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Organization:
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Comments:
3/21/2026
Objection Comments MBS Forestwide Thinning Treatments Project #68852, Draft Environmental Assessment and Draft Finding of No Significant Impact (FONSI) and Decision Notice (DN)

To: Erin Uloth, Forest Supervisor, Mt. Baker-Snoqualmie National Forest

Re: Mt. Baker-Snoqualmie National Forest (MBS) Forest-wide Thinning (FWT) Analysis Project #68852 EA, FONSI & DN (February 2026)

From: D. Brady Green

Submitted electronically to the MBS Objection portal for this project on March 22, 2026

On January 12, 2026, I submitted comments on the Mt. Baker-Snoqualmie National Forest (MBS) Forest-wide Thinning (FWT) Analysis Project #68852, December 2025 Draft EA. This also included my USFS experience since 1977 and working knowledge of the Nooksack, Skagit, and Stillaguamish river watersheds on the MBS, between 1984 and 2023.

I reviewed the February 2026 Draft Environmental Analysis (EA), Finding of No Significant Impact (FONSI), and Draft Decision Notice (DN), and Appendices D (Response to comments) and E (Changes to EA from comment period) to see how the MBS responded to my earlier concerns. I am submitting the following objection comments on the FWT.

My review of the Draft EA showed that the MBS made no changes to the proposed project in response to my comment letter.

There is a recognized need for thinning second growth forest stands on the MBS that were previously harvested and replanted and have grown back into dense stands. Proper thinning can be very effective and help improve stands so that they are more productive and provide more diverse habitat for native species. However, what is critical is where these stands are located, in relation to naturally occurring unstable soils, steep slopes, riparian areas, the intensity of thinning, and the risk of constructing new roads (temporary or otherwise) in these areas. And there are substantial costs to ecosystems associated with large-scale forest removals from mechanical thinning (Lindenmayer et al. 2026).
My primary objection comments continue to be are related to FWT impacts on aquatic habitats and aquatic species (especially ESA listed fish), riparian habitats, hydrology, fisheries, and unstable soils areas. The Project Implementation Areas (PIAs) contain Designated Critical Habitat for three ESA-listed Threatened fish species: Puget Sound Bull Trout, Puget Sound Chinook Salmon, and Puget Sound Steelhead. The PIAs contain eight Bull Trout Core Areas in the Puget Sound region (USDI FWS 2025), Puget Sound Chinook ESU, and Puget Sound Steelhead DPS (USDC NMFS 2025). This includes major watersheds and their tributaries in the Nooksack, Skagit, Stillaguamish, Snoqualmie, and White River systems.

Appendix D: Response to Comments (pages 109-124)
The order of objection comments is based on Appendix D Responses to Comments. There are 92 unnumbered responses to comments making it very difficult and awkward to review and provide comments on them. I have numbered them in chronological order for tracking purposes. It would have been helpful if the responses had

been numbered to avoid confusion. Many of the responses were very generic and 17 of them that were related to the concerns I brought up in my 1/12/2026 letter are covered below.

1. Agency. Significant concerns about lack of adequate staffing and funding and ability to accomplish the many tasks identified in Appendices A and B, considering the recent staffing and funding cuts under the Trump Administration.

MBS response: "FS capacity is expected to fluctuate over the 30-year period. The EA analyzes the maximum potential extent of implementation. Capacity will be considered when developing annual, site-specific implementation plans to ensure full compliance with the EA."

My response:
This response is unacceptable as all it does is "kick the can down the road." It does not recognize, or acknowledge, the significant funding and staffing uncertainty under the Trump Administration. Also, not being able to meet the many Project Design Criteria (PDC), project implementation and effectiveness monitoring, and mitigation requirements, is a violation of ESA Section 7 consultation and the Western Washington Restoration Collaboration Zone agreements (Bull Trout, Puget Sound Chinook, Puget Sound Steelhead, and other species) with the US Fish and Wildlife Service (FWS 2025) and the National Marine Fisheries Service (USDC NMFS 2025).

I object to the assumption that the MBS has adequate staffing and funding, or will receive adequate funding in the future, to accomplish the numerous tasks and project design criteria identified in Appendices A & B in this EA. Considering the significant recent staffing and funding cuts under the Trump Administration, the uncertain funding and staffing, it is not reasonable to assume that there will be adequate funding available anytime soon to prepare for this extensive project considering there are so many outstanding tasks to complete. I have concerns about the poor track record of having virtually no road maintenance conducted on the MBS over the last 10-15 years, and the lack of adequate funding for required staff with technical skills to conduct the numerous tasks that are identified in the Project Design Criteria (Appendix B) for this project.
Appendix A lists at least 96 tasks to be completed by resource specialists reviewing proposed units, logging systems, road work, etc., including: Wildlife Biologist - 10; Fisheries Biologist -10; Soil Scientist - 18; Hydrologist - 8; Fuels Planner - 6; Archaeologist - 6; Botanist - 4; Landscape Architect - 7; Recreation Specialist - 15; Transportation Planning - 6; and Engineering - 6.

Appendix B lists at least 203 different MBS enforcement tasks that will be required for the project preparation and implementation: Botany and Invasives - 16; Heritage - 7; Soil, Water & Fisheries - 71, Fire, Fuels, and Air Quality - 15; Wildlife - 58; Scenery -9; and Recreation - 27. Many of these tasks are assigned to contract administrators, timber sale administrators, project administrators, and numerous specialists (engineers, hydrologists, soils, etc.). How is the MBS going to get adequate funding to provide staffing to accomplish these tasks for this proposed project?

Violation of Law, Regulation or Policy:
By implying that the MBS will complete all the enforcement tasks identified in the EA, as well as through ESA Consultation with the USFWS and NMFS, they are not being truthful, especially considering all the unknowns regarding funding and staffing to accomplish these tasks. Because of these significant funding and staffing unknowns, it is highly likely that a number of Project Design Criteria (PDC) would not be completed.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.

Suggested Remedy:

Scale down the FWT Project to include only those PIAs that are accessible from existing roads and does not require constructing temporary roads.

