Data Submitted (UTC 11): 2/1/2024 5:00:00 AM
First name: Josh
Last name: Hicks
Organization: The Wilderness Society
Title: Campaign Director
Comments: Dear Secretary Vilsack:

The Wilderness Society (TWS) appreciates the opportunity to provide scoping comments on the USDA's notice of intent (NOI) and preliminary proposed action to amend all national forest land management plans to provide consistent direction for management of old-growth forests ("proposed amendment"). TWS is keenly interested in the USDA's efforts, as described in the NOI, to "conserve and steward existing and recruit future old-growth forest conditions and to monitor their condition," with the intent to "foster the long-term resilience of old-growth forest conditions and their contributions to ecological integrity across the National Forest System."

TWS commends the USDA Forest Service for taking this important step to conserve old-growth and mature forests in accordance with President Biden's Executive Order 14072 and following up on the USDA's advance notice of proposed rulemaking (ANPR) on climate resilience. Over the past few decades, the Forest Service has significantly shifted its perspective on the primary value and role of older forests from timber supply and limitations on cultural burning resulting in excessive vegetation in many fire-prone forests. In fact, thinning coupled with prescribed burning has often become an essential tool to remove excessive fuels and reduce wildfire risk to older forests in fire-adapted ecosystems.

Yet, many forest plans - even the 1994 Northwest Forest Plan and plans recently revised under the 2012 Planning Rule - still do not provide adequate direction to protect older forests from commercial logging or to improve their resilience to wildfire and other climate change impacts. This proposed amendment - with suggested improvements and if implemented to its fullest

extent - has the potential to effectively provide consistent direction across the National Forest System to affirmatively manage for old-growth forest conditions, to enhance old-growth forest characteristics, and to address threats to their long-term persistence in a collaborative manner that involves local communities and addresses Tribal interests.

Several key aspects of the proposed amendment must be strengthened or clarified to ensure that its intent is achieved upon implementation. For example, as discussed in the "Implementation" section and elsewhere in our comments, the long-term success of the proposed amendment largely hinges on the quality of each Adaptive Strategy for Old-Growth Forest Conservation, since they are the mechanism by which future old-growth forest conditions are recruited. The Forest Service should provide each unit with sufficiently detailed guidance on effective Tribal engagement and stakeholder collaboration, as well as a model Adaptive Strategy describing the process for prioritization of areas for the retention and recruitment of old-growth forest conditions, monitoring, and adaptive management. We also note the need for information required for completion of an Adaptive Strategy and the need for strong agency leadership and accountability. Without clarity on the requirements and expectations of collaborative adaptive management, and sufficient guidance and support from the Washington Office as units develop their Adaptive Strategy, the intent of this proposed amendment will not be fully realized.

These comments begin with an analysis of the legal framework for the proposed amendment, including the National Forest Management Act and EIS alternatives. Next, we provide detailed comments on each of the plan components and other plan content proposed in the amendment. Third, as mentioned above, we comment on implementation of the proposed amendment. Finally, we discuss impacts specific to Eastern forests, the Northwest Forest Plan

amendment process, and the Tongass National Forest.

I. Legal Framework and Issues

In our comments on the ANPR, TWS recommended that the Forest Service conserve old-growth and mature forests through a federal rule, exercising its broad rulemaking authority under the 1897 Organic Act. While TWS continues to support this regulatory approach, in part because of its legal durability, we also see merit in USDA's proposal to adopt a nationwide forest planning amendment as a complementary approach. Following are some legal issues that the proposed amendment process must address.

NFMA

The USDA clearly has the legal authority to adopt a nationwide forest plan amendment. The National Forest Management Act (NFMA) of 1976 gives the Forest Service broad authority to amend forest plans. Specifically, Section 6(f) of the NFMA states that forest plans "shall [hellip] be amended in any manner whatsoever after final adoption after public notice[hellip]." 16 USC 1604(f)(4) (emphasis added). Furthermore, the 2012 Planning Rule specifically states that the Secretary of Agriculture can act as the responsible official for approval of plan amendments. 36 CFR 219(b)(3). These and an array of other authorities provide ample legal and scientific support for the proposed amendment, as we discussed at length in our letter for the administrative record for the Advance Notice of Proposed Rulemaking (ANPR) on Climate Resilience addressed to Chris French and dated July 20, 2023, which we hereby incorporate by reference.

A notable condition that the NFMA places on plan amendments is that "if such amendment

would result in a significant change in such plan," the plan must be amended "in accordance with the provisions of subsections (e) and (f) of this section [hellip]." 16 USC 1604(f)(4). We urge the agency to pay special attention to the requirement for significant plan amendments in subsection (e)(2): "determine forest management systems, harvesting levels, and procedures in the light of

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TWS endorses the comments submitted by Silvix Resources on behalf of an informal coalition of conservation groups in which TWS is a participant.

all of the [multiple] uses[hellip] and the availability of lands and their suitability for resource management."

While the NOI at least implicitly acknowledges that the proposed amendment would significantly change the forest plans, we are concerned that the NOI does not appear to recognize all of the associated requirements in section 6(e)(2) of the NFMA. In particular, the NOI's initial listing of the substantive provisions of the 2012 Planning Rule that will govern the proposed amendment process does not mention any of the rule's forest management provisions in 36 CFR 219.11. That section of the Planning Rule, which is titled "Timber requirements based on the NFMA," includes provisions on timber land suitability, timber harvest for purposes of timber production, and timber harvest for purposes other than timber production, along with various limitations on timber harvest.

The EIS for the proposed amendment should address the NFMA's requirements for significant plan amendments. In particular, for each alternative considered, the EIS should "determine the forest management systems, harvesting levels, [hellip] and the availability of lands and their

suitability for resource management." 16 USC 1604(e)(2). For example, the EIS should estimate not only the different old-growth timber harvest levels of the alternatives - for the purposes of both "proactive stewardship" and "economic reasons" - but also the amount of old-growth forest currently classified as suitable for timber production.

