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Submitted via webform: https://cara.fs2c.usda.gov/Public//CommentInput?Project=65356

RE: Technical Comments on Amendments to Land Management Plans to Address Old-Growth Forests Across the National Forest System and Draft Environmental Impact Statement

Dear Ms. Walker: September 20, 2024

On behalf of Silvix Resources, National Wildlife Federation, Blue Mountains Forest Partners, Conservation Northwest, Forest Stewards Guild, Idaho Conservation League, Outdoor Alliance, Dr. William S. Keeton, Southern Environmental Law Center, Vermont Natural Resources Council and our members and supporters nationwide, thank you for the opportunity to provide comments on the United States Forest Service's proposed amendments to land management plans to address old-growth forests across the National Forest System (NFS) and the supporting Draft Environmental Impact Statement (DEIS). In addition to this multi-organization letter, many signatories are also submitting individual organization comment letters: the Forest Service should consider all these letters in a complementary fashion.

These comments are intended to highlight the major aspects of the Forest Service's proposed national old growth amendment (NOGA) preferred/proposed action, potential legal and policy infirmities present in the proposed action, and where possible, suggested approaches to address identified infirmities. *A complete list of suggested redlines to the proposed action are included as Attachment 1.*

In order to be an effective and durable conservation policy, the NOGA must achieve five primary objectives. *First*, the final amendments must include a clear passive stewardship management pathway for relevant MOG forests. *Second*, the selected alternative must include plan components that make it clear that existing old growth conditions may not be degraded through proactive stewardship. *Third*, and relatedly, the selected alternative must clarify that old growth forest definitions and associated criteria – whether developed at the regional level or contained in existing forest plans – are not minimum management targets, but rather are simply used to identify when a stand is meeting old growth characteristics. *Fourth*, the selected alternative must effectively provide for the recruitment of old growth forests from mature forest age classes. *Finally*, the selected alternative must clean up and limit the extensive exceptions to old growth conservation in the NOGA.

This memo's analysis is divided into three sections: 1) substantive provisions of the proposed action; 2) procedural concerns with the proposed action, focusing on National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), and Endangered Species Act (ESA) infirmities; and 3) Indigenous Knowledge and Tribal Inclusion considerations.

I. SUBSTANTIVE PROVISIONS.

"Substantive provisions" refer to the plan components and other plan content that comprise the proposed amendment text, specifically the preferred alternative, Alternative 2.

A. Glossary.

As discussed infra regarding Standard 2a, the proposed action as written gives the impression that the only management pathway for forests that currently meet the definitions and criteria for old growth forests is "proactive stewardship," which is defined as active vegetation management. However, nearly half of extant old growth can be classified as infrequent fire regimes where active management is unlikely to benefit old growth conditions. Therefore, the selected alternative must be clear that a legitimate and often ecologically appropriate management pathway is passive or custodial management.

To achieve this clarity, several terms in the Glossary should be revised[1] as follows, and a new definition of "passive stewardship" should be added. The supporting analysis in the final environmental impact statement (FEIS) should be updated accordingly.

> **Stewardship:** The management of forests for any goods, benefits, and values that can be sustained for present and future generations (Dictionary of Forestry; Bethesda, MD: Society of American Foresters, Page 72 and 177). Also see the definitions of "co-stewardship," ~~and~~ "proactive stewardship," and "passive stewardship."
>
> **Proactive stewardship:** ~~Refers to v~~ Vegetation management (e.g., prescribed fire, timber harvest, timber or biomass removal, hazardous fuel reduction, wildlife habitat improvement, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives) that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments. (Definition is also included in NOGA-FW-STD-02a) *Also see the definitions of "co-stewardship" and "stewardship."*

The definition of "proactive stewardship" could also be revised to read:

> **Proactive stewardship:** ~~Refers to~~ Intentional management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments, and includes both active vegetation management (e.g., prescribed fire, timber harvest, timber or biomass removal, hazardous fuel reduction, wildlife habitat improvement, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives) and passive management and restoration that focuses on reducing anthropogenic stressors where appropriate.

[1] ~~Strikethrough text~~ indicates deleted text, and red text is new text.

Including a passive management option in the definition of "*proactive* stewardship" runs the risk of confusing the public and line officers because not acting is inconsistent with the concept of "proactive." To avoid this confusion, we recommend the following new definition of "passive stewardship:"

> **Passive stewardship:** Inactive vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments.

In addition, we suggest the following minor, but important, change to "vegetation management:"

> **Vegetation management:** Includes – but is not limited to – prescribed fire, timber harvest, timber or biomass removal, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives (e.g., hazardous fuel reduction, wildlife habitat improvement). (Definition is also included in NOGA-FW-STD-02a)

The addition of "timber or biomass removal" is intended to make it clear that not only must the cutting have a proactive stewardship purpose, but also that the removal must also have such a purpose given that retaining cut biomass (down woody debris) is important in many forest ecosystems.