6. Analysis. Relying on old stand exams or lack of funding to conduct stand exams on in the PIAs.
MBS response: "The 1996 source cited in the comment provides a general definition of the stem exclusion stage of stand development (see Oliver and Larson, 1996)"

My response:
I object, as this does not at all answer the serious concern that stands exams for many of the PIAs are either very old, out of date, or non-existent and that the MBS does not have the staff or funding to conduct needed stand exams for the FWT project. The assumptions used in the analysis for this EA are, according to the Silviculture Report, based on 10 reference stands selected from recent timber sales or NEPA projects across the forest that contained Common Stand Exam (CSE) data. How can such a small number of reference stands reasonably reflect stand conditions across the rest of the PIAs?

Violation of Law, Regulation or Policy:
By using only 10 reference stands in the analysis for this extensive 30-year long FWT Project in PIAs, that extends across the whole MBS, to extrapolate assumptions about the remaining forest stands is faulty. This implies that these 10 reference stands represent forest stand conditions across all the PIAs. In addition, it assumes that the MBS will have the funding and staffing be able to complete all the stand exams necessary for FWT Project, especially considering all the unknowns regarding funding and staffing to accomplish these tasks.

Using information that is not current to make assumptions and decisions in the FWT Project is highly risky. Failure to collect data and analyze the effects of full project implementation renders the analysis highly uncertain.

Because of the significant funding and staffing unknowns and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) would not be completed. This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and does not require constructing temporary roads.

The following two responses, 8 and 9, deal with Condition Based Management (CBM)
8. Analysis. Condition-based Management (CBM) violates NEPA and that CBM decision points do not provide the level of analysis required for a hard look.

MBS response: "By adhering to clearly defined decision points, the Forestwide Thinning EA will comply with NEPA through thorough field surveys prior to implementation, ensuring treatments are applied in areas that best meet the Purpose and Need, deliver the greatest ecological benefit, and remain operationally feasible. The annual implementation process will ensure that the annual site implementation plan remains consistent with the proposed action and effects analysis outlined in this EA."

9. Analysis. CBM lacks site-specific analysis required under NEPA and detailed analysis would occur during implementation rather than prior to the decision being signed.

MBS response: "Under CBM, all analyses are completed and disclosed in the ERA and supporting documents. Decision points for existing conditions (stand condition and age), Forest Plan management areas, NWF Plan land allocations, and existing road network determines where implementation may occur within the potential

implementation areas. Prior to implementation, site-specific surveys will be conducted to confirm that each location meets the conditions outlined in the proposed action and that anticipated effects will be within those analyzed in the EA. If the IDT finds that an implementation plan is outside the bounds of this analysis, the plan will be modified or supplemental EA will be conducted."

My response:
This response is unacceptable again as all it does is "kick the can down the road." As I have seen in previous MBS EA's (SF Stillaguamish Vegetation Management Project (USDA FS 2017), NF Stillaguamish LA Project (USDA FS 2025), and NF Nooksack Vegetation Management Project (USDA FS 2022), CBM seems to be used to cut corners by collecting less on the ground data and extrapolating existing data to get around NEPA compliance by allowing proposed treatments to be aligned post treatment. There is a significant amount of ground work that needs to be done before actual treatments can be determined and the concern about lack of adequate funding and staffing needed to complete these tasks.

In addition, CBM is mentioned in the "Consistency Request for the MBS NF FWT Project" letter to justify increasing the allowable harvest tree diameter from 20" to 26" DBH within select LSR stands (Submitted by Sarah Thibeault and Kevin James on November 2025 in the on-line project file) states "For the purpose of this condition-based (CBM) EA, the PIA is defined as previously managed stands under 80-years of age located where the MBS land and resource management plan, as amended by the NWFP, allows for commercial timber harvest." The analysis for this effort addresses 10% of the nearly 650,00 acres of LSR across the MBS NF.

The use of CBM in this EA, and as we have seen in previous MBS EA's (SF Stillaguamish LA Project, NF Stillaguamish LA Project and NF Nooksack LA Project), seems to be used by the USFS to cut corners by collecting less on the ground data and extrapolating existing data in order get around NEPA compliance by allowing proposed treatments to be aligned post treatment. It appears that there is a significant amount of on the ground work that needs to be done before actual treatments can be determined and concern about the lack funding and staffing to complete these tasks.

Violation of Law, Regulation or Policy:
Use of CBM violates NEPA. EPA has formally stated that it considers CBM to be insufficient to meet NEPA compliance and discredit its use and there are currently lawsuits pending against the USFS challenging the use of CBM as violating NEPA.

Suggested Remedy:
Use NEPA methodology used by the USFS in previous projects.

26. Fish. Proposed activities could negatively impact threatened fish populations.
[NOTE: The issue description incorrectly refers to "endangered fish populations." There are no ESA-listed endangered fish populations on the MBS, only threatened species (Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead).]

MBS response: "The fisheries specialist report discloses effects from sedimentation, stream temperature and other facets of aquatic habitat elements needed to support Federally listed fishes in the project analysis area. Per the conclusions of the fisheries specialist report, the project effects are spatial and temporal in scale and do not result in a Jeopardy determination for Federally listed fishes."

My response:
As stated in the EA and Fisheries Resource Report "not all fish-bearing perennial streams have been sampled for presence or absence of various species. Those unsampled streams represent a data gap, which can be addressed as part of project implementation through booth modeling and field verification." Again, I am concerned that due to lack of MBS funding and staff, these tasks will not be conducted before the project starts.

Even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground, and history of stability problems in many riparian areas in the PIAs, especially watersheds on the north end of the MBS, and my recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2005) and NF Nooksack Vegetation Management (USDA FS 20022) projects, I have significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

As stated in the EA and Fisheries Resource Report "not all fish-bearing permanent streams have been sampled for presence or absence of various species. Those unsampled streams represent data a gap, which can be addressed as part of project implementation through both modeling and field verification." Again, I am concerned that due to funding and staffing issues, this may not be accomplished before the FWT Project begins.

