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Subject: Recommendations for Advancing USFWS Vision and Goals for PNW Forest
Management to Address Climate Change and Associated Threats

Introduction

Unprecedented wildfires are burning and altering forest ecosystems throughout North America and the world. The severity and magnitude of these fires are driven by climate change and a legacy of historic management practices, including over a century of fire suppression. In addition to the devastating economic and social impacts of these fires, they are exacerbating climate change effects through massive carbon releases, losses in long term forest carbon sequestration, reductions in water quantity and quality, and fish and wildlife population declines. The Biden Administration has made it a top priority to address these and other climate change impacts, and the U.S. Congress is considering a variety of legislation to address forest health and climate change.

The U.S. Forest Service (USFS) recently launched a multi-year effort to update individual forest plans for the 19 National Forests within the Northwest Forest Plan (NWFP) area to comply with the USFS "Planning Rule" (USFS 2012). The 2012 Planning Rule represents the most important

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change in federal forest biodiversity policy nationwide over the past 30 years, but it has yet to be applied to Forest Plan revisions in the NWFP area. Stretching from northern California to the Canadian border, the NWFP plan area includes millions of acres of the most important forests in the world for climate change mitigation and biodiversity conservation. Given the NWFP was created in 1994 to provide for the conservation of northern spotted owls and other late-successional forest species, it is imperative that the Service's perspective for how these lands and species should be managed is considered as these plans are updated.

The purpose of this memorandum is:

- to provide an overview of the U.S. Fish and Wildlife Service (Service) field staff's conservation vision for the management of forests in the Pacific Northwest (PNW),
- to alert Service leadership to the pressing challenges and opportunities of PNW forest management as the NWFP is updated, and
- to make recommendations for collaboration and staffing to meet these challenges and seize opportunities for climate change preparedness and mitigation in western forests.

Background

Although the Service does not directly manage large forest ecosystems, we influence how these forest lands are managed through our various authorities, programs, and partnerships with forest land managers such as the USFS, Bureau of Land Management (BLM), National Park Service, State forest agencies, and private landowners. The USFS and the Service have worked collaboratively for over three decades to conserve PNW forests and their species. The partnership between our two agencies is strong.

The Oregon Fish and Wildlife Office, as the lead Service office for northern spotted owl recovery (USFWS 2011), recently initiated a forest policy discussion with the Service's Ecological Services (ES) field offices located throughout the NWFP area. This area includes the following ES offices: Arcata and Yreka in California; Klamath Falls, Roseburg, Bend and Portland in Oregon; and Lacey and Wenatchee in Washington. Starting in April 2021, joint meetings were held among the field leadership and staff across the NWFP area, and a poll was conducted among these staff soliciting the most important forest management priorities to inform the forthcoming NWFP update. This memorandum is a summary of the vision and principles identified during that process, as well as applying the latest scientific literature and relevant research.

Vision – “One Northwest Forest Plan for Climate, Carbon, and Conservation”

We recommend one overarching federal land management strategy in the PNW that aligns the overlapping goals of climate change resilience, biodiversity conservation, and forest carbon sequestration. As was done in 1994 with the development of the NWFP, it is essential that the USFS apply a unified, consistent approach to how these lands are managed across the 19 National Forests in the three states (Johnson et al. In press). An overarching strategy is necessary to address the issues of climate adaptation, carbon sequestration, forest health and

wildfire, invasive species, and the conservation of wide-ranging imperiled species such as spotted owls and Pacific salmon. A cohesive strategy will allow for differences in management approaches within the varied ecosystems of the NWFP bioregion. This approach will also confer substantial long term economic benefits, improve coordination between agencies, and engender broad public support. The Service must be an integral part of this planning effort.

Overarching Forest Conservation Principles

This vision requires that all Service and USFS planning decisions be consistent with Administration climate change goals. We recommend that federal planners incorporate the following general principles into the NWFP update and other forest management decisions:

- *Manage for Natural Ecological Processes to Improve Climate Resilience at Landscape Scales*
- *Actively Intervene and Manage Forest Habitat to Reduce Severe Wildfire Risk*
- *Proactively Conserve All Older Forests and Associated Species*
- *Collaborate with Transparency and Public Participation, Including with Tribal Nations*
- *Strengthen Social Acceptance and Legal Durability of Management Decisions*

Manage Natural Ecological Processes to Improve Climate Resilience at Landscape Scales

Most western forest landscapes have “ecologically departed” from healthy conditions due to increasing levels of disturbance driven by climate change and the legacy of historic management (Haugo et al. 2019, Haggmann et al. 2021). Therefore, we recommend that management and restoration of natural ecological processes and patterns (e.g., the fire cycle, hydrological cycle, natural plant succession, etc.) be the primary goal of National Forest management, and that they be planned and applied at landscape scales rather than allowing management of single species or small landscape units to dominate planning decisions (Spies et al. 2019).

National Forests are managed for a variety of important public policy goals, including recreation, clean water, fish and wildlife conservation, and timber production, to name a few. Climate change adaptation, carbon storage, and ecosystem restoration and function should receive top priority and be reconciled with these goals. Ecological process restoration at landscape scales will vary with topography, aspect, soil type, elevation, and physiographic province. Given the need to align these overlapping goals under a climate resilience umbrella, we recommend the USFS “manage for outcomes, not outputs” in their NWFP update. In some cases commercial harvest of trees will contribute to restoration of ecological processes, but federal timber harvest decisions should be driven by managing for climate, resilience, and conservation goals rather than by market-driven timber outputs. This recommendation is fully consistent with the USFS 2012 Planning Rule goal of maintaining or restoring ecosystem function.