The EIS for the Roadless Area Conservation Rule, completed in 2000, provides a good model for addressing the timber harvest and suitability issues at a national scale. In that EIS, the Forest Service estimated that approximately 9 million acres of roadless areas were classified as suitable for timber production, out of a national total of 47 million acres of suitable timber land. Roadless Rule FEIS, p. 3-194. The EIS included a table that divided the 9 million acres into each of the nine Forest Service regions. FEIS, p. 3-195. Similarly, the EIS provided information about past and planned future timber sales in roadless areas. From 1993 to 1999, 783 million board feet of timber was sold on approximately 80,000 acres of roadless areas, of which one-third was salvage logged. FEIS, p. 3-199. Projected future timber sales in roadless areas for the next 5 years (under the No Action alternative) were estimated to total 1.1 billion board feet on 94,600 acres. FEIS, p. 3-200. Again, a table displayed the timber sale projections for each region. In the effects analysis, the EIS estimated the different amounts of timber that could be harvested from roadless areas under each of the four alternatives considered. In addition, the EIS discussed the different timber harvest systems - for stewardship and production purposes, salvage, helicopter logging, etc. - that have been and would be employed in the roadless area timber sales.

NEPA

We agree with USDA that the proposed amendment process should involve preparation of an environmental impact statement (EIS). Section 6(g)(1) of NFMA requires the Forest Service to

adopt regulations to guide the forest planning process, including "direction on when and for what plans an environmental impact statement is required." The 2012 Planning Rule requires an EIS for plan revisions, but for plan amendments the NEPA documentation can be an EIS, an EA, or a CE, "depending upon the scope and scale of the amendment and its likely effects." 36 CFR 219.13(b)(3). The 2012 Planning Rule (as amended in 2016) clarifies that "a proposed amendment that may create a significant environmental effect and thus requires preparation of an [EIS] is considered a significant change in the plan for the purposes of the NFMA and therefore requires a 90-day comment period for the proposed plan and draft [EIS]." Id. A nationwide plan amendment providing new long-term management direction for millions of acres of old-growth forest is certainly a major federal action significantly affecting the environment and therefore requires preparation of an EIS.

As discussed above, it is important that the EIS contains a reasonably thorough discussion of the effects that the proposed amendment would have on timber suitability, timber harvest levels, and harvest methods. We are concerned that the Forest Service's continued insistence in the NOI that "tree cutting is now a relatively minor threat" to mature and old-growth forests could result in an EIS that fails to disclose information about timber suitability and timber harvest in older forests that is both of high interest to the public and legally required by NEPA and NFMA.

The EIS also must consider a range of reasonable alternatives. An obvious and reasonable alternative to the proposed amendment, which focuses on protection of old-growth forest conditions, would be an amendment that applies the We request that the EIS analyze such an alternative.

Another reasonable alternative that could be analyzed should include a forest plan standard to prevent logging of all trees that established before 1870 in the West and 1920 in the East. The

logic is that trees that established before 1920 in the East predate the reversal of the centuries-long period of forest decline that occurred about 1920. In the West, trees that established before 1870 established under an intact disturbance regime, generally before the elimination of Indigenous burning and the introduction of domestic livestock that removed the fine fuels that once carried fire. In many places, restoration of resilient forest structure may require removal of trees that have established since these dramatic changes and protection of trees that established beforehand. Other alternatives for including aged-based approaches would be to protect all mature trees over 80 years old or to protect all trees over 200 years old.

The range of alternatives should also evaluate different management standards for the Tongass National Forest, apart from the rest of the national forests. Specifically, the EIS should analyze alternatives that include and eliminate the exception for the Tongass proposed in Standard #4.

Durability

Given the importance of older forests, the significance of the threats to their persistence, and the extraordinary amount of time it takes for forests to reach old-growth forest conditions, making policies to conserve older forests durable is essential. As a general matter, we are concerned that the proposed amendment process that USDA is pursuing may not be sufficiently durable to ensure the sustainability of older forests far into the future. For example, there must be commitment by the agency to the goals of this proposed amendment across multiple planning cycles because the achievement of resilient old-growth forest conditions may take centuries in some forest types, especially those that are poorly represented among existing old growth. Durability is a major reason that TWS has advocated for a federal rule to conserve older forests, and we continue to believe that a rule to complement the proposed amendment is another

important step that should be taken to ensure older forests persist throughout the National Forest System.

For the same reasons, we also urge the USDA to find ways to make the proposed amendment as durable as possible. For example, the Forest Service could amend the 2012 Planning Rule to require all forest plans to maintain and restore old-growth forests. In the meantime, the Record of Decision for the proposed amendment should specify that any changes to this proposed amendment suggested by local national forests must be approved by the Forest Service Chief or the Secretary of Agriculture.

II. Comments on Proposed Amendment

Below, we comment on specific sections of the proposed amendment and suggest changes to help achieve its intent.

Goal

We enthusiastically support the Goal of promoting tribal sovereignty and co-stewardship and encourage the recommitment expressed in the Management Approach, for example, to be repeated wherever appropriate throughout the proposed amendment. To that end, we suggest adding a Desired Condition of greater tribal inclusion and use of Indigenous Knowledge to complement the proposed Goal. Government-to-government relations, including tribal consultation and developing co-stewardship agreements, take time and must be rooted in reciprocity and trust. We realize that time is of the essence in initiating these arrangements where they do not exist but caution the agency not to let urgency corrupt these essential processes.

We support tribal co-stewardship of older forests on national forest system lands and appreciate that the Goal promotes tribal co-stewardship. We want to take this opportunity to call attention to the comment letter submitted by the Intertribal Timber Council (ITC) to the Forest Service in response to the agency's ANPR on Climate Resilience. ITC offered insightful answers to the questions posed in the ANPR that have relevance to this proposed amendment process, including opportunities for tribal co-management.

While we are excited about the inclusion of the tribal sovereignty and co-stewardship Goal, we question why there is not a second Goal reflecting the intent to foster the long-term resilience of old-growth forest conditions, their qualities, and their contributions to ecological integrity. Every forest plan should include that as a Goal, given that is the proposed amendment's intent.

Last, we are unclear whether the addition of the proposed Goal applies only to the old-growth conservation provisions of the proposed amendment or whether by including it among the Goals of every amended plan, it would guide every aspect of plan implementation. Please clarify.

Management Approach - Adaptive Strategy

In many ways, the Management Approach is the lynchpin of the entire proposed old-growth forest initiative. Without the Adaptive Strategies, there is no Guideline and therefore no planning mechanism for the recruitment of future old-growth. The Standards will protect old-growth only until it is lost to natural or human-caused disturbances, and mature forest will be left vulnerable to logging or uncharacteristic disturbances before it can reach the old-growth stage.