Many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas. A good recent MBS example is the NF Stillaguamish LA Project, where timber stands to be thinned (variable density thinning) were shown on project area maps. When overlayed with soil stability (Soil Resource Inventory=SRI) maps that were provided, many of the units were on, or immediately adjacent, to unstable areas with a Moderate and High risk of instability. A significant amount of unstable soils in the proposed NF Stillaguamish LA Project area have a high risk of failures and damage that could result from the proposed timber stand thinning and road-related activities for the project, especially in the valleys of Deer Creek, Little Deer Creek and Higgins Creek and upper NF Stillaguamish River areas. On the soils maps there is a significant amount of "Unstable & Very Unstable" (red) and "S8 Soils" (purple) shown in the Deer Creek, Little Deer Creek, Higgins Creek, and middle to upper NF Stillaguamish River portions of the project area, with many located immediately adjacent to potential project stands (commercial & non-commercial).

These areas have a considerable amount of deep, unstable, glacial lake deposits, till and outwash soils and this instability is caused by a combination of steep slopes, fine textured plastic subsoils, and restrictive drainage, where natural deep-seated failures frequently occur, and are greatly accelerate by management activities (Snyder and Wade 1970).
Many of the PIA watersheds (Fig. 1) contain similar areas with deep glacial soils and deep glacial lake-deposit soils (Lacustrine) which are generally highly erosive and unstable as well as deep, unstable soils occurring on steep toe-slop and midslope drainages. These concerns should be taken seriously.

Violation of Law, Regulation or Policy:

Because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and does not require constructing temporary roads.

28. Hydrology. Concerns about watershed analyses being out of date.

MBS response: "The NWFP states that a watershed analysis is required before timber harvest can occur in key watersheds, but does not specify a timeframe for when existing watershed assessments need to be updated."

My response:
I object to this response. Just because an exact time frame was not listed is no excuse to use outdated watershed information when making land use impacting decisions.

According to in the ROD S&G's NW Forest Plan (USDA FS & USDI BLM 1994) watershed analysis will be an on-going, iterative process that will help define important resource and information needs (USDA FS 1995). As watershed analysis (WA) is further developed and refined, it will describe the processes and interactions of all applicable resources. The ROD S&G's (pages B-20 to 23) indicate that Watershed Analysis relative frequency is infrequent with redo based on monitoring, changing management conditions, social values, or process knowledge.

Since the 1990's, when most of the WAs on the MBS were completed covering all HUC 12s for the FWT Project (Kelley 2025), many land management activities and habitat changes (flood events, landslides, road failures, timber harvest, etc.) have occurred in this project area, as well as downstream private and state lands in these watersheds, making these watershed analyses badly out of date and in need of update, revision, or amendment, that reflect these changes. Even with the addition of Watershed and Aquatic Resource Assessment Analysis and Proposal Development for Whole Watershed Scale Projects (WARA) and the Watershed Condition Framework (WCF), this still does not meet the Aquatic Conservation (ACS) Objectives for watershed analysis. In addition, this project involves thinning stands of trees located in RRs and to actively manage roads (temporary and system) in and near RRs over a period of at least years 30 years.

Twenty WAs are listed under "Supporting Documentation" on the project website. Since many of these WA's were completed, ESA federal listing of threatened species status of Chinook (1998), Bull Trout (1999), and Steelhead Trout (2003), has occurred. In addition, external watershed partner monitoring results, changing management conditions, wildfires, and reoccurrence of large flood events from 1995-1996 and into the 2000's has occurred. These management activities should have been included in an updated watershed analysis for the project area.

For example, the recent NF Stillaguamish LA EA (USDA FS 2025) and specialist reports, did not appear to have used much of the Deer Creek (USDA FS 1996) or North Fork Stillaguamish watershed analyses (USDA FS 2000), which is the whole idea of a watershed analysis, one of the principal analyses for implementing the Aquatic Conservation Strategy (ACS) set forth in the Northwest Forest Plan (USDA & USDI 1994).

The Mt. Baker Snoqualmie National Forest Plan (USDA 1990) involved a forest-wide watershed condition analysis. Nineteen watersheds were rated as being in an unacceptable condition and fifty-one in an acceptable condition (Appendix H in the MBS LRMP, USDA FS 1990). Most of the unacceptable watersheds (80%) were found on the more geological sensitive north end of the MBS where many of the PIAs are located (Figure 1).

Even though the FWT proposes thinning a maximum rate of 1200 acres per year, and would be distributed over space and time, the critical determination of project impacts depends on where the thinning treatments are located.
Stands in, or near, riparian and Riparian Reserve (RR) areas and their proximity to high risk and geologically unstable soil areas, should be avoided due to the high risk of exacerbating erosion of existing unstable soils and opening the canopy, increasing water temperature in temperature-sensitive streams.
Many of the watersheds proposed for thinning in the PIAs are sensitive and at risk.
They typically contain extensive naturally occurring unstable soils, sensitive soils and steep topography, high

frequency of glacial geology, history of rain-on-snow flood events, extensive slope stability issues, poor road maintenance, and a history of extensive logging and road building impacts. It is critical that these treatments be done carefully, focus on areas that have stable soils, and can be easily reached from existing roads, so that few, if any new roads (temporary or otherwise) are needed.

This combination of factors and steepness of many of the channels, together with land management history, has created unstable stream banks along the mainstem of many rivers and streams in the PIAs. Especially at risk, are upper NF Stillaguamish River (Deer Creek, Little Deer Creek, Higgins Creek, and major tributaries), NF Nooksack River (Canyon Creek), SF Nooksack River (Wanlick Creek), Skagit River (Finney Creek), just to name a few.

Violation of Law, Regulation or Policy:
The MBS watershed analyses being used for the FWT Project are out of date. They were completed in the mid 1990's to early 2000. Without recent WAs, that reflect current conditions, the FWT Project would pose a risk of exacerbating erosion of existing unstable soils and opening the canopy, increasing water temperature in temperature-sensitive streams and fails to demonstrate compliance with the ACS.