Actively Intervene and Manage Forest Habitat to Reduce Severe Wildfire Risk

Climate goals will not be met through passive management (Hessberg et al. 2015, 2021). The Service supports active forest management in altered forest landscapes to improve climate resilience and to reduce the risk of high severity wildfire, even if there are short-term adverse impacts to sensitive species (Henson et al. 2013, 2018). Goals and prescriptions will differ

between “Dry Forests” and “Moist Forests.” Specific actions that will contribute to ecological process restoration include managing with natural disturbance such as insects, disease, and wildfire to create structural diversity, and retaining large down wood and snags to improve soil health and a robust food web. Thinning, prescribed burning, and restoration treatments in managed forests can improve ecological function and reduce unwanted fire risk (Spies et al. 2019, Prichard et al. 2021). Expanded emphasis on management of smaller-diameter trees in unnaturally dense forests will help achieve maintenance and restoration of ecological processes that contribute to forest health and resilience. After fire or other disturbance, reforestation and salvage efforts should emulate natural ecological processes appropriate to the site. Expanded use of prescribed fire will help restore a healthier, sustainable fire regime. Invasive species disrupt ecological processes such as fire regimes and food webs and will often require active intervention.

Proactively Conserve All Older Forests and Associated Species

The conservation of older forests provides multiple benefits, including carbon storage, mitigating temperature changes, and providing diverse habitat structure for fish, wildlife, and other species (Spies et al. 2019, Buotte et al. 2020). We recommend that all older forests be conserved wherever found, even in small inclusions outside of mapped reserves, and that no commercial harvest be proposed in such stands unless consistent with climate and conservation goals. Old forests are found at reduced levels in every forest type, from the wet forests of the Olympic Peninsula to dry-side ponderosa pine forests. Even in dry forests, this forest type is likely to provide fire refugia in most conditions and store large amounts of carbon, although carbon storage is greatest in moist, westside old growth (Mildrexler et al. 2020). These old forests are not replaceable on a human timescale and should be protected. Especially in dry forests, fuels treatments around (and sometimes within, if needed) these old forest stands will reduce loss from future high severity fires. Although the management focus should be on ecosystem conservation, it will be necessary to monitor various at-risk and focal species to help inform whether management goals are being met. Restoration of ecological processes provides for proactive species conservation--when ecosystems function well, fish and wildlife thrive.

Collaborate with Transparency and Public Participation, Including with Tribal Nations

Success of the NWFP update will depend on collaboration and outreach with partners and neighbors. A top collaboration priority should be to proactively include tribal nations in the planning and implementation of land management decisions. It is scientifically well-established that the exclusion of many indigenous cultural land management practices, such as widespread seasonal burning, has contributed to a decline in forest health and resilience (Long and Lake 2018). Stronger collaboration with tribes on land management decision and implementation will help improve forest health (Hessberg et al. 2021). We also recommend increased use of local forest collaboratives and citizen science groups to champion and implement forest restoration actions and increase local community support for land management decisions, including education and outreach demonstrating the value of fuels reduction (e.g., thinning and

prescribed fire). Although they require significant commitment and time to be successful, forest collaboratives can empower communities to better reconcile land management decisions with local economies and cultures (Spies et al. 2019).

Strengthen Social Acceptance and Legal Durability of Management Decisions

Many forest management decisions made under the NWFP during the last 25 years have been controversial, especially the harvest of larger trees. Lawsuits were filed by environmental groups, timber industry, and local counties and communities. It is likely that future management decisions will also be litigated no matter how carefully they are planned and implemented by the USFS. However, we can increase the likelihood of government decisions prevailing under such challenges. The NWFP update needs to reconcile the best science with Administration priorities, multiple-use policies and mandates, legal precedence, and evolving public expectations and preferences. To this end, we recommend that updated plans incorporate a more robust adaptive management process to revise standards and guidelines as new information becomes available. The Department of Interior's Adaptive Management Technical Guide (Williams et al. 2009) outlines rigorous methods for transparent, accountable adaptive management methods.

Next Steps

We propose the following next steps to apply the above vision and principles:

1. Support the Service's forest policy vision in this memorandum at the national and regional executive levels in collaboration with other federal partners.
2. Ensure that local field staffing resources are adequate to support the NWFP update process. We recommend a collaborative three-state (CA, OR, WA) interagency field team to assist the USFS in planning and regulatory compliance, similar to the process used for the Oregon BLM's 2016 Western Forest Resource Management Plan amendments to the NWFP.
3. Apply these principles more broadly to other forest land management decisions, including the America the Beautiful initiative on non-Federal lands.

Conclusion

It is critical that the conservation vision for the NWFP is updated with the best science and policies to address the climate-driven forest health/wildfire crisis and achieve Administration priorities. The Service is in an important position to lead and help implement these priorities. Providing the Service's expertise and support will take increased coordination with the USFS at all levels (i.e., field, region, HQ) and allocation of staffing resources to be successful. The principles outlined in this memo can also be applied to other forests and large ecosystems (e.g., sagebrush) in the West to have even greater climate impact.

If you have any questions regarding these recommendations, please contact any of the Project Leaders in the NWFP area, or Paul Henson at the Oregon Fish and Wildlife Office.

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