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Submitted via webportal: https://cara.fs2c.usda.gov/Public//CommentInput?Project=64745

Date: 1/31/24

Re: Comments on the Notice of Intent to Amend the Northwest Forest Plan

Introduction
KS Wild hereby submits these comments on the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) to amend the Northwest Forest Plan (NWFP).

The NWFP was enacted in 1994 to strike a balance between timber production on federal public lands and the conservation of forest ecosystems. Covering 24 million acres of federal land throughout the Pacific Northwest, the plan was a comprehensive approach and amended all the 17 national forest and seven Bureau of Land Management district plans. Hailed as the largest and most significant ecosystem management plan in the nation, it remains an example of modern-era forest and landscape management that incorporates the principles of conservation biology into the multiple uses of public forest land.

KS Wild agrees with the U.S. Forest Service (USFS) that many factors throughout the region have shifted since 1994. An update to the NWFP could better ensure that USFS management best supports the ecosystems and communities in the planning area. In order for the plan amendment to effectively update the NWFP for the better, the USFS needs to ensure that late-successional forest ecosystems and local communities are supported by management that incorporates the best available science. We divide our comments into the five key issues that we think need to be addressed in the plan: tribal inclusion, socio-economics, climate change, wildfire, and mature and old-growth conservation.

Tribal Inclusion

The NOI correctly identified tribal inclusion as a critical concern. During the formulation of the NWFP, tribes were scarcely regarded as central parties in the contentious "loggers versus owls" debate. The NWFP region encompasses over 70 federally recognized tribes, along with numerous others with ancestral lands overlapping the planning area (Stuart and Martine 2005). While the NWFP acknowledged the significance of tribal consultation, it fell short in recognizing the impact of tribal fire use and management on forest health. It also overlooked the value of cultural management practices to tribes, and the imperative access tribes required to resources for subsistence, cultural purposes, and overall economic well-being (Long and Lake 2018).

The NOI acknowledges that engaging and including tribes in forest management issues is pivotal, as evidenced by various monitoring and research reports that underscore that tribal involvement was overlooked during the development of the 1994 NWFP. The NWFP amendment needs to emphasize the critical importance of involving tribes in addressing the challenges faced in the PNW by incorporating tribal engagement into the plan. We are aware that there are a variety of tools that the USFS can use to accomplish this, several of which can be included in the plan and others would require new policies adjacent to the NWFP.

Recommendations for Tribal Inclusion: KS Wild worked with Save California Salmon (SCS), a non profit based in northern California, to conduct outreach to tribal communities to gather recommendations on the NWFP amendment. SCS staff and board are tribal leaders, fishermen, educators, and scientists from the watersheds in the region. Main themes and recommendations from this outreach include:

1) Inclusion of Tribal People. Tribal people know and care for their lands well. They have a lot to say in terms of recommendations for land management as well as recommendations for how they would like to be included in land management decision making processes.
2) Increasing Tribal Capacity. Some tribes may not have adequate time, personnel or resources to be able to respond to requests. Tribes should be compensated for their time and energy.
3) Cultural Burning. A greater focus on cultural burning practices is needed/imperative.
4) Hire Tribal People. Tribal people should be hired by the government, including the Forest Service, both so their voices can be heard and in order to create trust and more open communication between Tribes and the Forest Service.
5) Develop and Maintain Relationships with Tribal People. Reach out, develop a relationship, and keep working with tribal people because they have important knowledge on these topics. Show them that they are being listened to.
6) Time for Change. There is the need for urgent policy changes due to climate change. Communities are more receptive to change now, due to a desire to protect themselves. Changes should incorporate more sustainable practices
7) Retrain Previously Timber Dominant Communities. Assist communities previously dependent on the timber industry by training them on sustainable practices and maintaining economic stability when shifting to sustainable industries.
8) No More Clear Cutting. Clear-cutting is an unsustainable practice that should not be used.
9) Groundwater is An Important Consideration. When it comes to forest and fire management the USFS should consider impacts of reducing groundwater in areas prone to fire.