Many of these WAs contain information that is not current but is used to make assumptions and decisions in the FWT Project. Failure to collect data and analyze the effects of full project implementation renders the analysis highly uncertain. This would violate NEPA and the NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and do not require temporary roads.

29. Public Involvement. Concern that no scoping process was conducted for this project.

MBS response: "Scoping is not a statutorily required step in the NEPA review procedures and there is no prescribed process or procedure required for scoping (7C.F.R. & 1b)."
My response:
It is wrong for such an extensive long-term project to not have any scoping at all. Also, if scoping is not a required step in the NEPA process, then why is "Scoping Start on 9/3/202" listed under "Project Milestones" in the online FWT Analysis Project page as starting on 9/3/2025? All past MBS projects had scoping periods where the public could provide comments prior to a Draft EA.

As stated by the National Research Council (2008) "When done correctly, public participation improves the quality of federal agencies' decisions about the environment. Well-managed public involvement also increases the legitimacy of decisions in the eyes of those affected by them, which makes it more likely that the decisions will be implemented effectively." I am saddened by the fact that the Trump Administration has chosen to disregard NEPA regulations that make decisions with less or no public involvement!

Violation of Law, Regulation or Policy:
All past MBS projects had scoping periods where the public could provide comments prior to a Draft EA. The public comments and additional information provided resulted in more complete projects and more public understanding and support. Without public involvement the FWT Project could end up creating public confusion and frustration and lead to unsafe recreation and other public conditions in the PIAs due to lack of public knowledge. This would be a violation of the intent of NEPA.

Suggested Remedy:
Send out adequate public notice (public news media, newspapers, etc.) to alert the public of the upcoming projects in each PIA prior to commencing project activities.

39. Roads. Concern that roads may be constructed within riparian areas and key watersheds.

MBS response: "Road construction within key watersheds and riparian areas will be minimized, and environmental impacts will be mitigated in accordance with management direction and project design criteria."

My response:
Even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground, and history of stability problems in many riparian areas in the PIAs, especially watersheds on the north end of the MBS, and my recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2025) and NF Nooksack Vegetation Management (USDA FS 2022) projects, there are significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

Based on soil stability maps (Snyder and Wade 1990) many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas.

In addition, this does not recognize, or acknowledge, the significant funding and staffing uncertainty under the Trump Administration. It is uncertain that during road construction activities that impacts to riparian areas will be minimized, and environmental impacts will be mitigated in accordance with management direction and project design criteria.

Violation of Law, Regulation or Policy:
Because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and do not require new roads.

41. Roads. Assurances that all temporary roads constructed for the project will be fully decommissioned following implementation, along with a clear description of the decommissioning process.

MBS response: "Temporary Road decommissioning will be implemented as outlined in the project design criteria, which will be incorporated into timber sale contracts "
My response:
I object to the assumption that temporary roads constructed will be successfully decommissioned following implementation. Many of the PIAs, especially in the northern part of the MBS, contain extensive areas with steep slopes, deep glacial-lake soils (Lacustrine), which are generally highly erosive and unstable. Road

decommissioning in these areas will not be 100% effective and will not bring back historical conditions prior to road construction. These will require significant monitoring and road maintenance, due to the extensive naturally unstable soil areas in these watersheds. The per mile cost of decommissioning a road can be as expensive as building a new road. Where is the funding coming from to do all of this?

The FWT Project estimates that annually over 30 years, up to 6 miles of temporary roads, up to 24 miles of road reconstruction (up to 14 miles along streams within 500 feet of LFH (Listed species habitat), and up to 160 miles of roads would be maintained within the timber sale contract areas annually (Table 4. Appendix A, USDI FWS 2025).

The annual combined impacts from all these road-related activities, could have significant impacts to ESA-listed fish species, and other aquatic organisms, in the more sensitive PIA watersheds, especially those in the northern watersheds on the MBS (Nooksack, Skagit and Stillaguamish rivers).

Violation of Law, Regulation or Policy:
Because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and do not require new roads.

47. Soils. References for gSSURGO, FSDMP, and the R6 soil quality definitions, as well as use of the 1970 soil mapping by Snyder and Wade.
MBS response: "The Snyder and Wade mapping circa 1972 was county-level mapping that is included as part of the national soil survey and SSURGO database. A citation was also added."

My response:
It is good to see in Appendix D the MBS finally acknowledging the Soil Resource Inventory (SRI) mapping conducted by Snyder and Wade (1970). It is unclear how this SRI mapping information was included in the SSURGO database. These SRI maps that were ground-truthed, identified unstable and S-8 areas across the whole MBS, and were used extensively by MBS project planning for many years.

However, this extensive soil mapping, and very important historical reference, was not referenced in the Draft EA or Soil Report. Many of the PIA's contain extensive areas with deep glacial soils and deep glacial lake-deposit soils (Lacustrine) which are generally highly erosive and unstable as well as deep, unstable soils occurring on steep toe-slop and midslope drainages. Many valleys in the PIAs have a considerable amount of deep, unstable, glacial lake deposits, till and outwash soils. This instability is caused by a combination of steep slopes, fine textured plastic subsoils and restrictive drainage and natural deep-seated failures that frequently occur and are greatly accelerated by management activities (Snyder and Wade 1970).

As mentioned previously, even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground, and history of stability problems in many riparian areas in the PIAs, especially

watersheds on the north end of the MBS, and recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2025) and NF Nooksack Vegetation Management (USDA FS 2022) projects, there are significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

Many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas.

Also, with the significant funding and personnel cuts under the Trump Administration there are significant concerns about the ability of the MBS to conduct field work needed to ensure that proposed treatment stands do not contain unstable soil areas and that buffers are sufficient to mitigate any potential erosion hazard into streams from project activity.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).

48. Soils. Concerned that thinning in riparian areas/near streams will increase water temperatures, runoff, and sediment loading, and impact ESA-listed fish due to unstable soils.

MBS response: "No cut buffers will be implemented in the vicinity of riparian areas to minimize impacts on ground and surface water. Additionally, erosion modelling of the project areas will be undertaken to ensure buffers are sufficient to mitigate any potential erosion hazard from project activity."