Such a critical part of the overall policy cannot be relegated to the status of a non-compulsory,

"unenforceable" element of forest plans. The Adaptive Strategy must either be made a compulsory and enforceable plan component (i.e., included in a Standard), or the Guideline must be made a Standard, thus requiring the development of an Adaptive Strategy to ensure compliance with the amended plan.

The requirement that the Adaptive Strategy be completed within two years of finalization of the proposed amendment seems to present an impossible timeline. The Management Approach commits the agency to consultation with tribes and a collaborative process on each forest or group of forests to produce an Adaptive Strategy. The experience of the Collaborative Forest Landscape Restoration Program suggests that it will take at least a year to even stand up a credible collaborative group, let alone for it to gel enough to reach agreement on a process that will produce sufficient results.

In addition, it would seem impossible for these collaboratives to "prioritize areas for the retention and promotion of old-growth" without adequate information about the location of old-growth and mature forests, which the agency doesn't appear to have a plan for producing, at least for every unit. Because of the significant process required to convene collaborative groups to develop the Adaptive Strategies, the time required to consult with tribes, the as-yet-undeveloped information needed to complete an Adaptive Strategy, and the work that must be done to identify priority areas and design a program of work for both current and future old-growth, we recommend extending the timeline for completion of Adaptive Strategies to four years.

Even with an extended timeline, there is no guarantee that all national forests will complete their Adaptive Strategies on time. We recommend that the proposed amendment address this possibility by stipulating that if the Adaptive Strategy is not adopted in accordance with the Management Approach within four years, then the provisions of the Standards for Management

Actions within Old-Growth Forest Conditions shall apply to both old-growth forest conditions and forests that do not meet old-growth definitional conditions until the Adaptive Strategy is adopted. This stipulation would help to ensure that older forests are conserved pending adoption of the Adaptive Strategy, while also giving forest supervisors an incentive to complete the Adaptive Strategy on time.

We find the bullet "Identify criteria used to indicate conditions where plan components will apply" to be confusing, redundant and unnecessary. For example, the proposed amendment plan components generally apply to old-growth forest conditions across the plan arena criteria for identifying mature and old-growth forests, which would undermine the important need for consistency and make effective monitoring impossible. We recommend it be deleted.

In addition to this deletion, we recommend the inclusion of another bullet requiring the Adaptive Strategy to include an adaptive management plan. It is essential to the proposed amendment's success that the Adaptive Strategy be revisited regularly and evaluated against monitoring data.

The Adaptive Strategy should include a detailed plan for collaborative adaptive management that anticipates and addresses challenges that other collaborative adaptive management processes have faced.2

Part (b) of section 1 of the Management Approach should be tightened up to make clear how many units may join to create a Strategy. We suspect that this is included to make room for the Northwest Forest Plan amendment, but it seems to leave the door wide open to ad hoc groupings that may not serve the purpose of the proposed amendment -- for example, single plans developed at the regional level. This section should provide more guidance about the nature of

multi-unit plans that could qualify. Also, we are concerned about how it will be determined if these plans "meet the intent" of the proposed amendment and lack of clarity on who makes this decision. This section, at the very least, should be edited to make clear that any such plan must have been developed through a collaborative process.

In addition, we are concerned that the second sentence of part (b) will create a powerful incentive for units with an existing old-growth management strategy to use that strategy as their Adaptive Strategy. Existing old-growth strategies were developed without the context of national level mapping and threat assessment or the benefit of the dialogue surrounding the ANPR. They also may not have been developed through a collaborative process, which is an essential part of the Management Approach and is necessary to determine if the strategy "meets the intent" of the proposed amendment. At the very least, part (b) should be modified to make clear that any "already existing strategy or other document" must have been developed through a collaborative process beyond the traditional public engagement efforts for plan revisions for the same purposes as the proposed amendment and that the decision to substitute an existing strategy is subject to approval by the Chief.

As an example, the recently revised Nantahala-Pisgah forest plan includes an "old-growth network" that meets some of the requirements for an Adaptive Strategy. However, the plan's old-growth direction still does not contribute to "a consistent approach to manage for old-growth forest conditions" as described in the proposed amendment. While the purpose of the proposed amendment includes both "maintaining and developing old-growth forest conditions," the direction in the Nantahala-Pisgah plan excludes thousands of acres of field-verified old-growth as well as areas identified under the previous plan as desirable for a well-distributed, representative old-growth network. These areas would not be subject to the non-degradation Standard of the proposed amendment. Instead, the plan's old-growth network incorporates areas "unlikely to be

prioritized" for timber harvests, which resulted in the inclusion of many younger stands that do little to ensure old-growth will "be persistent over the long term."

Desired Conditions

We are concerned that the phrase "maintained and improved relative to the existing condition over time" in Desired Condition #1 leaves unclear the timeframe to which "existing" applies and may be interpreted as setting the area of old-growth forest conditions in 2024 as the desired

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Cheng, A.S., Aplet, G.H., and A. EM Waltz. 2019. Challenges and opportunities for collaborative adaptive management in forest landscape restoration. A New Era for Collaborative Forest Management. Routledge.

condition. We support a simplified statement that makes clear that the desired condition is for the amount and distribution of old-growth forest conditions to be "increasing."

In the second Desired Condition statement, we support a change to make clear that it is the objective of stewardship activities to "enhance old-growth forest characteristics and foster an increasing trend[hellip]." We strongly recommend this change here (and elsewhere, as appropriate, throughout the entire proposed amendment) to clarify that stewardship activities should not simply increase the amount and distribution of forests that meet the minimum threshold definitions for classification as old-growth; rather, they should aim to improve the representation of the qualities of old-growth forests, including old and large trees with complex features reflecting their age (e.g., large branches, thick furrowed bark, cavities) and other characteristics,

like abundant large snags and down wood, where appropriate. We realize these characteristics will vary with forest type, but they should not be diminished through treatments aimed only at increasing "resilience."

Objective

We appreciate the attention to "measurable improvements" in the Objective; however, we are concerned that the Objective apparently would only apply for the first ten years following adoption of the proposed amendment. We recommend additional language making clear that the Objective applies in perpetuity (e.g., insert "and every ten years thereafter" following "within ten years"). We're also concerned about the phrase "at least one landscape" -- both because the term landscape is undefined and the Objective too modest. Also, the term "old-growth desired conditions" is inconsistent with previous language referring to "old-growth forest conditions" and does not reflect the need to account for old-growth forest characteristics in forests that have not yet reached criteria defining old-growth forest conditions. We suggest changes to the language accordingly. Finally, the last sentence can be made more parsimonious through a proper definition of "stewardship" that includes retention, recruitment, and natural succession.

