



January 27, 2021

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Mary Yonce, District Ranger
North River Ranger District
George Washington and Jefferson National Forest

Sent via online portal

Re: Comments on Draft EA for Mount Storm to Valley 500 kV Electric
Transmission Line #550

Board of Directors:

Dear Ranger Yonce:

I am submitting this letter regarding the referenced Draft Environmental Assessment (DEA), on behalf of Wild Virginia and Alliance for the Shenandoah Valley. We appreciate the opportunity to provide these comments before a draft decision is released by the Forest Service (FS). Because we assert that numerous issues raised by both groups in scoping comments have not been adequately addressed, we are including those letters as attachments and incorporate them by reference into these comments.

We assert that there are potential environmental and human impacts that are not adequately assessed and that the analyses fall short of the standard required under the National Environmental Policy Act (NEPA). Also, we assert that some the measures proposed for management and environmental protection are not in accordance with the Land and Resource Management Plan (Forest Plan) for the George Washington National Forest (GWNF) or with FS regulations.

Major issues addressed below include:

- The need for more thorough and appropriate analysis of possible erosion and sediment pollution impacts
- The need for additional analysis and protection against landslides and slips
- Possible harm to threatened, endangered, and rare species and their habitats
- The need for additional efforts to improve connectivity of wildlife habitats and reestablish native species
- The need for additional analysis of impacts caused by higher towers to scenic views and bird mortality

We understand that this powerline has been in place for many years and that some of the negative impacts caused during its construction and subsequent maintenance may not be reparable. Once a large swathe has been cut through an area of intact forest habitats, full restoration of the original resources and values is difficult, if not impossible. However, the FS has an obligation to describe both the current state of the affected environments and to describe how alternatives can lead to improvements. This project can and should provide a chance to ameliorate damages previously done, not exacerbate them.

Bette Dzamba

Leigh Kirchner

Elise Togbe

Jamie Trost

Ryan Wagener

Elizabeth Williams

Erosion and Sediment Pollution

Land disturbance from work on the powerline and on associated roads and work areas will remove vegetation and soil layers and produce discharges of sediment with both short and long term duration and impacts. The analysis used in the DEA to predict soil loss and impacts to water quality from the proposed project includes useful information but has some major flaws that must be addressed.

First, as noted in Wild Virginia's scoping comments, the FS is obligated to see that Virginia water quality standards (WQS), adopted pursuant to authority under the Clean Water Act and State Water Control Law, will be upheld. And yet, the DEA includes absolutely no analysis to show whether these standards can or will be met under the alternatives discussed.

The documents presented by Dominion and the FS discuss management practices that may be used to control runoff pollution and natural factors that may affect the quality of any discharges but does not discuss whether impacts from this project will interfere with designated or existing uses defined in Virginia WQS. There is no acknowledgement of the general criteria in the WQS that prohibit discharges that produce turbidity or color in state waters. There is no recognition that many of the waters affected are of high quality and that, therefore, Virginia's antidegradation policy prohibits lessening of water quality. This failure to even address clearly pertinent legal standards is arbitrary and capricious and the FS must not proceed without addressing these issues fully in the final EA. Also, the decision on this project must assure that all WQS will be met.

Second, the projections of "sediment delivery" to waterbodies, as contained in Tables 7 through 10, address pollutant loads on an annual basis. While such long-term estimates are useful to assess possible accumulations of sediment over time, they fail to provide the information most important for protecting waterbodies and aquatic species. Sediment discharges from the types of activities proposed here are not evenly distributed through time. One significant storm event may deliver as much or more than the amounts predicted for an entire year and result in acute damages to the stream ecosystem. While it is possible that these impacts will lessen through time, this outcome is not certain. Destruction of habitat from one severe event can damage stream communities for years or even permanently. Further, WQS do not allow for violation of general or numeric criteria for weeks, let alone for months or years.

Finally, the FS must use all reasonably available information in the NEPA analysis. Model predictions and planned methods of erosion and sediment control must be supplemented with actual results from similar projects or other activities in similar terrain and the record of compliance and efficiency of the builder in protecting resources must be considered. The accurate of predicted outcomes depends on the reliability of the measures as designed but also on the reliability of the builder to actually carry out those plans as promised.

