

October 17, 2024

Via Electronic Mail

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National Park Service
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RE: Adverse Impacts from the Ridgeline Expansion Project on Areas Protected Under the Wild and Scenic Rivers Act

Dear Director Foust:

We write on behalf of Appalachian Voices, Sierra Club, Tennessee Citizens for Wilderness Planning, and Southern Alliance for Clean Energy, to express concerns over the Ridgeline Expansion Project's impacts to the Obed Wild and Scenic River in Tennessee. We believe that the record before the Federal Energy Regulatory Commission ("FERC") and cooperating agencies, including the National Park Service ("NPS"), cannot support an affirmative determination under Section 7 of the Wild and Scenic Rivers Act regarding impacts to the Obed system's values, and thus the project as described should not proceed.

The Ridgeline Expansion Project ("Pipeline"), proposed to be built and operated by East Tennessee Natural Gas, LLC ("ETNG"), would include approximately 122 miles of methane gas pipeline and appurtenant facilities in Trousdale, Smith, Jackson, Putnam, Overton, Fentress, Morgan, and Roane Counties in Middle and East Tennessee.¹ NPS served as one of four cooperating agencies in the preparation of the draft environmental impact statement ("draft EIS") FERC issued following ETNG's application for a certificate of public convenience and necessity under Section 7(c) of the Natural Gas Act, 15 U.S.C. § 717f.

¹ ETNG, Abbreviated Application for a Certificate of Public Convenience and Necessity and Related Authorizations, *E. Tenn. Nat. Gas, LLC*, FERC Dkt. No. CP23-516-000 (Aug. 18, 2023), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230823-5107 (originally submitted July 18, 2023, and subsequently amended and resubmitted December 18, 2023).

We contend that the impacts to the Obed Wild and Scenic River have not yet been properly addressed; moreover, we believe the stated mitigation efforts and best management practices fall far short of preventing irreversible consequences from the Pipeline’s construction and operation. As detailed below, the Pipeline will invade and unreasonably diminish the free-flowing character and protected outstanding resource values in the Obed Wild and Scenic River because of the following foreseeable impacts:

- Downstream impacts to water quality and flow from dry-ditch, open-cut crossings of Clear Creek and Obed River tributaries;
- Downstream impacts to fish and other aquatic life from dry-ditch, open-cut crossings of Clear Creek and Obed River tributaries;
- Downstream impacts to water quality and flow from clearing, grading, and streambank alteration in areas highly susceptible to topsoil erosion; and
- Area-wide impacts to water quality, recreational opportunities, and fish and wildlife habitat from low-probability, high-risk events including landslides.

Accordingly, NPS must issue a determination under Section 7 of the Wild and Scenic Rivers Act that the Pipeline will invade and unreasonably diminish the Obed Wild and Scenic River’s resource values. Impacts from the Pipeline, whether considered individually or in the aggregate, are likely to encroach upon the undeveloped landscapes and natural features that make up the Obed system. Generic and reactive plans are ill-suited to answer the call in the Wild and Scenic Rivers Act to ensure that designated rivers and their immediate environments are “protected for the benefit and enjoyment of present and future generations.”² NPS has both the authority and the obligation to ensure that protection lasts.

Obed Wild and Scenic River Background

The Obed Wild and Scenic River System (“Obed WSR”) is comprised of parts of four notable rivers on the Cumberland Plateau: the Obed River, Clear Creek, Daddys Creek, and the Emory River. The Obed River, Clear Creek, and Daddys Creek jointly drain some 520 square miles,³ and the Park covers more than 5,000 acres in Morgan and Cumberland Counties.⁴ The Obed is known for its rugged landscapes, wild spaces, and spectacular gorges, which provide

² 16 U.S.C § 1271 (1968).

³ U.S. Dep’t of the Interior, *Obed River Tennessee: Wild and Scenic River Study* at 9 (June 1976), <https://www.rivers.gov/rivers/sites/rivers/files/2023-02/obed-study.pdf> [hereinafter *1976 Obed Study*].

⁴ *Obed Wild & Scenic River Tennessee: Press Kit*, NPS (Feb. 21, 2017), <https://www.nps.gov/obed/learn/news/presskit.htm>.

ample outdoor recreational opportunities—such as rock climbing, paddling, fishing, and camping.⁵ The area attracts hundreds of thousands of visitors every year.⁶

The Wild and Scenic River Act was enacted to protect rivers like the Obed WSR from irreversible humanmade impacts.⁷ Originally slated for a dam proposal in the 1960s, the Obed was designated under the Wild and Scenic Rivers Act after dedicated community engagement highlighting the Obed’s and its tributaries’ many wild and scenic qualities.⁸ The Obed WSR is Tennessee’s only federally designated Wild and Scenic River.⁹ For decades, the Obed WSR has been lauded and protected for its remote, pristine, and seemingly “untouched” natural characteristics, enabling a wide range of outdoor recreational opportunities.

The Pipeline would run parallel to the entire length of the designated Obed WSR segments, close enough that it routes between the Obed WSR and the Park’s dedicated NPS Visitor Center in Wartburg, Tennessee.¹⁰ The Pipeline would require crossings through nineteen upstream tributaries of the Obed WSR.¹¹ These crossings include streams that feed Clear Creek and the Obed River, as well as through the Emory River itself, less than five miles from its designated segment.¹² Fourteen crossings have been characterized by ETNG as “high risk” from the Pipeline based on a stream risk hazard assessment required by FERC staff.¹³ That risk assessment is intended to identify the high-risk crossings that require special attention and

⁵ *Id.* at 9–45; NPS, *Foundation Document: Obed Wild and Scenic River, Tennessee* at 7 (Nov. 2015), available at <https://www.nps.gov/obed/getinvolved/foundation-document.htm> [hereinafter “2015 Obed Foundation Document”].

