3/17/2025

Bark
PO Box 12065
Portland, OR 97212
www.bark-out.org
503-331-0374

Regional Forester Jacqueline Buchanan

Pacific Northwest Region

U.S. Forest Service

1220 SW 3rd Avenue

Portland, OR 97204

Regional Forester Jennifer Eberlien

Pacific Southwest Region

U.S. Forest Service

1323 Club Drive

Vallejo, CA 94592

Dear Regional Foresters Eberlien and Buchanan,

Bark is a 501(c)(3) organization located in Portland, Oregon. Our mission is to transform the lands now known as Mt. Hood National Forest into a place where natural processes prevail, wildlife thrives, and local communities have a social, cultural, and economic investment in its restoration and stewardship. Our supporters live in the many communities surrounding Mt Hood National Forest. They rely on the Forest for drinking water, economic opportunities, recreation, forest products, spiritual renewal, connection to the land, and more. We submit these comments on behalf of our supporters.

**TRIBAL INCLUSION**

The lands known today as Mt. Hood National Forest are the historic homelands and ceded territories of the Confederated Tribes of Warm Springs, Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and federally unrecognized tribes such as the Chinook Indian Nation. Numerous Indigenous people and organizations in and around Portland rely on Mt Hood to connect with the land and continue cultural traditions and practices. Bark believes that incorporating Tribal perspectives and values into all aspects of planning, project design, and implementation will lead to better outcomes for the land and its people.

Furthermore, the federal government has a trust responsibility that is enshrined in Secretarial Order 3403, U.S. Department of Agriculture Departmental Regulation (DR) 1350-002, and the U.S. Forest Service Manual (FSM 1563). This obligates the U.S. Forest Service (USFS) to ensure that Tribes are full partners in managing the lands and resources. However, Tribes were excluded from the original NWFP. This Amendment process and the Final EIS are crucial opportunities to ensure meaningful engagement and recognition for Indigenous Peoples within the NWFP area, and to implement meaningful commitments to Tribal sovereignty and co-stewardship.

***Recommendations***

1. We strongly encourage the USFS to include the FAC’s full Tribal Inclusion recommendation preamble (pg. 8-9) into the Final EIS and Record of Decision and any other relevant areas, with special emphasis on the section:

“*Over a century of fire suppression, coupled with regulatory restrictions, removal of Indigenous practitioners and practices (including cultural fire), as well as assimilationist policies from the boarding school era, have led to today’s increased risks from catastrophic wildfire and has also created structural barriers and mechanisms preventing Indigenous peoples from enacting sustainable stewardship. The NWFP amendment must signal a shift in Tribal relations across NWFP forests and include an apology for the exclusion of Tribal communities from the original formulation of the NWFP and call for healing and reparations for over a century of settler colonialism, land dispossession, criminalization and marginalization of Indigenous cultural stewardship practices, and mismanagement of Tribal lands*”.

1. Add Tribal inclusion measures to Alternative B and C that are included in Alternative D but not in B, which include Tribal involvement in protecting rare and listed plants, post-disturbance management, and first foods management. These plan components are: TRIBAL-FORSTW-ALL-GOAL-08–D, TRIBAL-FORSTW-ALL-GOAL-09-D, and TRIBAL-FORSTW-ALL-PMA-D.
2. DEIS: AG-DC-01

**Recommendation**: Convert this Desired Condition to a Standard, as recommended by the Federal Advisory Committee (FAC).

1. DEIS: BIO-DC-01

**Recommendation**: Amend the Desired phrase “in populations sufficient to fulfill their ecological function” to refer to beavers, not to imperiled aquatic species (as the DEIS language currently suggests).

1. DEIS: BIO-OBJ-01

**Recommendation**: Use the FAC recommendation language — it is more specific regarding the activities of interest (decommissioning and increased use of cultural burning): “*FAC: 1-45 OBJ: With relevant and interested Tribes, co-develop actions in priority watersheds that will improve soil and watershed conditions on 3,000 to 4,000 acres every 3 years, including through system and non-system road decommissioning and increased use of tribally-led cultural burning.”*

1. DEIS: BIO-PMA (4)

**Recommendation**: Rather than a PMA, make this an OBJ like in FAC: 1-37 “OBJ: *Annually restore a mileage meaningful to [relevant Tribes] of riparian habitat suitable for beaver reintroduction or expansion, consistent with the Aquatic Conservation Strategy*.”

1. DEIS: COSTW-OBJ-01

**Recommendation**: Use the FAC recommendation language. It’s more specific about types of agreements, and that the purpose is for co-management, and at the request of Tribes. FAC: 1-40 OBJ: “*Within two years and at Tribal request, work with relevant Tribes to co-develop and implement with interested Tribes programmatic agreements as directed by Tribes (e.g., memoranda of agreement, memoranda of understanding, master stewardship agreements, stewardship agreements, TFPA agreements, bilateral agreements, interagency agreements, NHPA section 106/110 responsibilities) between the Forest and Tribes to establish consultation protocols and cooperative/collaborative management processes*.”

1. DEIS: COSTW-PMA (1)

**Recommendation**: Use the FAC language because it’s important to refer to inclusion of Tribes in long-term programs of work. FAC: 1-101 MA: “*In the development of Forest annual work plans, encourage the inclusion of Tribes at the beginning of project development and prioritization of annual (and longer term) plans and programs of work*.”

1. DEIS: FORSTW-DC-01

**Recommendation**: Replace the DEIS plan component with the FAC recommendation as it is more specific to the variety of cultural uses for species. FAC: 1-4 DC: “*The Forest coordinates, consults, and collaborates with Tribes, and works with Tribes to establish a co-leadership role in the context of a co-stewardship agreement to restore, promote, and enhance traditional cultural use species (including but not limited to culturally significant species used for food, fuel, fiber, construction-e.g. for canoes or traditional lodges) of cultural items, medicine, regalia, artisanal, spiritual, and ceremonial purposes) and ensure they are accessible to tribal members*.”

1. DEIS: FORSTW-DC-03

**Recommendation**: Use the FAC recommendation language, as it is more thoughtful about the identities and statuses of Indigenous peoples. FAC: 1-12 DC: “*The Forest recognizes Tribal needs and viewpoints and fosters a robust and committed relationship to working alongside federally and non-federally recognized Tribes, Indigenous-led organizations, and related groups with which it consults, collaborates, and coordinates. Forest Service personnel, including but not limited to line officers, departmental staff, archaeologists, historians, and Tribal liaisons, make it a practice and norm to consult and communicate early, frequently, and openly with Tribal leadership, Tribal historic preservation officers, traditional religious practitioners, traditional gatherers, Tribal members, and other Tribal organizations*”*.*

1. DEIS: FORSTW-DC-04

**Action**: Use the FAC language because it is more sensitive to the statuses of Indigenous peoples and doesn’t include confusing language about the extent of laws that would already be implied and followed. FAC: 1-17 DC: “*The Forest supports and works with Tribes and Indigenous people to acknowledge and respectfully share Indigenous knowledge, expertise, and practices in meaningful co-stewardship including, but not limited to, planning, design, and implementation of prescribed fire and proactive wildfire management and mitigation actions and related practices*.”

