



VIA: Beaverhead-Deerlodge National Forest | Project Summary (#63754) | Forest Service

April 18, 2026

Madison Ranger District
Attn: Josh Connors
Tobacco Roots Vegetation Management Project
5 Forest Service Road
Ennis, MT 59729

Dear Josh:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to comment on the South Tobacco Roots Vegetation Management Project.

AFRC is a regional trade association whose purpose is to advocate for sustained timber yield 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 Beaverhead-Deerlodge National Forest and management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves.

The South Tobacco Roots Project area encompasses about 31,354 acres in the southern Tobacco Roots Landscape, approximately 4.5 miles east of Sheridan, 5.5 miles west of McAllister, 6.7 miles northwest of Ennis, and 7.7 miles north of Virginia City, Montana. There are many factors driving the need to treat this landscape including heavy fuel loadings, insects and disease and the fact that the entire Project area is within the Madison County Community Wildfire Protection Plan that was developed in 2014. Also, portions of the project area meet the definition of Wildland Urban Interface (WUI) under 16 USC 6511(16)(b) based on proximity to at-risk communities and evacuation routes.

With this background, AFRC supports the Needs outlined for the Project which include:

- Need to reduce wildfire risk.
- Need to manage timber stands.

For background on this project AFRC understands the Forest sent letters to interested and affected stakeholders beginning in March 2023 followed by a field trip on July 27, 2023, which was attended by AFRC members. AFRC submitted previous Draft EA comments on April 29, 2024. The project was paused while a Forest Plan Amendment for Canada Lynx Habitat Management was completed in November 2025. Due to a change in conditions from multiple nearby wildfires in 2025, updated analysis was warranted.

While AFRC supports the Need for the Project and the efficient NEPA, we offer the following suggestions that we hope will improve and strengthen the document.

1. AFRC supports using the Emergency Situation Determination (ESD) authorized by Department of Agriculture Secretary Brooke Rollins which as a result, this project will not be subject to the pre-decisional objection review process found at 36 CFR § 218.
2. While the District lists the need to manage timber stands, we believe that providing raw materials to the local infrastructure should be one of the needs as well. These forest health treatments can't be accomplished without a healthy and robust sawmilling infrastructure. In the past few years, sawmills in Townsend, Seeley Lake, and a panel facility in Missoula have closed. The Forest should be aware of these losses and strive to keep the existing facilities intact.

The timber products provided by the Forest Service are crucial to the health of our membership. 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. Specifically, studies in Montana have shown that 12-15 direct and indirect jobs are created for every one million board feet of timber harvested. 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 way these products are permitted to be delivered from the forest to the mills.

Additionally, 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. Much of the industry is centered in western Montana, and this Project is crucial to the infrastructure located in and around the Beaverhead-Deerlodge National Forest. Harvesting 2,711 acres commercially will help to keep this infrastructure viable.

Further, AFRC members depend on a predictable and economical supply of timber products off Forest Service land to run their businesses and to provide useful wood products to the American public. This supply is important for present-day needs but also important for future needs. This future need for timber products hinges on the types of treatments implemented by the Forest Service today. Of importance is how those treatments affect the long-term sustainability of the timber resources on Forest Service managed land. Not managing the maximum number of acres today will impact the ability to produce the timber needed in the future.

3. While AFRC appreciates the District commercially harvesting 2,711, we wonder if more acres might be treated to lessen the risk of wildfires. We would like the District to review and consider a new study published by Johnston et. al that focuses on the benefits of mechanical thinning in regards to wildfire mitigation.

Johnston, James D., Olszewski, Julia H., Miller, Becky A., Schmidt, Micah R., Vernon, Michael J., Ellsworth, Lisa M. Mechanical thinning without prescribed fire moderates wildfire behavior in an Eastern Oregon, USA ponderosa pine forest. *Forestry and Ecology*. 501 (2021) 119674

Key points of the Johnston paper include:

- Mechanical thinning can moderate fire behavior in the absence of prescribed fire.
- Modeled crown fire potential declined immediately following thinning, undoubtedly due to significant reductions of ladder fuels that carry fire into the crown and crown density that facilitates spread between crowns.
- Increase in surface fuel and modeled fire behavior was offset by a steady decline in litter and a dramatic decline in duff over time
- Fuel loading in a dry ponderosa pine forest increased for a year or two after thinning and then declined.
- Woody fuel particles increased somewhat following thinning but litter and duff fuel loading declined dramatically as a result of thinning.

Furthermore, the following studies should also be incorporated to illustrate the scientifically proven benefits of 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.

A key point of the Van Mantgem paper includes:

- Thinning treatments can improve forest resistance to wildfire.

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.

Key points of the Fettig paper include:

- 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.

Key points of the Hood paper include:

- 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.

A key point of the Bradford paper includes:

- 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.

Key points of the Latham paper include:

- 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

A key point of the McDowell paper includes:

- 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.