⁶ News Release, NPS, Obed Wild & Scenic River Experienced Continued High Visitation in 2023 (Feb. 28, 2024), <https://www.nps.gov/obed/learn/news/obed-wild-scenic-river-experienced-continued-high-visitation-in-2023.htm>.

⁷ See 16 U.S.C. § 1271 (declaring national policy to balance “dam and other construction” on rivers with “preserv[ing] other selected rivers or sections thereof in their free-flowing condition”).

⁸ *1976 Obed Study* at 5.

⁹ See *River Mileages & Classifications*, Nat’l Wild & Scenic Rivers Sys., <https://www.rivers.gov/apps/river-miles> (last visited Oct. 16, 2024); *1976 Obed Study* at 59–60 (showing map of designated segments).

¹⁰ ETNG has not provided a public-facing map showing the route of the Pipeline in the context of surrounding waterbodies such as the Obed WSR. However, there are maps attached as Appendix C to FERC’s draft EIS showing the Pipeline’s route. See App. C to FERC, Ridgeline Expansion Project Draft Environmental Impact Statement, *E. Tenn. Nat. Gas, LLC*, FERC Dkt. No. CP23-516 (May 24, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240524-3015 [hereinafter “FERC Ridgeline DEIS”].

¹¹ Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 16, *E. Tenn. Nat. Gas, LLC*, FERC Dkt. No. CP23-516 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159 (responding to an environmental information request from FERC staff on issues related to Obed WSR, among other matters).

¹² *Id.*

¹³ *Id.* at 11 & Attach. 7-1 (listing stream risk hazard assessment values by waterbody feature ID).

deviations from generic project design.¹⁴ Despite the Pipeline’s proximity and the risks it poses, ETNG’s representatives have told FERC that construction and operation of the Pipeline “will have no effect on aesthetics, recreation, or local geology” of the designated WSR sections.¹⁵

All but two of the proposed crossings through the Obed WSR’s tributaries would be constructed using dry-ditch open-cut techniques, which would have lasting impacts on the tributaries themselves and the protected rivers they feed. The Pipeline would cross Campground Creek and Emory River (one of two crossings) via horizontal directional drilling (“HDD”).¹⁶ But for the remaining waters, the impacts from dry-ditch, open-cut crossings would be devastating on their own and in the aggregate.¹⁷ The crossings would result in the unreasonable diminution of the scenic, recreational, and fish and wildlife values of the Obed WSR as they were present on the date of its designation.¹⁸

The segments making up the Obed WSR system “possess outstandingly remarkable scenic, recreational, geological, and fish and wildlife values,” which warranted their Wild and Scenic River designation.¹⁹ Section 7 of the Act gives those segments “permanent protection from . . . projects upstream, downstream, or on a tributary to the designated segments, that would invade or unreasonably diminish the segment’s fish, wildlife, scenic, or recreational resources.”²⁰ As the Obed’s administering agency, NPS alone is responsible for making this determination.²¹ NPS cannot allow FERC to authorize construction of the Pipeline if it will “invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area.”²²

¹⁴ Janine M. Castro et al., *Risk-Based Approach to Designing and Reviewing Pipeline Stream Crossings to Minimize Impacts to Aquatic Habitats and Species*, 31 RIVER RSCH. & APPLICATIONS 767, 777, 781–82 (2015), **Attachment 1**.

¹⁵ Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 17 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159.

¹⁶ FERC Ridgeline DEIS at 2-15.

¹⁷ App. D to FERC Ridgeline DEIS at D-106 to D-131 tbl.D-10 (“DC” crossings only). The remaining waters to be trenched through include an unnamed tributary to Clear Creek, unnamed tributary to Peter Branch, unnamed tributary to Shepherd Branch, Big Branch, Glade Branch, Bice Creek and one of its unnamed tributaries, Four Mile Creek and one of its unnamed tributaries, Little Clear Creek and one of its unnamed tributaries, White Creek, Douglas Branch, Green Branch, Gut Branch, Susan Branch, Crooked Fork, and the Emory River (one of two crossings).

¹⁸ See Interagency Wild & Scenic Rivers Coordinating Council, *Wild and Scenic River Act: Section 7* at 30 (Oct. 2004), <https://www.rivers.gov/sites/rivers/files/2023-07/section-7.pdf>.

¹⁹ *1976 Obed Study* at 1.

²⁰ NPS, Director’s Order #46: Wild and Scenic Rivers at 3 (May 1, 2015), https://www.nps.gov/subjects/policy/upload/DO_46_5-1-2015.pdf.

²¹ *Id.*

²² 16 U.S.C. § 1278(a).