One case that should be assessed in this context includes work on recent upgrades to other sections of this same transmission line in Augusta County. Dominion's subcontractors

allowed massive erosion and sediment control issues to continue unchecked for long periods of time, blasting caused damage to foundations, gravel and runoff were allowed to enter trout streams in the Shenandoah National Park, and transmission line workers used residents' fields and forests for their own private outdoor bathroom facilities. The FS cannot ignore such "real world" results in predicting possible outcomes for this project or fail to design and require safeguards to see that they are not repeated.

More particular concerns with the analyses include the following:

- Table 1 lists ground disturbance totals for road reconstruction and widening and for crane pads, wire pulling sites, etc. including 39.8 miles of USFS road reconstruction (64.9 acres ground disturbance), 4.6 miles of temporary access road construction including grading, curve widening and culvert replacement totaling 16.8 acres of ground disturbance. Another 0.5 miles of newly constructed access roads will have 1.8 acres of disturbance. These are significant totals. Some will have significant potential sediment impacts on streams such as Cold Spring River, German River, Bible Run, Slate Lick Branch, Long Run and Rocky Run due to longer sections of road reconstruction along the streams and some stream crossings.
- There are 8 wild trout streams with potential sediment impacts from the project in Rockingham County, Virginia: Cold Spring Run, Cold Spring River, Paint Lick Run, German River, Bible Run, Slate Lick Branch, Long Run and Rocky Run. Cold Spring Run and Paint Lick Run are not listed or discussed in the EA. Upper Cold Spring Run, next to the Pendleton Co. line is adjacent to FR 85 on private land. This is shown as a Dominion access road and has the potential for sediment impacts from regrading the road. Upper Paint Lick Run is within 400 feet of a Dominion access road just north of Rader Knob with very steep terrain between the road and stream.
- Table 10 lists high end estimates for first year increases in erosion and sediment production for 8 small watersheds factoring in potential adverse conditions such as not fully applying E & S controls and having storms during construction. These are much higher than expected increases in erosion and sediment for these watersheds listed in Table 8 which accounts for full implementation of gravel road surfacing, sediment barriers and downslope vegetation. The actual sediment increases will likely be between the 2 estimates due to typical installation shortfalls for sediment barriers, storm damage to sediment control devices which are not discovered or which remain unrepaired for too long. Silt fences can be difficult to entrench properly in areas with rocky soils and extensive tree roots. Sediment logs can be less effective than the manufacturers claims if not installed properly. Reseeding of disturbed areas can result in slow growth of grasses due to improper seeding practices or dry conditions.
- The more likely first year sediment increases for the 8 watersheds would be in the range of 1.5 to 25%. Six of these 8 watersheds are wild trout waters, including Long Run, Rocky Run and Slate Lick Branch which have the highest, 17.2 to 51.3%, increases for the worst case scenarios. Even a third of these amounts are not acceptable sediment loads for headwater wild trout streams!

- Sediment runoff is also a major concern for habitats of the Cow Knob and Shenandoah Mountain Salamanders. According to Billy Flint of JMU, unpaved roads and their maintenance can create detrimental sediment impacts to these salamanders up to 100 yards downslope of the roads. Although GWNF personnel have conducted surveys for the salamanders in the project corridor, they may be found in other locations not surveyed which have suitable habitat. We feel that additional surveys are needed, especially since these salamanders were found along Long Run Road and other sites adjacent to where project activities are planned.
- The DEA's discussion of impacts of roads, though it is pertinent in relation to other issues, is of particular importance for water quality. Decommissioning of roads, according to FS designations, include five levels of treatment, including: 1) Block entrance; 2) Revegetate and waterbar; 3) Remove fills and culverts; 4) Establish drainageways and remove unstable road shoulders; and 5) Full obliteration, including recontouring and restoring natural slopes." The DEA discusses, at pg. 7, "[a]fter the Project is complete, temporary roads will be graded to control water drainage, seeded, and closed to vehicular traffic."

It is important that the DEA disclose the difference in long-term impacts between this partial effort and a full decommissioning. Maintenance of any unnecessary roads should be avoided, given that the FS frequently acknowledges that it has a large and continual backlog of road maintenance work - a backlog that will only be increased with every new segment of road that is not fully restored. The DEA's statement that "[e]nvironmental impacts from construction of these roads would be the same whether the roads are permanent or temporary," pg 11, is nonsensical. This must be addressed in the final EA.

Landslide and Slip Hazards

The Central Appalachians are highly susceptible to landslides and particularly debris flows during major flood events. There have been well over 11,000 landslides in Western Virginia and Eastern West Virginia since 1949. Shenandoah Mountain is no exception, having had over 75 landslides during the June 17, 1949 flood event in the Little River watershed near Stokesville after up to 15 inches of rain. Additional landslides occurred in November 1985 and other major storm events.