Standards

We applaud the language of Standard #1 that prevents the degradation of old-growth composition, structure, or ecological processes, as well as the intent of Standard #2 to promote old-growth characteristics. However, we are concerned that the language of both Standards leaves the door open to activities that will diminish old-growth character. Specifically, we are concerned that the phrase that follows "ecological processes" in Standard #1 could be interpreted to allow degradation as long as old-growth forest conditions persist somewhere in the "plan

area."

Similarly, Standard #2 seems to allow for degradation of old-growth characteristics as long as stewardship activities are aimed at achieving "one" of the listed objectives. For example, it appears that stewardship activities may reduce the "amount, density, and distribution of old trees" all the way down to the minimum threshold definitions for classification as old-growth as long as the activities are conducted for the purpose of facilitating the "return of appropriate fire disturbance regimes." This kind of "thinning to the minimum" has for several years represented a misguided agency approach to managing old-growth. As a result, many large trees that contribute to old-growth character have been logged and sold in fuel treatment projects (over the objections of citizens concerned about old-growth conservation) without technically contributing to a reduction in old-growth area.

We encourage two changes to address these shortcomings. First, we recommend striking the phrase "in a manner that prevents the long-term persistence" following "ecological processes" and the phrase "in the plan area" at the end of Standard #1 to make clear that degradation of composition, structure, or ecological processes within old-growth stands is a hard line that may not be crossed. Second, we recommend that Standard #2 include language to make clear that the minimum criteria for classification of old-growth used in the federal inventory are not to be used to guide stewardship. Instead, all actions should enhance old-growth character and not drive stands toward the minimum threshold. In addition, we suggest striking all the language of Standard #2 following "proactive stewardship," and defining "stewardship" in the glossary as actions that enhance old-growth characteristics, including activities that promote the objectives now included in Standard #2.

While TWS supports science-based active management in appropriate areas, we are concerned that the proposed amendment places no restrictions on road construction associated with active management, particularly commercial thinning. The negative ecological impacts from roads and road construction include habitat fragmentation, water quality degradation, and the spread of

invasive species. The impacts can be pervasive and profound and are well-documented. Accordingly, we recommend that the proposed amendment provide a definition of "vegetation management" that includes associated road construction or reconstruction. That would make it clear that the non-degradation requirement in Standard 1 and the proactive stewardship requirement in Standard 2 both apply to road building.

We are also very concerned about the broad implications of Section (b)(v.), the exception for "cases where it is determined that the direction in this amendment is not relevant or beneficial to a particular forest ecosystem type." We acknowledge that there may be situations on the national forests where it simply does not make sense to manage for old-growth forest conditions, such as in plantations of exotic species or where native species have been planted "off site" for the purpose of timber production, shelterbelts, etc.; however, we feel that the current language is far too broad and leaves too much to discretion for arbitrary decision-making. The simplest solution is to delete the exception. At the very least, it should be restricted to list the specific conditions to

Gucinski, H., M. J. Furniss, R. R. Ziemer, and M. H. Brookes. 2001. Forest roads: a synthesis of scientific information. Gen. Tech. Rep. PNWGTR-509. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, OR. http://www.fs.fed.us/pnw/pubs/gtr509.pdf.

Trombulak S., and C. Frissell. 2000. Review of Ecological Effects of Roads on Terrestrial and Aquatic

Communities. Conservation

Biology 14(1): 18-30.

Switalski, T.A., J.A. Bissonette, T.H. DeLuca, C.H. Luce, and M.A. Madej. 2004. Benefits

and impacts of road removal. Frontiers in Ecology and the Environment. 2(1): 21-28. Available at:

http://www.fs.fed.us/rm/pubs_other/rmrs_2004_switalski_t001.pdf.

Coffin, A. 2006. From roadkill to road ecology: A review of the ecological effects of roads. Journal of Transport Geography 15: 396-406.

Fahrig, L., and T. Rytwinski. 2009. Effects of roads on animal abundance: an empirical review and synthesis. Ecology and Society

14(1): 21. Available at: http://www.ecologyandsociety.org/vol14/iss1/art21/.

Robinson, C., P.N. Duinker, and K.F. Beazley. 2010. A conceptual framework for understanding, assessing, and mitigation effects for forest roads.

Environmental Review 18: 61-86.

which it would apply or to apply it only to situations of ecological or ecocultural restoration or

scientific research.

We appreciate the intent behind Standard #3; however, we are concerned that it leaves open the

possibility that "economic reasons" may be considered a secondary purpose in the "statement of

purpose and need" for an ecological restoration project. The latitude this affords is inappropriate,

since economic reasons should not guide proactive stewardship in old-growth forests. We

recommend striking "primary" from the standard.

Regarding Standard #4, which provides a partial exemption of the Tongass National Forest, see our comments in the "Regional Issues" section below.

Guideline

We very much appreciate the language of the Guidance that provides for the recruitment of future old-growth. This is the only part of the proposed amendment that addresses this crucial aspect of old forest conservation and is an essential part of the proposed amendment. That said, as a Guideline, it lacks the "teeth" of a Standard, and, absent an Adaptive Strategy that identifies sufficient future old-growth in priority areas, the Guideline could be rendered meaningless. If a Forest simply refuses to produce an adequate Adaptive Strategy, there is, in effect, no Guideline.

Relying for such a critical element of old forest conservation on "optional plan content" and an "unenforceable" plan component undermines the entire intent of the proposed amendment and is inconsistent with Executive Order 14072. The proposed amendment should be modified to reinforce the conservation of future old-growth. One possible solution is for either the Management Approach or the Guideline to be elevated to a Standard so that the agency can be held accountable for this aspect of old-growth conservation; alternatively, a new Standard could be added to provide a strong incentive to comply with the intent of the proposed amendment. We reiterate our suggestion that a new Standard be added stating: "If the Adaptive Strategy is not adopted in accordance with the Management Approach within four years of the date of this proposed amendment, then the provisions of the Standards for Management Actions within Old-Growth Forest Conditions shall apply to both old-growth forest conditions and forests that do not meet old-growth definitional conditions until the Adaptive Strategy is adopted in accordance with the Management Approach."

