**September 7, 2021**

Ms. Cynthia Sandeno, District Ranger

Monongahela National Forest, Marlinton-White Sulphur Ranger District

1627 Cemetery Road

Marlinton, WV 24954

Dear Ms. Sandeno:

Please accept this letter as comment on the Upper Elk Ecological Restoration Project Preliminary Environmental Assessment as well as the map of the Proposed Actions in the Gauley Mountain Inventoried Roadless Area.

The Wilderness Society supports good ecological restoration. Unfortunately, this proposed project does not embody principles of good ecological restoration. Importantly, it also ignores and misinterprets provisions of the Roadless Area Conservation Rule and ignores requirements of NEPA analysis.

1. **The project fails to follow provisions and the intent of the Roadless Area Conservation Rule**

The Roadless Area Conservation Rule (RACR) was put in place to conserve the dwindling resource of roadless areas managed for their natural characteristics. In the words of the RACR: “The intent of this final rule is to provide lasting protection for

inventoried roadless areas within the National Forest System in the context of

multiple-use management.”[[1]](#footnote-1)

The EA cites the Forest Plan as justification for the project without examining how RACR confines direction coming out of the Forest Plan. The roadless status of the Gauley Mountain inventoried roadless area is treated as an afterthought that is addressed within the confines of Forest Plan standards and guidelines in the preliminary EA. The roadless area is mentioned early in the EA (p.11), but this is only in relation to listing proposed actions within the IRA. Limitations on management actions, project needs, and design criteria are developed without reference to the Gauley Mountain roadless area or circumstances that need to be addressed for a project within an IRA. RACR provisions supersede Forest Plan standards and guidelines and should have been a primary consideration during project planning rather than an issue to address after the project needs and design criteria had determined the project actions.

The EA fails to adequately address roadless area impacts in the section beginning on page 79 and is incomplete and misleading in its reference to RACR. The EA states: Under the 2001 Rule, timber may not be cut, sold, or removed from IRAs except under specified circumstances including: “*(i) To improve threatened, endangered, proposed, or sensitive species habitat; or (ii) To maintain or restore the characteristics of ecosystem composition or structure . . . within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period*.”

This is a selective and incomplete reference to the actual provisions of RACR. The Roadless Rule generally prohibits the cutting, sale, or removal of timber except for narrow exceptions. RACR states: (a) Timber may not be cut, sold, or removed in inventoried roadless areas of the National Forest System, except as provided in paragraph (b) of this section. The circumstances listed above in (i) and (ii) are included as possible exceptions under (b) where timber harvest may occur. However, the EA fails to disclose the context for this provision: “The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11.” The silvicultural treatments in the proposal, allowing cutting of trees up to 24 inches in diameter are not “small diameter timber”. The RACR also notes that “The cutting, sale, or removal of timber in these areas is expected to be infrequent.”[[2]](#footnote-2)

* 1. **The Preliminary EA Fails to establish that the Proposed Actions for T&E Species are Needed Within the IRA**

The EA does not establish that the cutting of timber in the Gauley Mountain area is needed to improve T&E or sensitive species habitat. The discussion of spruce forest and species associated with spruce forest on p. 82 of the EA only generally references spruce habitat in the broader West Virginia landscape and species that may be associated with this habitat in the broader landscape. The EA fails to establish that these species need spruce habitat within the Gauley Mtn area.

Even if a project arguably would maintain or improve one of the roadless characteristics, that is not enough. The preliminary EA argues that the proposed activities would benefit these roadless characteristics. But the RACR requires that the activity must also be “needed” for one of the few narrow purposes cited in the RACR. Just the Improvement of threatened, endangered, proposed, or sensitive species habitat or maintaining or restoring characteristics of ecosystem composition or structure is insufficient under RACR.

The preliminary EA argues for the importance of spruce forest for T&E and Sensitive species including West Virginia Northern Flying Squirrel (WVNFS) but fails to provide credible evidence that any species would benefit from the proposed actions. In fact, scientific research establishes the contrary – that WVNFS use a much broader habitat than just spruce forest. Research demonstrates that WVNFS has a varied diet compared to some flying squirrel species. Mitchell documents that WVNFS use northern hardwood forest for travel corridors especially very large old trees. Their diet includes lichen from old trees as well as seeds and fruits from red maple, stripped maple, beech, birch, serviceberry, oak, hemlock, and blueberry.[[3]](#footnote-3)

WVNFS are strongly associated with late successional forest conditions. These conditions include snags, downed wood, large diameter trees, moist climate, and high canopies.[[4]](#footnote-4) The project proposal of creating ESH and removing trees, including relatively large trees up to 24” would work counter to most of these conditions. Similarly, creating early succession wildlife openings is counter to creating these habitat conditions for WVNFS. Fungi and lichen, which are also a component of their diet, are more abundant and diverse in mature forests. Young forest would provide fewer of these major components of WVNFS’ diet.[[5]](#footnote-5) Holloway et al considered WVNFS an indicator species for mature and uncut forest[[6]](#footnote-6). And Smith notes their acute sensitivity to habitat fragmentation and disturbance.[[7]](#footnote-7) This scientific literature strongly suggests that removing hardwood trees, particularly larger trees could harm WVNFS more than it would benefit them.

