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Submitted to:
https://cara.ecosystem-management.org/Public//CommentInput?Project=58218

Subject: North Fork Nooksack Vegetation Management Project draft Environmental Assessment

Dear District Ranger Smith:

The Sierra Club has reviewed the draft Environment Assessment (EA) for the North Fork Nooksack Vegetation Management Project (VMP), and we appreciate the opportunity to provide comments, concerns, and suggestions regarding this project.

**Overview**

Concerns Regarding Inconsistencies

There are a number of inconsistencies within the project document. Some of these inconsistencies can be attributed to a lack of editing, while others appear to indicate that the current EA was reduced from a larger document, but there are legacy elements that linger from possibly the scoping phase or the Nooksack Integrated Conservation and Enhancement Project (NICE) project. In either case, the inconsistencies are confusing, reduce the reader's understanding of the project, and need to be corrected in the EA. Errors and inconsistencies such as these reduce the confidence in the rest of the data presented in the project documents.

A few examples relating to roads and transportation:

Figure 9 on page 26 presents road densities within the project area, and shows a reduction in road mileage within eight different subwatersheds. This table is directly imported from the Hydrology Specialists Report (January 27, 2021). However, the figures presented in the table cannot be correct, given that the project as presented in the EA does not include any road storage or decommissioning. An example would be the entry for Clearwater Creek, which shows 22.4 miles of road pre-project, and only 5.2 miles post-project, "after implementing road storage and decom" (Figure 9, EA, p 26). Also, the table totals show a reduction of road mileage from 317.5 to 192.9. Clearly, these values are incorrect.

The EA refers repeatedly to the "Engineering Specialist Report" (pp 25, 53, 59, etc.), but there is no report by that title on the Project website. The closest report related to the information that this information appears to reference is the "Transportation Report". However, the EA references information presented on "page 24" of the Engineering Report, and the Transportation Report doesn't have that many pages. Also, the Engineering Report is said to discuss "a history of deferred maintenance", which is not presented in the Transportation Report. Either the Transportation Report as currently presented is a reduced version of the Engineering Report, and it doesn't contain the information referenced, or the Engineering Report was not placed on the Project website. In either case, this needs to be corrected in the documentation. A phone call to the District to request this report was not returned.

The EA, as well as the Transportation Specialist Report, refer to temporary road needs for Alternative 2, stating "Alternative 2 would use approximately 20 miles of temporary roads." (EA p 13) (See also Transportation Report, p 12, "Haul Routes") It is unclear why Alternative 1 would not also use those same temporary roads as the stands considered for treatment are identical.

There are also discrepancies between the EA and the Specialist Reports provided for the project. These discrepancies are discussed in detail in the following sections.

Discrepancies such as these seem to signal that the project documents were hastily reduced from the larger Nooksack Integrated Conservation and Enhancement Project (NICE), which was a precursor to this project, and the resulting inconsistencies within and between the documents must be cleared up. Inconsistencies of this type lead to confusion, as well as a lack of confidence in the veracity of the rest of the information presented in the documents.

Specific comments on the draft EA and the related Specialists' Reports are presented below.

**Alternatives Developed**

There are two alternatives that have been presented. While there are only a few differences between the two alternatives, they are significant. Our concerns with the alternatives presented are as follows:

<u>Treatments within Late Successional Reserves (LSRs)</u>

All treatments of forestland within LSRs must be done in strict adherence to the Northwest Forest Plan (NWFP). No cutting of trees larger than 20-inches diameter breast height (dbh) should be considered, and an exemption should not be requested to diverge from this standard to an arbitrary choice of a 26-inch dbh limit. Amendments to forest plans that address site-specific projects which could then be expanded and applied to entire ranger districts and/or national forest administrative units represent a most serious misuse of the site-specific amendment process. There would also be questions as to whether a landscape-scale vegetation management plan would be considered "site-specific," or whether such a term should only apply to a single timber stand or drainage. We call your attention to the 2012 Umatilla National Forest 28,000-acre Snow Basin Project in the Eagle Creek Watershed as an example of where the forest plan amendment process was misused. In 2014, the Courts found that the process used for site specific amendments by the Umatilla National Forest violated the National Forest Management Act and the National Environmental Policy Act, and vacated both the ROD and the FEIS for that project.

Treatment objectives within LSR are "to benefit the creation and maintenance of late-successional forest conditions." (NWFP Standards & Guidelines (S&G) C-12) It would be contrary to this goal to then remove the larger trees within the treatment stands—those very trees that most likely could develop old growth characteristics first within that stand. It appears that the inclusion of trees between 20-inch and 26-inch dbh can be understood as both (1) an attempt to increase the financial benefits of the commercial thin and boost the subsequent interest of timber companies, and (2) to apply the maximum timber prescriptions to the LSR stands to attain a Stand Density Index (SDI) most conducive to subsequent timber growth, and appears to contemplate multiple subsequent entries via commercial thinning. Neither of these goals should be the primary drivers in the management of LSRs. Rather, LSRs should be managed in a manner that best protects the habitat for old-growth dependent species in both the near-and long-term. A more traditional and conservative approach to timber removal from LSRs should be applied to these sensitive and important forest lands to ensure the primary goal of habitat protection is met at the earliest stage by maintaining the diameter limits for LSR treatments at 20-inch dbh.

