



February 12, 2021

Ron Hecker  
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Dear Mr. Hecker:

This letter is in response to the request for comments from the Custer Gallatin National Forest (CGNF) regarding the proposed South Otter Restoration and Resiliency Project (SORR).

Representing members who purchase timber from the project area, the Intermountain Forest Association (IFA) appreciates the opportunity to provide comments.

***Purpose and Need***

IFA agrees with the purpose and need as stated in the scoping notice to “improve forest resiliency in ponderosa pine forested areas, provide for biological and structural diversity, reduce the risk of large-scale catastrophic wildfire, and reduce fuel loads in existing forested stands” and “also to improve or maintain wildlife habitat, refresh native grasslands and forested areas that are structurally diverse, to provide for local jobs, services and products.” As evidenced by the wildfire history in the project area, managing existing forested stands is critical while fostering forest recovery in areas burned by high severity fire. IFA is also appreciative of recognizing the need to support local jobs, services and products as part of forest management. Forest products companies that may purchase timber from the project area are in immediate need of raw material to sustain the health and well-being of local communities.

***Proposed Action***

Big picture, IFA is supportive of using commercial and non-commercial harvests, and prescribed fire as management tools in the project area. However, there are some aspects of the proposed action that require adjustment.

First, proposing to use group selection in commercial thinning treatments is not compatible with meeting the purpose and need. As stated on page 8 of the notice, "Following harvest, commercial thinning units would be considered fully stocked and canopy gaps would be minor." This is in contrast to the established needs of the treatment area, where 48 percent of the warm-dry pine in the project area is high (60+ percent) canopy closure and in the 10-15" diameter class the project aims to reduce to desired proportions. Further, the proposed action proposes to remove as little as 20 percent of the trees in the commercial thinning units and states that openings would only represent 5-35 percent of the treatment area. Again, this is not a significant enough change in stand conditions to move the needle on insect and fire risk. Although the notice recognizes the need to substantially reduce canopy and tree density, the proposed action would do little to address that need.

Additionally, ponderosa pine often responds poorly to group selection and creates difficult stand structures to manage into the future in frequent fire return intervals as portions of the treated stand are left at densities that continue to present a hazardous fuels concern. Thinning across the entire treatment area to low basal areas (ex 40 sq. ft.) produces open stands, a uniform and more complete reduction in tree and canopy density, and reduced competition for resources which better promotes growth on remaining trees.

*We recommend altering the proposed action to reflect an intent to commercially thin to low basal areas (ex 40 sq. ft.) with relatively uniform spacing (where existing tree spacing allows) and to utilize this action across entire treatment areas. To the extent the Forest is concerned about heterogeneity, we believe the broken nature of the landscape will produce heterogenous stand conditions across the treatment area if commercial thinning areas are treated in entirety using our recommended desired condition.*

The notice describes prescribed fire as a proposed action over nearly all the project area. IFA supports the use of prescribed fire as a management tool in many forest systems, including ponderosa pine. IFA generally does not support the use of prescribed fire to reduce tree density where mechanical operations could access. Killing trees with fire only creates increased hazardous fuels in the future as those dead trees fall to the forest floor. Further, mechanical thinning operations offer the ability of the Forest Service to intentionally select which trees stay or go. With the use of prescribed fire, we offer the following recommendations:

*We recommend using prescribed fire in stands only after they have been mechanically treated where stand density reductions are an objective. This allows for safer burning operations and more complete fuel reduction.*

*Explore all opportunities for mechanical treatment of forested stands, actively engaging and working with purchasers to identify the ability to operate equipment in the treatment area.*

## ***Timeline***

Although the scoping notice describes the proposed treatments and acres associated with those treatments, it does not describe a timeline for implementation. The project area has shown, over time, to be at high risk of wildfire. Further, the purpose and need provide compelling evidence of the need to immediately treat the remaining forested stands in the project area. Completing the commercial thinning operations as quickly as possible would also provide additional prescribed burning opportunities in the project area.

*We recommend implementing all commercial thinning operations within the next five years to ensure effectiveness of the treatments and also to ensure interest and ability from the forest products companies. NFMA and MYSA provide allowances for additional harvest in areas at imminent risk of wildfire damage or insect infestation – clearly demonstrated in the project area.*

Within the proposed treatments and strategies table, the group selection objective is described as to “promote 2-3 story structure...” Given the purpose and need of the project, and recognizing the desire for high frequency fire return intervals, *we recommend against multi-storied stand structures, beyond natural regeneration, due to the likely existence of ladder fuels associated with those stands structures.*

## ***Goshawks***

### **Goshawk**

We encourage the Forest to include the findings from Graham et al (2015) in any potential discussions of goshawks that may be located in the project area. Big picture, Graham (2015) aims to correct long-running assumptions that goshawks require buffer areas of high density forest. Graham, with Reynolds, (2015) writes, “Also, Reynolds and others (1992) recognized that high forest canopy cover was an essential component of goshawk habitat, especially in the older structures. *As such, their canopy recommendations only applied to older vegetative structures, which, at fine scale, could be less than 0.25 acres (.01 ha) in size* (emphasis added). This is an important concept when designing... forest conditions that are resilient to mountain pine beetle activity and yet capable of supporting goshawks and their prey.”

Graham (2015) goes on to recommend a silvicultural system that, “Using Reynolds and others (1992) as a template,... create[s] and maintain[s] forest conditions for the goshawk and its prey...” Over a period of 100 years, the stand conditions under that developed recommendation never exceed 78 sq. ft. basal area.