To facilitate tribal inclusion in the plan amendment, it is imperative to establish formal consultation processes that actively involve tribal governments in decision-making and planning discussions. Tribes will have the best process for their inclusion in the process, but this may encompass regular meetings, consultations, and collaboration sessions aimed at fostering a cooperative atmosphere. Acknowledging the sovereign status of tribes is fundamental, and implementing government-to-government relations is a step to ensuring their involvement as vital partners throughout the amendment process.

Workshops and other sessions dedicated to integrating Indigenous traditional ecological knowledge from tribal communities is another possible strategy. By providing opportunities to learn from tribal members about their historical and cultural connections to the land, a richer understanding can be gained. This knowledge should be integrated into the decision-making process, ensuring a holistic and culturally informed approach to forest management. Offering capacity-building opportunities for tribal members facilitates their active participation in forest planning, management, and monitoring.

Addressing the subsistence needs of tribal communities is equally important. This requires consideration of access to traditional resources for cultural and economic well-being, recognizing the significance of these resources in sustaining tribal communities. The development of a collaborative environment for sharing research data, findings, and insights between tribal communities and forest management agencies could also help with this relationship. Joint research projects with tribal communities to assess and monitor forest conditions, biodiversity, and ecosystem health contribute to a shared understanding.

The USFS can do more of its own homework. Ensuring cultural competency among USFS personnel and stakeholders is achieved through the implementation of training programs. This fosters an increased understanding of tribal perspectives and values. Simultaneously, strategies for protecting and preserving culturally significant sites and resources must be developed.

Communication plays a pivotal role. Community engagement meetings provide updates on the NWFP amendment process, gather input, and address concerns from tribal members. Establishing regular communication channels, such as newsletters or websites, ensures ongoing transparency and keeps tribal communities well-informed about the progress of the amendment.

From a policy perspective, it is vital to review and, if necessary, revise existing policies to align them with tribal interests and rights. Exploring the development of legally binding agreements that outline roles, responsibilities, and benefits for tribes in the NWFP amendment process adds a layer of assurance. Meaningful representation of tribal perspectives in decision-making bodies, coupled with the establishment of advisory committees that include tribal representation, serves as a mechanism for ongoing dialogue and collaboration.

Crucially, these options should be adaptable to the specific cultural, historical, and legal contexts of the tribes involved, recognizing the diversity of tribal nations and their unique relationships with the land. A commitment to open and transparent communication, mutual respect, and meaningful collaboration remains essential throughout the NWFP amendment process.

Socio-Economics

Traditionally, the timber industry has played a pivotal role in bolstering the economic prosperity of rural communities across the PNW. But the socio-economic landscape of rural communities in the PNW has undergone significant transformations that began even before the 1994 NWFP. Automation in the timber industry and an increasingly globalized economy has lessened the role of the industry in the region, with

some notable exceptions in small, more isolated communities. Regardless, a notable shift has occurred, with many communities now consisting of a diversified economic base. Natural amenities are more valued, and many communities now rely more heavily on tourism and recreation from national forests than ever before.

Moreover, research indicates that the degree of conservation in nearby landscapes has had positive economic repercussions for neighboring communities. This economic upswing often stems from the establishment of businesses in areas deemed attractive to employees. The burgeoning recreation economy has been embraced by numerous communities and the relative importance of the timber industry has diminished (Johnson et al. 2023).

While the timber industry maintains economic and cultural significance in certain pockets of the PNW, it no longer commands the same level of importance in the regional economy as it did three decades ago. This shift underscores a broader diversification of economic activities, reflecting the evolving priorities and dynamics of communities in the PNW.

At the same time, wildfire has emerged as a key socio-economic factor in the region. Preventing, preparing, and responding to wildfire is a significant portion of the USFS workflow. Communities near wildfire prone landscapes are likewise immersed in wildfire preparation. In addition to logging, prescribed fire, fuels reduction, defensive space, and education and outreach are all important social aspects of landscape management that have grown in importance since the NWFP was enacted in 1994 .