B. Desired Conditions.

In general, the Desired Conditions (DCs) – with some minor changes identified infra – set an appropriate "vision" for the amendment, which is that "Old-growth forests occur in amounts and levels of representativeness, redundancy, and connectivity such that conditions are resilient and adaptable to stressors and likely future environments." DEIS, 25. Two items of note: 1) there is nothing in the DCs that envisions an *increase* in the amount of old forest across the NFS or on any national forest, despite the recognized dearth of this seral stage; and 2) while DC2 sounds promising ("Old-growth forests persist in areas that have the inherent capability to sustain old-growth forests over time") the emphasis on "inherent capability" is potentially problematic and is discussed more infra.

To address the issue of recruitment of old growth forests over time, we suggest the following amendments to Desired Condition 1:

> Old-growth forests, and sufficient mature forests to recruit old growth forests over time are on a trajectory to reflect pre-fire suppression species composition or anticipated future species composition based on likely future climatic conditions, occur in amounts and levels of representativeness, redundancy, ~~and~~ connectivity, and quality such that conditions are resilient and adaptable to stressors and likely future environments when considered at an appropriate ecological scale.

This amended DC includes appropriate species composition, quality, and scale as Desired Conditions of old growth forests and specifically adds mature forest recruitment as a Desired Condition. Recruitment is discussed more infra.

C. Standards.

Standards are "mandatory constraint[s] on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements." 36 C.F.R. § 219.7(e)(1)(iii).

1. Standard 1.

Standard 1 requires local units to use the definition of "old growth" found in local land and resource management plans when identifying old growth forests during project development. DEIS, 28. Where plans do not have complete or any management direction regarding old growth, units are directed to use the regional definitions found in the MOG inventory. *Id.*

This Standard is problematic because it could be read by local land managers as requiring management of existing old growth forests to the minimum definitions and criteria found in either existing forest plans or regional definitions. For example, some old growth forest technical guides (i.e., Green et al. 2011) have been used as *management targets* to reduce the quality and complexity of old growth forests, rather than as tools to identify when a stand is meeting minimum old growth metrics. Given that the NFS is depauperate in old growth forest characteristics, proactive stewardship must not be used to "manage to the minimum" old growth forest definitions or criteria. Proposed action Standard 1 should be revised in the following way to clarify this intent:

> Old growth forests will be ~~determined~~ identified using definitions and associated criteria established in the land management plan. Where these definitions and associated criteria are found to be incomplete (i.e., only address some but not all ecosystems found in the planning area for which old-growth forest does or may exist) or are non-existent in the plan, the planning unit's corresponding regional old-growth forest definitions and associated criteria, or successor regional definitions and criteria, will be applied in part when these are incomplete or in full when non-existent. Do not use minimum definitions for old growth forests as a target for management outcomes.

2. Standard 2a.

Standard 2a requires that "Where conditions meet the definitions and associated criteria of old-growth forest, vegetation management may only be for the purpose of proactive stewardship." DEIS, 29. "Proactive stewardship" is defined as "vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments" and can only be

undertaken in old growth forests for one or more of 12 purposes. *Id.* There are at least two infirmities with Standard 2.

First and most critically, Standard 2 applies to *all* old growth forests of all kinds regardless of whether silvicultural intervention would benefit those forests (proactive stewardship – defined as active management – is appropriate "where conditions meet the definitions and associated criteria of old-growth forest"). The analysis supporting the DEIS is clear that a little more than half of the National Forest System (NFS) falls into frequent fire regimes where proactive stewardship of older forests may be appropriate. Draft Ecological Impacts Analysis Report (Eco Report), 19-20, Table 3; DEIS, 62-63. The remaining portion of the NFS, approximately 67 million acres (23% of which is currently old growth) falls into infrequent fire regimes. *Id.*

While a little less than half of the NFS are infrequent fire regimes where proactive stewardship is not necessary to maintain and recruit old growth conditions, the proposed action assumes *all* forests are appropriate for proactive stewardship; and yet this is ecologically inappropriate management, for example in the moist Douglas fir/hemlock forests of the Cascade Range. *See*, Franklin and Johnson 2012.

We understand that the intent of Standard 2a is to permit passive management where appropriate; however, neither the plan component nor the DEIS make this distinction. To address this infirmity, the Forest Service should amend Standard 2 in the following way to meet the agency's intent:

> Where conditions meet the definitions and associated criteria of old-growth forest, manage the forest for the retention and enhancement of those characteristics using either passive or proactive stewardship approaches, as ecologically appropriate. ~~vegetation management may only be for the purpose of p~~ Proactive stewardship shall maintain, or contribute towards the restoration of the quality, structure, distribution, abundance, pattern, ecological processes, and composition characteristic of the desired old growth forest type, taking into account the contribution of the stand to landscape fire adaptation and watershed health and retaining the large trees contributing to old growth structure as appropriate for this forest type. ~~For the purposes of this standard, the term "vegetation management" includes – but is not limited to – prescribed fire, timber harvest, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives (e.g., hazardous fuel reduction, wildlife habitat improvement). For the purposes of this standard, the term "proactive stewardship" refers to vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments.~~ Proactive stewardship in old-growth forests shall promote one or more of the following:...