<u>Treatments within Matrix:</u>
Cutting in Matrix should be limited to stands up to 80 years old, similar to LSRs. Cutting in stands over 100 years old is strongly discouraged and should be avoided. NWFP Standards & Guidelines delineate that old-growth fragments within Matrix Land Use Allocations (LUAs) should be retained as refugia for old-growth associated species with "limited dispersal capabilities," stating "It is prudent to retain what little remains of this age class within landscape areas where it is currently very limited." (NWFP, p C-44) These areas should be clearly removed from the project area.

<u>Treatments within Mountain Hemlock Zone (MA19)</u>
The 1990 Land and Resource Management Plan (LRMP) for the Mount Baker-Snoqualmie National Forest (MBS) called for the establishment of MA 19 and a study to test various silvicultural practices within that LUA. No such study was undertaken, and we are concerned about a Forest Plan amendment that would mandate an increased level of

development in the sensitive, high elevation, low productivity areas characterized by MA 19 without having done any analysis of the impacts of such treatments.

The project proposes to seek a project-specific forest plan amendment to "allow for non-commercial thinning for the purpose of huckleberry enhancement in Management Area 19, Mountain Hemlock Zone." (EA, p. 7-8) The text continues, "The need for the amendment is discussed in this EA at page 4." There is no text on page 4 of the EA that discusses this need (See notes above regarding text inconsistencies in project documents). This needs to be corrected. However, we can understand from subsequent discussions within the EA that a lack of wildfire has allowed some of this zone to become "overgrown", and has decreased the availability of suitable huckleberry habitat, which can be considered an important element to forest users, including Tribal users.

Nevertheless, there are additional areas within MA19 that are proposed for treatments that are not related to huckleberry enhancements, and these areas need to be examined separately from the huckleberry enhancement areas. Along Forest Service Road (FSR) 3140000, 3140025 and 3140026 confluences, there are regions within MA19 that are proposed for "Stand Improvement." Without having performed the study prescribed in the LRMP to study silvicultural practices within the Mountain Hemlock Zone, a separate forest plan amendment must be prepared for these areas. This amendment must address the treatment methodologies specific to this zone, and any treatment plan must be designed to provide monitoring, analysis, and information to satisfy the requirement within the LRMP for a study of silvicultural practices within this management unit.

<u>Treatments within Mountain Goat Habitat, MA 15</u>
Treatment areas within this LUA should be changed to "Stand Improvement," implementing hand cutting with the cut materials left in place, and access only via foot along closed roads. Otherwise, treatments within this LUA should be removed from the project scope.

This LUA is administratively withdrawn from scheduled cutting under the 1990 LRMP. This MA is also recognized as 'administratively withdrawn' under the NWFP direction. The 1990 LRMP states "No harvest scheduled. If timber management activities are conducted, practices applied shall be for the primary purpose of maintaining mountain goat winter habitat." (LRMP, pp 4-234 thru 4-236) Variable Density Thinning (aka "Commercial Thinning") is intended to produce log volumes for manufacture, and would not appear to meet the necessary guidelines for cutting as set forth by these LRMP and NWFP directions. It appears that the only reference to a benefit from these treatments is one sentence in the Wildlife Specialists Report, "Alternative 1 and 2 would provide for additional forage production in winter range allocation of MA 15 while maintaining cover in escape terrain." (Wildlife Report, p 16) Such a rationale seems at best, very thin. Consequently, if any vegetative manipulations occur in MA 15 clear evidence must be provided in the EA for the benefits that may accrue for mountain goats, and must be restricted to Stand Improvement, where only smaller diameter trees are cut, and all cut trees are left on-site.

Within this project, the areas within MA 15 that are proposed for treatment are small units in the 40-79 year age class, accessed via FSR 3035000. These areas are completely

surrounded by forest stands that are between 80 and 200 years old or greater. It is unclear how the treatment of these small units, surrounded as they are by mature and older forest, would be of sufficient importance to warrant entry into the MA 15 allocation, or how it would "maintain mountain goat winter habitat" to a degree that the surrounding intact forest is not providing. The EA needs to improve its rationale for these entries in order to justify them.

The LRMP guidelines further direct that "No new roads permitted which access mountain goat winter habitat." (LRMP, p 4-234) This stricture clearly applies to all roads, including temporary roads. The North Fork Nooksack Access and Travel Management Project (2016) (ATM) specifically addresses FSR 3035000, and recommends that the final 1.0 mile of this roadway be removed from the roads system and decommissioned (See discussion below in Roads and Transportation). It appears that the Forest is using this VMP to overturn prior administrative decisions by attempting to reopen this Maintenance Level 1 (ML1) roadway within MA 15, creating additional temporary roads within MA 15, and conducting minimally beneficial treatment in stands within MA 15. Instead, these treatment areas should be removed from the project, or at minimum reduced to "Stand Improvement," with access restricted to walk-in entry. The decommissioning of FSR 3035000 should be done, regardless, as defined in the 2016 ATM.

<u>Treatments in MA 1B, LSR (less than 80 years old), Semi Primitive, non-motorized LSR:</u>
It appears that the only area within this LUA is in the Glacier Creek/Clearwater Creek watershed, at the end of FSR 3900. No roads of any maintenance level should be permitted or planned for this MA. Any Stand Improvement thinning performed in this LUA must be done with the least visible impacts upon the stand. The Standards and Guidelines for this LUA in the LRMP states "The desired future condition: Areas are characterized by a predominately natural or naturally appearing environment generally free from evidence of sights and sounds of human activity…." (LRMP, p 4-161) Any Stand Improvement in this LUA should be done to meet this standard, with the resulting condition appearing "free from evidence of sights and sounds of human activity." Any cut trees should be left on-site. Again, the Forest appears to be overturning long-standing administrative decisions through this VMP process.

