



VIA Email: <https://cara.ecosystem-management.org/Public/CommentInput?Project=51107>

February 26, 2019

Mike Williams
c/o Luke Cerise, Project Lead
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Okanogan-Wenatchee National Forest
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Dear Luke:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to comment on the Mt. Hull Draft EA.

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 Okanogan-Wenatchee 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 Mt. Hull project area is on approximately 20,300 acres of land just southeast of Oroville, Washington. The project area is surrounded by Highway 97 to the west; County Road (CR) 9486, Chesaw Road, to the north; CR 4759, Dry Gulch Road, to the east; and Swanson Mill Road to the south. Main access roads to the project are Forest Roads 3525 and 3524100.

The proposed project is within five different sub-watersheds that overlay the Mt. Hull block; Tonasket Creek, Mosquito Creek, Whisky Cache Creek, Lower Antoine Creek, and a small portion of Upper Antoine Creek. Additionally, the Mt. Hull block shares approximately 21 miles of boundary with private or state managed lands and borders an additional six miles of land administered by the BLM.

AFRC supports the purpose and need for this project and many of our comments will reflect our perspectives on these issues and how they may be enhanced—those include:

- Improve hydrologic function in the project area to restore watershed function and reduce sediment delivery.
- Modify vegetation structure, composition, and patterns to develop, maintain, or restore healthy, resilient stand structure in the project area that is consistent with historic and future ranges of variability.
- Perpetuate and enhance bighorn sheep habitat on the west flank of Mt. Hull. Improve, promote, and maintain aspen and Late and Old Structure (LOS) in dry and cool, moist forested stands. Protect and enhance Late and Old stand structures that provide habitat.
- Reduce wildfire hazards in Wildland Urban Interface (WUI) by maintaining vegetation and surface fuel conditions that promote low flame lengths and reduce the high risk of crown fire behavior.
- Modify the transportation network and related structures lands to create the transportation system needed for safe and efficient travel, administration, and public use, and protection of natural resources on NFS lands. Improve scenic opportunities and reduce trail user conflict on a portion of the Pacific Northwest National Scenic Trail (PNNST).

AFRC provides the following comments for your consideration that we believe could strengthen the Mt. Hull project as it moves forward.

1. AFRC supports your actions to treat 7,664 acres of the 20,300 acre project area commercially. This includes commercial meadow & woodland restoration 2,110 acres, commercial thin & overstory removal 4,460 acres, regeneration harvest & post-harvest tree planting 1,094 acres. The volume of timber from these acres is very important for the survival of the forest products industry and to provide jobs back to local communities and counties.

We encourage the Forest to maximize the commercial volume being removed from these 7,644 acres. For every one million board feet of timber harvested approximately 12 jobs are created. Several milling facilities have left communities surrounding the Okanogan Wenatchee in recent years due to lack of adequate log supply. It should be noted that projects like Mt. Hull could help maintain those milling facilities that depend on wood from the Forest and will also help support the existing logging infrastructure.

2. In my previous scoping comments, I suggested that the Forest thin to wider spacings for the vigor of residual trees and for risk reduction from wildfires. Further, the mistletoe problem in many of the stands need to be addressed, and this will require heavy thinnings or regeneration harvests to establish young disease free stands. To supplement that comment, I am including a report by R. Haugo et al. titled *Forest Ecology and Management*. In that report is states that approximately 41% of all coniferous forest in eastern Washington and eastern and southwestern Oregon was in need of a transition to a different s-class in order to restore forest structure to a Natural Range of Variability condition. This report points out the fact that the forests in eastern Washington need to

be thinned heavily to reduce fire danger and to return these stands back to more natural conditions.

Further to support the level of needed restoration, the report finds: “*We have identified approximately 1.7 million ha presently in need of disturbance (including disturbance then succession) to restore forest structure NRV on US Forest Service lands outside of wilderness and inventoried roadless areas. Within our analysis area the US Forest Service averaged approximately 12,000 ha per year of hazardous fuels treatments between 2004 and 2013 and had a total of nearly 19,000 ha of forest vegetation improvements in 2013 (US Forest Service Pacific Northwest Region; unpublished data). Assuming that these treatments are additive and address disturbance restoration needs identified in this study, at these treatment rates it will take over 50 years to meet the identified disturbance restoration needs on these US Forest Service lands.*”

AFRC believes that treating 7,664 acres of the Mt. Hull project will help in treating the backlog of acres currently found on the Okanogan-Wenatchee that is in poor health.

