



VIA Email: appeals-northern-regional-office@usda.gov

December 13, 2021

Objection Reviewing Officer
USDA Forest Service
Northern Region
26 Fort Missoula Road
Missoula, MT 59804

Dear Reviewing Officer:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to provide an objection support letter for the Wildfire Adapted Missoula (WAM) 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 Lolo 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 WAM Project is currently in the objection process, and the intent of this letter is to provide support for the Project and also to provide additional input that could improve the project outcomes and facilitate economical implementation. AFRC provided Draft EA comments on this Project on June 3, 2021. In that comment letter we made several recommendations on how the Purpose and Need may be better met by treating additional acres commercially, thus making the Project more economically feasible, and reducing the fire risk to the surrounding Wildland Urban Interface (WUI). We would like to reiterate those options and encourage the District to adopt those improvements. In our Draft EA comments, we also mentioned that AFRC supports the Condition Based Management approach and 20-year timeline for implementation. Conditions on the ground change over time and Condition Based Management will allow the planners to implement actions based on current condition. The Forest should again recognize that during

this 20-year planning horizon trees that are now unmerchantable will grow into usable sizes. Again, we believe you are underestimating the need and opportunity for commercial treatments. The table below indicates the Forest has 17,982 acres identified in the Project area specifically for timber management, yet the WAM Project will only commercially harvest on 1,144 acres which is only 6% of those possible lands. Again, we believe this is a big lost opportunity.

16	17,982	Timber Management	<ul style="list-style-type: none"> • Suitable for timber production • Provide for healthy stands of timber and optimize timber growing potential. Full suite of silvicultural systems • Prescribed burning to maintain or restore the composition and structure of plant communities, or for hazard reduction purposes. Full suite of prescribed burning objectives and tools. • Emphasis of timber stand improvement for insect and disease prevention • Emphasis on maintaining and regenerating components of ponderosa pine and western larch in natural stands. • WFRR Fuel Treatments consistent with LRMP: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11
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Commercially treating such few acres also has an impact on the overall economic package for the Project. The table below indicates that only 1,144 acres will be commercially harvested that will produce an estimated 6 mmbf of timber. AFRC is not only concerned with the low number of acres being commercially thinned (which occurs in the Blue Mountains, Pattee Canyon, and Grant Creek areas), we are also concerned about the economic feasibility of the Project.

Table 1. Project Feasibility and Financial Efficiency Summary (2020 Dollars)

Category	Measure	No Action	Alt. B
Timber Harvest Information	Acres Harvested	0	1,144*
	Volume Harvested (CCF)	0	12,303
	Base Rates (\$/CCF)	\$0	\$3.00
	Appraised Stumpage Rate (\$/CCF)	\$0	\$5.82
	Predicted High Bid (\$/CCF)	\$0	\$11.47
	Total Revenue (Thousands of \$)	\$0	\$118,681
Timber Harvest & Required Design Criteria	PNV (Thousands of \$)	\$0	-\$131,209

The economic analysis shows that the Project will be economically deficit in its current design. AFRC stresses that the remedy for improving forest health, reducing fuels and fire risk and for improving project implementation is to treat more acres commercially which will generate more funds to get the work completed.

AFRC would like to remind the Forest that supporting local industry and providing useful raw materials to maintain a robust manufacturing sector should be a principal objective to any project

including the WAM Project. AFRC has pointed out before that the “restoration” treatments that are desired on these lands cannot be implemented without a healthy forest products industry in place, both to complete the necessary work and to provide payments for the wood products generated to permit the service work to be completed.

Montana’s forest products industry is one of the largest components of manufacturing in the state and employs roughly 7,700 workers earning about \$335 million annually. Without the raw material sold by the Forest Service, DNRC, and private lands these mills would be unable to produce the amount of wood products that the citizens of this country demand. Without this material, the industry 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.

When reviewing a Project and trying to make it more economical, AFRC would like to remind the Forest that 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. This is especially true with the WAM project based on the results of the economic analysis. 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 EIS’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 Lolo National Forest market area with a variety of skills and equipment. Developing an EA or EIS 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 and cautious use of their equipment. To address this issue, we would like to see flexibility in the EA/EIS 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 may be planned for cable harvest, there may be opportunities to use certain ground equipment such as fellerbunchers and processors in the units to make cable yarding more efficient. While we appreciate the language mentioning ground skidding may take place on slopes over 35% if approved, we would like the Forest to allow ground-based equipment to operate on slopes up to 45%. 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 viable and available option for felling and yarding on steep slopes. This equipment has shown to contribute 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.

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 a limited operating time at best, and further reductions such as these only makes surviving in the logging business that much more difficult.

Another tool that might help make the Project more economically feasible would be for the Forest to use Designation by Prescription DXP for harvest tree identification. This practice is being used more consistently and can not only save time and money but accomplishes a better end result.

In our Draft EA comments, we noted that we strongly supported the use of shaded fuel breaks along up to 108 miles of identified roads to not only provide fuel breaks along ingress and egress for the WUI, but also to provide wood products for the milling infrastructure. The District has now increased those road miles to 111 miles and 9,451 acres. AFRC supports that increase, and we further recommend treating a minimum of 200 feet on each side of the road and thinning to wide spacings again leaving only 40 sq. ft. of basal area.