<u>Treatments in MA 1C, LSR less than 80 years old), Semi Primitive, motorized LSR:</u>
It does not appear that there is any land in this allocation included in the project document.

**Roads and Transportation Report**

<u>Road Mileage Reductions</u>
We strongly disagree with the current recommendations within the project documents to not reduce the road mileage within the project area. By not reducing road mileage in a project that is predominately made up of the LSR LUA, this VMP is violating the spirit and intent of the NW Forest Plan Standards and Guidelines. There are a number of opportunities to decommission roads through the course of this project, which we present below. However, the information regarding the road modifications must be corrected

within the project documents to align the Transportation Specialists Report and the EA, as they are currently in conflict.

There are discrepancies in the discussion of roads as presented in the draft EA versus the Transportation Report. The draft EA contains language that indicate that roads will be decommissioned:

> As proposed activities would be completed as part of the North Fork Nooksack Project, the Forest would implement proposed road storage and decommissioning treatments under the Nooksack Access Travel Management (ATM). (EA, p. 25)
>
> In the long-term, road closure and decommissioning activities would reduce the risk of culvert failures and chronic road-related sedimentation to streams, as well as reduce the risk of mass failures that could contribute catastrophic inputs of sediments and road fill that could transport to fish-bearing waters, degrading the quality and quantity of spawning and rearing habitats. (EA, p. 53)
>
> Legal Consistency ACSO3: Additionally, proposed action would decommission and/or obliterate roads analyzed during the North Fork Nooksack ATM (EA, p.69)

However, the Transportation Report states:

> Most system roads would remain the same after project implementation. (Trans. Report, p. 11)
>
> No new road decommissioning is planned for the NF Nooksack project. (Trans. Report, p. 17)
>
> This project does not change the overall miles of road in the project area and makes minor changes to the Nooksack ATM project. (Trans. Report, p. 19)

Further, the Transportation Report proposes to make changes to the North Fork Nooksack Access and Travel Management Project (ATM, 2016), removing the road decommissioning recommendations made in the ATM that are pertinent to the project area. It also proposes to increase the Maintenance Level (ML) of roadways, keeping more roadways in open status after the project than before. Tables 2 & 3 of the Transportation Report show that 2.79 miles of ML1 roadway would be increased to ML2, 1.56 miles of ML1 roadway would be increased to ML3, whereas only 2.5 miles of ML4 roadway would be decreased to ML3. This would increase the miles of open roadway by almost 4.5 miles.

We strongly disagree with these recommendations made within the Transportation Report. These recommendations are contrary not only to the ATM, but to the requirements of the NWFP as noted above. The North Fork Nooksack is designated as a Tier 1 Key Watershed as delineated by the NWFP, and Aquatic Conservation Strategy (ACS) requirements within Tier

1 Key Watersheds establish that "The amount of existing system and nonsystem roads within Key Watersheds should be reduced through decommissioning of roads. Road closures with gates or barriers do not qualify as decommissioning or a reduction in road mileage" (NWFP, p B-19).

Additionally, per Watershed Analyses developed for the project area, including the North Fork Nooksack, the ATM confirms (Environmental Assessment, North Fork Nooksack Access and Travel Management Project, page 10-11):

> Findings indicate that roads and road deterioration will negatively impact fish and fish habitat, wildlife and wildlife habitat, and change hydrology in watersheds. Specifically,
>
> - that without proper maintenance, roads would deteriorate and increase the risk of mass wasting or road related slope failures and sediment delivery to streams
> - *without proper funding many of the system mileage are recommended to be placed in a low cost maintenance category or decommissioned* (emphasis added)
> - roads have the potential increased erosion and sedimentation effects on stream channels and aquatic habitat, and fragmented terrestrial habitats
> - that open roads and high-use trails have placed much of the terrestrial vertebrate habitat within a potential disturbance zone (1/3 mile from open roads and high-use trails)
> - habitat features are highly fragmented and discontinuous as a result of geography, roads and trails

The Mt Baker Snoqualmie Land and Resource Management Plan (LRMP) also clarifies the priorities for roads within the Forest, stating as a Management Objective for Roads: "As funding levels vary, primary priority will be given to resource management and protection, with second priority given to user convenience." (LRMP p 4-140) This Management Objective was noted in the Transportation Report (p. 3). We do not find the VMP in general conformance with the documented Management Objectives for Roads as directed in the LRMP, as noted in multiple places in our comments.

