed for each crossing in the Amended Project was the result of a feasibility analysis conducted by Mountain Valley to compare trenchless methods, predominantly conventional and guided bores, with the previously approved open-cut crossing method for the sensitive resources.³⁴⁵

³⁴⁴ 404 Comments at 15–17.

³⁴⁵ EA at 94.

But rather than scrutinize or independently review Mountain Valley's feasibility analyses, all the EA does is identify the factors that Mountain Valley purported to consider and summarize those factors.³⁴⁶ And within that summary, the EA describes Mountain Valley's conclusions but does nothing to examine whether those conclusions are accurate; instead, it uncritically accepts the company's self-serving say-so.

Because it is devoid of analysis and merely parrots the applicant's positions, the EA's consideration of construction technique alternatives is not sufficient to satisfy the NEPA obligations of either the Commission or the Corps. Nor is it sufficient to satisfy the Corps' obligation under the Section 404(b)(1) Guidelines. As noted elsewhere, in performing its 404(b)(1) Guidelines LEDPA analysis, the Corps has "an obligation to independently verify the information supplied to it" by the applicant. ³⁴⁷ And—as also noted elsewhere—the Corps' NEPA documents must

³⁴⁶ Id. Two of those factors relate to spoil storage area—bore pit depth and slope steepness. Id. at 94–95. The alternatives analysis appears to contend that spoil storage can make trenchless crossings infeasible. Id. That contention, however, is inconsistent with the assumption the Commission's staff makes elsewhere in the EA that, "[i]n terms of the total volume of spoil material subject to movement by construction equipment, bore pit backfilling would be similar that the amount that was previously analyzed for open-cut dry crossings." Id. at 77. In other words, in one breath the Commission states that the volume of spoil material generated by trenchless crossings is similar to the volume generated for open-cut dry crossings, and in another breath accepts Mountain Valley's contention that the volume of spoil generated by trenchless crossings frequently makes them infeasible. Such an inconsistency renders the EA's comparison of stream-crossing techniques arbitrary and capricious.

³⁴⁷ *Hintz*, 800 F.2d at 835.
include sufficient information to allow it to perform its LEDPA analysis.³⁴⁸ Because the EA only identifies the feasibility factors that Mountain Valley purported to consider, and entirely fails to examine or independently verify Mountain Valley's application of those factors, its alternatives analysis is deficient and the Corps cannot rely on it to satisfy either its NEPA or CWA obligations.

Fourth, at the sole open-cut, dry-ditch crossing where the EA even attempts a crossing-specific alternatives analysis, it fails to take a hard look at the issues presented by the crossing. The Blackwater River crossing, as described above, is the sole open-cut, dry-ditch crossing location even mentioned in the EA's alternatives analysis. The following is the entirety of the EA's examination of that crossing:

As discussed in section B.2.2, the Mountain Valley Pipeline Project would cross five Section 10 streams. All of these streams, except for the Blackwater River, would be crossed via a trenchless crossing method. We have included the following discussion in order to support the [Corps'] review of the joint application for Section 10 regulated streams. At the Blackwater River crossing, Mountain Valley stated that site conditions do not provide adequate space to stockpile spoil from bore pits that would be almost 40-feet-deep. We reviewed the Blackwater River crossing location and confirmed that there *may not* be space for spoil storage within the limits of disturbance and the slope on one side of the stream *may not* be conducive to a trenchless crossing.³⁴⁹

It is unclear as a threshold matter whether the Commission's staff's "review" of the Blackwater crossing location was a desktop review or a field evaluation. But in either event (and more fundamentally), rather than examining Mountain Valley's statements or their underlying engineering assumptions and premises, the EA

³⁴⁸ 40 C.F.R. § 230.10(a)(4).

³⁴⁹ EA at 93 (emphasis added).

purports to "confirm" that Mountain Valley "may" be right about the feasibility of a trenchless crossing. While that level of uncertainty may suffice for a single off a 1980 Billy Joel album, ³⁵⁰ it falls far short of the hard look required by federal environmental law. Stated otherwise, the EA fails to either confirm or refute Mountain Valley's analysis; at most it acknowledges that Mountain Valley's assessment is within the realm of possibility.³⁵¹

Such thin sauce not only violates NEPA but also falls short of what is required of the Corps under the Section 404(b)(1) Guidelines. The 404(b)(1) Guidelines prohibit the issuance of a Section 404 permit where "there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem[.]" ³⁵² "[P]racticable alternatives include, but are not limited to, (i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States . . . [and] (ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters[.]" ³⁵³ The burden to demonstrate that the proposed alternative is the LEDPA lies on the applicant.³⁵⁴ In

³⁵⁰ Billy Joel, You May Be Right (1980).

³⁵¹ EPA made similar comments on the EA. See Nevshehirlian Letter at 3.

³⁵² 40 C.F.R. § 230.10(a).

³⁵³ *Id.* § 230.10(a)(1).

 $^{^{354}}$ Utahns for Better Transp., 305 F.3d at 1187; see also Alliance for Legal Action v. U.S. Army Corps of Eng'rs, 314 F.Supp.2d 534, 543 (M.D.N.C. 2004) (holding "the burden to clearly demonstrate a lack of practicable alternatives lies with the project applicant").

As EPA explains it, "[t]he burden of proof to establish compliance with the Guidelines rest with the applicant; where insufficient information is provided to determine compliance, the Guidelines require no permit be issued." Memorandum to the Field,

performing the LEDPA analysis, the Corps has "an obligation to independently verify the information supplied to it" by the applicant.³⁵⁵

Mountain Valley's conclusory statements about the site conditions at the Blackwater River crossing fall short of what is required to carry its burden to demonstrate that an open-cut, dry-ditch crossing of the Blackwater River is the LEDPA. And a conclusion after a cursory "review" of a crossing location that Mountain Valley "may be" correct about the feasibility of a trenchless crossing certainly fails to verify the applicant's characterization of the site, as is required of the Corps under *Hintz*. Accordingly, the EA's treatment of the Blackwater River crossing falls short of what is required under NEPA and the CWA, and is no model for what the Commission and the Corps must do with regard to routing and construction method alternatives at the other crossing locations.

Fifth, the EA briefly acknowledges, but does not examine, Mountain Valley's credibility issues regarding crossing technique feasibility. In their comments to the Corps, and in their supplemental scoping comments, Commenters presented in detail Mountain Valley's numerous flip-flops and misrepresentations about which technologies are feasible for which crossings—including Mountain Valley's remarkable change in position earlier this year on whether 38 trenchless crossings

Subject: Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements (Aug. 23, 1993), *available at* 62 Fed. Reg. 31,492, 31,497–99 (June 9, 1997).

