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Comment on the Northwest Forest Plan Amendment Draft Environmental Impact Statement

1. Unmitigated Adverse Impacts to the Affected Environment All Alternatives as Currently Developed

We live in Douglas County, Oregon and are directly, indirectly, and cumulatively impacted by public land management covered by the Northwest Forest Plan (NWFP).

In the 1970s and particularly 1980s prior to the effective implementation of the National Forest Management Act the timber industry lobbied and successfully received levels of logging on federal lands that far exceeded sustainability and ecological health. Papers have been written and published about this. Further, between 1990 and 1996 congress passed a number budget bills that pushed the envelope over and over in favor of industry profit interests for an unsustainable amount of tree volume while it was already clear that our public forests had been logged far beyond sustainable levels as now envisioned in regards to ecological integrity in the 2012 NFMA Planning Rule. A prime example of this was the 1995 Salvage Logging Rider that required the removal of old growth in timber sale units across the region that were supposed to have been dropped from logging. I know of this since I was directly involved in it as a federal forest wildlife biologist at the time. I also conducted substantive regional and local analysis of forest conditions both locally and across the PNW as part of the staff working on the 1994 Northwest Forest Plan having received a certificate of appreciation for the effort from Jack Ward Thomas the project leader.

The huge body of science over and over again points to logging (removal of the forest tree biomass from its site where it grew and functioned (both alive and after it dies) has had a significant adverse impact on the entire forest system across the PNW and beyond. Thirty years of the Northwest Forest Plan is not enough time to recover and fact is not enough area has been designated for recovery. Data including many Northern Spotted Owl studies show that not enough space across the forests have been protected from mature/old tree removal and post fire logging. Both kinds of logging including thinning cause adverse impacts to may species including the Northern Spotted owl and their prey (Holloway and Smith 2011)[1]. As stated in Holloway and Smith, "Our results support the association of Northern Flying Squirrels with mature **uncut forest** and their suitability as ecological indicators of these vegetation types" (emphasis mine). You can not maintain ecological integrity without paying attention to the abundance of species that reflect it. Sustainable timber output has been affected by industrial political influences in the past and in the present that have had an adverse impact upon all of the elements of forests for future generations which is why the National Forest Management Act exists in the first place.

1 Holloway, G.L., Smith, W.P. (2011) Journal of Wildlfie Management 75 (3):668-674

Directly, I and many of us in my community depend upon the ecological services of water retention and storage in our public forests that flow to us to grow our food and drink. Food security in rural areas like Douglas County has always been dependent upon local products and now with the many perturbations affecting us it is even more critical. We know that the water capture and ground water storage and flows we depend upon have been seriously impacted by logging and the roads that access the sites. Too much logging including thinning and post fire logging and too many roads are still in place under the excuse they are needed to suppress fire and conduct active management. Young forest plantations less than 70 years old are prevalent across the landscapes and negatively affect water storage and ground water abundance[2]. Forest stands older than 70 years are valuable as the are (unthinned) for recovering water conservation. Jones and Perry (2017) found that regeneration logging and thinning impacts water flows. We have one of those long term research areas in our watershed such that we know the research results describe the local effects we have felt. Since the impacts of the logging are still not recovering including thinning treatments, and they predict it may take well over 50 years, it is false to assume that logging and fuels treatments outlined in Alternative B and D for dry and moist forest in and out of LSRs meets ecological integrity and species viability requirements as well as providing the ecological services of water to the public as legally mandated.

It is the ecological integrity of old/mature forest in the amounts and distribution that historically occurred that were responsible for making the valleys below where we live productive[3]. This support from the forest is key to our health and livelihood here in the 1000 valleys of the Umpqua. This is why Alternative C better meets the Purpose and Need - with modifications - as the manner in which different strategies for fire prevention/resilience are not distributed among the different alternatives as they should. For example, prioritizing fire risk reduction directly near areas that affect communities in Alternative B should also be included in Alternative C. Such a prioritization does not have to occur on USFS land such that continued funding to counties with requirements that the funding go to homeowners and towns for risk reduction and home hardening is the most effective means to address current and oncoming conditions.

We rural residents depend upon the climate conditions that intact forest ecosystems provide so as to make our area rainfall and temperatures amenable to life giving conditions[4]. We also depend upon ecologically intact biologically diverse forests for our well being since it literally gives many of us peace of mind, physical outlets, and non-timber products including medicinal and food sources.