The weathered Pocono sandstones overlies beds of red Hampshire mudstones, shales and sandstones and in some areas the bedding planes are close to parallel to the slope. When soils over these formations become saturated due to heavy rains on these areas, particularly in steep hollows near ridgetops, landslides can occur.

Road reconstruction and crane pad locations with slopes steeper than 35% should be carefully scouted for signs of previous slope instability. Road widening in curves and for other reasons should be minimized in steep slope areas. Extending fills or cut slopes will increase instability by undercutting colluvium or adding additional weight to fill sections.

The draft EA does not make it clear whether excavated crane pads in steep areas will be restored to original contours so as not to leave an unstable situation. LIDAR data available from DMME in Charlottesville should be reviewed for the steeper areas to check for evidence of previous slides.

All of these facts are especially important given that the FS has previously designated construction areas through terrain similar to that crossed by this project as "high-hazard areas" and judged that very specialized plans would be needed to ensure that activities could be completed safely and without very serious environmental damage. Proposed routes for the Atlantic Coast Pipeline through the Forest included many of the same features as the route followed here. And though pipeline construction and powerline work have significant differences, certainly there are enough commonalities to compel a much more thorough review.

Protection of Threatened, Endangered, and Rare Species

The project could affect the Rusty Patch Bumble Bee (RPBB) and other rare bees recently discovered in the project area. It could also affect the Cow Knob Salamander (CKS) and other sensitive species in the Shenandoah Mountain Crest management area. Additional populations may occur outside the SMC management area. The Forest Plan, laws such as the Endangered Species Act and the National Forest Management Act, and other regulations may limit or prohibit some of the proposed activity.

The 12 acres of permanent tree clearing within the right-of-way and 1.3 mi. of road construction outside the utility corridor in the NF should be planned carefully so as not to have an impact on any of these special species. The Forest would need to be especially careful in 8E7, where use of Forest Roads is allowed, but widening and pull-offs could have impacts that would not be in line with the Forest Plan.

The areas where road widening will be done and pull offs constructed should be surveyed for special species before approval. Please note that recent research shows reduced populations of Cow Knob Salamander on Shenandoah Mountain in areas where prescribed burning has been done. This same effect could happen where areas are cleared and more sunlight gets in. Jacobsen, C.D. 2019, *Influence of climate change and prescribed fire on habitat suitability and abundance of the high-elevation endemic Cow Knob Salamander (Plethodon punctatus)*. Masters thesis, West Virginia University. <https://researchrepository.wvu.edu/etd/4051>.

The DEA addresses scoping comments from the Alliance for the Shenandoah Valley about conformance with the Forest Plan's requirements for the 5C-Designated Utility Corridors management prescription and consistency with the National Forest Management Act. 16 U.S.C. § 1604(i). Those comments raised numerous specific issues.

For example, the Alliance commented: "The Forest Plan anticipates that vegetation may be controlled in the utility corridor using herbicide. See Forest Plan at 4-76 (5C-001). Has the Forest Service considered the effects that herbicide will have on the rare bee species that the scoping notice acknowledges are found in the vicinity of the project area?"

The DEA's answer to this very specific question, at page 85: "The Project complies with Forest Plan direction in all Management Prescription Areas as summarized in at the end of the description of Alternative 1." Then, in the section entitled "Forest Plan Consistency," at page 9, the DEA states that "[a]ll proposed activities are compatible with Forest Plan direction for

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this Management Prescription Area." Thus the FS offers two conclusory statements with no specific evidence or analysis to answer a very specific concern.

These specific Forest Plan requirements are not minor or inconsequential issues that the FS may dismiss out of hand. In fact, whether proposed actions conform to the Forest Plan is one of the most important findings the FS is to make under the statutes. These issues must be addressed in detail in the final EA.

Connectivity of Natural Habitats

The route of this powerline, as shown on Virginia Natural Heritage maps, runs through an area with valuable habitat cores (Map 1) and areas of particular importance for wildlife movement (Map 2). According to these maps, most lands in the GWNF are designated "high value," but particular areas affected by this project actually have "outstanding" ecological cores (shown in red on Map 1).

