



October 30, 2024

Via Project Website

Erin Black, District Ranger  
Mt. Adams Ranger Station  
2455 Highway 141  
Trout Lake, WA 98605

**In Reply to:** Little White Salmon Forest Resiliency and Fire Risk Mitigation Draft Environmental Analysis

Dear Ms. Black:

The American Forest Resource Council (AFRC) submits the following comments for the Revised Draft Environmental Assessment (EA) for the proposed Little White Salmon Forest Resiliency and Fire Risk Mitigation project.

AFRC represents the forest products industry throughout Oregon, Washington, Idaho, Montana, California, and Nevada. AFRC's members include over 50 forest product businesses and forest landowners. AFRC's mission 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 the protection of all forest lands. Many of our members have their operations in communities adjacent to the Gifford Pinchot National Forest (GPNF), and the management of these lands ultimately dictates not only the viability of their businesses but also the economic health of the communities themselves. The forest products sector in Washington State continues to provide around 40,000 direct and about 100,000 indirect jobs. Many of these are found in rural communities like those in Skamania County and the surrounding areas. In addition to the wages paid, the taxes and other monetary transactions generated by these businesses and family-wage jobs contribute to the infrastructure and well-being of the local communities. AFRC submits these comments on behalf of its members.

Washington and surrounding states continue to face an issue with a lack of raw materials to meet manufacturing demands for wood products. Several mills have closed in the past few years. Vegetation management projects, both current and future, on the GPNF can help contribute to the wood supply that many mills depend on to continue operating and employing their workforce. The economic activity created through these treatments contributes to the greater community's well-being.

## **Purpose and Need**

AFRC is supportive of the Purpose and Need statement in the Draft EA. However, we would have preferred to see a stronger emphasis on the economic benefits of this project. Sustainable commercial timber harvest on the Gifford Pinchot National Forest and neighboring National Forests is critical to our members' near and long-term success. Our members, their contractors, and their employees rely on the timber output from the GPNF and surrounding lands, including other National Forests. The economic activity created by this work also supports local economies and government services, such as those provided by AFRC members such as Skamania and Lewis Counties. Commercial timber harvesting is critical for the vitality of many rural communities in Washington state.

Additionally, much of the non-commercial and non-timber work proposed in the project will benefit from both economically viable and productive commercial timber projects as well as healthy and vibrant local economies. Too often, we see Purpose and Need statements where the economic contribution of timber harvest appears to be more of an afterthought or byproduct of the proposed work. However, we would suggest that well-maintained roads supported by timber operations lead to the success of other activities such as huckleberry enhancement, safe and efficient recreational access, and ultimately the ability to accomplish much of the restoration work outlined in these proposals.

Because commercial timber management on National Forest lands provides a strong economic benefit, we are disappointed that the Mt. Adams Ranger District did not use clearer, affirmative, and stronger language in the Purpose and Need statement regarding economic contributions from the Little White Salmon Forest Resiliency and Fire Risk Mitigation project. Especially, given that most of the proposed commercial work is located in the Matrix land allocation.

## **Proposed Actions**

### **Alternative 1 – No Action**

AFRC does not support Alternative 1. As described in the revised EA, no activity would occur under this action. Therefore, the 'Needs' identified by the Forest would not be met by this alternative.

### **Alternative 2 – Action Alternative**

AFRC generally supports Alternative 2, the Action Alternative. This alternative will provide the best opportunity for the Forest to meet its intended goals with this proposed project. The sections below cover specific concerns and/or recommendations.

