VIA Link: https://www.fs.usda.gov/project/?project=64924

December 10, 2024

Jeff Durkin, Project Leader
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Dear Jeff:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to provide Draft EA comments on the Rumbling Owl Project.

AFRC is a regional trade association whose purpose is to advocate for sustained yield timber harvests on public timberlands throughout the West to enhance forest health and resistance to fire, insects, and disease. We do this by promoting active management to attain productive public forests, protect adjoining private forests, and assure community stability. We work to improve federal and state laws, regulations, policies, and decisions regarding access to and management of public forest lands and protection of all forest lands. Many of our members have their operations in communities within and adjacent to the Flathead National Forest and management on these lands dictates not only the viability of their businesses, but also the economic health of the communities themselves.

The Rumbling Owl project area is in Missoula County, and National Forest System lands surround private land along the US Highway 83 corridor that extends from Swan Lake south to the boundary of the Flathead National Forest with the Lolo National Forest. The project area is bounded on the eastside by the Bob Marshall Wilderness. The private lands in this area are populated in rural and semi-rural developments within a forested environment.

AFRC staff is familiar with the project area, having driven through and visited the area on several occasions. AFRC also provided scoping comments in December 2023 that were generally supportive of the Project.

For background purposes, ownership within the 35,848-acre project area is 78 percent National Forest System (NFS) land and 22 percent privately owned land. Approximately 75.7 percent

(27,144 acres) of the project area is located within the wildland-urban interface (WUI), as defined by the Healthy Forests Restoration Act (HFRA). The city of Condon fireshed encompasses the entire Rumbling Owl project area and is identified by the Forest Service through the Wildfire Crisis Strategy as one of 19 high risk firesheds in Montana. In a letter dated July 9, 2023, Chief of the Forest Service Randy Moore identified "an emergency situation on National Forest System lands within 250 high risk firesheds across the West" and directed the Forests to use "emergency authorities as their default way of conducting environmental reviews and before consideration of our normal practices." Western Firesheds Emergency Action Determination, Section 40807 of the Infrastructure Investment and Jobs Act (Public Law 117-58; 2021), authorizes emergency vegetation treatment actions on NFS lands within 250 identified High Risk Firesheds (which the Rumbling Owl Project lies in). Emergency actions are taken to achieve relief from threats to public health and safety, critical infrastructure, and/or to mitigate threats to natural resources. The Forest will be asking for the emergency authority to move this project forward.

AFRC supports the Purpose and Need for the Project which includes:

- Reduce wildfire risk to loss of life, property damage, and ecosystem function within the wildland-urban interface.
- Improve the diverse forest composition which contributes to resistant1 forest conditions at both the stand and landscape level.

While AFRC supports the Project and the Purpose and Need, we offer the following comments for clarification and to supplement the record.

1. Since the Rumbling Owl Project is part of the Forest's FY'25 timber sale program we continue to urge the Forest to use the available emergency authorities to move this project forward to mitigate the harm to life and property adjacent to NFS lands. The wildfire that burned along Highway 83 in 2023 is a strong reminder of why this Project needs to be expedited to protect communities and the private lands adjacent to the project area.

2. AFRC was not able to find the reasons or locations for the reduction in the number of acres being commercially treated from scoping to the Draft EA.

   Commercial Treatments from scoping are listed below:

Commercial Tree Harvest	**Acres**
Regeneration Tree Harvest	988
Intermediate Tree Harvest	3453
Total Commercial Treatment Area	**4441**

   Commercial Treatments from the Draft EA is listed below:

Table 2. Summary of proposed commercial vegetation treatment

Commercial treatment	Acres
Regeneration tree harvest	853
Intermediate tree harvest	3151
Total proposed commercial treatment	4005

There was a reduction of 436 acres from Scoping to Draft EA. AFRC could only find language stating a concern that: *"Removing too much canopy cover will reduce snow intercept and will likely degrade the quality of winter range for ungulates. In response, Forest Service increased the retention of Douglas-fir and Ponderosa Pine in the east-west migration corridor just north of Holland Lake Road."*

