



June 7, 2022

Jody Weil, MBSNF Forest Supervisor  
Mount Baker Snoqualmie National Forest  
810 State Route 20, Sedro-Woolley, WA 98284-1263

Re.: Conservation Northwest Comments on the North Fork Nooksack Vegetation Management Project Draft Decision Notice and Finding of No Significant Impact

Dear Supervisor Weil,

Conservation Northwest supports the U.S. Forest Service's Draft Decision Notice (DN) selecting Alternative 1 - Modified for the North Fork Nooksack Vegetation Management Project as analyzed in the Final Environmental Assessment (EA). We submit these comments to acknowledge the improvements made in the April 2022 Draft Decision and to offer suggestions that could help further improve the project.

### **IMPROVEMENTS MADE IN THE CURRENT DRAFT DECISION**

We recognize the need to thin forest plantations and improve certain roads in order to enhance terrestrial and aquatic wildlife health and habitat. The April 2022 North Fork Nooksack Vegetation Management Project Draft Decision report is well laid out and the proposed vegetative treatments are more clearly tied to long-term ecological outcomes.

**Riparian Reserves.** We appreciate that restoration actions must be aligned with current and future stand, landscape, and climatic conditions and are pleased to see that a larger suite of design criteria and mitigation measures to protect water quality and aquatic habitat are being prescribed (especially in the absence of aquatic restoration actions within the EA), and that Riparian Reserve stream buffer distances have been increased, substantially so regarding perennial non-fish bearing and intermittent non-fish bearing streams (Draft Decision p. 4).

**Vegetation Reduction.** Thank you for referencing and explaining the vegetation reduction threshold at which flow increases become measurable, and for calculating the percentage of vegetative reduction at the sub-watershed scale. Table 6 on page 15 of the Draft Decision clearly illustrates how the percent of vegetative reduction in each sub-watershed (and the entire project area) falls well below the 15-25 percent threshold where flow increases are generally measurable. Since we expect an increase in precipitation and rain on snow events due to climate change, this is an important measurement. The loss of vegetative cover in connected watersheds will also be important to monitor over time.

**Soils.** We greatly appreciated the Minerals and Geology Report, its assessment of historical data, recognition of progressive increases in annual precipitation and/or undercutting, and recommendations to lessen erosion and mass wasting potential, including the restriction of all harvest and road building within S8 "irreversible" soils. The inclusion of vegetative indicators of slope instability/active movement, and a map overlaying S8 soils on treatment units was especially valued. We note that road maintenance will be key to preventing slope instability (Minerals and Geology Report p. 9). Relatedly, we appreciate that 25% of the watershed's road system will be

receiving urgent maintenance or reconstruction through the project's implementation and agree that long-term sediment inputs are likely to be lower than existing conditions due to improved drainage and erosion control. Notably, we regret that road storage and decommissioning pursuant to the 2016 Nooksack Access and Travel Management Decision are not proposed as part of this maintenance prescription.

## **OUTSTANDING ISSUES & SUGGESTIONS**

**Tribal Consultation.** There are three federally listed fish species known to occur in the project area and preliminary effects are “likely to adversely affect” these species and associated habitat (Revised Final Environmental Assessment p. 48). We recognize that the assessment of impacts to fish resources is limited by spatial data discrepancies and minimal field data. We suggest further consultation with Tribal partners regarding fish and aquatic data [analysis], and that traditional ecological knowledge be incorporated into the assessment.

**Measure Sedimentation.** There is recognition that during implementation, under Alternative 1, 2, and presumably Alternative 1 – Modified, there will be “small spikes of sediment delivery to streams and waterbodies from activities such as grading and culvert replacement” (Hydrology Report p. 7). The EA and Draft Decision would benefit from a modeled quantitative measurement of these predicted inputs. This data would likely also be useful while preparing Biological Evaluations and during consultation with the National Marine Fisheries Service (NMFS).

**Road Maintenance.** We appreciate the road density matrix calculations for each subwatershed and the low road mi/mi<sup>2</sup> pre and post-project (Draft Decision p. 13). We note that road maintenance will be key to preventing slope instability (Minerals and Geology Report p. 9), and that there will be no decrease in road mileage within the project area once implementation is complete. In fact, contrary to their proposed “stored” condition in the 2016 Nooksack Access and Travel Management Decision, 4.35 miles of road will be upgraded from ML1 to ML2 or ML3 for “... fire protection, administration, recreation, timber harvest, firewood gathering and other forest product removal, vegetation management, private land access and other forest management activities” (Draft Decision p. 6, 11). Road maintenance costs were calculated at the forest level in the 2015 MBSNF Forest-wide Sustainable Roads Report. The EA and Draft Decision would benefit from calculating the long-term maintenance costs to keep these improved roads open after the project's completion. This seems especially valuable as the “...recovery of vegetation and riparian habitat along road corridors that pass through Riparian Reserves [will need to occur] concurrently through road decommissioning from the North Fork Nooksack Access and Travel Management Decision” (Hydrology Report p. 12).