<u>Proposed Road Mileage Modifications</u>

There are a number of road segments that should be decommissioned through this project. A table of these segments is presented below. The roads proposed for closure are all within LSRs, which per NWFP direction should have no entry whatsoever after the stand reaches 80 years of age, unless some other management objective, other than timber harvest, can be specifically identified. The ages of the stands accessed by these roads are all greater than 40 years old. Therefore, once these stands are accessed for treatment during the 10-15 year duration of this project, and after which it is assumed that no further treatment would be performed within the limited time until these stands reach 80 years of age, these stands should then be considered inaccessible for further entry. In these cases, the roads within these stands should be decommissioned through this project in order to protect the

forest resources, and to hasten the recovery of the stands' ecosystem values.

| Road No. | Road Name | Begin MP | End MP | Current ML | Notes |
|---|---|---|---|---|---|
| 3100000 | Canyon Cr | 14.6 | 15.0 | 3 | This is the old switchback spur of road beyond the Damfino TH. This road portion does NOT serve the TH as is suggested in Trans. Report Table 3 |
| 3150000 | Canyon View | 0.0 | 0.8 | 1 | Short ML 1 spur to treatment area |
| 3160013 | Bee Cr | 0.0 | 0.9 | 1 | Short ML 1 spur to treatment area |
| 3160015 | Everlast | 0.0 | 0.5 | 1 | Short ML 1 spur to treatment area |
| 3170020 | Canyon Lake | 0.0 | 0.2 | 1 | Short ML 1 spur to treatment area |
| 3130000 | Kidney Cr | 1.3 | 2.5 | 1 | End of road, leads from Matrix to LSR |
| 3120000 | West Church | 3.5 | 4.3 | 2 | From matrix boundary (at 3120035 spur) to end of road |
| 3120035 | Blooper | 0.0 | 0.2 | 1 | Short ML 1 spur to treatment area |
| 3120037 | Dismal | 0.0 | 0.4 | 1 | Short ML 1 spur to treatment area |
| 3035000 | Fourmile | 0.2 | 1.2 | 1 | Per ATM, decommission [A] |
| 3310000 | Pinus Lake | 1.39 | 3.4 | 1 | End of road |

[A] This road segment was recommended for decommissioning in the ATM. It accesses MU 15, Mountain Goat Habitat, as well as forest stands >200 years of age. Please clarify in particular why this road is not listed for decommissioning.

In addition to these road segments, the ATM recommends decommissioning of Road No. 3100444 (0.2 miles), please clarify why this road segment is not being decommissioned as part of this project.

Also, a review of Table 5 in the Transportation Report, "Roads Proposed for use as Haul Routes", includes roads 33100011 and 3940000, both of which are recommended for decommissioning in the ATM. These roads, however, do not access any of the proposed timber stands presented in the project documents, so it is not clear why they would be listed as haul routes. Please correct this information, as well as any other discrepancies in this table. If there is some reason why they would be utilized in this project, they should be decommissioned as the related work is completed.

<u>Road Maintenance Funding Concerns</u>

Chronic underfunding of the road maintenance budget is also not addressed by retaining an oversized road system as proposed in the Transportation Report. The Transportation Report proposes that "Timber purchasers would be required to perform road repair and maintenance work as a condition of timber-sale contracts prior to using the roads." (p 12) Also, "Road maintenance accomplished by the proposed project would allow for the appropriated road maintenance dollars to be expended on other road projects." (p 12) While the use of timber sale contracts to perform maintenance on roadways is a sound solution for those roadways that will remain open after use, it should not preempt the decommissioning of roads that are no longer required after the project life. Roadways retained within the Forests' road system will always require ongoing maintenance, whether

they be ML1 or ML5. These maintenance costs cannot be supported under current funding levels, and it is not a long-term solution to the chronic problem of funding road maintenance. The proposed retention of roads in excess of identified requirements only exacerbates this funding problem.

Proposed Road Maintenance Funding Modifications

Only a reduction in overall road mileage will reduce long-term road maintenance costs. The road closure suggestions presented above would provide a long-term reduction in these costs, as well as improve the terrestrial and aquatic conditions of the watershed, as intended by the ACS. As has been suggested in the Transportation Report, the costs of road decommissioning can be a condition of the timber sale contract, and in so doing save the Forest the cost of decommissioning these same roads in the future when the stands that they access reach an age greater than 80 years old.

Temporary Roads Concerns

With nearly all the planning area allocated as an LSR it is important to note that the standards and guidelines in the NW Forest Plan advise against road construction in LSRs unless the benefits are clear. Per the NWFP, "Road construction in Late-Successional Reserves for silvicultural, salvage, and other activities generally is not recommended unless potential benefits *exceed* the costs of habitat impairment. If new roads are necessary to implement a practice that is otherwise in accordance with these guidelines, they will be kept to a minimum, be routed through non-late-successional habitat where possible, and be designed to minimize adverse impacts. Alternative access methods, such as aerial logging, should be considered to provide access for activities in reserves" (NWFP, p C-16). In this case, benefits mean benefits to the environment and the acceleration of late successional characteristics, and costs would mean any detrimental impacts to these goals. When costs exceed benefits, roads within LSRs should be avoided. In addition, other methods of access to LSRs must be considered before road construction, including temporary roads, is allowed.

For those treatments planned within Riparian Reserves (RR), no activity shall be allowed that retards or prevents the attainment of Aquatic Conservation Strategy objectives, and all activities shall follow the Standards and Guidelines specified for Riparian Reserves in the NWFP, in particular regarding Timber Management and Road Management (NWFP, p C31 thru C-33).

We are concerned that there are over 20 miles of temporary roads proposed for this project. While temporary roads do not contribute to the long-term inventory of roads within a watershed, they do contribute to short- and mid-term impacts to terrestrial and aquatic resources through ground disturbance activities and vegetation clearing, erosion and sedimentation, and creating unsanctioned access opportunities to the forest. As noted above, within LSRs, "potential benefits" must "exceed the costs of habitat impairment." To that end, minimization of temporary roads should be a goal of this project.