This reduction in acres treated is concerning because Montana's forest products industry is one of the largest components of manufacturing in the state and employs roughly 7,000 workers earning about $300 million annually. There are several sawmills, post and pole, and smaller wood operations where the Project is located. The timber products provided by the Forest Service are crucial to the health of our membership and the counties and communities where they are present. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Without this material, our members would also be unable to run their mills at capacities that keep their employees working, which is crucial to the health of the communities that they operate in. These benefits can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills. Studies from the University of Montana's Bureau of Business and Economic Research has shown that for every million board feet of timber harvested there are 15-18 direct or indirect jobs created.

3. AFRC supports treatements in the stands identified as old growth. Of the 2,566 acres of old growth patches on NFS land in the analysis area, 974 acres are proposed for intermediate treatment. Approximately 831 acres are proposed for intermediate treatments (commercial thin, improvement cut), 126 acres are proposed for fuels treatment, and 16 acres proposed for pre commercial thin treatment.

   There are hundreds of acres of ponderosa pine/western larch stands of old growth that need to be thinned from below to maintain the existing overstory. AFRC supports treatments in these areas and also supports removing trees less than 17 inches in these units.

4. Commercial treatments include several different silvicultural prescriptions including shelterwood, group selection, intermediate treatments, and commercial thinnings. While all of these treatments take a different approach to stand improvement, AFRC suggests that the main goal for all is to reduce stand density and promote fire resistant species across the landscape. We believe in most cases to accomplish this; the basal area of leave trees needs to be reduced to about 40 sq. ft. per acre to both reduce fuel loadings and tree

competition and to promote tree vigor on the residual trees. Thinning to this lower basal area is most important in areas adjacent to the WUI. This type of density reduction is especially pertinent for the protection of the privately managed land in the project area.

5. AFRC is pleased to see the broad range of equipment that may be suitable for use during harvest*: "All commercial harvest activities would be implemented using mechanized equipment. Mechanized equipment includes traditional tracked and rubber-tired logging equipment. This may include, but is not limited to, harvesters, forwarders, skidders, feller-bunchers, processors, masticators, chippers, and dozers."* AFRC would like to remind the Forest that the benefits of implementing the proposed treatments can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on Forest Service forestland. The primary issues affecting the ability of our members to feasibly deliver logs to their mills are firm operating restrictions. As stated above, we understand that the Forest Service must take necessary precautions to protect their resources; however, we believe that in many cases there are conditions that exist on the ground that are not in step with many of the restrictions described in Forest Service EA's and contracts (i.e. dry conditions during wet season, wet conditions during dry season). We would like the Forest Service to shift their methods for protecting resources from that of firm prescriptive restrictions to one that focuses on descriptive end-results; in other words, describe what you would like the end result to be rather than prescribing how to get there.

   There are a variety of operators that work in the Montana market area with a variety of skills and equipment. Developing an EA and contract that firmly describes how any given unit shall be logged may inherently limit the abilities of certain operators. For example, restricting certain types of ground-based equipment rather than describing what condition the soils should be at the end of the contract period unnecessarily limits the ability of certain operators to complete a sale in an appropriate manner with the proper use of their equipment. To address this issue, we would like to see flexibility in the EA and contract to allow a variety of equipment to the sale areas. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential operators. Though some of the proposal area is planned for cable harvest, there are opportunities to use certain ground equipment such as fellerbunchers and processors in the units to make cable yarding more efficient. Allowing the use of processors and fellerbunchers throughout these units can increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest. Tethered-assist equipment is also becoming a more safe, viable, and available option for felling and yarding on steep slopes. This equipment has been shown to contribute little additional ground disturbance when compared to traditional cable

systems. Please prepare any ensuing timber sale or stewardship contracts in a manner that will facilitate this type of equipment.

6. In our scoping comments we requested that the District more accurately and acutely describe the impacts of the No Action Alternative. However, we believe the Draft EA did not appropriately outline the threat of wildfire resulting from taking no action.

