

FRIENDS of BLACKWATER

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November 30, 2020

Ms. Cynthia Sandeno, District Ranger
Monongahela National Forest, Marlinton-White Sulphur Ranger District
1627 Cemetery Road
Marlinton, WV 24954

Re: Scoping comments on the proposed Upper Elk Ecological Restoration Project

Dear Ms. Sandeno:

Friends of Blackwater Canyon and **Center for Biological Diversity** appreciate the opportunity to submit scoping comments on the proposed Upper Elk project.

Friends of Blackwater (“FOB”) is a non-profit conservation organization working to protect biodiversity in the Mid-Atlantic Appalachian Highlands. FOB has 5,624 supporters across West Virginia and in the surrounding states and work to protect the public lands used by our members. During the past 20 years FOB has moved 4,650 acres of critical endangered species habitat into public ownership at Blackwater Falls State Park and in the Cheat Canyon. FOB has funded research and advocacy for the endangered Indiana bat, Virginia big-eared bat, Cheat Snail in the Cheat River Gorge, the Cheat Mountain salamander, and advocated for federal protections for the West Virginia northern flying squirrel, northern long-eared and little brown bats. Friends of Blackwater has a longstanding interest in the conservation of rare, threatened, and endangered species in the Monongahela National Forest, and has a track record of active engagement in Forest planning processes. FOB has a Memorandum of Understanding to work with the Monongahela National Forest on improving water quality, maintaining hiking and biking trails and interpreting historic sites in Tucker County. FOB has done similar trail work in Blackwater Falls State Park and collaborated with Tucker County and the Town of Hendricks to place roadside markers at historic sites.

Center for Biological Diversity (“Center”) is a nonprofit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental and administrative law. The Center has over 1.6 million members and online activists dedicated to the protection and restoration of endangered species and wild places. The Center has worked for over twenty-five years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life.

I. SUMMARY

FOB and the Center are primarily concerned with the proposed project's impacts to the West Virginia Northern Flying Squirrel (WVNFS) and their habitat. FOB and the Center urge the Forest Service to create maps where WVNFS habitat and capture sites are shown so more meaningful comments can be made and suggest that the proposed project be changed with more protective measures for the WVNFS. The fact that nothing has been said about the WVNFS in this document except in Forest Plan Amendment suggests the Ranger District is acting as though the Amendment has been decided on and that the public will no longer receive any information about the WVNFS. Is this true? We would also like more information on aquatic species, bats and insects found in the proposed project area.

II. DISCUSSION

A. The Forest Service Must Avoid Clearcutting in Hardwood Stands.

The purpose and need statement in the scoping document indicates that the Upper Elk project is focused on restoring red spruce which is often accompanied with improving habitat for the WVNFS. *See* Scoping at 2. In this case the WVNFS is never mentioned. The project calls for hundreds of acres of regeneration harvests in numerous hardwood stands. In fact, the amount of proposed regeneration harvests in MP 3.0 has more than doubled since the project was last scoped in February. Scoping at 4. The maps do not show WVNFS habitat so it is impossible for us to determine exactly which stands are in WVNFS habitat would be clear cut but we are concerned that many of these clear cuts would occur within or adjacent to areas that can be identified as WVNFS habitat. (FOB's mapping shows extensive WVNFS habitat in the project area). Moreover, many of these stands may be in areas containing mature/late-successional forests. There is no explanation as to how these clear cuts advance the project objectives of restoring spruce and (we hope) improving WVNFS habitat. In fact, regeneration harvests will likely do the opposite by eliminating important uneven-aged structure and fragmenting WVNFS habitat. Some of these areas may be 120 years or older and any amount of clearcutting would foreclose any potential restoration of these stands for more than a century.

Accordingly, we urge the Forest Service to remove its plans to clear cut these stands as shown in the scoping document. Regeneration harvests neither advance the purpose and need of the project nor the Management Prescriptions provided for in the Forest Plan.

B. The Scoping Document Does Not Provide Important Information Regarding the Location and Extent of WVNFS Habitat in the Project Area.

Unlike in other projects, this scoping document fails give the public maps of WVNFS habitat and fails to discuss the process by which the WVNFS habitat was evaluated with full data and scientific standards.¹ This is a significant omission.

