



Northwest Office

1402 Third Avenue, Suite 930 | Seattle, Washington 98101 | tel 206.508.5474
www.defenders.org

15 March 2023

Darrington Ranger District

1405 Emens Avenue North

Darrington, WA 98241

Re: North Fork Stillaguamish Landscape Analysis Project # 61659, draft Environmental Assessment

Dear District Ranger Smith:

On behalf of Defenders of Wildlife, please accept these comments on the Landscape Analysis Project #61659 draft Environmental Assessment (EA) for the North Fork Stillaguamish on the Mount Baker Snoqualmie National Forest (MBSNF).

Defenders of Wildlife is a national conservation organization dedicated to the protection and restoration of imperiled species and their habitats in North America. Defenders has over 2.1 million members and supporters nationwide, nearly 120,000 of which reside in the Pacific Northwest. Our regional base in Seattle, established in 2014, has worked with the USFS and the MBSNF over the years to conserve biodiversity and promote human-wildlife coexistence, including most recently the installation of bear-resistant waste receptacles in communities neighboring the MBSNF. Defenders applies evidence-based science to guide decisions and transform policies and institutions to promote durable biodiversity conservation and ecological landscape restoration. We support efforts on the MBSNF to restore ecological resiliency, watershed function and habitat conditions for wildlife populations at landscape scales. We also recognize the value of Tribal and public access for cultural and recreational opportunities.

The MBSNF contains immeasurable value, providing clean water and air for downstream communities, sequestering carbon, and serving as important habitat for Cascadia's unique biodiversity. We see planning of treatments in the North Fork Stillaguamish as a valuable opportunity to address and integrate as many of the forest and watershed restoration needs in the project area as possible to achieve ecological goals for the area and for its wildlife. A long history of anthropogenic impacts means that much of this land requires thoughtful proactive restorative management. Proactive management of this more than 60,000-acre landscape that is especially valued as high-quality habitat is important for the threatened northern spotted owl and marbled murrelet, for endangered Chinook salmon and other aquatic species, and is home to a myriad of other old-growth associated plants and animals. As a part of the broader North Cascades ecosystem, this landscape can also provide valuable habitat and essential prey for returning threatened grizzly bears and endangered gray wolves.

We support the project's Need as presented in the draft EA and appreciate the effort that went into exploring management alternatives in this project to restore impaired ecosystem processes, decrease fragmentation of large natural patches of old growth and accelerate the development of old



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growth characteristic. We also acknowledge and appreciate the effort that went into generating the comprehensive Wildlife Specialist Report (WSR) associated with this draft EA.

We are particularly concerned about the degree of decline of the northern spotted owl (i.e., estimated at >60% for the NWFP range and an average of 6-9% p.a. at Washington study sites between 1994 and 2018) and marbled murrelet (i.e., an average of nearly 5% p.a. in Conservation Zone 1 between 2001-2020) and the potential for localized extirpations if protections and precautions as outlined in the NWFP are not maintained. In addition, we are committed to seeing a future for the grizzly bear in the Northern Cascades and the expansion of the Washington wolf population into its former range throughout the state. As such, we see that ensuring adequate security habitat for these two species and their prey in the project area as vitally important as well.

Broadly speaking, we realize there is a critical need to restore west-side moist forests so that their structure, composition, and pattern leads to increases in the quality and abundance of old growth and that this calls for proactive and adaptive management. On the other hand, we are aware there are tangible trade-offs to species' populations in the short-term when applying treatments, such as thinning and prescribed burns (as well as the temporary road building required to do so), to lower "plantation" stand density and increase forest resiliency to uncharacteristic wildfire threats. Therefore, a proactive yet cautious approach is needed that is based on a foundation of robust baseline wildlife data, includes a commitment to ongoing monitoring at the project-level scale and offers a capability to course-correct on the basis of that monitoring.

Support for Alternative 3

We support Alternative 3 as described in this draft EA, with modifications, as it maintains larger riparian buffers, decommissions more road miles and is more protective of large trees yet still provides for considerable forest acreage to be treated, culverts replaced, instream quality habitat improved, and beaver habitat enhancements implemented. It also does not require the complication and uncertainty inherent in condition-based management of Riparian Reserves and Regional Office review. In this regard, the simplification of Alternative 3 could, in turn, result in a faster-paced implementation which is desirable and likely more economical. Our suggested modifications of Alternative 3 relate to 1) a reduction in the maximum gap size implemented in mature and old growth stands to guard against edge effects known to impact northern spotted owl and marble murrelet recovery trajectories, 2) an expansion of monitoring protocols of these threatened birds at the project-level scale to facilitate adaptive management across the 15-20 year timeline of the project, 3) capitalizing on recent use of emerging technologies to monitor these two birds and incorporate findings from their 2022 deployment in the final EA, and, 4) an increase in the number road miles decommissioned given this prime opportunity to do so to ensure security habitat for grizzly bears and wolves and their prey far into the future.