   The Draft EA states: "*There would be no immediate effects on vegetation, and natural processes such as tree growth and mortality would continue over time. This effects analysis assumes that all wildland fires would be successfully suppressed during the time frame covered by the analysis. This alternative would result in increasing stand densities and density related mortality; this increasing density would also increase risk of stand level mortality from insects and diseases. Mature lodgepole pine trees and stands would be at a high and increasing risk of mountain pine beetle infestation. Mature Douglas-fir dominated stands and individual tree susceptibility to Douglas-fir beetle would increase and so would the mortality from root diseases across the analysis area.*"

   AFRC does not believe you are appropriately describing the elevated wildfire risk that is exacerbated by taking no action. Increased levels of insects and disease, accumulating fuels, a warming climate, and expanding development in the WUI have elevated the fire threat. The area had a fairly significant fire in 2006, the Holland Peak fire which burned 1,646 acres. The risk has reached crisis proportions in the West, calling for decisive action to reduce risk to communities as well as improve forest health and resilience to future wildfire events. Further, increased tree density and tree succession has resulted in a higher susceptibility to insects, disease, and drought as trees compete for sunlight, water, and nutrients. Past and on-going tree mortality is evident, which subsequently has resulted in an increase of hazardous fuels and higher risk of wildfire.

   Please consider supplementing the Final EA with the following studies that illustrate the scientifically proven benefits following thinning and density reduction treatments.

   Van Mantgem, P.J., Falk, D.A., Williams, E.C., Das, A.J. and Stephenson, N.L. 2018. Pre-fire drought and competition mediate post-fire conifer mortality in western U.S. National Parks. Ecological Applications, 28(7), 1730-1739.

   Fettig, C.J., Klepzig, K.D., Billings, R.F., Munson, A.S., Nebeker, T.E., Negrón, J.F. and Nowak, J.T. 2007. The effectiveness of vegetation management practices for prevention and control of bark beetle infestations in coniferous forests of the western and southern United States. Forest Ecology and Management 238, 24-53.

   - Factors involving tree density are consistently associated with the occurrence and severity of bark beetle infestations. Management to reduce stand or landscape-level susceptibility to bark beetles must address factors related to tree density.
   - Thinning's effectiveness as a preventative measure to reduce the amount of bark beetle caused tree mortality is supported by the scientific literature.

Hood, S.E. 2017. Radial and stand-level thinning treatments; 15-year growth response of legacy ponderosa and Jeffrey pine trees. Restoration Ecology, 1-7.

- Shade-intolerant old trees can respond to density-reduction treatments. Stand thinning caused an immediate, sustained increase in BAI compared to radial thinning and unthinned stands in large, old ponderosa and Jeffrey pines.
- Thinning seemed to mitigate the effects of extreme drought conditions that occurred the year after treatment, such that growth reductions were much less than the control and radial thinning trees.

Bradford JB, Bell DM (2017) A window of opportunity for climate-change adaptation: easing tree mortality by reducing forest basal area. Frontiers in Ecology and the Environment 15:11–17.

- Reducing forest basal area can decrease tree competition, which may reduce drought-induced tree mortality.

Latham, P. and Tappeiner, J. 2002. Response of old-growth conifers to reduction in stand density in western Oregon forests. Tree Physiology 22, 137-146.

- Cutting trees to reduce density in old-growth stands or to modify the amount and distribution of fuels can be beneficial to residual large old-growth trees.
- Reduction of stand density around individual trees with full crowns is likely to increase the basal area growth of a high proportion of the trees for several decades.

McDowell, N., Brooks, J. R., Fitzgerald, S. A. and Bond, B. J., 2003. Carbon isotope discrimination and growth response of old Pinus ponderosa trees to stand density reductions. Plant, Cell & Environment, 26: 631–644. doi: 10.1046/j.1365-3040.2003.00999.x.

- The growth and physiology of old ponderosa pine trees are responsive to stand density reductions and have the potential to increase growth dramatically after these reductions.

