3/15/2023

To: Mt. Baker Snoqualmie National Forest

From: Barry Gall

Re: Comments to Draft EA for the NF Stillaguamish Draft EA

Thank you for the opportunity to comment on the Draft EA. I premise my comments by saying that I am not generally opposed to thinning timber stands to promote desired future conditions and it can in some cases have great benefits. I do, however, have many concerns about this proposed action. I’ve tried to relay those concerns in a succinct and useful format.

**NEPA process concerns**

The document is a Condition Based Analysis. This not clearly stated, nor is the difference between it and a traditional EA explained. It needs to be.

The draft document contends that the environment within the planning area could change so much in the time span between the EA Decision Notice and implementation that it would be impracticable to disclose the specifics (or at least reasonable narrower ranges) of what is being proposed, where it would occur, and when it would occur. That could not be the case unless it would be many, many years before implementation. Vegetation management proposals have always been able to give this information in past EAs for many decades and there is no justification for why that could not happen here.

The ranges of ‘possible’ acres and locations of harvest in the EA lists maximums but minimums, so actual acres could differ greatly from maximums. There is no way to assess those impacts if you don’t know if the actual number of commercial thinning is 10,572 acres or for instance half that. In addition, other possible actions such as LWD input and removal of instream passage barriers are listed as ‘up to’ various numbers of sites, with no minimums given, so actual numbers could vary from zero to the maximum listed various numbers. So again, there is no way to assess the impacts of these proposed actions.

There is also no assurance that those restoration actions will be funded and occur. There is also no assurance that the stated road decommissioning will occur since the EA states that there may well be inadequate funds to complete all proposed actions. In fact, how can there be assurance that the newly built or rebuilt roads will be maintained considering that the Forest has insufficient funds to maintain the current road system, and in some cases relies on volunteers to maintain roads?

There are hundreds of ‘possible’ harvest units, but only about 40 have been surveyed thus far, so the current stand and ground conditions of most units is actually unknown. Yet the EA states that current stand conditions require commercial or pre-commercial thinning in order to meet the desired future condition. That statement is not supported by data and there is no data included in the EA to support the need for the project as stated in the Purpose and Need.

In addition, there is little difference in acres proposed to be thinned between the two action alternatives. Alternative 2 states ‘up to’ 10,572 of variable density thinning (commercial thinning) and up to 6492 of non-commercial thinning. Alternative 3 is up to 8,842 and 5644, respectively. Under this scenario the preferred alternative (Alternative 2) may result in less acres thinned than the maximum under Alternative 3. The second action alternative is not significantly different and constitutes a straw dog.

Most of the actual vital decisions would be deferred until occur after the Decision Notice by unidentified Forest staff disciplines, with no opportunity for public involvement. For instance, it states that treatment prescriptions for the planning area would be developed after the NEPA decision is made. This proposed action is predominately timber harvest; hence prescriptions are a key aspect of assessing impacts. The EA does not disclose what staff disciplines would decide which "guidelines or mitigations" "as relevant". Guidelines by definition are set before assessment of impacts are made, and before a NEPA decision is made, not after. There is no rational stated for why so many key decisions are deferred to after the NEPA decision. If the premise is that conditions on the ground are changing so rapidly that many decisions have to made many years after issuance of the Decision Notice, then clearly the 23-year-old NF Stillaguamish Watershed Analysis needs to be revised before a Final EA can be issued as required under the ACS of the NWFP, and an EA written in 2023 can’t be used for the next 15-20 years of multiple entries because it would soon become outdated.

The content of the EA and description of the preferred alternative do not adequately support the stated Purpose and Need. The Need statement is also vague in some respects. For instance, the third bullet states “Enhance riparian areas for the benefit of both aquatic and terrestrial species”. That is vague and it does not explain what the current problem is, the Need. There is also no clear Purpose statement, and much of what appears to represent the Purpose is general background or really Needs, not the Purpose. In addition, the Draft EA does not have a References or Literature Cited section, which is required.

The Draft EA contains several important aspects of the proposed act that say the Forest "may" do, or “could" do. I agree that proposals cannot be definitive in all aspects, but some of these possible actions or decisions are in important. In those cases, the public has no way to assess what will occur, or even a reasonable range.

In addition, USFS 'standards', such as LSR standards are mandatory, they are not optional. The USFS put a lot of time and thought into what a standard should be. If a standard is not going to be adhered to, the Forest Plan needs to be amended to change that standard, and if the standard stems from the USFS Handbook or Manual, or from Regional Standards, those documents must also be changed. The USFS wrote these documents to be followed or formally amended.

