Data Submitted (UTC 11): 3/16/2025 4:00:00 AM
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Comments: Please let me know if this does not attach. (It should be 14 page WORD document)

March 14, 2025

Dear Regional Forester Jacque Buchanan and Regional Forester Jennifer Eberlien,

The Northwest Forest Plan has provided a global example of a successful and comprehensive landscape-scale ecological management strategy, since its inception 30 years ago. Envisioned as a 100-year plan, it has conserved and recovered habitat for imperiled species like salmon, northern spotted owls, and marbled murrelets, protected drinking water supplies, and as a side benefit, although it wasn't expressed as an original goal, the implementation of the plan has resulted in the storage of immense quantities of carbon from the atmosphere and thereby acted to mitigate climate change impacts. The original plan also identified 1,000 or more species that are associated with Pacific Northwest mature and old-growth forest habitat, that required surveys and buffering before logging occurs.

A major reason the original Northwest Forest Plan was so successful, is the scientific foundation on which it was predicated. The team who developed the framework, (Forest Ecosystem Management Assessment Team, or FEMAT), was made up of a highly esteemed, credentialed, scientifically professional group with diverse specialties pertaining to all aspects of the ecosystems and processes to be assessed, who operated without political pressure, unlike with this amendment phase, in which the team members lacked specific technical expertise related to wildlife and aquatic species, carbon accounting and life cycle analysis, and reserve design among other things. The FACA team was comprised more of stakeholders than rigorous scientists.

The FEMAT team was instructed to "include alternatives that range from a medium to a very high probability of ensuring the viability of species" and that the analysis "should include an assessment of current agency programs[hellip]" (page 27 of FEMAT, of Chapter 2 pg. 5)

The FEMAT team, developed 10 options, which were each analyzed for "likelihood of maintaining well distributed habitat conditions on the federal lands for threatened marbled murrelets and northern spotted owls. In addition, for seven of the options, similar assessments were done for 1,000 plant and animal species thought to be closely associated with late-successional successional forests. The likelihood of maintaining a connected viable late-successional ecosystem was also evaluated. These likelihoods varied across options but, in general, were found to be directly related to the amount of forest in reserve status." (page 18 FEMAT report, or Chapter 1, page 2)

https://www.fs.usda.gov/r6/reo/library/downloads/documents/FEMAT-1993-Report.pdf

The preliminary proposed action in the NOI, 2024, stated the Forest Service seeks to amend the NWFP to improve fire resistance and resilience by clarifying direction for employing prescribed fire, managed fire use associated with natural ignitions, cultural burning and active management. And, this direction should reflect differences in dry and moist forested ecosystems, and ensure that forests are managed to adapt to changing fire

regimes, restore fire in a functional role in the health and integrity of forest ecosystems, and contribute to traditional cultural resources.

With emerging and increasingly urgent issues that have arisen over the last 30 years, a deliberate and thorough assessment of new scientific peer reviewed and updated information must be a part of any amendment/revision to this plan, especially related to issues that were not thoroughly considered in the original. This step is greatly lacking in the recent Science assessment and amendment process, and must be corrected. Do you have plans to improve upon the Science synthesis, incorporating peer reviewed information that was brought to your attention during the recommendations received during the NOI comment period, that were not cited in previous documents? And will you incorporate effects analysis and decision making using new peer reviewed literature directly pertaining to plan components, especially those that shed new light on previous controversial findings? (Refer to previously submitted comments by Wild Heritage which cite and include pertinent peer review literature for consideration and inclusion.)

Perhaps as a result of inadequate science-based information and analysis of new topics, none of the action alternatives in the Draft EIS meet the 100-year timeline of the NWFP in restoring the ecological integrity of late-seral forests and dependent species. By weakening the ecological principles in the DEIS, including the preferred alternative, the proposals in the DEIS most likely violate: the Endangered Species Act, (by loosening the habitat protections for multiple Old Growth associated listed species that could result in "take" or jeopardy and further depleting their populations), the National Forest Management Act (by not adequately considering protection of viable species as several imperiled species could be negatively affected to the point of extreme loss), and even the National Environmental Policy Act, (by not presenting and analyzing a full range of alternatives including increasing and protections of the NWFP as a potential alternative). Will there be a thorough effects analysis on the alternatives, and a credible description of how the agency will comply with these and other legal requirements in all alternatives presented?

