



August 26, 2019

Kathleen Minor
Tiller Ranger District
27812 Tiller-Trail Highway
Tiller, OR 97484

In Reply To: Skillem Integrated Resource Restoration Project EA

Dear Ms. Minor:

Introduction

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to comment on the Skillem 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. AFRC represents over 50 forest product businesses and forest landowners throughout the West. Many of our members have their operations in communities adjacent to the Tiller Ranger District (Tiller RD), and the management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves. The state of Oregon's forest sector employs approximately 61,051 Oregonians, with AFRC's membership directly and indirectly constituting a large percentage of those jobs. Rural communities, such as the ones affected by this project, are particularly sensitive to the forest product sector in that more than 50% of all manufacturing jobs are in wood manufacturing.

Purpose and Need Indicators

AFRC is concerned with the indicators of the Project to meet the Purpose and Need for improved water quality and aquatic habitat. Out of context, miles of road decommissioning, miles of road put into storage, and roads removed within Riparian Reserves are not fair indicators of the

proposed action to meet the Purpose and Need of the Project. AFRC believes these types of actions should only be taken if and only if there is resource damage occurring and the cost to decommission or remove a road is less than the cost to store the road. In cases where the FS would like to store a road it should be done in a manner that is easily reversed to utilize the road again (such as tank traps, rock placement, or gates).

The Improve Forest Health Need utilized residual relative stand density index as an indicator. Because FVS or a similar modeling program was used to calculate this number it is paramount that accurate and recent stand data was utilized. **Please help us understand how and when stand data was calculated to be utilized for this exercise.** Additionally, Crowing Index relies on accurate stand data as well.

Alternatives Considered but Eliminated from Detailed Analysis

Alternative A is the type of alternative AFRC often requests. The ability for our members to operate all year is vital to the health of our industry. The ID Team determined that the cost to implement year-round haul for the entire Project was infeasible due to economics. As we will discuss later in this comment letter, when more volume is produced from a Project and more acres are treated, there will be more money to enhance the road system for not only haul but also recreation and other work to be done in the woods.

Alternative B would create better fuel breaks when it is anticipated that crowing fires are likely. Shaded fuel breaks can dramatically help with ground fires, but when a fire has progressed to crowing, they will only enhance the fire due to higher canopy cover. If the Tiller RD believes crowing will be an issue or anticipates trees within 20 feet from the road are likely to be felled during firefighting operations, then AFRC suggests reconsidering this part of Alternative B in addition to the lower canopy cover limits. AFRC also believes removal of merchantable materials should occur on every acre of fuel break creation that has such material, yet the FS is only proposing 11 acres of commercial thinning compared to the 434 acres of non-commercial thinning. In order to help subsidize this cost and create a true break, the District must be willing to remove merchantable trees where they exist. As such, in the area that will be commercially harvested, residual basal area would be a whopping 120-130 square feet with a canopy cover of 45% or greater. We believe this is far too high.

Proposed Action

AFRC is glad to see the Tiller RD proposing vegetation management on their Matrix, Riparian Reserve, and Late-Successional Reserve (LSR) lands that will likely provide useful timber products to our membership. Our members depend on a predictable and economical supply of timber products off Forest Service (FS) land to run their businesses and to provide useful wood products to the American public. The treatments on the Skillem project 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. Supporting local industry and providing useful raw materials to maintain a robust manufacturing sector should be a principal objective to any project proposed on Forest Service land, particularly those lands designated as Matrix, but also on land designated as LSR.

The consideration of active management on every acre of appropriate land, regardless of its land allocation, is important to our membership as each year's timber sale program is a function of the treatment of aggregate forested stands across the landscape. The EA states that the District is proposing treatment on about 5% of the project area (11,400 acre project area and 646 total commercial treatment acres). This percentage is typical of many Forest Service vegetation management projects and although AFRC would like to see the agency treat a higher proportion of the landscape, we understand the multiple directives and land management restrictions in place that make doing so difficult. We appreciate the Tiller RD for adding unit 400 to the Project. In AFRC's scoping comments we identified three stands along the 27 road in need of treatment. Stand 400 falls within two of the areas we identified. AFRC also identified a stand between the 27 road and the 990 road (Figure 1 & 2). During the Skilleen public field trip those present walked a portion of the 990 road from the 27 road. This section of the road has been proposed for decommissioning, but multiple participants on the field trip expressed concern with a full decommissioning of the road due to limited resource degradation and the usefulness of the road for hunting. We believe this portion of the road will be necessary to treat the identified stand in our scoping comments and should be considered for storage instead.