In the alternative, as discussed supra, the Forest Service could redefine "proactive stewardship" to include passive management, although this alternative runs the risk of confusing the public and others (not acting is inconsistent with the concept of "proactive"). *Our preferred course of*

action is to amend the definition of "stewardship," "proactive stewardship," and "vegetation management," and add a new definition of "passive stewardship" to clearly establish an intentional management pathway that does not involve active forest management.

Another alternative would be to add narrative in the FEIS and ROD that clarify that proactive stewardship is *not appropriate* in many forest types, particularly infrequent fire regime forests. While this may address public confusion, the fact remains that the text of the plan components – which is what line officers are required by law to follow – problematically currently proscribes proactive stewardship to all forest types, including those that will not benefit from silvicultural intervention. Thus, to address this infirmity, the Forest Service must amend the language of Standard 2 itself.

3. Standard 2a.viii.

One of the 12 purposes for which proactive stewardship may be undertaken in existing old growth forests is to promote "successional pathways and stand development." DEIS, 29 (purpose viii). The DEIS or supporting materials do not explain what this phrase means or what type of proactive stewardship would be undertaken to promote successional pathways and stand development. Purpose 8 could be read to permit active management to reset the successional clock: i.e., resetting an existing old growth forest to zero (or, at least an earlier successional stage) through active management. Given the opposition to the NOGA NOI from active management supporters under the (mistaken) perception that NOGA would prevent active management and/or require the Forest Service to manage forests to the detriment of early successional forest types, this potential outcome is not unreasonable.

To address this infirmity, the Forest Service should delete purpose 8 from Standard 2a. In the alternative, the Forest Service should clarify in the plan component that proactive stewardship may not reset the succession clock or appreciably reverse ongoing forest maturation. To effectuate this intent, and if not deleted in its entirety, Standard 2a.viii should be revised to read:

> ...successional pathways and stand development needed to retain or develop old-growth characteristics in the future;...

4. Standard 2b.[2]

Standard 2b provides that "The cutting or removal of trees in old-growth forest for purposes other than proactive stewardship is permitted when (1) incidental to the implementation of a management activity not otherwise prohibited by the plan, and (2) the area – as defined at an ecologically appropriate scale – continues to meet the definition and associated criteria for old-growth forest after the incidental tree cutting or removal." DEIS, 30. Essentially, Standard 2b.1 is an exception Standard 2a that allows for old growth harvest when "incidental" to the

[2] Standard 2b does not meet the definition of a "standard" under the 2012 Planning Rule because it is in fact an exception to Standard 2a: it allows departure from its terms ("cutting and removal of trees in old growth forest for purposes *other than* proactive stewardship [Standard 2a] *is permitted when....*"), thus indicating that it is better categorized as a guideline. 36 C.F.R. § 219.7(e)(1)(iv) ("A guideline is a constraint on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met").

implementation of a project that is otherwise consistent with the local forest plan. Presumably, this exception is designed to address situations such as infrastructure (e.g., pipelines) or recreational (e.g., ski areas) development; but nowhere in plan component language or supporting documentation is this limitation made clear. Similarly, "incidental" is not defined, and could be quite expansive: for example, the creation of fuel breaks for wildfire mitigation is currently a common practice across the NFS, and while this activity is likely otherwise consistent with local plans, there is reasonable concern that it could facilitate the loss of extant old growth forests.[3]

In addition, the qualifying language that the "incidental" cutting and removal of old growth forests is permitted provided that the area "defined at an ecologically appropriate scale" continues to meet the definition/criteria for old growth forest, is insufficient to adequately protect extant old growth forests. The DEIS explains that "it should be acknowledged that some of these infrastructure or multiple use activities may be large enough that they impact whether an area meets the definition and associated criteria of old-growth at the ecologically appropriate scale." DEIS, 104; Eco Report, 98 (recognizing that hazard tree removal could also result in pushing extant old growth forest out of old growth condition at relevant scales).

Standard 2b also permits "management to the minimum:" proactive stewardship, or exceptions to it, can result in management of extant old growth forests so that they no longer meet the definition of old growth, or are managed in such a way so as to meet only the minimum criteria for old growth rather than to maximize the quality of old growth forests.