The "No Action" Alternative is the most ecologically grounded, and yet a large part of the rationale for revisiting the plan, was due to the recognition that emerging issues such as climate change and the increased fire potential, need to be addressed to ensure that old growth and associated species are maintained or restored. And yet even the 'No Action' Alternative (or status quo), does not adequately assess the recent omission of 2.6 million acres of BLM land that were included in the original Plan, that had been counted on to meet the goals of habitat acres restored, needed for success of the NWFP over its 100-year period. (In 2016 the BLM revised its management plans to give itself more "management flexibility" and essentially removing all of its 2.6 million acres of Western Oregon forest lands from the conservation framework of the NWFP and shrinking riparian reserves to just half their previous size, and allowing maximization of logging both inside and outside late successional reserves and riparian reserve.) Any amendment to the NWFP needs to include a design/plan for making up for this huge loss in order to meet its said goals. Is this critical step in the works?

Thirty years after the Plan's adoption, climate change and biodiversity concerns have only intensified, making protection and recruitment of mature and old-growth forests even more critically important. One of the most impactful measures the Pacific Northwest region can do to address these crises is to uphold and strengthen the Northwest Forest Plan's conservation directives. Would you be open to developing a much needed serious Conservation alternative, that would increase the amount of reserves, includes a survey and manage section, and a monitoring section, with an effects analysis of affected species?

Supporting Tribal Sovereignty and Environmental Justice

The planners of the DEIS are to be commended for expanding their consultation process with tribes overlapping the footprint of the NWFP, and where they align with conservation objectives. However, the DEIS did not elaborate on how this will play out as it pertains to removal of large live and dead trees for tribal or other purposes. The removal of large trees for any reason, cultural or otherwise is controversial and rarely, if ever, in

line with restoration, conservation, or climate mitigation no matter who is doing the large tree removal.

Old large tree removal considerations must include analysis of impacts to imperiled species, to aquatics, to soils and include an analysis of greenhouse gas emissions to compare each alternative, including from logging. This is lacking in the DEIS.

Often within this and other sections of the DEIS, vague, undefined, and questionable terminology is used (such as stewardship, ecologically appropriate, restoration, climate friendly, resilience, ecoforestry) when discussing commercial logging including large old trees and road building.

Also, there were some comments to the NOI on this subject that were disconcerting. There were some implications, that if cultural burning was permitted, it would be "needed" to be done on a landscape basis, including in old growth, LSR's and other naturally forested areas, but would require mechanical fuel reduction prior to burning operations. Incorporating Traditional Ecological Knowledge, facilitating Tribal involvement, and addressing environmental justice concerns in the management of our national forests, however, should not require weakening the core conservation protections of the original Northwest Forest Plan. The standards for these areas in the original NWFP should be adhered to, with restrictions on cutting large trees, and mechanically operating in preserves. (The fire resiliency of natural stands will be discussed in other sections of these comments.)

Please find below, comments on the Draft EIS that includes these alternatives:

Alternative A: No Action- retains current NWFP protections, but on 2.6 million less acres administered by BLM (as of 2016)

Alternative B: Proposed Action - redefines "mature" and "old-growth," eliminates protections for unlogged mature forests in LSRs, increases clearcutting of mature and old-growth forests in Matrix lands, and increases logging in dry forests that will degrade habitat, emit greenhouse gases, and potentially increase fire hazard.

Alternative C: More emphasis on natural processes, including wildland fire, while still increasing logging through loosened protections in LSRs and new definitions for mature and old growth

Alternative D: Even greater flexibility and "predictability of timber outputs" than Alternative B, and would eliminate rare species survey requirements before logging in certain areas.

There is no credible rationale given for changing the age definition of mature and old growth, which would contribute to the weaking of existing protections and greatly increase logging on our national forests, in the three action alternatives (Alternatives B, C, and D).

Ending of Logging of old trees in the matrix:

This is a welcomed recognition of the importance of maintaining additional old trees in a previously unprotected land allocation. However, also in the DEIS, there is a proposed definition change that would use the stand origin year to limit the definition of stands deserving protections, versus using the actual age at time of project to define age of stands. This change essentially permanently locks existing mature forests out of potential protection, and severely limits recruitment of old growth to replace what will naturally be lost to disturbance over time.