Water quality impacts from the Pipeline are especially concerning given the Obed WSR's outstandingly remarkable water quality:

The Obed WSR contains an outstanding example of a deep sandstone gorge with high stream gradients which together direct white water flows down boulder-strewn courses intermingled with quiet, smooth-flowing stretches. The water is clear and is considered to be among the highest quality in the State.²³

Against this backdrop, the Pipeline will “invade” the Obed WSR within the meaning of the Section 7 standard because sediment pollution and other downstream impacts from construction across the Obed WSR's tributaries amount to “encroach[ing] or intrud[ing] upon the protected river.”²⁴ The Obed WSR's General Management Plan highlights concerns for “[t]imber cutting, clearing lands for development, oil and gas drilling, and agricultural and residential land activities [which] can impact water quality by causing soil erosion, ground and surface water pollution, and drainage alteration.”²⁵ NPS staff again documented concerns for upland development on the Obed WSR's valued water quality in a Foundation Document for the Park published in 2015.²⁶

As described in more detail below, the Pipeline involves many of the activities NPS has additionally listed in its general agency guidance among those activities “with the potential to invade or diminish” resource values.²⁷ As a result, the Pipeline would result in an unreasonable impact to the Obed's scenic, recreational, and fish and wildlife values violating the “unreasonably diminish” standard and prohibiting NPS from signing an affirmative Section 7 determination.²⁸

²³ NPS, Obed General Management Plan: Purpose and Need at 6 (1994), <https://www.nps.gov/obed/learn/management/upload/Purpose-and-Need-reduce.pdf>. The draft chapters of the Obed WSR's General Management Plan were published in 1994, and the final version was published in 1995 as excerpts of the pages changed from draft to final versions. Sections of the General Management Plan cited herein are from the draft version that were not reproduced (i.e., unedited) in the final plan. See NPS, Obed Wild & Scenic River, Tennessee: Final General Management Plan/Development Concept Plan/Environmental Impact Statement at 4 (June 1995), <https://www.rivers.gov/sites/rivers/files/documents/plans/obed-plan.pdf> (“[T]he material included [in this document] is to be integrated with the Draft General Management Plan The abbreviated format has been used because the changes to the draft document are minor and confined primarily to factual corrections, which do not modify the analysis.”).

²⁴ NPS, Reference Manual #46: Wild and Scenic Rivers at 4–6 (Apr. 12, 2021), https://www.nps.gov/subjects/policy/upload/RM-46_04-12-2021-2.pdf.

²⁵ NPS, Obed General Management Plan: Purpose and Need at 8 (1994), <https://www.nps.gov/obed/learn/management/upload/Purpose-and-Need-reduce.pdf>.

²⁶ 2015 Obed Foundation Document at 9, 12, 14.

²⁷ See Reference Manual #46 at 4–6.

²⁸ *Id.*; see *Sierra Club N. Star Chapter v. Pena*, 1 F. Supp. 2d 971 (D. Minn. 1998).

A. Downstream Impacts to Water Quality and Flow from In-Stream Construction

Dry-ditch, open-cut crossings are constructed by isolating streamflow—via dam or redirection—during pipeline construction. Construction includes clearing the construction corridor of any obstructions; isolating the streamflow where dam-and-pump or flume methods are used; trenching or excavating, which may require blasting bedrock; installing the pipe segment; and backfilling the trench with subsoil and topsoil.²⁹ Cleaning and testing the pipeline and restoring the construction workspaces follow.³⁰ Every part of the in-stream construction process disturbs the channel bed and banks, resulting in short- and long-term disruptions to stream structure and function.³¹ Experts have underscored that these trenched crossing methods have significant and permanent consequences for the waterbody and its dependent aquatic resources, both at the construction site and downstream.³²

NPS is already aware of the harm dry-ditch, open-cut crossing methods cause to river systems. For example, in its own guidance governing activities within a Wild and Scenic River’s boundaries, NPS states that such crossing methods “are strongly discouraged.”³³ Where stream crossings are required in a Wild and Scenic River’s corridor, NPS demands “enforceable provisions to return the river bed contours and materials to original condition.”³⁴ No such enforceable provisions have been included in ETNG’s Pipeline proceedings to date—only the generic plans generated by ETNG’s owner, Enbridge. As such, any construction-related impacts or equipment failures risk adverse consequences that encroach upon the Obed WSR from activities upstream.

Dry-ditch, open-cut crossing techniques, even if they occur outside the Obed WSR’s immediate boundary, can “unreasonably diminish” the protected rivers’ resource values. According to NPS, “The Obed WSR’s land base is relatively small considering the size of its watershed” such that “water quality of each stream is greatly affected by activities occurring outside of the Obed WSR’s boundaries.”³⁵ Although FERC has arbitrarily stated “the turbidity [from dry crossings] would be minimized, settle out, or dilute prior to reaching the Obed

²⁹ FERC Ridgeline DEIS at 2-9 to 2-16.

³⁰ *Id.*

³¹ Lucie M. Lévesque & Monique G. Dubé, *Review of the Effects of In-Stream Pipeline Crossing Construction on Aquatic Ecosystems and Examination of Canadian Methodologies for Impact Assessment*, 132 ENV’T MONITORING & ASSESSMENT 395, 396 (2007), **Attachment 2**.

³² *E.g.*, Starr Silvis, M.S., P.E., *Evaluation of East Tennessee Natural Gas Company, LLC Application for a Department of the Army Permit for the Ridgeline Expansion Project 2* (June 26, 2024), **Attachment 3**; Scott M. Reid et al., *Sediment Entrainment During Pipeline Water Crossing Construction*, 3 J. ENV’T ENG’G SCI. 81, 81–88 (2004), **Attachment 4**; Castro et al. at 767–83; Lévesque & Dubé at 395–407.

