

April 2, 2021

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Submitted electronically:

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<https://cara.ecosystem-management.org/Public//CommentInput?Project=58218>

RE: **North Fork Nooksack Vegetation Management Project #58218**

**List of concerns with
Mt. Baker Vegetation Management Draft Environmental Assessment (the "DEA")
dated as of March 4, 2021**

Dear Ms. Smith,

Thank you for providing the opportunity to comment on the DEA. Please accept these comments and enter them into the public record on Project 58218. I live in Maple Falls, Whatcom County, WA, and have hiked on many of the trails which will be impacted by this project, and am familiar with the access roads serving those trails as well as the stupendous views from both the access roads and the trails.

I. Overview of Plan

A. The project described in the DEA fails to preserve carbon sequestration provided by carbon storage by forests. With all the literature on the need to decrease carbon in the environment, it is unfortunate that the Federal government continues to ignore the science and instead focuses on timber harvests for National Forests, including harvests such as the subject project which are designed for a multi-year rotation cutting cycle extending out 50 years. Given the extraordinary environmental natural and human- caused disasters over the past decade and longer, and the now recognized need to decrease carbon in the atmosphere, it is irresponsible to cut this forest and to anticipate a rotation cutting cycle that extends out over five (5) decades. The Forest should be preserved.

- For more detail, I refer you to the Scoping Comment letter of the Evergreen Land Trust, dated July 1, 2020, pages 14-15.
- I also refer you to recent changes being made and further discussed by the State of Washington Department of Natural Resources, including "*rethinking the value of trees on state lands not as logs, but as trees to help address the twin crises of species extinction and climate warming.*" Page 1 of the *Seattle Times Sunday* issue, March 21, 2021, "*Saving Washington Forests for carbon storage, not logging*", <https://www.seattletimes.com/seattle-news/environment/amid-climate-crisis-a-proposal-to-save-washington-state-forests-for-carbon-storage-not-logging/>

It is important for the USFS to coordinate with the State of Washington DNR on the value of trees in the US National Forest in the State to address species extinction and climate warming.

B. The only climate change issues discussed in any depth in the DEA are the impacts of mechanized logging, rather than the impact of removing more forests from carbon sequestration. See pp 36-38 of the DEA. Carbon sequestration needs to be addressed for this project.

II. Incompleteness of the DEA

A. The DEA is incomplete as it is missing the following:

i) **the Biological Assessment** is being prepared, and the results of consultation are outstanding with the US Fish and Wildlife Service regarding the threatened and Endangered species: Spotted Owl and Marbled Murrelet; and

ii) **the Section 7 ESA consultation** for listed species and fish habitat under the Endangered Species Act, is incomplete (see page 55 of the DEA); and

iii) **Essential Fish Habitat consultation** for Chinook, pink and Coho salmon, is incomplete (see page 56 of the DEA)

B. The DEA is incomplete as the Wildlife Effects Analysis *incorporates by reference* the Project Record which was not provided to the public; the Project Record apparently includes additional information on assumptions, methodologies, stand evaluation criteria for Wildlife and environmental consequences:

i) *see pp 2,3, 12-15 of Wildlife Effects Analysis 1-30-21; and*

ii) *see page 58 of the DEA.*

Failure to include the Project Record as part of the Analysis documents results in the public not having a complete understanding of the Project proposed, and unable to make a meaningful determination as to the appropriateness of the DEA.

C. The DEA does not include a clearly identified No Action Alternative, i.e. Alt 3. Merely referring to the consequences of not choosing either Alt 1 or Alt 2 does not include a discussion of the benefits of No Action, and should be clearly mapped out and identified as such in the DEA.

D. The DEA is not clear as to the time schedule of the planned actions. References of 10-15 years, but no discussion of how much acreage per year, or where, or what years, and in some places the work is indicated to start in 2023. Such time schedule, as well as duration of work, and precise description of the parcels involved is critical for understanding the scope of the proposed project, and the consequences of the project.

III. Specific Comments on the DEA

A. The proposal to obtain approval and an exemption from the Regional Ecosystem Office, to maintain consistency with the Northwest Forest Plan, for thinning trees in LSR over

20" DBH up to 26" DBH, should be dropped from the Project. Trees over 20" DBH are old-growth and need to be retained for structure of the forest and for habitat. If the goal is to create old-growth forest, the USFS should retain the existing old-growth which even the experts say takes several hundred years to develop. See page 79.