Socio-Economic Recommendations: To support socio-economic transitions and effective land management for climate change and wildfire within the NWFP amendment, several policy elements should be considered. The USFS should implement policies supporting job training programs to equip workers with skills needed for emerging employment opportunities related to climate-smart forest management. Specifically, the jobs that will be needed in the future are in fuels reduction, community based engagement, prescribed fire, and ecological forestry. The USFS needs to establish policies that provide transition assistance and support for workers displaced from traditional industries due to changes in land management practices or economic shifts related to climate change.

The USFS should establish policies that encourage public-private partnerships for climate smart forest management. This can involve collaboration with private entities to implement climate-resilient practices and jointly invest in conservation initiatives. This could include protecting northern spotted owl and Pacific salmon habitat across boundaries. Working with adjacent landowners on cross boundary land management can ensure an ecosystem approach that also benefits local community interests.

The USFS should also work with local communities to allocate funds for the development of climate-resilient infrastructure, such as firebreaks, early warning systems, and community evacuation routes. These policies enhance preparedness for wildfire events and should be accompanied by public awareness programs to inform communities about the impacts of climate change, wildfire risks, and the importance of sustainable land management practices.

Lastly, the USFS should encourage policies that foster local community engagement and collaboration in decision-making processes related to land management and climate change resilience. This ensures that policies align with the specific needs and aspirations of communities. Craft policy with input from diverse stakeholders, including local communities, tribal nations, environmental organizations, and industry representatives, to ensure a comprehensive and inclusive approach to socio-economic transitions and land management in the face of climate change and wildfire. To this end, we recommend the Forest Service reinvigorate the Adaptive Management Areas (AMAs). AMA's present a unique opportunity for co-stewardship and co-management with Tribes and to engage with local communities. We also recommend for AMA's to be expanded to capture more land in the Matrix land allocation.

Climate Change

Climate projections for the NWFP area include warmer temperatures and shifting precipitation patterns. Mote et al. (2003) found that the Pacific Northwest warmed by 0.8 ℃ in the 20th century and projected warming of 1.5-3.2 ℃ by the 2040s. Precipitation may shift to less snow and more rainfall with longer dry periods leading to more severe droughts. There is ample evidence that climate change is already impacting forested ecosystems and communities in the NWFP area. These changes can increase the extent and severity of wildfires and insect outbreaks which may impact habitat for a variety of species in the planning area (Halofsky et al. 2018). Precipitation changes are variable, with stronger winter storms having a greater effect on coastal areas (Espinoza et al. 2018). Along with the impacts to community infrastructure, agriculture, and water supplies, climate change is likely to impact the northern spotted owl and other threatened and endangered species in the planning area (see for example Glenn et al. 2010).

Climate Change Recommendations: Both active and passive approaches to climate change should be employed. The USFS should protect all mature and old-growth legacy trees as these are the most fire resilient structures in forests. Thinning some forests will be important in dry, fire suppressed portions of the NWFP, but only if followed up with prescribed fire.

Adaptive management frameworks can better allow for real-time adjustments based on monitoring data and changing climate conditions. Adaptive management requires regular monitoring programs to assess the effectiveness of land management strategies in mitigating wildfire risks and adapting to climate change. The USFS should utilize the resist-accept-direct (RAD) framework to decide the direction of land management in the region (Lynch et al. 2022). Consider a policy framework that involves reviewing and updating regulations to reflect current scientific understanding and best practices.

Species such as the northern spotted owl and pacific salmon species require areas outside of the federal land base, and the USFS should establish policies that encourage public-private partnerships for sustainable forest management. This can involve collaboration with private entities to implement climate-resilient practices and jointly invest in conservation initiatives. This is especially apparent in the need for watershed restoration to enhance Pacific salmon habitat (See science synthesis).

Lastly, the USFS should support policies that allocate funds for research and grants to explore and implement innovative climate smart management practices. We will need to employ both surveillance of the landscape as well as monitoring to determine the path forward in the face of climate change. Pilots and experiments will be needed to learn about the effects of treatments on the landscape.