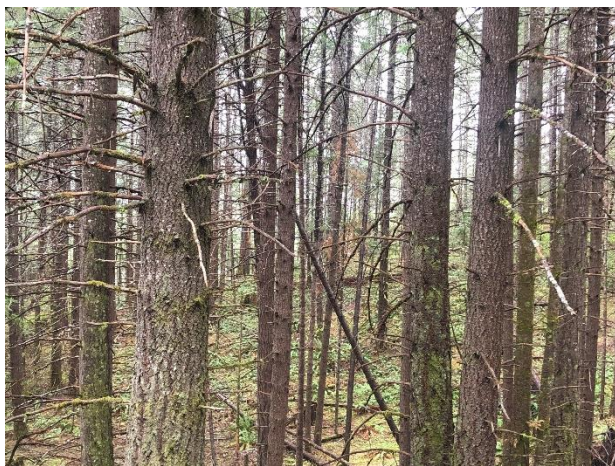


Figure 1: Stand between the 27 road and the 990 road from the 27 road.



Figure 2: Stand between the 27 road and the 990 road from the 990 road.

Additionally, AFRC noticed at least 5 other stands that need treatment along the 900 road that look very similar to the pictures above (Figures 3-6 showing three of them).



Figure 3: Stand at Lat. 43.07471, Long. -122.68423



Figure 4: Stand at Lat. 43.06368, Long. -122.69011



Figure 5: Stand at Lat. 43.06629, Long. -122.68374 from the 900 road West of the 901 road.



Figure 6: Stand at Lat. 43.06629, Long. -122.68374 from the 900 road at the intersection of the 901 road.

Given the relatively small scale at which this project is proposed to be implemented on, we urged the District in our scoping comments to look for ways to maximize treatment where it is proposed and to avoid deferring units or setting aside portions of units for what is often referred to as “skips”. On Matrix land, we urged that large patch cuts or gaps be implemented to provide early seral habitat (an objective exclusive to Matrix land), provide timber products (also exclusive to Matrix land), and diversify the vegetation type on the landscape. In addition, much of the Project is located in Management Area 11 – Big Game Winter Range (MA11) where big game need early seral habitat for browse, forage, and mast.

The Tiller RD was originally proposing 1-3 acre gaps within all of the treatments but reduced the gaps in the LSR to ¼ acre in order to forgo a review of the Project by the Regional Ecosystem Office. The Regional Ecosystem Office amended the “Criteria to Exempt Specific Silvicultural Activities in Late-Successional Reserves and Managed Late-Successional Areas from Regional Ecosystem Office Review” in September of 1996 to allow up to ¼ acres gaps as an activity which does not need a Regional Ecosystem Office review. This is down from the previously allowable ¼-½ acre gap size.