My response:
Even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground,

and history of stability problems in many riparian areas in the PIAs, especially watersheds on the north end of the MBS, and my recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2025) and NF Nooksack Vegetation (USDA FS 2022) projects, I have significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

Many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas.

Also, with the significant funding and personnel cuts under the Trump Administration I am concerned about the ability of the MBS to conduct the erosion modelling described above to ensure buffers are sufficient to mitigate any potential erosion hazard from project activity.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025), it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).
57. Timber. Concern about increasing the thinning treatment diameter limit to 26".

MBS response: "This is addressed in the pending REO Request and Concurrence documents."

My response:
The FWT Project would thin a maximum of 1,200 acres annually over 30 years and the Regional Ecosystem Office (REO Letter 3/2/2026) approved increasing the upper diameter limit from 20 inches to 26 inches DBH (diameter at breast height) in LSR. According to the 11/2025 request letter the "current 20-inch diameter limit

would prohibit work needed to meet project objectives." I object. The reason for this change seems to be more about increasing the commercial timber value for the timber sale. Leaving trees in stands between 20-26 inches DBH, after thinning smaller diameter trees around them, would provide better opportunities for these larger trees to better meet LSR objectives, rather than to be harvested.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).

72. Watershed Management. Proposed no-harvest riparian area buffer requirements are too small to effectively control sediment during harvest and to provide adequate habitat after implementation.

MBS response: "Standards and Guidelines for the NWFP states, 'Apply silvicultural practices for Riparian Reserves to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy Objectives.' The NWFP does not have no-harvest buffers standards. No-harvest buffer does not equate to the entire Riparian Reserve. The no-harvest buffers for this EA follow the Western Washington Programmatic BO, in consultation with USFWS and NMFS."

My response:
As mentioned previously, even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground, and history of stability problems in many riparian areas in the PIAs, especially watersheds on the north end of the MBS, and recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2025) and NF Nooksack Vegetation Management (USDA FS 2022) projects, I have significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream

channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

Many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas.

Also, with the significant funding and personnel cuts under the Trump Administration I am concerned about the ability of the MBS to conduct the erosion modelling described above to ensure buffers are sufficient to mitigate any potential erosion hazard from project activity.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).
73. Watershed Management. Concern that the project could disturb unstable soils within the project areas, potentially resulting in negative impacts to aquatic habitat and increasing the risk of future flooding and landslides.

MBS response: "Regarding hillslope erosion and failure (including landslides), independent of anthropogenic influences, these processes are a naturally occurring phenomena on the landscape. The most erosive soils have already been removed from consideration for this project. Those that remain, are subject to strict criteria to mitigate potential soil erosion including maintaining good groundcover, minimizing machinery passes, and utilizing alternative logging methods. Refer to project design criteria SWF 6 and 76 which include evaluation and identification of unstable slopes/soils during timber sale layout procedure."

My response:
I disagree with the implication that naturally occurring phenomena on the landscape (hillslope erosion and failure,

including landslides) are not affected by anthropogenic influences. There are plenty examples in the literature where timber harvest activities (clear cuts, roads, etc.) have contributed to, or exacerbated, existing natural soil and glacial geology hillslope slope instabilities. The disastrous 2014 Oso Slide, that claimed 43 lives, and the 1984 DeForest Creek Slide, seriously damaging the Deer Creek/NF Stillaguamish River system, are just two examples.

Many of the watersheds proposed for thinning in the PIAs are sensitive and at risk.
They typically contain extensive naturally occurring unstable soils, sensitive soils and steep topography, high frequency of glacial geology, history of rain-on-snow flood events, extensive slope stability issues, poor road maintenance, and a history of extensive logging and road building impacts. It is critical that these treatments be done carefully, focus on areas that have stable soils, and can be easily reached from existing roads, so that fewer new roads are needed.

This combination of factors and steepness of many of the channels, together with land management history, has created unstable stream banks along the mainstem of many rivers and streams in the PIAs. Especially at risk, are upper NF Stillaguamish River (Deer Creek, Little Deer Creek, Higgins Creek, and major tributaries), NF Nooksack River (Canyon Creek), SF Nooksack River (Wanlick Creek), Skagit River (Finney Creek), just to name a few.

Due to the extent of naturally unstable soil areas in many watersheds in the PIAs, and based on my recent experience evaluating the NF Stillaguamish Landscape Analysis Project (USDA FS 2025), when actual field work for each stand and road access is finally completed, many stands will be dropped due to these high-risk factors. Therefore, there may not be enough commercial timber value left for a viable timber sale contract.

A good recent MBS example is the NF Stillaguamish LA Project (USDA FS 2025), where timber stands to be thinned (variable density thinning) were shown on project area maps. When overlayed with soil stability (Soil Resource Inventory) maps that were provided, many of the units were on, or immediately adjacent, to unstable areas with a Moderate and High risk of instability. A significant amount of unstable soils in the proposed NF Stillaguamish LA Project area have a high risk of failures and damage that could result from the proposed timber stand thinning and road-related activities for the project, especially in the valleys of Deer Creek, Little Deer Creek and Higgins Creek and upper NF Stillaguamish River areas. On the soils maps there is a significant amount of "Unstable & Very Unstable" (red) and "S8 Soils" (purple) shown in the Deer Creek, Little Deer Creek, Higgins Creek, and middle to upper NF Stillaguamish River portions of the project area, with many located immediately adjacent to potential project stands (commercial & non-commercial).

These areas have a considerable amount of deep, unstable, glacial lake deposits, till and outwash soils and this instability is caused by a combination of steep slopes, fine textured plastic subsoils, and restrictive drainage, where natural deep-seated failures frequently occur, and are greatly accelerate by management activities (Snyder and Wade 1970).

Many of the PIA watersheds (Fig. 1) contain similar areas with deep glacial soils and deep glacial lake-deposit soils (Lacustrine) which are generally highly erosive and unstable as well as deep, unstable soils occurring on steep toe-slop and midslope drainages. These concerns should be taken seriously.
Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have

significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).
75. Watershed Management. Project activities could alter the landscape in ways that increase vulnerability to future storm impacts, such as flooding, increased sedimentation, landslides, and damage to infrastructure.