1. DEIS: FORSTW-DC-10

**Recommendation**: Add language about monitoring back into this DC. For example, “Through monitoring, ensure that culturally significant plants…”

1. DEIS: FORSTW-DC-11

**Recommendation**: Re-include “and Tribal people” in the final language to properly include Indigenous communities. FAC: 1-7 DC: “*The Forest supports Tribal interests in food sovereignty for all Tribes and Tribal people*.”

1. DEIS: FORSTW-DC-12

**Recommendation**: Implement the FAC language around “coordinates with Tribes to ensure”. FAC: 1-8 DC: “*The Forest coordinates with Tribes to ensure Forest access by tribal members for the exercise of Treaty and other Tribal Rights regarding cultural and traditional uses*.”

1. DEIS: FORSTW-OBJ-03

**Recommendation**: We recommend adding “identified through consultation with interested Tribes” to the final language of this OBJ.

1. DEIS: FORSTW-OBJ-04

**Recommendation**: Use the FAC language as it is more specific and nuanced. FAC: 1-42: “*Within two years, enter into one or more Government-to-government agreement(s) with Tribes per Forest to co-design, plan, and implement habitat enhancement projects and programs for culturally significant species and practices through processes that respectfully engage Indigenous knowledge and values while both promoting Tribal workforce capacity and protecting Tribal data sovereignty and culturally sensitive information about culturally significant species, places, and practices. Develop an implementation strategy for NHPA section 304 on confidentiality (54 USC §307103) that responds to Tribal needs to protect the confidentiality of religious practices*.”

1. DEIS: FORSTW-STD-03

**Recommendation**: Include “and Indigenous Peoples” in the final language. For example: FAC: 1-72 STD: “*Proposed practices and management activities shall uphold Treaty and other Tribal rights of all Tribes and the federal trust responsibilities owed to all Tribes and Indigenous Peoples regardless of treaty status*.”

1. DEIS: FORSTW-GDL-03

**Recommendation**: The phrase “as identified by relevant Tribes” should be re-included in the final EIS. For example, FAC: 1-75 GDL: “*To ensure Tribal access to First Foods and culturally significant botanical species, collection of special forest products should not be authorized if Tribal access to culturally important resources is diminished, as identified by relevant Tribes. If access or gathering is authorized, such activities should minimize conflicts with Tribal uses, Trust responsibilities and Treaty and other Tribal rights and resources*.”

1. DEIS: FORSTW-GDL-04

**Recommendation**: The word “explore” in the DEIS language should be changed to the word “provide”, just as in FAC: 1-79 GDL: “*Thorough the Government-to-Government consultation process, the Forest Service should provide for the free use, without permit, of culturally significant plants by Tribal people should be honored for traditional native cultural gathering. Local agreements are encouraged to support such gathering*.”

1. DEIS: FORSTW-PMA (1)

**Recommendation**: Incorporate this as a Guideline rather than a PMA.

1. DEIS: FORSTW-PMA (3)

**Recommendation**: This should be a Standard or Objective since a time component is included. Remove the language of “strive to,” which is currently included in the DEIS.

1. DEIS: FORSTW-PMA (4)

**Recommendation**: Change this to a Guideline rather than a PMA.

1. DEIS: FORSTW-PMA (5)

**Recommendation**: Change this to a Standard rather than a PMA.

1. DEIS: FORSTW-PMA (6)

**Recommendation**: Ensure that this PMA requires consultation, coordination, and collaboration with relevant Tribes.

1. DEIS: FORSTW-PMA (7)

**Recommendation**: Change this to an Objective.

1. DEIS: TPTR-OBJ-01

**Recommendation**: Broaden this Objective to included unrecognized tribes as well.

1. DEIS: TPTR-STD-01

**Recommendation**: Use the FAC Standard language that focuses on the Tribe as the decision maker, not the Forest Service, because this determination is better made by Tribes themselves, not the Agency. Example, FAC: 1-48 STD: “*Commercial collection of special forest products shall not be permitted if the relevant Tribal governing body identifies it would result in limiting Tribal member access to treaty, reserved, or retained resources. This determination shall be reviewed annually in coordination with relevant and interested Tribes to ensure treaty resources are adequately conserved and stewarded*.”

1. DEIS: TPTR-STD-04

**Recommendation**: Use “shall enter into” rather than “strive to enter”, because “strive” is not the language of a Standard.

1. DEIS: TPTR-STD-05

**Recommendation**: Add the language “The USFS shall not rely on internal procedures alone to determine the sufficiency of consultation efforts” into this Standard.

1. DEIS: WRKFOR-GOAL-01

**Recommendation**: Mention administrative land transfers as one potential avenue to provide land to Tribes for workforce housing and office space.

1. DEIS: WRKFOR-GOAL-04

**Recommendation**: This GOAL should specifically mention Indigenous youth and youth-serving organizations.

1. DEIS: WRKFOR-GOAL-05

**Recommendation**: This should be changed to a Desired Condition rather than a GOAL.

1. DEIS: WRKFOR-GOAL-07

**Recommendation**. This should be changed to a Guideline rather than a GOAL.

***FAC Tribal Recommendations Not Included***

The following FAC recommendations were not included in the DEIS. We recommend incorporating all of the following into the final analysis:

1. 1-11
2. 1-30
3. 1-43
4. 1-73
5. 1-78
6. 1-86
7. 1-92
8. 1-103
9. 1-105
10. 1-108
11. 1-109
12. 1-110
13. 1-111
14. 1-112
15. 1-113
16. 2-12
17. 2-15

Additionally, to address the shortcomings in the DEIS the following recommendations are provided:

