



May 31, 2012

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Dear Sharon:

Thank you for the opportunity to comment on the Porcupine Vegetation and Road Management Project Environmental Assessment (EA). We believe this is an important project that can have significant benefits to the forest ecosystem and to forest timber industry infrastructure. All three of the action alternatives have differing benefits so it is imperative that the final decision be based on meeting the designed purpose and need for the project area and is consistent with current Land and Resource Management Plan (LRMP) direction.

The project has identified three key purpose and needs for the project area. They include:

1. Improve Forest Health and Growth
2. Reduce Fuels
3. Maintain Aspen, Meadows, Natural Openings, and Uplands within Riparian Reserves

Three action alternatives have been analyzed in detail as part of the EA. These alternatives were developed either to meet the intended purpose and need or to address significant issues raised during project scoping. The three alternatives are as follows:

The Proposed Action - Alternative 3a (Preferred Alternative) – includes: 3,252 acres of standard commercial thinning, 125 acres of mature stand thinning, 74 acres of hazard reduction thinning, 310 acres of biomass thinning, 21 acres of aspen release, 48 acres of meadow and natural opening restoration, 64 acres of lodgepole green tree retention (GTR), 19 acres of ponderosa pine GTR, 299 acres of mechanical fuel treatments, 500 acres of slashing fuel treatments, 1,736 acres of underburn, 299 acres of burning piles, 8 miles of road closure, 3 miles of road decommissioning, 2 miles of road reconstruction, 0.6 miles of new road construction, 6 miles of new temporary road construction, and 2 miles of road added to existing system.

Alternative 2a - includes: 3,156 acres of standard commercial thinning, 144 acres of mature stand thinning, 74 acres of hazard reduction thinning, 333 acres of biomass thinning, 21 acres of aspen release, 26 acres of meadow and natural opening restoration, 64 acres of lodgepole green tree retention (GTR), 295 acres of mechanical fuel treatments, 487 acres of slashing fuel treatments,

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114 acres of handpile, 1,524 acres of underburn, 409 acres of burning piles, 8 miles of road closure, 3 miles of road decommissioning, 2 miles of road reconstruction, 0.6 miles of new road construction, 6 miles of new temporary road construction, and 2 miles of road added to existing system.

Alternative 7 (No Machine Piling) - includes: 3,252 acres of standard commercial thinning, 125 acres of mature stand thinning, 74 acres of hazard reduction thinning, 310 acres of biomass thinning, 21 acres of aspen release, 48 acres of meadow and natural opening restoration, 64 acres of lodgepole green tree retention (GTR), 19 acres of ponderosa pine GTR, 704 acres of slashing fuel treatments, 1,736 acres of underburn, 8 miles of road closure, 3 miles of road decommissioning, 2 miles of road reconstruction, 0.6 miles of new road construction, 6 miles of new temporary road construction, and 2 miles of road added to existing system.

Alternative 4 (No Action Alternative) – no activities would be implemented with the selection of this alternative.

**AFRC supports the selection of either Alternative 3a or 2a for the Porcupine Project. These are the only Alternatives that fully meet the project purpose and need. We cannot support the selection of Alternative 7 or the No Action Alternative. Alternative 3a is the best alternative as it will take care of the mortality issues located within the 19 acres ponderosa pine stand.**

### **NORTHERN SPOTTED OWL**

It is highly likely the project will be challenged because proposed activities may slightly degrade or remove habitat for the Northern Spotted Owl (NSO). It must be noted that all three action alternatives contain the same impacts to the NSO. All three action alternatives degrade 244 acres of foraging habitat, 8 acres of foraging habitat are degraded by temporary road construction, and 6 acres of foraging habitat are removed by landing construction. In all three action alternatives there is no disturbance to any breeding pairs of NSO and there is no identified critical habitat. **The determination for all three action alternatives is May Affect, Not Likely to Adversely Affect the NSO.**

There may be challenges regarding degradation of foraging habitat. The analysis has looked at both short and long-term effects. Some of your challengers neglect to fully look at long-term effects which are extremely important. The following quotes are from (pages 77-79).