B. There should not be a project specific amendment, or any other amendment, to the Forest Plan to exempt the subject Proposal from the indicated provisions, standards and guidelines ("The proposed project-specific plan amendment would allow non-commercial thinning within the Mountain Hemlock Zone MA-19 to enhance habitat for huckleberries.") *The 1990 Forest Plan called for a Study of these issues which was never conducted.* There is no justification or evidence in the subject Proposal for such an exemption.

C. There is inconsistency between the Scoping acreage of 5,733 acres and the Project acreage of 4711 acres, unless the difference is the acreage of the MA 5-B which was excluded from analysis in some places in the DEA and the Specialist Analyses. But oddly that acreage of MA 5-B is listed as 1,590 acres on page 52 so that cannot be the source of the difference. The inconsistency needs to be resolved, and clarified.

D. Regarding impact on recreation, it is inaccurate for the DEA to state on page 40 that *"It should be noted that the only recreation related issues brought forth during scoping was public safety and public access to recreation sites and experiences."*

- Throughout the Visibility Analysis, which is part of the DEA, visibility of the treated areas was recognized as an issue. See also pp 44 of the DEA, which acknowledges that the scenic quality of the areas could be altered, which surely is an issue for the public engaged in recreation in those areas.
- There are many users of this National Forest who access trails from Glacier Creek Road and Canyon Creek Road which are designated on page 42 as two of the three primary haul roads for the timber treatment. Not only will access be impacted during the harvest, but long-term visibility will be impacted. See Section VII below for more detail.
- The DEA Section on Recreation should be revised, pages 40-41 to cross-reference the DEA Section on Visibility Resources (pages 43-47) to reflect that not only is access and safety during plan treatment an issue for Recreation, but longer term the visibility of the treated sections are an issue for Recreation. The visibility of treated sections both next to the roads and extending further away, will have an impact for both drivers along the impacted haul and treatment roads, and hikers from trails such as Skyline Divide. The Visibility Analysis identified Skyline Divide as one of two areas most impacted by the Plan. Unappealing views of harvested areas will have a direct impact also on skiers, snowmobilers, hunters and others who use the roads to access the trailheads.
 - The Visibility Map #5 attached to the Visibility Analysis clearly identifies that the trailhead and at least 3 other view spots on the Skyline Divide Trail will have clear views of the thinning and treatment. In that large landscape, seeing clearcuts will stand out to the viewer, even if several miles away.

E. There are many issues for the Canyon Creek Drainage which is part of the proposed project:

- The community of Glacier Springs, WA, has historically experienced soil disturbance, increase in surface erosion and mass wasting of soil, and flooding due to *"Debris dam breach floods have developed in the Canyon Creek drainage after slope stability failures caused debris flows or landslides to temporarily dam Canyon Creek"*. Page 49 and 50 of the DEA.
- Debris dam breach floods and deep-seated landslides have been raised as concerns by the Whatcom County Public Works Dept, and by Carl Weimer, former chair of the Whatcom County Council, in their scoping comments.
- Neither Whatcom County Public Works Dept nor Carl Weimer was listed on page 68 as contacted by the FS for preparation of the DEA; however, clearly Whatcom County has significant issues with any proposed logging in the Canyon Creek Drainage .
- The Whatcom County Public Works Dept raised significant issues regarding deep-seated landslide issues in the Canyon Creek drainage in its comment letter of July 2, 2020, and requested several steps to be taken by the FS before proceeding further, including but not limited to the following:

"5. A susceptibility analysis for shallow and deep-seated landslides should be done for all proposed timber removal or road areas. This request is based on the extensive landslide history in the Canyon Creek watershed such as during the 1989 and 1990 events. While not as dramatic, several shallow landslides formed small landslide dams during those events and combined routed many thousands of yards of sediment to the Canyon Creek's channel."

- In addition, as stated on page 48 and 49 of the DEA, *"However, there are a few project units in both Alternatives 1 and 2 which are within the mapped boundaries and margins of Jim Creek Slide and Bald Mountain Slide shown by Washington Geologic Survey."* In its scoping letter of July 2, 2020, Whatcom County Public Works Dept raised concerns specifically regarding these two slides, which do not appear to have been addressed by the FS.