We also recommend that the proposed amendment define "landscape-level proactive stewardship activities." If "stewardship" is defined sufficiently, it should be unnecessary to modify it with "landscape-level" or "proactive." If the term is retained, it must be defined. Included within a sufficient definition of "stewardship" should be "activities" that extend well beyond "vegetation management" to include protective activities, like travel management decisions that mitigate impacts from off-highway motor vehicles, road decommissioning and restoration, etc. It should also include decisions to allow natural succession to proceed unaided.

Monitoring

We are encouraged by the commitment to monitoring evident in the monitoring section, especially the Chief's commitment to developing the National Old-Growth Monitoring Network. It is not clear that a nationwide plan amendment can actually drive the establishment of the Network, but we are nevertheless pleased to see it referenced. The creation of the Network will require effort supplemental to the proposed amendment (see discussion of monitoring in the Implementation Issues section below). Similarly, it is unclear whether a national amendment would create substantive requirements to provide the "regular updates on measurable changes in unit-level old-growth forest conditions," as required by the monitoring section.

Delivering on these commitments will require strong leadership and follow-through (see discussion of leadership below). Because a nationwide plan amendment appears to have limited authority to establish a monitoring strategy, we recommend that, concurrent with the drafting of

the EIS, the Chief develop and publish a document, similar to the Wildfire Crisis Strategy,

committing the Forest Service to a nationwide old forest monitoring strategy and dedicate resources to support staff and public participation in the strategy.

We are very concerned that the Management Approach section says the Adaptive Strategy for Old-Growth Forest Conservation - which is critical to the success of the proposed amendment - is anticipated to be published as part of either the "broader scale monitoring strategy" or the "biennial monitoring report." This is an unreliable element of the proposed amendment. Despite the requirement in the 2012 Planning Rule that monitoring plans be modified by 2016 to "meet the requirements of [the Rule]," most forests don't have a plan-level monitoring program. In addition, even the forests that have completed planning since the 2012 Rule have a spotty record of completion of plan-level monitoring programs (or the "biennial reports"). Therefore, it is unclear what the inclusion of monitoring questions and indicators will achieve or what the fate of the Adaptive Strategies will be without the existence of a broader-scale monitoring strategy or publication of a biennial monitoring report. This is a significant weakness of the proposed amendment.

In addition, some aspects of the monitoring section would benefit from additional attention. For example, the name "Adaptive Old-Growth Conservation and Management Strategy" is different from the "Adaptive Strategy for Old-Growth Conservation and Management" referred to in the Management Approach section. The first indicator refers to "changes in trends in amounts and distributions"; this is not the same as what is asked in the first monitoring question, which refers to "amount, representativeness, redundancy, and connectivity." At the very least, the indicator should match the question. Even better would be if the biennial monitoring report included information about the status of "old-growth forest characteristics" or the qualities of old-growth and older forests included in priority areas.

In addition, the wording "changes in trends" is awkward. It would seem to require reporting only on rates of change, not on status. We recommend changing it to "changes in status and trends."

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USDA Forest Service. January 2022. Confronting the Wildfire Crisis: A Strategy for Protecting Communities and Improving Resilience in America's Forests. FS-11871. Available at: https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/Confronting-the-Wildfire-Crisis.pdf.

Finally, the second monitoring question is restricted only to management activities "within old-growth forest." It leaves out changes in future old-growth. The question should be redrafted to read: "Are vegetation management activities promoting desired old-growth forest composition, structure, pattern, and ecological conditions?"

III. Implementation

While amending the forest plans is an important step to conserving older forests and their associated values across the National Forest System, several additional steps must accompany the proposed amendment to ensure it achieves its intent.

First, the proposed amendment includes Standards intended to prevent degradation of stands where old-growth forest conditions are currently expressed. If these Standards are to be effective, units will bear the responsibility of field verifying whether any given stand meets the minimum criteria of old-growth forest conditions during project development. We are concerned about the lack of a formal process to resolve the inevitable conflicts upon implementation of the proposed

amendment as to whether a stand meets the minimum criteria for old-growth forest conditions, and, therefore, whether the Standards apply. While the agency has existing inventory protocols to support project-level planning, such as the Common Stand Exam, we are skeptical that these sampling designs will be sufficient to determine whether a stand meets all the criteria for old-growth forest conditions. We are aware of instances where such ambiguities result in disputes between agency staff and key stakeholders, which further erodes trust between the public and the agency. For example, nearly all the definitions of old-growth forest conditions developed by the Regions include a minimum stand age, yet stand age is notoriously one of the most challenging variables to estimate in the field due to complex stand histories, uneven age distributions, the consequences of which trees to select for ageing, and the difficulties of interpreting and verifying tree ring counts. We expect there to be disagreement among agency staff and key stakeholders, including collaboratives charged with developing the Adaptive Strategies, as to whether a stand currently meets the definition of old-growth forest conditions. We encourage USDA to detail a formal dispute resolution process, including a more thorough field reconnaissance, that can be triggered when stands meet some, but not all, of the minimum criteria of old-growth forest conditions. We understand this may be viewed as burdensome, but we believe that correctly identifying stands that meet current old-growth forest conditions is paramount to the successful implementation of the proposed amendment.

Second, a critical element to the development of adequate Adaptive Strategies is delivery of the best available spatial information that describes the current distribution of old-growth forest characteristics consistent with "definitions and inventories (that) have been established for forests exhibiting old-growth conditions." Without an Adaptive Strategy that identifies all existing old-growth and sufficient "areas that currently do not meet old-growth definitional conditions... as a priority for the future contribution of the development of those conditions over time," the proposed amendment will be unable to achieve its intent "to manage for old-growth

forest conditions with sufficient distribution, abundance, and ecological integrity...to be persistent over the long term, in the context of climate amplified stressors."

The Forest Service must make available to units and associated collaboratives the best scientific information on the location of forests exhibiting old-growth characteristics. At a minimum, all units should have access to the same set of spatial information describing where on the landscape old-growth forest characteristics may be more likely expressed. This information must be of sufficiently high resolution to serve the intent of the proposed amendment; data that are too coarse (e.g., firesheds) will inevitably blur important fine scale heterogeneity and mask opportunities to retain and proactively steward old-growth forests. TWS published such a map to demonstrate how permanent inventory plots administered by the Forest Inventory and Analysis (FIA) program can first be classified as meeting the criteria for old-growth forest conditions and subsequently paired with imputation techniques to map old-growth forest conditions throughout

the country.