1. **Formalizing Enforceable Co-Stewardship Agreements**
	* Establish binding co-stewardship agreements with Tribes that support Tribal decision-making authority, measurable outcomes, and guaranteed funding. These agreements must recognize Tribal sovereignty and provide Tribes with management authority over culturally significant lands and resources, as outlined in Secretarial Order 3403.
	* Develop co-stewardship agreements within two years for all lands of cultural significance to Tribes within the NWFP area, incorporating Tribal management standards and guidelines.
	* Co-stewardship agreements must include specific funding, staffing, and capacity-building provisions to support meaningful and sustained Tribal leadership in forest planning, project implementation, and monitoring efforts.
2. **Protect Sacred Sites and Cultural Landscapes**
	* Mandate consultation with Tribes prior to any management activity near sacred sites, Traditional Cultural Properties, and burial grounds.
	* Develop enforceable standards to prevent disturbance in identified sacred areas, supported by funding for long-term site protection and monitoring programs.
3. **Integrate Indigenous Knowledge (IK) into Forest Management**
	* Require consultation with Tribes and collaboration with Indigenous knowledge holders at the request of Tribes at all stages of management, from planning to implementation and monitoring.
	* Establish a formal IK consultation process, co-developed with Tribes, ensuring IK is applied with respect, consent, and data sovereignty.
4. **Protect Tribal Data Sovereignty and Cultural Information**
	* Ensure that all Tribal knowledge, data, and cultural information are protected by robust Tribal data sovereignty protocols, requiring free, prior, and informed consent (FPIC) before use.
	* Confidentiality provisions must safeguard sensitive Tribal information and ensure that its use aligns with the principles of Tribal sovereignty and self-determination.
5. **Address Climate Change with Tribal-Led Strategies**
	* Incorporate Tribal climate vulnerability assessments and adaptation plans into the NWFP amendment to guide forest management and resilience measures.
	* Expand cultural fire practices with measurable targets (e.g., acres treated annually through Tribal-led cultural burns) to reduce wildfire risk and enhance ecosystem resilience.
6. **Foster Sustainable Economic Opportunities for Tribes**
	* Tribal communities must benefit from sustainable economic initiatives that align with Tribal values. The DEIS inadequately explores these opportunities.
	* Expand Tribal participation in restoration contracts and stewardship agreements to support economic self-determination. Allocate at least 30% of all restoration and stewardship contracts under the NWFP to Tribal entities, prioritizing culturally and ecologically aligned projects.
	* Expand funding for programs like the Indian Youth Service Corps and Good Neighbor Authority to support Tribal workforce development and create long-term employment opportunities.
	* Prioritize Tribal-led enterprises in contracting, ensuring economic opportunities align with Tribal values and practices.
	* Support Tribal-specific infrastructure projects.
7. **Support Tribal Workforce Development**
	* Job creation is essential for building capacity within Tribal communities while addressing forest management needs. Provide funding for workforce development programs, including the Indian Youth Service Corps, to train Tribal members in restoration, fire management, and ecological monitoring.
	* Establish dedicated funding streams for Tribal training programs in restoration, fire management, ecological monitoring, and climate adaptation.
	* Create internships and apprenticeships within the Forest Service for Tribal members, ensuring Tribal representation in management decision-making roles.
8. **Advance Adaptive Management and Flexibility**
	* Enable Tribes to implement their own land management standards and guidelines, with provisions allowing these standards to supersede NWFP components where necessary to support Tribal sovereignty and fulfill trust obligations.
9. **Establish Accountability Mechanisms**
	* Require annual public reporting on co-stewardship progress, including specific metrics for Tribal participation, ecological restoration, and climate adaptation outcomes.
	* Create a Tribal oversight body to monitor and evaluate NWFP implementation, ensuring accountability to trust and treaty obligations.
	* Incorporate enforceable deadlines for meeting objectives related to co-stewardship agreements, Tribal-led and identified priority projects, species recovery, and climate action.

**BENEFICIAL FIRE**

Beneficial fire is one of the principal means that Indigenous peoples use to steward the land, protect built dwellings, nurture biological productivity, and sustain vital resources for traditional foods, fibers, medicines, and ceremonies. The Forest Service's fire suppression and fire exclusion policies have significantly altered landscapes and degraded ecosystems and habitats that are nurtured by Native peoples and in turn nourish Native cultures. **Alternative B’s approach to beneficial fire is strongest** because it supports Indigenous cultural burning and co-stewardship agreements.

Remedying cultural and ecological harms caused by fire exclusion requires fire inclusion and expanding Tribal partnerships, as discussed above. Authorizing greater fire use while limiting aggressivefirefighting represents an essential step toward environmental justice for Indigenous peoples. In the Pacific Northwest, native forests need Native fires, and Tribal inclusion requires fire inclusion. Likewise, fire inclusion requires Tribal inclusion, whether through cultural fire or Indigenous-led prescribed fire with cultural objectives.

The DEIS presents numerous supportive statements on beneficial fire use for cultural and ecological purposes. Indigenous cultural burning is rightfully supported across all action alternatives, and statements favoring prescribed burning and managing wildfires for resource benefits are present in alternatives B and C. These praiseworthy statements signify a necessary change in Forest Service fire policy that better recognizes Tribal sovereignty. The DEIS could go further in incorporating more of the FAC recommendations on Indigenous cultural burning and/or Indigenous-led prescribed fire with cultural objectives.

Additionally, the DEIS lacks an analysis of how existing bureaucratic barriers to fire use will be overcome and lacks disclosure of where and how beneficial fire use will be allowed and applied. The fact that the Northwest Forest Plan amendment is tiered to the Agency's Wildfire Crisis Strategy is a warning sign that fuels reduction for fire suppression may continue to dominate the Agency’s fire management policy, turning fire use provisions in the Northwest Forest Plan amendment into broken promises.

We suggest the following:

1. Expand the discussion of the numerous, social, cultural, economic, and ecological benefits of cultural burning and prescribed fire, and contrast these effects with the costs and impacts of mechanical fuels reduction treatments alone and conventional wildfire suppression operations.
2. Describe the numerous safety risks, economic costs, and direct environmental impacts of conventional wildfire suppression operations to make the case for alternative fire use practices.
3. Tier the authorization of beneficial fire use from Indigenous cultural burning, prescribed fire, and managed wildfire to the Federal Wildland Fire Policy (1995/2001) and the growing literature on Indigenous fire use.
4. Provide spatial fire management information on the locations of Potential Operational Delineations (PODs) and fire management zones where wildfires could be managed for resource benefits.
5. Require that any/all fuels reduction or fire resilience projects include a fire use component (e.g. prescribed pile burning and/or broadcast understory burning) and specify that the primary objective of these fuels projects is to prepare sites for managing future fire for resource benefit rather than fire suppression.
6. Indigenous peoples use fire lighting, not firefighting, and mature/old-growth trees are an outcome, not an objective, of Indigenous fire use. Frequent low intensity burning helps nurture soil, water, and fuel conditions that enabled some trees to grow big and old, with wide range of tree species’ diversity, and survive occasional passage of wildfires.
7. Follow the [Good Fire II Report’s](https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2024/03/good-fire-ii-march-2024.pdf) Recommendation #3 to identify barriers to the exercise of reserved, retained, and other rights by Tribes and their members, including the right to engage in cultural burning and prescribed fire.
8. Work to remove bureaucratic barriers to beneficial fire inclusion and managed wildfire. This includes following the [Good Fire II Report’s](https://karuktribeclimatechangeprojects.wordpress.com/wp-content/uploads/2024/03/good-fire-ii-march-2024.pdf) Recommendation #35 to create concrete policies that allow for managed ignitions under particular conditions.
9. Implement recommendations #15, 16, and 92 from the Wildlife Fire Mitigation and Management Commission’s [“On Fire” report](https://www.usda.gov/sites/default/files/documents/wfmmc-final-report-09-2023.pdf%5D) to empower Tribes to plan and implement more beneficial fire through expansion of the Tribal wildland fire workforce and legal authority to promote cultural burning.