³³ Reference Manual #46 at 3-20.

³⁴ *Id.*

³⁵ NPS, Obed Wild and Scenic River General Management Plan: Affected Environment at 71 (1994), <https://www.nps.gov/obed/learn/management/upload/Affected-Environment-reduce.pdf>.

WSR,”³⁶ downstream construction impacts are actually likely to persist downstream, threatening the free-flowing waters of the Obed WSR.

At its closest point, ETNG’s planned crossing through Gordon Branch in Morgan County, at Milepost 93.2, is less than one river mile from Clear Creek.³⁷ The literature is clear that pipeline construction creates “short term pulses of highly turbid water and total suspended sediments (TSS) downstream of construction,”³⁸ which presents an imminent threat to Clear Creek. Suspended sediment concentrations increase downstream during each phase of construction, from installation to removal of dams and flumes.³⁹ ETNG anticipates that construction may cause impacts downstream but characterizes them as “temporary” and “not significant.”⁴⁰ Even “temporary” sediment increases inhibit water quality and adversely affect aquatic resources reliant on specific water quantity and quality for survival.

To worsen matters, ETNG will potentially use wet open-cut crossings at the Obed WSR’s tributaries, a method that does not isolate the stream flow during clearing, trenching, and backfilling. ETNG has not indicated where along the route it plans to use the open-cut method but could do so anywhere it is not “practicable” to construct a dry crossing.⁴¹ Wet open-cut crossings cause hugely devastating impacts: “severe pollution from greatly increased total suspended sediment (“TSS”) concentrations, changes in channel morphology, and localized destruction of aquatic ecosystems.”⁴² In one study, wet open-cut crossings resulted in an average increase in TSS more than *one hundred times higher* than dam-and-pump dry-ditch crossings.⁴³

ETNG attempts to obscure the dramatic consequences from this crossing method by limiting construction to one or two days depending on the size of the waterbody.⁴⁴ But “[w]hile faster and cheaper, this methodology increases the potential for detrimental impacts to the aquatic environment.”⁴⁵ Even limited-duration disruptions causing such a dramatic increase in

³⁶ FERC Ridgeline DEIS at 4-37.

³⁷ *Id.* at 4-31.

³⁸ Email from Barbara Douglas, Sr. Endangered Species Biologist, W. Va. Field Office, U.S. Fish & Wildlife Serv., to Cindy Shulz, U.S. Fish & Wildlife Serv. (Dec. 11, 2019, 11:44 AM), **Attachment 5** (citing Lévesque & Dubé at 399–400).

³⁹ *E.g.*, Scott M. Reid & Paul G. Anderson, *Effects of Sedimentation Released During Open-Cut Pipeline Water Crossings*, 24 CAN. WATER RES. J. 235, 240 (1999), **Attachment 6**.

⁴⁰ Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 18 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159.

⁴¹ FERC Ridgeline DEIS at 2-14.

⁴² W. Va. Dep’t of Env’t Prot., *Erosion and Sediment Control Best Management Practice Manual* at 32.1-7 (Rev. Aug. 29, 2016), **Attachment 7**.

⁴³ *See Reid et al.* at 87 tbl.5.

⁴⁴ FERC Ridgeline DEIS at 2-14.

⁴⁵ Michael S. Rolband & Frank R. Graziano, *Mountain Valley Pipeline Crossings of the Gauley, Greenbrier, Elk, and Meadow Rivers: Assessment of “Wet” vs “Dry” Open-cut Methods of Pipeline Installation* at 2 (June 22, 2018), filed as Ex. 9 to Federal Respondents’ Motion to Lift Stay Pending Appeal, *Sierra Club v. U.S. Army Corps of Eng’rs*, No. 18-1173 (July 11, 2018), **Attachment 8**.

sediment concentrations “have considerable effects on stream and river substrates and benthic invertebrate communities.”⁴⁶ Wet open-cut construction releases sediment that can adversely modify fish and other species’ habitat for *years* afterward.⁴⁷

ETNG plans to conduct its crossings “at low flow,”⁴⁸ which aligns with NPS’s own general guidance for instream construction.⁴⁹ But NPS has also previously noted that the low-flow regime in and around the Obed WSR presents the highest risk for water contamination via seepage from a previous oil spill near Clear Creek.⁵⁰ In 2002, an oil spill upland from the confluence of White and Clear Creeks devastated the area, and officials at the time estimated that even following cleanup efforts, contaminant seepage would persist through 2028.⁵¹ ETNG is therefore proposing to construct its Pipeline in the same area during the period when it is still recovering from the oil spill’s lasting impacts.

The Clear Creek oil spill also illustrates that NPS cannot assume the length of the Pipeline will be constructed without a hitch. In filings to FERC, ETNG cited studies of other projects finding that certain construction phases resulted in only minor sedimentation impacts “with exception of accidental leaks from construction infrastructure.”⁵² Similarly, ETNG ensures “the primary sediment release will be isolated and restricted to short-term peaks,” but only if “the cofferdams are designed and maintained properly[.]”⁵³ Without any enforcement mechanisms, there is nothing but blind optimism protecting against those worst-case scenarios.