Our preference is to delete Standard 2b in its entirety. If the Forest Service decides to retain this plan component, it must be revised as follows to provide accountability around this expansive exception:

> Where no practicable alternatives exist, and after minimizing the effect to old-growth forest conditions, ~~T~~the cutting or removal of trees in old-growth forest for purposes other than proactive stewardship is permitted when (1) incidental to the implementation of a management activity not otherwise prohibited by the plan, and (2) the area – as defined at an ecologically appropriate scale – continues to meet the definition and associated criteria for old-growth forest after the incidental tree cutting or removal. Such cutting and/or removal is infrequent.

5. Standard 2c.[4]

Standard 2c is a series of exceptions to Standards 2a and 2b. DEIS, 31. While some of the exceptions (e.g., 2c.ii or for Tribal use) may be appropriate, the remainder are problematic. Although the supporting documentation states that the use of these exceptions is expected to be

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[3] Elsewhere in the amendment, the Forest Service recognizes the value of relic, legacy, or individual old growth trees and requires their protection. Eco Report, 24; DEIS 36 (Guideline 3). However, this is inconsistent with Standard 2b, which allows for the "incidental" harvest of old growth forest.

[4] Standard 2c does not meet the definition of a "standard" under the 2012 Planning Rule because it is in fact an exception to Standard 2a: it allows departure from its terms ("*deviation* from Standard 2.a and 2.b may only be allowed if...."), thus indicating that it is better categorized as a guideline. 36 C.F.R. § 219.7(e)(1)(iv).

"minimal" and affect less than 5% of the old growth on each National Forest, Eco Report, 100, there is no basis in the DEIS or supporting documentation for this assumption. Indeed, the Ecological Report acknowledges that the exceptions in Standard 2 may result in the loss of old growth forests at relevant scales. *Id*., 98. If that is the case, then the preferred action does not meet the purpose and need, nor does it achieve the Desired Conditions of the amendment. This is a significant infirmity that the Forest Service must address in the FEIS and ROD.

To do so, the Forest Service should revise Standard 2c as follows:

> Deviation from Standard 2.a and 2.b is only appropriate ~~may only be allowed~~ if the responsible official determines that vegetation management actions or incidental tree-cutting or removal are the minimum intervention necessary for the following reasons and includes the rationale in a decision document or supporting documentation.

These changes clarify that deviations must be the minimum necessary to meet other desired conditions or multiple use objectives. In other words, the fact that a small deviation is necessary does not authorize a large unnecessary deviation from the Standards.

In addition, as outlined infra, the selected alternative should include plan component language that plainly prohibits the loss of old growth at relevant scales, and revise or eliminate the exceptions as described below.

a. Standard 2c.i (HFRA & WUI Exception).

This exception allows for vegetation management or "incidental tree-cutting and removal" of old growth when necessary for wildfire risk reduction activities in municipal watersheds or the wildland-urban interface (WUI) pursuant to the Healthy Forests Restoration Act (HFRA). While it is essential that the Forest Service retain the ability to reduce wildfire risk in appropriate locations, this exception is infirm for at least three reasons.

First, a significant portion of extant old growth forest exists in the WUI. The DEIS states that "frequent fire ecosystems make up the majority of the WUI," DEIS, 99, where proactive stewardship is appropriate, and indeed 25% of extant old growth – 6.2 million acres – is in the WUI, Eco Report, 98, 81, and could be harvested, Eco Report, 98. Consequently, Standard 2c.i has the potential to result in the loss of up to 25% of extant old growth at ecologically relevant scales. DEIS, 104; Eco Report, 98. This outcome would compromise the purpose and need of the amendment and preclude the achievement of the Desired Conditions (as well as landscape ecological integrity), threatening the viability of the amendment.

To address this issue, the Forest Service should clarify in the FEIS that while proactive stewardship in the WUI is appropriate, that old growth forests, characteristics, and criteria should not be degraded as a result of proactive stewardship activities. In support of this clarification that old growth trees should be retained, the Forest Service could point to Guideline 3, which states that proactive stewardship activities "should retain and promote the conservation and survivability of old trees that are rare when compared to nearby forested conditions that are of a

noticeable younger age class or unique in their ability to persist in the current or future environment, and are not detracting from desired species composition or ecological processes." DEIS, 34.

However, a more concise and clear approach would be to amend Standard 2a as follows:

> Where conditions meet the definitions and associated criteria of old-growth forest, manage the forest for the retention and enhancement of those characteristics using either passive or proactive stewardship approaches, as ecologically appropriate. ~~vegetation management may only be for the purpose of p~~ Proactive stewardship shall maintain, or contribute towards the restoration of the quality, structure, distribution, abundance, pattern, ecological processes, and composition characteristic of the desired old growth forest type, taking into account the contribution of the stand to landscape fire adaptation and watershed health and retaining the large trees contributing to old growth structure as appropriate for this forest type. ~~For the purposes of this standard, the term "vegetation management" includes – but is not limited to – prescribed fire, timber harvest, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives (e.g., hazardous fuel reduction, wildlife habitat improvement). For the purposes of this standard, the term "proactive stewardship" refers to vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments.~~ Proactive stewardship in old-growth forests shall promote one or more of the following:...