³⁵⁵ *Hintz*, 800 F.2d at 835.

along the first 77 miles of the route are feasible.³⁵⁶ Despite that detailed presentation, the EA underwhelmingly states, "We also received comments noting that Mountain Valley previously rejected boring of waterbodies and wetlands as too costly and risky during the application process for the Mountain Valley Pipeline Project."³⁵⁷ In an apparent effort to excuse Mountain Valley's willingness to change its position on feasibility as suits its interests, the EA states that "various legal, regulatory, and permitting challenges have prevented Mountain Valley from completing construction of the Mountain Valley Pipeline Project as previously certificated[,]" leading "Mountain Valley [to] reevaluate[] the crossing method for all remaining crossings."³⁵⁸ Stated differently, the EA attributes Mountain Valley's inconsistent statements to the loss of its streamlined Nationwide Permit 12 authorization in litigation and its choice to resort to Plan B in order to survive the scrutiny that an individual permit application brings. The EA provides no further explanation for Mountain Valley's shifting positions on technical and cost feasibility. Remarkably, the EA proceeds to accept Mountain Valley's various current representations about technological and cost feasibility without any real analysis.³⁵⁹

³⁵⁶ 404 Comments at 18–29; Supplemental Scoping Comments at 16–28; Section I.A.5, *supra*.

³⁵⁷ EA at 92.

³⁵⁸ *Id.* at 92–93.

³⁵⁹ See id. at 93–98.

A federal agency acts arbitrarily and capriciously when it bases an action on unreliable information. ³⁶⁰ Accordingly, the Commission and the Corps must independently review and closely scrutinize *every* representation Mountain Valley makes about the feasibility of the technologies it is proposing. Because the EA fails to grapple meaningfully with Mountain Valley's prior inconsistent statements, it cannot lawfully support a certificate amendment by the Commission or a permit issuance by the Corps.

Sixth, the EA's alternatives analysis suffers from the same defect as its consideration of the environmental impacts of open-cut, dry-ditch crossings on water quality and climate change—it ignores the Corps' specific requests in its scoping comments. Accordingly, the EA itself is unlawful, and reliance on it by the Corps would be arbitrary and capricious.

When a cooperating agency in a NEPA review submits scoping comments to the lead agency, and those comments are not addressed in the resulting NEPA document, the cooperating agency cannot simply adopt that resulting NEPA document without independent review.³⁶¹ As discussed above, when the Corps accepted the Commission's invitation to be a cooperating agency, it provided specific

³⁶⁰ See, e.g., Colo. Fire Sprinkler, 891 F.3d at 1041 (holding agency decision to be arbitrary and capricious because of its reliance on "demonstrably untrustworthy" information); Friends of Boundary Waters Wilderness, 437 F.3d at 825 (holding an agency cannot rely on questionable data without independently validating it); Menorah Med. Ctr., 768 F.2d at 295–96 (reliance on untrustworthy survey rendered decision arbitrary and capricious); St. James Hosp., 760 F.2d at 1467 n.5 (7th Cir. 1985) ("[I]t is an agency's duty to establish the statistical validity of the evidence before it prior to reaching conclusions based upon that evidence.").

³⁶¹ Cowpasture River, 911 F.3d at 170–73; see also Sierra Club, 897 F.3d at 594–96.

scoping comments "to ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR 320.4)[.]"³⁶² Among the items that the Corps requested the Commission evaluate in the resulting NEPA document were compliance with the Section 404(b)(1) Guidelines, including the prohibition against authorizing a discharge where there is a practicable alternative with a less adverse impact.³⁶³ The Corps further informed the Commission that "[t]he NEPA document should provide a sufficient analysis to determine compliance with the Guidelines"—which would include the Guidelines' LEDPA provisions.³⁶⁴

Moreover, the Corps told the Commission in its scoping comments that a "fundamental precept of the Corps' Regulatory Program under Section 404 of the Clean Water Act is that the discharge of dredged and/or fill material into waters of the United States will be avoided and minimized, where it is practicable to do so," such that a "Section 404 of the Clean Water Act permit may only authorize the least environmentally damaging practicable alternative."³⁶⁵ Thus, in order for the EA to have been responsive to the Corps' scoping comments and even close to sufficient to

³⁶⁵ *Id*. at 3.

³⁶² Letter from Teresa D. Spagna, Chief, North Regul. Branch, Huntington Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility at 2 (Mar. 8, 2021) (Accession No. 20210311-5077).

³⁶³ *Id*. at 3.

³⁶⁴ *Id.* at 4.

support the Corps' permitting process, it would have had to "evaluate how the Project was designed to avoid and minimize the discharge of dredged and/or fill material into waters of the United States" including analysis of "avoidance and minimization alternatives."³⁶⁶

For the reasons discussed above, the EA fails to include the information and alternatives analysis requested by the Corps in its scoping comments. For example, trenchless crossings represent one potential avoidance and minimization alternative for the crossings that Mountain Valley proposes to accomplish using the open-cut, dry-ditch method. For the Corps to rely on the EA, the EA would have had to separately evaluate the practicability of requiring Mountain Valley to employ trenchless crossing methods at each and every location.³⁶⁷ But the EA does not do so.

³⁶⁶ *Id.*; see also 40 C.F.R. § 230.10(a)(4) (requiring supplementation of NEPA documents that do not consider alternatives in sufficient detail to address the "least environmentally damaging practicable alternatives" requirements of the Section 404(b)(1) guidelines).

³⁶⁷ It is not just the Commenters who endorse that requirement—EPA does as well. On May 27, 2021, EPA Region 3 submitted comments to the Corps on Mountain Valley's pending application for an individual Section 404 permit for the MVP's waterbody crossings. Lapp Letter. In those comments, EPA Region 3 stated that the MVP "may not comply with the [Section 404(b)(1)] Guidelines," and recommended "that the permit not be issued until modifications described in the attachment . . . have been addressed and incorporated into the project." *Id.* at 2. Among the reasons underlying EPA's recommendations were its concerns about Mountain Valley's presentation of crossing alternatives. *Id.* at 4–6.

EPA recognized that alternatives to the proposed action should include "not only geographical siting but also operational options, such as design modifications." *Id.* at 4. To accomplish a robust alternatives analysis, EPA recommended that "a full range of practicable alternatives" be considered for each crossing. *Id.* Indeed, EPA specifically recommended further consideration of trenchless crossings "at streams where [such methods are] not currently proposed, particularly streams that will be

Because such evaluations are utterly lacking, it would be arbitrary and capricious for the Corps to rely on the EA to satisfy its NEPA obligations under the Fourth Circuit's precedent in *Cowpasture River* and *Sierra Club v. U.S. Forest Service.*³⁶⁸ The Corps should learn from the Forest Service's mistakes in that agency's review of the MVP and conduct its own robust NEPA analysis of the alternatives to the proposed stream crossings.

C. THE CORPS MUST CONDUCT FURTHER NEPA ANALYSIS FOR THE 404 PERMIT BECAUSE THE EA'S NEPA ANALYSIS DOES NOT ADEQUATELY CONSIDER CLIMATE IMPACTS.

The EA's analysis of climate impacts is inadequate. And, as addressed in previous comments submitted by the Commenters, the climate impacts analysis in the 2017 FEIS was also inadequate.³⁶⁹ Consequently, the Corps cannot issue a 404 permit without conducting further climate impacts analysis to satisfy its own public interest review and NEPA obligations. Finally, it is imperative that both the Commission and the Corps begin heeding our national climate policy, as every new

crossed multiple times, streams that are of good quality, and/or streams that may contain threatened or endangered aquatic species" *Id.* at 5.

