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PILCHUCK AUDUBON SOCIETY
Champion for the Environment

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13 March 2023

Greta Smith, District Ranger
Darrington Ranger District
1405 Emens Avenue North
Darrington, WA 98241

Submitted electronically to: https://cara.fs2c.usda.gov/Public//CommentInput?Project=61659

Dear Ms. Smith:

Pilchuck Audubon Society represents over 1,000 members in the north Puget Sound region of Washington State. Our mission is to conserve and restore natural ecosystems focusing on birds and other wildlife for the benefit of the earth's biological diversity. Our members use the National Forests and Wilderness areas for various forms of passive recreation including bird and other wildlife-watching; hiking, camping; gathering berries, mushrooms, and medicinal plants; and spiritual renewal.

This letter constitutes our comments on the draft Environmental Assessment (EA) for the North Fork Stillaguamish Landscape Analysis (NFSLA). We attach and incorporate by reference the joint scoping comments submitted by us with Skagit Audubon Society for this proposal, as most of the concerns raised therein were not resolved in the EA.

We reiterate the need for developing a full Environmental Impact Statement, for the reasons detailed in our scoping letter. Logging on up to 17,000-plus acres as implied by Table 26 in the draft EA (though never explicitly announced in the text) can hardly be insignificant. Furthermore, because the EA did not study an option to apply silvicultural treatments without commercial thinning, we do not feel that a full range of alternatives was presented as stipulated by the National Environmental Policy Act (NEPA), which requires environmental analysis documents to "rigorously explore and objectively evaluate all reasonable alternatives." (40 CFR § 1502.12(a))

Throughout the draft EA, potential adverse effects—including but not limited to those on climate change (p. 28), water quality (pp. 40, 42), fish (p. 48), and wildlife—are dismissed as so small compared to the effects occurring on State administered and private lands (p. 51), or to the total area in a particular classification (e.g. p. 75, Spotted Owl Critical Habitat), as to be insignificant. At the same time, the Forest Service asserts that the beneficial effects on each of these components of the landscape will be significant! If the area involved is too small for problems to matter, how then can the changes in such a small area make a positive difference?

We note that the "Past and Present Actions" section on page 30 of the Silvicultural Specialist Report refers (by name) to conditions in the North Fork Nooksack watershed, not the North Fork Stillaguamish. This erratum should be corrected immediately, and additional time allowed for public comments.

Purpose and Need

Again, we refer to our scoping comments regarding the spurious nature of the alleged need for thinning to create or enhance old growth characteristics. While true benefits of the proposal are questionable, harms to forest health are likely. For example, the EA (p. 66) and Silvicultural Specialist Report (p. 28) point out that laminated root rot and heterobasidian root rot, both common in the area, are likely to be exacerbated by thinning. Natural thinning selects for the strongest genetics for disease resistance and survival under current (modified by climate change) conditions. In contrast, commercial and precommercial thinning selects trees based on economic criteria.

The rationale given for thinning to promote healthier, more diverse forests also completely ignores important work in recent years by Suzanne Simard[1] and others showing the interdependence of plant communities. These scientists have found that trees preferentially support their genetic offspring; thus, removing trees without regard for such connections will weaken the remaining trees. It has also been demonstrated that resistance to diseases can not only be inherited, but can be transmitted between trees that are not genetically related. Since we don't know which trees have these properties, we risk destroying them and eliminating this benefit from the entire community. These are just a few examples of how human attempts at improving on nature can go badly awry.

Furthermore, the stated need to artificially create early seral habitat in the North Fork Stillaguamish watershed is unsupportable, especially when considering the highly cutover adjacent State and private lands. It can also be anticipated that events related to climate change such as increased occurrence of wildfires, landslides, drought, windstorms, and insect mortality will provide abundant openings for the establishment of early seral habitat in the near future.

Buried in the reforestation discussion on page 67 of the EA, the real motivation for the NFSLA is revealed: "regeneration would be pre-commercially thinned at 10-15 years of age in preparation for additional commercial entries as part of the rotation." Spoken like a true tree farmer, this language—and intent—have no place in a proposal with the purported objective of favoring old growth forest characteristics.