A few sites of particular concern:

- The temporary road network proposed from the terminus of FSR 3130000 (Kidney Creek Rd) must be reconsidered. This temporary road network (1) is proposed to be built within LSR of stand age greater than 200 years old, and (2) criss-crosses the 0.5 mile buffer surrounding and containing a Marbled Murrelet occupancy site (Canyon Creek Eng). Any access to these timber stands must only be considered using an alternative access method, such as aerial logging.

- The temporary road network proposed along the southern bank of Kidney Creek must be reconsidered. This road network appears to run fully within the Riparian Reserve in order to access a timber stand that, based on the Fire History Map in Appendix A, is land that burned in the 1960s. This narrow strip of forestland is, again, predominantly within the Riparian Reserve. The temporary road network proposed along the south bank of Kidney Creek must be removed, and an alternative access method proposed.

<u>Proposed Temporary Road Modifications</u>
The scale and locations of the temporary roads within this project must be further studied. Any temporary road that is proposed within an LSR must be analyzed to demonstrate that the costs (in terms of detrimental impacts to the goal of habitat restoration) do not exceed the benefits. Any temporary roads proposed within Riparian Reserves must be analyzed to demonstrate that they comply with the restrictions on road design and construction outlined in the NWFP (S&G p C-32). The EA and appropriate supporting documents must be revised to include the necessary cost benefit analyses noted above.

In the Kidney Creek road network, the temporary road network from the terminus of Kidney Creek Road described above must be removed. Any access to these timber stands must only be considered using an alternative access method, such as aerial logging. Likewise, the temporary road network proposed along the south bank of Kidney Creek must also be removed, and an alternative access method proposed.

Within Land Management Allocation 15, Mountain Goat Habitat LSR, the Mount Baker Snoqualmie Forest Plan states that "Road density will average no more than two miles per square mile and no new roads will be built in Goat MR areas" (LRMP, p 4-44). Therefore, any thinning (commercial or noncommercial) within MA 15 must be carried out without any road building, temporary or otherwise. However, given the negligible benefits expected from the harvest within LUA 15, these stands should be removed from the project area. See previous discussion of LUA 15 above.

**Silviculture Specialist Report** (dated December 2020)

Our review of the Silviculture Specialist Report generates the following concerns and recommendations:

- Page 4, Area of Analysis. The Silvicultural Specialist Report (here after referred to as the report) states that the Nooksack Vegetation Project area totals 61,696 acres. This statement is unclear if this acreage refers to <u>all</u> NFS (National Forest Service) lands

within the North Fork Nooksack drainage, or only NFS lands that are theoretically subject to treatment under this vegetation management plan, i.e. LSR and matrix LUAs? Per existing management direction such treatment excludes LSR>80 years old and Inventoried Roadless Areas. Please clarify the areas of NFS lands that the treatment options apply to.

- Page 4, Area of Analysis. The report states that there are approximately 4710 acres of stands suitable for silvicultural treatment. Tables 1, 2, 3, 6 and 11 (pages 5, 9, 15, 23) repeat this figure of 4710 acres. However, on page 10, section Existing Condition, the report then states "There are ~200 stands that are proposed for treatment and total approximately 5733 acres." Please clarify which area of treatment is correct and update this report accordingly.

  We are further confused by the documentation of the "treatment acres" that are shown in the EA data table included on page 14 that defines the "treatment acres total" to be 2907 acres for both Alternatives 1 and 2. Which figures are correct, the report or the EA? All documents should be updated for consistency as to the total treatment areas this vegetation management project is actually addressing.

  The Silvicultural Report and the EA should provide the total number of acres in the project area that include LSR <80 years old.

- Page 5, Table 2, Acres within each MBS Forest Plan Land Allocation organized by the NWFP Land Allocations. The data table lists MA 5B (Recommended Scenic Rivers) as including 19 acres of lands in the Matrix category. Our review of the North Fork Nooksack Vegetation Project LUA (Map #4) for MA 5B shows that nearly all of this recommended river segment to be within the LSR LUA and none of it within Matrix. Please update the Table 2 so that the MA 5B LUA is correctly reflected in the proper LUA in the Silvicultural Specialists Report.

  The 1990 MBS LRMP identified several rivers as eligible for the Wild and Scenic Classification, but only recommended the North Fork Nooksack as scenic. The Wild and Scenic Rivers Act directs the agency to manage all rivers found to be eligible for designation to insure they remain in a condition suitable for designation when and if Congress should act. Please revise the report to list Wells Creek as an eligible river that could potentially become a LUA MA 5B should Congress Act.

- Page 10, Forest Health. The data presented in the report for the Palmer Drought Severity Index (PDSI) indicates drier conditions have prevailed in recent decades. This study should address stream temperatures effects of these trends. Stream temperature trends should also inform the intensity of cutting in the riparian areas so as not to exacerbate natural occurring phenomena.

- Page 5-6, Applicable Laws, Regulations, and Policies. This section of the report should also list the management direction for Inventoried Roadless Areas (IRA). Those areas are identified and mapped in accordance with the Roadless Area Conservation Rule (36

CFR Part 294). No road construction of any kind should be considered or proposed for IRA's. And no timber harvesting or vegetative management should be proposed within any IRA as part of this project. *In addition, no timber harvest or road construction should take place within any area that is roadless and is contiguous to a mapped roadless area.*

- Page 6, Relevant Standards and Guidelines. We strongly agree that all direction for LSR's (See NWFP ROD, C-12) must be strictly followed. There must be no cutting of any kind in LSR>80 years old. In addition, no roads *of any kind* should be built in LSR>80 years old.