**WILDFIRE RESILIENCY AND RISK REDUCTION**

***Managing Wildfires as a Resource Benefit***

Wildland fire should be viewed as a management tool for improving the health and resilience of our forests. To address our historic and ongoing fire deficit, the Agency needs to reduce the suppression of unplanned wildfires, where safe and appropriate. We urge the Forest Service to increase the number of acres to be treated with wildland fire.

We cannot get out of the fire deficit through controlled burning.[[1]](#footnote-2) In order to allow for unplanned ignition to play its historic beneficial role in western forests, particularly dry fire-prone areas, it is imperative to clearly establish where fires will be allowed to play their natural role. It is also imperative to establish reasonable expectations for fuel treatments near communities. Strategic fire zones, similar to those contemplated in Alternative D, offer a way to allow for landscape level planning that prioritizes fuel treatments where they will have the most benefit—near communities—and are sized such that they are capable of being maintained.

***Addressing Impacts from Fire Suppression***

The alternatives vary in the amount and degree of allowed unplanned ignition; therefore, the alternatives inherently differ in the amount of fire suppression anticipated to control unplanned ignitions. The DEIS must examine the varying impacts from anticipated fire suppression activities. We urge the Forest Service to assess the impacts of wildland fire suppression, including air quality, water quality, future fire behavior, wildlife habitat and other impacts.[[2]](#footnote-3) Additionally, we recommend the Forest Service consider the impact of fire suppression, including smoke inhalation and fire-retardant use, on wildland firefighters and other vulnerable communities.

***Addressing Fuels Conditions in Reserves***

Bark recognizes that improving wildfire resiliency and resistance is an important objective, however we do not believe that the Plan materially interferes with this objective. Critically, the plan’s standards and guidelines *already recognize* that dry forests may require more management than moist forests. As the Forest Service’s own recent Science Synthesis for the plan explains, “In most cases, including the [Plan] standards and guidelines, biodiversity reserves *permit and encourage* restoration activities that further the species and ecosystem goals of the reserved area,” and the plan “indicates that restoration activities within reserves [are] needed for both moist and dry forests.”[[3]](#footnote-4) Accordingly, the standards and guidelines provide direction for each forest type—in dry forests, for example, “Given the increased risk of fire … due to lower moisture conditions and the rapid accumulation of fuels in the aftermath of insect outbreaks and drought, additional management activities are allowed in [LSRs],” such as “risk management activities” that may reduce the probability of major stand-replacing events.[[4]](#footnote-5) And while the plan states that treatments should “not generally” harm currently suitable owl habitat or other late-successional conditions, it also recognizes that management of older stands, as well as additional measures that go beyond the standards and guidelines, may be appropriate in areas where risk levels are particularly high.[[5]](#footnote-6)

The current framework likewise provides the appropriate language for managing reserves going forward, particularly in the face of climate change and increased wildfire. As noted above, the plan does not call for lack of management—to the contrary, the standards and guidelines “encourage the use of silvicultural practices” (i.e., vegetation management and prescribed burning) to not only accelerate the attainment of late-successional characteristics, but also “to reduce the risk to [LSRs] from severe impacts resulting from large-scale disturbances and unacceptable loss of habitat.[[6]](#footnote-7) Indeed, LSRs were created not only to increase old forest features, but also “to maintain natural ecosystem processes.”[[7]](#footnote-8) And again, the plan recognizes that this means different things in different ecoregions and, accordingly, provides appropriate flexibility for successful management of both moist and dry forests.

Rather than cast away a reserve framework that has, to this point, accomplished its goals of old forest attainment and ecosystem resilience, decisionmakers should enact the Plan as written by updating management assessments to reflect current and future conditions. It is imperative that the Forest Service retain dry forest LSRs and govern those LSRs using clear and objective standards and guidelines. Doing so would alleviate uncertainty by informing decisionmakers as to current and future conditions and would result in increased landscape resilience to disturbance regimes, particularly in light of climate change.

***Post-fire “Salvage” Logging***

Fire is a natural feature of western forests; however, climate change and mismanagement of federal forests have resulted in increased fire activity. In the event of fire, it is important to ensure that post-fire activities do not disrupt natural successional processes that produce the biological legacies necessary to regenerate older forests over time.[[8]](#footnote-9) The NWFP “gave vague and potentially conflicting guidance on protecting old trees and mature and old-growth forests during salvage.”[[9]](#footnote-10) All action alternatives rightly limit post-fire logging in moist forest reserves, to varying degrees, yet leave open the opportunity for post-fire logging in dry forest reserves. While fires may produce fuel loading concerns in dry forest stands, the nature of commercial post-fire logging typically results in worsened fire conditions by removing large-diameter snags, which are the type likely to persist on the landscape for the longest period of time, while leaving significant residual fine fuels and jackpots of logging slash.[[10]](#footnote-11) Post-fire logging is also associated with plantation creation and other interventions that work to undermine fire-resilient forests. Many species require the ephemeral environments produced by high-severity fire, including transitional, early successional species.[[11]](#footnote-12) Artificial regeneration often requires release of competing vegetation, impacting the value of post-fire ecosystems.

Post-fire timber sales have also been a particular source of litigation, as the Forest Service has attempted to expand logging in late successional reserves (LSRs), Riparian Reserves, northern spotted owl Critical Habitat, and other ecologically sensitive areas. As one law review article notes, “As wildfire continues to affect old-growth forests within the range of the northern spotted owl, if the government continues to convince courts not to enjoin salvage sales on the unproven ground salvage logging helps prevent future wildfires, the integrity and viability of the [Northwest Forest Plans]’s [Late Successional Reserve] network will be undermined.”[[12]](#footnote-13)

Regardless of land classification, Bark urges the Forest Service to impose further restrictions on commercial post-fire logging to ensure that large fire-killed trees and large live trees are preserved on the landscape to help create more complex early-seral ecosystems. In wet forests, salvage logging should be wholly forbidden except for issues of public safety, such as hazard trees along important roads, and even in these circumstances, logging should be limited to those management activities actually responsive to safety issues and those instances should be well-documented. A number of post-fire, roadside hazard tree logging projects have been rejected by federal courts because they were commercial volume projects masquerading as safety projects.[[13]](#footnote-14)  In dry forests, salvage logging should prohibit the removal of large-diameter snags and prohibit the consideration of potential revenue in planning decisions. The Forest Service should also meaningfully consider the impacts of post-fire logging on fire-dependent species, like black-backed woodpeckers, that utilize the ephemeral habitats produced by high-severity wildfires, and extend meaningful protection to complex early seral forests. Lastly, we urge the Forest Service to favor natural regeneration and eschew artificial regeneration, which contributes to over-dense “reforestation” and disregards important transitional habitat types. To the extent that reforestation is necessary, it should emphasize a variety of species, including non-commercial species and hardwoods.[[14]](#footnote-15)