Yet another approach would be to reinstate Standard 1 as proposed in the NOI, which read "Vegetation management activities must not degrade or impair the composition, structure, or ecological processes in a manner that prevents the long-term persistence of old-growth forest conditions within the plan area." Forest Service, *Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest System, Notice of Intent to Prepare an Environmental Impact Statement*, 88 Fed. Reg. 88,042, 88,047 (Dec. 20, 2023). This issue is discussed in additional detail infra, but we disagree that deletion of this standard from the preferred action is either appropriate or duplicative of other plan components. If the NOGA allows for the loss of old growth characteristics, the Forest Service will not meet the purpose and need of the amendment, which is to create consistent national forest plan direction that purports to steward the very old growth characteristics it also allows to be lost. Such a result is arbitrary and capricious.

Second, although Standard 2c.i refers to the definition of "wildland urban interface" from HFRA, it is our understanding that the Forest Service no longer uses that definition and instead utilizes the 2010 Wildland-Urban Interface of the Conterminous United States map as the best available scientific information to identify and delineate WUIs.[5] Consequently, we suggest the Forest Service revise Standard 2c.i as follows:

[5] We also note that NOGA cannot rely on the HFRA definition of WUI, because HFRA allows for community wildfire protection plans (CWPPs) to change WUI boundaries. The Planning Rule states that "...a plan amendment is

> In cases where this standard would preclude achievement of wildfire risk management objectives for municipal water supply systems as defined at 16 U.S.C. § 6511(12) ~~within municipal watersheds~~ or the wildland-urban interface (WUI) as identified in the 2010 Wildland-Urban Interface of the Conterminous United States map or successor map ~~defined in Section 101 of the Healthy Forest Restoration Act of 2003 (16 USC 6511) and its application by the local planning unit,~~ or would prevent protection of critical infrastructure from wildfire;...

Third, the application of Standard 2c.i to "municipal watersheds" as drafted is overly broad and threatens to swallow Standard 2. The concept of municipal watersheds is generally well known but is not defined in the proposed action or supporting documentation, and a list of these watersheds is not available (although their management is addressed in regulation). *See*, 36 C.F.R. § 251.9 ("management of municipal watersheds"); 36 C.F.R. Part 219. The Forest Service's Climate Risk View includes a data layer showing its "NFS Municipal Supply Watershed Inventory" overlapped with national forestlands: depending on the region, these watersheds overlap nearly completely with national forests. Consequently, pursuant to the exception in Standard 2c.i, forest management in these watersheds could result in the loss of old growth forest characteristics.

To address this situation, the Forest Service should revise Standard 2c.i as described supra, which utilizes the phrase "municipal water supply systems" that appears in and is defined by HFRA.

b. Standard 2c.iii (Grandfather Exception).

This exception allows for vegetation management or "incidental tree-cutting and removal" of old growth to "comply with other statutes or regulations, valid existing rights for mineral and energy resources, or authorization of occupancy and use made prior to the old-growth amendment decision." DEIS, 31. While it may be appropriate to exclude valid existing rights from application of the amendment, as well as the operation of statutes or regulations (given that these laws are more authoritative than forest plans), grandfathering in prior decisions is potentially problematic. For example, the mature and old growth timber sale Flat Country on the Willamette National Forest is a "final agency action" with a legally operable Record of Decision, even though the Forest Service currently claims it does not intend to implement that decision. Still, it is an "authorization of occupancy and use made prior to the old-growth amendment decision" and therefore could be implemented as written at any time given the exception in Standard 2c.iii.

To address this issue, the Forest Service should delete the portion of Standard 2c.iii that refers to prior decisions. Doing so also would be consistent with the 2012 Planning Rule. *See*, 26 C.F.R. § 219.15(c) ("Resolving inconsistency. When a proposed project or activity would not be consistent with the applicable plan components, the responsible official shall take one of the

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required to add, modify, or remove one or more plan components, *or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas)*." 36 C.F.R. § 219.13(a) (emphasis added). Reliance on HFRA and its definition of the WUI therefore would trigger a plan amendment if and when CWPPs are developed or revised.

following steps, subject to valid existing rights: (1) Modify the proposed project or activity to make it consistent with the applicable plan components; (2) Reject the proposal or terminate the project or activity; (3) Amend the plan so that the project or activity will be consistent with the plan as amended; or (4) Amend the plan contemporaneously with the approval of the project or activity so that the project or activity will be consistent with the plan as amended. This amendment may be limited to apply only to the project or activity"); *Habitat Educ. Ctr., Inc. v. Bosworth*, 381 F. Supp. 2d 842, 859 (E.D. Wis. 2005) ("when the agency revises a forest plan, it must also revise resource plans and other instruments, including plans for timber sales that it approved under the old plan."); *Cherokee Forest Voices v. U.S. Forest Serv*., 182 F. App'x 488, 495 (6th Cir. 2006) ("[Section] 1604(i) requires the projects be consistent with the revised Forest Plan")).

c. Standard 2c.iv (De Minimis Local Community Use Exception).