According to the *West Fork Smith EA* out of the Coos Bay BLM District. “The edge effects upon seedlings within planted group selection openings would be highly variable based upon aspect, topography, competitive interactions, and the height of adjacent trees (Fernández et al. 2002). Factors affecting growth and survival would include animal damage and vegetative competition associated with shrub growth and hardwood sprouting. During the initiation phase (≤ 30 years), the canopy within the opening would develop some height and diameter differentiation based upon moisture, light availability, and shade tolerance. Coates (2000) showed that the largest trees of several planted coniferous species are generally found in the middle of patch openings. Depending on the height and orientation of the forest edge, shading would influence survival and growth (Minore and Laacke 1992, Strothmann 1972). For example, the growth rates of shade-intolerant tree species such as Douglas-fir may be reduced in a wide band along the south side of an opening due to shading from the adjacent forest. A representative study (Hansen et al. 1993) found that when density is controlled, both the height and diameter of Douglas-fir trees are significantly reduced within 20 meters from the stand edge. More recent studies have similarly confirmed greater growth responses in gaps larger than 1.1 hectares (2.7 acres), and that gap sizes below 0.6 hectare (1.5 acres) would not create conditions to ensure adequate growth of Douglas-fir regeneration in group selection systems (de Montigny and Smith 2017, York and Battles 2008). Promoting and maintaining wider spacing within the regenerative layer would provide greater potential for long-term (100-year) recruitment of large-limbed tree structures than the no action alternative, under which dense tree spacing would limit light penetration through the canopy and lead to suppression and/or mortality of lower limbs.” ***Why then does the Skillem Project also require such small gaps in Units 100, 120, 140, 180, 210, 220, and 230?*** These units equate to 122 acres of the total 295 acres (40%) of Matrix treatments in the Project. Matrix stands should not be treated as LSR stands are treated. Additionally, Unit 180 (Figure 7 & 8) is even in MA11 and as such would need larger gaps in order to stimulate early seral habitat and forage growth for big game. ***AFRC would like to know why these units are being treated differently than the other Matrix, Management Area 10 and Management Area 11 units even though they look the same (Figure 9-12 as examples).***



Figure 7: Unit 180 to the South of NF-2838.



Figure 8: Unit 180 to the North of NF-2838.



Figure 9: Unit 40



Figure 10: Unit 10



Figure 11: Unit 140



Figure 12: Unit 230

AFRC's scoping comments also highlighted how important the Matrix, MA10 and MA11 objectives are to our members. Producing timber for the market is a perfectly fine objective for a Project and should be included when treating these lands. According to Table 4 on page 17 of the EA, the FS is proposing to remove between 29%-53% of the standing basal area of the stands. AFRC believes maximizing treatment where it has been proposed has not been achieved with numbers like these. Additionally, to reduce costs associated with paint, it would be most appropriate to designate timber for removal either with a cut-tree-mark or designation by prescription. Unfortunately, we have not seen good results with cut-tree-marking to prescription in Oregon and so we would suggest this Project be implemented through designation by prescription. In our scoping comments, we also suggested thinning throughout all diameter classes and having a mix of thinning techniques. According to Table 17 on page 53 of the EA the QMD for each stand will increase by up to 7 inches. This indicated a pure thin from below prescription has been chosen for this Project. We would like to see overstory trees removed in young stands, thinning through a diameter class in most stands, and the occasional thinning from below. Please take this into consideration for this and future Projects remembering that Matrix and MA10 are specifically for sustainable timber production and should be treated and prescribed as such. We are however happy to see that a diameter limit has not been applied to the prescriptions nor has a canopy cover limitation. These types of limiting factors should not be applied to most lands and especially not Matrix, MA10, and MA11 lands.

In addition to commercial harvest, the Project proposes pre-commercial thinning in stands aged 25-35 years old. AFRC would like to know more detail about this prescription. Will the trees be hand cut and then left in place to rot as private timberlands does during pre-commercial thinning or will extra work need to be completed to pull this material through the doghair thick stands into burn piles? ***AFRC suggest leaving the wood in place in order to decrease cost associated with this work.*** Since the FS is outside of the most optimal window for pre-commercial thinning as noted in the EA, AFRC believes the FS could also just leave these stands to grow into a merchantable operation. One piece of vital information that is not included in the EA is the average DBH in each of the pre-commercial thinning units and their specific age. **Could the Tiller RD also include these two metrics in a table on page 21 of the EA?**

Economics and Operating Restrictions

The timber products provided by the FS are crucial to the health of our membership. Without the raw material sold by the FS 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 FS 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. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on FS forestland.

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 FS must take necessary precautions to manage 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 FS Environmental Assessment (EA) and contracts (i.e. dry conditions during wet season, wet conditions during dry season). There are a variety of operators that work in the Tiller RD market area with a variety of skills and equipment. Developing a Project 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. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential operators. Additionally, language such as in PDF 47 may restrict certain operations to be competitive in this Project Area. Often times creative solutions not thought of by the ID Team can be employed when it comes to implementation of timber sales. Though some of the proposed area is planned for cable harvest, there are opportunities to use certain ground equipment such as feller bunchers 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. According to PDF 44 only 1 or 2 (round trip) passes in the same location off of a designated skid trail is allowed. AFRC suggests amending this language to say “unless traveling on at least 8 inches of slash mats” or similar language.