***“All Lands” Approach to Wildfire Risk Reduction***

With the proposed amendment, the Agency claims it is taking “an all-lands risk-based approach in planning and decision making that is responsive to the latest fire and social sciences, including indigenous knowledge, and is adaptable to rapidly changing conditions, including climate change [and will] coordinate wildfire management with relevant State agencies and adjacent Federal agencies and Tribes.”[[15]](#footnote-16) However, this “all-lands approach” omits the most vital and culpable player: private industrial timber. The plantations that dominate private timber lands across the NWFP planning area are the elephant in the room when discussing wildfire resistance. These plantations are tinderboxes that unnaturally exacerbate wildfire severity and rate of spread and pose the greatest threat to our communities and community assets. An all-lands approach needs to include coordination with private timber owners. Alternatives should have been analyzed that include coordination with private timber.

**FOREST STEWARDSHIP**

***Moist LSR Management***

Every action alternative includes a major change to the underlying purpose and need of the Late-Successional Reserves: “maintain or restore habitat for other species that depend upon younger stands.” This conflicts with the original purpose of LSR: “to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth related species including the northern spotted owl.” These two goals are fundamentally at odds with one another. The Forest Service states that the proposed amendment will “retain and augment” the original objectives for LSRs, but we struggle to see how the proposed changes will mesh with the original purpose. The proposed change, which again is part of every proposed action alternative, would permit the Forest Service to manage every acre of LSR to create “younger forest.” The NWFP DEIS states only that this allowance for management for younger stands “would be guided by local vegetation and regional conditions.”[[16]](#footnote-17) This is incredibly vague and unhelpful and certainly not sufficient under NEPA.

Elsewhere the DEIS concludes that the management of the LSR would improve and maintain Late-Successional Old-Growth (LSOG) habitat and “contribute to the recovery of federally listed species such as northern spotted owl, marbled murrelet, and the coastal DPS of Pacific marten,”[[17]](#footnote-18) but this is not a valid assumption or conclusion if the Forest Service permits itself to convert LSR forests into younger forest through logging (i.e., removing all the trees and replanting). “Restoring younger forest” necessitates a logging prescription that will remove the existing stand and reset the stand’s age. Such logging prescriptions are designed to maximize volume and will obviously and severely undermine the recovery of the federally listed species named above.

This fundamental contradiction in the Forest Service’s proposed amendment is not fairly discussed or disclosed. This is an enormous exception in the objectives in the LSR that is irreconcilable even with the mere name of the land allocation, “*Late-Successional* Reserves.” The Forest Service needed to analyze Action Alternatives that did not include this change in order to properly analyze its effect and needed to properly analyze the scope of this change in the DEIS, which vaguely glazes over the import of this change.

***Dry LSR Management***

Every action alternative adds volume targets to dry LSR to contribute to economic stability.[[18]](#footnote-19) Adding economic purposes to the LSR is unnecessary to achieve Wildfire Resistance and Resilience desired conditions on the landscape and alternatives should have been analyzed that considered new approaches to “reducing damages and enhancing benefits from wildland fire,” without adding this commercial driver to the LSR. We are concerned that adding timber volume economic purposes to LSR eliminates NFMA’s multi-use mandate and renders all the other values and issues in the NWFP subservient to these volume goals. This is a violation of NFMA.

***Proposed Changes to Stand Age and Tree Age Restrictions***

The amendment increases the limit for commercial logging in moist LSR stands from 80 years old to 120 years old.[[19]](#footnote-20) Logging and road building in stands older than 120 years could occur to “reduce fire risk to communities.” In moist matrix, the proposed amendment adds a requirement to log “young stands (established after 1905).”[[20]](#footnote-21) Individual trees established prior to 1905 would be protected, barring exceptions including operational purposes. In dry forests, logging is mandated in all stands (LSR and matrix), with protections for individual trees older than 150 years old, but with exceptions including wildfire risk and infrastructure.[[21]](#footnote-22)

How often are large, structurally complex trees felled for operational purposes? How often are new logging roads and spurs constructed through patches of old-growth, or will they be if there is an ambitious timber target attached? We are concerned that these exceptions will swallow the rule in practice and find the Agency’s analysis insufficient. We are also highly concerned about the Forest Service’s logging allowances related to fire risk. Logging and road building creates conditions that increase fire risk for decades following implementation.

In moist matrix, old-growth protections are created for “timber harvest for stands established prior to 1825 with limited exceptions.” Exceptions include “tribal co-stewardship and cultural use or to reduce wildfire risk to communities and infrastructure.” No mapping is provided of stands established prior to 1825, nor distinction made for stand management history. The Forest Service has not provided any justification for choosing the proposed establishment dates beyond the Agency’s stated need “to bolster timber production” and the fact that time has passed since the original NWFP went into effect.[[22]](#footnote-23)

Bark is concerned that the Agency’s proposed method to ‘protect’ older forests in the matrix land use allocation is based on stand origin date as opposed to stand age. While older stands would be protected in the matrix, these protections are only temporary until they burn and reestablish. This will effectively result in a rolling brown out, eventually eliminating all protections for older matrix stands. The impacts of this approach must be fully analyzed and disclosed.

***Ecological Forestry***

The Forest Service never provides any quantified guidance in the DEIS on the management strategy described as “ecological forestry.” Again, this prescription is included “in all action alternatives [and] establishes an objective to increase restoration treatments using ecological forestry methods for forest management while also conserving and protecting older trees and achieving desired conditions for LUAs.”[[23]](#footnote-24) Absent any quantified definition of what “ecological forestry” includes, it is impossible for the Forest Service or the FWS or NMFS or the public to accurately understand what this amendment is contemplating. Quantification of these prescriptions is necessary to analyze effects, necessary to complete consultation, and necessary to inform the public. This is the principal new tool the Agency is proposing to use. It needs to be defined and quantified.

Further, we know the Agency quantified to an extent the amount of timber volume the proposed action alternatives would produce from Table 3-27, but no detail is provided on the prescriptions themselves or how the Agency arrived at these figures. The alternatives the Forest Service are analyzing need to contemplate a range of prescriptions across the landscapes and compare the effects of these changes in this DEIS. BLM did so in its RMP FEIS; it is feasible and necessary to quantify and understand the proposed changes.