MBS response: "No permanent changes to the road system will occur under this project. Roads used for timber haul will be improved and temporarily reduce road-stream interactions and lower sediment input along those segments. Thinning activities will retain 60-79% of crown cover and the largest trees, leaving most root systems intact. Therefore, no increase in vulnerability to future storm events is anticipated as a result of project activities."

My response:
As mentioned previously, even with proposed mitigation measures, due to the extensive areas of naturally unstable soils, steep ground, and history of stability problems in many riparian areas in the PIAs, especially watersheds on the north end of the MBS, and my recent experience evaluating the NF Stillaguamish Landscape Analysis (USDA FS 2025) and NF Nooksack Vegetation Management (USDA FS 2022) projects, I have significant concerns about the potential for resource damage (sedimentation, increased stream temperatures, etc.) resulting from thinning-related activities ((treating alder stands, understory thinning, skyline yarding corridors, fall and leave treatments such as previous examples of damage from dropping trees into stream channels in the NF Nooksack River system (Ruth Creek near Hannigan Pass Trailhead and NF Nooksack River near Excelsior Group Camp)) that could directly, or indirectly, impact ESA-listed Puget Sound Bull Trout, Puget Sound Chinook, and Puget Sound Steelhead.

Many of the PIAs proposed for treatment are in, or immediately adjacent to, these high-risk riparian areas.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate

Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).
81. Watershed Management. Missing road data creating uncertainty in hydrological assessments suggests MBS lacks sufficient data to accurately rank road conditions within 300 feet of streams.

MBS response: "These unclassified/non-system roads will be accounted for during sale implementation and design criteria and best management practice will be applied."

My response:
As stated previously, the FWT does not recognize, or acknowledge, the significant funding and staffing uncertainty under the Trump Administration. Also, not being able to meet the many Project Design Criteria (PDC), project implementation and effectiveness monitoring, and mitigation requirements, is a violation of ESA Section 7 consultation and the Western Washington Restoration Collaboration Zone agreements (Bull Trout, Puget Sound Chinook, Puget Sound Steelhead, and other species) with the US Fish and Wildlife Service (FWS 2025) and the National Marine Fisheries Service (USDC NMFS 2025).

I object to the assumption that the MBS has adequate staffing and funding, or will receive adequate funding in the future, to collect sufficient and/or missing road data to be able to accurately assess and rank road risk to accomplish the numerous tasks and project design criteria identified in Appendices A & B in this EA. Considering the significant recent staffing and funding cuts under the Trump Administration, the uncertain funding and staffing, it is not reasonable to assume that there will be adequate funding available anytime soon to prepare for this extensive project considering there are so many outstanding tasks to complete.
Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025), where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025) it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A 300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).
83. Watershed Management. Clarification on implications of the limited 303(d) listings available for the Forest.
MBS response: "The discussion on 303(d) listings on page 5 of the Hydrology Report has been revised for clarity."
My response:
The Hydrology Report on page 4 (Kelly 2026) states "It should be noted that the State of Washington has not yet reviewed most streams on the MBS (WADOE 2025a, 2025b). One such issue for water quality on the MBS includes stream side roads which create instream issues."
Since Washington Department of Ecology (WADOE) has not reviewed most streams on the MBS, it is unknown whether, or not, streams on the MBS are in compliance with the Clean Water Act. Thus, we do not have data about sediment, turbidity and temperature on MBS rivers and streams. For example, there are indications that several streams in the Deer Creek and NF Stillaguamish River areas are not meeting water quality standards (USDA FS 1996 and 2000). Also, Finney Creek, an important Skagit River tributary, was listed for temperature in 1998 (USDA FS 1999; Nichols and Ketcheson 21013).
There is at least the risk of local adverse effects from thinning treatment-related activities that are in, or near, RRs, considering the existing high-risk conditions in many of these watersheds due to a combination of factors glacial geology, steep topography, road failures, poor road maintenance, landslides, extensive logging history, significant history of rain-on-snow flood events, combined with expected climate change impacts.
As a result of a forest-wide watershed condition analysis,19 watersheds were rated as being in an unacceptable condition and 51 in an acceptable condition (Appendix H in the MBS LRMP, USDA FS 1990). Most of these unacceptable watersheds (80%) were found on the more geological sensitive north end of the MBS (Table 3, Appendix H). These subwatersheds that were analyzed (Tables 2 & 3), called Allocation Zones in Appendix H, are very similar to the HUC 12s in the PIAs for the FWT Project.

The process used by the MBS to complete its hydrologic cumulative effects analysis consisted of a two-step process: 1) Watershed Sensitivity Analysis looking at watershed condition factors and placed watersheds into three risk categories (I, II and III) by increasing degree of risk and 2) Watershed Condition Analysis, which further examined the stream channel conditions and upslope conditions for each watershed and based on the above conditions, whether category II and III watersheds were in an acceptable or unacceptable condition.

After the watershed sensitivity analysis, it was determined that an additional more site-specific, analysis of Category II and II watersheds was necessary and organized individual District ID teams to conduct the watershed condition and method or constraint analysis for Category II and II watersheds. The analysis and discussion separated the upper watershed (1st and 2nd order streams) from the lower watershed (3rd and 4th order streams). They evaluated present and past in-channel stability, streambank stability, status of large woody debris, and channel. The team also looked at upslope conditions by reviewing past harvest rates, road density

and condition, presence of landslides, amount of unstable soils, and stability to revegetate and recover. Appendix (H-38) states as follows:

"Section 208 of the Clean Water Act and Section 319 of the Water Quality Act of 1987 are the legal precedents that most affect forest management because they address nonpoint source pollution. The Region has established some guidelines on how to comply with those water quality requirements.

1. Requirements of the Clean Water Act will be met by applying Best Management Practices. (See FSM 1561.5, R-6 Supplement 48 (8/79), agreement with the State of Washington).

2. Within the concept of Best Management Practices, cumulative effects should be addressed and impacting activities scheduled and dispersed, when water quality might be unacceptably impacted. This is particularly important for high-risk areas where management activities have been or might be concentrated over a short period of time.