### **General Comments on the Action Alternative**

AFRC is extremely disappointed to see the Forest drop 2,351 acres of proposed treatments from this proposal. This amounts to roughly fifteen percent of the potential treatment acres. We realize that Executive Order 14072 has created a very challenging environment for the Forest Service to conduct its planning and critically needed vegetation management projects. Direction from leadership may not be as clear as intended, but the overly conservative approach taken in this planning effort is disappointing. The Forest Service has acknowledged that fire is the leading risk to old-growth forests. While it may be possible to grow stands into "old growth-like structure," the presence of forest stands with no human disturbance would be what many

consider to be “true” old growth. Walking away from “mature forests,” especially those showing little to no stand structure other than large trees, seems irresponsible and contrary to the goals of conserving and preserving old growth. The stand visited earlier this year by the National Old Growth Amendment staff, GPNF staff, DNR, and stakeholders is a prime example. While that stand clearly had large trees, it was lacking in most, if not all, of the other characteristics of old-growth structure. Being on Matrix lands it is not the current intent to grow older stands into late seral conditions.

AFRC has an extensive understanding of DNR’s RS-FRIS inventory and associated modeling work. A coalition of trust land beneficiaries and AFRC sued the Department of Natural Resources over its last “Sustainable Harvest Calculation” partly due to its use of RS-FRIS. Over several years, a variety of stakeholders, including many professional foresters, reviewed DNR’s data associated with RS-FRIS. What they and AFRC found was that the quality of the data was questionable and lacked the finite stand characteristics to effectively be used for modeling. Especially habitat modeling. Absent robust on the ground cruises that could be used to verify the remote sensed data, the results were highly suspect. While we agree the overall canopy height data obtained using LiDAR is highly accurate, assuming high-quality LiDAR data is used, other critical data was either statistically questionable or unavailable. Down wood, for example, was one key metric that RS-FRIS was extremely poor at predicting. Along with species composition, ground cover, and in some cases multi-story conditions were also unreliable.

Without robust stand data derived from on-the-ground plots, the reliance on RS-FRIS is problematic at best. The Draft EA acknowledges that the planning area includes highly productive growing sites. This can lead to stands with larger trees yet still lacking other conditions for mature and especially old growth. Appendix F highlights the problems encountered when trying to accomplish stand-level mapping with data better suited to landscape or even geographic region mapping. The appendix clearly documents why the forest needs to work to obtain better stand-level data for this project.

We ask the Forest to reconsider the exclusion of 2,351 acres from this proposal. If the goal of the project and the Executive Order is to protect old growth stands, then doing this work is critical to the success of both.

### **Road Maintenance and Reconstruction**

AFRC strongly supports this portion of the proposal. A maintained road system provides safe, efficient access to a variety of Forest users. And proper maintenance minimizes the potential impacts those roads can have on aquatic systems. Proper running surface maintenance (crowning, rolling dips, in-slope, etc.) can help to ensure water is shed from the roadway as quickly as is practical. Ditch and culvert cleaning are critical factors in controlling surface water flow from the road running surface. These drainage structures can also help to ensure that sediment is not delivered to flowing streams. We would encourage the Forest to consider including replacing and installing additional cross drains as needed during this work. Many of these roads have been in place longer than the expected life span of the corrugated metal culverts often installed during construction. Replacing worn, rusted, or undersized cross drains, especially with plastic culverts, can reduce the overall cost when road maintenance work is

completed. Additionally, modern double-wall plastic culverts have a longer life span and tend to flow water and debris better than equal-sized corrugated metal culverts.

Slope and fill stabilization also is critical and important work to maintaining a safe and effective transportation system while minimizing potential negative impacts to both aquatic and terrestrial habitats. Many of the roads on the Mt. Adams Ranger District were built at a time when “side cast” construction was widely accepted on almost all side slopes. Over time this form of construction on steeper slopes, often coupled with buried organic debris near the toe of the fill slope and poor drainage maintenance, has led to numerous “slumps” and failures of the outer roadbed. Stabilizing these side cast slopes coupled with other needed maintenance can increase safety and minimize impacts from potential road failures.

Accomplishing this work will address both economic and ecological goals now and in the future.