Mature and Old-Growth

The Federal government has recognized the importance and rarity of mature and old-growth forests in their Executive Order 14072, *Strengthening the Nation's Forests, Communities, and Local Economies.* Following the EO, the USDA and USDI conducted a nationwide assessment to define and inventory mature and old-growth forests, completed a threat assessment, and are now charged with developing climate-smart management and conservation strategies that address threats to mature and old-growth forests on Federal lands. In December 2023, the Forest Service declared its plan to enact a nationwide amendment to forest plans with the aim of preserving old growth forests.

It is evident that the policy of the federal government is to preserve mature and old growth forests due to the diverse ecosystem services and functions they offer to society. While some mature and old-growth forests may have congressional or administrative protection, it is not the case that all or even most of the mature and old-growth forests are protected. Forests administered by USDA and managed under NWFP include those established in late-successional reserves and matrix land use allocations, among others. The matrix allocation encompasses approximately four million acres and allows for industrial logging of approximately one million acres of older forests.

In the PNW, the USFS has a history of protecting a portion of the remaining mature and old-growth forests. In the late 1980s and early 1990s, scientists and federal land management agencies developed a universal definition framework. In 1993, the Forest Ecosystem Management Assessment Team (FEMAT) advanced a definition based on the best scientific evidence at the time. In 1994, the NWFP adopted the FEMAT definition of "late successional" and "old growth" to include "the successional stages defined as mature and old growth, both of which function as old growth." NWFP FEIS at 3 & 4-13. DOI and USDA have used that definition since 1994.

In the Pacific Northwest, late-succession and old-growth successional stages include mature and old-growth age classes. The NWFP intentionally used this ecological definition. While classical old-growth definitions for the Pacific Northwest often include characteristics such as very large trees, multi-layered canopies, canopy gaps, large snags, and large down wood, the NWFP found that "many mixed-age stands that include scattered individuals or patches of old trees alongside mature trees function ecologically much like classical 'old-growth' stands." NWFP FEIS at B-44. In addition to the definitions of classical old-growth, in mesic forests in the Pacific Northwest, scattered old and mature trees over 80 years, wherever they persist, belong in the mature and old-growth definition framework pursuant to EO 14072. In drier, fire prone conifer forests in the PNW, the mature successional stage can include the predominance of mature trees and some snags, and patches of trees age over 80 years where

self-thinning is occurring, decayed and undecayed logs are on the ground, and understory vegetation is well established. (See Thomas 1979).

Forests are dynamic and subject to natural disturbances that are projected to increase in frequency and severity with climate change. The mature and old-growth forests of today were developed from disturbance patterns driven by past climatic conditions. The current structure and composition of mature and old-growth forests may not occur again under modern climates and disturbance regimes. The legacies (large live old and dead trees) in these forests are essential for the transition these systems will undergo as a result of climate change.

According to the 2018 NWFP Science Synthesis, ecological processes including disturbances are essential to the maintenance of mature and old-growth forest ecosystems.

> *Ecological processes include those natural changes that are essential for the development and maintenance of late-successional and old-growth forest ecosystems. Although the processes that created the current late-successional and old-growth ecosystems are not completely understood, they include: (1) tree growth and maturation, (2) death and decay of large trees, (3) low-to-moderate intensity disturbances (e.g., fire, wind, insects, and diseases) that create canopy openings or gaps in the various strata of vegetation, (4) establishment of trees beneath the maturing overstory trees either in gaps or under the canopy, and (5) closing of canopy gaps by lateral canopy growth or growth of understory trees. These processes result in forests moving through different stages of late-successional and old-growth conditions that may span 80 to 1,200 years for forests dominated by long-lived species.*

The USFS is quick to point out that wildfire and other climate-driven disturbances are major threats to the conservation of mature and old trees. However, these perturbations are not the only threats to older forests: commercial timber harvest remains a significant threat, particularly in the Pacific Northwest.

Mature and Old Growth Recommendations: In order to retain the diversity of mature and old-growth in the Pacific Northwest and recognize the potential for ecosystem reorganization under future climate scenarios, some level of protection for all late-successional trees over 80 years is needed to capture the majority of mature forest across forest types.