We are keenly aware and appreciate that the USDA Forest Service has invested considerable resources into the BIGMAP project, an effort to more accurately describe the spatial distribution of forest attributes by employing sophisticated plot imputation techniques beyond those used by TWS. Unfortunately, the broader scientific community is unable to take part in the coproduction of maps describing the spatial distribution of old-growth forest conditions in a manner consistent with regional definitions of old-growth because of privacy laws intended to maintain the integrity of the FIA plot network. These restrictions convey an exceptional responsibility on the agency to deliver the highest quality spatial information describing the distribution of old-growth

forest conditions, since no other spatial data products exist. A more aspirational process would be to pair these predictions with the best available data at the unit level, including information collected by citizen groups, to provide a top down/bottom up estimate of the location of forests exhibiting old-growth characteristics (i.e., old-growth and mature forests).

Third, we applaud the language of the Management Approach requiring the Adaptive Strategy to "prioritize areas for the retention and promotion of old-growth forest conditions." We believe that such an "area-based approach" is essential to identifying sufficient current and future old-growth to achieve the proposed amendment's intent "to manage for old-growth forest conditions with sufficient distribution, abundance, and ecological integrity (composition, structure, function, connectivity) to be persistent over the long term[hellip]." The goal of the area-based approach should be to identify areas for conservation of current and future old-growth forest conditions with the following parameters:

* in every forest type;
* with sufficient redundancy to endure expected disturbances;
* well-distributed across each forest (including both reserves and unreserved areas);
* oriented to facilitate habitat connectivity and minimize fragmentation; and
* composed of patches of sufficient size to support old-growth dependent species.

The system of old-growth conservation areas should be of sufficient size and distribution to achieve long-term persistence in the face of climate-amplified stressors. The system could potentially be created without requiring a total area target to be determined in advance (e.g.,

Barnett K., Aplet G.H. and Belote R.T. 2023. Classifying, inventorying, and mapping mature and old-growth forests in the United States. Front. For. Glob. Change 5:1070372. doi:10.3389/ffgc.2022.1070372.

through an analysis of historical old forest distribution). Conservation areas will likely need to be on the order of several thousand acres to meet habitat requirements of old-growth-dependent species, as was the case in the various conservation strategies developed in the 1990s for old-growth in the Pacific Northwest and Sierra Nevada and likely larger than even the "Large-sized Areas" recommended in the Region 8 Old-Growth Guidelines.

Priority areas for future old-growth should be oriented around existing patches of old-growth to the maximum extent feasible but should not be limited to occurrences of existing old-growth. Because the prioritization process is essential to the success of the proposed amendment, we recommend the Forest Service convene, at the earliest possible date, a team/Committee of Scientists or even a Federal Advisory Committee with significant representation by scientists and tribal representatives and Indigenous Knowledge holders to refine this process for use by the collaborative groups.

Fourth, while we agree that the collaborative process can be an appropriate mechanism to organize a diverse public when developing Adaptive Strategies, we believe that the process and expectations of collaboration should not be left to individual units to invent in isolation. We encourage the USDA Forest Service to share a model collaborative process that details its form and function to increase the likelihood that an adequate Adaptive Strategy will be produced. Such a model should include the steps to convene and conduct collaboration and draw upon syntheses of critical factors to success and the many lessons learned from related collaborative programs (see, e.g., Butler and Schultz 2019).

In addition, sufficient technical support must be available to all units that draws upon the breadth of expertise found across USDA Forest Service programmatic areas, Tribal Nations, the academic community, non-governmental organizations, and other relevant entities. Besides identifying priority areas, as described above, the collaborative groups developing the Adaptive Strategies should detail the types of stewardship activities that are (in)appropriate across the landscape, as well as the expected consequences of those activities on the retention and recruitment of old-growth forest characteristics, and describe the process for adaptive management - including across planning cycles - that will be used during collaborative implementation, including the process for updating the Adaptive Strategy over time. Development of the Adaptive Strategy cannot be a "one and done" event.

Fifth, given the importance of adaptive management to the success of the Adaptive Strategies, and the foundational role that monitoring plays in adaptive management, we encourage the USDA Forest Service to hasten development of the National Old-Growth Monitoring Network and not wait until the conclusion of the amendment process. The monitoring network's role in informing adaptive management must be articulated in the context of collaboration. Such a monitoring network must be conceived to address both the plan-level monitoring questions included in the proposed amendment and report on status and trends upward to the national level.

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We believe that upon synthesis of the above information sources, the total area by which the standards apply on each unit must be equal to or greater than the estimated area of current old-growth forest conditions provided by the

strategic-level inventory. This will provide necessary credibility that the plan components - specifically the standards on non-degradation of current old-growth forest conditions - are implemented to their fullest potential

due to imperfect information.

Careful consideration of the scale at which old-growth forest characteristics are expressed and affected by management activities will be essential so that inferences drawn from the monitoring are statistically robust and relevant to the adaptive management process.

An effective monitoring program is likely to require information that captures changes in old-growth forest conditions at a finer spatial scale than can be achieved through existing strategic-level monitoring programs like FIA. For example, our experience participating in collaborative forest landscape restoration indicates that a relatively high density of monitoring plots will be necessary to detect change in condition, given the significant variability in pre-treatment forest conditions, multiple treatment objectives, and alternative proactive stewardship activities.

Furthermore, reliance on FIA data alone will fail to capture important characteristics of old-growth in frequent fire ecosystems where proactive stewardship activities often seek to restore

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horizontal heterogeneity and the distribution of individuals, clumps, and openings. FIA plots simply have too small footprints to monitor such desired conditions. Wall-to-wall remote sensing products can be useful to describe status and trends at broad spatial extents when validated by

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FIA data, as is the case of monitoring under the Northwest Forest Plan, but they are likely

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insufficient to inform adaptive management within planning units.

These issues are exacerbated when proactive stewardship activities intended to develop old-growth forest characteristics are not easily measured through traditional inventory methods or

easily quantified through metrics describing forest structure, function, or composition, but nonetheless are permitted under the proposed amendment (e.g., cultural uses). The co-stewardship process must be articulated and built into the development of the Adaptive Strategy, including monitoring, from the beginning. For these reasons, we encourage the USDA Forest Service to prioritize the careful development of an adequate monitoring network to address the above challenges.

