Data Submitted (UTC 11): 10/1/2025 7:00:00 AM
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Title:
Comments: Attached are my comments on the Blue Mountains plan for the public record complete with supporting hyperlinked citations and two exhibits.

September 30, 2025

Re: Commenting on Blue Mountains Forest Plan Revision #64157

We submit these comments on scoping for the Blue Mountains Forest Plan revision and summarily

oppose the agencies' proposal to weaken forest and streamside protections for the region by removing enforceable standards that will otherwise cumulatively degrade ecological integrity, increase fire and insect outbreak risks, and amplify regional climate change impacts from logging-related greenhouse gas emissions, livestock grazing, and road building. The agency's proposal is on a trajectory to place an unprecedented disturbance burden (Lindenmayer et al. 2025) on ecosystems responding to cumulative stressors from logging, roads, livestock, ORVs, and climate change. We request that the agency develop an alternative based on enforceable forest standards that protect mature and old-growth forests, complex early seral forests, wetlands, seeps, and riparian areas from logging, roads, cows, and other stressors on the affected national forests in the planning area. Stepped-up forest protections, rather than logging, are required to protect carbon stocks held disproportionately in mature forests and large trees, roadless areas that can act as climate refugia, clean air and water provided by unlogged watersheds and riparian areas, and important wildlife habitat present in intact forests free of logging and roads.

In support of our comments, we submit a report on the ecological importance of large live and dead trees that includes a literature review on why these trees, mature forests, and riparian areas should be protected from logging and other 'active management' stressors Exhibit 1). Please note - all citations in our comments are provided via online links to the source material when first cited so that the agency can easily access them by clicking on the hyperlinks. We request that these articles being included in the literature section of the agency planning documents going forward. For articles not available via open online access, we have provided the abstracts.

Protect all Large Trees (live and dead) Regardless of Species Composition & Mature/Old Growth

(Late Seral) Forests

Large trees have declined globally and have superior ecological benefits as wildlife habitat that include irreplaceable carbon stocks (Lindenmayer et al. 2012, 2017) With respect to the eastern Cascades and Blue

Mountain forests, the importance of large (>21 inches dbh) trees has solid scientific support as a critical conservation strategy (Exhibit 2). Large trees in this region have been recovering from past high-grade logging due to protections afforded them under the Eastside Screens (Exhibit 2). There is simply no ecological reason to log large trees, and enforceable standards need to be in place to prevent this type of logging-related degradation (see DellaSala et al. 2025 for what constitutes degradation). Specifically, we request that you use the principles, criteria, indicators, and verifiers in DellaSala et al. (2025) to determine the impacts of active management in relation to areas where no active management will occur. That analysis should be made available to the public to ensure that the agency's practices are not degrading ecosystem integrity and that there is a transparent and science-based approach to determining levels of ecosystem degradation from the agencies' management actions.

From Lindenmayer et al. 2012 - Abstract: Large old trees are among the biggest organisms on Earth. They are keystone structures in forests, woodlands, savannas, agricultural landscapes, and urban areas, playing unique ecological roles not provided by younger, smaller trees. However, populations of large old trees are rapidly declining in many parts of the world, with serious implications for ecosystem integrity and biodiversity.

It is a common misperception by some researchers, especially those with ties to agency funding, to assume in-filling by large firs overtime has created competition for limited resources with pines that also increase fire risks. However, several well-respected forest and carbon scientists demonstrated that this assumption is false (Mildrexler et al. 2023). Using an extensive sampling of 636,520 trees on 3335 FIA plots, Mildrexler et al. (2023), documented that large trees: (1) comprised a small fraction (2.0% to 3.7%) of the total stems in forests; (2) hold a disproportionate amount (33% to 46%) of the total above ground carbon stored by each of five conifer species - the largest trees had the highest relative carbon; and (3)

large ponderosa pine overlapped (co-mingled) with large grand fir (the target of much of the logging for tree competition purposes) on only 8% of all plots in the region while large larch and large fir were together on only 4% of all plots. This study in general falsified the agencies' claim about high competition pressure on large pines from large firs due to low co-occurrence of the two conifers. Further, Mildrexler et al. (2023) cited how dry forests of eastern Oregon once had 60% to 85% older forests and while large th trees on the national forests in this region have been recovering from being nearly decimated by 20 century logging - and many of them include large fir and larch - and not just pine - they are all ecologically priceless.