The FS is urged to meet with Whatcom County Public Works Dept to address their issues and to take necessary steps to protect life and property, and to amend the DEA to reflect how those issues will be handled to the satisfaction of Whatcom County.

F. Turning to the Nooksack River, on page 52, the DEA implies that since the Riparian Reserve Management Allocation is 1,590 acres and thus 15% of the subwatershed, and likewise that the same 1,590 acres are merely 4% of the Watershed, that the treatment proposed is not significant. The DEA states that the effect on recruitment of trees to instream usage would be "minimal and undetectable..." and "effects on fish and fish habitat from vegetation treatments...would be small." And, on page 54, that the effects would be "negligible and certainly undetectable." Likewise, on page 53, the DEA states that the effects on fish from increased sedimentation from various roadwork associated with the vegetation treatments would be 'minimal'.

But the *Visibility Resource and Wild and Scenic River Effects Analysis* indicates that due to the pending status of the River as a Wild and Scenic River, ***no treatment action should be taken.*** See Section VI subsection D below of this comment letter. Again, the inconsistency between the DEA and the Visibility Resource and Wild and Scenic River Effects Analysis must be resolved, and the DEA revised and reissued.

G. Throughout the DEA (see page 16 for example) and the Specialist Analyses (see Silviculture Analysis, page 18), the preferred cutting would leave 35% SDI max density, and contemplates multiple subsequent entry commercial thinning. Effectively, this plan is approaching the Forest as a 'plantation' in terms of density, even if reforestation would occur both naturally and by planting.

- 35% SDI max density can easily result in windthrow, which would further decrease the density of trees left for habitat or structure.
- 35% SDI max density would result in fragmented habit and connectivity corridors.
- Even at 47 years after harvest, in **Alt 1**, at page 19 and 20 of the Silviculture Analysis, there would be an increase **only to 55-58% canopy** closure after 47 years which would be unacceptable for habitat for the Marbled Murrelet and the Spotted Owl.
 - After thinning in 2023: 22-25% canopy closure and 37 – 41% SDI max density where Variable Density Thinning occurred
 - By 2070: 55-58% canopy closure and approximately 67% SDI max density where Variable Density Thinning occurred, and 81% canopy closure and 68% SDI max density where Variable Retention Harvest occurred.
- Under **Alt 2**, at pages 24 and 25 of the Silviculture Analysis, the regrowth of canopy closure and SDI max density would be only slightly better than under Alt 1:
 - 2023: Variable Density Thinning: 22-47% canopy; 36-57% SDI max density
 - 2070: Variable Density Thinning: 53-66% canopy; 55-79% SDI max density

An increase to 53-66% canopy after 47 years under Alt 2 is only marginally better, for the Marbled Murrelet and the Spotted Owl.

The preferred cutting targets for SDI max density and for forest canopy clearly focus on the timber harvest rather than the creation of appropriate habitat for listed species, and should be increased so as to create appropriate habits more quickly.

H. The argument that the harvest and thinning would benefit the Marbled Murrelet and Spotted Owl makes no sense whatsoever. Both species are Listed Species who are rapidly declining in population. The Marbled Murrelet may well die off before any 'new' old-growth is developed. Neither bird preferentially nests in small islands of old growth surrounded by bare or thin patches of harvest and thinning which will not grow back for years. See Section IV following below.

I. Regarding all of the specific objectives included in the various Legal Obligations on the FS, listed under "Preliminary Review" on pages 68 - 78 of the DEA, how are those obligations going to be monitored and mapped? Who is going to provide, and pay for, staffing for that monitoring and mapping? Monitoring and mapping are critical concerns for all parties, and must be included in the DEA. Merely a statement by the FS at this stage, in the DEA, that Project is "in compliance with" the listed Legal Obligations does not address how to ensure actual implementation in fact on the ground. Given the significant issues with the Project, there should be a mechanism to ensure compliance by the contractors, with compliance provided by independent parties.