7. AFRC is pleased that treatments in the riparian management zones are proposed to improve tree growth, improve species composition, and reduce fuel loads in upland stands. AFRC believes that active management in riparian areas can help to achieve forest restoration goals. It has been well documented that thinning in riparian areas accelerates the stand's trajectory to produce large conifer trees and has minimal effect on stream temperature with adequate buffers. Removal of suppressed trees has an insignificant short-term effect on down wood, and a positive effect on long-term creation of large down woody debris and large in stream wood, which is what provides the real benefit to wildlife and stream health. We encourage the Forest Service to focus their riparian reserve treatments on a variety of native habitats. There is a need for treatments that meet the need of multiple habitat types, and we encourage the District to look for ways to incorporate treatments that meet those needs. Utilization of gap cuts to promote early seral habitat in the reserves, treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives that the Project mandates should be considered.

The tradeoffs that the Forest Service will likely be considering through the ensuing environmental analysis will be between achieving these forest health benefits and potentially having adverse impacts to streams. These impacts to streams typically include stream temperature, wood recruitment, and sedimentation associated with active management.

We would like the Forest Service to review the literature cited below and consider incorporating their findings into the Final EA that will shape the level of management permitted to occur in riparian reserves.

Stream temperature

Janisch, Jack E, Wondzell, Steven M., Ehinger, William J. 2012. Headwater stream temperature: Interpreting response after logging, with and without riparian buffers, Washington, USA. *Forest Ecology and Management*, 270, 302-313.

Key points of the Janisch paper include:

- The amount of canopy cover retained in the riparian buffer was not a strong explanatory variable to stream temperature.
- Very small headwater streams may be fundamentally different than many larger streams because factors other than shade from the overstory tree canopy can have sufficient influence on stream temperature.

Anderson P.D., Larson D.J., Chan, S.S. 2007 Riparian Buffer and Density Management Influences on Microclimate of Young Headwater Forests of Western Oregon. *Forest Science,* 53(2):254-269.

Key points of the Anderson paper include:

- With no-harvest buffers of 15 meters (49 feet), maximum air temperature above stream centers was less than one-degree Celsius greater than for unthinned stands.

Riparian reserve gaps

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon. *Aquatic Sciences* 75:547-558.

Key points of the Warren paper include:

- Canopy gaps were particularly important in creating variable light within and between reaches.
- Reaches with complex old growth riparian forests had frequent canopy gaps which led to greater stream light availability compared to adjacent reaches with simpler second-growth riparian forests.

Wood Recruitment

Burton, Julia I., Olson, Deanna H., and Puettmann, Klaus J. 2016. Effects of riparian buffer width on wood loading in headwater streams after repeated forest thinning. *Forest Ecology and Management*. 372 (2016) 247-257.

Key points of the Burton paper include:

- Wood volume in early stages of decay was higher in stream reaches with a narrow 6-meter buffer than in stream reaches with larger 15- and 70-meter buffers and in unthinned reference units.
- 82% of sourced wood in early stages of decay originated from within 15 meters of streams.

Collectively, we believe that this literature suggests that there exists a declining rate of returns for "protective" measures such as no-cut buffers beyond 30-40 feet. Resource values such as thermal regulation and coarse wood recruitment begin to diminish in scale as no-cut buffers become much larger. We believe that the benefits in forest health achieved through density management will greatly outweigh the potential minor tradeoffs in stream temperature and wood recruitment, based on this scientific literature. We urge the Forest Service to establish no-cut buffers along streams no larger than 40 feet and maximize forest health outcomes beyond this buffer.

In addition to the benefits of managing in the riparian areas listed above, AFRC believes that this Project will have beneficial impacts to fisheries resources as indicated in the scoping document. Culverts need to be replaced to help with fish passage, thinning is needed to increase water yield, and density reduction is needed to mitigate wildfire risk that will lessen the chances for mass soil movements into streams following fires.

8. The Flathead National Forest has recently implemented shaded fuel breaks projects. AFRC supports the concept of shaded fuel breaks along strategic roads within the project area. These fuel breaks should be wide enough to stop or slow down a fast-moving wildfire. At a minimum, these breaks should be wide enough on either side of those roads to enable effective fire suppression. The stands within those fuel breaks should be thinned to a wide spacing and low basal area to reduce the threat of a crown fire going through the area. The purpose of the fuel breaks is to get the fire to lay down on the ground for suppression purposes.

