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First name: Evan

Last name: Frost

Organization:

Title:

Comments: Please accept attached letter and report as my formal comment on the NOGA DEIS.

VIA CARA AND ELECTRONIC MAILSeptember 20, 2024Linda WalkerDirector, Ecosystem Management  
CoordinationUnited States Forest Service201 14th Street SWMailstop 1108Washington, DC 20250-  
1124Linda.Walker@usda.govRe: Comments on the Draft Environmental Impact Statement for Amendments to  
the Land Management Plan to Address Old-Growth Forests Across the National Forest SystemDear Ms.  
Walker,Thank you for the opportunity to comment on the Draft EIS for the National Old Growth Amendment. I  
submit these comments as a professional ecologist, conservation biologist and environmental consultant with  
over thirty years of experience working at the interface of research, land management and conservation in the  
western United States. Throughout my career, I have been involved with a wide diversity of organizations,  
projects and initiatives, ranging from landscape-scale biodiversity assessments to individual species conservation  
plans and site-specific land management projects. The statements below and the more detailed project-specific  
comments to which they reference are based on my professional judgment as a forest ecologist, my review of the  
relevant scientific literature on fire and western forest dynamics, extensive first-hand experience with these  
ecosystems, and my understanding of the potential impacts of proposed land management actions.As an  
overarching matter, I am pleased to see that the National Old Growth Amendment DEIS acknowledges the  
myriad benefits associated with old-growth forests, and that conservation of these forests is necessary to  
maintain ecological integrity as well as contribute to important ecosystem services such as carbon storage,  
biodiversity, water quality and watershed health. Given the significant deficit of old growth forests and trees that  
currently exists on the nation's public lands relative to historic conditions, and the importance of recruiting more in  
the future, I strongly support the proposed Desired Condition 3 (NOGA-FW-DC-03), which calls for increasing the  
long-term abundance and distribution of old-growth forests.As the US Forest Service continues to accelerate the  
pace and scale of projects whose stated primary goals are to reduce fuels, restore forests, and/or increase  
resilience to high intensity wildfire and other disturbances, it is critical that projects that are advanced under these  
stated goals -- especially in the context of the National Old Growth Amendment strategy -- are based on sound  
ecological science. To evaluate this issue, I worked in collaboration with Rick Enser, an ecologist with expertise  
in eastern forest ecology and management, to conduct an independent scientific review of eight recently  
proposed and/or currently pending Forest Service and BLM projects widely distributed across the US. The full  
report that is a result of this effort is submitted with this letter as Exhibit A.In conducting these project evaluations,  
we developed a set of five key criteria that are both well-established in the scientific literature and agreed upon  
by a large number of forest ecologists, biologists and other practitioners with specific expertise on these issues.  
We scored each project based on a qualitative evaluation of the degree to which each project was consistent with  
this set of criteria -- whichtogether are intended to serve as a transparent, science-based "yardstick" by which to  
evaluate the ecological efficacy of forest restoration/resiliency projects. The grades resulting from these reviews  
are intended to serve as a simple and straightforward way for readers to get a broad sense of whether and to  
what degree individual projects are meeting the stated ecological goals upon which they are premised (typically  
specified in the agencies' purpose and need statements, e.g. forest restoration, increasing resiliency, fire hazard  
reduction, etc.).The first and what we assert is the most important criteria incorporated into these project reviews  
is -- Does the project include clear and specific protections for existing mature and/or old-growth trees, which are  
key foundational elements of ecologically resilient forests? This criteria was applied to projects in both western  
and eastern national forests, because there is overwhelming and widespread consensus among the scientific  
community that no single ecological criteria is more important in managing federal forests than the need to  
conserve large and old trees. Protecting large/old trees is regarded as essential because they "form the structural  
backbone" (Franklin & Johnson 2012, Ellison et al. 2005), "are the key contributor to resistance and  
resilience in dry forests" (Franklin et al. 2013, Henjum et al. 1994, Johnson et al. 2008), and represent "an