It is logging and mechanical treatments not wildfires and other disturbances that is and has been the biggest threat to forest resilience and conditions that maintain the climate, water and overall healthy conditions we need. Climate change has an increasing impact and the forests respond in the manner they have for thousands of years including insects which enter when trees are dying. However it is the continued perturbations of logging and human set wildfires in the forest and out with associated fossil fuels and CO2 emissions that are the primary causes of the problems and the “bleeding” needs to be stopped.

We know that our landscape is much more amenable to tourism and regional foods that brings people and commerce to our community without retarding the recovery of the forest landscape that active management timber harvest as described in all the Draft NWFP amendments would do. There is no published evidence that demonstrates the active management as described in either moist or dry forest

2 Jones, J.A. & Perry, T. (2017) 10:e1790, Wileyonlinelibrary.com/journal/eco.
3 Jones, J.A. & Perry, T. (2017) 10:e1790, Wileyonlinelibrary.com/journal/eco.
4 How Trees Bring Water, Andrew Millison Nov. 3, 2022 https://youtu.be/oY8ds4BIG1A?si=ulWQ_pDsfXpBRCw

particularly where trees would be logged up to 120 (moist) and 150 (dry) years old will advance the development of older forest OR increase "resilience". It is the young dense plantations of little merchantable value that are the issue and responsibility of the agency to address since it was the agency with their silvicultural prescriptions and paradigms that facilitated past actions. Therefore this element needs to be changed in all alternatives and the thinning up to 80 year old standard as currently exists should continue to be be used since it remains the best guide. After that time frame the biological functions and habitat of the trees becomes far too important both alive and as they die and contribute to many species habitat, water storage, drought resistance, energy and nutrient transfer and refugia during heat domes, wind events and cold snaps and drought.

Note that I reviewed all of the references referred to in the relied upon *Synthesis of Science* (GTR PNW 966) (e.g. Carey 2003, Churchhill et.al. 2013, Haugo et. al. 2015, Muir et. al. 2002) for the Amendment on this topic and they do not provide science evidence as suggested that the forestry thinning and fuels treatments outlined in the alternatives will be beneficial nor provide "resilience" or quicken recovery. The risk is actually **higher** when you remove the trees older than 80 years through logging including drying out the stand and increasing the vapor pressure deficit[5] at a time (accelerating climate change) when that is the last thing needed and the exception again is only where very young dense even aged plantations that have not yet gone through the many possible self thinning processes, increased stem diameter, water conservation, and soil fungi connectivity that establish resilience. As will be reiterated there is much greater risk that active management will make the forest stands less resilient due to the effects of the treatment and removal.

This community is already stuck in an economic paradigm that adversely affects us that we need to get out of as described well by Ernie Nieme, Natural Resources Economics Inc.[6]:

"It is common for advocates to assert that increased logging will have positive economic effects on workers and communities, by generating logging-related jobs and revenue. For example, the Staff Report for this agenda item asserts that an "increase in potential harvest outcomes [will] help support local government services and communities." Contrary to such perceptions, though, the facts show that industrial timber production, for many decades, has had deep, negative impacts on workers, families, and communities. Some of the impacts occur directly, as the industry persistently eliminates jobs, with correlative impacts on the number of families living in poverty and other indicators of social distress. Others occur indirectly, as the industry's legacy and influence distract communities from pursuing opportunities that have greater potential to strengthen local economies. Giving greater emphasis to managing state lands for conservation and restoration would bolster powerful forces that have to potential to create more jobs, raise incomes, and strengthen local economies."

Mr. Nieme also calculated the benefit/cost to us citizens from logging with climate change pollution caused by logging and found the cost per year for each citizen from impacts of CO2 ($5,000 to $34,000) exceeded the value of the timber ($4,000) per 800mbf using BLM and EPA data and other published data including Law et. al. (2018) which provides evidence that timber logging and milling is known to be the largest CO2 emitter (35%) for Oregon[7]. Also noted in 350 Humbolt's submitted

5 Jerecke, K.M. et. al. (2024) Forest Ecology and Management 551 (2024) 121529 https://doi.org/10.1016/j.foreco.2023.121529