In addition, the potential added benefits of some matrix old trees being protected, will be negated by the proposed changes in large tree definitions, in the proposed alternative and resulting in increased removal of trees in other allocations. That tradeoff in allowing more logging in reserves vs. less in the matrix would come with collateral damages and carbon costs to removal of old trees, that would increase emissions from logging, thereby adding to global feedbacks that are driving more extreme fire weather, and more rapid habitat loss for late successional species.

Large Trees Definition and Guidance Changes; Projected Increase in Logging

In DEIS proposals, the age class of "mature" or late successional stage forests would be raised from 80 years old to 120 years old, effectively opening up 824,000 acres to logging[mdash]the equivalent of nearly 8 Jefferson Wilderness areas.

The DEIS would allow logging at least one third of dry forest stands over a 15- year period, a total of 964,000 acres, in the name of "forest health" and fire hazard reduction, both questionable logging outcomes. The Forest Service would have broad discretion in determining what constitutes a dry forest.

Also, the proposed changes in age definitions, would allow double the amount of commercial logging in National Forests. As the DEIS stated, in 2023, the Forest Service logged approximately 504 million board feet of timber from the 17 National Forests within the NWFP area. Logging under Alternative B, the proposed action, could exceed one billion board feet annually, doubling 2023 levels, and tripling the most recent 10-year average.

Old growth snags would be permitted to be cut, even though they are critical to forest ecosystem health. More species may depend on dead trees than live ones. Removal of snags after fires, removes carbon that would otherwise be stored within them.

In Matrix stands of 200-year-old "old growth" forests, logging would be permitted to preclude fire, even though such logging has been shown to increase wildfire spread.

The original authors of the NWFP considered a range of scientific information and determined that forests under 80 years were likely to benefit from careful thinning and forests over 80 years old are likely to experience net negative effects from manipulation. Authors of the new science synthesis and amendment documentations, have given no cogent scientific reason to change that conclusion. Also, since 1994, there is additional information showing that dead wood is more valuable than previously thought. The original 1994 NWFP standards and definitions on these subjects, should therefore remain or be strengthened.

Recovery of Species

The original goal of the NWFP was in response to concerns of late-seral species, and the resulting plan was legally and scientifically defensible because it was based the science of the times and still relevant decades later. There is no legitimate scientific reason for the Forest Service to abandon its obligation as the nation's steward of remaining late-seral forests that are linked to the viability of dependent species, although, as previously state, none of the alternatives in the DEIS meet the 100-year timeline of the NWFP in restoring the ecological integrity of late-seral forests and dependent species. Proposals withing the DEIS will harm forest ecosystems and imperiled species due to increased logging of large trees and increasing roads, which will also increase unwanted climate-related impacts.

For over more than 3 decades, I worked as a wildlife biologist in land management agencies and helped manage all three sub-species (Northern, California and Mexican) spotted owls. I was a biologist when the N. spotted owl was proposed, and eventually listed, and learned to implement the NWFP when it was adopted, including conducting surveys for fungi, mollusks, and plants in Oregon forests within the NWFP. The surveys resulted in:

finding new species, learning about rare species' micro-habitat needs, learning that some species that were thought to be rare, were common (and therefore adjustments were made accordingly for species needing to pre-project surveys). Survey and Manage concepts are crucial for addressing the biodiversity crisis, and gaining knowledge to prioritize management strategies. Will you commit to maintaining and continuing to build on the Survey and Manage program by ensuring updated monitoring and incorporation of habitat into the reserve network?

Will you commit to addressing the effects to 'species of conservation concern' with a well thought out effects analysis, including species of concern, of currently proposed, and any new proposed action alternatives?

Spotted Owl Threats and Assumptions as to Habitat loss

Spotted owls are threatened by the combination of severe habitat loss and competition from invasive barred owls that now occupy the entire range of the spotted owl. Spotted owls are at a competitive disadvantage compared to barred owls, especially within suboptimal habitat, but spotted owls are able to hold their own in more optimal mature and old-growth habitat, so any loss of such habitat makes it harder for spotted owls to compete.

Spotted owls and barred owls use similar habitat and are both territorial. There is evidence that spotted owls and barred owls are more likely to co-exist, and less likely to drive each other toward extinction, when suitable mature and old-growth habitat is more abundant, so any loss of suitable habitat increases the extinction risk for spotted owls. (Wiens et al 2014)

The spotted owl recovery plan calls for the retention of all high quality spotted owl habitat to mitigate for the invasion of the barred owl. Scientists recommend retention of a more inclusive subset of suitable habitat, not just the small subset of high quality suitable habitat. (Forsman et al 2014)

In order for the spotted owl to remain extant, habitat recovery in conjunction with implementation of the barred owl management plan, need to occur.