EPA's recommendations echo the Commenters' consistent refrain: the NEPA review by the Commission and the Corps must include a site-specific, crossing-by-crossing, alternatives analysis to take a hard look at the environmental impacts of the available alternative stream-crossing methods at each proposed crossing.

³⁶⁸ Cowpasture River, 911 F.3d at 170–73; see also Sierra Club, 897 F.3d at 594–96.

³⁶⁹ Supplemental Scoping Comments at 112, 129–30; see also Maya Weber, Environmentalists Push FERC on MVP Environmental Review Plans, Carbon Impacts, S&P GLOBAL (Aug. 6, 2021), https://www.spglobal.com/platts/en/marketinsights/latest-news/electric-power/080621-environmentalists-push-FERC-on-mvpenvironmental-review-plans-carbon-impacts; Scoping Comments of Allegheny-Blue Ridge Alliance et al. (Apr. 15, 2021), at 43–50.

pipeline approval makes it less likely that we can succeed at meeting our national and international commitments.

1. THE EA'S ANALYSIS OF CLIMATE IMPACTS IS INADEQUATE.

The EA's analysis of climate impacts falls far short of fulfilling the Corps' NEPA obligations. The EA discusses climate change generally but makes no attempt to consider the climate impacts of the pipeline as a whole, instead limiting its quantitative analysis to only the additional construction emissions of the boring amendment. Such a limitation on the EA renders it inadequate. Even that analysis within that impermissibly narrow scope—falls short, as the EA claims that no methodology allows it to quantify the project's climate impacts. Worse still, in making this erroneous claim, the EA disregards public comments submitted by the Commenters describing available methods for analyzing this project's climate impacts, including the Social Cost of Carbon and Life Cycle Analysis.³⁷⁰

a. Because the EA is limited to emissions increases due to the amendment, its NEPA analysis for the project as a whole is inadequate.

The EA's assertion that the requisite scope of the analysis is limited to the increases in emissions caused by the amendment itself³⁷¹ ignores the fact that the no one has yet fulfilled NEPA obligations for the project as a whole. In doing so, the EA

³⁷⁰ Supplemental Scoping Comments at 130–33; Scoping Comments at 48–50.
³⁷¹ EA at 69–70.

fails to assess the significance of this project as the Commission did in *Northern Natural Gas Company*³⁷² and sets the agencies up to fail.

Taken together, the 2017 FEIS and the EA fail to "assess the significance of" the project's climate impact, as NEPA requires.³⁷³ The EA ignores the scoping comments submitted by many organizations and individuals detailing the need for the Commission's NEPA analysis to consider the full context of the proposed pipeline's climate impacts using a Life Cycle Analysis, not solely the additional climate impacts of boring.³⁷⁴

b. The EA's discussion of certain emission increases is incomplete and inadequate.

Even when the EA limits its analysis of climate impacts to the increase in construction emissions from the proposed change in crossing methods, it still fails to adequately quantify and analyze those climate impacts. The EA addresses greenhouse gas emissions and/or climate change in several places, but each time its treatment fails to take the requisite hard look at the project's climate impacts.

First, the EA includes a paragraph stating that greenhouse gases cause climate change; listing carbon dioxide, methane, and nitrous oxide as greenhouse

³⁷² 174 FERC ¶ 61189 (2021).

³⁷³ For a discussion of this decision and the Commission's March 18, 2021, press release and the ways the 2017 FEIS falls short of both, see Supplemental Scoping Comments at 129.

³⁷⁴ See Scoping Comments submitted by Jessica Sims on behalf of Appalachian Voices, West Virginia Rivers Coalition, Protect Our Water Heritage Rights, and Chesapeake Climate Action Network at 2 (Apr. 15, 2021) (Accession No. 20210415-5251).

gases; and defining the term " CO_2 equivalents." ³⁷⁵ This paragraph contains no indication of how such basic information applies to this pipeline and is couched in a section about the Clean Air Act and the National Ambient Air Quality Standards.³⁷⁶

Second, the EA offers several pages of background information on the importance of climate change, only to go on to claim that Commission staff could not analyze the project-level climate impacts because "staff has not identified a methodology to attribute discrete, quantifiable, physical effects on the environment to the Amendment Project's incremental contribution to GHGs."³⁷⁷

The EA states that atmospheric modeling was "not reasonable for Project-level analysis" because "global models are not suited to determine the incremental impact of individual projects, due to both scale and overwhelming complexity."³⁷⁸ The EA further states that "staff could not identify a reliable, less complex model . . . and thus staff could not determine specific localized or regional physical impacts from GHG

³⁷⁸ Id. at 73.

³⁷⁵ EA, at 68.

³⁷⁶ *Id.* at 67–68.

³⁷⁷ Id. at 69–73. This is not the only instance of the EA acknowledging the impacts of climate change in one context while ignoring them in another. In the EA, Commission staff acknowledge that climate change will lead to "changes to water resources" and that "certain weather events are becoming more frequent and more severe." EA at 70. Elsewhere, however, the EA's analysis ignores the substantial changes to weather and precipitation patterns that will occur in the future. For example, the EA relies on data for the period 1985 to 2014 to characterize the regional climate, while describing recent precipitation levels as "unusually high." EA at 19–20. In so doing, the EA ignores that precipitation and other weather patterns that appear highly "unusual" compared to historic data are quickly becoming the norm. The EA fails to properly account for these shifting patterns attributable to climate change.

emissions from the Amendment Project."³⁷⁹ The EA additionally states that, despite national and state-level commitments to emissions reduction targets, "Commission staff have not been able to find an established threshold for determining the Amendment Project's significance when compared to established GHG reduction targets at the state or federal level."³⁸⁰

This explanation ignores available methods—raised by Commenters—of analyzing the significance of project-level climate impacts, including the Social Cost of Carbon.³⁸¹ There is no credible argument that the Social Cost of Carbon is not yet an accepted method, as it was first adopted in 2010 and was updated earlier this year.³⁸² Indeed, the White House Office of Climate Policy is currently applying the same principles to update its calculation of the Social Cost of Methane.³⁸³ The EA does not even mention the Social Cost of Carbon, much less explain or justify the decision not to use it. Instead, the EA pays lip service to the importance of climate change, only to revert to the traditional excuse that incremental increases in a global

³⁷⁹ Id.

 $^{^{380}}$ Id.

³⁸¹ *Id.* at 73–75.

³⁸² See generally Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document (2021), available at https://www.whitehouse.gov/wp_content/uploads/2021/02/TechnicalSupportDocume nt_SocialCostofCarbonMethaneNitrousOxide.pdf; Interagency Working Group on the Social Cost of Carbon, Technical Support Document (2010), available at https://www.epa.gov/sites/production/files/201612/documents/scc_tsd_2010.pdf.