ecological cornerstone to which forest restoration strategies can be anchored" (North et al. 2009; see report for citations). In western forests, the second criteria we adopted in these project reviews is: Do projects focus on addressing existing fire/fuel/ecological restoration concerns in frequent-fire forest types? This criteria is important because one of the fundamental tenets of an ecologically-based management approach is to utilize information on historic disturbance regimes as a guide to help determine where forests have become most altered and are most likely in need of restorative management. In the western U.S., where wildfire is usually the dominant disturbance, it is generally understood that forests characterized by different fire regimes need different forms of management. It follows that restoration treatments are most warranted in places where past management (e.g. fire suppression, logging, livestock grazing) has resulted in major alterations to ecosystem structure, function, and composition. Although some areas still support resilient conditions, available evidence is clear that ponderosa pine and dry mixed conifer forests of the western U.S. -- i.e. those forests that typically occur in warm/dry settings and were historically shaped by a frequent (0-35 yr fire return interval), low- to mixed-severity fire regime -- have been the most degraded in the last ~150 years. As described in detail in the attached report, all USFS and BLM projects scored poorly (D or F) in terms of meeting the basic ecological criteria employed in these reviews. The most consistent failing and greatest immediate concern is the continued logging of mature and old-growth trees. Just two of the eight projects (North Yuba, Last Chance) included any clear standards regarding large tree retention, and even in these cases, proposed standards only apply in limited settings to the very largest/oldest tree cohort. The remaining six projects included no large/old tree safeguards at all. In the few cases where project documents provided rationales for logging large/old trees, these justifications failed to withstand scientific scrutiny and/or are predicated on an incomplete or inaccurate understanding of the key roles that these trees play in healthy forest ecosystems. For this reason alone, all projects reviewed in this report cannot legitimately be referred to as 'restoration' or 'proactive stewardship'. The NOGA preferred Alternative 2 fails to ensure ecologically-based management of old-growth forests and trees. Absent significant improvements, NOGA will fail to address and rectify the numerous, ecologically inappropriate management actions that are currently being proposed or implemented on the national forests, as detailed in the attached report. Of particular and specific concern is that it does not appear NOGA's preferred Alternative 2 will alter how the Forest Service designs and implements projects that are proposed in old-growth forests and/or in other forest stands that include remnant large/old trees. The DEIS states that Alternative 2: "Prohibits proactive stewardship in old-growth forests for the purpose of timber production (NOGA-FW-STD-03 as described for this alternative). This standard, along with NOGA-FW-STD-02a, ensures that the sole purpose of proactive stewardship will be to promote the composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments." The following comments summarize my chief concerns with the NOGA preferred alternative, and provide recommendations for finalizing a more appropriate policy based on Alternative 3 that would adhere to ecologically-based restoration principles regarding mature and old growth values.<sup>1</sup> The preferred Alternative 2 fails to meet the purpose and need due to lack of clear standards for old-growth and large/old tree retention. Based on our findings in the attached report that evaluates a number of federal projects with stated fuels reduction, restoration and/or resiliency goals, my professional opinion is that the preferred Alternative 2 will not meaningfully change how agency staff design and implement projects on the ground. Absent clear and transparent standards that would ensure the retention of large/old trees and other old forest attributes, agency projects will likely continue to degrade existing old growth and remove large/old trees under the flawed justifications of 'proactive stewardship'. The direction described in standard 2.a will not produce different results than the current or approved and/or pending projects evaluated in our report -- and in some cases could result in even more logging of large/old trees. As noted earlier, six out of eight projects that we reviewed failed to include any clear standards that would ensure retention of large, and/or old-growth trees. Of particular concern is that all action alternatives presented in the DEIS will allow the Forest Service to eliminate old growth (both stands and trees) using a 'proactive stewardship' rationale if local agency personnel judge that an area is either not of 'quality' or 'not resilient' -- two extremely subjective metrics that are not adequately or ecologically defined. As currently proposed, this policy could also allow existing old-growth stands to be logged 'down to the minimum' for various structural attributes (e.g. large trees, canopy cover, etc.) that appear in existing old-growth definitions -- an unjustified practice that we found may already be occurring on some national forests (see case review for the Gold Butterfly project, Bitterroot National Forest). Based on our review, it appears that