 In summary, this Condition Based Analysis does not meet the ‘hard look’ requirement under NEPA.

**Soils**

This Soils Report states “No vegetation treatments would occur on unstable or potentially unstable areas under Alternative 2 or Alternative 3.” It states “Snyder and Wade performed a simple large-scale assessment of natural soil stability in the 1970 Mt. Baker National Forest Soil Resource Inventory, including an assessment of expected mass movement as a result of human activity (vegetation management). Areas assessed as naturally unstable and greatly increased expected mass wasting due to human activity were avoided during project planning and development. The project is generally limited to areas assessed as moderate to good natural stability and low to moderately increased expected mass wasting due to human activity”This statement, therefore promises that there are no proposed harvest units in any areas that the Soil Resource Inventory shows as unstable. The Draft EA, however, states that field surveys will be conducted sometime after the Decision Notice is issued to determine which of the possible approximately 350 harvest areas are unstable to avoid them. These statements do not agree with one another, and they need to be rectified. In addition, the MBS does not currently have a soil scientist on staff, so who would be surveying 350 possible harvest units for both stand conditions, slope stability, and erosion potential? Again, all these decisions would be made after the Decision Notice when the public has no opportunity to be involved.

The Soils Report states that “A total of approximately 43.94 miles of new soil disturbance would be expected in the form of temporary roads.” This number does not agree with the numbers shown in tables 6,10, 13, 14, and 16 in the Draft EA, and there are also inconsistencies about various road actions among those tables. Those inconsistencies need to be corrected. There also mixing of terms to define proposed actions which is confusing to the reader. The Report also states that 46 miles of road are identified in both Alternatives 2 and 3 for ‘closure’. This number also does match those number listed tin the various road related tables in the EA. In addition, the difference between ‘closure’ and ‘decommission’ needs to be clearly defined. It’s not defined in the Soils Report at all. In the EA it appears to be that the difference may be that side cast materials are pulled on decommissioned roads but not on closed roads. Lastly, there are simply too many tables that show similar road data. It’s impossible for the reader to get a clear picture of what new or rebuilt roads will be built. There is also way too much emphasize in the EA on the positive effects of decommissioning 12 miles of road considering that those miles have already largely been treated, and compared to the many times greater miles of new temporary or rebuilt roads to be added and used over the proposed 15-20 life span of this project the 12 miles is a relatively minor action.

**Aquatic and Riparian Reserve Concerns**

The Draft EA states that there will be a combination of ground-based, cable, and helicopter yarding, but it does not disclose in what cases each will be used. The EA and the Soils and Hydrology Specialist Reports acknowledge that ground-based and cable yarding can cause significant erosion. Many of the proposed harvest units are on steep, highly erosive soils. The proposed no cut buffers of only 100 feet for fish bearing streams for commercial harvest, 50-100 feet for non-fish bearing perennial streams (which drain to fish bearing), and 25-50 feet for intermittent streams (which drain to fish bearing) is inadequate for any ground-based or cable yarding. Such yarding would certainly deliver significant sediment into fish-bearing streams and streams the transport sediments into fish bearing streams. The EA needs to make clear in what situations ground-based or cable yarding will not occur, and what actions would minimize and mitigate sediment being delivered to stream channels.

Since only about 40 of the proposed 350 harvest units have yet to be surveyed, there is little or no data to show the Need to commercially thin 20-26” dbh trees within riparian reserves to meet the stated desired future stand condition. In addition, the Summary Table (Table 6) in the Draft EA shows no harvest of smaller dbh trees in the riparian reserves. The EA needs to explain and defend this, since the proposal appears to be focusing solely on harvest of merchantable trees in the riparian reserves which would be in violation of the requirements in the ACS of the NWFP.

There are no minimum numbers of proposed Aquatic Organism Passage, Instream Wood, or Beaver Enhancement sites, only maximums. This means that due to limited funding or other factors none of these proposed actions are assured to occur. Some or all of the harvest would occur, but there is no assurance than any of these will. It is therefore impossible to assess the environmental effects of these proposed actions. The most valid assumption for environmental assessment would be that few if any will actually occur.

The Draft EA proposes to ‘fell or push over” two to four 20” dbh trees at ‘up to’ 12 sites. To put my following comments in some context, I’ve been involved in the design and implementation of several LWD restoration projects on two National Forests, as well as others on non-Federal lands for other agencies. None simply felled or pushed trees into rivers, and that was never seriously considered due to the risks of resulting in some very negative impacts. All of these LWD projects were designed and planned for specific placement or all logs, while considering appropriate log length, mass, and relative buoyancy; hydrologic regime; channel morphology; and the degree of stability or mobility desired for the LWD at the site and relative to downstream infrastructure and resources.