Site specific exceptions to this definition are needed that allow the active management of trees over 80 years of age that are the result of fire exclusion policies, the absence of Indigenous fire use, and past large tree and clearcut logging practices. To this end, the Northern Spotted Owl Recovery Plan (2011) provides important direction that we support for managing older forests in dry, frequent fire landscapes. The majority of fuel reduction and forest resiliency projects can be accomplished by focusing on trees and other vegetation that are less than 80 years of age and that are the result of fire exclusion. However, fire suppression was effective in the frequent fire forests of the Pacific Northwest for over 100 years in certain areas, leading to an ingrowth of trees that can be older than 80 years. A review process similar to what is accomplished through the Regional Ecosystem Office (REO) review of LSR projects that log trees

over 80 years is needed. In some forests (e.g. closer to communities where fire fighting was effective for the longest period of time), trees that are a result of fire exclusion may be older than 80 years.

The NWFP's reserve network has played a crucial role in safeguarding mature and old-growth forests, emerging as one of the notable successes within the Plan. The current framework provides the appropriate language for managing reserves, particularly in the face of climate change and increased wildfire. We recommend the Forest Service retain dry forest LSRs and govern those LSRs using clear and objective standards and guidelines.

The USFS has ample authority under the 1994 NWFP to manage forests in dry forest LSRs. The Ashland Forest Resiliency project is a prime example of a project entirely located in a NWFP LSR. The City of Ashland has touted the accomplishments of this collaborative project with the USFS, Lomakatsi Restoration Project and others. To date, 8,439 acres have been pile burned and 1,000 acres under-burned for a total of 9,439 acres; 615 acres of thinning with a helicopter yarding; 12,500 acres were thinned for ecological forest restoration and community fire protection producing a total of 14 million board feet. This project illustrates that LSRs can be managed for fuels, remove timber, while retaining LSOG conditions. Therefore, additional authority to manage dry forests is unnecessary.

Furthermore, the REO, which is responsible for conducting reviews of proposed actions in LSRs to ensure that these are consistent with the requirements of the NWFP, consistently approves projects without substantive modifications. For example, over the last ten years, a total of 15 projects submitted to the REO by the Rogue River-Siskiyou, Klamath, and Shasta-Trinity National Forests have been approved. These projects include management activities such as non-commercial thinning, plantation thinning, and prescribed burning covering a total area of over 33,000 acres (See USFS ‘Late Successional Reserve Reviews’).

The recurrent nature of this "rubber stamp" procedure raises concerns regarding the thoroughness of the review process, prompting a reassessment of its efficacy and the necessity for revitalization to enhance overall legitimacy. This is especially important if the Forest Service considers reinvigorating the Adaptive Management Area (AMA) land use allocation in this amendment process. We encourage and support the development of an “Adaptive Management Late Successional Reserve” land use allocation in which public and tribal participation helps to identify and define the purpose and need of projects that are implemented in reserves. It is possible and perhaps likely that the Forest Service will seek to reduce public involvement in project planning through implementation of the Wildfire Crisis Strategy. Already we see limitations on the development of action alternatives and curtailment of the administrative objection process. We believe that management of the reserves would benefit from more public involvement, not less. Success stories like the Ashland Forest Resiliency project and the Upper Applegate project demonstrate that local knowledge and input can and should help shape management projects in the reserves. Adaptive Management Late Successional Reserves could bolster the agency’s relationship with the communities it serves and utilize local knowledge and ideas to inform project development.

Policies should also ensure the restoration of mature and old-growth forest ecosystems in the Pacific Northwest. Since the time of European settlement, approximately 72% of the original old-growth conifer forest has been lost in the Pacific Northwest, largely through logging, development, and clearing. See Strittholt et. al, 2006. Mature and old-growth forest conservation must include all forests and scattered trees that are 80 years old or older. However, as mentioned above, forest characteristics that are the result of management actions such as industrial logging and fire suppression should be restored to contribute to the recovery of the distribution and abundance of old forest conditions.

