Data Submitted (UTC 11): 3/25/2022 6:00:00 AM First name: D.J. Last name: Duerr Organization: The Life Conservancy Title:

Comments: Please consider and address the following comments if the US Forest Service elects to pursue this project. This project is unjustifiable, it would significantly impact sensitive species, and it would exacerbate rather than mitigate the sustained yield problem. For these reasons I urge the agency to abandon the proposal and spend its limited staff time and resources on revising the existing forest plan that has outlived its legal and intended lifetime.

1. The Project Lacks a Valid Purpose and Need.

The Scoping Package presents various assertions for why logging spruce stands is needed. None of these reasons justify the project. Sustained Yield. One stated reason [mdash] and what appears to be the true motivation behind this project [mdash] is to provide economic support to local communities by providing wood fiber and creating jobs in a sustainable manner. This is the same argument the agency has used to justify past timber sales that have logged the forest at a non-sustainable rate, in violation of the National Forest Management Act and Multiple-Use Sustained-Yield Act. The agency cannot cut more trees to fix this problem and come into compliance with the law. This project would only amplify the sustained yield problem and associated harms to local communities.

The fact that the current forest plan did not schedule much spruce logging is not a reason to start cutting it now in a thinly veiled scheme to keep selling large numbers of public trees from this already badly overcut forest. Pressure from the timber industry [mdash] and from unethical politicians who receive financial contributions from the industry [mdash] is not a valid reason to go forward with this project.

Fire Risk. A different reason offered for the spruce logging project is create openings in "over-mature" spruce dominated stands that have increasing fuel loads and ladder fuels. The massive BHNF logging program has not reduced fire risk; by eliminating large fire-resistant yellow bark trees and replacing them with younger fire-prone trees, widespread logging has contributed to more forest fires and more intense forest fires. As the amount of sawtimber harvested increased, so did the number of fires and the sizes of fires on the BHNF. Spruce grows in higher elevation areas that are at lower risk of fire. Closed canopy spruce stands also tend to be cooler and moister than ponderosa stands. Creating more openings in these stands, and replacing spruce with young ponderosa pine, would make these stands more likely to burn catastrophically rather than reducing fire risk. There is no legitimate basis for authorizing this project under the rubric of fire prevention.

Over-mature v. Old Growth. The BHNF Forest Plan directs the agency to manage the forest for at least 5% old growth. Sadly, the agency has allowed so much logging that less than 1% of the forest now remains in a true old growth condition, and much of this is located in beauty strips along road corridors. SS-4C habitat that could become SS-5 is also well under forest plan objectives due to excessive logging. Despite the agency's awareness of the old growth shortage, the proposed spruce project specifically targets "over-mature" spruce (scoping notice at 5). Over-mature is an ambiguous term with a negative connotation conducive to justifying more logging. The term implies these trees have grown "too old" and must be logged to create younger stands. I believe the targeted spruce stands are in or near SS-5 condition. The agency should not be proposing to log stands that are in SS-5 or SS-4C condition, regardless of tree species. And the USFS should not use Orwellian euphemisms such as "over-mature" to mislead the public into believing these trees need to be cut.

Creating more Ponderosa Pine. The scoping notice asserts the proposed logging is needed to increase the occurrence of ponderosa pine and aspen in mixed conifer stands that are now dominated by spruce. However, this forest is already dominated by ponderosa pone and aspen. For perspective, the BHNF contains roughly 300

million ponderosa trees on about 900,000 acres and roughly 40 million aspen trees on 100,000 acres. In contrast, there are only around 20 million spruce trees on 50,000 acres.1 So there is nearly 20 times more ponderosa habitat and 2 times more aspen habitat. Since these stands are much more limited on the BHNF, the agency should be protecting this ecologically important habitat rather than letting it be logged to grow more ponderosa.