Condition Based Management

The concerns raised in our scoping letter around Condition Based Management (CBM) are still valid, although we were pleased that the Forest Service has chosen not to apply this method of land use planning to the entire project. Both the Environmental Protection Agency (in Region 8 comments on Environmental Assessments for projects in the Dixie and Custer Gallatin National Forests) and the American Bar Association have raised similar concerns, that "CBM operates to circumvent the National Environmental Policy Act (NEPA) review framework by postponing site-specific analysis until the Forest Service implements the project, which effectively excludes the public from site-specific decisions, reduces transparency, and removes incentives for the agency to avoid harming localized resources."[2] CBM should be removed from the NFSLA altogether.

Late Successional Reserve 802

With the exception of dropping clearcut logging from the proposal, our concerns remain about the NFSLA plan's threat to the integrity of the Late Successional Reserve (LSR) forests that comprise most of the Finney Adaptive Management Area (AMA). We remind the Forest Service that the goal of the Finney AMA is

[1] Simard, Suzanne. 2021. *Finding the mother tree—discovering the wisdom of the forest.* New York: Alfred A. Knopf, Random House.

[2] https://www.americanbar.org/groups/environment_energy_resources/publications/fr/20210510-the-us-forest-services-expanding-use-of-condition-based-management/

"[r]estoration of late-successional and riparian habitat components."[3] For reasons detailed throughout this letter and our scoping letter, we question whether the proposal will in fact achieve this goal. Cutting and removing large trees up to 26 inches dbh would blatantly defy this objective. If their death is truly necessary, these large trees should be left on the forest floor to provide much-needed large woody debris. The Northwest Forest Plan (NWFP) Standards and Guidelines prohibiting commercial logging of trees in this size class in LSR should be upheld.

Water Quality and Quantity

The EA contains conflicting statements about existing stream temperatures; on p. 37 it states that several creeks in the project area and the North Fork Stillaguamish River have been listed as WA Department of Ecology 303(d) impaired for stream temperature, while on page 40 it states that "most streams in the project area have a mean August temperature of less than 14 degrees C and would not exceed state water quality standards." On p.41-42, the EA dismisses effects of logging on stream temperatures by stating that they mimic natural processes where trees are lost. However, this logging would be done in a shorter period of time rather than gradually over many decades, exposing more water surface at a time to solar radiation and magnifying the effect on stream temperatures. Furthermore, increased sedimentation would result from the project, further contributing to warming of streams.

The EA (p. 42) states, "Removal of live vegetative cover can increase runoff and alter streamflows in forested watersheds…Such changes could cause accelerated rates of erosion, could contribute to slope instability or mass wasting events, and could lead to failure of road stream crossings and other infrastructure. Changes in water quantity could persist for up to 15-years (Verry 1986) and are more pronounced during wet cycles (Carrera-Hernandez et. al. 2011)." There has been a significant change in local rainfall patterns since 1986, and "wet cycles" seem to be an almost annual (or more frequent) event. Effects from landslides in the area, such as the infamous 1983 DeForest Creek/Deer Creek slide, have been known to persist for many decades longer than 15 years.

The EA's cumulative effects section under water quantity (p.42) dismisses past actions not "still contributing to cumulative effects" as "part of the baseline condition." This rationale neglects to consider effects of past roadbuilding and logging, to which the effects of the NFSLA would be added. These past practices provide the very rationale for undertaking the project, so they must be considered with current cumulative effects.

Roads

The detrimental effects of roads are well documented, including being "the most important source of accelerated delivery of sediment to anadromous fish habitats in forested watersheds of the Pacific Northwest" (EA, p.40). In addition, roads increase the risk of wildfire, noxious weed introduction, and human disturbance including toxic waste and other dumping, dispersed camping and off-road travel, poaching, and other wildlife harassment.

The EA fails to show that the project would result in no net increase in roads, as required by the NWFP in Key Watersheds such as the North Fork Stillaguamish. Table 6 in the EA specifies that 19 miles of new roads would be constructed, with an additional 4.3 miles on decommissioned roads (were these not removed from the road inventory when they were decommissioned?) and 39.64 miles on unclassified roads (of unspecified driveability, also not part of the USFS road system). In fact, it is possible that none of these roads are recognizable as such by wildlife at this time, a condition that is currently unverifiable due to snow conditions. Although we are told that these temporary roads will eventually be decommissioned, during the time that they

[3] 1994 ROD, D-13

are in use they represent an increase—potentially significant—in road miles, in violation of the NWFP direction for Key Watersheds, and adversely impacting Grizzly bear and Gray wolf habitat.