Those worst-case scenarios are not at all uncommon. Columbia Gas Transmission, LLC’s failures associated with construction of a similar project in Pendleton County, West Virginia, illustrates the catastrophic downstream impacts from in-stream pipeline construction.⁵⁴ After neglecting to implement the proper controls at an upstream dam-and-pump crossing of one river, then failing to report its noncompliance to the designated state agency, Columbia Gas Transmission was fined more than \$13,000 by the West Virginia Department of Environmental Protection after its temporary dam failed, causing turbid in-stream conditions and settleable solids *nineteen miles* downstream of the dam failure.⁵⁵ Were that same failure to have occurred at, for example, the proposed Pipeline crossing of White Creek, turbid, sediment-laden water

⁴⁶ Lévesque & Dubé at 398.

⁴⁷ Reid et al. at 81.

⁴⁸ FERC Ridgeline DEIS at 4-31.

⁴⁹ Reference Manual #46 at 3-20.

⁵⁰ Trustee Council for Resources in the Obed River System, Damage Assessment and Restoration Plan / Environmental Assessment: Final Report at v (July 2008), **Attachment 9**.

⁵¹ *Id.* at 1-1 to 1-2.

⁵² Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 14 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159.

⁵³ *Id.* at 13.

⁵⁴ Consent Order Issued under the West Virginia Water Pollution Control Act, W.V. Code, Chapter 22, Article 11 at 2 (Jan. 28, 2019), **Attachment 10**.

⁵⁵ *Id.*

would only need to travel a quarter of the distance to reach the Wild and Scenic River segment of Clear Creek, approximately four river miles downstream.⁵⁶

Columbia Gas Transmission is not an outlier. Researchers comparing wet and dry open-cut crossing methods noted construction difficulties that caused large downstream sedimentation increases in five out of twelve (41.7%) flume crossings and one out of twenty-three (4%) dam-and-pump crossings.⁵⁷ ETNG has not reported which dry-ditch method will apply to what crossing, or whether it will use a dry-ditch technique instead of a wet open-cut crossing at all. NPS cannot rely on the odds alone to prevent a catastrophic impact on the Obed WSR's treasured waters.

B. Downstream Impacts to Fish and Wildlife

The potential for this Pipeline to unreasonably diminish the Obed's fish and wildlife values—among other resource values—from downstream sedimentation impacts is evident from the scientific literature. Sediment loads created by upstream diversions—such as dam installs and removals—disrupt aquatic life and the habitat on which they depend. In fact, “instream construction has been shown to have considerable effects on stream substrates and benthic invert[eb]rate communities that persist after construction has been completed.”⁵⁸ Even supposedly “non-permanent” impacts can have years-long consequences for rivers. Effects from pipeline-project-induced increases in sedimentation on benthic invertebrates, such as mussels, crayfish, and snails, can “persist for up to four years” as observed by the Fish and Wildlife Service in the Mountain Valley Pipeline project.⁵⁹ Four years of impacts would be sure to intrude upon the fish and wildlife values protected in the Obed WSR.⁶⁰

Fish and wildlife values are core to the Obed WSR's establishment under the Wild and Scenic Rivers Act. From the foundational document recommending its inclusion among the Wild and Scenic Rivers list, the Department of Interior recognized “[t]he fish and wildlife habitat of the Obed River area is among the best in the State.”⁶¹ The area's unique geologic features, including steep slopes and dramatic gorges, have long been connected to its ability to “harbor rare plants and animals.”⁶² As a result, the fish and wildlife values of the Obed area were among those outstanding and remarkable values earning it the designation of a Wild and Scenic River.⁶³

⁵⁶ FERC Ridgeline DEIS at 4-34 to 4-35 tbl.4.3-6.

⁵⁷ Reid et al. at 87.

⁵⁸ Email from Barbara Douglas, Sr. Endangered Species Biologist, W. Va. Field Office, U.S. Fish & Wildlife Serv., to Cindy Shulz, U.S. Fish & Wildlife Serv. (Dec. 11, 2019, 11:44 AM) (citing Lévesque & Dubé at 396–97).

⁵⁹ U.S. Fish & Wildlife Serv., Biological Opinion for the Mountain Valley Pipeline Project at 191 (Feb. 28, 2023), **Attachment 11**.

⁶⁰ See *1976 Obed Study* at 58.

⁶¹ *Id.* at 31.

⁶² *Id.* at 33.

⁶³ *Id.* at 58; see also *2015 Obed Foundation Document* at 37–38.

NPS staff have noted that “[c]lean, well-oxygenated waters of small tributaries to the Obed River” are essential to the habitat of rare species in addition to the waters protected within the Obed WSR.⁶⁴

The Obed WSR contains designated critical habitat for the federally threatened spotfin chub (*Erimonax monachus*) and is proposed designated habitat for the proposed federally threatened sickle darter (*Percina williamsi*).⁶⁵ Federally listed freshwater mussel species, namely the Alabama lampmussel (*Lampsilis virescens*) and Tennessee bean (*Villosa perpurpurea*), have been found upstream from the designated segment of the Emory River, in the area where the Pipeline will cross the Emory via dry-ditch, open-cut methods.⁶⁶