IV. Specific Comments regarding the Marbled Murrelet and Spotted Owl (see the DEA and the Wildlife Effects Analysis 1-30-21 (the "WEA")):

A. The DEA and the Wildlife Effects Analysis fail to take into consideration, and do not even mention, the recent 2019 decisions by the State of Washington Dept of Natural Resources regarding both:

- i) the Marbled Murrelet Long-Term Conservation Strategy; and
- ii) the State of Washington's Sustainable Harvest Calculation.

The cumulative effect of the ongoing timber harvests on nearby DNR State lands, under the 2019 SHC and the 2019 MMLTCS do not protect the Marbled Murrelet sufficiently to allow it to survive and flourish if the DEA is implemented. *"...According to DNR's analyses (FEIS p.4-61) the adopted plan will result in fewer marbled murrelets on DNR-managed lands at the end of 50 years than are present today, even under the most optimistic set of assumptions."* See Statement from the Washington Environmental Coalition, Dec 4, 2019.

B. The Wildlife Effects Analysis is incomplete for both the Marbled Murrelet and the Spotted Owl. *See page 2 of the Wildlife Effects Analysis which states that "no new surveys were conducted for the Marbled Murrelet and the Spotted Owl since no nesting habitat would be removed".* However, the 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (the "ROD" or the "1994 Record of Decision"), clearly refers on page 46 to **"mandatory pre-project surveys."** (*Final SEIS at 2-28*). Without surveys, one cannot accurately determine the inventory of existing habitat so as to preclude removal of existing habitat. Merely relying on historical surveys is not accurate in general, let alone for two Federally Listed species.

C. On page 9, the WEA states that those treatments are 'long-term beneficial' notwithstanding that long-term benefit treatments are defined as being one or more decades (see page 1 of the WEA), in duration to occur, and does not take into consideration the current and future declining population of Marbled Murrelets and Spotted Owls.

D. However, the WEA states, page 9 for the Spotted Owl, and on page 10 for the Marbled Murrelet, that there is short-term risk that the treatment *'may affect, likely to adversely affect the Marbled Murrelet (and Spotted Owl, respectively,) and its designated critical habitat.* Short term is defined, on page 1 of the WEA as being less than 5 years in duration. Given the Threatened Status of both birds, and the issues with historical and future clear-cutting on neighboring State and private Lands, even short-term risk is unacceptable for the Marbled Murrelet and the Spotted Owl.

E. Even though page 61 of the DEA states that *'no suitable spotted owl or marbled murrelet nesting habitat would be degraded or removed'*, the variable density thinning under both Alt 1 and Alt 2 is in critical habitat for both the Spotted Owls and the Marbled Murrelet (see page 9 of the WEA) and such removal has multiple consequences:

- such variable density thinning, as discussed on page 9 of the WEA, and page 63 of the DEA:
 - impacts the Primary Constituent Elements of Spotted Owl critical habitat, and

- removes the Primary Constituent Elements of MM Critical Habitat, and
- reduces canopy to approximately 25 % in the treated areas of critical habitat for both the Spotted Owl and the Marbled Murrelet.
- There is literature referenced on page 8 of the WEA that suggests large blocks of habitat are important in deterring detection by predators.
- MM and Spotted Owls are birds of the forest. What is being proposed would consist of single tree or multi trunked trees sparsely spread across the treatment area. Even though the WEA states that no nesting habitat would be removed, the treatment as described would not leave viable habitat for either bird.
- Furthermore, since on page 65 the DEA is stated that it is expected that commercial harvest of trees on non-federal lands is expected to continue, it stands to reason that it is even more important that there be viable nonfragmented habitat for both birds on federal lands as there will be less and less habitat on non-federal lands.

F. Question: how to correlate different listings of subject acreage impacted by the treatments:

- In a discussion of noise disturbance to the MM and the Spotted Owls, the WEA states on page 8 that of up to 525 acres of murrelet nesting habitat and up to 265 acres of spotted owl nesting habitat would be impacted by noise; but
- 123 acres of LSR Murrelet habitat is listed in the Silviculture Analysis at page 9, which is 3% of the entire proposed project.

There needs to be clearer and consistent identification of the acreage of existing and historical habitat, and the acreage impacted by noise.

Given that the WEA was written based on 525 acres and 265 acres, respectively for MM and Spotted Owl, impacted by noise, and that the WEA still concluded that there was short-term risk that *'may affect, likely to adversely affect the Marbled Murrelet and its designated critical habitat'*, if instead there are only 123 acres of LSR habitat, merely 25% of the habitat that resulted in such high short-term risk, a new analysis is required to determine if the merely 123 acres create a higher and longer term risk to MM and Spotted Owl.

