

Anvil Vegetation Management Project (#294998) PA Comments

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Please accept the following as my submitted comments for the Anvil Vegetation Management Project (#294998)-

SOILS-

Units 24, 26, 28, 30, 32, 34, 36, 38 and 52 are located on Mount Hood National Forest's Soil Resource Inventory Mapping Unit 304. The SRI describes Unit 304 as having a "high brush hazard." If the intent is to reduce fuels and overall fire hazard, how does the Forest Service justify treatments which seem predestined to increase the fire hazard? Wouldn't a predominance of brush create an environment full of ladder fuels? SRI Unit 304's description goes on, cautioning of high seedling mortality and that achieving "adequate stocking may be a problem." Shifting site characteristics back towards a ladder fuel friendly environment is a choice that these units may not be able to break back out of.

In the Soils Specialist's Report on page 6, it states that "soil temperature regime is categorized as mesic and frigid. Mesic having moderate temperatures with moisture availability throughout the growing season." But this assumes conditions prior to applications of the proposed treatments which will actually change these conditions. Aubry and Halpern (2009)¹ published a synthesis of research findings based on the DEMO project which applied various logging treatments on test units and then performed subsequent field sampling to examine various metrics. The key findings I would like to highlight are that units receiving thinning or VRH had less species richness, lower levels of soil moisture retention, and warmer air temperatures.

HYDROLOGY-

The PA section on "Reasonably Foreseeable Effects of the Proposed Action" (page 9) about hydrology effects only references peak flows and the density of in-stream wood but doesn't address increased temperatures and moisture loss from thinning. Most of the Anvil project units are in locations which have direction contributions to Shellrock and Peavine Creeks. Those units which are located along Shellrock Creek (Units 2, 4, 6, 8, 10, 12, 14, 16, 18, 20) have western aspects which will just bake in the summer sunshine. According to NorWeST² models, Shellrock Creek is projected to increase its stream temperature 1° C by 2040, without additional factors. Nineteen mapped streams (perennial or intermittent) intersect these units and flow downslope into Shellrock Creek.

Peavine Creek is projected to have an even larger temperature increase by 2040 and the project units upslope of that creek are even larger than the units above Shellrock Creek. None of this is even worth mentioning or discussing? As linked previously, the thinning will increase the ambient temperature of the stands receiving treatment and will subsequently increase the temperature of the creeks running through them. This compounds the effects of increased stream temperature.

CUMULATIVE IMPACTS-

One of the troubling aspects for me of this Forest Service assessment is the promise of a rosy future. Every specialist report will identify, in some manner, short term impacts and long term benefits. For example, in the PA

section on “Reasonably Foreseeable Effects of the Proposed Action” (page 8), the Silviculture section claims that 10 years post treatment would bring increased diameter growth rates and rapid response of understory vegetation. 40 years post treatment would bring “accelerated development of late successional forest.” Will this unit (or any other unit in this project) actually get to 40 years to recover without additional Forest Service actions? Case in point- 25% of proposed Anvil Unit 56 was thinned just 19 years ago in 2007 as part of the Cloak Timber Sale (Unit 512 in that EA). The MHNH did this same thing with the Grasshopper Project which included re-entering units that had been previously thinned only 12 years previously under the 3 Conifer Timber Sale.

It seems disingenuous to me to suggest that impacts will mitigate over time while not acknowledging or giving serious consideration to the fact that Forest Service will continue to meddle in the units thereby resetting their clocks. These stands will never achieve these future desired conditions simply because the Forest Service will not let them. You can’t grow long hair if you keep getting a buzz cut.

PROJECT DESIGN CRITERIA-

In the Project Design Criteria for fuels piling (Appendix A, pg 12), I believe language should be added to specify a set distance away specified from the edge of unit as well. It’s possible that I-10(A)(ii) indirectly addresses this as it does mention spacing to live trees but I believe it should explicitly also mention live trees at the edge of unit. I wouldn’t think that this needs to be mentioned but apparently it does. The following is a photo from the Umpqua National Forest (North Umpqua Ranger District) from an Archie Creek Fire Salvage harvest located on Panther Creek Ridge along Road 4714-185:



Figure 1 Archie Creek Fire Salvage Slash Pile - October 2022

As you can see, this huge slash pile is situated literally at the edge of the forest. The cut unit does not extend further down slope and there is no buffer area extended from this pile. Such an easy source of ignition should NOT be in such close proximity to forest which could ignite if the slash pile is set on fire. This slash pile has been there for over 2 years. If the whole point of this project is to reduce fire danger, then ensuring the contractors do not place burn piles so close to the forest edge should be a no brainer.

A second language clarification I would like to see is to the PDCs with respect to downed woody materials and / or snags. While the current language specifies that down woody material (or snags cut for safety purposes) shall

remain on site, I believe it should also clarify that the materials shall remain where they are felled. Your sister agency the Bureau of Land Management (BLM) also has site retention requirements in its guidelines with but also does not have the additional specificity about staying where felled. I believe this is important because if these trees are felled and then decked near a road, they become susceptible to timber theft rather than providing the benefits that downed woody debris provide. Once again, I have an example from southern Oregon which shows a 5' diameter tree cut down for "safety purposes" but was then dragged and decked near a BLM road. After two seasons, this log disappeared, or was hauled off to the mill when it should not have been-



Figure 2. 5-foot diameter hazard tree from BLM Old Fairview Hazard Tree Project decked along the road - June 2022

In the proposed PDCs, I14 should be revised to say "Down woody material on the ground prior to proposed treatments, should be retained to the extent possible during all activities ***and in the location felled.***"

PDC K1 should be revised to "...If snags must be cut for safety reasons, they would be left on site ***and where felled.***" Further down in K1, the sentence about down logs should also be revised- "Down logs currently on the forest floor would not be removed ***and left in place to the extent possible.***"

Thank you.

Steve Cole

Literature Referenced / Cited in these Comments:

1. **Aubry, K.B.; Halpern, C.B., Peterson, C.E. 2009.** Variable-retention harvests in the Pacific Northwest: a review of short-term findings from the DEMO study. *Forest Ecology and Management*. 258(4): 398–408.
2. **Isaak, Daniel J.; Wenger, Seth J.; Peterson, Erin E.; Ver Hoef, Jay M.; Hostetler, Steven W.; Luce, Charlie H.; Dunham, Jason B.; Kershner, Jeffrey L.; Roper, Brett B.; Nagel, David E.; Chandler, Gwynne L.; Wollrab, Sherry P.; Parkes, Sharon L.; Horan, Dona L. 2016.** *NorWeST modeled summer stream temperature scenarios for the western U.S.* U.S Department of Agriculture, Forest Service, Rocky Mountain Research Station, Air Water & Aquatic Environments Program.

<https://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST.html>