6 Ernie Nieme, Natural Resources Economics Inc. Letter to Oregon Board of Forestry, August 29, 2023

7 Law, B.et.al. (2018) Land use strategies to mitigate climate change in carbon dense temperate forests. PNAS https://doi.org/10.1073/pnas.1720064115

comments to the Draft Amendment, Talberth[8] found that "Using a life-cycle of carbon footprint method ….GHG emmisions associated with logging and logging roads in Shasta and Siskyou counties averages over 4 million metric tons CO2 equivalent per year". The EPA currently values the Social Cost of Carbon at at least $190 per metric ton but as high as $340 per ton according to Ernie Niemie's recent assessment leading to annual community costs in the million dollar plus range for who knows how long. Note, we rural folk are not flush with cash and are impacted by a number of lack of health and education services for example. We note that the Draft Amendment does not adequately address the costs versus benefits of economic impacts to ALL of us citizens of the logging and active management considering climate change resulting from implementing the alternatives as described. Many of us are already directly suffering from less water resources having to pay for truck loads of water for basic needs (another cost) and not able to obtain enough water to grow our food and water livestock (another cost), and our insurance costs are rising significantly all tied to logging resulting in the conditions of the forest landscape (the 0 to 40 year old stands and road density – not the 80 plus year old stands) and climate change. We also note that the body of science finds that wildfires contribute much less CO2 to the atmosphere than logging and milling and is evidenced in a number of publications. Since we are in a climate emergency, keeping the trees in the forest and reducing roads to reduce water impact and human caused fires (70-80% of the fires) and direct home hardening, and treatments should be our number one priority to ensure sustainability.

We, like most Americans expect our National Forests to keep our wildlife legacy healthy and well distributed within their geographic range. Our federal public forests are relied upon to maintain wildlife species viability that occur in our forested landscapes as documented in the Planning Rule of 2012 to meet NFMA and the ESA. These species evolved over thousands of years into interdependent relationships with the forest such that their normal abundance and distribution is necessary in order to functionally keep the forest healthy and maintain their viability. Conservation Biology Principles make it clear that species must have enough habitat to facilitate a population size, distribution and density that is able to face stochastic events such as invasive species, disease, and natural disturbance processes. This is why the Northern Spotted Owl is in grave trouble because too much habitat has been removed, AND not enough was reserved during the 1994 NWFP on BLM and USFS land. I directly know this since I was one of the staff given the criteria and direction for the NWFP to delineate the LSRs on the Umpqua National Forest and conducted spotted owl surveys and assessments. The agencies did not know then how much area was needed and kept changing the levels and still have not effectively incorporated the full extent of disturbance regime and percentage of old, mature and unfragmented (road density and associated logging) forest across the landscape into the species critical habitat requirements. The Northern Spotted Owl would have more options to adapt if landscape conditions were not made more favorable to the Barred Owl particularly through more fragmentation and opening up stands as is occurring with roadside fuels logging and continued thinning, regeneration (clear cut), and post fire logging. It will not be helpful to open up canopies and under-stories in stands with trees 80 to 150 years old for the Northern Spotted Owl and many (most) other species. The cutting and piling and burning of the piles is also causing adverse impacts to the soil biota and other vegetation that support the ecological integrity of the trees through their symbiotic relationships. Thinning is more detrimental to the Northern Spotted Owl which has a smaller wing span and can maneuver better in more dense stand conditions than the Barred Owl with its larger wing span and generalist prey preferences. The spotted owl is also stressed by heat so needs more canopy refugia. Further, since removal of what would potentially become dead tree biomass that is habitat for prey

8 Talberth, J. Ph.D. Senior Economist, Center for Sustainable Economy, Climate Impacts of Logging and Wood Products in Shasta and Siskiyou Counties, California. Prepared for Battle Creek Alliance, August 2024.

species and their food, it does not make sense to remove trees by logging them out to “advance OG conditions” nor to increase “resilience” aka to fire.

As a longtime professional forest wildlife biologist and educator in this area I have 45 years of experience and observations of the results of active management. As Chris Maser states in many of his publications, linear thinking leads to treating symptoms rather than the system. The problem here is the linear thinking that a timber product of a certain amount must be produced at this time in order to meet NFMA. It is well documented that we are in a Climate and Biodiversity Emergency. It is time we face the facts and the spirit and intent of our laws rather than rationalizations to meet one special interest end. In reference to Spies 2018 Synthesis of Science as referred to in the NWFP Amendment Draft, the issue is not that active management is needed as stated to log trees 80-150 years old or to treat fuels with thinning and removal of trees (AKA logging). The issue is that we need to allow the forest to react and recover with all of its tools including all of the densities and distributions of species that work in the dead wood environment of complex early seral to old forest.