***Connectivity***

The original NWFP designed the LSR to provide a habitat connectivity function for a host of species: “maintain and restore spatial and temporal connectivity within and between watersheds.”[[24]](#footnote-25) The Forest Service has not analyzed its changes in LUA objectives and management on connectivity. The Agency assumes in the DEIS that “moist forest stands on Matrix LUAs under all alternatives also provide function as connectivity between LSRs and LSOG-dependent species as well as organisms associated with younger forests.”[[25]](#footnote-26) But this assumption is inappropriate given the proposed changes in ages of forests to be logged, the logging allowed in these forests, and allowing these areas to be managed as younger forests. There is simply no way for the Agency to analyze and account for spatial and temporal connectivity absent providing the prescription detail requested above and mapping out the application of these prescriptions across the landscape. The Forest Service claims it is “retaining” the connectivity purposes of the LSR. If this is the case, a connectivity analysis that accounts for “spatial and temporal connectivity” needs to occur. Such an analysis inherently cannot be a vague discussion of overall percentages, which is how it is addressed in the DEIS.[[26]](#footnote-27)  Not only have there been massive changes to the underlying baseline data concerning the connectivity function of LSR, but the Forest Service is layering management changes on top of this shifting baseline. The FAC specifically requested that this factor be addressed.[[27]](#footnote-28) The DEIS does not address this at all.  A spatial analysis of connectivity necessitates mapping and quantified details concerning proposed management changes.

***Mandated Acreage Targets***

Every action alternative mandates acreage for treatments in all Dry Forests and Moist Matrix forests.[[28]](#footnote-29) This is a novel change in approach to forest management from the NWFP. Mandating acreage targets removes agency discretion on what areas can and cannot/should not be logged and carries with it a host of environmental consequences in and of itself. Again, given this proposed change, it should be weighed against other alternatives that do not mandate these acreage targets across the landscape because compliance with these targets will lead to conflicts with other NWFP standards being retained. Thus, the only way for the decision-maker to appropriately assess the effects of these proposed changes across differing alternatives is to have action alternatives that include these targets, and those that do not. It is not clear from the DEIS why acreage targets are included in every action alternative, and we believe this approach is very problematic and will lead to adverse environmental effects not considered in the DEIS.

The BLM similarly adopted this approach for its 2.6 million acres in the region and has been having difficulty meeting the targets it set for a number of reasons. Pursuit of these targets has forced the BLM to develop enormous projects developed under Environmental Assessments (EA) to keep with timing requirements. The scope of these EAs has precluded site-specific review of compliance with plan standards that necessitate site-specific review. This has been the case for soils, Bureau Sensitive Species, unique habitats, road construction, and invasive species.[[29]](#footnote-30) The timing and aggressive acreage requirements under the RMP has led to legal gridlock because the BLM is riding roughshod over its NEPA requirements. This approach has simply proven unworkable.

The NWFP amendments propose to adopt this failed approach on a much more massive scale when compared to BLM. The amendments also plan to retain a massive suite of plan components that will entirely hinge on site-specific analysis. This is simply not feasible. For example, when the Forest Service proposes one of these large projects, it is going to necessitate enormous amounts of new road construction or reconstruction, which can financially render many logging units non-feasible. Given the set acreage targets, any areas rendered financially non-feasible will have to be replaced acre for acre. This will bring the pressure to log a certain amount of acres into direct conflict with any of number of reasons the Forest Service might defer harvest in specific locations or has deferred harvest over the years, like slope stability concerns, imperiled species effects, recreation effects, viewshed impacts, invasive weed infestations and spread risk, etc. The proposed amendments insert an inherent inconsistency into the NWFP which will break it. This is wildly irresponsible, and the Forest Service should be aware of this problem because of the BLM’s recent experience.

Further, BLM has reduced its staff in local years and it's unclear to what extent the federal efforts to downside the government have impacted local capacity and staffing, but even before this process, local BLM districts admitted to  having significant difficulty complying with survey requirements for Bureau Sensitive Species, monitoring requirements,and meeting basic planning needs. The Forest Service needs to consider the staffing needs and capacity issues associated with mandating these enormous acreage targets. Just identifying Project Design Features or other types of mitigation that relies on site-specific analysis and review is going to necessitate an enormous amount of staff time on the ground. We know that spotted owl monitoring has ceased for 2025 because of the hiring freeze.[[30]](#footnote-31) We do not believe the Forest Service is in a place to roll out these amendments effectively.

***Road Construction***

One of the relevant environmental and economic issues unexplored in the DEIS is the road construction, maintenance, and usage that will be required to implement the proposed changes. The Forest Service acknowledges that the proposed amendments will require road construction and that corresponding environmental effects will result, but dismisses them from consideration:

*It is possible that the forest road networks could be affected by project/treatment-specific actions authorized by the proposed amendment. Potential effects to this resource may include the creation of new roads for logging, impacts to existing roads due to management activities, or construction or alteration of forest roads due to forest thinning or prescribed burns. However, the scope, extent, and location of these effects cannot be determined at this time, and a project/treatment specific evaluation would be required for impacts to individual roads or road networks.[[31]](#footnote-32)*

The claim that the scope, extent, and location of these effects cannot be determined at this time is simply untrue. The Forest Service generated the acres available and, in its view, required for harvest using satellite mapping of forest stand ages. The Forest Service mapping also includes existing roads and roads in need of renovation. While implementation of site-specific timber sales may require construction of a limited amount of spur roads to facilitate actual harvest, the Forest Service can readily determine how much road construction/reconstruction will generally be required to facilitate this required harvest. Additionally, the Forest Service has stream and river mapping layers, and thus would also be able to determine how many new waterway crossings would be required across specific types of fish-bearing streams. Because this satellite data exists, and the Forest Service is relying upon this data to justify the amendments, it needs to apply and analyze the data for roads.[[32]](#footnote-33)

These roads will have aquatic impacts as discussed below, but the proposed increase in commercial logging and entry into areas that have previously been prohibited from harvest, will necessitate extensive amounts of road construction and reconstruction which has immediate economic costs and longer-term maintenance costs that need to be incorporated into the overall decision to proceed with any mandated increase in timber logging volume. If it costs more to get into areas, especially moist forest remote areas with little or no fire concerns, than the Forest Service can expect to generate volume wise, the Agency should remove this acreage from its mandated totals.

Again, because the Forest Service is mandating acreage targets, the Agency will not be allowed to defer logging certain areas because of the feasibility of road construction/reconstruction. Thus, subsequent site-specific evaluation will not really matter because the proposed standards will require logging regardless. This is a fundamental problem with this proposal and requires more thorough analysis up front, specifically a spatial and temporal analysis of the road construction needed to implement its alternatives.

BLM has run into similar problems, desperately trying to find replacement volume for areas it modeled as eligible and required for harvest, but the Agency is unable to economically or for other reasons access these areas. If actual analysis of these issues occurred up front, the Agency could readily assess the areas feasible for access and harvest and then adjust the expectations for logging acreage accordingly. Prior to the NWFP, many areas were spitefully logged and roaded by the Forest Service to preclude roadless designations or compromise critical habitat designations, and returning to these remote areas is likely unnecessary or not feasible. Weighing road construction costs (both environmental and economic) is required to implement the Forest Service’s logging targets and is necessary to make an informed decision under the DEIS.