**LSR Treatments.** The Draft Decision is clear that any LSR stands “...which are found to be 80 years of age or greater (at time of planning) would be dropped from proposed treatment” (p. 4). This should be adjusted from “at time of planning” to “at time of implementation” or “at time of unit layout” so that during treatments, trees >80 years remain standing.

We recognize the Regional Ecosystem Office/Late-Successional Reserve Work Group exemption allowing the harvest of trees between 20” and 26” DBH where required to meet treatment

objectives within LSR stands, i.e. 28-40% relative density (RD) (Draft Decision p. 8).<sup>1</sup> We also recognize that competition begins around 45 RD and stands >60 RD show competition-based mortality, however, shade-tolerant species such as Pacific Silver Fir and Western Hemlock, which are dominant in this landscape, can tolerate more crowding. The Draft Decision states that a 20" DBH cap models a 57 RD which would leave the stand near suppression mortality immediately following treatment (p. 9), clearly negating the thinning investment made to improve habitat conditions.

We'd like to note that relative density (RD) and stand density index (SDI) are typically used in commercial forestry decision making and we question if this is an appropriate unit of measurement regarding intended ecological outcomes in late successional reserves where mortality and decomposition is a key component of habitat health. The Draft Decision states that a RD average of 41, enabled by the take of trees up to 26" DBH, will reduce stand density and increase growing space resulting in "desired habitat components such as large crowns, branch growth, and broken and diseased trees for snag recruitment and nesting..." (p. 9). The EA and Draft Decision would benefit from added references that show how thinning in older stands (up to 80 years) will greatly improve LSR habitat components, and not just increase basal area growth. It appears most thinning studies in older stands have focused on [Douglas fir] tree growth (with "release-growth" slowing as the stand ages), with limited information gathered regarding other conifer species and/or late seral features. Will the take of trees up to 26" DBH enhance late seral characteristics within 10 years instead of 100? Or 95 years instead of 100? Somewhere in between?

**Non-commercial Treatments.** Stand improvement treatments improve forest health and enhance connectivity and species movement (Draft Decision p. 25). Therefore, we are disappointed to see that non-commercial stand improvement treatments have been reduced by 229 acres including 101 acres in the high elevations of Canyon Creek (units c8 and c3). What is the ecological reason for this reduction in non-commercial treatment acres? If the reason is a reduction in economic output from the timber sale needed to pay for non-commercial treatments, we would advocate for the use of infrastructure dollars or agency stewardship contracts to complete this work.

**Reforestation.** The project proposes to plant like-species in VRH [Matrix] stands subsequent to harvest. There is no measure of the density of these plantings. If pre-commercial thinning is planned within 10-15 years, high density planting would be expected, and we question how this action (replanting) will supply quality complex early seral for an extended period of time (approximately 30 years) as desired for ungulate forage production. We would also recommend consultation with the Washington Department of Fish and Wildlife (WDFW) regarding ungulate forage needs in this region.

**Removal of Glacier Creek and Clearwater Creek subbasins.** Vegetative treatments proposed in the Glacier Creek and Clearwater Creek subbasins have been removed from the project, presumably due to road washouts and accessibility issues. The Decision would benefit from a record of this removal from the project and why.

---

<sup>1</sup> The North Fork Nooksack Vegetation Management Project Final Environmental Assessment (EA) and Draft Decision Notice and Finding of No Significant Impact (FONSI) reference relative density (RD) as a percent, however, we understand relative density to be a unit-less English measurement, not a percent.



## **FUTURE PROJECTS ON THE MBSNF**

Large-scale restoration plans are needed to improve forest health and resilience, especially amidst our quickly changing climate. Large-scale plans are best approached by integrating vegetation management projects, watershed restoration projects, Access and Travel Management projects, and Tribal and public partnerships, addressing forest and First Foods restoration, road removal, riparian and aquatic health, trailhead repair and other recreation needs simultaneously. We remain concerned that the District's decision to depart from the Nooksack Integrated Conservation and Enhancement Project (NICE) will not result in improved ecological outcomes for the MBSNF as required by the Northwest Forest Plan (NWFP). By moving to a scaled-down vegetation project, timber will simply be removed from the land more quickly without adequately addressing the full suite of restoration actions needed to genuinely improve the forest and aquatic ecosystem. We will continue to work with the Mt. Baker Ranger District on projects and actions that will improve terrestrial and aquatic habitat conditions in the North Fork Nooksack watershed, including road storage and decommissioning as intended in the Nooksack Access and Travel Management Plan.

## **Conclusion**

We appreciate your consideration of the information and suggestions addressed in these comments. We are supportive of this project's intentions to thin plantations and create improved terrestrial habitat conditions for a variety of wildlife, while addressing serious deferred road maintenance needs that will improve hydrologic processes in the long-term.

Sincerely,

Jen Syrowitz, M. Env.  
Conservation Program Manager  
(206) 970-1434  
jsyrowitz@conservationnw.org

Cc: Dave Werntz, M.S., Science and Conservation Director