³⁸³ Zack Colman, Scientists Say the World Urgently Needs to Cut Methane Emissions. The Politics Aren't as Simple., POLITICO (Aug. 24, 2021), https://www.politico.com/news/2021/08/24/methane-emissions-cut-politics-506736.

problem are difficult to quantify. This type of glib excuse for failing to adequately consider climate impacts, even when they are difficult to quantify, is becoming increasingly unacceptable to courts.³⁸⁴

2. THE CORPS CANNOT ISSUE A 404 PERMIT TO MOUNTAIN VALLEY WITHOUT A SUPPLEMENTAL NEPA ANALYSIS BECAUSE THIS EA AND THE 2017 FEIS DO NOT ADEQUATELY CONSIDER CLIMATE IMPACTS.

In previous comments on the EA, many organizations have emphasized that, if the Commission failed to adequately consider the project's climate impacts in this NEPA document, the Corps would need to conduct its own NEPA analysis due to the inadequacy of the 2017 FEIS.³⁸⁵ It is now clear that the Corps will have to prepare a separate NEPA analysis that fully considers the climate impacts of the pipeline, including methane emissions from the pipeline infrastructure and end-use greenhouse gas emissions over its entire expected lifespan.

It would be arbitrary and capricious for the Corps to simply adopt the 2017 FEIS and the EA without conducting its own NEPA review of the climate change effects of the MVP. As discussed elsewhere in these comments, when a cooperating

³⁸⁴ See, e.g., Sovereign Inupiat for a Living Arctic v. Bureau of Land Mgmt., _____ F. Supp. 3d _____, No. 3:20-CV-00290-SLG, 2021 WL 3667986, at *11-*12, *46 (D. Alaska Aug. 18, 2021) (vacating an oil and gas project's approval after finding that agency's exclusion of foreign end-use emissions from NEPA analysis was arbitrary and capricious where the agency based its decision on negligible environmental impact and purported lack of information as to foreign energy consumption and emissions patterns but failed to thoroughly explain why estimating foreign emissions was impossible, failed to cite any materials or research relied upon, and failed to discuss how downstream foreign oil consumption could change carbon dioxide equivalents analysis).

³⁸⁵ See Supplemental Scoping Comments at 126–33; Scoping Comments at 48–50.

agency in a NEPA review submits scoping comments to the lead agency, and those comments are inadequately addressed in the resulting NEPA document, the cooperating agency cannot simply adopt that resulting NEPA document without independent review.³⁸⁶ Here, when the Corps accepted the Commission's invitation to be a cooperating agency, it provided specific scoping comments "to ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR 320.4)[.]"³⁸⁷ Among the items that the Corps requested the Commission evaluate in the resulting NEPA document were the Corps' public interest review factors, including, but not limited to, general environmental concerns, energy needs, and the needs and welfare of the people.³⁸⁸ The Corps informed the Commission that those "factors should be scoped and evaluated in the NEPA document."³⁸⁹

Climate change and the need for carbon-free energy sources fit squarely within the public interest review factors the Corps requested be included in the Commission's NEPA document, especially the categories of general environmental

³⁸⁶ Cowpasture River, 911 F.3d at 170–73; see also Sierra Club, 897 F.3d at 594–96.

³⁸⁷ Letter from Teresa D. Spagna, Chief, North Regul. Branch, Huntington Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility, at 2 (Mar. 8, 2021) (Accession No. 20210311-5077).

 $^{^{388}}$ Id. at 4–5.

³⁸⁹ *Id.* at 5.

concerns, energy needs, and the needs and welfare of the people. And, of course, climate change and the shift to carbon-free energy sources are extremely high priorities for both the federal government and the public—as evidenced, respectively, by President Biden's executive orders and rejoining of the Paris Agreement³⁹⁰ and by the sheer volume of public comments expressing concern for this project's climate impacts and lock-in of fossil fuel infrastructure. Accordingly, the Corps must evaluate climate impacts in its public interest review. But, as described above, the Commission's consideration of those issues in the 2017 FEIS and the EA are wholly inadequate. As a result, under *Cowpasture River*, the Corps cannot simply adopt the Commission's NEPA documents. Rather, it must independently review the climate impacts of the Mountain Valley Pipeline Project in its public interest review *and* in a supplemental NEPA document.³⁹¹

³⁹⁰ See Section II.D.3, infra.

³⁹¹ Mountain Valley's recently announced "mitigation" plan does not render this project's climate impacts insignificant because it addresses only a small portion of the emissions resulting from the pipeline. Mountain Valley plans to mitigate its GHG emissions by purchasing \$150 million in carbon offsets, which would be generated through a methane abatement program at a coal mine in Southwestern Virginia that would convert methane into carbon dioxide and water before release. Laurence Hammack, Mountain Valley Pipeline to Purchase \$150 Million in Carbon Offsets, ROANOKE TIMES (July 12, 2021), https://roanoke.com/business/local/mountain-valleypipeline-to-purchase-150-million-in-carbon-offsets/article 9126aac6-e34c-11eb-89da-7bc791f77d9d.html. Mountain Valley admits that the purchased offsets only cover the pipeline's first ten years of operational emissions (only one-fifth of its expected lifespan). Id. It is likely that Mountain Valley's purchased offsets will cover an even smaller portion than it claims of its operational methane emissions—which include leakage and intentional releases of methane from the pipeline and compressor stations—as recent research has shown that these methane emissions are routinely underestimated by both industry and government agencies. Even if Mountain Valley's claims are accurate, the program will do nothing to mitigate the pipeline's methane leaks and releases during the balance (approximately 40 years) of its

3. NOW IS THE TIME FOR FEDERAL AGENCIES TO MOVE BEYOND RHETORIC AND ACTUALLY APPLY OUR NATIONAL CLIMATE POLICY.

The gulf between this Administration's statements and action on climate

change is increasingly noted in the media, both in terms of this pipeline³⁹² and more

generally.³⁹³ Permitting this project will severely undermine the public's trust that

The inadequacy of Mountain Valley's carbon offset plan is plain. Indeed, even as Mountain Valley touts its carbon offset plan, others have recognized its inadequacies. Laurence Hammack, *Pipeline's Plan to Offset Greenhouse Gas Emissions Questioned by Environmentalists*, ROANOKE TIMES (July 30, 2021), https://roanoke.com/business/local/pipelines-plan-to-offset-greenhouse-gas-

expected lifespan. Lastly, and most importantly, the plan does nothing to mitigate the greenhouse gas emissions resulting from end-use combustion. *Id*.

 $emissions - questioned - by - environmentalists/article_bb46c980 - f17a - 11eb - 84c6 - bb46c980 - f17a - f$

⁶fcf1344e5e8.html; see also William Limpert, Pipeline's Carbon Offsets Don't Come Close to Adding Up, VA. MERCURY (July 28, 2021), https://www.virginiamercury.com/2021/07/28/pipelines-carbon-offsets-dont-comeclose-to-adding-up/. This plan does not curtail the project's grievous climate impacts and does nothing to distract from the obvious conclusion that the pipeline would be

and does nothing to distract from the obvious conclusion that the pipeline would be extremely harmful for the climate and cannot be squared with the federal government's climate commitments.