The DEIS uses assumptions as to primary owl threats in dry forests, being habitat loss due to wildfires, with subsequent avoidance by spotted owls of severe burn patches. And yet comments such as those from Wild Heritage during several comment periods to the NWFP team, include recommendations to utilize multiple peer reviewed studies showing additional variables in many situations. Some factors in these studies needing your consideration, include the data showing spotted owls repeatedly using high severity burn patches for nesting and foraging, and that often owl abandonment of habitat after fires, occurred in territories that received logging entries (before and/or after the fires) which may have increased barred owl invasions; these invasions likely contributed to, or were ultimately the cause of habitat abandonment by spotted owls. The omission of these studies, has resulted in overestimates of fire losses in the chapter on spotted owls. Please refer to Wild Heritage comments for a full list of previously omitted literature references on this subject, and correct the omission in the EIS considerations.

Also, the mis-classifying of fire as a habitat loss[mdash]without determining high severity patch sizes in owl territories and whether abandonment was caused by fire or logging[mdash]has resulted in extensive post-fire logging in owl territories and LSRs treated as no longer qualifying as owl habitat, by federal managers. The results of post-fire logging operations after large fires like Biscuit, Klamath Westside, Rim, and King Fires, for example, ended up causing owl site abandonment. This serious omission of the lessons learned in scientific literature needs to be corrected so that high-severity patches are included in owl surveys, and ensuring foraging habitat is given the protections of nesting/roosting habitat in the future.

Current spotted owl guidelines, limit thinning to where "long-term benefits clearly outweigh adverse impacts." But there is accumulating skepticism that thinning provides the needed amount of benefits. Commercial thinning in

maturing forests delay development of snag objectives and other key habitat elements of old forest ecosystems important to both terrestrial and aquatic species dependent on old complex forested habitat. Also opening up the otherwise closed canopy is counter-productive to reducing fire severity risk, since closed canopies are much better at retaining moisture.

Even if thinning did reduce high-severity fire, those benefits may not accrue faster than the adverse impacts of degrading habitat. (See Comments on Science Synthesis, Jan. 2017, prepared by Dr. Dominick A. DellaSala, for multiple organizations, pgs. 16-17). After using empirical data to calculate future amounts of spotted owl habitats' risk of severe fire in thinned compared to un-thinned forests, the conclusion was this: Over 40 years, habitat loss would be far greater after thinning compared to unthinned, even when modelled with substantial increase in future fire rates.

In Odion et. al 2014 (Effects of fire commercial thinning on future spotted owl Habitat, Open Ecology Journal, 2014, 7, 37-51) authors found that the long-term benefits of commercial thinning would not outweigh adverse impacts, even if much more fire occurs in the future. If a longer time interval, such as 100 years, is analyzed, "the declines in dense, late-successional habitat due to thinning would not flatten, as long as thinning is reoccurring". Authors in Gaines et al. 2010, stated that the best strategy for maintaining habitat is to avoid thinning treatments that have adverse impacts in potential or existing owl habitat, and that there are plenty of areas outside of existing or potential owl habitat to focus fuels reduction efforts without impacting spotted owls, such as in areas adjacent to homes or in dense conifer plantations with high fuel hazards. Plus, the latter has been shown to experience higher fire severity compared with closed canopy forests.

Thinning also has tradeoffs to mature/Old-growth species because it requires an extensive road network for access. Thinning increases emissions relative to forest fires and would likely compromise the net carbon sink that the NWFP is currently providing. In conclusion, commercial thinning may not only be ineffective (in reducing fire risk) but may actively contribute to the problems they are trying to address.

Within the DEIS, there appears to be no mention of measures to ensure protection of crucial habitat for spotted owls, murrelets, or other mature/Old growth dependent species. As proposed, the amendment would delay or prevent recovery of these species. The plan was prepared in response to a region wide legal injunction on logging of spotted owl habitat (older forests) issued in 1991 by U.S. District Court Judge William Dwyer. After reviewing the prepared NWFP, Judge Dwyer in 1994, ruled the NWFP was sufficient to protect the ecosystem, but just barely. He also added the following caveat to the Forest Service and BLM: "careful monitoring will be needed to assure that the plan, as implemented, maintains owl viability." (See http://www.justice.gov/enrd/3258.htm). With increased logging now occurring on Western Oregon BLM lands, conditions have changed since this ruling. And any increased logging permitted on National Forest Systems lands as a result of amending the NWFP, brings into question whether an ecologically weakened plan would meet the lawful criteria in the court's judgment.