G. The 1994 Record of Decision notes:

"There is one primary evaluation question with regard to the northern spotted owl, the marbled murrelet, and at-risk fish stocks: **Is the population stable or increasing?"**
Standards and Guidelines, page Implementation E-10, Attachment A to the ROD.

"Current protocol requires 2 years of surveys to assure that no marbled murrelet nests exist in areas planned for timber harvest. If behavior indicating occupation is documented (described below), all contiguous existing and recruitment habitat for marbled murrelets (i.e., stands that are capable of becoming marbled murrelet habitat within 25 years) within a 0.5-mile radius will be protected. The 0.5-mile radius circle should be centered on either the behavior indicating occupation, or within 0.5 mile of the location of the behavior, whichever maximizes interior old-growth habitat. When

occupied areas are close to each other, the 0.5-mile circles may overlap." **Page Standards and Guidelines C-10, Attachment A to the ROD**

"One hundred acres of the best northern spotted owl habitat will be retained as close to the nest site or owl activity center as possible for all known (as of January 1, 1994) spotted owl activity centers located on federal lands in the matrix and Adaptive Management Areas. This is intended to preserve an intensively used portion of the breeding season home range. "Activity center" is defined as an area of concentrated activity of either a pair of spotted owls or a territorial single owl. Timber management activities within the 100-acre area should comply with management guidelines for Late-Successional Reserves. Management around this area will be designed to reduce risks of natural disturbance. Because these areas are considered important to meeting objectives for species other than spotted owls, these areas are to be maintained even if they become no longer occupied by spotted owls." **Page Standards and Guidelines C-10 and 11, Attachment A to the ROD**

H. Overview: Canyon Creek Road: why harvest here at all given presence of critical habitat? The statement that "... *no nesting habitat would be removed...*" is inconsistent with all the statements throughout the WEA about the impact of 'treatment' on the Marbled Murrelet and the Spotted Owl. Leaving fragmented islands of nesting habitat does not provide habitat for survival of either of these Federally Listed Species. Where there are so many issues with cutting in Murrelet and Spotted Owl habitat, all cutting in and around MM and SO habitat should be dropped from the Project proposal.

V. Specific Comments re Mountain Goats

There are several concerns regarding MA 15, mountain goat habitat. First, the *Visibility Resource and Wild and Scenic River Effects Analysis* on page 3 makes two statements: "*Visual Quality Objectives consistent with adjacent management areas. The site itself will be managed to show **little to no evidence of human impact***" [emphasis added]. That latter comment is completely restrictive but the first statement is inconsistent with the second statement.

However, other parts of the documents indicated that there would be no treatment in the mountain goat habitat, so it is unclear what 'little to no evidence of human impact' means.

Is there in fact going to be some treatment? If so, how and what, since on Wells Creek Road, where the goats spend the winter and spring, is quite sparsely vegetated and is mostly bare due to the Barometer Ridge fire many years ago. This steep ridge has not regrown, since the fire, in many areas, and is subject to snow slides as there are no anchors. How could treatment be possible here?

There is nothing in the DEA that justifies such treatment, let alone explains what that treatment would consist of.

The Silviculture Analysis states, on page 3, that MA 15 is 50 acres. Given the risks of disturbing and damaging the goat habitat, including not only winter forage but also escape habitat, and in view of the other restrictions on MA 15, MA 15 should be dropped from the Project.

VI. General comments re Wildlife Effects Analysis

A. For the same reason that the DEA is incomplete as discussed in Section II above, the Wildlife Effects Analysis is incomplete as it does not include either 1) the Nooksack Wildlife Background Report in the Project Record, although it is incorporated by reference, or 2) the Biological Assessment nor 3) ESA Section 7 consultation nor 4) the results of consulting with US Fish and Wildlife Service. The public needs to be able to review those documents to accurately evaluate the Wildlife Effects Analysis.

B. On page 2 of the WEA, there is a chart defining Resource Indicators; however, there is no material in the WEA discussing the actual calculation of existing Resource Indicators. It appears that such a calculation is in the Nooksack Wildlife Background Report in the Project Record, which is not included in the WEA.

