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Comments: Thank you for the opportunity to comment on the Draft Environmental Impact Assessment regarding the Land Management Plan Direction for the Northwest Forest Plan. The original plan developed in 1994 has had numerous beneficial effects on Northwest Forests by protecting critical habitat for the Northern Spotted Owl and other species occupying old-growth forests. Not only has wildlife habitat been protected, but the forests have acted as significant ecosystems for removing carbon dioxide (CO₂) from the atmosphere, thereby reducing warming and the negative impacts of climate change. The Woodwell Climate Research Center (Woodwell) is a scientific research organization that works with a worldwide network of partners to understand and combat climate change. We bring together hands-on research experience and 38 years of policy impact to find societal-scale solutions that can be put into immediate action by policymakers and decision makers. Scientists from Woodwell work in more than 20 countries on six continents, collaborating with a wide range of partners, including national subnational and local governments, nonprofit organizations, universities, and private sector companies. Throughout Woodwell's history, our scientists have been among the world's leaders in studying natural climate solutions and the role of forests in maintaining a stable climate.

The Forest Service is proposing to update the plan components "to improve wildfire resistance and resilience, adapt to expected future climate conditions, improve ecological conditions related to old-growth forests, expand tribal inclusion, and support local economies." Remaining old-growth forests are threatened by logging and natural disturbances in drier areas despite their unique and highly valued contribution to biodiversity and climate mitigation. We greatly appreciate the intent to conserve and improve stewardship of existing old-growth forests and foster creation of additional forest areas having old-growth conditions. Unfortunately, the draft EIS fails to adequately consider the impacts of alternatives on carbon stocks and has selected alternative B and increased active management rather than the more appropriate alternative C which addresses all of the goals without increasing timber harvest.

There is a large body of literature highlighting options for managing forests to maintain or increase carbon stocks. At least some of this literature should be reviewed and referenced as part of the Climate, Ecosystem Integrity, and Carbon assessment. Briefly, most peer-reviewed studies conclude that it is more effective to let forests grow without management interventions or harvesting to address the principal cause of climate change, emissions of CO₂. (Birdsey et al. 2023, Cook-Patton et al. 2021, Law et al. 2018, Moomaw et al. 2019). These studies indicate that it would take decades to centuries to restore the carbon stocks lost to harvesting live trees - particularly large trees -- even if fully accounting for the temporary storage of carbon in harvested wood products, which is far less than the emissions. Although threats from wildfire and insects must be considered, especially in ecosystems that have short disturbance return intervals, the probability of natural disturbance in areas with high annual rainfall and high productivity is extremely low and therefore not a significant factor in the ability to protect future carbon stocks.

The draft EIS indicates that Alternative B is preferred. This alternative addresses the contemporary need to conserve and recruit mature and old-growth forest conditions, restore ecosystem resilience to wildfire and other disturbance processes exacerbated by climate change, and provide a predictable supply of timber and other ecosystem goods and services. While we appreciate the intent to conserve and recruit mature and old-growth

forest conditions, this alternative is mainly focused on adapting to climate change and providing wood products, while ignoring the essential role of public forests in sequestering carbon in vegetation and soils. In contrast, Alternative C would employ more restrictive limits on the use of commercial timber logging for vegetation management and ecological restoration and would reduce active forest management relative to Alternative B. Therefore, Alternative C is far more important for addressing the cause of climate change rather than focusing on the symptoms. The analysis states that alternative C would not achieve the same levels of fire resistance, ecosystem resilience, and adaptation to climate change compared to other alternatives. There is little scientific evidence to support these statements, but there is some substantial literature concluding that protection and maintenance of large trees in mature and old-growth forests are superior for achieving fire resistance and ecosystem resilience (DellaSala et al. 2020).

With these comments in mind, Woodwell strongly supports a shift in emphasis by selecting Alternative C rather than Alternative B.

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Literature cited

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ATTACHMENT-LETTER TEXT: Woodwell Comment on the Draft EIS for the Northwest Forest Plan.pdf; this is the same content that is coded in text box; it was also included as an attachment