Additionally, there are a host of restrictions in the NWFP on road construction, standards to minimize new construction, and prohibitions on net new construction in certain areas. The amendments propose to retain all these applicable requirements. This includes but is not limited to: B-33 (roads in LSR required to “avoid late-successional habitat”); B-46 (numerous mandatory standards pertaining to road construction in riparian reserves; road construction in riparian reserves to be minimized); B-46 (roads required to meet ACS objectives at the watershed scale); B-47 (“Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams.”); B-47(“Develop and implement a Road Management Plan or a Transportation Management Plan that will meet the Aquatic Conservation Strategy objectives”); B-38 (“Reduce existing system and nonsystem road mileage.”); B-14(“If funding is insufficient to implement reductions, there will be no net increase in the amount of roads in Key Watersheds.”). The Forest Service’s proposed mandated harvest needs to be reconciled with these other applicable provisions, otherwise the amendments will create irreconcilable conflicts in the plan. Again, the Forest Service has the data to conduct this analysis, it just is refusing to do so, which violates controlling Ninth Circuit precedent for NEPA compliance.

***Aquatic, Hydrologic, and Soils Impacts***

Concerning aquatic and hydrologic impacts, the Forest Service states that the DEIS will retain the Aquatic Conservation Strategy and riparian protections in the NWFP, and concedes there will be negative effects from the action alternatives: “Increased short-term impacts to riparian and aquatic systems, but impacts will be substantially alleviated by RR objectives and ACS components (all retained and applicable).”[[33]](#footnote-34) However, as elaborated upon above, the Forest Service has not analyzed how it will comply with these standards in light of simultaneously mandating harvest of areas that will necessitate extensive impacts to riparian areas, especially road construction and reconstruction. Analysis of these impacts on ACS objectives, including water quality, sedimentation, flows, and hydrology needs to occur now to ensure these standards are reconcilable.[[34]](#footnote-35) The Agency’s decision to “dismiss [water resource impacts] from further analysis” and to rely on site-specific analyses is ecologically unacceptable and legally indefensible. These aquatic effects also necessitate consultation with NMFS, FWS, and state water quality control agencies.[[35]](#footnote-36)

Dismissing the alternatives’ effects on water quality due to the continued existence of the ACS also ignores the fact that the ACS itself permits logging in riparian reserves under certain circumstances, thus these reserves are not inherently protected at baseline. Indeed, logging projects that are purportedly for the purpose of “fuels reduction” are commonly approved in riparian reserves. Further, the ACS does not identify any set “no cut” buffers within the riparian reserves. Buffer widths vary greatly from project to project and are often inconsistent among similar locations with similar resource concerns. Narrow “no cut” buffers have in some projects resulted in unintended tree blowdown, delivery of sediment to stream channels due to erosion from upslope and upstream logged areas and roads, great reductions in habitat for riparian dependent species, detrimental increases in water temperatures, and detrimental impacts to natural hydrologic cycles via upslope and upstream timber harvest.

The DEIS also contains no discussion of the alternatives’ impacts on soils in the NWFP area. Vegetation management projects that include harvest, yarding, and road building will clearly have the potential to affect soils. Salvage logging–which is permitted to different degrees across all alternatives–also has significant, deleterious impacts on soils, yet these impacts are not discussed or compared across alternatives. High-severity fire can also affect soils, and the alternatives that will increase the risk of high-severity wildfire by logging large, fire-resilient trees must be analyzed with regard to these impacts.

In addition, extensive timber harvest, yarding, and new roads will result in decreases in canopy cover, snowpack retention, evapotranspiration, and soil cohesion. In addition, soil temperatures and erosion will increase with increased logging, as will the risk of slope failures in some locations. None of these issues are discussed in the DEIS, as there is no meaningful discussion whatsoever of hydrology or soils. Extensive timber harvesting will also result in extended periods of low summer baseflows in some project areas, negatively affecting aquatic species. Similarly, low flows will increase the magnitude, frequency, and durations of storm flows in some locations which can degrade stream habitat and adversely affect aquatic and riparian dependent species. These issues must be discussed in the EIS or its appendices.

Further, the Federal Watershed Analyses underlying the NWFP are now decades old and should be updated as part of this amendment process. If on-the-ground conditions have so significantly changed since 1994 and are expected to continue to change such that this amendment to the NWFP is needed to reflect and adapt to those changes, then clearly there is a critical need to update these analyses to understand baseline conditions. Forests within the NWFP area have updated few, if any, Watershed Analyses, nor does it appear they plan to update these analyses as required by the NWFP.[[36]](#footnote-37) The DEIS states that Watershed Analyses will be updated, but there is nothing to support that claim, especially given that current staffing and funding is greatly reduced from what it was in the 1990s and will further drop dramatically in 2025 and beyond. The Watershed Analyses simply must be revised before large-scale vegetation management decisions are permitted to occur.

**WORK HAZARDS AND FOREST-BASED WORKER NEEDS**

Forest-based jobs are a vital part of the economy but come with significant risks. To promote economic growth with good jobs and safe working conditions:

1. Create an Economic Sustainability Desired Condition in the Final Action (FEIS) for safe working conditions for forest-based workers and fair compensation for this work.
2. Create an Economic Sustainability Goal to increase collaboration with OSHA and DOL to properly enforce wage and safety regulations and guard against worker intimidation, including among contractors.
3. Create an Economic Sustainability Goal to remove financial barriers to worker and public participation in decision-making, invest in communication with workers (through regional liaisons or trusted channels to connect with Communities of Interest), and consult regularly with workers and worker-focused organizations to develop protocols for worker protections.

**RECENT USFS STAFF REDUCTIONS**

Section 3.8.1.6 must be revised to reflect the recent and likely near-term additional cuts in the Forest Service’s permanent, term, and seasonal workforce. This information is critical not only to any discussion of socioeconomic impacts, but to the overall ability of the Agency to implement any of the alternatives. Much of what the DEIS states the Forest Service will do (e.g., monitor, plan and design projects appropriately, carry out meaningful tribal engagement, implement the NWFP while complying with other applicable laws, revise watershed analyses, etc.) will not be able to be completed with the skeletal workforce that will remain. The Forest Service was already understaffed before the recent firings, and the agency’s further reduced capacity–and its impacts on the implementation of the NWFP at baseline and any amendment to it–must be described in the DEIS.

**CONCLUSION**

After over 30 years of management under the original NWFP, the Plan needs updating to reflect current ecological and socioeconomic pressures and concerns. In particular, the opportunity to write policy that makes Tribes and Indigenous people equal decisionmakers should not be overlooked. Bark fully supports the Tribal inclusion proposals and has provided recommendations to improve these proposals. Simply speaking, Bark will **NOT** support any final decision that lessens Tribal inclusion from how it is currently reflected in the DEIS.