VII. General Comments re Visibility Resource and Wild and Scenic River Effects Analysis (the "VRA")

A. The Visibility Resource Analysis in its road analysis only looked at the Mt. Baker Highway, notwithstanding that significant work would be done along the Canyon Creek Road and Glacier Creek Road.

- Even though apparently the S&Gs and VQOs for LSR and Matrix permit 'maximum modification', from a public relations perspective the failure to consider the impact on the public who will be using the Canyon Creek Road and Glacier Creek Road, which are access roads for many major trails, is quite unfortunate and should be reversed.
- Significant treatments right next to the road will be distasteful to the public, and could result in negative impression of the Forest Service's failure to honor its "VISUAL RESOURCE MANAGEMENT Goal: Provide an attractive forest setting, emphasizing the natural appearance of areas seen from major roads and recreation sites." See page 4-93 of the Forest Plan.

B. The VRA acknowledges, on page 5, that the treatment 'may change the landscape as seen from primary secondary travel routes.' However, the VRA justifies the treatment by saying: "but visual quality objectives and guidelines associated with Partial Retention and Modification VQOs would be met". See above comments in Subsection A to the contrary.

C. The VRA is inconsistent in its descriptions of the modifications permitted:

- On page 4, the VRA says that '**partial retention**' is the 'most restrictive' VQO in the Management Areas in the project; but then
- in the table on page 3 of the VRA, the '**retention**' standard is utilized for MA 2A from primary road corridors and where trails cross 2A, and for part of MA 19.

The VRA needs to accurately revise its statements to reflect the limitations of some of the VQO modifications actually permitted, as discussed above, and to correct the inconsistencies.

D. The VRA on page 3 makes two inconsistent statements regarding MA 15, mountain goat habitat:

- "Visual Quality Objectives consistent with adjacent management areas"; and
- "The site itself will be managed to show **little to no evidence of human impact**" [emphasis added].

That latter comment is completely restrictive, but the first statement is inconsistent with the second statement.

Frankly, as stated in Section V above, other parts of the documents indicated that there would be no treatment in the mountain goat habitat, so it is unclear what 'little to no evidence of human impact' means. Further comments regarding mountain goat habitat and MA 15 are found in Section V above. Again, the VRA needs to be revised to remove inconsistencies. There should be no treatment in any of the mountain goat habitat.

E. The VRA states the following conclusions regarding the Nooksack River, which conclusions need to be incorporated into the DEA:

Page 5 of the VRA:

"The Forest Plan S&Gs for Wild and Scenic Rivers states that we are to "Maintain recommended rivers and streams to protect their highest classification level until Congress takes actions on preliminary administrative recommendation." The highest VQO classification is Preservation. This VQO allows ecological changes only. Management activities except for very low visual impact, are prohibited. Thus, a visual analysis was conducted with the highest and most restrictive visual classification in place."

Page 7 of the VRA:

*"Conclusion and Consistency. After reviewing the Forest Plan Standards and Guidelines for the visual resources for Wild and Scenic River land management allocations, and performing a viewshed analysis, it appears that Alternative 1, in regards to regeneration variable retention and or Alternative 2 variable density thinning unit 137c, is **not consistent** [emphasis added] with the Forest Plan. It is suggested that this unit be reduced in size and readjusted to stop at the edge of land management allocation 5B. **Until a resulting Wild and Scenic River designation is made for the Nooksack River. Forest Plan direction recommends that 5B is to be preserved and have the highest VQO classification applied to it.**" [emphasis added]*

Therefore, these recommendations should be clearly included in the DEA.

VIII. Silviculture Analysis

A. Page 13 of the Silviculture Analysis argues that treatment can speed up conversion to 'old-growth', but importantly acknowledges that *"the full suite of conditions that develop in old-growth forests over long periods of time cannot be expected to accelerate through a single thinning treatment"*. On page 12, the Silviculture Analysis states that old forests can take between 175 to 350 years to develop, and that old growth forests can take up to 450 years to develop. For Listed and Threatened Species that require and prefer old growth forests, that time line will be beyond their survival. Again, there is no good argument for cutting down old growth forests. The FS is treating these forests as plantations for timber harvest.

