**VIA Link:** https://cara.fs2c.usda.gov/Public/CommentInput?project=62857

May 9, 2023

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 a letter of support for the Wood Duck Project which is currently open for comments during the Objection period.

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 Helena-Lewis and Clark 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 Wood Duck Project area encompasses 69,876 acres of which 61,000 acres are forested. The area is in the Big Belt Mountains, of east of Townsend, Montana and north of U.S. Highway 12. The project takes lies in both Meagher and Broadwater counties between the areas known locally as Confederate Gulch and Ray Creek. Proposed treatments encompass 2,977 acres: 2,428 acres of intermediate harvest, 286 acres of regeneration harvest, 263 acres of pre-commercial thinning, 30 acres of meadow restoration, and 39 acres of wildlife habitat improvement. Total treatment acres are reduced from scoping, but these reductions reflect issues raised in scoping.

AFRC submitted scoping comments on November 4, 2022. As we mentioned earlier AFRC is not objecting to the Project but rather are writing to support its implementation of Alternative 2.

The Forest has identified a strong Purpose and Need for the Project which includes:

- Recover the economic value of forest products in order to contribute to employment and income in local communities.
- Ensure diverse and sustainable forest stands and habitat for the future.
- Promote healthy desirable regeneration.

Specifically, AFRC supports the Project for several reasons which include:

1. The District has gone to great lengths to outline the forest health issues in the Project area. AFRC supports the method used to determine treatments for various areas. That was done by using the Region 1 post-fire Douglas-fir bark beetle hazard category information for the Helena-Lewis and Clark National Forest, which was used to determine potential susceptibility to bark beetle within the Woods Creek Fire perimeter and within a two-mile buffer around the fire. Susceptible stands provide the opportunity for Douglas-fir bark beetle-mitigating treatments.

2. In addition to looking at ways to improve the health of the Forest, the Project is also designed to help recover the economic value to contribute to the employment and income in local communities. 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 three sawmills and several post and pole and smaller wood operations in the project vicinity. 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.

   AFRC supports and appreciates the prepared Economic Analysis. A preliminary estimate indicates that the proposed harvest units would generate approximately 15 to 20 million board feet of timber available for sale, contributing to the Forest Plan's annual timber sale objective. The anticipated volume is sufficient to reasonably expect that this Project would result in multiple timber sales, resulting in positive economic effects to local communities and counties as described by Forest Plan desired conditions. This also moves toward the Forest Plan goal to provide a sustainable level of timber products for current and future generations and contribute to an economically viable forest products industry.

3. In an effort to get in front of potential insect and disease damage stemming from the Woods Creek Fire, the Forest has determined a need to layout harvest units larger than 75

acres. Openings this large are allowed as a result of a single harvest operation, per the 2021 Forest Plan. The openings total 115 and 104 acres and support high levels of insect-caused damage and mortality. The rationale for creating large openings is to address insect issues at a scale consistent with ongoing infestations, thereby meeting the project purpose and need, while following logical treatment unit boundaries. Regeneration harvest is the only silvicultural option appropriate for these heavily insect-impacted units.

4. Approximately 2,977 acres are proposed for treatment, which would include a combination of commercial harvest of trees and non-commercial vegetation treatments. Treatments would be accomplished using tractor (1,389 acres), skyline (1,325 acres), and hand (263 acres) harvest methods. AFRC would like to reassert that one of 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 Helena-Lewis and Clark market area with a variety of skills and equipment. Developing this EA and subsequent contracts that firmly describe 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 future NEPA analysis documents in a manner that will facilitate flexibility in the use of various types of equipment. AFRC believes that with some of the lighter touch logging methods as mentioned above, the impacts could even be less than those analyzed.

   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.

5. AFRC supports the criteria that the District has developed for treating Old Growth and Large Tree Structure stands. In old growth stands treatment units would be surveyed to determine the potential of meeting old growth habitat criteria, as defined in Appendix D of the 2021 Forest Plan, page 10. Treatment objectives are to decrease stand density, reduce stand susceptibility to Douglas-fir bark beetle, and create stands more resilient and resistant to disturbances and stressors are compatible with maintenance of old growth habitat characteristics. Where large tree structure is found, commercial harvest would be designed to reduce Douglas-fir tree susceptibility to Douglas-fir bark beetle, thereby retaining large trees across the landscape. To the extent possible, silvicultural prescriptions would prescribe the removal of smaller diameter trees to promote the retention of larger diameter trees.

   The proposed action would commercially harvest 482 acres identified as old growth. Silvicultural prescriptions would be site-specific for each unit and would prescribe retention of all minimum old growth attributes and available associated characteristics. Compared to other treatment units, old growth units would include a component of poor-quality trees (dead top and/or branches, thin crown, forked top, crooked stem, stem decay, etc.) that contribute forest structure included in the old growth definition.

   The only stand attribute that can be altered to reduce Douglas-fir bark beetle and western spruce budworm susceptibility in old growth units is stand density. Harvesting to a target density of less than 100 square feet would create stand conditions with lower Douglas-fir bark beetle susceptibility and low to moderate spruce budworm hazard. Large and very large trees would remain susceptible to bark beetles, but improved tree vigor and a more open stand structure should limit the presence of bark beetles. Overall stand resistance and resilience to insects would be improved, and old growth stands would be better able to persist on the landscape in the face of succession and disturbance.