- Page 12, Late Successional Reserve. While the report has stated that no stands >80 years old will be treated, this LSR write up should be absolutely clear that treatments proposed by this project will occur in stands <80 years old. It should also be stated that older trees within the <80 years old category will acquire old growth characteristics sooner than tree <70 years old, particularly given that this sale may be extended over 10-15 years time period.

- Page 13, Matrix. Within the Matrix LUA, where stands are over 80 years old, cutting and treatments should be avoided.

- Pages 12-13, Treatment Considerations for MBS Land Allocations. If treatment for 171 acres of MA19 requires special access, in terms of either new or reopened roads, we strongly question the need for such construction given the concentration of adjacent older stand ages.

- Pages 15-26, Discussion of Alternatives 1 and 2. With all the data on average MBF/acre, acres, and estimated net timber value ($), we find it strange that estimates for volume removal by each LUA and by treatment type were not provided for each alternative. We are particularly interested in the volume projected to be removed by LUA for each Alternative, and in particular from Riparian Reserves for each alternative.
  Since no volume information is included in either the EA or supporting documents, we believe this omission makes these VMP documents inconsistent with the intent of 36 CFR 219.8(b) as it applies to the social and economic sustainability analyses where multiple uses may contribute to local, regional, and national economies in a sustainable manner. Without volume data, no such economic assessment is possible.
  We also find no detailed analyses for the rationale for a NWFP amendment (exemption) that would be reviewed with the Regional Ecosystems Office for the treatment of trees up to 26" dbh in an LSR <80 years old as is discussed in the EA, page 7. Please provide this detailed analyses so that its scope and intent can be better understood.

- Page 27, Past and Present Actions. The report states that past timber harvest practices have influenced the landscape patterns on both federal and private lands. The adjacent private lands have been particularly impacted by even-age silvicultural systems on the basis of low rotation age cutting. We question the report's comment that "The decision not to harvest or thin much of the landscape has contributed to existing conditions and

many of the problems that the Nooksack Vegetation project area is currently seeing….." as being somewhat myopic and in fact at least in part has been self-inflicted. It seems to us that the decision made by the MBS NF to maintain high levels of cutting in low elevation, roaded areas during the period 1970-1990 after the exclusion of roadless area entry had reduced the forest base, has certainly exacerbated the problems noted above. This report should be more open about disclosing all the decisions that have been made that have contributed to the noted problems.

- Page 28, Conclusion. The report conclusion seems to be biased against the selection of Alternative 2 when it states that opportunities would be foregone for silvicultural treatments to better meet wildlife objectives. We are concerned about a potential Forest Plan amendment because:
  - Expanding cutting in LSR<80 years old by removing larger diameter trees may have the effect of removing the very trees that have the potential of contributing to the earliest development of old growth characteristics within the younger stands of the LSR. The purpose of cutting in LSR<80 is to accelerate the development of old growth characteristics and increasing the diameter limits appears to retard that development. Please explain the impacts of cutting larger trees in LSR<80 on the rate of acceleration of old growth characteristics.
  - Because the report has provided no data on volume removals by alternative, or LUA, or treatment type, we are concerned that the removal of larger trees is simply an effort to increase cutting volumes associated with this sale. Please expand the EA and this report to define the expected log volumes that will be extracted for each alternative, by LUA (including Riparian Reserves), and treatment type.
  - The wildlife objectives that would be 'better' met by Alternative 1 have not been quantified in a fashion that facilitates an understanding of any definable benefits to wildlife. Please improve the description of any benefits.
  - The scope of the application of cutting to increased diameter limits in LSRs <80 years appears to have no defined geographical limits. The scope of the proposed amendment appears 'open loop' and without constraint. The report makes references to cutting units with an 'abundance of larger trees,' but with no specific locations defined. We are concerned that the proposed expanded diameter limits would be made applicable to all treatment areas in LSR<80 years in this sale, expanded to cutting in other LSR<80 on the MBS NF, and even applying this amendment to other national forest units in the Region of the Northern Spotted Owl.

- 13. Pages 28-30, Glossary. The report includes a very helpful Glossary. Please revise the EA to include this Glossary.

**Climate Change**

The discussion on Climate Change within the EA should include an analysis, or reference to an analysis, of the specific hydrologic design criteria to mitigate climate change impacts. Per the EA, strategies for adapting to climate change include "Replacing undersized culverts with larger appropriately sized crossings." (p 38) The project Best Management Practices

(BMPs) do not specify the design criteria for streamflow, such as the design storm that culverts, ditches, and other drainage elements would be based on (i.e. 100 year storm), and whether these design criteria have been adapted to the newer, higher volumes predicted by climate change analyses. This is an important element in costs associated with roadway improvements suggested by the EA. If roadway maintenance and reconstruction is predicated on a timber sale, the associated drainage must be designed and build/rebuilt to accommodate increased flow rates and volumes. The project, including the BMPs, should include a discussion of the culverts within the project area, including identification of culverts that will need to be replaced due to road maintenance, reconstruction, or climate change impacts.

**Wild and Scenic River**

Recommended Scenic River MA 5B.