¹ For example in the Forest Service's FONSI for the Spruce Mountain Grouse Management Area Project, the agency explained: "WVNFS habitat was determined using the Monongahela

WVNFS are strongly associated with late successional forest characteristics, including snags, downed wood, large diameter trees, moist climate, and high canopies.² Decreasing mid to late successional habitat in favor of an increase in early successional habitat, as is proposed, would decrease the habitat suitability for WVNFS significantly. Major food sources for WVNFS, including fungi, lichen and mast, can be severely impacted by disturbance associated with forest management.³ “Unlike northern flying squirrels in the Pacific Northwest which are primarily mycophagists (including lichens), the West Virginia northern flying squirrel has a more varied diet.”⁴ Fungi and lichen are more abundant and diverse in mature forests, which means that young forests would be less able to provide several major components of WVNFS’ diet.⁵ WVNFS are considered an indicator species for mature and uncut forest,⁶ partly because of their acute sensitivity to habitat fragmentation and disturbance.⁷

The squirrel uses a much broader habitat than just the portion of the forest with red spruce. They use northern hardwoods for travel corridors especially very large old trees. They use red maple, striped maple, beech, birch, serviceberry, oak, hemlock and blueberry as well as large amounts of lichen found on older trees (Mitchell 2001 Am. Midl. Nat.). Removing large older trees from the forest in WVNFS habitat will remove these food sources and corridors for travel.

The Forest Service must analyze the impact of logging both commercial and non-commercial on the WVNFS and explain the extent of impact or where it will occur. Large older trees cannot simply be plucked out of the forest during commercial logging. The forest floor will be impacted by machinery and the Forest Service must closely examine post-project changes to the forest floor, including desiccation and the compaction of the hyphal mat which contains truffles,

National Forest WVNFS suitable habitat layer, the DNR Red Spruce cover layer, the Menzel model, satellite aerial imagery, known capture locations, and on-the-ground habitat verification.” USDA Forest Service, Decision Notice and Finding of No Significant Impact for the Spruce Mountain Grouse Management Area Project at 6.

² 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.

³ Flaherty, E. A., M. Ben-David, and W. P. Smith. 2010a. Diet and food availability of the endemic Prince of Wales flying squirrel (*Glaucomys sabrinus griseifrons*) in Southeast Alaska: implications for dispersal across managed landscapes. Journal of Mammalogy 91:79-91.

⁴ Mitchell, D. 2001. Spring and Fall Diet of the Endangered West Virginia Northern Flying Squirrel (*Glaucomys sabrinus fuscus*) Am. Midl. Nat. 146:439-443.

⁵ Smith, WP. 2007. Ecology of *Glaucomys sabrinus*: Habitat, demography, and community relations. Journal of Mammalogy 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.

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.

⁷ Smith, W.P. 2012. Sentinels of Ecological Processes: The Case of the Northern Flying Squirrel. Bioscience, 62(11): 950-961.

a food that the squirrel depends on. The hyphal mat if disturbed takes 40 years to regrow. The Forest Service must also discuss impacts to lichen, which is a major WVNFS food source. The Forest Service must further examine the squirrel's use of tall trees (regardless of species) to navigate through the forest and the impacts to WVNFS dispersal and foraging if the trees are removed. Staff must also consider the impacts of immature flying squirrels that may be killed during logging. The short-term impacts of logging in the WVNFS habitat may last 40 or more years and would remove habitat for 8 generations of squirrels.

Timbering will simultaneously degrade the quality of the habitat and, by creating gaps in the forest and reducing the height of the trees, make it more difficult for WVNFS to reach more suitable habitat in the surrounding area. Habitat connectivity is crucial for long-term population viability of WVNFS, potentially more-so than the habitat quality within a particular isolated area.⁸ WVNFS avoid crossing gaps, and will choose to detour around a clear cut even when the detour distance is many times longer.⁹ Studies suggest that removing even half of the trees from a given area has a negative impact on flying squirrels, so the clear-cutting and thinning proposed could have a severe impact.¹⁰ Dense young forests also limit WVNFS' perceptual range, meaning that the early stages of regrowth will force WVNFS to spend more time searching for clues to guide them toward suitable forest habitat.¹¹

