

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

February 8, 2022

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 Dead Laundry 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 Nez Perce-Clearwater 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.

AFRC is not writing to file an Objection to the Dead Laundry Project, rather this is a letter of support for the Project to move forward, and some suggestions on how to improve implementation. AFRC first commented on this Project during the scoping period on March 26, 2020, and also commented on the Draft EA on June 28, 2021.

The Forest has developed the Purpose and Need for the project because of the large variance between existing and desired conditions.

AFRC supports the Primary Purposes of the Dead Laundry project which are:

• Reduce hazardous fuel loading within the project area to provide protection for the wildland urban interface areas associated with private inholdings within the project area.

- Harvest wood products to sustain local and regional economies.
- Improve forest health and resiliency in concurrence with desired conditions and objectives identified in the Forest Plan.

The selected alternative includes approximately 3,580 acres of commercial harvest comprised of regeneration harvest. While this is down from the 3,837 acres proposed in the Draft EA, AFRC supports the decision by the District to remove some acres. The majority of treatments will maintain and/or re-establish long-lived early seral species by reducing stand densities and addressing insect and disease infestations. AFRC members depend on a predictable and economical supply of timber products from Forest Service land to run their businesses and 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 particular importance is how those treatments effect the long-term sustainability of the timber resources on Forest Service managed land. AFRC has voiced our concerns many times regarding the long-term sustainability of the timber supply on Forest Service land and how the current management paradigm is affecting this supply. While the treatments on the Dead Laundry Project are unlikely to directly address this long-term sustainability concern, they will likely provide short-term products for the local industry and we want to ensure that this provision is an important consideration for the decision maker as the project progresses. As we will discuss later in this letter the importance of our members' ability to harvest and remove these timber products from the timber sales generated off this project is paramount. Studies by the University of Idaho have shown that as many as 18-22 direct and indirect jobs are created for every million board feet of timber that is harvested. The volume harvested in this project will greatly help the industry and surrounding communities.

AFRC believes the Forest did an excellent job in their economic analysis of the Project. Table 12 below points out the financial benefit to the local community. The Project is estimated to generate 39.6 mmbf of timber by treating 9.5% of the area. This supply will be critical to our industry members.

Alternative	Net Acres	Net Total Volume (MMBF)	Harvest Related Jobs: 20 jobs per MMBF	Wages and Salaries: \$667,000 per MMBF	Sales of Goods and Services: \$3,850,000 per MMBF
Alt l	0	0	0.0	\$0.00	\$0.00
Alt 2	2218	39.6	792	\$26,410,893	\$152,446,685

Table 12: Economic Effects on the Local Community per Million Board Feet<sup>2</sup>

In our Draft EA comments, we explained that the Project could be improved economically by treating more acres and harvesting more timber. We still encourage the District to pursue additional timber volume wherever possible.

AFRC supports the Forest's plan to create openings larger than 40 acres. With the history of past logging and dense unhealthy stands of second growth timber, harvest in the project area would be conducted through a combination of intermediate treatments and variable retention regeneration harvest. Regeneration harvest may include areas of full retention (clumps), irregular edges, and retention of snags and legacy trees to provide structure and a future source of woody debris. In order to implement the needed treatments some regeneration units will need to be larger than 40 acres. There are 26 proposed units that would create openings greater than 40 acres in size. This will require approval from the Regional Forester prior to implementation. AFRC supports this request and urges the Forest to pursue full implementation of the approved treatments. These regeneration treatments will improve forest health, assist in fuels reduction, and provide early seral habitat for deer and elk.

AFRC also encourages the Forest, when using intermediate treatments, to thin the stands down to 40 sq.ft. of basal area. This will optimize fuels reduction in and around the WUI and provide maximum vigor for the remaining trees. The project area is outside of desired conditions for dominance types, with a high proportion of the project area (80%) in the shade tolerant dominance types of grand fir, Douglas-fir, and western red cedar. Thus, a conversion to western white pine, western larch, ponderosa pine, and lodge pole pine is needed.

The Forest is now only planning to treat 140 acres of old growth. While we support management in the old growth areas, we are disappointed that you have reduced the acres down from 300 acres. These stands are dominated by an overstory of large (over 36 in. DBH) cedar trees. These stands have an understory component of grand fir and Douglas fir trees that are susceptible to disease and the potential for a high severity wildfire. AFRC supports management in these stands to ensure their health and resiliency by removing the ladder fuels of smaller grand and Douglasfir trees. Should insect, disease or fire create forest health issues during the life of this Project in old growth units, we urge the District to implement necessary treatments to address those problems.

We again remind the District that there are approximately 30 structures across these three remote areas of private inholdings that are primarily used as summer recreation homes. Few residences have year-round occupants. Commercial harvest and hazardous fuels treatments will greatly reduce fire behavior and intensity adjacent to private lands increasing the probability of successful protection of property in the event of a wildfire. AFRC encourages the Forest to thin to 40 sq. ft. of basal area along all WUI boundaries for both fire prevention and to check any spread of insects and disease onto the private lands.