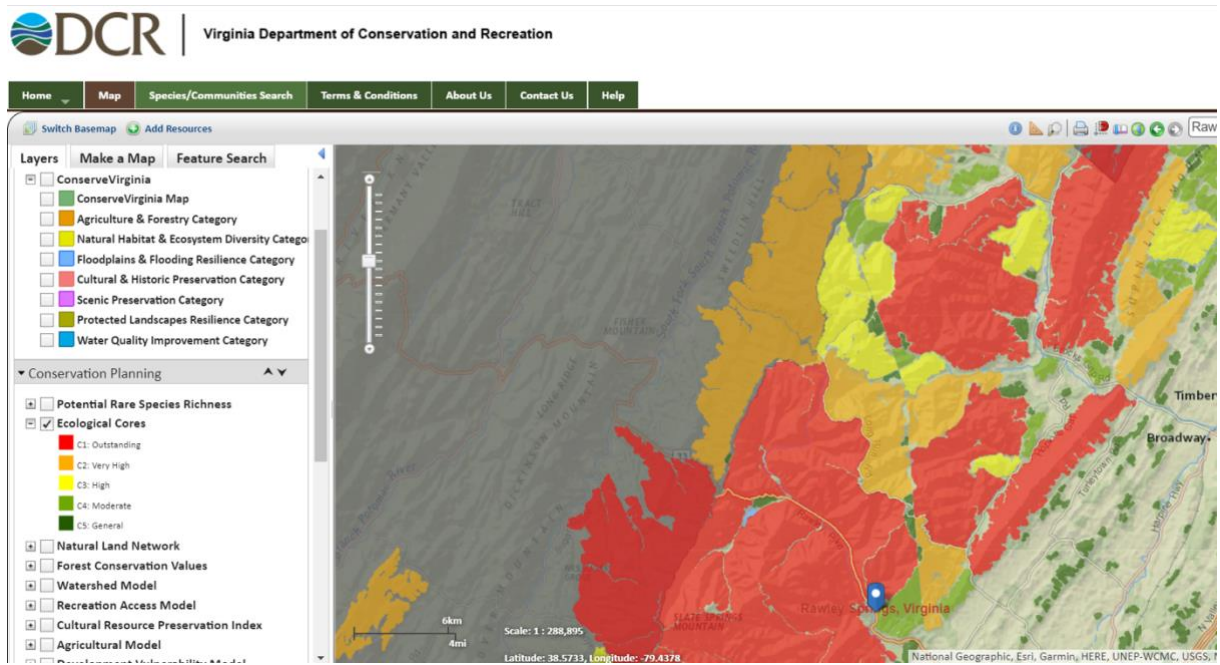
It is important to enhance connections between outstanding cores of habitat wherever possible and the NEPA analysis must do a fuller job of exploring these possible improvements. Further, any changes that would harm connectivity between these core areas must be carefully assessed and prevented to the greatest extent possible. This project provides an opportunity to mitigate or correct some of the damages to habitat connectivity that have persisted for decades; this opportunity cannot be ignored and should not be lost.

Even worse, many of the activities proposed for this project can and commonly do increase fragmentation. Clearing forest and building new roads, removing vegetation for structures within the right of way and temporary clearing outside the ROW, spraying of chemicals, and other actions will harm or destroy wildlife corridors. The fact that historical damages exist only heightens the need to prevent more damages of the same kind.