This exception allows for vegetation management or "incidental tree-cutting and removal" of old growth for Tribal cultural uses and "for de minimis use for local community purposes." DEIS, 31. We do not object to the application of this Standard to Tribal cultural uses.

We understand that the Forest Service intends for this exception to authorize microsales of old growth forest under the Southeast Alaska Sustainability Strategy (SASS). DEIS, 33 ("The Department and Agency remain committed to the Southeast Alaska Sustainability Strategy. The intent is that, in the limited instances where implementation of the SASS is not consistent with the definition of proactive stewardship in old-growth forests, the combined use of Standards 2c.iii and 2c.iv would allow for continued implementation of the Southeast Alaska Sustainability Strategy, including for small sales for local mills, music wood, and culturally significant uses like totem poles"). However, the supporting documentation states that "it is assumed that the small commercial sales would ***not*** occur under Alternatives 2 and 3, although there may be ecologically appropriate stewardship actions under NOGA-FS-STD 2a and non-commercial activities in accordance with the exceptions." Eco Report, 100 (emphasis added). As such, the DEIS and supporting documentation are operationally and internally inconsistent.

To address this infirmity, the Forest Service must resolve the inconsistency in its stated intent of the exception and in the environmental analysis (it is not clear given the inconsistency whether the environmental consequences of microsales were considered in the DEIS).

Outside of the SASS context, we understand that this exception is intended to allow for the collection of fuel- or firewood for community use (among other more limited purposes such as harvest for musical instruments). DEIS, 105. While we support the local use of excess biomass for fuel/firewood purposes, this exception is problematic. It should not be the case that communities are cutting and removing *old growth trees* for fuel/firewood purposes; and we point out that such activities would be inconsistent with Guideline 3 that provides for the conservation of legacy old growth trees. Indeed, on some forests, the unlawful harvest of old growth trees – such as western larch on the Malheur National Forest – for firewood is rampant and potentially compromising the ecological integrity of these forests.

To address the underlying intent of this Standard, it should be revised as follows:

...for culturally significant uses as informed by Tribes and Indigenous Knowledge; ~~, or for de minimis use for local community purposes~~;

Should the Forest Service desire to incorporate provisions related to the SASS and transitional harvest on the Tongass, we suggest the following new exception as Standard 2c.vii:

...vii. for subsistence or transitional purposes on the Tongass National Forest.

This change avoids inadvertently stretching the "de minimis" concept in Standard 2c.iv to include SASS. The FEIS should correspondingly include text explaining the intent of "transitional purposes."

d. Standard 2c.v (Research Exception).

Although we are generally supportive of a limited research exception, there is cause for caution. For example, some experimental forests – such as the Wind River Experimental Forest on the Gifford Pinchot National Forest or the H.J. Andrews Experimental Forest on the Willamette National Forest – are in ecological settings (infrequent fire regimes) where proactive stewardship is simply not ecologically appropriate and would compromise ecological integrity of these forests. To the extent that these research forests have management plans that allow for the harvest of old growth, then Guideline 2 should resolve any potential inconsistency in favor of the retention of old growth forests. The Forest Service should make explicit that the use of this exception as applied to experimental forests is expected to be rare and provide examples of where its use would be permissible.[6]

While this exception may be appropriate for some experimental forests, it is inappropriate to include research natural areas (RNAs) in this exception. RNAs are intended as reference areas and must be managed "in a virgin or unmodified condition except where measures are required to maintain a plant community which the area is intended to represent." 36 C.F.R. § 251.23. Furthermore, "Research Natural Areas may be used only for research and development, study, observation, monitoring, and those educational activities that do not modify the conditions for which the Research Natural Area was established." FSM 4063.02 (emphasis added). RNAs have been designated to "Protect against human-caused environmental disruptions…Serve as reference areas for the study of natural ecological processes including disturbance and climate change[, and]...Serve as baseline areas for measuring long-term ecological changes." FSM 4063.02. Accordingly, there should be no old growth forest harvest in RNAs.

To address both infirmities, Standard 2c.v. should be revised as follows:

[6] A preferred approach would be to eliminate this exception altogether. The purpose of NOGA is to provide consistency across the NFS, but allowing exceptions to old growth conservation on any number of the 80 experimental forests and watersheds in the NFS would undermine the goal of consistency. Simply put, the Forest Service has provided no rationale for an area-based exclusion of experimental forests and RNAs.