³⁹² See, e.g., Crystal Cavalier & Michael E. Mann, *Biden Must Stop Methane Pipelines to Delivery on Climate Change and Environmental Justice*, USA TODAY (June 21, 2021) ("The Mountain Valley Pipeline and others awaiting approval are nails in America's climate coffin. . . . We fervently hope the Biden administration intends to make genuine progress on the paired crises of climate change and environmental justice. The MVP, for starters, has no place in that vision for America.").

³⁹³ See, e.g., Darryl Fears, Biden Officials Trumpet How Solar Can Provide Nearly Half of the Nation's Electricity by 2050, WASH. POST (Sept. 8, 2021), https://www.washingtonpost.com/climate-environment/2021/09/08/biden-solar-

climate-change/ ("[I]n recent weeks some environmental groups have begun to question Biden's commitment to curbing fossil fuels linked to climate change, especially since the Interior Department announced it would hold an oil and gas sale on 80 million acres in the Gulf of Mexico this fall"); Lisa Friedman, *Biden Administration Defends Huge Alaska Oil Drilling Project*, NY TIMES (May 26, 2021), https://www.nytimes.com/2021/05/26/climate/biden-alaska-drilling.html; Brad Plumer, *Nations Must Drop Fossil Fuels, Fast, World Energy Body Warns*, NY TIMES (May 18, 2021), https://www.nytimes.com/2021/05/18/climate/climate-change-

the Administration is willing to move beyond rhetoric and actually implement the policies it espouses.

Furthermore, there has been a recent increase in attention on reducing methane emissions in addition to carbon dioxide, because methane is many times more powerful than carbon dioxide in warming the atmosphere over a short timescale.³⁹⁴ In the United States, the gas industry is a prominent source of this potent greenhouse gas from both inadvertent leaks and intentional venting occurring throughout natural gas infrastructure.³⁹⁵ In May, a new report from the United Nations Environment Programme declared:

Lower methane concentrations would rapidly reduce the rate of warming, making methane mitigation one of the best ways of limiting warming in this and subsequent decades. Doing so would also help limit dangerous climate feedback loops, while simultaneously delivering

emissions-IEA.html ("We're seeing more governments around the world make netzero pledges, which is very good news,' [International Energy Agency Director Fatih] Birol said. 'But there's still a huge gap between the rhetoric and the reality.""); Christopher Flavelle, *Climate Change is Making Big Problems Bigger*, NY TIMES (May 12, 2021), https://www.nytimes.com/2021/05/12/climate/climate-changeepa.html_("While Dr. [Kristina Dahl, a senior climate scientist with the Union of Concerned Scientists,] applauded the Biden administration for updating and expanding its climate data, she said the work that matters is changing those trends. 'It's a bare minimum that this kind of data should be updated regularly and available to the public,' Dr. Dahl said. 'We have a very long, uphill road ahead of us for actually enacting policies that will make change."").

³⁹⁴ Ilissa B. Ocko et al., Acting Rapidly to Deploy Available Methane Mitigation Measures By Sector Can Immediately Slow Global Warming, 16 ENVTL. RESEARCH LETTERS 054042 (2021), available at https://doi.org/10.1088/1748-9326/abf9c8.

³⁹⁵ See generally INT'L ENERGY AGENCY, DRIVING DOWN METHANE LEAKS FROM THE OIL AND GAS INDUSTRY: A REGULATORY ROADMAP AND TOOLKIT (2021).

important health and economic benefits from reducing ground-level ozone. $^{\rm 396}$

The report further explains that "without relying on future massive-scale deployment of unproven carbon removal technologies, expansion of natural gas infrastructure and usage is incompatible with keeping [global] warming to 1.5° C[,]"³⁹⁷ the goal the United States agreed to work toward by rejoining the Paris Agreement.³⁹⁸ Finally, in just the past few weeks, the United States and the European Union jointly launched the Global Methane Pledge ahead of the U.N. Climate Change Conference in Glasgow, urging countries to commit to a collective goal of reducing global methane emissions by 30% by 2030.³⁹⁹ Of course, building new gas infrastructure increases rather than reduces methane emissions. There is a clear conflict between our national climate policy and building this pipeline, a conflict that is not escaping anyone's notice.

³⁹⁶ UNITED NATIONS ENVIRONMENT PROGRAMME, GLOBAL METHANE ASSESSMENT, Executive Summary at 8 (2021), https://bit.ly/2TanDvg.

³⁹⁷ *Id.* at 10.

³⁹⁸ The Paris Agreement, UNITED NATIONS, https://www.un.org/en/climatechange/paris-agreement.

³⁹⁹ Press Release, White House Briefing Room, Joint US-EU Press Release on the Global Methane Pledge (Sept. 18, 2021), *available at* https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/18/joint-us-eu-press-release-on-the-global-methane-pledge/.

E. THE NEPA DOCUMENTS FOR ANY CORPS PERMIT MUST EXAMINE THE CUMULATIVE EFFECTS OF THE HUNDREDS OF CROSSINGS PROPOSED BY MOUNTAIN VALLEY.

Among the factual findings that the Corps must make under the 404(b)(1) Guidelines is a "[d]etermination of cumulative effects on the aquatic ecosystem."⁴⁰⁰ Cumulative effects must also be evaluated as part of the factual determinations of the effects of the proposed discharge on the physical substrate, the effects of suspended particulates and turbidity, and the effects on the structure and function of the aquatic ecosystem and organisms.⁴⁰¹

In its scoping comments to the Commission, the Corps expressly requested that the NEPA document the Commission was working on "scope[] and evaluate[]" "[t]he cumulative and indirect impacts on aquatic resources resulting from the Project."⁴⁰² The Commission, however, completely ignored that request by the Corps. Accordingly, under Fourth Circuit precedent, it would be arbitrary and capricious for the Corps to adopt and rely on the EA; rather, the Corps must independently review the cumulative impacts of the MVP on aquatic resources.⁴⁰³

Here, to lawfully support any authorization by the Commission or the Corps, the NEPA document must include a detailed statement of the cumulative

⁴⁰⁰ 40 C.F.R. § 230.11(g).

 $^{^{401}}$ Id. § 230.11(a), (c), & (e).

⁴⁰² Letter from Teresa D. Spagna, Chief, North Regul. Branch, Huntington Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility at 5 (Mar. 8, 2021) (Accession No. 20210311-5077).

⁴⁰³ Cowpasture River, 911 F.3d at 170–73; see also Sierra Club, 897 F.3d at 594–96.

environmental effects of all of the proposed crossings, regardless of any purported effect of the 2020 NEPA regulations on a federal agency's obligation to consider cumulative effects. That is so because:

- (1) the Corps, as a cooperating agency, has to ensure that the information in the NEPA document produced in this process is "adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act,"⁴⁰⁴
- (2) the pre-2020 NEPA regulations require an examination of cumulative effects,⁴⁰⁵ and
- (3) Mountain Valley's proposed crossings are "connected actions" whose impacts require review even under the 2020 NEPA regulations.⁴⁰⁶

The 404(b)(1) Guidelines recognize that, "[a]lthough the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems."⁴⁰⁷

⁴⁰⁴ Letter from Jon T. Coleman, Pittsburgh Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n, Re: Acceptance of Cooperating Agency Responsibility (Mar. 10, 2021) at 1–2.