*“Approximately 244 acres of foraging habitat would be degraded and would continue to function as foraging habitat after all thinning treatments. The 244 acres represents approximately 27 percent of the available foraging habitat in the assessment area. Foraging habitat would continue to function as foraging habitat post-project as canopy cover would be retained at or above 40 percent (Solis, Jr., D. & R.J. Gutierrez, 1990) and basal area in mixed-conifer stands would not be reduced below levels consistent with maintaining foraging habitat (Irwin, et al., 2012). Residual understory trees would still provide and continue to contribute to existing and future vertical structure. The largest, dominant, codominant and intermediate trees would be retained in clumps (as opposed to even spacing) and Forest Plan snag and CWD*

*retention requirements would be met, if not exceeded, contributing to NSO prey species cover and habitat in the short term.*

*While it is not the project's purpose to eliminate disease and insects, reducing these disturbances to endemic levels and lowering the risk of stand losses would enhance the long-term availability of foraging and dispersal habitat in the assessment area. Any short- to mid-term reductions in foraging quality due to the project are considered relatively minor and would occur over 244 acres (27 percent of available foraging habitat in the assessment area). A reduced risk of stand-replacing insect, disease and/or fire effects would be realized on 3,965 acres, including 2,123 acres of NSO habitat. This would have meaningful beneficial effects to the long-term sustainability of NSO habitat (see Forest Health and Growth starting on page 53).*

*Thinning and fuels reduction treatments within all stands are expected to accelerate development of larger and more sustainable stands with characteristics indicative of nesting/roosting habitat. Forest stands in earlier stages of development provide few benefits to NSO as they are deficient in CWD, large snags and nest trees and high stand densities do not allow for flight maneuverability (Carey, 2006). Actively managing closed-canopy stands by removing some competition between trees can accelerate the creation of structurally complex forests needed by owls and their prey (Carey, 2003). While the short-term effects are not expected to disrupt nesting or foraging behaviors of NSO, and the long-term effects would maintain and improve the current limited habitat, the assessment area would likely only provide for one pair of owls over the long term. Treatments would improve existing habitat for any dispersing owls.”*

These statements highlight the need to implement the project as planned and Alternatives 3a and 2a would best meet the long term needs for potential NSO habitat.

One of the other issues is tractor piling. Some of your commenters raised issues with proposing tractor piling as part of a cost effective fuels treatment option. Page 82 of the EA discusses the impacts of the proposed alternatives to potential NSO prey species.

*“As described for the proposed action and Alternative 2a, the effects of slashing with mastication are expected to have a potential longer-term negative effect on NSO prey species, due to the longer period of time that masticated material can remain on the landscape and impede vegetation growth and nutrient cycling. Machine piling/burning does not leave a thick bed of chips or smaller fuels that could impede grass and forb vegetation growth, though it may result in more crushing of CWD. Fuels treated with hand slashing would result in a fuel model 11 on seven percent of the assessment area and 72 percent of the suitable NSO habitat. Fuel Model 11 is characterized by active fire in slash and herbaceous material that could transition to the crown canopy (Anderson, 1982). The Revised Recovery Plan for the Northern Spotted Owl states that “a necessity of any vegetation management treatment, regardless of its purpose, is to ensure that slash and other residual fuels generated as part of the project are adequately treated so as not to increase fire severity or risk” (USDI-FWS, 2011a p. III.37). Eliminating piling of residual surface and activity-generated slash would result in fuel loads that exceed Forest Plan requirements and if a fire occurred, fire behavior would be increased and control more difficult compared to the proposed action or Alternative 2a. Changing crown structure with thinning, while not effectively treating surface fuels would not reduce the likelihood of an intense surface fire that could ignite tree crowns (Graham, et al., 2004).”*

### ***“Cumulative Effects (for Alternative 7)***

*Cumulative effects of thinning would be the same as described for the proposed action as the same foraging habitat (244 acres) is treated with the same prescriptions under all action alternatives. Compared with the proposed action and Alternative 2a, there would be a higher probability for ground fire to spread to the canopy due to the dense surface fuels that would remain on the landscape from slashing (Fuel Model 11). This condition would be represented on 72 percent of the suitable NSO habitat treated, and six percent of the suitable habitat (including nesting/roosting habitat) in the spotted owl Action Area.”*

The above statements justify why you should not select Alternative 7. Only Alternatives 3a and 2a provide complete slash removal which will benefit prey species and the development of understory vegetation.