Sensitive Species. Many species in the Black Hills depend on spruce stands. For instance, there is a small breeding population of pine marten in the Black Hills, and this species is "generally associated with dense, white spruce dominated forested stands."2

The three-toed woodpecker is another sensitive species that would be adversely impacted by the project. It is already rare on the forest and "is most likely to use large stands of mature or old spruce" targeted under this proposal.3 The golden-crowned kinglet is also dependent on spruce:

"Prime habitat for golden-crowned kinglets is mid- to late-seral spruce with large diameter trees. [hellip] This bird is a spruce obligate, and this cover type has a limited distribution (21,681 acres or about 2 percent of the Forest land base) in the Black Hills. Habitat for this kinglet follows the distribution of spruce. Concentrations are located primarily southwest of Lead/Deadwood. White spruce structural stages 4A, 4B, 4C, and 5 are considered high capability summer habitat by the HABCAP model for this species. Currently there are 19,110 acres, representing 1,911 territories (10 acres/pair) available (USDA Forest Service 1996). Under the 1997 Revised Forest Plan the extent of this habitat would be 19,873 acres (1,987 potential territories) after 10 years."4

According to this 2001 disclosure, the 1997 Revised Forest Plan did not contemplate extensive logging of spruce but instead assumed spruce would continue to occur on about 20,000 acres. At that time there were only about 19,000 acres, which indicates there was not enough spruce to meet the forest plan goals for this habitat type. The proposed spruce logging project would alter the forest conditions in a way not contemplated in the forest plan and apparently take the conditions farther away from what the plan specifies.

Land snails and salamanders are also found in spruce stands and would impacted by the project. The best habitats for tiger salamanders "in the Black Hills are probably along riparian margins, and upland quaking aspen and white spruce stands."5 And regarding the striate disc snail, the USFS has previously acknowledged "Conversions of white spruce to ponderosa pine would reduce the natural boreal diversity and adversely affect this snail."6 Yet here we find the agency proposing to convert significant acreages of spruce to ponderosa.

Several sensitive plants would also be harmed by the proposed logging. Notably, Selkirk's violet (Viola selkirkii) "occurs in spruce forests [hellip] where it is commonly found in association with rotting logs and stumps, or on moss mats on rock outcrops (Marriott 2001)." "Trailing clubmoss (Lycopodium complanatum) is a boreal remnant species that occurs in cool, shady spruce or birch habitats[hellip]." And the orchid Platanthera orbiculate is also "closely associated with mid-successional spruce/birch boreal habitats in the northern Black Hills and Bearlodge Mountains."7

In light of the number of sensitive species that would be impacted by this massive spruce logging project, the agency should abandon this proposal and increase emphasis on protecting these uncommon habitats.

Heterogeneity v. Homogeneity. Another asserted reason for the project is to increase the structural heterogeneity in stands that are spruce dominated. The BHNF is the most heavily logged National Forest in the nation. Nearly every acre has been logged at least once and most areas have been logged repeatedly. Much of this logging has been authorized under the same rationale: that there was a "need" to increase the heterogeneity of stands. As a result this forest has become nearly homogenously heterogeneous, meaning it now has very similar patchy, fragmented ponderosa stands throughout forest. The proposed spruce logging would eliminate uncommon habitat conditions and create conditions more like what is already very abundant. In other words, it would shift the

forest towards a more homogeneous condition. This is indefensible.

Just because some of the target spruce stands may have similar structural stage conditions does not make them "homogeneous" or in need of logging. Spruce stands generally exhibit structural complexity [mdash] vertically and horizontally [mdash] much more so than ponderosa pine and aspen stands. Logging spruce stands to create "more of the same" kind of habitat conditions (presumably with a long-term goal of growing more ponderosa trees that could be sold decades from now) will decrease habitat diversity and life diversity. Simply put, there is no credible basis for logging more spruce under the guise of increasing heterogeneity.

2. A Forest Plan Amendment and Site-specific EIS are Required.

In light of the fact that the agency has not presented a valid purpose and need for this proposal, I don't see a need to comment on other aspects of the proposal. When a project is unjustified and unjustifiable it should not be implemented. Period. However, in the event the USFS elects to pursue the project anyway, the agency will have to amend the forest plan to address an expansion of the logging program beyond what was contemplated in the plan. The forest plan and programmatic EIS did not contemplate or consider logging "on up to 25,000 acres of spruce dominated forest stands" (scoping notice at 6). The significant forest plan amendment will have to be accompanied by a supplemental programmatic EIS.