In cases where adherence to Standards 2a and 2b would unreasonably interfere with ongoing research in areas designated for research purposes, such as experimental forests ~~or research natural areas~~; ~~or~~

e. Standard 2c.vi (Manager's Choice Catch-All Exception).

This exception is the broadest exception and permits the cutting and removal of old growth forests "in cases where it is determined...that the direction in this standard is not relevant or beneficial to a particular species or forest ecosystem type." DEIS, 31. The Forest Service has explained that "2.c.vi is intended to recognize that not all ecosystem types in a plan area have the ecological capacity or ecosystem potential to reach an old-growth forest development stage. Examples may include – but are not limited to – birch, aspen, jackpine and lodgepole pine when these are further characterized by physical elements, climatic regime, or natural disturbance processes." *Id*. While this explanation is helpful in elucidating the agency's intent, the fact remains that the *text* of the plan component is extraordinarily broad,[7] and allows a line officer – who is not bound by alleged explanatory text in an EIS – to decide that the proposed amendment "is not relevant or beneficial to a particular species or forest ecosystem type." *Id.* Moreover, the explanatory text seems to suggest that some forest types – including but not limited to birch, aspen, jackpine, and lodgepole pine – do not have old growth characteristics or otherwise reach the old growth successional stage, a suggestion that does not find support in the applicable western scientific literature or Indigenous Knowledge.

While we are sympathetic to the concern that not all ecosystem types may climax in a sustainable old growth condition, DEIS, 31, we point out that by operation of Standard 2a the amendment only applies to forests "where conditions meet the definitions and associated criteria of old growth forest," DEIS, 29, establishing an internal inconsistency between Standard 2a and Standard 2c: the former assumes the forest is already meeting old growth criteria, whereas the latter assumes (or suggests) that some forest types are incapable of doing so and should be exempted from the protections of Standard 2a; and yet old growth stands of aspen (for example) clearly do in fact exist on the NFS.

This internal inconsistency and infirmity must be resolved. We suggest that the Forest Service eliminate the exception Standard 2c.vi to do so. However, if the agency insists on retaining this exception, it must be limited as follows:

...in cases where it is determined – based on best available science~~, which includes~~ including Indigenous Knowledge – that the direction in this standard would preclude restoration of process, composition, or structure consistent with the natural range of variation and DC 1; or ~~is not relevant or beneficial to a particular species or forest ecosystem type~~.

[7] We note that the effects analysis in the DEIS and supporting documentation does not analyze the environmental consequences of the application of this exception. Because a not insignificant portion of the NFS is comprised of birch, aspen, jackpine, and lodgepole pine forests (and these are simply illustrative forest types offered by the agency: a line officer could apply this exception to other forest types), the effect of this exception on achieving the purpose and need of the amendment could be substantial, and potentially swallows the rest of the amendment.

This language would fully cover the situations where this exception could be justified, such as a previously type-converted stand or restoring characteristic fire to a system where it may nominally consume old growth (like jack pine). The revised formulation clarifies that if the restoration purpose can be met without deviating from Standards 2a and 2b, then the action would not fall under this exception.

6. Standard 3.

This Standard clarifies that proactive stewardship is not for the purpose of timber production as defined by the 2012 Planning Rule. We support this clarification and the use of the 2012 Rule to limit the purposes for the cutting and removal of old growth forests.

7. Omitted Standard (NOI Standard 1).

The DEIS states that the Forest Service eliminated Standard 1 proposed in the NOI – "Vegetation management activities must not degrade or impair the composition, structure, or ecological processes in a manner that prevents the long-term persistence of old-growth forest conditions within the plan area" – from the preferred action because it was "redundant" with Standard 2.a. DEIS, 28. This omission is extremely problematic and must be addressed in the FEIS and ROD.

The lack of a prohibition on the loss of old growth characteristics compromises the purpose, need, and Desired Conditions of the amendment because without such a prohibition, those characteristics may be lost, which is the opposite result intended by NOGA and EO 14072. The Forest Service is clear that "there is no requirement that [old-growth] areas continue to meet the definition of old-growth when managed for the purpose of proactive stewardship," DEIS, 16, and indeed the DEIS and supporting documentation recognize that old growth forests will be lost as a result of the amendment. DEIS, 104; Eco Report, 98, 100. Likewise, there is no requirement that old growth forests lost in one area will be replaced/recruited in other areas to make up for the loss ("no net loss"). Similarly, the preferred alternative allows for proactive stewardship to degrade existing old growth conditions, which may or may not recover in the future through succession or otherwise. DEIS, S-14, 16-17, 104.

To address this infirmity, the Forest Service should reinstate NOI Standard 1 and/or adopt the suggested changes to Standard 2a identified supra that incorporate a non-degradation requirement. This provision can and should be read consistently with the other plan components and proactive stewardship.

D. Guidelines.

Guidelines are "constraint[s] on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met. (§ 219.15(d)(3)). Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements." 36 C.F.R. § 219.7(e)(iv).