## ***Northern Long Eared Bat***

Extensive documentation shows NLEB benefit from forest management activities, such as those proposed in the SORR.

Among other things, peer reviewed literature, along with FWS and FS analysis find:

- “Vegetation management activities that lower tree density may have some positive effects on the bat (78 FR 61055).”
- “On the landscape scale, activities to make forested stands more resilient to catastrophic wildfires and insect and disease epidemics are likely to have an overall positive effect . . .” Black Hills National Forest Draft BA at p. 76.
- “Studies have found that female bat roosts are more often located in areas with partial timber harvesting than in random sites, which may be due to trees located in more open habitat receiving greater solar radiation and therefore speeding development of young (78 FR 61060).”
- Cryan et al. (2001) found evidence of timber harvesting, often heavy, within all but three of the roost plots used by the northern long-eared bat in the southern Black Hills. Black Hills National Forest Draft BA at p. 78.
- Broders and Forbes (2004) discusses the negative correlation between roost sites and conifer cover and goes on to state, “A roost site was 24 times more likely to be in a shade-tolerant deciduous tree than a coniferous tree, and trees in the mid-decay classes were 5.2 times more likely to be used than live or recently dead trees.”
- “Silvicultural practices could meet both male and female roosting requirements by maintaining large-diameter snags, while allowing for regeneration of forests. (78 FR 61060).
  - o “Fewer trees surrounding maternity roosts may also benefit juvenile bats that are starting to learn to fly”. (78 FR 61055, italics added)
- “Cryan et al. (2000) found the relative abundance of reproductive females decreased as elevation increased in the southern Black Hills . . . . reproductive females may be constrained from roosting and foraging in high elevational habitats . . . .” Black Hills National Forest Draft BA at pp. 57-58.
- Northern long-eared bats roosted primarily in crevices in late-decay stage snags . . . . The mean decay stage of roost trees was  $5.5 \pm 2$  [1=alive 7=decomposed]. (Cryan 1997, Cryan et al. 2001).
- Cryan et al. (2001) concluded that timber harvest and tree thinning activities are not expected to decrease the long-term suitability of these areas as northern long-eared bat roosting habitat.

- “The effects from ground disturbance and habitat modification resulting from vegetation management treatments are likely to be insignificant in relation to prey availability or foraging habitat.” Black Hills National Forest Draft BA at p. 79.

Additional benefits to the NLEB from timber harvest activities have been detailed in other research. Timber harvest directly benefits NLEB prey through habitat improvement which is likely to indirectly benefit NLEBs during the summer roosting season through similar mechanisms as described for prescribed burning (80 FR 18004, Lacki et al 2009).

Illustrating the suppressive effect from dense forest on understory plant communities, many peer-reviewed publications have found understory production and diversity are negatively related to overstory density (Smith 2011, Uresk et al 2000, Uresk and Severson 1989). Because of the limitations imposed on understory plant communities under dense forests, it follows that many other peer-reviewed publications have found understory production and diversity respond positively to forest management activities that reduce forest tree and canopy density (Stoddard et al 2011, Smith 2011, Dodson et al 2008, Logar 2007, Moore et al 2006, Griffis et al 2001, McConnell and Smith 1970). The scientific literature generally concludes that reducing forest canopy cover through mechanical removal reduces competition for resources and, at the same time, increases the abundance of certain critical resources including sunlight and water. These findings follow the described effects from prescribed burning where understory production, abundance, and richness are increased which, in turn, directly benefits prey species of the NLEB. Although it is difficult to quantify the positive effect from timber harvest on NLEB fitness resulting from increased prey availability, NLEB individuals will benefit from increased prey availability during the summer roosting season in areas where forest canopy cover has been reduced.

### ***Other Issues***

- When appraising timber from mechanical treatments, all material below 9 inches DBH should be appraised as POL or non-saw.
- All POL or non-saw material should be, contractually, subject to agreement. This would help to reduce transportation costs for purchasers traveling from the Black Hills or eastern Montana, and would also bolster the 5-9 inch trees which are currently lacking compared to the desired conditions in the scoping notice.
- Any roads created, reconstructed, or maintained should be left open or closed to non-administrative use. Decommissioning roads only serves to reduce access for firefighting operations and adds additional costs.
- Because many interested purchasers may be traveling from outside the immediate area, the Forest should exercise every ability to reduce operating restrictions. This would include any limitation on logging systems (unless limited by slope or other resource concerns), seasonal

restrictions for recreation uses and wildlife not otherwise “endangered”, among others. Reducing operating restrictions helps ensure project completion.

- We Encourage exploring, with cooperation from purchasers, potential treatment of slopes greater than 40 percent on frozen ground, through the use of tractor skidding, or other accommodations to protect resources.

### ***Special Recognition***

We are especially appreciative of the discussion and detail, in Table 4, of prescribed burning mortality limits in broad diameter classes. We believe all prescribed burning actions require the same level of detail provided for mechanical operations. Table 4 is an excellent start and we appreciate those efforts.

We also appreciate the effort undertaken to list acres for prescribed burning and other treatments by vegetation type/condition. A good example of this is the details provided in the table for NF-RX8-14 Non-forest vegetation prescribed burn. Those efforts did not go un-noticed.

- Kudos for clearly detailing mortality limits in broad diameter classes from prescribed burning. Table 4
- Kudos for listing prescribed burn acres by treatment area type (eg NF-RX8-14 Non-forest vegetation prescribed burn)

We welcome any discussion regarding any aspect of the SORR, and FS staff should feel free to contact us.

Thank you,



Ben Wudtke  
Executive Director  
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