The plan for Dead Laundry calls for construction of approximately 52 miles of temporary roads to facilitate harvest. These roads will be **decommissioned** after all project activities are completed. 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 road decommissioning proposed in the Dead Laundry scoping notice likely represents a *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 Dead Laundry 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 believe that only those road segments where resource risk outweighs access value should be considered for decommissioning.

Further, 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 Dead Laundry planning area we would like the Forest to 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 could 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 provide firefighters with quicker and safer access to suppress any fires that are ignited. The improved ability of fire suppression agencies to suppress fires starts safely and effectively should be considered and analyzed as a direct effect of road construction and road improvements.

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

- 1. Determination of any potential resource risk related to a road segment.
- 2. Determination of the access value provided by a road segment.
- 3. 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.

During implementation we urge the District to recognize that the primary issues affecting the ability of our members to feasibly deliver logs to their mills are firm operating restrictions. As stated above, we understand that the Forest Service must take necessary precautions to protect their resources; however, we believe that in many cases there are conditions that exist on the ground that are not in step with many of the restrictions described in Forest Service EA's and contracts (i.e. dry conditions during wet season, wet conditions during dry season).

The Forest has done a good job on the economic analysis as mentioned above; however, we believe there are further opportunities to increase the economic feasibility of this Project by implementing practical operational protocols. 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 Nez Perce-Clearwater market area with a variety of skills and equipment. Developing a 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 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 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 contracts in a manner that will facilitate this type of equipment. AFRC suggests that the Forest look at allowing ground skidding on this project on slopes up to 45%.

AFRC understands that all timber harvest and road maintenance activities will be prohibited from January 1-March 30 in Units 30, 33C, 33D, 33E, 70, and 108, to retain security and reduce stress for wintering ungulates.

In units that aren't clearcut, AFRC encourages the District to consider using DxP in the layout of the harvest units. On recent field trips to the Flathead National Forest, we toured several projects that used DxP and found positive results. On one Project the Forest estimated they saved nearly \$100,000 by not designating trees with paint. The Forest should recognize that many industrial and state forests are already employing DxP management, again with good results, and it is becoming the industry standard.

In both our scoping and Draft EA comments we suggested the Forest consider implementing shaded fuel breaks up to 150 feet on both sides of the roads. These breaks can address both forest health issues and reduce the risk of wildfire along routes that are needed for ingress and egress into the National Forest. The shaded fuel breaks may also be used within the Idaho Roadless Areas (IRAs) located within the project. AFRC believes it is appropriate to treat these areas during this entry to improve safety along the travel corridors. The Forest is proposing this treatment in the End of World Project and others, and we believe it has a lot of merit.

The Forest Provided this background information on Climate Change: "The combined Nez Perce-Clearwater National Forests represent a very small amount of the carbon stored in forests in the United States (Heath et al. 2011). Given the available data and tools (USDA 2015; USDA 2016a), patterns and trends of carbon dynamics are best determined at larger scales and over long periods of time. This project and others taking place on the forest will at most affect a very small percentage of the forest carbon stocks, and a small fractional proportion of the total forest carbon stocks of the United States. The affected forest lands in this proposal would remain forests, not be converted to other land uses, and long-term forest services and benefits would be maintained. As such, the long-term cumulative effects of forest management will have little impact overall on a potential future scenario of carbon accumulation and loss. None of the alternatives would have a measurable impact on carbon stocks in either the short nor long term, because the area of treatment is a small fraction relative to regional and global carbon stocks (Z-001; NPC Forests Carbon Cycling and Storage Specialist Report)."

In addition to this information, AFRC would like you to supplement your record for this Project and others by including the following documents related to carbon sequestration and related forest management. This is an important issue that warrants appropriate and accurate analysis.

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:

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

- a. 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.
- b. 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. Links to the above-mentioned studies can be found at:

Lisa McCauley article on large scale forest restoration stabilizes carbon: https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/eap.1979

Andrew Gray article on Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity: https://www.fs.usda.gov/treesearch/pubs/52237

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.

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 still believes there are opportunities to manage within the Riparian Areas with the Forest using the following parameters- "Apply silvicultural practices for Riparian Habitat Conservation Areas to acquire desired vegetation characteristics where needed to attain Riparian Management Objectives. Apply silvicultural practices in a manner that does not retard attainment of Riparian Management Objectives and that avoids adverse effects on listed anadromous fish."

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. The Pacfish/Infish strategy describes the need for treatments that meet the need of multiple habitat types, and we encourage the North Fork 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 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.

Key points of the Anderson paper include:

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

## Riparian reserve gaps

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old growth versus early-mature riparian forests in western Oregon. *Aquatic Sciences* 75:547558.

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 6meter 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

Key points of the Rashin paper include:

• 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 an Objection Support letter for the Dead Laundry Project. We look forward to seeing this Project implemented in the near future.

Sincerely,

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