Furthermore, a site-specific project EIS is needed to analyze and disclose the likely significant impacts of the spruce project itself. The EIS must include the following information.

* A full analysis of potential impacts to species associated with spruce habitat on the forest. Please list all sensitive and uncommon species that might be affected, disclose their estimated population sizes and the numbers of individuals that could be impacted. This information is needed for me and other members of the public to understand whether the proposed activities could contribute to a significant reduction in any of these species or complete extirpation from the Black Hills.

* Include maps showing the proposed treatment areas in relation to known areas inhabited by pine martens rare, sensitive land snails, sensitive birds, and other sensitive species. The "species maps" available at https://ebird.org/explore contain records of bird sightings on the forest. If there is a risk any species (e.g., pine martens) may be trapped, killed or collected as a result of disclosing their locations, the locations can be redacted from the EIS and public record, but this information must be made available to the decisionmaker to ensure a fully informed decision is made on whether the project should proceed in light of the potential impacts to vulnerable species.

* Include maps and tables displaying structural stage and patch / stand size information for the targeted stands. This should include disclosure of the sizes and locations of all SS-4C and SS-5 stands in relation to the proposed logging. The EIS should also include data on the abundance and locations of SS-4C and SS-5 stand conditions elsewhere on the forest. This information is necessary so that I, other members of the public, and the decisionmaker can determine whether the proposed logging would protect or eliminate these important and uncommon habitat types.

* Include maps showing the locations of proposed treatment areas in relation to the lands deemed not suitable for timber harvest. This information is needed to allow myself, other members of the public, and the decisionmaker to determine if the agency is proposing to authorize logging on areas that should not be logged. Logging should not be allowed on lands already determined to be unsuitable for timber harvest.

* Include a graph showing the annual timber volume harvested versus the annual number of acres burned by fires. This information is needed to allow myself, other the members of the public, and the decisionmaker to determine whether logging of the type proposed is likely to reduce fire risk or increase it.

* Include graphs showing the annual timber volume harvested versus the number of people employed by the timber industry. These graphs will show that as timber volume increased over the past 5+ decades, the number of people employed by this industry (and the number of timber mills) also decreased significantly. This information is needed in the EIS because the scoping notice has predicated this project on an assertion that the project is necessary to provide economic support to local communities by providing wood fiber and creating jobs in a sustainable manner. If I and other members of the public are provided with accurate information about the true relationship between the numbers of timber jobs and the timber sale volume, we will be able to judge for ourselves whether this project can be justified in terms of creating jobs in a sustainable manner.

* Provide an appendix containing all records (letters, emails, meeting notes, etc.) wherein any representative of the timber industry has asked the USFS to increase logging of spruce on the BHNF. This information is needed to help me and other members of the public understand whether this spruce project was conceived and pursued in response to the industry's desire to cut more public trees from this forest after it has largely depleted the supply of harvestable ponderosa pine trees.

Finally, in the event the agency decides to pursue this project, it will need to prepare a supplemental NEPA study on all previously authorized projects that are not yet completed where the EA, EIS, BA or biological opinion was predicated on an assumption that spruce habitat on the BHNF would remain at around 20,000 acres. If the agency is going to now allow extensive logging of this scarce spruce habitat, those prior studies will no longer be valid, and the decisions predicated on those studies will therefore also be rendered invalid.8

D.J. Duerr

FOOTNOTES

1 B.F. Walters et al., Forests of the Black Hills National Forest, Resource Bulletin NRS-83, USDA Forest Service, 2013, Figures 2 and 8.

2 Biological Evaluation for Sensitive Species, BHNF Noxious Weed Management Plan, Appendix C, page 16.

3 2001 Biological Evaluation for Sensitive Species, BHNF Noxious Weed Management Plan, Appendix C, page 25.

4 Ibid at 26 (emphasis added).

5 Ibid at 35.

6 Ibid at 39 (emphasis added).

7 Ibid at 44.

8 See, e.g., ibid at 26 (noting ("Currently there ar 8 e 19,110 acres, representing 1,911 territories (10 acres/pair) available (USDA Forest Service 1996). Under the 1997 Revised Forest Plan the extent of this habitat would be 19,873 acres (1,987 potential territories) after 10 years."