The Road Management Plan calls for decommissioning at least 8 miles of roads in the Project. While we understand the need to manage your road system and protect resources at risk, we ask that you consider that a significant factor contributing to increased fire activity in the region is the decreasing road access to our federal lands. This factor is often overshadowed by both climate change and fuels accumulation when the topic of wildfire is discussed in public forums. However, we believe that a deteriorating road infrastructure has also significantly contributed to recent spikes in wildfires. This deterioration has been a result of both reduced funding for road maintenance and the federal agency's subsequent direction to reduce their overall road networks to align with this reduced funding. The outcome is a forested landscape that is increasingly inaccessible to fire suppression agencies due to road decommissioning and/or road abandonment. This inaccessibility complicates and delays the ability of firefighters to attack nascent fires quickly and directly. On the other hand, an intact and well-maintained road system would facilitate a scenario where firefighters can rapidly access fires and initiate direct attack in a more safe and effective manner.

If the Forest proposes to decommission, abandon, or obliterate road segments from the WAM Project area we would like to see the analysis consider potential adverse impacts to fire suppression efforts due to the reduced access caused by the reduction in the road network. We believe that this road network reduction would decrease access to wildland areas and hamper opportunities for firefighters to quickly respond and suppress fires. On the other hand, additional

and improved roads will enable fire fighters quicker and safer access to suppress any fires that are ignited.

We would like the Forest to carefully consider the following three factors when deciding to decommission any road in the project area:

- Determination of any potential resource risk related to a road segment.
- Determination of the access value provided by a road segment.
- Determination of whether the resource risk outweighs the access value (for timber management and other resource needs).

We believe that only those road segments where resource risk outweighs access value should be considered for decommissioning.

Finally, we are including the links to three studies produced by Brian Sugden relating to road maintenance and sedimentation, BMP's in Montana and streamside management and impacts to water temperature. We think these studies can be helpful as the Forest Service analyzes management, and how management can make improvements to the resources.

<https://www.tandfonline.com/doi/abs/10.1080/14942119.2019.1571472?scroll=top&needAccess=true&journalCode=tife20>

<https://academic.oup.com/jof/article/110/6/328/4599544>

<https://www.tandfonline.com/doi/full/10.1080/14942119.2019.1571472?scroll=top&needAccess=true&>

AFRC is concerned about the impacts dead trees that are not salvaged might have on the amount of CO₂ released into the atmosphere. Little study has been done to analyze what gasses are released into the atmosphere from the dead trees left on the landscape following a major fire like Sand Mountain.

We would like to encourage the District to consider several documents related to carbon sequestration related to forest management.

McCauley, Lisa A., Robles, Marcos D., Wooley, Travis, Marshall, Robert M., Kretchun, Alec, Gori, David F. 2019. Large-scale forest restoration stabilizes carbon under climate change in Southwest United States. *Ecological Applications*, 0(0), 2019, e01979.

Key points of the McCauley paper include:

- Modeling scenarios showed early decreases in ecosystem carbon due to initial thinning/prescribed fire treatments, but total ecosystem carbon increased by 9–18% when compared to no harvest by the end of the simulation.

- This modeled scenario of increased carbon storage equated to the removal of carbon emissions from 55,000 to 110,000 passenger vehicles per year until the end of the century.
- Results demonstrated that large-scale forest restoration can increase the potential for carbon storage and stability and those benefits could increase as the pace of restoration accelerates.

We believe that this study supports the notion that timber harvest and fuels reduction practices collectively increase the overall carbon sequestration capability of any given acre of forest land and, in the long term, generate net benefits toward climate change mitigation.

Gray, A. N., T. R. Whittier, and M. E. Harmon. 2016. Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity. *Ecosphere* 7(1): e01224.10.1002/ecs2.1224

Key points of the Gray paper include:

- Although large trees accumulated C at a faster rate than small trees on an individual basis, their contribution to C accumulation rates was smaller on an area basis, and their importance relative to small trees declined in older stands compared to younger stands.
- Old-growth and large trees are important C stocks, but they play a minor role in additional C accumulation.

We believe that this study supports the notion that, if the role of forests in the fight against climate change is to reduce global greenhouse gasses through maximizing the sequestration of carbon from atmospheric CO₂, then increasing the acreage of young, fast growing small trees is the most prudent management approach.

Gustavsson, L., Madlener, R., Hoen, H.-F., Jungmeier, G., Karjalainen, T., Klöhn, S., ... Spelter, H. (2006). The Role of Wood Material for Greenhouse Gas Mitigation. *Mitigation and Adaptation Strategies for Global Change*, 11(5–6), 1097–1127.

Lippke, B., Oneil, E., Harrison, R., Skog, K., Gustavsson, L., Sathre, R. 2011 Life cycle impacts of forest management and wood utilization on carbon mitigation: knowns and unknowns, *Carbon Management*, 2:3, 303-333.

McKinley, D.C., Ryan, M.G., Birdsey, R.A., Giardina, C.P., Harmon, M.E., Heath, L.S., Houghton, R.A., Jackson, R.B., Morrison, J.F., Murray, B.C., Pataki, D.E., Skog, K.E. 2011. A synthesis of current knowledge on forests and carbon storage in the United States. *Ecological Applications*. 21(6): 1902-1924.

Skog, K.E., McKinley, D.C., Birdsey, R.A., Hines, S.J., Woodall, C.W., Reinhardt, E.D., Vose, J.M. 2014. Chapter 7: Managing Carbon. In: *Climate Change and United States Forests, Advances in Global Change Research* 57 2014; pp. 151-182.

AFRC strongly believes that in the absence of timber salvage the dead trees remaining on the landscape 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 a support letter for the Wildfire Adaptive Missoula Project. I hope the District can incorporate some of our suggestions in the Final Decision. I look forward to following the Project through implementation.

Sincerely,

A handwritten signature in blue ink that reads "Tom Partin". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Tom Partin
AFRC Consultant

Two lines of blacked-out text, likely redacting contact information such as a phone number and email address.