⁴⁰⁵ See, e.g., 40 C.F.R. § 1508.25(c)(3) (2019).

⁴⁰⁶ 40 C.F.R. § 1501.9(e). Because all of Mountain Valley's proposed crossings are indisputably connected actions under that regulation, the Commission and the Corps must consider the additive or cumulative effects of each crossing, along with the additive or cumulative effects of the crossings and upland construction, which are also connected actions. This section of the comments should be construed to use the term "cumulative effects" to include the additive/combined effects of the various connected actions necessary to complete the MVP as proposed by Mountain Valley.

⁴⁰⁷ *Id.* § 230.11(g).

That description of cumulative effects remarkably tracks the conclusions of the scientific literature on the significant cumulative effects of open-cut, dry-ditch crossings:

The potential for cumulative effects associated with pipeline crossing construction should be taken into consideration in assessing the impacts of these activities on rivers and streams. Construction of a single crossing on a stream or river, or within a watershed, may not have significant effects on fish and fish habitat in that system. Construction of multiple crossings on a stream or river, or within a watershed, however, has the potential for cumulative effects on that system. In such cases, the capacity of the system to recover from impact may be exceeded, and the detrimental effects of crossing construction permanent. The same may be said for the frequency of crossing construction within a given system; rivers and streams will have limited capacities to recover from multiple impacts.⁴⁰⁸

Despite the 404(b)(1) Guidelines' requirements for factual findings regarding cumulative effects, and despite the scientific literature's clear predictions of significant effects, Mountain Valley's application to the Corps is devoid of any useful analysis of the cumulative effects of its proposed crossings. The absence of such information raised concerns for EPA, as described in that agency's May 27, 2021 comments on Mountain Valley's application to the Corps.⁴⁰⁹ For example, EPA recommended "a conclusive evaluation at watershed scale (i.e. HUC 12) be provided to ensure that measures are undertaken to avoid and minimize the potential of cumulative impacts,"⁴¹⁰ and asked the Corps to require special provisions applicable

⁴⁰⁸ Lévesque and Dubé (2007) at 406–07.

⁴⁰⁹ Lapp Letter at 1 (noting an "insufficient assessment of secondary and cumulative impacts").

⁴¹⁰ *Id*. at 8.

to streams and wetlands impacted multiple times by construction of the MVP.⁴¹¹ As explained above, Mountain Valley recently provided the Corps with information purportedly evaluating the cumulative impacts of its proposal, but that supplemental information is incomplete, insufficient, and does not cure the problem.

In previous comments, Commenters have repeatedly detailed the cumulative effects that the agencies must consider, including the streams and watersheds that the MVP would cut multiple times with its proposed open-cut trenches.⁴¹² Thus far, the agencies have ignored those comments. But they do so at their peril. Any NEPA review that omits examination of the cumulative effects of Mountain Valley's crossings will be insufficient to support an agency action on the company's pending permits.

Furthermore, to be complete, the environmental review the Commission and the Corps conduct must account for the combined effects of *trenchless* crossings with *open-cut, dry-ditch* crossings.⁴¹³ There may be cumulative impacts from those two methods that the Commission and the Corps must analyze in their NEPA documents. For example, trenchless crossings in a watershed may affect water *quantity* in such a way as to reduce the flow available in downstream reaches to clear sedimentation from open-cut, dry-ditch crossings in downstream reaches.

⁴¹¹ *Id.* at 7.

⁴¹² 404 Comments at 133–36; Supplemental Scoping Comments at 105–08.

 $^{^{413}}$ This combined-effects analysis is also required under the Section 404(b)(1) Guidelines. 40 C.F.R. § 230.11(g).

One key cumulative impacts issue that the EA ignores is the extent to which bore pit dewatering will affect nearby surface waters and wetlands, especially those that are proposed for both trenched and trenchless crossings in close proximity.⁴¹⁴ A 2021 report by the Virginia Scientist-Community Interface notes that "[h]eadwater streams, wetlands, and groundwater form a complex hydrologic network, and hillslopes, headwater streams, and downstream waters are best described as individual elements of integrated hydrological systems."⁴¹⁵ It would be arbitrary to ignore the risk—and at some sites, the likelihood—that bore pit dewatering operations will also dewater nearby surface waters and wetlands. For example, licensed professional geologist Pamela C. Dodds, Ph.D., notes, in the vicinity of Bent Mountain, Virginia, the hydraulic connectivity between the area's perched aquifers and its surface waters and wetlands.⁴¹⁶ It is incumbent upon the Commission and the

⁴¹⁴ One example occurs in Virginia, near Bent Mountain, where Mountain Valley proposes seven crossings—a combination of trenched and trenchless—within .4 miles of one another, all affecting wetlands along Mill Creek and tributaries to Mill Creek, which flows parallel to and very near the right-of-way. *See* Mountain Valley Pipeline, LLC, Roanoke County Detail Map Fig. 4-653 (Feb. 2021) This map ostensibly is available with Mountain Valley's individual permit application materials at Accession No. 2021-0304-5122, but the FERC eLibrary returns an unexpected error message when access is attempted; the map is also available via Virginia DEQ at https://www.deq.virginia.gov/home/showpublisheddocument/5400/637502240076230 000.

⁴¹⁵ Virginia Scientist-Community Interface, Geology, Hydrology, Ecology, and Soils May Present Challenges for Construction of the Mountain Valley Pipeline near Bent Mountain, Virginia at 3 (July 2021) (attached as Ex. 42) (Accession No. 20210802-5098).

⁴¹⁶ Pamela C. Dodds, Hydrogeological Assessment of Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke County, Virginia at 24 (June 2017) (attached as Ex. 43).

Corps to account for the cumulative impacts of trenching and tunneling, including bore pit dewatering, in areas like this along the pipeline route. Notably, however, this cumulative impacts analysis will require site-specific information because, as the Virginia Scientist-Community Interface notes with respect to construction challenges near Bent Mountain, "[p]ublicly available data and best available science demonstrate the ecological important, environmental heterogeneity, and sensitivity of Blue Ridge headwater streams and underlying aquifers."⁴¹⁷ Indeed, the Virginia Scientist-Community Interface report explains: "Because of the considerable hydrological connection between groundwater and surface water . . . dewatering of [the] bore pits may impact groundwater sources and lead to alterations of the wetlands they sustain. Because geological, terrain, and soil characteristics on Bent Mountain are highly heterogenous, field-based site-specific planning and geotechnical analysis must take place before construction begins."⁴¹⁸

Also missing from the EA is any examination of the cumulative impacts that would result from the combination of Mountain Valley's upland activities and proposed stream crossings. Mountain Valley's upland activities have already led to substantial sediment deposits along streams in its path. Expert Starr Silvis predicts these impacts from upland disturbances:

The conversion of forested land to maintained right-of-way increases runoff volumes, which will change stream morphology. Lack of intact forest cover has been found to change stream morphology for two to four years post-disturbance (Reid & Anderson 1999). Methods to maintain the right-of-way include the use of pesticides and herbicides which can

⁴¹⁷ Virginia Scientist-Community Interface (2021) at 5.