The project proposed should not allow for timbering year-round, with no precautions made for the critical breeding and nesting period of the WVNFS, from April to September. WVNFS young may not be mobile during this period. It is possible that adult WVNFS would be able to relocate and potentially even re-nest if they were disturbed by timbering activities, this is in no way certain. Disturbance and stress related to timbering, taking place at this critical time, could result in reduced survival for young WVNFS. If adult WVNFS are forced to relocate, that process could be costly in terms of energy, especially since the lack of suitable forest cover would force them to rely on inefficient quadrupedal locomotion.¹² Relocation would also

⁸ Loeb SC, Tainter FH, Cazares E. 2000. Habitat associations of hypogeous fungi in the Southern Appalachians: Implications for the endangered northern flying squirrel (*Glaucomys sabrinus coloratus*). *American Midland Naturalist* 144: 286-296; Smith, WP; Person, DK, Pyare S. 2011. Source-sinks, metapopulations, and forest reserves: Conserving northern flying squirrels in the temperate rainforests of Southeast Alaska. Pages 399-422 in Liu J, Hull V, Morzillo AT, Wiens J, eds. *Sources, Sinks, and Sustainability across Landscapes*. Cambridge University Press.

⁹ Smith, M.; Forbes, G.; Betts, M. 2013. Landscape configuration influences gap-crossing decisions of northern flying squirrel (*glaucomys sabrinus*). *Biological Conservation*, 168:176-183.

¹⁰ Holloway, G.L.; Smith, W. P.; Halpern, C.B.; Gitzen, R.A.; Maguire, C.C.; West, S.D. 2012. Influence of forest structure and experimental green-tree retention on northern flying squirrel (*Glaucomys sabrinus*) abundance. *Forest Ecology and Management*. 285: 187-194.

¹¹ Flaherty EA, Smith WP, Pyare S, Ben-David M. 2008. Experimental trials of the northern flying squirrel (*Glaucomys sabrinus*) traversing managed rainforest landscapes: Perceptual range and fine-scale movements. *Canadian Journal of Zoology* 86: 1050-1058.

¹² Flaherty, E. A., M. Ben-David, and W. P. Smith 2010. Quadrupedal locomotor performance in two species of arboreal squirrels: Predicting energy savings of gliding. *Journal of Comparative Physiology B* 180: 1067-1078.

increase the risk of predation, due to the need to cross open areas, potentially move in daylight, and use inefficient quadrupedal locomotion.

While the proposed project previously did not call for any road reconstruction, new permanent roads, or new temporary roads, the Forest Service has now proposed 8.3 miles, 2.7 miles, and 3.1 miles of road work respectively. Flying squirrels have been documented not to cross forest roads, which results in divided subpopulations that have reduced access to mates, den sites, and foraging grounds.¹³ Thus, there is great potential for harm to the larger population if smaller populations are disconnected from one another as a result of a timber harvest that fragments the species' habitat. These impacts, and the impacts to nearby streams and aquatic species from erosion and sedimentation need to be rigorously examined.

C. Forest Plan Amendment

The delisting of the West Virginia northern flying squirrel (WVNFS) occurred with the explicit condition and expectation that the Monongahela National Forest would protect the WVNFS under the same standards and management direction regardless of the listing status.¹⁴ Unlike other sensitive species, the Forest Service also has a long-term monitoring plan for the WVNFS.

The 2006 Forest Plan (revised in 2011) under Forest-wide Management Direction TE64 provides for logging in WVNFS suitable habitat only in certain limited instances and in consultation with the U.S. Fish and Wildlife Service. Under the Forest Plan, vegetation management activities shall only be conducted after consultation with the USFWS, and (1) under a research permit, or (2) to improve or maintain WVNFS habitat after research has demonstrated the beneficial effects of the proposed management, or (3) when a project would have no affect or not likely adversely affect the species, or (4) to address public safety concerns.

It must be noted that to date the WVNFS research referenced in TE64 has not been completed.