We encourage the adoption of Alternative 3 with modifications because it could best strike the needed balance between proactively attempting to restore forest stands and essential habitat to move them to desired ecological conditions (whereas the No Action Alternative would not) while avoiding some risks that Alternative 2 distinctly raises related to tree size range for thinning, riparian buffer width and road miles retained that seem to be at odds with the stated Purpose and Need of the project.



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Application of Variable Density Thinning

The draft EA describes commercial and non-commercial variable density thinning (VDT) to restore older forest habitat within Late Successional Reserves (LSR) land allocations on 30% of the landscape (just under 20,000 acres) in both action Alternatives. Variable density thins of previously harvested areas –that is old plantations of typically even-aged uniform monocultures -- can facilitate and expedite creation of older forest characteristics in the Riparian Reserve and LSR allocations but only if carefully done. This involves variable density thinning from below leaving hardwoods, natural regeneration from hemlocks and cedars for species diversity, and all bigger trees (D.B.H. >20 inch), snags, and down wood for structural diversity in stands less than 80 years old only for example, creating gaps and skips and thereafter decommissioning roads. This kind of detail (what tree species, what sizes etc., what units or stands) and more needs to be fully specified in the final EA and incorporated in the overall design of the project if the intended need is to be met.

The WSR states that “all proposed activities are within stands less than 80 years of age” and describes the Pechman Exemptions, however, we question if the treatments described in Alternative 2 technically meet the requirements of this exemption because trees with D.B.H. >20 inches may be commercially thinned/harvested. A brief examination of the literature on northwest forests suggests that diameters of 20+ inches could include mature trees (depending on species and location). Considering the Pechman Exemptions, a general precautionary principle given possible uncertainty in tree diameter at the cut-off age, and the continued struggling status of the two threatened birds (especially within Washington conservation zones) that depend on large old trees, we consider Alternative 2 to simply be too risky and as compared to Alternative 3. Alternative 2 seems to counter the overall purpose of restoration of late-successional and riparian habitat components (e.g., the stated management emphasis for the Finney AMA) by aggressively removing mature trees. In addition, any trees that are to be removed in the thinning activities should be sized/aged at the time of implementation (and not at the time of planning) given the 15-20 year expected timeline of this project.

In this landscape, there is a need to increase core habitat, patch size and development of old growth structural characteristics according to the associated Late Successional Reserve (LSR) Assessment (2001) and known nesting needs of the northern spotted owl and marbled murrelet. The amount of old growth forest in the western hemlock zone is low relative to desired conditions, with much of it in younger age ranging from 30-80 years of age and considered to be relatively poor for old growth-associated species. Twenty pairs of owls are desired in this LSR yet historically only twelve owl activity sites have been detected with singletons rather than pairs being the predominant. Combined, this information suggests that sizable gaps that would create more edge (both Alternative 2 and 3), and treatments that would remove mature trees (i.e., D.B.H. > 20 inches) (and which are “tomorrow’s” old growth) risks being too aggressive (Alternative 2) and not protective enough in the short term to support northern spotted owl and marbled murrelet survivorship and recruitment (as well as that of the owl’s old growth, closed canopy- associated prey). The proposed VDT with gaps sized up to two acres in 3-10% of the treatment area would “continue to function as spotted owl dispersal habitat” as stated in the draft EA. However, this begs the question whether increasing nesting, roosting, and foraging (NRF) habit would or would not be supported at this scale and intensity of treatment. Given the species’ current trajectory in the state, gap size should be reconsidered so that the minimum for the owl is not just met (i.e., provision of dispersal habitat) and the current situation of few breeding pairs maintained.



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Smaller gap sizes not exceeding 0.25 acres in LSR, as outlined in the Finney AMA plan (2011) could be adequate to create forest complexity, potentially increasing NRF habitat yet guard against creating excess edge. We also urge that no stands >80 years of age or areas not previously harvested be removed to create these gaps and complex early seral.

Wildlife Monitoring

The WSR states that “a concentrated effort to conduct a comprehensive species inventory within the project area was considered impracticable for most species of concern due to expense and complexity of species behavior and ecology.” (pg. 13). We appreciate that extensive inventory of “most species of concern” on this landscape would require considerable effort, however, given the current declining trends of the northern spotted owl and marbled murrelet in the Washington portion of their range, this could be prioritized and supported for these two species here by explicitly including it in the final EA. The historic survey data of the two birds in this landscape that is referenced is either dated (i.e., early 1990s) or else, any more recent data technically relies on information and inference from a set of sites (e.g., DSAs) that do not include northwestern Washington (e.g., see Franklin et al. 2021 where three study sites are evaluated for Washington, all of which are south of this present landscape and not all on Federal land). Climate change impacts for both birds and barred owl competition for the northern spotted owl are threats that have emerged since the NWFP and historic surveys were first published and thus, it is likely more important than ever to have up-to-date and reliable information localized to this landscape on these two threatened species.