⁴¹⁸ *Id.* at 2 (emphasis omitted).

be mobilized in stormwater runoff and cause degradation of aquatic ecosystems. The construction of temporary and permanent access roads also increases runoff volumes and increases turbidity and sediment migration from upland areas to water bodies. The increases in stormwater runoff volumes can alter stream morphology and stream bed composition. There are also long-term increases in temperature associated with the reduction of forested canopy for both streams and wetlands.⁴¹⁹

And, as Hansen & Betcher (2021) conclude, given that Mountain Valley "has been contributing sediment to streams along the pipeline's route during upland construction[, c]onstruction of stream crossings would only compound the sediment inputs to streams along the pipeline's route."⁴²⁰ As a result, the Commission and the Corps must consider whether the locations that would be affected by sedimentation from Mountain Valley's proposed open-cut stream crossings have also been affected by sedimentation and runoff from Mountain Valley's upland activities and determine the cumulative effects of those discharges on the aquatic ecosystems.

In sum, because of the requirements of the 404(b)(1) Guidelines, the scientific literature establishing potentially permanent impacts to watersheds from multiple trenched crosses in the same watershed, the inadequacy of Mountain Valley's application on those issues, and the connected nature of the actions that would occur under the proposed certificate amendment and Corps permit, the Commission and the Corps must take a hard look at the combined effects of Mountain Valley's proposed crossings in their NEPA documents. The EA does not do so. Accordingly, it

⁴¹⁹ Silvis (2021) at 4.

 $^{^{420}}$ Hansen & Betcher (2021) at 5.

cannot support any agency action authorizing Mountain Valley to trench through or bore under waterbodies in its path.

F. THE NEPA DOCUMENT MUST EXAMINE THE UNIQUE NATURE OF THE WETLANDS ON BENT MOUNTAIN IN VIRGINIA.

The wetlands in the vicinity of Bent Mountain, Virginia, provide a case study in the kind of review the Corps must undertake—and thus the kind of information that must be present (but isn't) in the NEPA document. The EA should have taken a hard look at the environmental impacts of Mountain Valley's requested amendment activities and stream crossings and equipped the Corps to make its required substantive determinations, including its public interest review determinations under 33 C.F.R. § 320.4.⁴²¹ But it did not. That deficiency must be remedied before the Commission or the Corps act on Mountain Valley's pending application.

Commenters and others including EPA have noted that Mountain Valley's application materials are far too general and that the Commission and the Corps must undertake site-specific analyses. As explained below, the wetlands in the vicinity of Bent Mountain, Virginia are entitled to consideration under the Corps' public interest regulations such that a permit presumptively may not issue.⁴²² Those

⁴²¹ See, e.g., Letter from Jon T. Coleman, Pittsburgh Dist., U.S. Army Corps of Eng'rs, to Kimberly D. Bose, Secretary, Fed. Energy Regul. Comm'n Re: Acceptance of Cooperating Agency Responsibility (Mar. 10, 2021) ("[T]o ensure the information presented in any National Environmental Policy Act (NEPA) document is adequate to fulfill the Corps' statutory requirements, including the requirements of Section 404(b)(1) of the Clean Water Act (40 CFR 230) and the Corps' public interest review (33 CFR 320.4), the Corps requests the topics listed in Enclosure 1 be included in the scoping and evaluation of any submitted NEPA document.").

⁴²² See 33 C.F.R. § 320.4(b)(4).

wetlands are also a microcosm of conditions likely to be found along the proposed pipeline route and highlight information that must be addressed in the agencies' NEPA documents.

The Corps' public interest regulations recognize that "[m]ost wetlands constitute a productive and valuable public resource, the unnecessary destruction or alteration of which should be discouraged as contrary to the public interest."⁴²³ The same regulations also recognize that wetlands can face major impairment due to the cumulative effect of numerous piecemeal changes, and the regulations require the Corps to evaluate "the particular wetland site for which an application is made . . . with the recognition that it may be part of a complete and interrelated wetland area."⁴²⁴ Finally, the regulations identify eight non-exclusive categories of wetlands that are "considered to perform functions important to the public interest"⁴²⁵ and

⁴²³ 33 C.F.R. § 320.4(b).

⁴²⁴ 33 C.F.R. § 320.4(b)(3).

⁴²⁵ 33 C.F.R. § 320.4(b)(2). Those categories of wetlands include:

⁽i) Wetlands which serve significant natural biological functions, including food chain production, general habitat and nesting, spawning, rearing and resting sites for aquatic or land species;

⁽ii) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;

⁽iii) Wetlands the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;

⁽iv) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, islands, reefs and bars;

create a rebuttable presumption that "no permit will be granted which involves the alteration" of wetlands in those categories unless the Corps expressly concludes that "the benefits of the proposed alteration outweigh the damage to the wetlands resource."⁴²⁶

The wetlands in and around Bent Mountain perform functions important to the public interest as described in 33 C.F.R. § 320.4(b)(2) and, therefore, fall into many of the specially-protected categories of wetlands itemized in that regulation. For example, a June 2017 report by licensed professional geologist Pamela C. Dodds, Ph.D., notes that "[e]xtensive wetlands areas are developed along first order stream tributaries to Mill Creek as well as along Mill Creek," and that "[t]he headwater areas and wetlands associated with the first order stream tributaries to Mill Creek provide the essential aquatic habitats for aquatic species and associated terrestrial fauna and fowls within the entire length of the river continuum." ⁴²⁷ Dodds' statement is consistent with a 2021 report by the Virginia Scientist-Community Interface, which

⁽v) Wetlands which serve as valuable storage areas for storm and flood waters;

⁽vi) Wetlands which are ground water discharge areas that maintain minimum baseflows important to aquatic resources and those which are prime natural recharge areas;

⁽vii) Wetlands which serve significant water purification functions; and

⁽viii) Wetlands which are unique in nature or scarce in quantity to the region or local area.

³³ C.F.R. § 320.4(b)(2)(i)-(viii).

⁴²⁶ 33 C.F.R. § 320.4(b)(4).

⁴²⁷ Dodds (2017) at 1; see also 33 C.F.R. § 320.4(b)(2)(i).

states that the "[s]treams and wetlands surrounding Bent Mountain are a part of the headwaters of the Roanoke River," and explains that "[h]eadwater streams are widely recognized as providing valuable aquatic habitat for a variety of aquatic species and it has been recognized that the biological integrity of entire river networks may be greatly dependent on the individual and cumulative impacts occurring in the many small streams that constitute their headwaters."⁴²⁸

The wetlands in and around Bent Mountain are inextricably linked to groundwater in the area.⁴²⁹ For example, Dodds notes that the proposed pipeline route encounters "numerous wetlands which have formed in areas of a perched water table."⁴³⁰ Dodds explains:

Perched aquifers are numerous in the watersheds of Mill Creek and Bottom Creek, accounting for the numerous wetlands. During a rain event, water will penetrate the ground and slowly migrate downward to the perched aquifer. Water in the perched aquifer will then provide water through springs to tributary streams in wetland areas, sometimes causing a large stream flow several days after a rain event.⁴³¹

Finally, Dodds notes that these perched aquifers "form[] seeps and springs where the bedding planes and fractures [in bedrock] intercept the ground surface," and that these "seeps and springs also occur within streams and along stream banks, providing water to streams during drought conditions."⁴³²

 $^{^{428}}$ Virginia Scientist-Community Interface (2021) at 3 (internal quotation marks and emphasis omitted).