6. Implementation of this Project would require constructing 23.9 miles of temporary roads for use as haul routes, of which 18 miles would be new construction and 5.9 miles would be construction on an existing road template. Approximately 7.4 miles of existing system roads would be reconditioned to maintain road conditions that meet best management practice standards, minimize impacts to water resources, and allow for safe timber haul. Just over 17 miles of existing system roads would be reconstructed to improve road conditions to meet best management practices standards, minimize impacts to water resources, and allow for safe timber haul.

   The Plan also calls for all temporary roads to be obliterated after implementation activities are complete, within five years post-implementation. 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 Wood Duck Project area likely represents ***permanent*** removal of these roads and the deferral of management of those forest stands that they provide access to. The land base covered in

the Wood Duck Project area is 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 Wood Duck 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 to have quicker and safer access to suppress any fires that are ignited. Please consider whether all the temporary roads need decommissioning and by what methods this will be accomplished.

7. AFRC strongly supports the analysis on Climate and Carbon Storage. The Draft EA states that "Douglas-fir treatment, specifically stand density reduction, is a viable management strategy to improve survival under a changing climate and increase resilience to insect activity (Halofsky et al. 2018a;b). Limiting the occurrence or

magnitude of disturbance events is one strategy to maintain stored carbon and a stable carbon cycle. As stated in the Insects section, warming temperatures and drought stress increase spruce budworm and Douglas-fir bark beetle activity and tree susceptibility. Intermediate treatments (pre-commercial thin, commercial thin, improvement cut) would reduce spruce budworm damage and Douglas-fir bark beetle susceptibility and create more vigorous stand conditions. **Wildfire is the greatest disturbance factor accounting for 76 to 82 percent of the total non-soil carbon lost from the Forest**. Insects and harvest combined account for the remaining 18 to 24 percent of total non-soil carbon loss.

Adverse impacts to climate change from forest management should be minimal. Instead, the best available science indicates positive impacts to both CO2 sequestration and carbon storage resulting from improved forest health & growth, wildfire risk reduction, and carbon storage in long-lasting wood products. 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 to bolster your analysis. This would bolster the Revised Draft EA.

a. Wood harvested from the forest, especially timber used for durable structures, can be reservoirs of long-term carbon storage (Bergman et al. 2014).
b. Forests and their products embody a closed-loop system in which emissions associated with harvests and product use are eventually recovered as forests regrow.
c. Although products may be retired in solid waste disposal sites, they decompose quite slowly, causing carbon to continue to be stored for many decades.
d. 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 the graph below into the Wood Duck project analysis.**

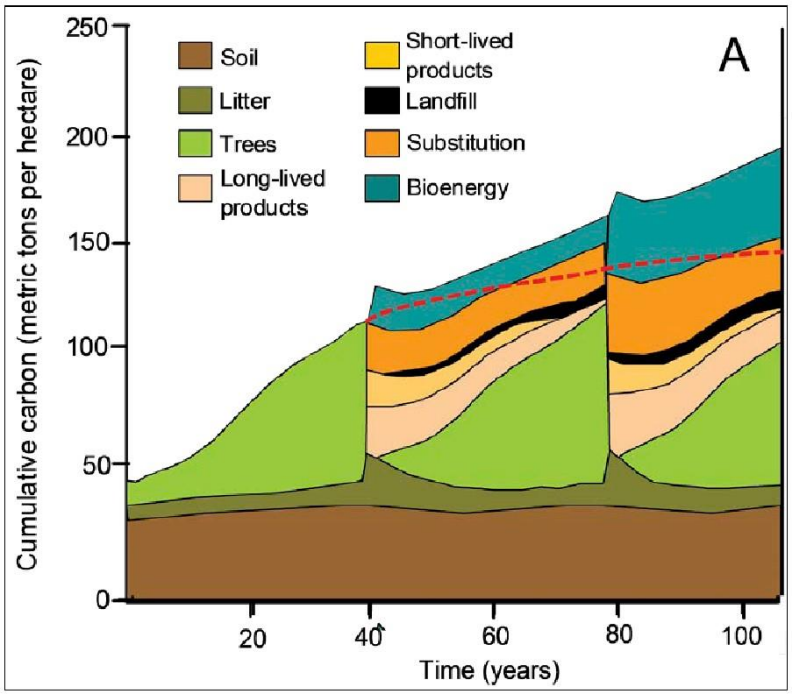


Figure 8.7—Carbon balance from a hypothetical forest management project in which the forest is harvested roughly every 40 years from land that started with low forest carbon stocks. This figure accounts for forest regrowth and carbon stored in wood products in use and landfills as well as the prevented 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 other 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 (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 Wood Duck Project during the Objection Period. I look forward to this Project being implemented and getting the needed fuels treatments put on the ground.

Sincerely,

Tom Partin
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Portland, Oregon 97239