Other findings from their study showed: (1) across six national forests large grand fir represent 2% of the total tree species population, roughly on par with other dominant conifers; (2) it is not uncommon for fir to live to 250-300 years in frequent-fire forests thereby providing valuable wildlife habitat (e.g., goshawk, fisher) and carbon stocks not afforded in younger trees of any species; (3) large grand fir <150 yrs old can continue growing and playing an important role in accumulating and storing carbon important in the climate crisis; and (4) thinning - especially the commercial removal of large trees - has a high carbon cost because the diminished carbon stocks from logging take too long for young trees to compensate for

removals. These findings need to form the basis of a large (>21 in dbh) protection standard that is enforceable. Summarily, we also request that you include a comprehensive life cycle analysis following published accounts in the peer-reviewed literature by Hudiburg et al. (2019) to evaluate the reduction of carbon stocks from logging via upstream (on site losses including soils) and downstream (transport, manufacturing and processing) emissions. This information should be provided in a range of alternatives that include full protections for large trees of all

species (>21 in), riparian areas, roadless areas, late seral forests, and complex early seral forests (Swanson et al. 2011) that retain carbon stocks even in the most severe burn patches (Harmon et al. 2022). Importantly, even thinning smaller trees involves substantial carbon losses of 30-40% on site stock reductions (see Mildrexler et al. 2023). The results by Mildrexler et al. (2023) and the recommendations of Law et al. (2021) to protect carbon dense areas and high carbon stocks in large trees should form the basis of an alternative having superior carbon benefits that also correspond with clean water, wildlife habitat, soil, and other ecosystem benefits. Those benefits need to be thoroughly examined.

Protecting Riparian Areas, Seeps, and Streams from Cows, Logging of all Forms, and Road

Building

Riparian areas, seeps, and wetlands offer unsurpassed ecosystem benefits in dry forest systems as they are concentrated zones of wildlife activity. Removing livestock and fencing streams and seeps will allow those areas to recover from destructive grazing that has been altering stream morphology, water quality, and habitat for aquatic organisms - the same holds true for seeps that contain rare aquatic organisms. Beschta et al. (2012) found that the interaction of livestock and feral animals with climate change was the top threat on public lands in the West and that threat is often underplayed by federal land managers. The proposed removal of standards that are present in PACFISH and INFISH would greatly degrade aquatic systems at a time when water is increasingly valuable due to climate-driven droughts. We request that you

include an alternative that keeps those standards in place, removes cows from riparian areas and seeps, and restores stream morphology by beaver reintroduction. Extensive evidence from multiple studies show recovery in the form of restored channel morphology, water quality, bird and small mammal habitat, and fragile soils (e.g., crypto-biotic crusts) occurs fairly rapidly when aquatic systems and other areas where cattle are concentrated are properly fenced and the fencing maintained from livestock and feral ungulate damages (e.g., Kauffman et al. 2004). We request that you analyze this information and develop an alternative with enforceable standards that protects riparian areas, fragile soils, aspen groves, and wetlands from livestock grazing pressures and other actions like roads and logging.

End Road Building, Obliterate, and Seasonally Close Roads for Restoration and Ignition Control

Roads are a pervasive multi-stressor on aquatic and terrestrial ecosystems that: (1) impact wildlife through collisions, poaching, and fragmented habitat; (2) contribute to stream side pollution from roadside chemical infiltration (from vehicles) and altered stream hydrology along the road prism; (3) provide an entry point and stronghold for invasive plants, some which are highly flammable; and (4) increase unwanted fire ignition risks from human access (Balch et al. 2017). The ecological impact of roads is known to extend out 1-km on both sides of a road (Ibisch et al. 2016). The forest plan revision must look at the agencies' transportation planning as having an excessive use of roads, and develop an alternative that reduces road densities in the planning area, obliterates problematic roads while improving culverts to handle climate-related and logging/road related floods and mass wasting events, and includes

seasonal road closures of even popular access areas when fire risks are elevated.