In addition, the impact of the proposed actions on WVNFS and its habitat is barely addressed other than to claim it would be temporary. Many of the effects on habitat characteristics would be far from temporary. Stand age and structure would take decades to recover. The impacts of the machinery and tree removal that would be required by the proposed actions might be temporary from the standpoint of the machinery being present and actions occurring within a short time span, but their impacts on WVNFS and other species could be profound. Besides the impacts to food sources and habitat that would be long lasting in its effects on forest characteristics detailed above, the EA fails to examine what these impacts would be to WVNFS and other species even in the short term.

The above illustrates that the benefit to T&E species argued in the EA is dubious at best, and far from a “need” the proposed actions would more likely harm WVNFS than benefit them. The EA didn’t attempt to establish need but only argued that the actions would benefit T&E species, but even this benefit is highly dubious. The preliminary EA fails to establish a need for these actions, which is a requirement for exceptions to the timber harvest prohibition in the RACR. Sierra Club vs Eubanks established that the agency must not just intend a benefit to roadless characteristics to be granted an exception for timber harvest under RACR. Optimistic predictions about habitat manipulation are insufficient. It must also show, by reference to the best available scientific information, that the action is *needed* to improve the habitat. 36 CFR 294.13(b).[[8]](#footnote-8)

* 1. **The Preliminary EA Fails to establish that the Proposed Actions to Maintain or Restore the Characteristics of Ecosystem composition or Structure are Needed Within the IRA**

Similar to the discussion of T&E species, the EA fails to establish that the proposed actions are needed to maintain or restore the characteristics of ecosystem composition or structure in the roadless area. The EA discusses plant and animal diversity on p. 82. However, it only makes a dubious case that the proposed actions could possibly benefit ecosystem composition and structure. It focusses on detailing the lack of certain structural conditions in West Virginia and on the Monongahela NF without addressing how these conditions relate to the Gauley Mtn area or how it is needed in the roadless area. Importantly, the EA ignores the important role of roadless areas and their protection for the diversity of plan and animal communities. The RACR states: “Roadless areas are more likely than roaded areas to support greater ecosystem health, including the diversity of native and desired nonnative plant and animal communities due to the absence of disturbances caused by roads and accompanying activities. Inventoried roadless areas also conserve native biodiversity by serving as a bulwark against the spread of nonnative invasive species.” [[9]](#footnote-9)

The wildlife openings proposed for the area are an important illustration of the blind spots in the EA. Wildlife openings may be appropriate to benefit wildlife species in parts of the forest. However, roadless areas are places where natural processes are intended to predominate. The RACR only envisioned wildlife habitat improvement where it “is designed to maintain or help restore ecosystem composition or structure to conditions within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period.” Wildlife openings artificially maintained by machinery may be appropriate in areas of the forest where active management is expected, but it falls outside disturbance events that would be expected under natural disturbance regimes. The EA is an argument for the need for ESH in portions of the national forest and management for ESH may be appropriate on certain parts of the Forest. The arguments in the EA might be persuasive that timber cutting and wildlife openings for composition and structure might be appropriate **on some portion** of the Forest. However, the EA fails to make the case that management actions are **needed** to create wildlife openings and ESH associated with the timber cutting within the roadless area. The RACR requires this need for an exception to the prohibition on timber cutting. Sierra Club vs Eubanks reiterates that solid science is required to establish this need and that claims of intention for positive effects are insufficient to establish this need.[[10]](#footnote-10)

* 1. **The Preliminary EA Fails to Establish that the Proposed Actions meet RACR requirement that Timber Cutting be Generally Small Diameter and Infrequent**

Widespread timber cutting and wildlife opening creation go against the intent of the RACR. While the rule provided leeway in allowing some limited timber cutting and removal, it did not visualize the massive activities proposed in this project. Timber harvest or removal that is only allowed in very specific and narrow circumstances; and is “expected to be infrequent” and limited to “generally small diameter timber” is a far cry from the project proposal of massive timber cutting of relatively large trees across large swaths of the entire roadless area. This is fundamentally at odds with the RACR view that: “Inventoried roadless areas provide clean drinking water and function as biological strongholds for populations of threatened and endangered species. They provide large, relatively undisturbed landscapes that are important to biological diversity and the long-term survival of many at risk species. Inventoried roadless areas provide opportunities for dispersed outdoor recreation, opportunities that diminish as open space and natural settings are developed elsewhere.”[[11]](#footnote-11)

While what constitutes "generally small diameter timber" may vary from case to case, the RACR makes the intent of this limitation clear: "[t]he intent of the rule is to limit [timber harvest] to those areas that have become overgrown with smaller diameter trees."[[12]](#footnote-12) Thus, the Roadless Rule creates a strong presumption against canopy manipulation, because canopy trees will be of the largest diameter in any given forest community.