9. AFRC believes that the Forest has done an excellent job of explaining the beneficial tradeoffs of active forest management in the range of threatened or endangered species. HFRA authorizes hazardous fuels reduction projects on Federal land where threatened and endangered species habitat exists if (A) natural fire regimes on that land are identified as being important for, or wildfire is identified as a threat to, an endangered species, a threatened species, or habitat of an endangered species or threatened species in a species recovery plan; (B) the authorized hazardous fuel reduction project will provide enhanced protection from catastrophic wildfire for the endangered species, threatened

species, or habitat of the endangered species or threatened species; and (C) the Secretary complies with any applicable guidelines specified in any management or recovery plan (16 USC 5512(a)(5)).

The Project proposes approximately 186 acres of vegetation management, 0.75 miles of system road use and 700 feet of temporary road construction in grizzly bear secure core as defined by the forest plan. Project activities that require the use of roads will comply with forest plan standards FW-STD-IFS-02 and 03.

Habitat in the affected Lynx Analysis Units would continue to support a mosaic of differing forest successional stages, providing the physical or biological features essential to the conservation and recovery of the Canada lynx population (FW-DC-WL-05). Activities proposed in matrix habitat would not create barriers to lynx movement.

10. Appendix A states: *"All units will receive individual marking guidelines to describe trees to be selected for cut and leave. Marking guidelines will be especially important in old growth stands and stands with large/ old individuals where those trees are to be retained."*

    AFRC strongly suggests the District develop marking guidelines that will enable the use of Designation by Prescription (DxP). Recent funding constraints affecting the ability to hire temporary seasonal staff amplifies the importance of leveraging the skillset of the private sector to assist with project layout such as marking or boundary tagging. The Forest is one of the leaders in implementing DxP and we believe this project is another good candidate for that.

11. AFRC is pleased to see that the District updated the record in the Draft EA to include a more comprehensive discussion of Forest Carbon Cycling. We were pleased with he results of your findings which states that: *"Under the proposed action alternative, the anticipated impacts to biogenic carbon stores after the project has been fully implemented, over the lifetime of the project, include a gain in carbon stores due to increased tree growth, increased retention of large trees on the landscape, and reduced loss from high-intensity wildfire."*

    Additionally, AFRC would like to again include the following which we believe sums up the positive aspects of forest management as it applies to carbon stocks. In the absence of commercial thinning, the forest where the Rumbling Owl Project would take place would thin naturally from mortality-inducing natural disturbances and other processes resulting in dead trees that would decay over time, emitting carbon to the atmosphere. Conversely, the wood and fiber removed from the forest in this proposed action would be transferred to the wood products sector for a variety of uses, each of which has different effects on carbon (Skog et al. 2014). Carbon can be stored in wood products for a variable length of time, depending on the commodity produced. It can also be burned to produce heat or electrical energy or converted to liquid transportation fuels and chemicals that would otherwise come from fossil fuels. In addition, a substitution effect occurs when wood products are used in place of other products that emit more GHGs in manufacturing, such

as concrete and steel (Gustavasson et al. 2006, Lippke et al. 2011, and McKinley et al. 2011). In fact, removing carbon from forests for human use can result in a lower net contribution of GHGs to the atmosphere than if the forest were not managed (McKinley et al. 2011, Bergman et al. 2014, and Skog et al. 2014). The IPCC recognizes wood and fiber as a renewable resource that can provide lasting climate-related mitigation benefits that can increase over time with active management (IPCC 2000). Furthermore, by reducing stand density, the proposed action may also reduce the risk of more severe disturbances, such as insect and disease outbreak and severe wildfires, which may result in lower forest carbon stocks and greater GHG emissions.

Thank you for the opportunity to provide Draft EA comments on the Rumbling Owl Project. I look forward to following the implementation of this Project as it moves forward.

Sincerely,

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