Abstract from Ibisch et al. 2016 - Roads have done much to help humanity spread across the planet and maintain global movement and trade. However, roads also damage wild areas and rapidly contribute to habitat degradation and species loss. Ibisch et al. cataloged the world's roads. Though most of the world is not covered by roads, it is fragmented by them, with only 7% of land patches created by roads being greater than 100 km . Furthermore, environmental protection of roadless areas is insufficient, which could lead to further degradation of the world's remaining wildernesses.

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Logging Will Not Reduce Insect Outbreaks or Lower Fire Risk - the Opposite is Likely

It is important to first note that dry forests in the region are still in a fire deficit (ALL fire severities) compared to historical times (Parks et al. 2015, Baker et al. 2024). The Forest Service has been type converting mixed conifer, mesic forests in the region through excessive thinning and canopy removals that will elevate fire risks and degrade ecological integrity (DellaSala et al. 2022, 2025). Additional stress placed on areas from logging includes: (1) co-lateral damage of nearby trees when other trees are felled; (2) soil and mycorrhizae damages from dragging logs to landings and from burning slash in intensely

heated piles; and (3) over-ventilating forests by removing canopy trees that increase wind speeds and fire spread rates- all of which are a form of degradation that is not restoration or resilience (DellaSala et al. 2025). Furthermore, logging beetle-killed areas for fire concerns is inconsistent with the literature that shows beetle-killed areas if/when they burn after needles drop are not a risk of canopy fire (Harvey et al. 2013, Six et al. 2014, Meigs et al. 2015, Hart et al. 2015). The survivors of beetle kill also may hold important genetic adaptations that confer resilience to future outbreaks and foresters cannot determine

which ones have those genes in logging operations (Six et al. 2018). Logging these areas will degrade them by increasing the disturbance burden in any given location experiencing outbreaks on top of active management stressors (i.e., cumulative effects, Lindenmayer et al. 2025). Thus, we request you include a thorough examination of the literature on this topic and assess the ecological costs in the form of carbon stock removal, wildlife habitat degradation, and impacts on surviving trees that may hold important genomes in forest planning.

Request for Alternative that Includes Enforceable Standards Based on Forest Protections

In closing, the Blue Mountains plan revision will impact/degrade some 5 million acres in eastern Oregon and southeastern Washington on the Malheur, Umatilla, and Wallowa-Whitman national forests. The region has experienced decades of high-grade logging of large, old trees; extensive road building; damaging fire suppression activities, including bulldozed fire scars and fire breaks that become de-facto roads and weed infested fields; hydrologically altered streams and aquatic systems from roads, logging, and livestock; and climate-induced changes to fire regimes, regional temperature increases and reduced precipitation levels especially declining snowpack. Removing the enforceable standards of the eastside-screens, INFISH, and

PACFISH will amplify these impacts leading to cumulative degradation

(Lindenmayer et al. 2025).

We request that you develop an alternative that sustains the region's ecosystems in a fast-changing climate by: (1) protecting large trees (>21 in dbh) of all tree species (live, dead, or dying) so that they can continue to build carbon stock and recover from logging related large tree losses; (2) prohibits all forms of commercial logging from late-seral forests (mature and old growth) to protect closed canopy species such as goshawks and fisher; (3) prohibits post-disturbance salvage logging in complex early seral forests; (4) closes and obliterates roads and improves culverts to reduce road density impacts to aquatic and

terrestrial species; (5) revises the transportation plan to reduce the probability of human-caused fire ignitions from too many roads left open during high fire weather; (6) removes cattle and feral animals from streams, riparian areas, seeps and wetlands through exclosures while also restoring beaver populations that begin to recover channel morphology and bird habitat (Beschta et al. 2012); and (7) substantially reduces impacts from ORV use. Additionally, we support the use of prescribed fire and cultural burning practices for ecological purposes via the decoupling of burning from logging related measures. Additionally, the alternative should include operationalizing the agencies' MIST (minimum impact suppression tactics) in Wilderness and allows for managing natural ignitions for ecosystem benefits under safe fire weather. We strongly disagree with the agencies' preferences to use commercial

thinning and other commercial logging practices as these actions are not restorative and instead are degrading to ecosystems as shown by our extensive research (DellaSala et al. 2022, 2025, Lindenmayer et al. 2025). The Blue Mountains need stepped up conversation that are not present in the agencies' planning documents but should be as an alternative for evaluation by scientists, the public, and decision makers.

Sincerely,

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