 Cutting trees up to 24" to manipulate forest canopy structure and create ESH is clearly beyond the permissible limits of the Roadless Rule. The decision in Sierra Club vs Eubanks stresses this intent. Discussing the removal of "ladder" fuels as distinguished from "overstory" trees, the decision found that "Cutting canopy trees will decrease the average diameter of trees in the treatment areas, which is further evidence that the proposal is not limited (as it must be) to "generally small diameter timber."[[13]](#footnote-13)

This finding related to where tree removal could be considered appropriate removal of small trees under the RACR is supported by the decision in the Alliance for the Wild Rockies v. Krueger approving a project that would harvest relatively small trees, thereby **increasing the average diameter of leave trees** (emphasis added). In that case the “average” diameter of trees to be removed was 10” to 12”.[[14]](#footnote-14)

1. **The project fails to deliver on ecological restoration objectives**

The Wilderness Society supports well thought out ecological restoration that seeks to return forest to natural conditions within the natural range of variation (NRV). A prerequisite of good ecological restoration is balancing short term impacts to relevant conservation concerns with long term outcomes. Also essential is recognition that long term outcomes are best reached working with natural processes although it may involve some active management. Effective ecological restoration treats the forest as a dynamic ecological system where human intervention needs to be guided by reference to natural processes and sustainability considerations. The Forest Service Ecosystem Restoration Policy in the Forest Service Manual is clear on this (FSM 2020). FSM 2020 lists a number of factors that should be considered in the development of restoration goals and objectives. Among these are the Natural Range of Variation (NRV), ecological integrity, and the best scientific information.[[15]](#footnote-15) The EA fails to adequately address these factors.

 Rather than reference to NRV, the EA stresses age class and achieving “desirable age class distribution”. Age class distribution could be one component of NRV, but the age class distribution concept fails to recognize that old growth forest is a component of the NRV in Monongahela NF and that natural processes can lead to this development. The EA also fails to acknowledge that old growth is very often characterized by multi-age or all age forests rather than age classes.

The EA references vague notions of resiliency and climate adaptation and with scant evidence claims that the proposed actions in the EA address resiliency and climate adaptation. Resiliency is a component of ecological integrity. The Forest Service’s legally binding definition of **ecological** **integrity** is “the quality or condition of an ecosystem when its dominant ecological characteristics (e.g. composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence” (36 CFR § 219.19). The EA fails to adequately address important aspects of ecological integrity and fails to address how the proposed actions would be consistent with ecological sustainability.

Importantly, the EA fails not only to address how composition, structure, function, and connectivity may differ from NRV but it also fails to address how these ecological integrity factors change over time and whether many or all of these factors will return to NRV in time through natural processes. The EA also fails to address how the proposed actions will affect ecological integrity factors. The proposed actions will undoubtedly affect these ecological integrity factors themselves. Some of these effects on ecological integrity may only be in the short term, but many will likely be long lasting.

The trajectory of forest stands under the proposed actions vs the trajectory under natural recovery is not addressed. The Society for Ecological Restoration, a scientific society focused on ecological restoration, defines **ecological restoration** as the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed”. They further define one of the attributes of a restored ecosystem as “The restored ecosystem is self-sustaining to the same degree as its reference ecosystem and has the potential to persist indefinitely under existing environmental conditions.”.[[16]](#footnote-16) Two aspects of these characteristics are striking in relationship to the project EA. First the EA fails to compare the project area and conditions there to any reference ecosystem, explaining how the project area differs in any fundamental way from reference conditions and why the project area cannot return to reference conditions under natural processes. The EA highlights the mix of hardwoods and spruce as somehow undesirable. However, it fails to provide any evidence that this is not a natural condition or a natural stage of forest stand development. It also fails to acknowledge or investigate how the proposed activity could alter natural stand development.

Second, where these conditions might differ from reference conditions, the EA fails to address how the proposed actions fit into an ecological restoration framework. For example, it is generally recognized that coarse woody debris is natural and desirable for stream health. However, what is the reason for this lack of coarse woody debris, and will natural processes over time supplement coarse woody debris to return it to NRV levels. The lack of coarse woody debris in streams is likely due to past management. As the forest ages from past logging and returns to all age conditions more characteristic of NRV forests, coarse woody debris will be added to streams through natural processes. The EA fails to provide a reasonable rationale as to why artificial supplementation is needed now or to evaluate how artificial supplementation would be preferable to natural supplementation over time. It also utterly fails to evaluate and analyze the environmental effects that would be associated with artificial supplementation by cutting trees and using heavy machinery.