As proposed, the amendment is not likely to allow the spotted owl to recover, but will instead jeopardize its chance of survival. Will you commit to adding monitoring components for species in peril, and ensuring that all recovery plans are adhered to, in any amendments? How do proposed actions comply with Executive Orders (14072 and 14008) and the simultaneous NOGA planning and goals?

Supporting Tribal Sovereignty and Environmental Justice

The planners of the DEIS are to be commended for expanding their consultation process with tribes overlapping the footprint of the NWFP, and where they align with conservation objectives. Prescribed fire and cultural burning can be helpful restoration practices. However, the DEIS did not elaborate on how this will play out as it pertains

to removal of large live and dead trees for tribal or other purposes. The agency needs to also prioritize retention of mature and old growth trees and snags, as removing them undermines the ecological integrity of many ecosystems. The removal of large trees for any reason, cultural or otherwise is controversial and rarely if ever, in line with restoration, conservation, or climate mitigation no matter who is doing the large tree removal.

Old large tree removal considerations must include analysis of impacts to imperiled species, aquatics, soils and logging emissions in all cases, and is lacking in the DEIS. Often within this and other sections of the DEIS, vague, undefined, and questionable terminology is used (such as stewardship, ecologically appropriate, restoration, climate friendly, resilience, ecoforestry) when discussing commercial logging including large old trees and road building.

Also, there were some comments to the NOI on this subject that were disconcerting. There were some implications, that in order for cultural burning to be implemented, it would need to be done on a landscape basis, including in old growth, LSR's and other naturally forested areas, but would require mechanical fuel reduction prior to burning operations. Incorporating Traditional Ecological Knowledge, facilitating Tribal involvement, and addressing environmental justice concerns in the management of our national forests, however, should not require weakening the core conservation protections of the original Northwest Forest Plan. The standards for these areas in the original NWFP should adhered to, with restrictions on cutting large trees, or mechanically operating in reserves.

Communities and predictable supplies of timber from federal forestlands

Although there is no statutory basis to provide "predictable" supplies of timber from Federal Forest lands, if fuel reduction thinning is implemented outside reserves for restoration goals such as to promote increased old growth replacement, there could potentially be a reliable output of forest products (understory trees) for many decades. (The ecological needs to improve loss of habitat due to overharvesting old growth, should drive the product type and amount.)

The NWFP amendment should emphasize development of a restoration economy that is independent of commercial timber harvest of forest lands. Restoration work should include, but not be limited to: fire treatments, invasive species removal, general restoration, tree planning, road closures and trail building and maintenance. Elements of a restoration economy could include creating watershed restoration workforces that integrate indigenous knowledge and provide economic opportunities for smaller, local firms; promoting sustainable processing of restoration by-products; supporting culturally appropriate, sustainable recreation opportunities; and other measures of mutual benefit to Tribal Nations, Indigenous people, the federal government, and local communities.

Climate Change

Climate Change was one very crucial reason that the NWFP amendment initiative was begun.

Forests are the world's second-largest carbon sink, after oceans, and play a vital role in mitigating climate change.

The Northwest Forest Plan enacted in 1993 was designed to conserve old-growth forests and protect species such as the northern spotted owl, but researchers conclude in a new study that it had another powerful and unintended consequence - increased carbon sequestration on public lands.

When forest harvest levels fell 82 percent on public forest lands in the years after passage of the NWFP, they became a significant carbon "sink" for the first time in decades, absorbing much more carbon from the atmosphere than they released.

Carbon emission is a key factor in global warming. Forests absorb carbon dioxide from the atmosphere and store it in trees (both living and dead), root systems, undergrowth and in organic matter in soils. If left undisturbed, these carbon reservoirs can last centuries.

Previous estimates of forest carbon balance had suggested a significant loss of carbon from Pacific Northwest Forest lands between 1953 and 1987, associated with a high rate of old-growth timber harvest. Those harvests peaked in the mid-to-late 1980s.

