

Data Submitted (UTC 11): 4/15/2022 12:00:00 PM

First name: Steve

Last name: Cole

Organization: None (an individual)

Title:

Comments: Hello,

I submitted my comments yesterday through this system but discovered an error in my submitted comments today. I have corrected the error and would like to replace my comment submitted on 4/14/2022 with the comments in the attached PDF.

Thank you!

Steve Cole

Everett, WA

Text of attached letter:

Please consider these comments for the 2020 Fire Affected Road System Risk Reduction (#61749) Scoping:

1. Proposed Treatment Road Segments & Road Status

The project website summarizes this project with the following statement:

[ldquo]Reduce the risks posed by fire-killed and injured trees that have fallen across or remain standing along important access routes of the 2020 fire-affected road system so that access to and through the burned area can be restored.[rdquo]

The Forest Service must better explain the [ldquo]important access route[rdquo] description for a number of the roads that have been included. The following road segments are included in the proposed list but are roads not accessible to the public. In other words, these roads are not shown on the current Motor Vehicle Use Map (MVUM) maps: (see attachment)

Since the Forest Service hasn[rsquo]t provided the public with the specifics of road milepost segments, the road numbers and approximate milepost segment lengths above are approximate and were constructed using an older copy of the Willamette National Forest GIS routed road network. If the Forest Service is determined to include roads which the public can never utilize, it should be prepared to justify its selection for inclusion. The list above is approximately 36 miles of road. Here is but one example within the Lionshead Fire area on the south/southwest side of Deadhorse Mountain: (see attachment)

In the map example above, roads 4696-702, 4696-699, 2225-464, 2225-466, and 2225-467 are all shown on the proposed action roads map but none of these roads are shown on the current MVUM. There are many, many

roads just like 2225-464 which the Forest Service has elected to include in their proposed list but these roads appear to serve absolutely no critical function. They are short, dead end roads to nowhere. Why have they been included?

2. Impacts to Northern Spotted Owl Habitat

This project has a high potential to impact Northern Spotted Owl and this needs to be analyzed in the EA. Sixteen miles of proposed road segments lie completely within the 0.5 mile Core Area of a Survey & Manage Northern Spotted Owl Observation (segments shown in red in the attached Figures 1 & 2). The list of road segments is as follows: (see attachment)

In fact, of the 300 total miles identified in the project, only 89 miles of road do not intersect a Survey & Manage NSO Observation Point core area. In recent years, Derek Lee has published articles in 2018¹ and again in 2020² on the topic of Spotted Owls and wildfire response. In both articles, Lee found that that mixed-severity fire including large patches of high-severity fire were not an immediate threat to Spotted Owl populations.

3. Tree Selection Criteria

As it should, the Forest Service is using its own technical publications to direct & guide the actions that are to be taken (Region 6 Danger Tree Guide). Unfortunately, when that document suggests that there is a low likelihood of failure during the timeframe that the project is based upon, the Forest Service has decided to go against its own guidance. Further troubling, this dynamic pertains to larger diameter trees. This would be an ideal opportunity to enhance and provide additional habitat qualities (in the form of large snags) that would benefit the region's Northern Spotted Owl population, which is widespread as my previous point touched on. Trees fall in the forest and there's nothing that will stop that. I would urge the Forest Service to heed the recommendations of its own technical guidance and not take action against recently killed Douglas-Fir trees greater than 20" dbh.

4. High Burn Severity Data as Project Foundation

The Forest Service isn't clear in its scoping document which burn severity data it is using to determine its project locations (RAVG or MTBS), and it also isn't clear whether or not the list of road segments have been field verified to confirm their status. This is an important point, especially if the Forest Service is solely relying on satellite derived data to justify the project road segments. DellaSala & Hansen (2015)³ found that, depending on which burn severity data was used, the results can overestimate the actual burn severity found on the ground. I would like to see the Forest Service verify that the proposed road segments match the suggested ground conditions.

Since the public is prohibited from accessing these areas, the only means available to review the information provided to us is from remote sensing. I have taken the time to compare all the proposed road segments against two Landsat-8 satellite images (3/9/2022 and 8/10/2021 for confirmation in areas of deep shadow or snow) to review the stand health in the vicinity of the road segments. I used bands 6 (SWIR-1), 5 (NIR), and 4 (Red) due to their ability to highlight healthy vegetation in rich greens and bare earth as magenta hues. The panchromatic band was also included in order to provide a little more sharpness.

I tried to assign a current condition status from one of three possible categories- burnt (75% or greater mortality along the road segment), partially burnt (50% of road segment length was healthy forest and/or forest mortality appeared to be dispersed), and lastly, a living stand (stand appears vibrant green).

Of all the identified road segments published in the scoping documents, 200 miles of road were burnt, 78.1 miles of road were "partially burnt" and 20.9 miles of road showed no signs of mortality. My concern from

these results is that approximately 1/3rd of the proposed project units should not be part of the project or their segment lengths have been exaggerated and should be reduced.

For context of what this looks like, I have included these image examples: (see attachment)

All three image examples above were taken from the March 7th, 2022 Landsat-8 image. The list of road segments along with my assessment is as follows: (see attachment)

Thank you,

Stephen Cole

Materials Cited in these Scoping Comments:

1. Lee, Derek E. 2018. Spotted Owls and forest fire: a systematic review and meta-analysis of the evidence. *Ecosphere* 9:e02354. <https://doi.org/10.1002/ecs2.3310>
2. Lee, Derek E. 2020. Spotted Owls and forest fire: Reply. *Ecosphere* 11: e03310. <https://doi.org/10.1002/ecs2.3310>
3. DellaSala, D.A., and C.T. Hanson. 2015. The ecological importance of mixed-severity fires: nature's phoenix. Elsevier, UK. (pg 326-328)