4. AFRC believes the District should strengthen the analysis of the No Action Alternative. For example, the document states that:

- a. The no action alternative would have no measurable effect to project area streams analyzed from vegetation treatment, new road, or temporary road because these actions would not occur. Conifer encroachment in riparian areas would continue to degrade riparian conditions. Canopy cover would not change from timber harvest activities, there would be no effect to water yield from canopy cover.*
- b. The no action alternative would trend vegetation conditions in the same direction as their current trajectory.*
- c. No action would trend conditions to higher amounts of surface fuels, lower canopy base heights, and higher percent canopy cover; however, changes affecting fire behavior at a large scale would be minimal due to slow vegetative growth and associated impacts to fuel amount and arrangement.*

With the catastrophic wildfire history and ongoing risk in the area, the District should consider the likely effects of fire impacts to the untreated stands in the No-Action alternative. The picture below is from the Trails Fire on the Beaverhead-Deerlodge National Forest near Wisdom that burned in 2021. The same catastrophic damage that occurred in this fire should be addressed and analyzed in your No Action Alternatives.



The District needs to consider the impacts to riparian areas, vegetation, fuels, scenic, wildlife and other resources when fires like this burn across the untreated landscape.

5. The primary issue affecting the ability of our members to feasibly deliver logs to their mills is 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 Beaverhead-Deerlodge 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 greatly 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 to little additional ground disturbance when compared to traditional cable systems. Please prepare your NEPA analysis documents in a manner that will facilitate this type of equipment.

We appreciate seeing the recognition of tethered-assist equipment in the project proposal. Tethered-assist logging is becoming a more economical, safe, and available method of yarding on steep slopes throughout the region. The weight displacement provided by tethering allows tracked equipment to operate on steep ground with limited soil displacement or compaction. Standard psi levels for that tracked equipment are transferred to the tethering uphill.

Please consider the research studies cited below in your analysis as warranted.

Green, P. Q., Chung, W., Leshchinsky, B., Belart, F., Sessions, J., Fitzgerald, S. A., Wimer, J. A., Cushing, T., Garland, J. J. (2019). Insight into the productivity, cost and soil impacts of cable-assisted harvester forwarder thinning in western Oregon. *For. Sci.* 66(1):82–96

A key point of the Green paper includes:

- The use of cable assistance can reduce track coverage and reduce shear displacement, and thus lessen potential soil impact caused by forestry machines.

Garland, J., F. Belart, R. Crawford, W. Chung, T. Cushing, S. Fitzgerald, P. Green, *et al.* 2019. Safety in steep slope logging operations. *J. Agromedicine* 24(2):138–145.

A key point of the Garland paper includes:

- Use of new tethered-assist technology reduces exposure to hazards and reduces workers exposed to the most dangerous work in logging—felling and working on cable operations on steep slopes.

Finally, AFRC would like the Forest to examine the days that operations and haul are shut down due to hunting seasons and other outdoor recreation. The logging community has limited operating time at best, and further reductions such as these only makes surviving in the logging business that much more difficult.

6. AFRC supports the District's plan to create seven openings larger than 40 acres totaling 578 acres. These larger openings are needed to address forest health problems. Lodgepole pine dwarf mistletoe is the primary reason for creating openings greater than 40 acres. AFRC also supports the Forest requesting approval from the Regional Forester for this work to take place.
7. As described above, the Project location is in proximity to at-risk communities and evacuation routes. AFRC believes that the District should plan shaded fuel breaks along all major evacuation routes. The shaded fuel breaks should be a minimum of 200 feet

wide on each side of the roads. Basal area in these fuel breaks should be reduced to 40 sq. ft. per acre.

8. AFRC supports your work on the remapping issue of Canada lynx. Based on your studies, the county with the second lowest total number of verified lynx observations is Madison County, where this project is located, with 3 verified observations. The most recent observation occurred on private land within the administrative boundary of the Madison Ranger District in 2022, over 22 airmiles to the east of the project area in the Spanish Peak Mountains. Montana Fish Wildlife and Parks surveyed for lynx in two cells on the Forest in the winter of 2024-2025 and no lynx were detected. At the time of this writing, the Forest is not aware of any current lynx in the Tobacco Root Mountains.
9. AFRC is pleased to see that the District acknowledges that some management is needed in the riparian areas. *“One of the most significant historical impacts to vegetation composition on the landscape is due to fire suppression and project activities would improve aquatic conditions by addressing watershed vegetation composition and riparian health.”* AFRC believes that managing in the riparian areas can help to achieve these 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 ultimately 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 ACS 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 incorporate its findings into your environmental analysis 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.

A key point of the Anderson paper includes:

- 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.

Sedimentation

Rashin, E., C. Clishe, A. Loch and J. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. *Journal of the American Water Resources Association*. Paper No. 01162

A key point of the Rashin paper includes:

- Vegetated buffers that are greater than 33 feet in width have been shown to be effective at trapping and storing sediment.

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.

Thank you for the opportunity to provide Draft EA comments for the South Tobacco Roots Vegetation Management Project. We look forward to this Project being implemented soon.

Sincerely,

A handwritten signature in dark ink, appearing to read "Tom Partin". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Tom Partin
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Portland, Oregon 97239