Sixth, as we've discussed, the Management Approach and development of the Adaptive Strategy is the cornerstone of the proposed old-growth forest policy. We suggested revisions to the proposed plan components to help ensure the successful development of the Adaptative Strategy. In addition to these suggestions, we also encourage the Forest Service to adopt a performance measure related to the development of the Adaptive Strategy. The agency adopted a performance measure to ensure expedited compliance with the 2005 Travel Management Rule and its requirement that units develop Motor Vehicle Use Maps (MVUMs), and nearly all national forest units published MVUMs within a relatively short timeline.

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Churchill, D.J., Larson, A.J., Dahlgreen, M.C., Franklin, J.F., Hessburg, P.F., and J.A. Lutz. 2013. Restoring forest

resilience: From reference spatial patterns to silvicultural prescriptions and monitoring. Forest Ecology and Management (291): 442-457.

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Davis, Raymond J.; Bell, David M.; Gregory, Matthew J.; Yang, Zhiqiang; Gray, Andrew N.; Healey, Sean P.; Stratton, Andrew E. 2022. Northwest Forest Plan-the first 25 years (1994-2018): status and trends of late-successional and old-growth forests. Gen. Tech. Rep. PNW-GTR-1004. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 82 p. https://doi.org/10.2737/ PNW-GTR-1004.

Bell, David M.; Gregory, Matthew J.; Palmer, Marin; Davis, Raymond. 2023. Guidance for forest management and

landscape ecology applications of recent gradient nearest neighbor imputation maps in California, Oregon, and Washington. Gen. Tech. Rep. PNW-GTR-1018. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 41 p. https://doi. org/10.2737/pnw-gtr-1018.

To complement our suggested performance measure to accelerate development of Adaptive Strategies, the agency may consider carefully selecting a few "early implementer" units that have already made significant progress towards solving several of the implementation challenges (e.g., tribal co-stewardship, collaboration, mapping of existing old growth and mature forest, monitoring, supportive leadership) to create strong models for other forests to follow. It would be wise to select units from across the National Forest System that have strong familiarity with old-growth forest management. While it is assumed that these units will face fewer barriers in the development of Adaptive Strategies, their experiences handling the many unforeseen challenges could nonetheless help the agency identify key knowledge gaps and programmatic areas for long-term investment.

Finally, we believe that the proposed amendment is unlikely to succeed without strong, supportive leadership from the Chief on down. With so many critical issues left unresolved by the proposed amendment, it will take firm and steady guidance from everyone in a leadership position to ensure the success of this initiative. We are encouraged to see in the proposed amendment that the Chief is committed to establishing a National Old-Growth Monitoring Network; however, success of the Network will require not just a few staff positions allocated at the top but commitment from regional foresters, forest supervisors, and district rangers to ensure

that the necessary data are collected and evaluated, especially given the dismal history of forest-level monitoring in the agency.

Similarly, the collaborative process for development and implementation of the Adaptive Strategies will need to be supported at every level. Historically, support for collaboration has been spotty, and even functional collaboratives have suffered from turnover due to the agency's system of transfers and details. All staff need to be assured that it is their duty to participate in collaboration in good faith, and these commitments should be repeatedly and publicly

demonstrated.

Leadership must also set the tone for cooperation within the Forest Service. Success of this proposed amendment will depend on good working relationships between the National Forest System, Research and Development, and the Forest Inventory and Analysis program. Old rivalries and resentments cannot be allowed to obstruct the teamwork that will be needed. We believe the Forest Service would do well to establish a system of rewards and awards for demonstrating commitment to old-growth conservation, dedication to collaboration, and a cooperative spirit in support of old-growth inventory and monitoring.

The spirit of collaboration and cooperation must be extended to tribes wherever possible. Federal policy requires "consultation," which has historically translated only to "notification." We are encouraged by the language of the proposed amendment committing the Forest Service to "co-stewardship," but we also recognize that a "culture of co-stewardship" must be built within the agency. Formal government-to-government agreements that outline the co-stewardship

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Cheng, A.S., Aplet, G.H., and A. EM Waltz. 2019. Challenges and opportunities for collaborative adaptive management in forest landscape restoration. A New Era for Collaborative Forest Management. Routledge.

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arrangements between tribal nations and the federal government may need to be prioritized, and tribal nations should be welcomed directly into the collaborative process, which must be grounded in a spirit of reciprocity, not extraction of Indigenous Knowledge. We encourage the Forest Service to consider providing grant funding to Tribes that are interested in participating in the process, similar to how the agency extends financial support to States to engage as cooperating agencies in other NEPA processes.

IV. Regional Issues

Eastern Old-Growth

Region 8 old growth guidance directed each unit to develop a network of small, medium, and large patches to be managed for old-growth conditions, and many units have designated areas for those networks. These networks may not be sufficient to meet the patch-size needs of all old-growth-associated species or all needs identified through consultation and collaboration, but the portions not already in old-growth condition should be included in the priority areas identified in the Adaptive Strategy. To ignore or arbitrarily dismiss these networks in whole or in part would undermine the credibility of agency old-growth planning, including this proposed amendment. Designating stands for an old-growth network and then removing them before old-growth conditions have been achieved would run counter to the purpose of the amendment.

Unfortunately, that is precisely what happened when the revised Nantahala-Pisgah Forest Plan created a new old-growth network that excluded over 2,000 acres of small old-growth patches that were included under the prior plan and in accordance with the Region 8 guidance. Networks should be durable, as long as they continue to meet the purpose of the amendment, and help provide the long-term consistency necessary for successful stewardship and recruitment.

Across the eastern US, many units have scarce remnants of old growth within extensive landscapes of mature forest. This differs significantly from pre-colonial conditions when old growth was typically abundant. Hence, these units have both a substantial old-growth deficit and a major opportunity to restore it. In coming decades, newly recruited old-growth from harvested stands will dominate some units' old-growth cover. However, stands that have just reached old-growth status will often differ from those that were never industrially logged in several key aspects: species composition, structural traits such as tree size and coarse woody debris, and services such as carbon storage and habitat quality. To make informed decisions that enhance the value and ecological resilience of old-growth conditions, these differences among different old-growth stands need to be captured. Evaluating old-growth conditions requires assessing not only the extent and distribution, but also stand-level characteristics.