The EA states that "…evidence of timber harvest should not be noticeable from the river and appear natural when viewed from the river banks." (pp 2 and 47-48) We take exception to this interpretation since it misrepresents of the intent of the Wild and Scenic Rivers Act. The EA wording is unchanged from the scoping documents and fails to account for our comments provided on this issue from June 2020. We believe that the management prescription should to revised as noted below:

- The Act requires that the management of recommended scenic river corridors be managed so as to largely remain primitive with shorelines that are largely undeveloped. Please revise the EA so that it complies with the intent of the Wild and Scenic Rivers Act. See 16 U.S. Code § 1273(b)(2).
- Per the land use allocation map on the website, all of the MA5B in the project area is in the North Fork Nooksack river corridor. Nearly all of this land is in a near natural condition. Future management actions are expected to retain this condition.
- A recommended scenic river corridor MA 5B may or may not be allocated for scheduled timber production, but any timber harvest that is planned must be consistent with the ACS objectives, help to achieve riparian conditions, and be compatible with the identified Outstandingly Remarkable Values (ORV) of this river: scenic, recreation, fisheries, wildlife, and historical/cultural values. The EA for this project must be revised to reflect this clarification.
- The clear evidence of past cutting in the Cascade River Wild and Scenic Corridor (see Section 7, T35N-R12E) after designation is an example that must not reoccur in the North Fork Nooksack.
- The EA should specify the number of acres of MA 5B within the project area.
- The EA should recognize that any rivers found to be eligible within the project area, but not recommended in the 1990 MBS Forest Plan, must be managed to retain their ORV's until Congress acts. Wells Creek falls into this category. The EA should be revised to document this important land management constraint and document this situation on page 2 of the "Other Relevant Land Management Allocations."

**Additional EA Comments**

- Pages 1-2, Land Management Allocations, LSRs. We agree that the EA should be prepared in accordance with NEPA regulations, but we question why an explicit "no action" alternative was not included? Please explain the rationale for this decision.

  While we agree that the EA must be tiered to the 1990 MBS LRMP, as amended, the EA must also include an explicit list of all amendments that apply on the Project Area, not just the 'major amendments.' Please revise the EA accordingly.

  We agree that the proposed actions should be designed to contribute to attainment of the Aquatic Conservation Strategy (ACS) objectives. These LSR management objectives include a focus on roads and they direct that roads in LSRs should be kept to a minimum. The North Fork Nooksack is designated as a Tier 1 Key Watershed as delineated by the Northwest Forest Plan, and ACS requirements within Tier 1 Key Watersheds establish that "The amount of existing system and nonsystem roads within Key Watersheds should be reduced through decommissioning of roads. Road closures with gates or barriers do not qualify as decommissioning or a reduction in road mileage" (LRMP, p B-19). The Forest, as part of this project, should be considering a significant reduction in road density throughout the project area. The plan should eliminate roads where impacts of the roads and vehicle access impacts soils, aquatics, wildlife usage and primitive recreation. No new permanent roads should be constructed for this project, temporary roads should be fully decommissioned at the completion of this project. We would request a reduction in the mileage of system roads within the study area to only those segments necessary for recreational and cultural access and that are *consistent with those administrative needs that are only supported by reasonably expected agency budgets*. See Roads discussion above for additional discussion of roads within the Forest.

- Page 2, Land Management Allocations, Matrix. The EA states that the matrix is where most of the timber harvest and other silvicultural activities occur. However, on the MBS National Forest most of the timber removals that have occurred since 2000 have come from the LSR<80 years old. The EA should be updated to reflect the actual situation on the Forest and not just copy and paste in the relevant sections of the Northwest Forest Plan.

- Page 3, Other Relevant Land Management Allocations, Inventoried Roadless Areas (IRA). We are pleased with the addition of the reference to this critical element of Land Management Allocations in this EA. As a reminder, these specific these IRAs include:

  - Mt Baker (Canyon Creek Block) Roadless Area 6041 (LRMP, pp C-16 thru C-23)
  - Mt Baker (North Block) Roadless Area 6041 (LRMP, pp C-24 thru C- 35)
  - Mt Baker (West Block) Roadless Area 6041, unit MK (LRMP, pp C-36 thru C-45)

  It is indeed appropriate that no road construction or timber harvesting of any kind take place in lands that are inventoried as roadless.

This or any other project must not take any action that would prevent any unroaded lands from being inventoried per the current direction in FSM Chapter 70 (Wilderness Inventory and Evaluation Process), and no cutting should be considered for any unroaded lands within LSR land allocations. Per the EA data on stand age we note discrepancies in the roadless inventory. For example, they include:

- The IRA boundary should be extended downhill nearer to road R33 and Wells Creek in Sections 15 and 16 (T39N-R8E).
- The IRA boundary near the confluence of Clean Creek and Canyon Creek should be extended north to the south bank of Canyon Creek in Sections 9 and 10 (T40N-R7E).

The IRA inventory should be updated with a review of stand age mapping as well as a detailed consideration of inventory criteria as defined in FSM Chapter 70.

- Page 42: There are many users of this National Forest who access trails from Glacier Creek Road and Canyon Creek Road which are designated 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**.**

- Page 53: "In the long-term, road closure and decommissioning activities would reduce the risk of culvert failures and chronic road-related sedimentation to streams, as well as reduce the risk of mass failures that could contribute catastrophic inputs of sediments and road fill that could transport to fish-bearing waters, degrading the quality and quantity of spawning and rearing habitats." We agree with this statement, and would therefore request that road closure and decommissioning be done via this project. At present, the EA does not plan to close or decommission any roads, see discussion regarding Roads above, and this statement does not correctly reflect that plan.