3. As pointed out by your Purpose and Need, the Forest Plan as amended by PACFish establishes riparian management objectives (RMOs) and directs us to restore and maintain riparian habitat (Riparian Habitat Conservation Areas, or RHCAs) and stream integrity impacted by management, improve habitat for aquatic species, and increase watershed resiliency to existing and anticipated disturbances. Further, commercial-sized conifers may be removed in RHCAs to meet RMOs and aquatic and hydrologic restoration goals, allowing for the return of hardwood species such as willow and alder in areas that historically supported this type of vegetation. Conifer removal would occur through hand-felling; equipment would not operate in the RHCA

AFRC strongly encourages the Forest to enter into the riparian areas to remove some of the fuel loading and cover. Recent large wildfires have shown that some of the most severe burns and resource damage have occurred in the riparian areas where the fuel loads are the highest. Creating openings in the riparian areas also allows more sunlight to enter which can enhance other vegetation and insect production for a variety of species that depend on them for food.

It has been documented by many that most of the wood that naturally recruits to streams comes from within the first 65 feet of the stream channel (Murphy and Koski, 1989; McDade et al. 1990. Johnson et al. 2011). So if this is where the LWD is coming from then thinning in this region would likely accelerate its creation. We encourage the Forest to design riparian thinning treatments on this project in ways that foster positive changes to large wood supplies that would result in measurable changes. One way to accomplish this is to reduce the no-cut buffers. It has also been documented that vegetated buffers that are greater than 33 feet in width have been shown to be effective at trapping and storing sediment (Rashin et al. 2006). Partial cutting down to one or two conifers from intermittent and perennial stream channels would accelerate the recruitment of LWD with minimal impacts to sedimentation and stream temperature. We would like the Forest

Service to consider these trade-offs closely in the planning for this project to improve riparian conditions on the maximum amount of these reserves.

We would also like the Forest to consider including some of the following pieces of scientific research into their analysis. Much controversy surrounding any type of thinning in riparian reserves has surfaced, and we think the following information would be useful in justifying the kinds of beneficial treatments the Forest implements.

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.

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.

(1) Small Functional Wood

Nearly all wood that falls into stream channels has the capacity to influence habitat and aquatic communities (Dolloff and Warren, 2003). Therefore, smaller woody material that enters stream channels is important to overall channel function because it can store sediment and organic material, contribute nutrients, and provide temporary pool habitat and slow-water refugia. It is important to note, however, that pools formed by smaller wood generally are not as deep or complex as those formed by large wood. In addition, small wood does not persist for long periods of time because it deteriorates quickly and is more likely to be flushed from the system (Naiman *et al.*, 2002, Keim *et al.*, 2002).

(2) In smaller streams adjacent to previously harvested stands, field surveys (McEnroe, 2010) indicated that relatively large amounts of existing (in-stream) and potential (standing) small functional wood are present. Field surveys also indicate that the vast majority of the down wood in these areas originated from within 50 feet of the stream

channel. This is consistent with findings by Minor (1997), who found that in second-growth coniferous riparian forests, 70-84 percent of the total in-stream wood was recruited from within 15 meters (49 feet) of the channel. In addition, McDade *et al.* (1990) and Welty *et al.* (2002) found that 80 percent and 90 percent, respectively, of the wood loading occurred within 20 meters (66 feet) of the stream channel in coniferous forests.

The photo below is from this presentation and represents the uncharacteristically severe wildfire impacts associated with riparian areas.



4. To accomplish the Purpose and Need of getting the stands back into the Historic Range of Variability, to enhance wildlife habitat, and to reduce fuels in the Wildland Urban Interface, AFRC encourages the Forest to use a variety of silvicultural prescriptions in this project to accomplish additional resource needs and RMP objectives. For example, in some of the stands heavily impacted by insects and disease (mistletoe), regeneration harvests might be considered to establish new healthy stands. Where wildlife forage is needed, regeneration, shelterwood, or seed tree harvests might be used to improve and increase early seral vegetation. Regeneration harvest is also integral to meeting agency requirements for sustained-yield timber management as partial harvests and thinning treatment opportunities will eventually be exhausted. Finally, to promote fire resistant species in areas of dense stands, shelterwood or seed tree harvests could be utilized to leave species such as western larch, ponderosa pine or white pine to help establish young stands of these fire resistant species.