Where old-growth forest conditions remain, they may be difficult to recognize. Industrial logging operations circa 1900 bypassed forest stands most often due to low commercial value, commonly associated with poor growing conditions. Relatively small trees frequently dominate these stands. As a result, the stands do not match stereotypical images of old-growth, and their age may go unnoticed. Additionally, natural uneven age structures within most eastern forest types can complicate the identification and aging of the oldest age class. In formerly open stands, fire

For examples see Memorandum Of Understanding between the Chippewa National Forest and Leech Lake Band of Ojibwe; Memorandum Of Understanding between the Superior National Forest and the Bois Forte, Grand Portage, and Fond du Lac Bands of Lake Superior Chippewa.

suppression has also allowed younger cohorts to fill in around older age classes. These challenges highlight the need for careful review of stands in proposed projects, taking these factors into account.

Across much of the Eastern US, the risk of stand-replacing disturbances remains low. Consequently, there are limited opportunities for active management to mitigate threats to those forests because there are few threats. Indeed, fire suppression has been so effective in the East that there is a deficit of stand-replacing fire relative to the natural range of variation. Active management, in particular timber harvests, can also create a threat through its potential to introduce invasive species. In the Guideline and elsewhere, the proposed amendment should make clear that "proactive stewardship" includes natural succession.

Northwest Forest Plan Amendment

At the same time that the USDA is amending all national forest management plans to conserve old-growth forests, it is also amending the Northwest Forest Plan (NWFP) to address five interrelated issues, one of which is "improving conservation and recruitment of mature and old-growth forest conditions[hellip]." 88 Fed. Reg. 87393, 87395 (Dec. 18, 2023). The NOI mentions the concurrent NWFP amendment process in its discussion of "areas of agreement" that emerged from the ANPR comments - specifically, the agreement that "differences in threats and conditions in different regions and ecosystems will require additional consultation with Tribes [hellip]

and place-based collaboration to develop geographically informed adaptive management strategies." NOI at 88044. The NOI states that the USDA's appointment of a NWFP Federal Advisory Committee (FAC) last year to guide the NWFP amendment is an example of tribal consultation and place-based collaboration to develop a geographically informed adapted management strategy.

TWS commends the USDA both for instituting a NWFP amendment process to conserve and recruit mature and old-growth forests in the Pacific Northwest and for establishing the NWFP FAC. Obviously, it is important that the proposed Amendment work together with the NWFP Amendment as much as possible. Key outcomes for Pacific Northwest forests include:

* Greater protection for the 1.5 million acres of old-growth and late successional/mature forests that the NWFP purposely made available for commercial logging when it was adopted in 1994 but largely remain unlogged and intact today.
* Increased ecological restoration activity in relatively dry, frequent-fire forests in the eastern and southern portions of the NWFP area to reduce their vulnerability to extreme wildfire and drought exacerbated by climate change.
* Greater co-stewardship of resources that are important to tribes in the NWFP areas, based on traditional knowledge, treaty rights, and an indigenous ethic of reciprocity.

We hope these outcomes will be achieved under the suggested actions for the proposed amendment and the NWFP amendment. There is much that the two amendment processes can learn from each other, and we strongly encourage the Forest Service to make sure that the agency planners for the two processes are consistently interacting.

Tongass Exemption

The proposed amendment singles out the Tongass National Forest for exclusion from its protections by creating an exception for old-growth logging under the Southeast Alaska Sustainability Strategy (SASS). This exception is deeply concerning. The SASS sets out in many respects a positive direction for the Tongass. Indeed, the Forest Service restored the Roadless Rule on the Tongass, has been redirecting its resources to invest in forest restoration, recreation, and resilience, and is centering collaboration and partnerships in its work. TWS supports these changes, and we believe that protecting the Tongass' old-growth is critical. Exempting the Tongass from the protections being considered for every other national forest in the country seems unnecessary and inconsistent with the purpose and need of the nationwide land management plan amendment as well as President Biden's Executive Order 14072.

TWS supports the primary purposes of the SASS and understands the Forest Service's desire to avoid having conflicting policies related to old-growth on the Tongass. The SASS has very little durability and could be easily amended and/or revoked by any future administration with no public input or additional process. TWS sees the proposed amendment as an opportunity to enhance the durability of a key aspect of the SASS, namely ending large-scale, old-growth timber harvest and focusing resources to support forest restoration, recreation, climate resilience,

and sustainable young-growth management. Indeed, this is precisely what the proposed plan Standards attempt to address.

Further, an important part of the SASS is to ensure Tribal Nations will be provided opportunities to describe, identify, or remove cultural wood to maintain for future generations or for uses such as totem poles, canoes, and tribal artisan use. As put forward, the proposed amendment would provide for an exception to Standards 2 and 3 to allow for culturally significant uses. Thus, it

appears that the proposed amendment (without the Tongass exception) and the SASS are, in many ways, consistent with each other.

We offer three recommendations. It is imperative that the Forest Service consult with Southeast Alaska Tribes regarding this plan amendment and its proposed exception for old-growth logging on the Tongass. The Forest Service must analyze an alternative that does not provide an exception for the Tongass. If this exception is analyzed in an alternative in the DEIS, we request that it be modified as follows:

* Clarify that the exception to these standards be provided on a case-by-case basis for individual projects.
* The approval to grant the exception should be elevated from the Alaska Region Forester to the Chief.

In conclusion, TWS greatly appreciates the USDA Forest Service's proposal to conserve old-growth forests through a nationwide forest plan amendment. We look forward to working with you to achieve a strong, durable, and implementable policy to provide the immense benefits of old-growth forests to current and future generations.

Sincerely,

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Available online at : https://www.usda.gov/media/press-releases/2021/07/15/usda-announces-southeast-alaska-sustainability-strategy-initiates.

Mike Anderson, Senior Policy Analyst

Greg Aplet, Senior Forest Scientist

Kevin Barnett, Landscape Ecologist

Josh Hicks, Campaign Director

Scott Miller, Senior Regional Director, Southwest

Jess Riddle, Senior Conservation Specialist, Southern Appalachia

ATTACHMENT: USFS_OG_amendment_TWS_scoping_comments_2.1.24.pdf is letter content.

ATTACHMENT: Attachment - Climate Resilience ANPR comments Wilderness Society.pdf is comments on Climate Resilience ANPR.

ATTACHMENT: Attachment - USFS Fed Reg ANPR Climate Resilience.pdf is Climate Resilience ANPR.

ATTACHMENT: Attachment - USFS_MOG_Threats_Analysis_Report.pdf is Threats Analysis Report for Mature Old Growth.