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Attn: Thomas Vilsack, Secretary of Agriculture

Linda Walker, Director of Ecosystem Management Coordination

The following comments concern the June 2024 Amendments to Land Management Plans to Address Old-Growth Forests Across the National Forest System Draft Environmental Impact Statement (DEIS).

I am a United States citizen and an owner of our National Forests. I live in Hamilton, Montana and spend much of my leisure time in the forest. I find solace spending time with large trees. It is humbling and calming to stand next to something that is centuries old. Mature and old-growth forests are much older than I am even at 62 years. They have survived, wildfires, insect infestations, and disease. The only thing they have not survived is logging. Only about 10% of our forests are still old growth. We have lost the majority of old growth to logging. It is time to put an end to the destruction of old growth for any purpose and to preserve mature forests to recruit future old growth. The DEIS does neither. In fact, it opens the door to commercial logging in old growth and completely omits protection for mature forests.

President Biden's Executive Order 14072 made clear that public forests are essential to mitigating climate change and rapidly declining biodiversity. Thousands of people and organizations commented on the Executive Order as well as the scoping for this DEIS. Those comments and references urging the Federal Government and the United States Forest Service (FS) should have helped shape a policy to protect old-growth and mature forests to mitigate climate change and promote biodiversity. The DEIS, instead, ignores the best available science and immense public outcry for the protection and preservation of mature and old growth (MOG) forests.

The DEIS claims to have considered the best available science in the preparation, creation, and consideration of the alternatives in this DEIS. Yet a letter signed by over 200 scientists makes it clear that the DEIS fails to consider the best available science. The letter states, "We are concerned that the Administration's proposed old-growth Amendment "does not alter or prescribe any substantive standards for the management of old growth forests" that in the meantime remain vulnerable to dozens of timber sales nationally and efforts by the Forest Service to increase logging of these forests before any substantive conservation takes hold. We are also concerned that the proposed Amendment excludes mature forests and includes a loophole that would allow logging of old-growth forests under certain conditions."

The DEIS ignores an extensive study by Harris et al 2016 showing that more tree mortality has been caused by logging than insects and wildfires combined. The DEIS claims that wildfires are the greatest threat to old growth and neglects to mention logging as a threat. The DEIS considers using timber extraction for energy production green when burning wood for energy emits 38%-65% more CO₂ into the atmosphere than burning coal (Fanous and Moomaw 2018).

One of the most egregious omissions is the work of Law, Moomaw, and Harris showing that logging emits more CO₂ than wildfires and emissions from logging are greater than from transportation in Oregon (Harris et al 2016, Moomaw et al 2019, Law et al 2018). In fact, the DEIS Ecological Impacts Analysis claims that logging forests will somehow increase carbon storage. Numerous scientists have promoted increased protections of forests to absorb more CO₂ from the atmosphere and store more, not less, carbon in our forests (Depro et al. 2008, Harris et al. 2016, Woodwell 2016, Erb et al. 2018, IPCC 2018, Law et al. 2018, Harmon 2019, Moomaw et al. 2019). Please see another letter from over 200 scientists concerning carbon storage and the importance of preserving MOG forests.

There are no protections for mature forests in any of the alternatives considered in the DEIS. Executive Order 14072 clearly mandates protections for mature forests. Mature forests are carbon rich and they are soon to become old-growth forests. There is no reason to exclude them in a policy meant to increase carbon storage and sequestration. The DEIS Threats Analysis (fig 19) shows that logging levels will almost double with the implementation of the preferred alternative. How does this preserve MOG and promote biodiversity? It does not.

Baker and Hanson 2022 found that forest thinning kills significantly more trees than it presumably prevents from being killed. Sadly, Forest Service studies that claim thinning reduces tree mortality in wildfires fail to include mortality from the thinning.

Where is the analysis of the impact of the increased logging of MOG forests and large trees on carbon storage? Even Forest Service study Depro et al 2008 found that increased logging will seriously undermine atmospheric carbon draw down. Kellet et al 2022 found:

[hellip]the climate mitigation value of forest carbon lies not in the sequestration rate but in the total amount that is accumulated and kept out of the atmosphere (Mackey et al., 2013). The power of forests in this process is unparalleled and far greater in old forests than in young forests, both above and below ground; carbon continues to accumulate for centuries (Zhou et al., 2006; Luyssaert et al., 2008; Keeton et al., 2011; Curtis and Gough, 2018; Leverett et al., 2021; Law et al., 2022)."

According to Kellet et al 2022, even including carbon storage in forest products does not even out the equation. "A logged mature forest stores less than half of the carbon of an uncut mature forest, even if carbon stored in wood products is included in the carbon storage total of the logged areas (Nunery and Keeton, 2010; Law et al., 2022)."

The DEIS finds wildfire to be the greatest threat to MOG forests. Wildfire is a necessary natural process that forests have adapted to and survived for centuries before experiencing human management of any kind. Many studies have found that dense MOG forests burn at lower severity (Bradley et al 2016, DellaSala 2016). Lesmeister et al 2019 found, "Denser, older forests with high canopy cover had lower fire severity and "buffer the negative effects of climate change" regarding wildfires." Logging is the greatest threat to wildfire and the DEIS must state that clearly.

The assumption that "proactive stewardship" might reduce wildfire is not supported. Even Forest Service scientists have found that managed wildfire or prescribed fire can be used during the natural fire season without removing trees. Thinning often creates higher fire severity. Graham et al found, Thinned forests in the Fourmile Canyon Fire "were burned more severely than neighboring areas where the fuels were not treated." 162 homes were destroyed by the Fourmile Canyon Fire. Law et al 2022 found, "As to the effectiveness and likelihood that thinning might have an impact on fire behavior, the area thinned at broad scales to reduce fuels has been found to have little relationship to area burned, which is mostly driven by wind, drought, and warming."

Thinning and burning opens the canopy and dries out fine fuels making fires more likely to start and spread quickly. It also removes fuel breaks. Atchley et al found that when modelling included atmospheric dynamics, it showed that thinning increases fire severity. Openings can widen the fire front and increase fire speed.

Proactive stewardship loopholes allowing logging of MOG forests must be removed. Instead, MOG forests must be preserved to allow maximum carbon draw down and recruit old-growth forests into the future.

Commercial logging of old growth should not be allowed under any circumstance and similar protections should be added for mature forests. Old-growth forests should be left to natural processes. Yes, some may burn, but they have a better chance of survival if they are not "managed." Old growth should not be removed from old growth status for any reason.

Standard 1 from the notice of intent was removed from the DEIS. Standard 1 stated that agency activities "must not degrade or impair" old-growth forests. This standard must be reinstated because without a strong standard to protect the integrity of old growth, the National Old Growth Amendment does little to protect old growth and the wildlife that need them for survival.

Salvage logging must never occur in MOG forests. Many wildlife species and birds rely on mature snag forests. See Hutto 1995, 2006, and 2008 on the importance of mature snag forests and the role of fire in biodiversity for bird species.

Please rewrite and rethink this Amendment. As it stands, it does little to fulfill Executive Order 14072. Nor does it help fulfill the promises this nation has made in the Paris Climate Agreement. Our nation participated in the Glasgow Leaders' Pledge to end deforestation and forest degradation. The Final Environmental Impact Statement must have strong, measurable standards to ensure the preservation of MOG forests and the biodiversity they support. It must fully analyze and disclose effects to carbon storage and sequestration on our national forests. It must also consider effects to wildlife that survive because old-growth and mature forests exist and function.

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