- Stands in Variable Retention Harvest would be planted for reforestation, while stands in the Variable Density Thinning areas are planned to be reforested naturally. Page 22.
- A precommercial thinning is contemplated for 10-15 years after the treatment in the Variable Retention Harvest stands. Page 22.
- A commercial thinning is contemplated for 40-50 years post-harvest in Variable Retention Harvest stands, with a second commercial thinning contemplated depending on site specific conditions. Page 20

The Canyon Creek LSR lands are described as 'core habitat' in the Executive Summary of the 1995 Canyon Creek Watershed Analysis, page ES 1, "*It includes core habitat key to the functioning of a late successional reserve*". If it is core habitat key to functioning of LSR, then it should not be harvested.

B. Inconsistency between the acreage of 5,733 listed on page 10 of Silviculture Analysis, and the acreage of 4,710 listed on page 9, 15 and 23 of the Silviculture Analysis, needs to be explained.

C. There is a very concerning aspect to the charts on page 19, for Alt 1 and on page 24 for Alt 2. The charts show analysis based on *remaining trees on the treated sites having a DBH of 7" not only for Matrix stands treated with Variable Retention Harvest, but also for Variable Density Thinning stands*. To have only 7" DBH trees used for the analysis is quite concerning as it could imply that there are *no trees left which exceed 7" DBH*.

D. The economic analysis (cost efficiency) excludes the costs and profits of pre-commercial (or non-commercial) Stand Improvement thinning parts of the Project. See page 8. That exclusion is misleading as to ultimate value of the timber harvest, and its financial costs.

The data for the Mountain Hemlock Huckleberry Enhancement and data for other Stand Improvements were likewise excluded from the charts in the Silviculture Analysis. See page 14. That exclusion is misleading as to ultimate value of the timber harvest, and its financial costs.

E. The economic analysis needs to break out the benefits and costs, both short-term and long-term, to local, rural economy other than just to the timber industry.

- There is no such economic analysis provided of whether or not there are financial benefits to tourism, recreation, conservation, or other local business of this timber project.
- Nor is there any analysis of whether or not the timber industry is located locally in the Mt. Baker Highway corridor, in Whatcom County, or if located further south in other counties. If not located in Whatcom County, the benefit to the timber industry would not count as a local benefit.
- Nor is there analysis of negative impacts on local businesses. Generally, negative impacts to views along major trailhead access roads and along trails will adversely impact local businesses. Due to unappealing views from access roads, there will in all likelihood be loss of tourism, hiking, camping, hunters, birders, skiers, and

snowmobilers which will impact the businesses of local lodging, restaurants, grocery stores, and convenience stores.

F. As suggested by Richard Bowers, former Exec Director of the Whatcom Land Trust, in his comment letter of June 24, 2020, it would be useful to have *"more robust evidence the FS has regarding the future value of clear-cuts in the Canyon Creek watershed as a benefit to rural communities and the timber industry. That information should be compared with potential tourism, recreation, and conservation, financial and economic benefits."*

IX. Mitigation Analysis

All ten of the proposed mitigations for wildlife found at pages 20-22 of the Mitigation Analysis, Exhibit A to the DEA, should have enforcement conducted by an independent licensed Wildlife Biologist. As drafted, only one of the mitigations, W-3 for protecting raptor nests, requires *as an alternative*, enforcement by a wildlife biologist. The other alternatives for W-3 and for all other wildlife mitigations W-1, W-2 and W-4 through W-10 provide merely for timber sale contact and administrator, or representatives, to provide enforcement. An independent wildlife biologist is needed to ensure that the wildlife mitigations are observed and enforced.

X. Conclusion

For all of the reasons listed in this Comment Letter, and for the many other reasons listed in the numerous other Comment Letters submitted on this proposal, the Draft Environmental Assessment should not be adopted. The Draft Environmental Assessment should be rewritten and resubmitted.

Ideally, instead there should be an Environmental Impact Statement conducted, given the significant impacts of any such proposal on the Forest and the environment.

Thank you for considering my comments. I look forward to your response, and to participating in ongoing discussions and decisions about this Project. I hope that my comments and concerns will provide an opportunity for discussion and improvement of this plan going forward.

Please keep me on your mailing list for this Project, and keep me informed of future developments.

Sincerely,

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