We appreciate that acoustic recorders (autonomous recording units (ARUs)) were installed in this watershed in 2022 to monitor species occupancy and potentially inform decision-making about actions; this may have been to address the issue of a lack of localized recent data that we describe above. However, the data from the ARUs appear to have not yet been analyzed. We encourage further development, validation and/or analysis of this emerging survey technique, the design array and data gathered for basic scientific reasons but also because doing so aligns well with the overall AMA process and objectives of the Finney Adaptive Area Management Plan (i.e., development and testing of technical approaches to achieving ecological objectives). We suggest that an update of findings from the ARUs be incorporated and considered in the final EA for this landscape and a monitoring plan described that builds on this up-to-date baseline (if adequate) of bird presence and activity or else include in this EA the generation of an alternative suitable baseline of information and build on that over time. Robust monitoring that tracks impacts of stand/forest treatments on the birds’ ability to nest, roost, forage, recruit and survive over time is essential to the application of an adaptive management concept to this landscape.

In terms of the direct and indirect effects on marbled murrelet and northern spotted owl, we feel it is worth raising the issue of possible impacts of treatments in this project to the birds’ activity sites on the adjacent State lands. Even though examining possible impacts just outside of project boundary may not be the norm, we encourage it in this instance given the number and density of historic sites for these two birds in the pocket of State land that the project landscape surrounds. For example, is one Alternative expected to have less noise effects to northern spotted owls when all (historic) owl activity circles in the area (i.e., as mapped in the WSR) are considered? Are there mitigation measures that could be taken that simultaneously protect the birds on the project site as well



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as those birds just “next door”? It is conceivable that application of treatments on the edge of Federal land could be consequential to the birds on the State land in terms of their ability to nest, roost and forage in their critical habitat and at critical times if not accounted for in timing and sequencing of prescriptions and their associated temporary road building. A Federal versus State land boundary is not apparent to the birds themselves; therefore, holistically considering how impacts of the treatments of the two action Alternatives may affect the activity sites just over the border line seems reasonable to include if protecting individuals and breeding pairs of these two species is a current priority. A description of how any such impacts will be mitigated would be ideal to include in the final EA as well.

Road Decommissioning

With respect to road decommissioning, we are of the view that the current project is a chance to go further, do better and reflect the data and recommendations of the associated Watershed Analyses (1996 and 2000) and that the opportunity of decommissioning/closing more road miles should be seized. Alternative 3 proposes to decommission more road miles than Alternative 2 and thus should be supported but modified to increase decommissioning further. The Stillaguamish and Sauk Rivers are Tier 1 Key Watershed and presently, there are nearly 500 designated road miles in the project area. Security habitat consists of areas of quality habitat used by wildlife, such as grizzly bears, where there is a minimum of 300 meters from any road accessed by vehicles and high-use trails. To support grizzly core habitat, wildlife security habitat and watershed function, road density should be less than 2 miles/mile squared. The final EA should explicitly state what the resultant road density would be and justify why it is not approaching 2miles/mile squared if it is not at this level.

Beaver Habitat Enhancements

We appreciate the inclusion activities related to installation of beaver dam analog (BDA) and beaver transplants. Facilitating beaver presence at a density that imparts their full ecological function on the landscape is a natural solution to increasing water retention and thus mitigating climate impacts and improving forest resiliency. Given the opportunity that the Finney AMA provides for experimenting and learning, a robust monitoring plan, complete with the full seven beaver habitat enhancement sites proposed, that comprehensively evaluates BDA and beaver transplant success in raising beaver density and ecological function over time should be included in the final EA so that it can serve as a model for other USFS forest restoration projects in the future. An aggressive timeline to BDA installation and monitoring should also be delineated in the final EA to ensure this opportunity is prioritized.

Defenders of Wildlife appreciates your leadership and the hard work of your team on planning restoration work to improve forest health and move the North Fork Stillaguamish landscape to desired ecological conditions at a pace and scale that is needed if endangered and threatened species, like the northern spotted owl, marbled murrelet, grizzly bear and gray wolf are to thrive here. We look forward to continuing to partner with the USFS on biodiversity conservation and human-wildlife coexistence opportunities in the future.

Sincerely,

Kathleen S. Gobush, PhD., Northwest Director, Defenders of Wildlife