5. In our scoping comments AFRC suggested that the Forest conduct heavy thinnings along the 21 mile WUI boundary. This will protect the Forest from the threat of wildfire, insects and disease and will also prevent the spread of those onto other landowners. With the past history of large fires in this area, and also on the west boundary of the Colville National Forest, these silvicultural treatments are necessary to ensure the health and vigor of both private and National Forest lands. Also the project has the unique feature of trying to enhance the Mollisol (grassland soils) soil types in the project area. Due to fire exclusion, conifers have encroached into areas that were historically open grassy meadows thus reducing grass and forb species diversity and reducing foraging habitat. Again, heavier harvests in these soil types is recommended.
6. AFRC supports the use of Designation by Prescription (DxP) for this project. At a recent purchasers meeting, Forest personnel asked if industry favors the use of DXP and the answer was overwhelmingly positive to using this tool. AFRC and the Forest Service has taken two trips to look at the Benzer project on the Methow Valley District where DxP has been used. The results have been very good thus supporting more management by DxP.
7. AFRC supports the Forest using two Forest Plan amendments that would amend four Forest Plan Standards & Guidelines to allow treatments for: 1) Reducing deer and bighorn sheep winter range cover on up to 991 acres to levels below those specified in Forest Plan. Since the Forest Plan was written, new science has revealed that thermal cover is not as critical as forage quality and quantity for winter survival of deer and bighorn sheep. In addition, areas of winter range cover in the project area historically contained fewer trees with less canopy closure than currently exists, with lower risk of uncharacteristic crown fire behavior and less vulnerability to insect outbreaks. These amendments would allow treatments that reduce deer winter cover while restoring vegetation composition and arrangement to patterns similar to the historic range of variability, while minimizing wildfire hazard in the Wildland Urban Interface; 2) allow understory commercial and non-commercial treatments and fuels treatments in old growth stands, consistent with the restoration strategy. A review of new science since development of the original Forest Plan has found that in order to sustain old-growth stands, thinning by harvest and fire was needed to reduce the potential for stand-replacing fires.
8. AFRC continues to recommend using tractor skidding on slopes over 35% to more efficiently capture the economic value of the timber and to provide more revenues back to the Forest for other resource improvements. In your document you state that commercial harvest with ground based equipment would be located in stands with slopes no greater than 35% across the treatment unit, and with the potential for at least 2,500 board feet/acre removal of conifers greater than 7 inch diameter. Cable yarding would occur in areas with relatively consistent slopes over 45%, with a road at the top of the unit. AFRC would like the Forest to use ground based equipment or at least conduct more tests on slopes between 35% and 45% which aren't addressed in this document.

The nearby Colville National Forest is testing skidding on slopes up to 45% and the results have been favorable. Additionally many acres have been bypassed in the past because of concern about damage to soil from compaction, erosion and other issues. Today's new high tech logging equipment has a very light footprint and damage to the soil resource is minimal.

9. A thorough analysis of what roads will still be needed for future fire access, forest treatments, recreation etc. should be conducted before a final plan is adopted for roads to keep as system roads and those to delete. While AFRC agrees that some roads need to be closed we prefer gating or blocking rather than obliteration.
10. There is a huge opportunity to use retained receipts or K-V funds from the harvest of timber on this Project to improve many of the other resources that have been mentioned including the installation of new culverts or possible road relocation to prevent potential road failures or stream sedimentation. There will be a need for thousands of acres of precommercial thinnings, prescribed burnings, and other treatments as well that could be funded by these timber receipts.
11. In the past some Okanogan-Wenatchee timber sale contracts have called for operations only in deep snow or in winter months. This has delayed getting projects accomplished. AFRC suggests having lenient operating seasons that permits both summer and winter logging. Getting the area treated is more important than depending on unpredictable winter weather conditions.
12. Due to the distances of this project area to markets, often getting rid of the non-saw material can be difficult. Chip markets and biomass markets are unpredictable at best. To accommodate for uncertain markets AFRC suggests having the removal of the non-saw material be optional.

Thank you for the opportunity to provide comments on the Mt. Hull Project Draft EA. I look forward to following the implementation of this project as it moves forward.

Sincerely,



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