



Submitted via: <https://cara.fs2c.usda.gov/Public/CommentInput?Project=57353%20>

October 28, 2022

Custer-Gallatin National Forest
Attn: South Plateau Landscape Area Treatment Project,
PO Box 520
West Yellowstone, MT 59758.

Dear Project Planner:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to provide comments for the Draft Revised Environmental Assessment the South Plateau 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 Custer-Gallatin 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 Plateau Area Landscape Treatment Project area is located on the South Plateau, south and west of West Yellowstone, Montana. The project area is approximately 39,900 acres and includes the Lower, Middle, and Upper South Fork Madison River watersheds. The project area extends from US Highway 20W to Reas Pass and is bordered by the Continental Divide National Scenic Trail on the west and Yellowstone National Park on the east. The project area spans 39,909 acres. Forest resilience and fuels reduction treatment units will be located across the project area; treatments will not exceed a total area of 16,462 acres.

The Forest originally identified the need for this project under the 1987 Gallatin Forest Plan and listed the proposal in the Schedule of Proposed Action in January 2020. AFRC provided Draft EA comments on September 14, 2020, provided a letter of support for the Project on April 6,

2021, during the original objection period, and visited the project area in July 2021 with members of the Forest Service and timber industry. This revised Environmental Assessment was created to ensure that the need for management and conditions the management actions would create are consistent with the desired conditions in the 2022 Plan, and to document the project's consistency with the Revised Custer-Gallatin Forest Plan that was implemented in January 2022.

AFRC continues to support the Purpose and Need for this Project which includes:

- Reduce the risk from and increase stand resistance and landscape resilience to insects and disease, particularly long-term losses of lodgepole pine stands.
- Contribute to a sustained yield of timber products and improve the productivity of forested timber stands.
- Treat hazardous fuels to increase fire suppression effectiveness and reduce risk to the public and first responders.

Approximately 51% (20,240 acres) of the project area falls within the 2020 Gallatin County Wildfire Protection Plan defined Wildland Urban Interface. Current fuels conditions indicate large areas of crown fire and high intensity surface fire which will limit safe and effective suppression action near many values at risk including West Yellowstone municipal water source, private lands, numerous structures, critical infrastructure, and key ecosystem components (like lynx foraging habitat).

While AFRC supports the Project's Purpose and Need and understands the need for management across this landscape, we offer the following suggestions that we believe will inform your analysis and improve Project viability.

1. AFRC agrees with the Forest's rationale for analysis of a single Action and No Action Alternative. Seventy-three percent of the project area is rated as either having high or moderately high susceptibility to mountain pine beetle. The subsequent forest health and wildfire issues make a strong case for treatment. The project would increase the landscape resilience to insects by decreasing the acres rated as highly susceptible to a pine beetle outbreak from over 26,000 to under 7,000 in the project area. The project would reduce the risk from insects from a 93% probability of a severe pine beetle outbreak to a probability of 24% or less.
2. AFRC also supports the Forest's use of adaptive management where the exact extent and location of treatments to be applied would be determined through an adaptive condition-based approach. During the implementation period the Interdisciplinary Team would survey proposed areas to determine the appropriate treatments. Treatment types and location would adhere to the Design Features and Sideboards which include acreage caps, temporary road limitations, and other resource protection measures.

AFRC believes the Forest did a good job of identifying where treatments would take place in Appendix A—Decision Making and Implementation. This section describes the process used to determine appropriate silvicultural prescriptions based on existing conditions. However, AFRC would like the Forest to consider treating more stands identified as old growth lodgepole and mixed species, both inside and outside the WUI.

The photos taken on our 2021 trip to the Project area illustrate the dense stands. Considering the age of these trees, they will be ripe for stand replacement either by fire or insects and disease. Adaptive management provides this option for entering these stands.



3. Regarding the second Purpose and Need— “Contribute to a sustained yield of timber products and improve the productivity of forested timber stands”—AFRC is disappointed that the number of acres being treated commercially has substantially dropped in the Revised Draft EA from 15,379 acres to 12,141 acres as the two charts illustrate below.

Chart below is from the original Draft EA

Table 91. Project Feasibility and Financial Efficiency Summary (2018 dollars)

Category	Measure	Proposed Action
Timber Harvest Information	Acres Harvested	15,379
Timber Harvest Information	Sawtimber Volume Harvested (CCF)	162,418
Timber Harvest Information	Base Rates (\$/CCF)	7.09
Timber Harvest Information	Appraised Stumpage Rate (\$/CCF)	10.64
Timber Harvest Information	Predicted High Bid (\$/CCF)	16.29
Timber Harvest Information	Total Revenue (Thousands of \$)	2,646
Timber Harvest & Required Design Features	Present net value (\$Thousands)	-1,127

The Chart below is from the Revised Draft EA:

Table 1. Proposed action maximum extent.