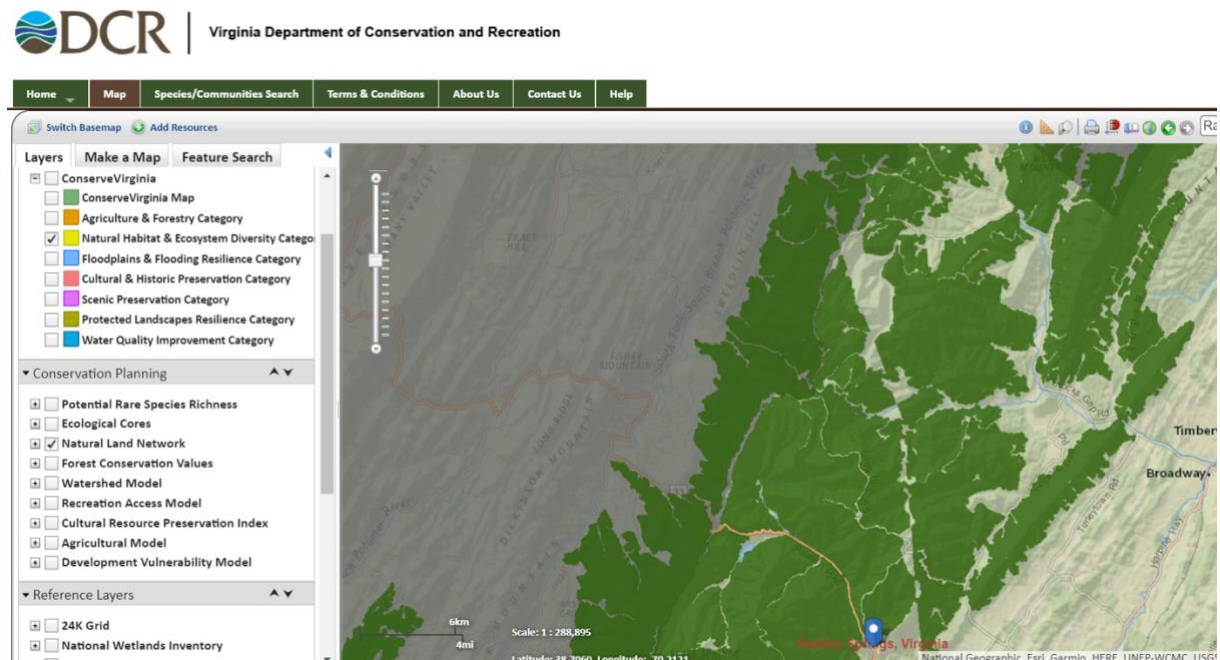
Since most land around the ROW in the GWNF is of high conservation value on the VA state maps (as shown above), Integrated Vegetation Management (IVM) accommodations should be included in the design. At minimum, limiting spraying and revegetating the ROW with only native plants should be required to enhance the connectivity in this area. At best, vegetation should be "local, native plant compositions...while also providing pollen and

nectar, fruits and berries, nest sites for birds and solitary bees, and host plants for monarch caterpillars and other pollinators." By contrast, the DEA states that plantings proposed for the right of way consist "predominantly of low grasses, wildflowers with some native deciduous and evergreen shrubs, low-growing trees like dogwood and redbud, and young, sapling-sized trees" pg. 2. We believe that this is inadequate.

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Map 1.



Map 2.

Impacts from Taller Towers

The visual impacts of taller, wider towers that are also located at different elevations could create significant visual changes that impact the recreational experience of the National Forest and the quality of life to those communities on the edge of the Forest. A logical, cost-effective way for Dominion and the Forest Service to balance both the impacts to the Forest and the

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need for safe, reliable energy is for the towers to be darkened and the glistening wires to be made to be visually subdued. There are proven, cost effective ways to do this and we seek a commitment from Dominion and the Forest Service that they will work together to make this mitigation happen.

At page 54, the DEA states: "Proposed increases in tower height are unlikely to make a noticeable change in bird mortality," but this is merely a conclusory statement that does not appear to be supported in the record. The FS should discuss the feasibility and likely impact of methods to reduce bird mortality, including the addition of flags or markers to power lines to prevent collisions or of insulated perches for raptors to prevent electrocution".

One additional issue of concern involves recreation on affected parts of the Forest. The list of trails on page 64 of the EA and the map on page 65 makes no mention of the Carr Mountain Trail which is a new 6 mile trail built between 2009 and 2016 by Potomac Appalachian Trail Club and Shenandoah Valley Bicycle Coalition volunteers as well as horseback riders. The trail starts from FR 232, German River Road, just south of where the powerline crosses and proceeds under the powerline northeast and eastward along Carr Mountain, over and around Beech Lick Knob and ties in with FR 302 beside White Grass Knob. This is a multi-use trail approved by the GWNF.

The real significance of Carr Mountain Trail is that it was built to fill in a gap along the new national long-distance trail, Great Eastern Trail which will run from New York state to Alabama. The Great Eastern Trail Association continues to work with trail clubs in other states to fill in a few more gaps while 3 or 4 people have already hiked the entire length. The Dominion Powerline rebuild will temporarily disrupt access to the south end of Carr Mountain Trail, cause scenic impacts to the view with higher, shinier towers and potentially open up a better chance for invasive plants to disperse along the trail. These omissions must be corrected in the final EA and the potential impacts must be assessed in light of Forest Plan prescriptions.

Thank you for considering the concerns expressed and we would be happy to discuss them with you prior to completion of final EA and your decision.

Sincerely,

/s/ David Sligh

David Sligh
Conservation Director