1. **The project fails to comply with NEPA by evaluating reasonable alternatives to the proposed action**

NEPA regulations require that agencies shall "[e]valuate reasonable alternatives to the proposed action.[[17]](#footnote-17) However, no alternatives other than the proposed actions were presented or considered in the preliminary EA. There certainly were a range of alternatives that might be considered reasonable. In the Gauley Mountain Inventoried Roadless Area alternatives that allowed natural processes to continue or were more measured in actions it proposed and compliant with the RARC might have been appropriate as alternatives. However, it is not acceptable under NEPA to propose actions without alternatives.

Sincerely,

Hugh Irwin

Senior Conservation Specialist

The Wilderness Society

P.O. Box 817

Black Mountain, NC 28711

hugh\_irwin@tws.org

828-820-2885

1. Federal Register / Vol. 66, No. 9 / Friday, January 12, 2001 / Rules and Regulations; Summary and § 294.10 Purpose. [↑](#footnote-ref-1)
2. Federal Register / Vol. 66, No. 9 / Friday, January 12, 2001 / Rules and Regulations; § 294.13 Prohibition on timber cutting, sale, or removal in inventoried roadless areas. [↑](#footnote-ref-2)
3. Mitchell, D. 2001. Spring and Fall Diet of the Endangered West Virginia Northern Flying Squirrel [↑](#footnote-ref-3)
4. Carey AB, Kershner J, Biswell B[L], Dominguez de Toledo L. 1999. Ecological Scale and Forest Development: Squirrels, Dietary Fungi, and Vascular Plants in Managed and Unmanaged Forests. The Wildlife Society. Wildlife Monographs no. 142; Smith, W.P. 2012. Sentinels of Ecological Processes: The Case of the Northern Flying Squirrel. Bioscience, 62(11): 950-961. [↑](#footnote-ref-4)
5. Smith, WP. 2007. Ecology of Glaucomys sabrinus: Habitat, demography, and community relations. Journal of Mammology 84: 1044-1058; Selva, S.B. 1994. Lichen diversity and stand continuity in the northern hardwoods and spruce-fir forests of northern New England and western New Brunswick. Bryologist 97: 424-429. [↑](#footnote-ref-5)
6. Holloway, GL; Smith, WP. 2011. A meta-analysis of forest age and structure effects on northern flying squirrel densities. Journal of Wildlife Management 75:668-674. [↑](#footnote-ref-6)
7. Smith, W.P. 2012. Sentinels of Ecological Processes: The Case of the Northern Flying Squirrel. Bioscience, 62(11): 950-961. [↑](#footnote-ref-7)
8. Sierra Club v. Eubanks, 335 F. Supp. 2d 1070 (E.D. Cal. 2004) (halting harvest in a roadless area where the Forest Service could not demonstrate that its proposal would actually achieve the intended outcome of reducing wildfire risk). [↑](#footnote-ref-8)
9. Federal Register / Vol. 66, No. 9 / Friday, January 12, 2001. P.3245 [↑](#footnote-ref-9)
10. Sierra Club v. Eubanks, 335 F. Supp. 2d 1070 (E.D. Cal. 2004) (halting harvest in a roadless area where the Forest Service could not demonstrate that its proposal would actually achieve the intended outcome of reducing wildfire risk). [↑](#footnote-ref-10)
11. Federal Register / Vol. 66, No. 9 / Friday, January 12, 2001 p. 3245 [↑](#footnote-ref-11)
12. Federal Register / Vol. 66, No. 9 / Friday, January 12, 2001 p. 3257 [↑](#footnote-ref-12)
13. *Sierra Club v. Eubanks*, 335 F. Supp. 2d 1070 (E.D. Cal. 2004) (holding that cutting of trees between 11' and 24" in diameter violated Roadless Rule) [↑](#footnote-ref-13)
14. Alliance for the Wild Rockies v. Kruege*r,* 950 F. Supp. 2d 1196 (D. Mont. 2013) [↑](#footnote-ref-14)
15. Federal Register / Vol. 81, No. 81 / Wednesday, April 27, 2016 / Rules and Regulations; § 2020.3 Prohibition on timber cutting, sale, or removal in inventoried roadless areas. [↑](#footnote-ref-15)
16. SER International Primer on Ecological Restoration. [ser\_primer.pdf (ymaws.com)](https://cdn.ymaws.com/www.ser.org/resource/resmgr/custompages/publications/ser_publications/ser_primer.pdf) [↑](#footnote-ref-16)
17. Revised 40 C.F.R. § 1502.14(a). [↑](#footnote-ref-17)