One possible solution to this problem would be to decommission an equivalent length of system roads prior to the construction of any new temporary roads, and then decommission the new temporary roads when they are no longer needed, prior to construction of other temporary roads.

Soil Erosion and Lanslides
In an effort to minimize the effect of logging activities on soil erosion, the EA (p. 58) asserts that the amount of "sediment produced from timber harvesting activities and road activities is less than one percent of the sediment produced by the DeForest Creek slide in 1983." But it is generally agreed that that very slide was CAUSED by excessive logging on the nearby slopes! So it is baffling that the NFSLA proposes logging above this very area. As previously mentioned, logging and roadbuilding significantly increase the risk of soil erosion and mass wasting, by increasing runoff and soil saturation, and destroying root structure that holds the soil in place.

Fish
The EA's evaluation of effects of the NFSLA proposal on fish (p. 47) omits consideration of increased temperature, which is highly likely to result from logging in Riparian Reserves. Obviously, increased sedimentation and flows resulting from the project would also impair fish habitat. The Biological Evaluation has determined that the project is Likely to Adversely Affect Endangered Species Act - listed fish species, designated critical habitat, and essential fish habitat for Pacific Coast salmon. That alone should trigger an Environmental Impact Statement to better evaluate and mitigate harm to these protected species—or better yet, withdraw the project altogether. The EA (p.51) asserts that any adverse effects are inconsequential because effects from inferior forest practices on nearby State and private lands are more severe. This is akin to a child arguing that their transgression is forgivable because their peer did something worse!

Wildlife
We reiterate the concerns raised in our attached scoping comments about Northern spotted owls (NSO), Marbled murrelets (MM), and other wildlife. If this project is to proceed in spite of its Likely to Adversely Affect determination for NSO and MM, it is critical that timing restrictions of noise-generating activities and other mitigation measures be strictly enforced.

Fire
This project would increase fire risk by reducing moisture content and increasing surface temperatures through vegetation removal, reduced shade, increased soil exposure to sun and wind (which also facilitates fire spread), and increased likelihood of human ignition by increasing road access.

Climate Change
Climate change is increasing peak flows and the frequency and intensity of flood events, droughts, erosion, and landslides—all of which are exacerbated by tree removal! A single mature Douglas fir tree can store 5,000 gallons of water, and release it slowly during drought months. When that tree is gone, so is the water—and instead of the next rainstorm being absorbed into its wood and foliage, the deluge washes topsoil into the streams, and may result in landslides and/or floods.

In addition to these services, mature forests are excellent carbon storage depots. According to a recent review, "Broad-scale thinning (e.g., ecoregions, regions) to reduce fire risk or severity results in more carbon emissions than fire, and creates a long-term carbon deficit that undermines climate goals."[4]

Cultural Resources

While we would not presume to speak for any Native American Tribe or Tribal member, we wish to remind the Forest Service—as admitted in the EA (p.33) that "huckleberries are not the only plant species of cultural importance." Indeed, many plant species traditionally used by indigenous and subsequent populations are dependent on forest ecosystems, including but by no means limited to cedar bark and roots and maidenhair ferns for basketry, edible fungi, and devil's club (*Oplopanax horridus*), among countless others.

Recreation

We do appreciate that the absurd trail decommissioning provisions have been dropped from this project. It is unfortunate that they were not replaced by trail reconstruction (e.g. Mt. Higgins, Niederprum, and Squire Creek) efforts that could have helped to alleviate overuse pressure on other areas of the Darrington and Mount Baker Ranger Districts.

In conclusion, we feel that the only positive components of the North Fork Stillaguamish Landscape Analysis plan are the ultimately reduced road footprint and aquatic organism passage (AOP) improvements. We urge the Forest Service to proceed with the planned road decommissioning and storage and AOP improvements, which have proven benefits, and dispense with the proposed logging and its unproven advantages and known adverse impacts.

Thank you for providing the opportunity to provide comment, and for additional information that was supplied upon request. For questions or further discussion, please contact me at president@pilchuckaudubon.org or Kathy Johnson at forest@pilchuckaudubon.org

Sincerely,

Bill Derry, President

[4] Law, B.E.; Moomaw, W.R.; Hudiburg, T.W.; Schlesinger,W.H.; Sterman, J.D.;Woodwell, G.M. Creating Strategic Reserves to Protect Forest Carbon and Reduce Biodiversity Losses in the United States. Land 2022, 11, 721. https://doi.org/10.3390/land11050721