Commercially motivated logging and planting has resulted in ubiquitous tree plantations that should be restored into late-successional forests. Thinning tree plantations with variable density silvicultural techniques can restore the structure and function of these forests, helping them contribute to the recovery of late-successional forest ecosystems and habitat for threatened species such as the northern spotted owl (Johnson et al. 2023). In drier forests, restoring fire as a keystone ecological process is critically important, but that must be incorporated while maintaining adequate areas of spotted owl habitat that will shift across the landscape as fire and successional processes operate (Spies et al 2018).

The NWFP did not protect all mature and old-growth forests in the Pacific Northwest. The Forest Service should create regulatory certainty in the plan amendment to prevent projects that degrade or remove mature and old-growth forests in the course of vegetation management planning and project design, layout, and implementation.

Wildfire

The threat of wildfire has intensified across the NWFP area, particularly in the southern and eastern regions encompassing the habitat of the Northern spotted owl. While the NWFP was crafted to accommodate natural disturbances, the growing frequency and severity of wildfires pose a significant challenge. Many forests within the region have deviated from their historical structure, composition, and fire regimes, influenced by various factors such as livestock grazing, fire suppression, logging practices favoring larger, more fire-resistant trees, and the loss of Indigenous fire practices (Prichard et al. 2021).

Compounding this challenge is climate change, poised to exacerbate wildfire risks with potential impacts on both forested ecosystems and human communities. In particular, the Klamath province in southern Oregon and northern California, having experienced notable events such as the 2002 Biscuit fire, remains no stranger to large wildfires. The 2020 Labor Day fires served as a stark reminder that extreme wildfires are increasingly unavoidable, transcending factors like vegetation, setting, or preparedness. The Almeda fire burned in an urban setting, and ultimately was the most destructive fire in the region after burning over 2,000 homes to the ground.

Recently, the USFS outlined a 10-year plan, “Confronting the Wildfire Crisis: A Strategy for Protecting Communities and Improving Resilience in America's Forests” that calls for focusing fuels and forest health treatments more strategically and scaling up the efforts by working closely with partners outside the agency. The need to increase the use of prescribed fire is featured prominently in this plan. However,

too often the USFS plans and analyzes mechanical treatments and prescribed fire, but never actually implements the prescribed fire.

Despite these challenges, proactive measures can be implemented by the USFS to mitigate the impact of wildfires. This section outlines a series of recommendations aimed at preparing for and addressing the heightened risk of wildfires, considering the cumulative effects of past management decisions and the ongoing influence of climate change.

Wildfire Recommendations: We encourage the USFS to engage in collaborative planning involving federal, state, and local agencies, as well as communities and tribal nations, to develop integrated fire management strategies. This should include community-focused fire preparedness programs to educate residents about wildfire risks and the importance of creating defensible spaces around their properties. Develop and regularly update evacuation plans in collaboration with local communities to ensure swift and organized evacuations when necessary.

While the USFS has proposed ample forest thinning projects, it is very slow to scale up the requisite prescribed fire operations that are needed. Prescribed fires are not just a good idea after forest treatments, without a follow up prescribed fire thinning treatments can be counterproductive by increasing the amount of fuel on the forest floor. Moreover, prescribed fire will likely be needed even without pre-treatment to scale up the treatment acres (Prichard et al. 2021). USFS needs to promote and incentivize prescribed burns to reduce fuel loads and enhance the resilience of forest ecosystems to wildfires.

As mentioned in earlier sections of these comments, the USFS should 1) collaborate with tribal nations to integrate traditional ecological knowledge and fire management practices into modern wildfire management strategies, 2) collaborate with local communities and adjacent landowners, 3) engage in climate smart forestry, including adaptive management, and 4) protect older trees. These are all policies that will best support communities and ensure ecosystem resilience from the growing wildfire crisis.

Conclusion

Thank you for the opportunity to provide the foregoing information as the Forest Service seeks to update the NWFP. Please feel free to contact our organization if you have any questions regarding this correspondence.

Sincerely,

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