- Page 54: "There would be a continued negative impact from the removal of riparian trees from the landscape that could have otherwise been recruited to adjacent streams and river in the Upper North Fork Nooksack watershed. The legacy of removed riparian trees from past timber management on federal, state, and private land, combined with current and future removal, would lead to fewer trees that can be recruited to nearby streams and rivers." Also:

  Page 54: "Legacy impacts from riparian removal persist today through continued fish habitat degradation and would overlap with current and future riparian tree removal. Collectively those impacts would persist on the landscape for decades."

  This result of the proposed treatment plan is directly contrary to the restrictions set forth in the NWFP for Riparian Reserves to comply with Aquatic Conservation Strategy objectives. "Complying with the Aquatic Conservation Strategy objectives means that an agency must manage the riparian-dependent resources *to maintain the existing condition or implement actions to restore conditions*." (NWFP, p B-10). Any work to be conducted in Riparian Reserves must comply with these restrictions within the NWFP. Any work that does not comply must be removed from the project.

- Page 54: "The incremental impact of the riparian tree removal when combined with other interacting actions is negligible and certainly undetectable in its effect on fish and fish habitat. The total acres of riparian treatment and vegetation treatment type of the proposed action is in stark contrast to legacy riparian management of the past and of some current and future riparian treatments on state and private land." Also:

  Page 55: "The proposed action would incrementally contribute to the reduction of riparian trees that can be recruited to nearby streams and rivers. However, this contribution is negligible when added to the more frequent and wide-spread riparian management impacts occurring on state and private land currently and in the future. These impacts combined continue to slow the recovery of suitable habitat for ESA and MIS fish species."

  These comments are directly contrary to the statements noted above regarding the collective impacts to the project area. Additionally, an argument that the Forest Service does not need to consider the impacts of its actions because (a) they didn't in the past, and (b) other landowners aren't doing it is completely indefensible. The Forest Service is required by law to consider the impacts of its actions and develop action alternatives that abide by the laws and regulations that define those actions. Not doing so because "everyone else isn't" is not logically valid, nor is it a legal argument in the management of our federal lands.

- Wells Creek Road and Canyon Creek Road: why harvest here at all given presence of critical habitat? The statement that "*… no nesting habitat would be removed…"* appears to be inconsistent with all the statements throughout the Wildlife Effects Analysis (WEA, dated January 30, 2021) 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 multiple issues with cutting in Marbled Murrelet (MM) and Northern Spotted Owl (NSO) habitat, many of these cutting units in and around MM and NSO habitat should be re-examined for conformance with the Standards and Guidelines of the NW Forest Plan. If the noted monitoring has taken place, these surveys should be explicitly documented and included in the EA.

**Monitoring**

Monitoring of the project elements must be addressed in the EA. Currently, the only discussion of monitoring within the EA is in regards to regeneration within Matrix gaps. Currently, the Lake Wenatchee Ranger District of the Okanogan Wenatchee National Forest is developing a monitoring plan in conjunction with stakeholders and the public for the Upper Wenatchee Pilot Project, a landscape-scale vegetation management plan. We would recommend that the Mt Baker District contact Lake Wenatchee to more fully understand the elements of monitoring that are pertinent to Vegetation Management Plans that are attempting to rehabilitate the aquatic and terrestrial elements of the Forest that have been

heavily impacted by past management activities.

NWFP Standards & Guidelines specify:

> Monitoring is an essential component of natural resource management because it provides information on the relative success of management strategies. The implementation of these standards and guidelines will be monitored to ensure that management actions are meeting the objectives of the prescribed standards and guidelines, and that they comply with laws and management policy. Monitoring will provide information to determine if the standards and guidelines are being followed (implementation monitoring), verify if they are achieving the desired results (effectiveness monitoring), and determine if underlying assumptions are sound (validation monitoring). (NWFP, S&G p E-1)

In order to comply with NWFP Standards & Guidelines, a monitoring plan that provides for implementation, effectiveness, and validation monitoring must be included in this EA. The scope and framework of such monitoring is outlined in the NWFP S&G, Section E: Implementation. In particular, any exemption or amendments to the LRMP or NWFP must include a rigorous monitoring plan to track the implementation, establish the efficacy of the amended treatment, and validate the assumptions of the treatment plan. The plan should clarify who will be providing staffing, funding, and management oversight for the monitoring as well as the subsequent analyses and mapping efforts that must come out of the monitoring. Implementation Monitoring needs to be performed in the short-term to ensure that the work is consistent with the contract, while Effectiveness and Validation Monitoring can require studies that are carried out years after the work has been completed.

Additionally, per NWFP (p E-10): "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?" This question must be answered through a robust monitoring program. Per NWFP (p C-10):

> 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.

Have these surveys been performed? If not, the project does not comply with the NWFP. If they have been performed, the results of these surveys must be included in the project documents.

The NWFP continues (pp C-10 – C-11):

> 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* (emphasis added).

Again, if these surveys have not been completed, the project does not comply with the NWFP. If they have been performed, the results of these surveys must be included in the project documents.

We appreciate the opportunity to comment on this significant project. The scale of the project, the sensitivity of the lands and waters in the project area, and the duration of the plan require a close analysis of any proposed actions, with plenty of input opportunities from interested parties. We hope that our comments and concerns will provide an opportunity for discussion and improvement of this plan going forward. Please keep us on the mailing list and informed of future developments.

Sincerely,

Nete Olsen
National Forest Committee
Washington State Chapter
Sierra Club