NPS cannot accept ETNG’s dismissal of impacts from construction on aquatic resources as merely “temporary” to avoid their real adverse consequences. Impacts to downstream fish, wildlife, and other aquatic values have previously been found to “invade or unreasonably diminish” Wild and Scenic River values as this Pipeline threatens to.⁶⁷ Indeed, researchers have observed that “the potential for both short and long-term negative impacts on aquatic habitat and species is substantial” and could lead to long-term ecosystem changes, even when characterized as short-term.⁶⁸ Such ecosystem damage could include, but is not limited to, “downstream increases in turbidity and suspended sediment, downstream deposition of sediment, sedimentation from disturbance of stream banks, temperature increases, and increase in stormwater runoff due to change in runoff from upslope areas.”⁶⁹

Moreover, studies have demonstrated decreased abundance of fish downstream from pipeline crossings and signs of physiological stress in remaining fish.⁷⁰ Adverse effects visible as soon as six months following impact, lasting for years.⁷¹ ETNG has stated the downstream impacts are “not anticipated to be more than naturally occurring conditions that may occur during high water events when upstream banks and substrate are transported in the water column downstream.”⁷² But since these crossings will be constructed during periods of *low flow*, common sense indicates that “high water events” are not to be expected at those times. As such,

⁶⁴ 2015 Obed Foundation Document at 37.

⁶⁵ Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Sickle Darter, 88 Fed. Reg. 4,128, 4,135–36 (proposed Jan. 24, 2023).

⁶⁶ FERC Ridgeline DEIS at 4-33, 4-35, 4-36.

⁶⁷ See *High Country Res. v. FERC*, 255 F.3d 741, 743 (9th Cir. 2001) (upholding administering agency’s determination that upstream hydropower projects would “invade or unreasonably diminish” Skagit Wild and Scenic River’s fishery values).

⁶⁸ Castro et al. at 767.

⁶⁹ Silvis at 3.

⁷⁰ Email from Barbara Douglas, Sr. Endangered Species Biologist, W. Va. Field Office, U.S. Fish & Wildlife Serv., to Cindy Shulz, U.S. Fish & Wildlife Serv. (Dec. 11, 2019, 11:44 AM).

⁷¹ *Id.*

⁷² Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 18 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159.

aquatic species' behavior patterns could be severely disrupted by an unseasonal, human-caused sediment plume. The Pipeline's sedimentation impacts pose too great a threat to "one of the most biologically diverse aquatic systems in the Tennessee River drainage."⁷³

C. Downstream Impacts to Water Quality and Flow from Upland Activities

In addition to threats from in-stream activities, the Pipeline is likely to have additional downstream impacts from construction and maintenance activities in upland areas. Perhaps nowhere is this more apparent than pipeline projects in regions with steep slopes. Upland clearing for right-of-way and pipeline construction causes erosion and runoff that overloads watershed systems. One study noted "Construction activity can increase soil erosion rates up to 40,000 times that of the pre-construction condition due to land disturbance."⁷⁴

Erosion and runoff are made even worse by tree clearing, which destabilizes soil and changes the land cover. The Pipeline requires clearing 2,550.6 total acres of trees, though ETNG has yet to indicate exactly what kinds of trees will be impacted within this total or where clearing will take place upland from the Obed WSR.⁷⁵ Any additional tree clearing diminishes the wild and scenic character of the broader region in the Cumberland Plateau and would contribute to downslope erosion and sedimentation impacts.

Upland activities threaten wildlife that call the Obed WSR home. In addition to the aquatic species, many types of rare and beloved species native to the region occupy the lands surrounding the Obed WSR and contribute to its scenic and recreational values. NPS has estimated that "[t]he park is home to 1,080 species of vascular plants and vertebrate animals, including six federally threatened or endangered species and 29 species ranked as globally imperiled."⁷⁶ The Obed WSR is home to three-quarters of all remaining populations of the federally threatened Cumberland rosemary (*Conradina verticillata*), which occupies riverbanks exclusively in the Cumberland Plateau.⁷⁷ The Cerulean warbler (*Dendroica cerulea*) relies on mature hardwood forests, specifically in the Cumberland Plateau during its breeding season.⁷⁸ The Cerulean warbler population is already facing an average annual population decline and is threatened by even greater declines should it lose even "a relatively small portion" of its range.⁷⁹

⁷³ 2015 Obed Foundation Document at 38.

⁷⁴ Binbin Wang et al., *A Model for Evaluation of Sediment Exposure and Burial for Freshwater Mussels from Heavy Particle Sedimentation*, 493 ECOLOGICAL MODELLING 110751, 2 (2024), **Attachment 12**.

⁷⁵ See FERC Ridgeline DEIS at 4-84 to 4-85 tbl.4.8-1, 4-87 to 4-88.

⁷⁶ *Inventory and Monitoring at Obed Wild and Scenic River*, NPS (July 8, 2019), <https://home.nps.gov/im/aphn/obri.htm>.

⁷⁷ *Id.*

⁷⁸ Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List the Cerulean Warbler (*Dendroica cerulea*) as Threatened with Critical Habitat, 71 Fed. Reg. 70,717, 70,718 (Dec. 6, 2006).

⁷⁹ *Id.* at 70,724 ("Effects in a relatively small portion of the species' range, compared to the species' entire breeding range, could contribute disproportionately to the population decline.").

And bat species, like the federally endangered Northern long-eared bat (*Myotis septentrionalis*), rely on trees and caves in the region for essential habitat.⁸⁰ These and other species risk losing their habitat as the result of widespread tree-clearing and land-disturbing activities.