The driving factors associated with wildfire issues is the extent and conditions of young plantations less than 70 years old and the continued logging creating this dominant small stem condition across the landscape in combinations with weather and mostly human ignitions connected with so many roads during red flag weather which has increased due to climate change (not “fuels build up in mature and older forests from fire suppression” as continues to be communicated). You can not fix this condition with Alternatives A, B and D. Alternative C needs more integration of the elements that would address increasing more acres of mature and old forest into the reserves and across the landscape as the best tool for cooling down fires as is evidenced in publications and directly address the risks to communities.

In furtherance, We support and submit by reference the comments submitted February 21, 2025 by Wild Heritage submitted online via https//cara.fs2c.usda.gove/Public//CommentInput?Project=64745. And concur with Wild Heritage that there is a substantive issue with lack of use of the best available science both procedural in the make up of the FAC and by the active exclusion of a significant body of science studies with substantive evidence in independent, blind, peer review publications that were effectively ignored.

2. Summary

The current Draft Amendment places **The Public Trust** at significant risk and does not ensure compliance with the Panning Rule such that meeting the letter and spirit of NFMA has not been achieved. The impacts are likely not effectively considered challenging the assumptions and soundness of the resulting proposed actions in the Alternatives as drafted.

Reference: Planning Rule of 2012:

- “Meet the requirements under the National Forest Management Act, Multiple Use Sustained Yield Act, and the Endangered Species Act”
- “This final rule is intended to ensure that plans responsive to the requirements of land management….including the need to provide **sustainable benefits, services**, and uses, including recreation, the need for **forest restoration and conservation, watershed protections and wildlife conservation; and the need for sound resource management under changing conditions.** The rule sets forth a process that is adaptive, **science based**….” (emphasis mine).
- As described in the 2012 Planning Rule an emphasis is to be placed upon maintaining and **restoring ecological integrity and biological diversity.** Further, the Rule states:

    - to “enhance management direction to restore and maintain ecological integrity through increasing ecosystem resilience to wild land fire and climate change.”
    - **“strengthening** habitat supported by mature and old growth ecosystems,
- Includes “**requires the responsible official to use the best available scientific information to inform the planning process and “how the best available science was used to inform the plan decision.**” pg 21166 Federal Register Vol. 77 No. 68 / Monday April 9, 2012/ Rules and Regulations

3. Recommendations to mitigate adverse impacts of the past and prevent adverse impacts of the present and future to ALL citizens from actions taken on USFS land in R6. The Plan contains commendable goals. To achieve those goals:

- The plan as written made it difficult to comment on by how the strategies are distributed among the Alternatives. It makes the public feel the Alternatives are manipulated to a predetermined end. As such it doesn’t allow the public to cohere to packages that commenters can support. The FAC should not be in the drivers seat but instead it should be the public. The FAC is not an elected body representing the public and impacts and benefits occur to the public as a whole. The best available science needs to be applied to support the best outcome for the public.

- Alternative C is the best foundational framework to shape a package that includes some of the other compatible elements in Alternative B. Alternative C should include expanding the size of Late Successional Reserves to encompass the full extent of ecological processes including stand replacing fires that facilitate and protect complex early seral habitats after disturbances. In most of the planning area high severity fires are part and parcel with the fire regimes and are not outside the norm. Very little of the planning area is in a low severity frequent fire regime.

- Support Tribal traditional treatments in special areas of traditional foods such as oak woodlands and wet meadows as described in Alternative B.

- Maintain the 80 year tree age criteria in regards to treating young stands. This should remain in both moist and dry forests. There is no sound science evidence that changes the age criteria. Rather the current body of science suggests otherwise.

- Truly facilitate adaptive management by delaying logging in mature and old growth stands outside of Late Successional Reserves for the next planning period pre or post fire until a better understanding of climate change impacts is at hand and the value of the functions of this forest structure in these places is reassessed to provide the greatest flexibility for future management.

- As a result of the previous bullet recommendation, support the need to sequester and store far more carbon by limiting logging to levels much lower than currently until there is a major turn in the climate trajectory and existing landscape conditions.

- Focus wildfire prevention and resilience on communities and on hot spots of strategic importance in limiting severe wildfires; recognize that logging is not wildfire treatment but a wildfire problem.

Thank you for the opportunity to comment.
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