standard-2.a will not prevent many of the existing problems that we found in the way that projects with explicit fuel reduction/resiliency/restoration goals are currently being designed and implemented. While the DEIS suggests that standard-2a (which limits management in old-growth stands for the purposes of 'proactive stewardship') is equivalent to an earlier requirement that management "must not degrade" old-growth forests, these two standards would in fact provide very different direction to agency personnel. A standard that limits management to actions that do not degrade old-growth forests provides more clear direction and, in our view, should be essential part of any selected alternative. Recommendation: The final policy should reinstate the non-degradation standard that was included in the Notice of Intent.2. Proactive stewardship should be limited to dry, frequent-fire forest types. According to the NOGA standard 2-a (NOGA-FW-STD-02a), "Proactive stewardship in old-growth forests shall promote one or more of the following..." which includes a list of 12 rationales for conducting active management in old-growth forests. One of these rationales includes promoting: "iv. amount, density, distribution and species composition of old trees, downed logs, and standing snags appropriate for the forest ecosystem type." As discussed in our report, restoration and resilience treatments are most warranted in places where past management (e.g. fire suppression, logging, livestock grazing) has resulted in major alterations to ecosystem structure, function, and composition. Although some areas still support resilient conditions, abundant scientific evidence is clear that ponderosa pine and dry mixed conifer forests of the western U.S. -- i.e. those forests that were historically shaped by a frequent (fire return interval 0-35 yrs), low- to mixed-severity fire regime -- have been the most degraded. Yet none of the alternatives limit proactive stewardship to dry frequent-fire forest types. One of the key findings that arose from the individual reviews that appear in our report is that some USFS projects inappropriately extrapolate thinning or other mechanical treatments that are specific to and appropriate for dry, frequent-fire forests (e.g. ponderosa pine, dry mixed conifer) to moist and/or higher elevation forest types -- where reducing tree density is not ecologically appropriate and is not likely to be effective at achieving stated goals (e.g. lodgepole pine and subalpine spruce/fir forests in the Rocky Mtns, red fir and moist mixed conifer forests in CA and OR). Absent clear standards for old growth and large tree retention, and explicit direction to limit proactive stewardship to dry, frequent fire forests, the NOGA is not likely to result in substantive changes to such projects on the ground, and therefore will not meet the purpose and need of this national amendment. Alternative 3, which would prohibit the commercial exchange of timber volume removed from old-growth stands, represents a potentially effective and meaningful change that would better conserve old-growth forest values by encouraging ecologically-appropriate stewardship. Recommendation: Modify Alternative 3 to eliminate commercial exchange of timber volume from old-growth stands in dry, frequent-fire forests. In order to meet NOGA's original purpose and need, it is my professional opinion that the forthcoming policy decision regarding management of old-growth forests must establish clear standards that will prevent the ecologically inappropriate management practices that we found are currently occurring across the national forest system. If it does not do so, it will fail to realize the potential that remains to ensure the continued existence of these irreplaceable forests into the future, and the numerous benefits and values they provide to the American people.

Sincerely, Evan Frost

ATTACHMENT: NOGA\_cover\_letter\_final\_9\_20\_24.pdf - this is the content that is coded in text box, it was only included as an attachment

ATTACHMENT: NOGA\_MOG\_report\_9\_20\_2024.pdf - An Evaluation of Projects using Ecological Rationales to Log Mature and Old-Growth Trees on U.S. Federal Lands by Evan Frost, Terrestrial/Forest Ecologist, Wildwood Consulting LLC and Rick Enser, Conservation Biologist Conservation Cooperative, Hartland, VT