Forest fire is also an issue in carbon emissions, but researchers have found that the magnitude of emissions linked to fire was modest, compared to the impacts of logging. Even the massive Biscuit Fire in southern Oregon in 2002 released less carbon into the atmosphere than logging-related emissions that year, they said. An eye-opening comparison of various contributors of emissions is evident in OSU's study of Oregon's 5-year average of annual carbon emissions (2011-2015): Fires 4%; Agriculture 5%; Industrial 12%; Residential and Commercial 21%; Transportation 23%; and Wood Products 35%.

A recent study by Wood's Hole on the role of carbon storage in forests, found that the top ten carbon storing Forests in the country, were all in the Pacific northwest, and 9 are within the NWF planning area (6 were in Oregon, 3 in Washington). This accentuates the importance of ensuring that these forests continue to provide and improve this vital service for mitigating global climate change.

Large trees play an outsized role in both storing and accumulating atmospheric carbon. The rate of carbon accumulation continues to rise as trees grow older and larger. The do not act simply as senescent carbon reservoirs, but actively fix large amounts of carbon compared to smaller trees. Inland Pacific Northwest (PNW) forests make a significant contribution to climate mitigation goals by protecting and enhancing carbon stores in large trees that accumulate and store the most carbon and are much more resistant to fire and drought compared to small trees. Recent changes to large tree retention policy on National Forests east of the Cascade Mountains and in southeastern Oregon allow increased harvesting of trees over 21 inches. Although that larger size class accounts for only 3% of all stems, they hold 42% of the above ground carbon. (Mildrexler, et. al 2022, in Conservation Science and Practice, DOI:10.1111/csp2.12944) The authors of the IPCC, 2022 stated that "Climate science makes clear that we don't not have time to wait for regrowth after logging to accomplish these important ecosystem services" associated with carbon storage in old forests.

Older forests and trees help counter the biodiversity crisis, by developing structural complexity as they age (more hollows in trees, more snags, and downed logs, for example), and thereby providing habitats for diverse wildlife species.

The Aquatic Conservation Strategy should also continue to be a part of the NWFP; protecting riparian reserves is especially important in light of global climate change, which is expected to increase stream temperatures and reduce fish habitat quality and quantity. Continued or expanded protection of riparian reserves could potentially offset future increases in water temperature associated with global climate change.

The best approach to mitigate climate change locally, is to maintain and expand the reserve system which would protect large trees and in-tact forests, especially those that already have been preserved under the NWFP for 30 years, and will continue to increase their capacity to sequester carbon, if left unmanipulated (including after fire). These mature and old growth forests provide the greatest ecosystem services and should be expanded to address climate change mitigation (maintain and increase carbon storage and reduce carbon emissions from logging), and climate resilience (cool/moist refugia, greater redundancy attenuates the uncertainty related to climate change) as well as the biodiversity crisis. Thinning only the smaller trees outside reserves, can reduce climate stress on the larger trees while emitting less carbon.

The other benefits provided by the above recommended strategy include these ecosystem services: provide clean water and protect watershed, increase biodiversity, moderate fire risk, and improve quality of life.

The emerging global crisis of climate change, is the most compelling issue that drives a review and update to the existing NWFP, because it had not been originally considered, and our knowledge of the causes and remedies are considerable .It seems imperative that this amendment contribute to managing for carbon storage as an ecosystem service, and there be a quantitative effects analysis of carbon storage and emissions, to reveal the consequences of any proposed action, including comparing the action alternatives to the "No Action/Status Quo". Will you commit to managing for carbon storage as an ecosystem service, and develop a quantitative analysis of effects of actions to carbon by alternatives?Will you commit to only adopting an alternative that will improve the carbon capture in the forests within NWFP?

Concept of Reserves

The documents' authors have not made a cogent scientific argument for changing reserve designs, including why larger reserves or matrix-less management with fixed reserves in place, would not achieve the goals of a resilient landscape. Fixed in situ reserves are a fundamental and accepted conservation approach (Watson et al. 2014, Courtney et al. 2004, DellaSala et al 2015).

The concept of Reserves continues to be scientifically accepted conservation concept. FEMAT planned for the reserve network with disturbances in mind, particularly, the concepts of redundancy and well connected and widely distributed reserve network. Losses of late seral forests from fire were anticipated by FEMAT. (Courtney et al 2004.)

In fact, the 3% decrease in Mature/Old-growth on federal lands since 1994 that was used by the authors of the science synthesis for the DEIS to justify heavier handed management, was actually in line with expectations outlined in FEMAT. Therefore, the Reserves and their redundancy and planned distribution, must be working.