### **Quarry Development**

We are disappointed to not see the District and Forest explicitly including rock quarry development work as part of this proposal. ‘On-Forest’ rock pits and the associated products that can be made from them (pit run, crushed aggregate, etc.) can help to reduce both future maintenance costs as well as costs associated with timber harvest projects. Costs associated with hauling rock long distances have been escalating in recent years and often represent a significant cost in timber sale implementation for our members. Timber sale economic viability often is influenced by the rock source for required and optional road work. Long haul distances from commercial rock sources can lead to economically non-viable timber sales.

### **Road Decommission, Closure, and Maintenance Level Updates**

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. Additionally, fire suppression requires safe ingress and egress from the landscape when conducting suppression activities, as well as ongoing fire risk mitigation work. We strongly encourage the use of Maintenance Level 1 (ML 1) designations over the use of decommissioning. While based on today’s access needs some roads may be deemed unnecessary for future needs. However, in a changing climate, regulatory, and technology world, they may be required for future access. If placed in ML 1 status, we believe the Forest can address aquatic and wildlife needs while not foreclosing on the potential future needs of land managers. We generally do not support decommissioning of roads in the Little White Salmon Forest Resiliency and Fire Risk Mitigation project area.

### **Forest Resiliency Activities**

#### **Thinning**

We have concerns as outlined below but generally support this work where appropriate within the project area. The general prescriptions outlined in the EA and Project Design Criteria (PDC) appear consistent with the typical management needs of the Forest. However, we are very concerned with the goal of *“All treatments would aim to accelerate the development of larger*

*trees*” being used across the Matrix lands, especially in stands approaching CMAI. We continue to highlight the need for management on Matrix lands, including regeneration harvest. This is needed to provide for long-term sustainability. We are pleased to see the limited regeneration harvests planned on Matrix Lands. And we realize in the younger stands on Matrix Lands, commercial thinning is likely appropriate. But we want to ensure that older stands on Matrix lands are being managed in a manner that will provide for future regeneration harvests and timber production. The treatments described in the Draft EA appear more appropriate for LSR land allocations where the goal is to grow stands into later seral habitats. Matrix lands are expected to provide sustainable timber harvest into the future.

We strongly encourage the forest to reevaluate the types of proposed treatments/prescriptions and the scale of these treatments on Matrix lands. The proposed “regeneration patches” seem too small and inconsistent with forest management work within Matrix lands. Similarly, the use of “skips and gaps” is better suited for treatments in LSRs, where the goal is to create late seral diversity and structure. The scale of the “early seral” treatments appears extremely limited, given the project area size. And we question this as a long-term sustainable practice for Matrix lands. With climate change impacts on forests being one of the drivers of this project, it seems inappropriate to create early seral habitat and solely rely on natural reforestation from seed sources from the remaining surrounding timber. This will perpetuate the existing tree characteristics rather than promote vegetation growth more adapted to potential future climate conditions.

### **Fire Risk Mitigation Activities**

#### **Thinning**

We have the same concerns within the Matrix land allocations as addressed in the above comments regarding forest resilience thinning work. The purpose and intent of LSR and Matrix lands are different, and therefore, the proposed management should account for those differences. Additionally, while we understand many stakeholders' concerns with harvesting trees over 20 inches dbh on LSR lands, maintaining this limitation rather than obtaining a project-specific plan amendment seems short-sighted given the goal of fire risk mitigation. The Forest has identified within the totality of this document that many of the stands in the project area are located on very high-productivity sites. This increases the potential for undesirable trees to be present in the landscape and would work to undermine the stated purpose of this project.

Regarding treatments on Matrix lands, it is widely accepted that large stand-replacing fires are the typical form of fire disturbance of the forests in this landscape. Ensuring treatments are consistent with this knowledge is critical. It is unclear how the proposed small patch regeneration, skips and gaps, and early seral habitat creation will reduce ladder fuels and other factors increasing fire risk.