3. Within the bounds of the above direction, Forest should address water quality in their analysis in the manner most appropriate given their information base and particular conditions.

Guideline 2 above was of particular concern for the MBS because of the occurrence and frequency of management activities in watersheds having a large amount of unstable soils."

The concern on many of the more sensitive watersheds on the MBS is that dispersing management activities, and state-of-the-art BMPs, are not adequate to avoid unacceptable adverse hydrologic cumulative effects. It appears in some such cases such things as reducing future outputs or foregoing outputs for a period may be necessary."

Appendix H (H-42) states "It is the intent of the Forest to continue to fine-tune many of the assumptions we made in this programmatic level of analysis." It is not apparent that much, if any on-the-ground monitoring, has been done by the MBS since 1990.

Based on the direction in Appendix H, it appears that as proposed, the FWT Project would not be following these water quality requirements, especially in RRs areas in the PIA, in the 19 watersheds identified in Table 3 that have been identified as being in an unacceptable condition and being high risk.
A good recent MBS example is the NF Stillaguamish LA Project (USDA FS 2025), where timber stands to be thinned (variable density thinning) were shown on project area maps. When overlayed with soil stability (Soil Resource Inventory) maps that were provided, many of the units were on, or immediately adjacent, to unstable areas with a Moderate and High risk of instability. A significant amount of unstable soils in the proposed NF Stillaguamish LA Project area have a high risk of failures and damage that could result from the proposed timber stand thinning and road-related activities for the project, especially in the valleys of Deer Creek, Little Deer Creek and Higgins Creek and upper NF Stillaguamish River areas. On the soils maps there is a significant amount of "Unstable & Very Unstable" (red) and "S8 Soils" (purple) shown in the Deer Creek, Little Deer Creek, Higgins Creek, and middle to upper NF Stillaguamish River portions of the project area, with many located immediately adjacent to potential project stands (commercial & non-commercial).

These areas have a considerable amount of deep, unstable, glacial lake deposits, till and outwash soils and this instability is caused by a combination of steep slopes, fine textured plastic subsoils, and restrictive drainage, where natural deep-seated failures frequently occur, and are greatly accelerate by management activities (Snyder and Wade 1970).

Many of the PIA watersheds (Fig. 1) contain similar areas with deep glacial soils and deep glacial lake-deposit soils (Lacustrine) which are generally highly erosive and unstable as well as deep, unstable soils occurring on

steep toe-slop and midslope drainages. These concerns should be taken seriously.

Mt. Baker-Snoqualmie National Forest Land and Resource Management Plan (MBS LRMP) (USDA FS 1990)

The FWT Project EA and specialist reports do not adequately address MBS LRMP Forest-wide Standards & Guidelines (S&Gs) and is covered below.

Forest-wide Standards & Guidelines (S&Gs)
As planned, the FWT Project allows treatment activities within the RRs, and no-cut buffers, many of which are within, or adjacent to, naturally unstable soils and unstable banks and may not comply with the following Forest-wide Standards & Guidelines (S&Gs) from MBS LRMP.

Soil Resource S&G
Numbers 1, 2, 6-8 (Page 4-117)

1. Plan and conduct land management activities so that reductions of soil productivity potentially caused by detrimental compaction, displacement, puddling, and severe burning are minimized. Nutrient capital on the forest and rangelands is to be maintained at acceptable levels as determined by state-of-the-art technology.

2. Plan and conduct land management activities so that soil loss from surface erosion and mass wasting, caused by these activities, will not result in an unacceptable reduction in soil productivity and water quality (as stated in FSM R-6 Supp. 45 or as revised).

6. Areas classified as irreversible soils (S-8) will generally be considered as unavailable for road construction and timber harvest.

A good recent MBS example is the NF Stillaguamish LA Project (USDA FS 2025), where timber stands to be thinned (variable density thinning) were shown on project area maps. When overlayed with soil stability (Soil Resource Inventory) maps that were provided, many of the units were on, or immediately adjacent, to unstable areas with a Moderate and High risk of instability. A significant amount of unstable soils in the proposed NF Stillaguamish LA Project area have a high risk of failures and damage that could result from the proposed timber stand thinning and road-related activities for the project, especially in the valleys of Deer Creek, Little Deer Creek and Higgins Creek and upper NF Stillaguamish River areas. On the soils maps there is a significant amount of "Unstable & Very Unstable" (red) and "S8 Soils" (purple) shown in the Deer Creek, Little Deer Creek, Higgins Creek, and middle to upper NF Stillaguamish River portions of the project area, with many located immediately adjacent to potential project stands (commercial & non-commercial).

These areas have a considerable amount of deep, unstable, glacial lake deposits, till and outwash soils and this instability is caused by a combination of steep slopes, fine textured plastic subsoils, and restrictive drainage, where natural deep-seated failures frequently occur, and are greatly accelerate by management activities (Snyder and Wade 1970).

Many of the PIA watersheds (Fig. 1) contain similar areas with deep glacial soils and deep glacial lake-deposit soils (Lacustrine) which are generally highly erosive and unstable as well as deep, unstable soils occurring on steep toe-slop and midslope drainages. These concerns should be taken seriously.

8. Other soils that are known to be unstable, but which are not sufficiently unstable to be classified as S-8, will require special transportation planning, design, layout, preconstruction, construction, and maintenance techniques. Refer to Forest Supervisor's 2550 memos of June 10, 1988, and January 2, 1990.

Water Resources and Riparian Areas S&G

Numbers 2-5, 8-10, and 12-13
(Pages 4-118 to 4-120)

2. Meet, or exceed Water Quality Regulations for waters of the State (Washington Administrative Code, Chapter 173-201) through application of Best Management Practices (see Glossary). The key beneficial uses which BMPs are designed to protect are fish and water for domestic use.

3. Use existing process to implement the State Water Quality Management Plan on lands administered by the USFS as described in Memorandum of Understanding (MOU) between Washington State Department of Ecology and U.S. Department of Agriculture, Forest Service (7/79), and "Attachment A" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest lands in the Pacific Northwest 12/78).