The newest operating system is tethered logging. This system allows ground based equipment to operate on slopes greater than 35% by decreasing the PSI of the machine and therefore the ground disturbance. AFRC would like to thank you for not writing yourself out of allowing purchasers to utilize this new type of equipment in PDF 39.

When it comes to road work, AFRC understands the importance of erosion control and proper road design. PDF 23 however seems to go too far in requiring a minimum of 20 inches of subsoiling after use of a landing, temporary road, or skid trail. It is important to realize that these

same roads and areas will be used again, and purchasers should only be required to do what is necessary to control erosion and sedimentation into water ways.

Monitoring

AFRC recognizes all the demanding work put into completing NEPA. Therefore, we would like to see a detailed monitoring methodology for implementation and post implementation (pre-sale and post cut-out). It is not always clear if and how all the arduous work on the front end is coming to fruition. It is paramount quality control occurs. If site specific prescriptions are not written correctly or if those prescriptions are not implemented correctly, then all the work put into the NEPA is moot. This is one reason why AFRC has suggested the use of designation y prescription. On page 36 of the EA, monitoring by the FSR, CO, and Ranger is specified in the form of inspection reports. We believe the one of the most effective ways to ensure objectives from NEPA are being met is through designation by prescription.

Other Comments

In Table 9 on page 38 of the EA and elsewhere in the analysis, the forest thinning acres are identified as 611 acres. Page 14 and Table 3 in the EA however state that 646 acres of thinning are being proposed with 120 acres of buffers. This equates to true thinning acres being 526 acres of treatment. **Please clarify which number is correct.**

On page 20 of the EA, the non-commercial units to be thinned are stated to be aged 25-30. On page 54 of the EA they are aged between 25-35 years old. **Please help us understand what age these stands are at.**

Thank you for the opportunity to provide scoping comments on the Skillem Project. We look forward to following the implementation of this project as it moves forward.

Sincerely,



Amanda Astor

Southwest Oregon Field Forester

[American Forest Resource Council](http://www.americanforestresourcecouncil.org)

2300 Oakmont Way Suite 205A

Eugene, OR 97401

Office: 541-342-1892

Cell: 541-517-8573

aastor@amforest.org

References:

- Fernández, C., F. J. Acosta, et al. 2002. Complex edge effects as additive processes in patches of ecological systems. *Ecological Modeling* 149(3), 273–283.
[https://doi.org/10.1016/S0304-3800\(01\)00464-1](https://doi.org/10.1016/S0304-3800(01)00464-1).
- Minore, D. and R. J. Laacke. 1992. Natural regeneration. Pages 258–283 in Hobbs, S. D., editor. *Reforestation practices in southwestern Oregon and northern California*. Oregon State University Forest Research Laboratory. Corvallis, OR.
- Strothmann, R. O. 1972. Douglas-fir in northern California: Effects of shade on germination, survival, and growth. Research Paper PSW-RP-84. U.S. Department of Agriculture - Forest Service - Pacific Southwest Forest and Range Experiment Station. Berkeley, CA.
<https://www.fs.usda.gov/treearch/pubs/28748>.
- Hansen, A. J., S. L. Garman, et al. 1993. Do edge effects influence tree growth rates in Douglas-fir plantations? *Northwest Science* 67(2), 112–116.
<https://research.wsulibs.wsu.edu:8443/xmlui/bitstream/handle/2376/1574/v67%20p112%20Hansen%20et%20al.PDF?sequence=1>.
- de Montigny, L. E. and N. J. Smith. 2017. The effects of gap size in a group selection silvicultural system on the growth response of young, planted Douglas-fir: A sector plot analysis. *Forestry: An International Journal of Forest Research* 90(3), 426–435.
<https://doi.org/10.1093/forestry/cpw068>.
- York, R. and J. Battles. 2008. Growth response of mature trees versus seedlings to gaps associated with group selection management in the Sierra Nevada, California. *Western Journal of Applied Forestry* 23(2), 94–98. <https://doi.org/10.1093/wjaf/23.2.94>.