Proposed Action	Maximum Extent
Total Treatment ¹	16,462 acres
Clearcut Harvest	5,551 acres
Commercial Thinning	6,593 acres
Non-Commercial Thinning	2,514 acres
Temporary Road	56.8 miles
Fuels Treatment ²	1,804 acres

AFRC would like to have seen more information in the Revised Draft EA that outlines and expands on the commercial acreage reductions. New information in the Revised Forest Plan likely contributed to those reductions, but that was not clearly documented in the Revised EA. While AFRC appreciates the fact that this Project is planned to produce 83 mmbf of timber, the reduction of 3,238 acres being commercially harvested will have significant impacts on forest conditions and timber volume available for the milling infrastructure. As highlighted in our Draft EA comments, 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. There are three sawmills and several 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.

4. AFRC believes the Forest should consider additional treatments due to the fact that about 90% of the project area is in Fire Regime Group V, which is characterized by high severity, stand replacing fire. High severity fire is in the natural range of variation for the project area, but high severity fire in the WUI and near values at risk would threaten the health and safety of the public, first responders, and the town of West Yellowstone. While the Revised Draft discusses improvements to ladder fuel reduction, reduced flame length, and reduction in possible crown fires, the percentages of those decreased could be greatly improved. This Project will probably have an implementation life of 15-20 years and land managers need to be thinking of what the landscape will look like at that time and take needed management steps now to curb out year fuel related problems. Those areas not getting treatments in this entry will have 15-20 years to increase the amount of fuel per acre and burn severity.
5. AFRC does not agree with how the economic analysis portrays the Project. We would like to see a complete listing of the Project benefits including what a NO ACTION alternative could mean if a catastrophic wildfire occurred due to lack of management. The current analysis does not provide the public with the full suite of benefits likely to be provided by taking action. Also, the value of timber has increased since the original analysis was done in 2020. In the Revised Draft it states: ***“Forest economists analyzed financial efficiency in terms of net value, and economic impact in terms of estimated jobs and labor income and found that the project would not be financially efficient with a net value of about -\$1.1 million for timber harvest and relevant design features, and a net value of -\$3.2 million for all project activities. A negative present net value means that over time, the financial costs of a project are likely to be exceed financial benefits. This does not include other real but unquantifiable project benefits (such as reducing the risk of high intensity wildfire and reducing sediment in the South Fork Madison River). Non-financial costs and benefits are described qualitatively in other resource sections.”***

AFRC strongly believes that the qualitative benefits should be analyzed and stated better as well as the costs of the NO ACTION Alternative.

6. As stated in our Draft EA comments 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 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 Custer-Gallatin market area with a variety of skills and equipment. Developing this EA 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 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 feller-bunchers 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. Please prepare your NEPA analysis documents in a manner that will facilitate flexibility in the use of various types of equipment.

AFRC is concerned about the no hauling criteria during snowmobile season. We request that this be modified depending on snow conditions and amount of recreational use. AFRC also requests temporarily closing some snowmobile routes to allow for log haul. ***(No project activities or plowing on roads and trails in the project area would take place between November 1st and April 30th to prevent impacts to over snow recreation. Project activities include all proposed treatment actions and associated activities.)***

7. The Plan calls for no visible tree marking (300 ft.) from the Continental Divide National Scenic Trail. AFRC believes that this concern could be mitigated through the use of designation by prescription (DxP). The areas proposed for thinning are generally conducive to DxP so no paint would be required.
8. The Project Road Plan states that temporary roads, by design, are a single-entry access and not intended to be a permanent part of the road system and as such would be located and constructed to minimize investment, dirt moving, and disturbance. Following use, these roads would be permanently closed and rehabilitated to meet adjacent land management objectives with no regard to future access, this includes recontouring, seeding, and slashing of the corridors. Temporary roads would be closed and rehabilitated before termination of the timber sale contract.

AFRC would like to remind the Forest that an intact road system is critical to the management of Forest Service land, particularly for the provision of timber products. Without an adequate road system, the Forest Service will be unable to offer and sell timber products to the local industry in an economical manner. The decommissioning of roads in the South Plateau Project likely represents ***permanent*** removal of these roads and likely the deferral of management of those forest stands that they provide access to. The land base covered in the South Plateau Project area are to be managed for a variety of forest management objectives. Removal of adequate access to these lands compromises the agency's ability to achieve these objectives and is very concerning to us.

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

- a. Determination of any potential resource risk related to a road segment.
- b. Determination of the access value provided by a road segment.
- c. 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. AFRC is generally supportive of BMP upgrades to existing roads, however we encourage the use of hydrologically self-maintaining structures like rolling drain dips rather than structures that require periodic maintenance or are subject to breakage such as flappers or open top box culverts.

AFRC believes 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 Service proposes to decommission, abandon, or obliterate road segments from the South Plateau planning 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 firefighters quicker and safer access to suppress any fires that are ignited.