**There will be no significant impacts to the NSO through implementation of this project by selecting either Alternative 3a or 2a.**

### **TRACTOR PILING vs. MASTICATION**

The other main issue raised by some of the challengers has to do with impacts caused by tractor piling. Tractor piling has been used successfully for decades on the McCloud Ranger District. It is a cost effective tool for reducing non-activity and activity fuels. It has also been utilized without causing undo environmental effects. Tractor piling and subsequent pile burning are effective, economic, and cause no significant environmental effects. Tractor piling actually reduces the fuel loading whereas mastication does not reduce the current fuel loading it only changes the character of the fuel.

Page 70 of the fuels report discusses impacts to future fuel loadings and fire risk. The following statement found on Page 70 of the EA highlights the need to select either Alternative 3a or 2a. It displays why the selection of Alternative 7 could be detrimental in terms of meeting the project fuels objectives.

*“If fuels are treated under the hand slashing option, a fuel model 11 would be represented. This could occur on seven percent of the assessment area. A fuel model 11 is characterized by active fire behavior. In the event of a wildfire, fire behavior would be increased and control more difficult compared to Alternatives 2a and 3a. Eliminating piling of activity-generated slash would result in fuel loads that exceed the requirements outlined in the Forest Plan. This would also result in the possibility of increased fire activity and increased danger for firefighters in the event of a wildfire.*

*Mastication generates chips that can suppress herbaceous vegetation and lock up nitrogen (ERI, 2005). Graham, et al. (1994) suggests that dozer piling utilized to reduce fire hazard can assist in distributing coarse woody debris across the unit. Chipping, as occurs with mastication*

*destroys many of the characteristics of coarse woody debris that are important for nitrogen fixation, animal habitat and site protection (Graham, et al., 2004).*

*Graham et al. (2004) and Peterson, et al. (2005) found that potential fire intensity and/or severity in thinned stands are significantly reduced only if thinning is followed by reducing surface fuels created from the thinning operations. The most appropriate fuel treatment strategy is often thinning, including the removal of ladder fuels and decreased tree density, followed by prescribed fire, piling and burning of fuels or other mechanical treatments that reduce surface fuel loads. This method reduces canopy, ladder, and surface fuels, thereby reducing both intensity and severity of potential wildfires. Changing crown structure, while ignoring surface fuels, would only affect the likelihood of active crown fires – it would not necessarily reduce the likelihood of surface fires severe enough to damage soils or intense enough to ignite tree crowns (Graham, et al., 2004). Equipment used for piling (excavators or dozers with brush rakes) is more maneuverable than machines with mastication heads and also able to work on rockier areas. Pile and burn generally is more effective at removing thinning material from the forest floor, especially from the base of remaining trees (Peterson, et al., 2005). **Alternative 7 is not expected to be as effective as the Proposed Action.**"*

## **Soils Conclusion**

The issues raised by some commenters discuss the negative impacts by tractor piling to the soils resource. They generally contend that tractor piling has detrimental effects to soil productivity, compaction and erosion. The following statements are found on Pages 128-129 concerning impacts on soils based on the various alternatives.

***"All action alternatives would meet Soil Quality Standards and all other applicable Standards and Guidelines from the Forest Plan.***

*As shown in Table 37, Alternative 2a has fewer underburning and slashing acres, slightly fewer machine piling acres, but more pile burning than the Proposed Action. As compared to the Proposed Action, Alternative 2a would have slightly less impact in one 19 acre stand where a regeneration GTR would be replaced by thinning so less machine traffic would occur there. Less litter and duff would be consumed by underburning. Alternative 7 would produce less impact from machine piling and pile burning. **However, all action alternatives meet SQS and other applicable Forest Plan standards and guidelines. None of the alternatives would cause detrimental soil disturbance. All action alternatives would relieve the small amount of existing detrimental compaction by subsoiling.**"*

**Once again there is no reason to select Alternative 7 based on impacts to the soils resource.**

**AFRC wants to go on record in support of either Alternatives 3a or 2a for the Porcupine project. We believe Alternative 3a is the best alternative as it will deal with the insect and disease problem associated with the 19 acre ponderosa pine stand.**

There is a high likelihood this project will be challenged by groups who do not have an understanding of the need to adequately treat overstocked stands and stands with insect and

disease problems. Please keep us informed of any appeals/litigation that may occur due to your final decision. We would like to receive copies of those challenges and take an active role in any resolution meeting that may occur. Thank you for the opportunity to comment on the Porcupine Vegetation and Road Management Project EA.

Sincerely,

*/s/Richard J. Svilich*

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