⁴²⁹ See 33 C.F.R. § 320.4(b)(2)(vi).

⁴³⁰ Dodds (2017) at 24.

 $^{^{431}}$ Id.

⁴³² *Id.* at 37.

The NEPA process (and the Corps' public interest review) must account for the fact that the Corps is obligated to favor these wetlands and presumptively may not issue a permit absent an express finding that the benefits outweigh the costs.⁴³³ In other words, under the Corps' regulations, even equipoise favors the wetlands on Bent Mountain. And, even as Bent Mountain's wetlands merit special solicitude in their own right, they also demonstrate the reality that myriad other wetlands along the pipeline right-of-way are surely also entitled to a presumption of protection under 33 C.F.R. § 320.4(b)(4). Thus far, the agencies have cooperated on a NEPA document that cannot support the lawful issuance of a Corps permit. The only way to remedy that defect is for the Commission and the Corps take a hard look at the site-specific characteristics of the streams and wetlands Mountain Valley proposes to degrade.

IV. THE CORPS SHOULD CONDITION ANY DA PERMIT IT ISSUES TO MOUNTAIN VALLEY TO PROHIBIT ACTIVITIES THEREUNDER UNTIL ANY JUDICIAL REVIEW OF THE PERMIT IS CONCLUDED.

Twice before the Corps has followed its motto "Essayons"—"Let Us Try"—and attempted to authorize Mountain Valley to cross the streams in its path under legally dubious circumstances, and twice the United States Court of Appeals for the Fourth Circuit has found those actions unlawful and issued judicial stays pending review.⁴³⁴ The litigation over whether Mountain Valley's Nationwide Permit 12 authorizations should be stayed pending judicial review was time consuming and resource intensive for the environmental petitioners, the Corps, and Mountain Valley alike. And, as a

⁴³³ 33 C.F.R. § 320.4(b)(4).

 ⁴³⁴ Sierra Club, 981 F.3d at 251; Order, Sierra Club v. U.S. Army Corps of Eng'rs, No. 18-1173, Doc. #58 (4th Cir. June 21, 2018).

result, Mountain Valley constructed waterbody crossings without lawful authorization.

Because of the legal deficiencies identified herein, in Commenters' May 28, 2021 comments on Mountain Valley's application, and in EPA's May 27, 2021 comments to the Corps on the pending application, it would serve judicial economy and protect the environment if the status quo were maintained until any judicial challenges to any DA permits issued to Mountain Valley are concluded.⁴³⁵ This is not an ordinary project. Time and again, Mountain Valley has initiated construction— and its attendant environmental disturbance—only to have to stop. Moreover, Mountain Valley has previously embraced a strategy of proceeding quickly under Corps' authorizations to trench through "critical" streams "as quickly as possible before anything is challenged."⁴³⁶ Given that predilection, the MVP's checkered litigation record,⁴³⁷ its history of causing unpermitted environmental harm,⁴³⁸ and the mounting evidence that a Section 404 permit may not lawfully be issued,⁴³⁹ the

⁴³⁵ To be perfectly clear, the status quo is that Mountain Valley is not presently authorized to perform any activities requiring DA permits.

⁴³⁶ Equitrans Midstream Corp. (ETRN) Q2 2020 Earnings Call Transcript (Aug. 4, 2020) (statement of Diana Charletta, President and C.O.O., Equitrans Midstream Corp.), available at https://www.fool.com/earnings/calltranscripts/2020/08/04/equitrans-midstream-corp-etrn-q2-2020-earningscal.aspx.

⁴³⁷ See, e.g., Mountain Valley Pipeline, LLC: Order Partially Lifting Stop Work Order and Allowing Certain Construction to Resume, 173 FERC ¶ 61,252 at Dissent ¶¶ 1– 3 (Dec. 17, 2020) (Glick, Comm'r, dissenting).

⁴³⁸ See, e.g., WV DEP Consent Order No. 8951 (May 8, 2019), available at https://dep.wv.gov/pio/Documents/MVP%20LLC%20SIGNED%20ORDER.pdf.

⁴³⁹ See, e.g., Lapp Letter.

Corps should not authorize additional environmental harm while the project remains in doubt.

Under these circumstances, the Corps should condition any DA permit that it issues to Mountain Valley to prohibit activities thereunder until either (a) any and all judicial challenges thereto, brought within 30 days of the date any such permit is issued, have reached final judgment upholding such permit, or (b) one year after the date upon which the latest of any such judicial challenges is commenced—whichever is sooner. In other words, the Corps should administratively stay the effectiveness of any Section 10 or Section 404 permit that it issues to Mountain Valley until the conclusion of any judicial challenge thereto. The additional burden on Mountain Valley from any delay associated with such a condition is minimal in light of the timeline of the project to date, and the need for such a condition is the result of Mountain Valley's own track record in any event. Such a condition would be a practicable alternative and an important avoidance and minimization measure to eliminate the risk of further unnecessary environmental harm during the pendency of judicial review.⁴⁴⁰ Such a condition would also serve to protect the environment, conserve the resources of the parties, promote judicial economy, and ensure that any judicial permit challenges are resolved in a deliberate and thoughtful process, devoid

⁴⁴⁰ See 40 C.F.R. § 230.10(a) (prohibiting the issuance of a Section 404 permit where there is a practicable alternative with lesser environmental impacts); *id.* § 230.12(a)(2) (allowing the Corps to find compliance with the Section 404(b)(1) Guidelines contingent on conditions that minimize adverse effects); *Aracoma Coal*, 556 F.3d at 202 (recognizing that the Section 404(b)(1) Guidelines require that adverse impacts first be avoided, then minimized and finally mitigated).

of the pressures of active pipeline construction through waters of the United States or under Section 10 rivers.

CONCLUSION

For the reasons set forth above, the Corps must deny Mountain Valley's permit application because it cannot comply with the Section 404(b)(1) Guidelines and is not in the public interest. Moreover, for the foregoing reasons, the Corps cannot rely on the 2017 FEIS or the August 2021 EA—together or separately—to satisfy its NEPA obligations attendant to its consideration of Mountain Valley's pending applications for DA permits. Accordingly, the Corps cannot act on those applications without further NEPA review. Finally, even if the Corps were able to overcome the issues described above—and those identified in Commenters' May 28, 2021 comments on the public notice of Mountain Valley's application—it should condition any DA permits it issues to prohibit activities thereunder until any judicial challenges to the permits are concluded.

Respectfully submitted,

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