#### **Regeneration Harvest**

AFRC strongly supports the application of regeneration harvest in this proposal. As mentioned above, the long-term sustainability of timber harvest on National Forest lands, particularly on

Matrix lands, in western Washington requires that stands be re-initiated. Regeneration harvest is the primary tool to accomplish this work and assure ongoing sustainability into the future. The limited acres proposed for regeneration harvest are a small percentage of the overall proposed treatment acres. And while likely not enough to assure future sustainability at a landscape level, it is a start. We applaud the Forest, despite the very limited proposal, for undertaking this proposed treatment and fully support maintaining the proposed regeneration footprint. We would encourage the Forest not to reduce the acres proposed for regeneration, but to rather explore expanding the acres regenerated.

### **Down Wood and Snags**

We continue to highlight our concerns with the creation of down wood and, more specifically, snags. We continue to recommend that the Forest seek to minimize this work for two reasons. First, it can be expensive to complete, and this cost may create economic viability issues for sales or could reduce funding available for other projects outlined in this proposal. The second reason for minimizing this work is future safety issues. For any LSR stands, the Forest expects to conduct a secondary treatment to accomplish late successional goals; a large number of snags scattered through the stands may pose safety risks. Additionally, any roads or trails that pass through these stands may also create safety issues for users of those travelways. It is not clear in the EA and associated documents that this work will account for current and future safety concerns on the Forest. We also urge you to monitor past treatment units to assess the degree of naturally established snags and those created incidentally following timber harvest. Such an assessment could inform the need to artificially create additional snags.

### **Project-Specific Forest Plan Amendments**

We support the proposed project-specific plan amendments as a tool to achieve the project's purpose and needs. Implementing treatments in high-risk and high-priority areas is critical to reducing fire risk and improving forest resiliency. The proposed amendments will minimize the visual impacts of the treatment while still allowing needed work in areas where it would otherwise likely be prohibited.

### **Riparian Reserve Management**

AFRC is pleased to see the Forest propose some treatments within the Riparian Reserves. Many of the streams located in the project area were not buffered during the previous harvest operation. Wide “no-cut” buffers can limit the ability to treat the very area that would provide the greatest benefit for accelerating desired future conditions for the Riparian Reserves.

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 the 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 its riparian reserve treatments on a variety of native habitats. The ACS describes the need for treatments that meet the needs of multiple habitat types, and we encourage the Mt. Adams Ranger District to look for ways to incorporate

treatments that meet those needs. Utilization of gap cuts to promote early seral habitat in the reserves, treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives that the ACS mandates should be considered.

These impacts on 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, which will shape the level of management permitted in the riparian reserves.

We encourage the Forest to consider more narrow minimum width “no-cut” buffers, especially on the lower order seasonal and non-fish bearing streams, that allow for the critical treatments needed to attain the project goals within the area of greatest benefit for the various streams and other water bodies in the project area. The minimum width would allow professional field staff to expand the buffer when needed for localized site protections while still providing the needed flexibility to treat the areas closest to the streams.

### ***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), the maximum air temperature above stream centers was less than one degree Celsius greater than for unthinned stands.

### ***Riparian reserve gaps***

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon. *Aquatic Sciences* 75:547-558.

Key points of the Warren paper include:

- Canopy gaps were particularly important in creating variable light within and between reaches.

- Reaches with complex old-growth riparian forests had frequent canopy gaps, which led to greater stream light availability compared to adjacent reaches with simpler second-growth riparian forests.

### **Wood Recruitment**

Burton, Julia I., Olson, Deanna H., and Puettmann, Klaus J. 2016. Effects of riparian buffer width on wood loading in headwater streams after repeated forest thinning. *Forest Ecology and Management*. 372 (2016) 247-257.

Key points of the Burton paper include:

- Wood volume in early stages of decay was higher in stream reaches with a narrow 6-meter buffer than in stream reaches with larger 15- and 70-meter buffers and in unthinned reference units.
- 82% of sourced wood in early stages of decay originated from within 15 meters of streams.