In, addition there have been many past and recent examples of engineered log jams on the MBSNF that required detailed analysis and design to achieve the desired outcome and minimize risks of negative impacts. Natural recruitment does not always result in good short- or long-term outcomes, especially when road systems and other infrastructure exists downstream. Tipping trees would result in much greater risks of significant negative impacts compared to fully planned and designed placement of LWD. In addition, “pushing” trees over to include the entire bole and root wad would require heavy equipment to be very near the active channel with consequent erosion and compaction effects from the equipment, plus all the disturbed soils created by pushing the tree and root wad over. If you’re going to expend that time and money to add LWD, all possible planning and design to increase chances of positive outcomes, and minimization of possible severe negative outcomes need to be taken. Finally, if tipping does occur (which I oppose), all of these felled or pushed trees should be marked to track where they are over time. Just as is commonly the case for engineered log jams.

The Hydrology Specialist report defines short-term as occurring within the first 3-5 years. It defines long-term as greater than 20 years. The proposed lifespan of the EA and project work is 15-20 years. All Specialist Reports and the EA need to define consistent time frames for the entire proposed span of work, and for effects following the end or work, with estimated impacts for all time periods. There can’t be a 15-year void of time between short- and long-term (i.e., years 5-20).

The Hydrology Report claims that the no cut buffer widths are wide enough that there would only be some short-term increases of sediment inputs to streams from “road stream interactions”. The EA proposes that there will be multiple entries of vehicles and harvest over 15-20 years. Hence there will certainly be significant input of sediment over that entire span and possibly longer from roads and yarding. In addition, the Report does not discuss the possible erosion and soi compaction impacts from ground or cable yarding within the Riparian Reserves, where no cut buffers under the Preferred Alternative range from only 100 feet on fish bearing streams to as little as 25 feet on intermittent streams that flow into fish bearing streams. The Rashin et.al. 2006 paper it cites to rationalize these very narrow no-cut buffers is not applicable or appropriate for USFS lands. The authors wrote it regarding management of Washington State lands under TFW, which are much less protective than what is required under USFS lands under the NWFP.

The Hydrology Report also does not discuss the very likely inputs of sediment into streams by ‘pushing’ then over to during tree tipping. Neither does it discuss the possible positive and negative impacts of ‘tipping’ two to four 20-inch dbh trees into unspecified stream reaches. Hydrologists must be very involved in any man-caused addition of LWD into rivers. There is no discussion either the Report or the EA and it must be addressed in both.

The proposed road miles by treatment type listed in the Hydrology Report do not agree with the numbers in Tables 6,10, 13, 14, and 16 in the Draft EA. The numbers in all tables, maps, and Reports need to be rectified where there are differences. In addition, as stated earlier, the EA contains too many road-related tables that appear to present similar information but use different terms to describe roads, and road mileages to not agree between those tables. It’s too confusing for readers, including the USFS, to track what actions are really proposed.

Under a subheading of “Deferred Maintenance” within the Water Quality section of the Hydrology Report its stated “There are over 194 road miles in North Fork Stillaguamish Landscape Analysis Project area, approximately 130 miles will have reconstruction and heavy maintenance and nearly 45 miles will have maintenance.” This sentence refers to a period of 10-15 years during the proposed action. This infers that all this reconstruction and maintenance on all the 175 miles of current road within the proposed action portion of the planning area is “deferred maintenance” that the Forest has not conducted to due to funding or other constraints. It’s very concerning that that Forest is stating that all the existing 175 miles of road within the planning area have not received the maintenance that the Forest thinks should have occurred. Is the Forest now reliant on the revenues of harvests and volunteers to conduct basic road maintenance?

The Hydrology Report later states “Further, as shown with the WWPR process there is a long term with the reduction of 40% in roads with in within floodplains and with road stream crossings. This is accomplished placing the maintenance level one roads into a hydrological stability and with the amount of decommissioning of roads within the action alternatives this could lead to lower instream sediment loading due to roads.” The EA states that some harvest and other aspects of this proposed action may not occur due to reduced timber receipt revenues if its impractical to harvest some of them. That being the case, there is no assurance that there will be enough funds left at the end of harvest activities to fund “placing the maintenance level one roads into a hydrological stability” and decommissioning “up to 12 miles” of road. If that occurs the end result may be that the road system will be in worse condition than it is now. In addition, I found no definition of hydrological stability and specifically how it contrasts to decommissioning. That needs to be clear in both the Report and the EA.