Establishing Forest Reserves are crucial for protecting biodiversity AND mitigating climate change (Law et. al 2022). The highest priority forestlands are federally managed lands.

Therefore, there is no scientific basis to recommend alteration of the NWFP's Reserve design, permanent fixed-boundary reserves, or large tree standards. Reserves need to stay fixed until at least the Mature/Old-growth ecosystem has reached the 100-year goals of the NWFP. Climate change losses can be offset by building on reserve networks, rather than subtracting from it or adding even more active management that conflicts with the standards and guidelines of the NWFP.

Significant Concerns with the Proposed Amendment

Any amendment to the Northwest Forest Plan must (not weaken but rather expand the network of forest reserves where natural processes can be unhindered, and maintain and recruit habitat needed by imperiled species, like salmonids, spotted owls and murrelets in order to persist and recover. Preserving biodiversity and connected wildlife habitat across the region should be a core principle of any forest plan revision/amendment. Habitat and other needs for proposed species like Pacific fisher and red tree voles must be considered in any updated plans. Any amendment must also adequately protect streamside habitat that provides cool, clean water supplies for

communities and salmon, while at the same time ensuring our Pacific Northwest forests continue to achieve their potential as carbon sinks that help mitigate climate change. These goals can all be achieved by protecting mature and old-growth forests from logging while supporting Tribal sovereignty and environmental justice.

Unfortunately, none of the action alternatives described in the Draft EIS adhere to these core elements of retention and expansion of reserves. Instead of focusing on increasing the amount of old growth, which remains at a severe deficit across the landscape, the proposed amendment aims to exploit fear of fire in our forests by doubling - and potentially tripling - commercial logging from current levels. This dramatic increase in logging would occur across an even smaller footprint than the original Northwest Forest Plan, since the Bureau of Land Management has removed all of its 2.6 million acres of Western Oregon forest lands from the protective management scheme. In other words, all the adverse impacts associated with commercial logging - road-building, sediment delivery to streams, loss of carbon storage, disturbance and degradation of species habitat - would be even more concentrated on our national forests.

The Forest Service's fire suppression, fire exclusion, and clearcutting policies have significantly altered forests and degraded frequent fire-adapted ecosystems. There is a widespread view among land managers and others that the protected status of many forestlands in the western U.S. corresponds with higher fire severity levels due to historical restrictions on logging that contribute to greater amounts of biomass and fuel loading in less intensively managed areas, particularly after decades of fire suppression. The reaction by agencies is to reduce or eliminate protections and increase some forms of logging based on the belief that the restrictions on active management have increased fire severity, as seems to be the case with the DEIS proposals.

However, a western US analysis of high severity fire, Bradley et al. (2016) found that high severity amounts were greatest in actively managed forests compared to protected areas. Their analysis included 1500 fires over 9.5 million hectares between 1984 and 2014 in Ponderosa pine and mixed conifer forests of the west. While reserve networks have had high severity fire, the study found that forests with higher levels of protection had lower severity values, even though they are generally identified as having the highest overall levels of biomass and fuel loading.

Similarly, Lesmeister et. al 2019, found that old-forest conditions (such as those in mature, old growth and spotted owl habitats) burn at lower severity with microclimate and structure playing a key role in lower severity risk compared with other forest types. And in Lesmeister et al. Fire Ecology 2021, authors found that interior nesting habitat burned at lower severity than edge or non-nesting habitat. As canopy cover of shade-tolerant species increases, forests eventually gain old-growth characteristics and become less likely to burn because of higher relative humidity in soil and air, less heating of the forest floor due to shade, lower temperatures, lower wind speeds, and more compact litter layers (Countryman 1955, Chen et al. 1996, Kitzberger et al. 2012, Frey et al. 2016, Spies et al. 2018). Shading by the overstory suppresses growth of herbs and shrubs, reducing the ability of the lower canopy fuels to reach the higher canopy.

In addition to the potential to mitigate negative impacts of climate warming at local scales by creating refugia and enhancing biodiversity (Frey et al. 2016) northern spotted owl nesting/roosting habitat also has the potential to function as FIRE refugia in areas of mixed-severity fire regimes. Management strategies to conserve old-growth characteristics (such as reserves) may also reduce risk of high-severity wildlife (Bradley et al. 2016) and serve as buffer to negative effects of climate change (Betts et al. 2018).