Further, while the proposed amendment contains positive and encouraging language regarding beneficial fire and managed wildfire, it could go further. We encourage you to strengthen policy so that land managers have clear direction on when, where, and how to use fire as a management tool.

Finally, while we recognize that active management is needed to protect communities from wildfire and to improve forest resiliency, there are many concerning proposals that may increase risk to communities and perpetuate the degradation of forest ecosystems throughout the plan area. We hope that you will take our forest stewardship recommendations seriously and address them in the FEIS.

Thank you,

Jordan Latter

Forest Watch Program Manager, Bark

1. *See generally* Vaillant, N.M. and Reinhardt, E.D., 2017. An evaluation of the Forest Service Hazardous Fuels Treatment Program—Are we treating enough to promote resiliency or reduce hazard? *Journal of Forestry*, 115(4), pp.300-308; [↑](#footnote-ref-2)
2. *See generally* Kreider, M.R., Higuera, P.E., Parks, S.A., Rice, W.L., White, N. and Larson, A.J., 2024. Fire suppression makes wildfires more severe and accentuates impacts of climate change and fuel accumulation. *Nature communications*, 15(1), p.2412. [↑](#footnote-ref-3)
3. Spies et al., Synthesis of science to inform land management within the Northwest Forest Plan area (2018), available at <https://doi.org/10.2737/PNW-GTR-966> 154 (emphasis added). [↑](#footnote-ref-4)
4. NWFP Standards and Guidelines, C-12 [↑](#footnote-ref-5)
5. NWFP Standards and Guidelines, C-13. [↑](#footnote-ref-6)
6. NWFP Standards and Guidelines, B-1. [↑](#footnote-ref-7)
7. NWFP Standards and Guidelines, B-1. [↑](#footnote-ref-8)
8. Donato, Daniel C., John L. Campbell, and Jerry F. Franklin. "Multiple successional pathways and precocity in forest development: can some forests be born complex?." *Journal of Vegetation Science* 23.3 (2012): 576-584; dry forests.”

Swanson, M.E. et al. 2011. The forgotten stage of forest succession: early-successional ecosystems on forested sites. Frontiers in Ecology and Environment 9:117-125 doi:10.1890/090157. [↑](#footnote-ref-9)
9. Johnson, K. Norman, et al. The Making of the Northwest Forest Plan: The Wild Science of Saving Old Growth Ecosystems. Oregon State University Press, 2023. [↑](#footnote-ref-10)
10. Lindenmayer, David & Burton, Philip & Franklin, Jerry. (2008). Salvage Logging and Its Ecological Consequences;

Karr, J., J. Rhodes, J. Minshall, et al.. 2004. The Effects of Postfire Salvage Logging on Aquatic Ecosystems in the American West, *BioScience*, Volume 54, Issue 11, November 2004, Pages 1029–1033, [https://doi.org/10.1641/0006-3568(2004)054%5B1029:TEOPSL%5D2.0.CO;2](https://doi.org/10.1641/0006-3568%282004%29054%5B1029%3ATEOPSL%5D2.0.CO;2);

Thorn, S., C. Bassler, R. Brandl, et al. 2018. Impacts of salvage logging on biodiversity: A meta- analysis. *Journal of Applied Ecology* 55:279-289. <https://doi.org/10.1111/1365-2664.12945>; [↑](#footnote-ref-11)
11. Swanson et al. 2011. [↑](#footnote-ref-12)
12. Blumm, Michael C., Susan Jane M. Brown, and Chelsea Stewart-Fusek. "THE WORLD’S LARGEST

ECOSYSTEM MANAGEMENT PLAN." Environmental Law 52.2 (2022): 151-216. [↑](#footnote-ref-13)
13. *See EPIC v. Carlson*, 968 F.3d 985 (9th Cir. 2020)*.* [↑](#footnote-ref-14)
14. Donato, D. C., et al. "Post-wildfire logging hinders regeneration and increases fire risk." *Science* 311.5759 (2006): 352-352. [↑](#footnote-ref-15)
15. DEIS at A2-19. [↑](#footnote-ref-16)
16. DEIS at 3-36. [↑](#footnote-ref-17)
17. DEIS at 3-77. [↑](#footnote-ref-18)
18. *See* DEIS at A2-18. [↑](#footnote-ref-19)
19. DEIS at 2-14. [↑](#footnote-ref-20)
20. DEIS at 2-17. [↑](#footnote-ref-21)
21. DEIS at 2-18. [↑](#footnote-ref-22)
22. DEIS at 2-16 (“Changes authorization for forest management activities in stands less than 80 years old to 120 years old to account for 30 years of time passage since the 1994 NWFP decision.”). [↑](#footnote-ref-23)
23. DEIS at 3-146. [↑](#footnote-ref-24)
24. DEIS at B-3. [↑](#footnote-ref-25)
25. DEIS at 3-27. [↑](#footnote-ref-26)
26. *See* DEIS at3-23. [↑](#footnote-ref-27)
27. DEIS at 1-8. [↑](#footnote-ref-28)
28. *See* DEIS at A2-11. [↑](#footnote-ref-29)
29. *See Cascadia Wildlands v. Adcock*, No. 6:22-cv-01344-MK, 2024 U.S. Dist. LEXIS 206308 (D. Or. Apr. 10, 2024) (Kasubhai, Mag. J.). [↑](#footnote-ref-30)
30. See, e.g., Oregon Public Broadcasting, *Federal hiring freeze, firings hindering Oregon endangered owl monitoring, protection*. [↑](#footnote-ref-31)
31. DEIS at 1-12. [↑](#footnote-ref-32)
32. See, e.g., *Kern v. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) (“If it is reasonably possible to analyze the environmental consequences” of a particular type of action at a particular stage, “the agency is required to perform that analysis.”). [↑](#footnote-ref-33)
33. DEIS at 3-67. [↑](#footnote-ref-34)
34. *See* DEIS at B-46, B-52, B-53-54; B-55. [↑](#footnote-ref-35)
35. It appears the only place the Forest Service addresses water quality impacts is in its discussion of prescribed burning, which the agency states “could lead to increased fines and nutrients within the water column, alter the riparian canopy in a manner that could lead to increased solar energy and higher water temperatures, or affect water quantity through the removal of riparian vegetation.” DEIS at 3-72. This appears to be one of the very few, if not sole, places in the entire DEIS that discusses adverse impacts to water quality, water temperature, or water quantity. The substantial increase in *logging* across the NWFP area will have significant adverse impacts to watersheds, yet this is not discussed. [↑](#footnote-ref-36)
36. U.S. Forest Service, Watershed Analyses Documents. <https://www.fs.usda.gov/detail/siuslaw/landmanagement/planning/?cid=fsbdev7_007247#:~:text=What%20are%20Watershed%20Analyses%3F,Aquatic%20Conservation%20Strategy%20%2D%20ACS%20>). [↑](#footnote-ref-37)