4. Geographical boundaries of riparian areas will be determined by on-site characteristics. They are lands adjacent to perennial and intermittent streams, lakes, wetlands, ponds, springs (seeps), floodplains, or other wet areas.

5. Maintain the bank, floodplain, and shore stability of all wetlands, streams, lakes, and other bodies of water. (This standard applies above the high waterline on reservoirs). Implicit in this standard are actions to prevent all forms of accelerate soil erosion and soil compaction, and the retention of the live root mat to the maximum practicable extent.

8. Maintain in-channel and streambank stability maintained for upper and lower channels in the Forest watersheds in order to provide stable, high-quality habitat for salmon and trout, and provide high quality water for other in-stream beneficial uses.

9. Maintain pool conditions in upper and lower channels in the Forest watersheds to: (1) provide high quality habitat for salmon and trout, and (2) provide in-stream flow regulation.

10. Along perennial streams and fish bearing intermittent streams, vegetation should be maintained to provide cover and/or root strength so as to maintain streambank stability and fish habitat capability at existing levels.

12. For class I, II, and fish bearing class III streams, the maximum daily temperature shall not exceed 65° F. and average 7-day maximum temperature shall not exceed 60° F. Exceptions must be based on scientific rationale, and must maintain the existing level of beneficial uses of the water, and be approved through NEPA analysis and documentation.
[NOTE: How does the MBS know that this requirement is being met if very little temperature information is available on the MBS?].

13. The Forest shall inventory and map riparian areas during project design and enter information and data into Forest-wide data base.
[NOTE: This does not appear to have been completed]

Fish Habitat Management S&G
Numbers 1 and 4 (Page 4-126)

1. Water quality shall be maintained or enhanced through application of Best Management Practices. This meets the requirements of the Clean Water Act and State Water Quality Standards (includes temperature, turbidity, and sediment).
[NOTE: This does not appear to have been completed]

4. All forest management activities should provide for unobstructed fish passage to accessible fish habitat.

Threatened, Endangered, and Sensitive Species S&G
Numbers 1-3, 5, 6 and 10 (Pages 4-127 to 4-129)

1. All proposed management actions which have the potential to affect habitat of endangered, threatened, or sensitive species will be evaluated to determine if any of these species are present.

[NOTE: Surveys appear to have not been conducted to determine the presence or absence of T, E and S fish species have been conducted on most, if not all, the FWT Project area]

2.The Forest will initiate, support, and cooperate with State and Federal fish and wildlife agencies in developing recovery plans for Federally listed threatened or endangered species. Where such plans conflict with other Management Area direction, the recovery plans will take precedence.

[NOTE: In reviewing all the MBS projects over the past 10 years, or more, the Washington State Department of Fish and Wildlife is rarely, if ever consulted or coordinated with on projects, and is often left off the list of agencies consulted in the EAs. It is noted that Appendix C: Changes to EA from comment period, the MBS finally added WA Department of Fish and Wildlife to state agencies consulted.]

3. The Forest and Districts will cooperate in conducting inventories and keeping records of essential and/or critical habitat and its distribution for all T&E and sensitive species. Occupied habitats of threatened, endangered, and sensitive species will be monitored on a regular basis.

[NOTE: It does not appear that the MBS is cooperating in conducting inventories or keeping records of essential and/or critical habitat and its distribution for threatened or sensitive fish species.]

5. Before project decisions are made, consult with Federal, State, and other agencies, groups, and individual concerned with the management of T&E and sensitive species.

The Washington Department of Wildlife (now Department of Fish and Wildlife) will be consulted for technical information in development of species management guides, and in determinations of viable population levels of sensitive species.

[NOTE: In reviewing all the MBS projects over the past 10-15 years, the Washington State Department of Fish and Wildlife was rarely, if ever, consulted or coordinated with about fish species.]

10. All habitat improvement projects for Threatened, Endangered, or Sensitive species will be small-scale and experimental in nature until such time as species responses are better understood. When species response to a specific improvement project can be predicted, projects can be larger in scale and practical in nature.

Violation of Law, Regulation or Policy:
Because it is unclear how the SRI mapping data was used, and based on experience with the NF Stillaguamish Landscape Analysis (USDA FS 2025) where many thinning treatment stands were located in, or immediately adjacent to, unstable soils areas identified on Maps 2 & 3 (USDA FS 2025), it is unclear how the SRI mapping data was used or will be used for the PIAs for the FWT Project.

Based on these factors, and due to this uncertainty of staffing to conduct identified tasks (PDCs, etc.), there is a high probability that the FWT Project will impact streams (temperature, sediment) in those watersheds that have significant areas of unstable soils and violate Section 303(d) of the Clean Water Act. This would also violate Washington State Administrative Codes (WACs): 173-201A-200 (Fresh water designated uses criteria), 173-201A-602 (Table 602-Use designations for freshwaters by water resources inventory area WRIA), and 173-201A

300, 600 and 602.

In addition, because of the significant funding and staffing unknowns, and the lack of data on the rest of the stands proposed for thinning in the PIAs, it is likely that a number of Project Design Criteria (PDC) and mitigation measures, would not be completed. In addition, many of the PIAs proposed for treatment are in, or immediately adjacent to, high-risk riparian areas, posing significant risk of impacts to aquatic species, including ERA-listed threatened fish species, from soil erosion, sedimentation, and increased water temperatures.

This would be in violation of ESA Section 7(a)(2) consultation for the Western Washington Restoration Zone (WWRZ) (USDC NMFS 2025; USDI FWS 2025) and could put three ESA-listed Threatened fish species (which numerous fish stocks) at risk.
This would also violate NWFP ACS Objectives (USDA FS & USDI BLM 1994) and S&G's identified in the MBS Forest Plan (USDA FS 1990).

Suggested Remedy:
Scale down the FWT Project to include only those PIAs that are accessible from existing roads and verified on the ground that they are not located in, or immediately adjacent to, unstable soil areas as mapped on the SRI (Snyder and Wade 1990).

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