Logging mature and old-growth trees, is also counter-productive to protecting communities and restoring fire to the landscape. These stands are the most fire-resilient, and focusing on logging them takes resources away from proven community protection strategies such as creating defensible space and emergency preparedness. The agency should prioritize protecting communities over commercial logging, and establish the strongest possible protections for mature and old-growth trees and stands as part of its wildfire strategy.

The DEIS proposal also shifts the fundamental purpose of the Northwest Forest Plan from maintaining existing (minus the BLM acres) and developing more old growth across the landscape to, changing the definitions of age structure to maintain, and encouraging treatments within more acres of preserves, using inaccurate assumptions that infer thinning or logging is needed in old forests to lower fire susceptibility. It would drastically increase the amount of land that commercial logging can occur, and increase the board feet harvested in mature forests, although these changes are not ecologically justified. The proposals allow new loopholes to allow logging in reserves meant to protect fish, wildlife, and drinking water. The proposal would also permanently lock existing mature forest stands out of potential protection, which in turn would severely limit recruitment of old-growth to replace what will naturally be lost to disturbance over time.

Despite admissions in the Draft EIS that species that rely on older forests would be adversely affected by these changes, the Forest Service has not offered any measures to ensure protection of vitally needed habitat for spotted owls, murrelets and other old growth dependent species.

The proposals in DEIS with the expansive use of logging would setback the decades of progress of the original plan, amplify climate impacts by contributing emissions from logging large trees, cause cumulative impacts from logging, roads, livestock and invasive species interacting with climate change, damage wildfire and climate refugia properties of the reserves and old forest, and likely result in a jeopardy determination for old growth listed species.

I strongly oppose weakening critical environmental protections under the Plan. Mature and old-growth trees and stands are naturally fire-resistant and fire-resilient, as well as carbon-storing champions. The Forest Service must not sacrifice the immediate and near-term biodiversity values and the natural climate solution our older forests provide in exchange for a return to older forest logging and uncertain ecological benefits that may never accrue. We urgently need to increase carbon storage in our national forests to mitigate climate impacts. The least impactive alternative included in the DEIS, is the No Action, but the best path forward would be to develop a new proposed conservation alternative, with thorough effects analysis, using the current NWFP as a basis from which to increase reserves, and protections and incorporate science based recommendations from Wild Heritage, myself, and other groups who provided practical, ecosystem oriented comments during the NOI and DEIS comment periods.

In light of all these pervasive and imminent threats, now is NOT the time to loosen terrestrial and aquatic habitat protections, water quality and conservation, restrictions on snag removal or weakening of the reserve system as a proven conservation foundation, as is proposed in all the Draft EIS action alternatives, with a bias toward increasing heavy handed manipulation, especially logging, at the expense of the myriad resource values, that the remaining late successional and old growth forests provide. We are out of time to protect old growth associated species, and out of time to re-grow carbon sequestering old forest which take centuries. (We also cannot ignore that since the Draft EIS was released in November, there have been and will continue to be a mass undermining of environmental and ecosystem protections, that we cannot afford.) Therefore, you are tasked with building upon the original and ongoing success of the NWFP, that is less than halfway through its timeline for the plan's predicted old forest restoration goals.

In conclusion, I strongly oppose this effort to significantly expand commercial logging in mature and old-growth forests across the Pacific Northwest. Our region is facing twin extinction and climate crises, and this proposal would make both of them worse. I support reforms that would result in better consultation, co-stewardship, and integration of Indigenous perspectives into the management of our national forests. The Forest Service can and should improve Tribal inclusion and environmental justice in forest management while at the same time preserving and advancing ecological protections in our national forests. However, any amendment to the Northwest Forest Plan that weakens core protections for mature and old-growth forests and the suite of water quality, species habitat, and carbon storage values they provide should not move forward.

Thank you for this chance to comment on the Draft Environmental Impact Statement for the Northwest Forest Plan Amendment.

Sincerely,

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P.S. So as not to duplicate background material and references, I instead direct you to the citations previously submitted within the attachments sent by Wild Heritage. References and copies of the documents, can be found in Wild Heritage's attachment entitled WildHeritagecombinedpdfsFile3.pdf

or in their previous comments to the NOI.

ATTACHMENT-LETTER TEXT: Final Comments NWFP Oertley 2025.docx; This is the same content that is coded in text box; it was originally included as an attachment

(Mildrexler, et. al 2022, in Conservation Science and Practice, DOI:10.1111/csp2.12944)