¹³ See Kelly, C.A., Diggins, C.A., and Lawrence, A.J. 2013. Crossing structures reconnect federally endangered flying squirrel populations divided for 20 years by road barrier. *Wildlife Society Bulletin* 37:375-379, <https://doi.org/10.1002/wsb.249>.

¹⁴ The final rule delisting the WVNFS states in part, "The current MNF Forest Plan...protects WVNFS habitat primarily through land use designations, a predominately passive management strategy, and binding standards that effectively remove the threat of habitat loss (via logging and other disturbances) on all WVNFS habitat on the forest. Standards TE63-66...adopt and implement the provisions of appendix A of the recovery plan for the WVNFS, which severely limit vegetation management in all WVNFS habitat, including breeding, feeding, resting, and dispersal corridors...Only specific actions that have no adverse effect to WVNFS habitat, a discountable or very minor effect, or that demonstrate a beneficial effect (such as habitat restoration) are allowed in WVNFS habitat forest wide...We reasonably expect these standards to continue to apply regardless of the Act's listing status of the WVNFS. This management strategy is also likely to continue post delisting, as the WVNFS would be managed by the Forest Service as a 'sensitive species.'" U.S. Fish and Wildlife Service, Final Rule Removing the Virginia Northern Flying Squirrel (*Glaucomys sabrinus fuscus*) From the Federal List of Endangered and Threatened Wildlife, 73 Fed. Reg. 50226, 50232-33 (Aug. 26, 2008).

Nevertheless, the Forest Service now proposes to amend TE64 to remove several existing protections for the species. While we do recognize that the species was removed from the endangered and threatened species list in 2013, and we do not object to the Forest Service removing the language referring to the need for consultation under the ESA, we believe the proposed new language is unnecessary and goes too far. Under the Forest Service's proposal, TE64 would only prohibit loss of Forest-wide viability and a trend toward federal listing for non-excepted activities. The scoping notice does not explain at what point a project's impacts would cause the loss of forest-wide viability and a trend toward federal listing and given that critically important WVNFS research has not been completed, it is unlikely that the Forest Service could make an informed and accurate determination. Further, the language does not advance the purpose and need for this project, which is described as improving forest stand health and composition and ecological connectivity and resiliency. In sum, the Forest Service provides no reasoned explanation as to why this additional language is necessary, particularly given the Fish & Wildlife Service's assumption that the current language would remain intact and in view of the habitat restoration goals for this proposed project.

D. Roadless Area: MP6.2

The Purpose and Need statement on page 2 of the scoping document goes against the Forest Plan. The Forest Plan calls for increasing late successional conditions in MP 4.1 spruce restoration areas, and it calls for late successional conditions and natural vegetation development throughout MP 6.2. Therefore, the plan to create and maintain young forests and early successional habitats throughout the project area should be dropped. Logging in MP6.2 should be dropped. This would include the 3,276 acres of non-commercial spruce restoration. (see Table 1, page 4)

Conclusion

As currently formulated, the scoping document fails to give us any information on the WVNFS, so we are unable to give important feedback on this topic. It also fails to explain the WVNFS Amendment process and the impacts the proposed amendment would have on this project.

Friends of Blackwater has sent several important papers on the WVNFS's natural history to the Monongahela National Forest. We hope that these detailed scientific papers will be used in the analysis of impacts to the WVNFS from logging, roadbuilding, etc. on the Upper Elk Project. We urge the Forest to consider these and other sources as part of the NEPA process and closely examine the impacts of the proposed project and plan amendment on the species. We urge the Forest Service to reconsider this proposed project as it related to the WVNFS and remove the logging proposal in the Roadless Area.

Thank you for the opportunity to comment on this proposed project and forest plan amendment. Please make these comments part of the official record for this project. Also, please send us all future notices for this project.

Sincerely,

A handwritten signature in blue ink, reading "Judith S. Rodd". The signature is fluid and cursive, with the first name "Judith" being more prominent.

Judith S Rodd
Director
Friends of Blackwater Canyon

A handwritten signature in blue ink, reading "Jason Totoiu". The signature is more stylized and less legible than the one above, with a long horizontal stroke.

Jason Totoiu
Senior Attorney
Center for Biological Diversity