The Mountain Valley Pipeline (“MVP”) stands as a testament to the threat of erosion and sedimentation, and the inability of pipeline industry control measures to protect water quality. MVP traverses many miles of steep slopes and numerous streams and rivers in Virginia and West Virginia. In its EIS for that pipeline, FERC assumed the developer’s control measures would minimize erosion and sedimentation impacts, but that rosy prediction quickly proved false.⁸¹ Ultimately, state enforcement authorities in both Virginia and West Virginia discovered that the project’s erosion and sediment control measures were insufficient to protect water quality, and that the developer had failed even to institute those minimally effective measures in the first place.⁸² After conducting multiple site visits in response to complaints along the MVP’s construction route, state officials observed multiple instances of hundreds—and in some cases more than a thousand—of linear feet of unpermitted sediment discharges into stream channels.⁸³ All told, the developer of MVP was cited for hundreds of water quality and permit violations and racked up millions of dollars in fines, and the U.S. Court of Appeals for the D.C. Circuit ordered FERC to consider whether a supplemental EIS was required due to the significantly different-than-anticipated impacts from sedimentation.⁸⁴

As the story of MVP illustrates, NPS cannot rest assured that best management practices and standard control measures will protect water quality and prevent sediment-laden waters from the Pipeline charging directly into the Obed WSR’s channels.

Moreover, runoff is made predictably worse following heavy rainfall events. But even if ETNG were to cabin its in-stream crossings to dry summer months, clearing and grading activities are slated to overlap with periods of Tennessee’s highest average rainfall and flood risks, largely during the transition from winter to spring.⁸⁵ As ETNG is aware, flash flooding is

⁸⁰ See *Northern Long-eared Bat*, U.S. Fish & Wildlife Serv., <https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis> (last visited Oct. 14, 2024).

⁸¹ See *Sierra Club v. FERC*, 68 F.4th 630, 650 (D.C. Cir. 2023), *vacated and dismissed as moot*, 2023 WL 5537562 (D.C. Cir. Aug. 25, 2023).

⁸² Complaint at 10–11, *Paylor v. Mtn. Valley Pipeline*, Case No. CL18006874-00 (Va. Henrico Cnty. Cir. Ct. Dec. 7, 2018), **Attachment 13**.

⁸³ *Id.* at 11.

⁸⁴ *Sierra Club*, 68 F.4th at 650–51; see also Consent Decree, *Paylor v. Mtn. Valley Pipeline*, Case No. CL18006874-00 (Henrico Cnty. Cir. Ct. Oct 11, 2019), **Attachment 14** (available at <https://virginiamercury.com/wp-content/uploads/2019/10/MVP-Consent-Decree.pdf>).

⁸⁵ FERC Ridgeline DEIS at 2-20 tbl.2.6-2 (showing Construction Schedule by Phase for the Project Facilities with clearing and grading September to February and May, respectively); see Mott MacDonald, ETNG Ridgeline Phase I – Geohazard Assessment Report Desktop Study at 6 (Mar. 31, 2022), filed as App. 6D to ETNG, Ridgeline Expansion Project: Resource Report 6, Geologic Resources, available for download at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230823-5107.

common during the summer, such that no season for construction could reliably avoid the impacts heavy rainfall could have on ETNG’s generic construction plans.⁸⁶

Climate change has also occasioned more frequent precipitation and worse flash flooding events and will only continue to do so. The Pipeline exacerbates the climate crisis by expanding the use of fossil fuels and through the transportation and inevitable leakage of methane, a harmful climate pollutant. But the climate crisis also presents greater risks to the Pipeline that would imperil the free-flowing, natural system protected in the Obed WSR. Torrential rain events threaten infrastructure, including pipelines, in areas with steep slopes. Landslides, river rise, and erosion are all potential risks from heavy rainfalls and are slated to worsen with continued climate change.⁸⁷

Heavy rainfall creates more runoff in areas where the topsoil is already more susceptible to erosion. In its original application, an engineering contractor for ETNG reported that the likelihood for topsoil to erode “may be of greatest concern” between Mileposts 85 and 123 along the Pipeline route⁸⁸—the same stretch that parallels the Obed WSR from Mileposts 83 to 100, approximately. NPS must seriously consider those foreseeable impacts to the Obed WSR when flash floods and heavy rainfall, due to worsen with the impacts of climate change, overlap with ETNG’s plans for the Pipeline.

D. Area-Wide Impacts to Water Quality, Recreational Opportunities, and Fish and Wildlife Habitat from Low-Probability, High-Risk Events

In addition to threats from construction on water quality and aquatic species, the Pipeline also traverses steep-slope terrain creating concern for landslides, yet ETNG has failed to adequately address NPS’s concerns for landslide risk in and around the project workspace.⁸⁹ NPS has already identified features of concern at Mileposts 93.5 and 98.6,⁹⁰ one of which showed evidence of “minor” land movement at a recent site visit.⁹¹ Those baseline conditions

⁸⁶ See Mott MacDonald, ETNG Ridgeline Phase I – Geohazard Assessment Report Desktop Study at 6.

⁸⁷ See Douglas K. Miller et al., *An Expanded Investigation of Atmospheric Rivers in the Southern Appalachian Mountains and Their Connection to Landslides*, 10 *ATMOSPHERE* 1, 2 (2019), **Attachment 15**; Jeremy S. Hoffman et al., *Chapter 22: Southeast in FIFTH NATIONAL CLIMATE ASSESSMENT 22-1, 22-9 to 22-12* (A.R. Crimmins et al. eds., 2023), <https://nca2023.globalchange.gov/chapter/22/> (describing climate-change-induced threats from inland and coastal flooding on home values, buried infrastructure, and evacuation routes).