9. The Revised Draft has a short section on carbon stating the *“Project tiers to the programmatic analysis of carbon sequestration in the Land Management Plan EIS Land Management Plan components that are designed to provide for ecological integrity and resiliency to disturbances. Over the long term, management activities that are consistent with Land Management Plan desired conditions are likely to increase carbon storage and reduce emissions by reducing disturbance risk and storing carbon in wood products. Specifically, harvesting, and prescribed fire treatments would achieve a more resilient forest condition that maintains critical ecosystem functions into the future and would improve the ability of the Forest to maintain carbon stocks and enhance carbon uptake.*

The proposed project actions are consistent with Land Management Plan direction and one or more desired conditions and are therefore consistent with the Plan. Forest types, successional stages or size classes, patterns and vegetation conditions at the project level are also consistent with those analyzed in the Land Management Plan EIS (U.S. Department of Agriculture 2022a). No new circumstances or science have arisen that would change Land Management Plan EIS carbon analysis. Therefore, carbon sequestration was not analyzed further.”

AFRC asks the Forest to consider the points below from a technical report by the Climate Change Vulnerability Assessment and Adaptation Project (SWOAP) in Southwest Oregon. This would bolster the Revised Draft EA.

- Wood harvested from the forest, especially timber used for durable structures, can be reservoirs of long-term carbon storage (Bergman et al. 2014).
- Forests and their products embody a closed-loop system in which emissions associated with harvests and product use are eventually recovered as forests regrow.
- Although products may be retired in solid waste disposal sites, they decompose quite slowly, causing carbon to continue to be stored for many decades.
- Products derived from the harvest of timber from national forests reduce carbon emissions by substituting for more energy-intensive materials including concrete, steel, and plastics.

Please see the graph below from the IPCC (2007) that captures the ability of forests to “stack” carbon sequestration and storage through continual harvests. **Please consider adopting this graph into the South Plateau project analysis.**

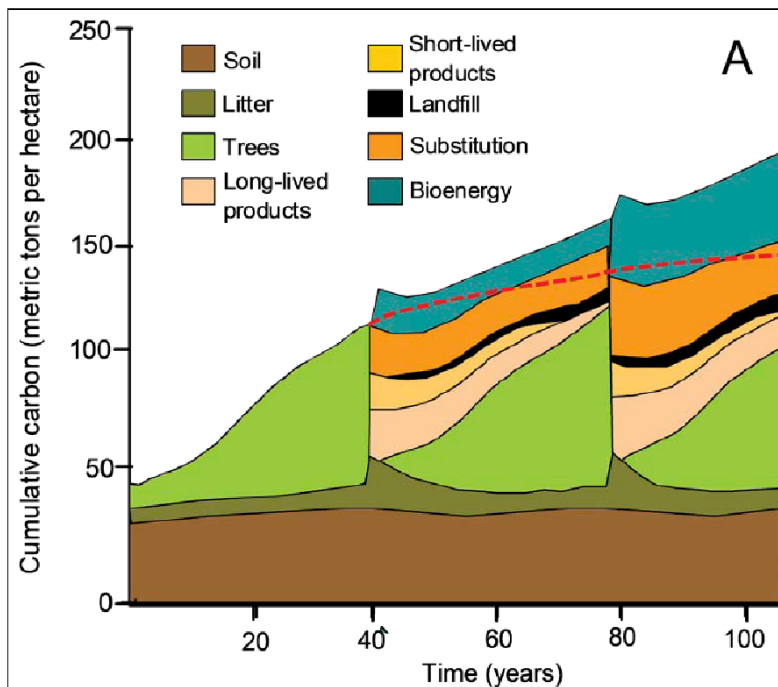


Figure 8.7—Carbon balance from a hypothetical forest management project in which the forest is harvested roughly every 40 years from land that started with low forest carbon stocks. This figure accounts for forest regrowth and carbon stored in wood products in use and landfills as well as the prevented release of fossil fuel carbon (also counted as stored carbon) via product substitution and biomass energy. It illustrates how forests can continue to accrue carbon over time with forest management. Figure is from McKinley et al. (2011) and adapted from IPCC (2007).

We believe that this graph encapsulates the forest management paradigm that would be most effective at maximizing carbon sequestration on a per-acre basis by “stacking” storage in wood products and regrowth of newly planted trees.

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 believes that in the absence of commercial thinning, the forest where this proposed action 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 (Gustavsson 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.

10. 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 300 yards wide on either side of those roads. 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 spreading through the stand. The purpose of the fuel breaks is to get the fire to lay down on the ground for suppression purposes. This can be a very effective tool in the Custer Gallatin CWPP.
11. AFRC strongly supports managing in unroaded areas. Over 14,000 acres of unroaded areas exist in the South Plateau project area, consisting of three wilderness inventory areas: the Henrys 5 (7,453 acres), Hebgen 4 (5,680 acres), and Hebgen 81 (1,097 acres). **These wilderness inventory areas were not carried forward as recommended wilderness in the Land Management Plan (just completed) because, after adjacent roads were buffered, the remaining areas were not large enough to qualify as stand-alone recommended wilderness.**

12. AFRC agrees that an EA is adequate for NEPA compliance, and the Forest has found No Significant Impacts when analyzing the Project. AFRC also believes that Forest has done an excellent job assessing the impacts of the Project on threatened or endangered species such as Grizzly bear and Canada lynx.

Thank you for the opportunity to provide Revised Draft EA comments for the South Plateau Project. We look forward to its implementation.

Sincerely,

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

Tom Partin
AFRC Consultant
921 SW Cheltenham Street
Portland, Oregon 97239