### **Sedimentation**

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

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.

### **Additional Literature Addressing Stream Buffers**

D.S. Bateman, R.E. Gresswell, D. Warren, D.P. Hockman-Wert, D.W. Leer, J.T. Light, J.D. Stednick. Fish response to contemporary timber harvest practices in a second-growth forest from the central Coast Range of Oregon. *Forest Ecology and Management*. 411 (2018) 147-152

D.S. Bateman, N.D. Chelgren, R.E. Gresswell, J.B. Dunham, D.P. Hockman-Wert, D. W. Leer, K.D. Bladon. Fish response to successive clear-cuts in a second-growth forest from the central Coast Range of Oregon *Forest Ecology and Management*. 496 (2021) 119447

Douglas J. Martin, Andrew J. Kroll, Jenny L. Knoth. An evidence-based review of the effectiveness of riparian buffers to maintain stream temperature and stream-associated amphibian populations in the Pacific Northwest of Canada and the United States. *Forest Ecology and Management*. 496 (2021) 119190

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.

### **Harvest Operations**

AFRC is pleased to see the inclusion of tethered logging systems as a timber harvesting method. Providing operators with flexibility in harvesting systems, especially given the current challenge of finding qualified cable systems loggers, is critical to the success of this project.

As the Forest and Ranger District move forward into implementing this project we would encourage the forest to engage the purchasing community when planning helicopter logging operations. Due to the costs of operations, potential volume removals, timing restrictions, and more, the risk of creating non-economically viable sales is real. AFRC staff recently met with the Okanogan Wenatchee NF to review a potential helicopter IRSC project. Concerns over costs and harvest operations layout were of concern to both the Forest and the purchasing community. Early dialogue can help the Forest be successful with helicopter logging.

### **Additional Comments**

The below comments and information apply to all proposed timber management proposals in the Little White Salmon Forest Resiliency and Fire Risk Mitigation project.

### **Carbon Literature**

We would like to encourage the CVRD 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.

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 for 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 CO<sub>2</sub>, then increasing the acreage of young, fast-growing small trees is the most prudent management approach.

During the 2020 legislative session, the Washington State Legislature passed HB2528, which states, “Recognizing the contributions of the state's forest products sector as part of the state's global climate response.” This bill, codified in RCW 70.235, identifies the forest products industry as a key tool in the state's efforts to address atmospheric carbon levels. Sustainable forest management for carbon sequestration coupled with manufactured wood products that store carbon, are outlined as critical aspects of Washington’s greenhouse gas emissions reduction goals. The Little White Salmon Forest Resiliency and Fire Risk Mitigation project can play a key role in this work.

Absent the use 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). Additionally, the regeneration harvests proposed in this project can accelerate carbon flux (the rate at which carbon is sequestered from the atmosphere) further benefiting carbon reduction goals. 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 renewable resources 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 outbreaks and severe wildfires, which may result in lower forest carbon stocks and greater GHG emissions. And finally, as mentioned above, this work is in alignment with the goals put forth by the Washington State Legislature and signed into law by the Governor.

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.

### **Additional Project Design Criteria Comments**

We are concerned with the relatively narrow Limited Operating Periods (LOPs) identified in the Project Design Criteria. The narrow windows these create to operate can create significant challenges to the economic viability of projects being offered. Helicopter and cable thinning operations are the most impacted by these. Efforts to minimize these LOPs so that operations on the ground have the greatest number of days available are strongly encouraged by AFRC.

We are pleased to see the Forest include the use of tethered harvesting equipment for this project and provide flexibility for winter operations. This will be critical for the economic viability of the harvesting projects.

Thank you for the opportunity to comment on this project. We look forward to participating in the further development of this proposal. If you have any questions regarding the above comments or additional information, please contact me at 360-352-3910 or [mcomisky@amforest.org](mailto:mcomisky@amforest.org).

Sincerely,



Matt Comisky  
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American Forest Resource Council