⁸⁸ *Id.* at 19.

⁸⁹ See Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC at 7 (Aug. 29, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240829-5159.

⁹⁰ Meeting Notes from National Park Service Landslide Feature Review at 1–2 (Sept. 17, 2024), filed as Attach. 8-2 to Letter from Estela D. Lozano, Enbridge, to Debbie-Anne A. Reese, FERC, *E. Tenn. Nat. Gas, LLC*, FERC Dkt. No. CP23-516 (Sept. 30, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number20240930-5154.

⁹¹ *Id.* at 2.

should be among the list of reasons the Pipeline cannot move forward due to its threats on the Obed WSR.

And ETNG's generic mitigation measures are inadequate in the face of construction and operation compounded by the risks of climate change, presenting an untenable threat to the Obed WSR. A future filled with higher frequencies of heavy rainfall means greater landslide risks.⁹² Torrential rain from a single storm event can cause hundreds of dangerous landslides, which wipe out infrastructure buried into slopes.⁹³

Landslides occur as the result of seismic activity, a risk FERC has decided to characterize as not significant despite their high risk.⁹⁴ Of 31.4 total miles containing high consequence areas along the Pipeline, 10.8 miles are in Morgan County, and at least three locations are along the same Pipeline segment that will cross the Obed WSR's tributaries.⁹⁵ Approximately eight or so miles in the same stretch are flagged as locations of medium consequence.⁹⁶ Accidents along methane gas pipelines have been documented outside of high consequence areas,⁹⁷ meaning the focus cannot be limited to those high consequence areas alone.⁹⁸ For example, another Enbridge-owned, thirty-inch-diameter pipeline caused more than \$31 million in damages from two separate failures at locations not classified as high-consequence area.⁹⁹ Indeed, the eastern half of ETNG's Pipeline—from Milepost 65.5 until the Pipeline's terminus—contains the areas with highest susceptibility to landslides and either low or moderate landslide incidences.¹⁰⁰ FERC has been made aware of those risks,¹⁰¹ but it is NPS's responsibility not to authorize an activity

⁹² See Hoffman et al., *Chapter 22: Southeast* at 22-9 to 22-12, <https://nca2023.globalchange.gov/chapter/22/>.

⁹³ See, e.g., *Hurricane Helene Landslide Observations Dashboard*, U.S. Geological Survey, <https://www.arcgis.com/apps/dashboards/01b4f51fc0b64002bf7722a9acfc181d> (mapping 625 total landslides as of October 14, 2024).

⁹⁴ See FERC Ridgeline DEIS at 4-10 to 4-12.

⁹⁵ App. D to FERC Ridgeline DEIS at D-188 tbl.D-19 (showing location of High Consequence Areas).

⁹⁶ *Id.* at D-189 tbl.D-19.

⁹⁷ Texas E. Transmission, LP, CPF No. 4-2021-034-NOPV, U.S. Dep't of Transp. Pipeline & Hazardous Materials Safety Admin. (Feb. 3, 2023) (final order), [https://primis.phmsa.dot.gov/enforcement-documents/42021034NOPV/42021034NOPV_Final%20Order_02032023_\(20-183709\)_text.pdf](https://primis.phmsa.dot.gov/enforcement-documents/42021034NOPV/42021034NOPV_Final%20Order_02032023_(20-183709)_text.pdf), **Attachment 16** (detailing failures that resulted in explosions along Enbridge-owned thirty-inch-diameter natural gas lines in Danville and Hillsboro, Kentucky, implicating geohazards not occurring in high consequence areas).

⁹⁸ Nat'l Transp. Safety Bd., Enbridge Inc. Natural Gas Transmission Pipeline Rupture and Fire, Pipeline Investigation Report: NTSB/PIR-22/02 at 23, 39, 45 (Aug. 15, 2022), <https://www.ntsb.gov/investigations/AccidentReports/Reports/PIR22002.pdf>, **Attachment 17**.

⁹⁹ Texas E. Transmission, LP, CPF No. 4-2021-034-NOPV at 7–9 (findings of violation).

¹⁰⁰ Mott MacDonald, ETNG Ridgeline Phase I – Geohazard Assessment Report Desktop Study at 18 tbl.5.1.

¹⁰¹ Comments of Southern Alliance for Clean Energy on FERC Ridgeline DEIS at 3–7, *E. Tenn. Nat. Gas, LLC*, FERC Dkt. Nos. CP23-516-000, CP23-516-001 (July 15, 2024), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240715-5128.

where such risks could result in the unreasonable diminution of the resource values present in the nearby Obed WSR.

* * *

We appreciate the opportunity to voice these concerns about reasonably foreseeable impacts to the Obed WSR, a widely treasured natural resource on the cusp of celebrating fifty years of federal protection under the Wild and Scenic Rivers Act. As the record and scientific literature indicate, the Pipeline, as proposed, threatens to invade and unreasonably diminish the outstanding resource values of the Obed WSR. We urge NPS to fulfill its stated management objectives for the Obed WSR, protecting its water quality, natural character, and many remarkable values by issuing a negative determination for the Ridgeline Expansion Project.

Sincerely,

/s/ Delaney King

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