1. Guideline 1.

This Guideline states that "In areas that have been identified in the Adaptive Strategy for Old-Growth Forest Conservation as compatible with and prioritized for the development of future old-growth forest, vegetation management projects should be for the purpose of developing those conditions." DEIS, 33. The DEIS explains that "The intent of this guideline is to support the recruitment and development of future old-growth forests by constraining vegetation management projects in areas that have been identified and prioritized for the recruitment and development of future old-growth forests (see Management Approach 1b)." *Id*.

We appreciate the intent of this plan component to recruit additional old growth forest in the future from extant mature forest age classes. However, we also question what departure from this Guideline may look like and thus whether this component is thus appropriately labeled as a Guideline. Under what conditions and for what reasons would an area identified in an Adaptive Strategy "as compatible with and prioritized for the development of future old-growth forest" be subject to vegetation management that would *not* develop old growth forest conditions? How frequently does the Forest Service expect this exception to apply to future old growth areas? It is not clear that the amendment will meet the purpose and need or Desired Conditions if this exception is broadly applied across the NFS.

2. Guideline 2 ("More Restrictive").

Guideline 2 states that "Where there are additional land management plan components for old-growth that existed prior to the old-growth amendment and these provide more restrictive direction for old-growth forests, the more restrictive direction should be adhered to." DEIS, 34. This language is extremely problematic. Proactive stewardship and ecocultural restoration are necessary in many forest ecosystems, particularly those with frequent fire regimes, but many forests with these fire regimes also have woefully outdated forest plans with plan content that actively precludes proactive stewardship. For example, those forests east of the Cascade crest amended by the Eastside Screens contain a provision that precludes the cutting and removal of live trees greater than 21 inches in diameter (21-inch rule), which the DEIS and supporting documentation acknowledge would be "more restrictive" than and therefore trump the preferred action. DEIS, 102; Eco Report, 96. Other outdated forest plans with similar diameter thresholds may be similarly maladaptive, and yet the preferred action would lock in this maladapted forest plan direction at the expense of ecological integrity.

It is essential that the Forest Service revise the "more restrictive" language in Guideline 2 in the following way or otherwise meet this intent:

> Where there are additional land management plan components for old-growth that existed prior to the old-growth amendment and these provide ~~more restrictive direction~~ greater benefit to ~~for~~ old-growth forests, the ~~more restrictive~~ prior direction should be adhered to.

Failing to make this change threatens the integrity of the proposed amendment because frequent fire forests that would benefit from proactive stewardship would be excluded from operation of

the preferred action. We understand that the agency's concern with altering this Guideline is that existing "more restrictive" plan components are the basis for other conservation agreements, particularly related to Endangered Species Act compliance. However, this justification is not found in the DEIS or supporting materials, nor is any information regarding the scope or scale of the alleged reliance: consequently, there is no way for the public or decision makers to evaluate whether this Guideline is appropriate. The Forest Service must explain its rationale for retaining this provision in the forthcoming FEIS and ROD.

3. Guideline 3.

We appreciate and support the recognition of the value and retention of legacy, remnant, relic, or otherwise individual trees in Guideline 3. DEIS, 34. However, we also note that there is no requirement in other plan components to retain old trees that are located within old *stands* of trees. While such retention may appear self-evident, the language of the Guideline does not specifically require it. Therefore, we suggest the following modest change to ensure that old trees are conserved wherever they are found:

> To preserve the cultural and historical value of old trees occurring inside and outside of old-growth forests, vegetation management projects should retain and promote the conservation and survivability of old trees that are rare when compared to nearby forested conditions that are of a noticeable younger age class or unique in their ability to persist in the current or future environment, and are not detracting from desired species composition or ecological processes.

E. Management Approaches.

Management Approaches – optional plan content[8] – are a centerpiece of the proposed amendment and compel the development of "Adaptive Strategies for Old Growth Forest Conservation." DEIS, 21-25. Management approach plan components should not "create unrealistic expectations regarding the delivery of programs," and that these can be changed administratively with only public notice. Because so much of the conservation benefit of the NOGA rides on the development and deployment of Adaptive Strategies, we are concerned that these MAs create a *great deal* of stakeholder and Tribal expectation, in contrast to the direction of the 2012 Planning Rule. Similarly, while significant investments of time, money, and energy will be necessary to develop Adaptive Strategies, as management approaches, these documents can be changed administratively with only public notice (not comment), 36 C.F.R. § 219.13(c)(2), which appears to undermine the intended collaborative nature of the Strategies.

The structure and content of the Management Approaches reveal a significant analytical infirmity that may be fatal to the proposed amendment. The Management Approaches rely on the future development of substantive place-based Adaptive Strategies, the content of which is

[8] Although "management approaches" are optional plan content, the Forest Service has verbally represented that if this plan content is utilized, the agency must comply with its provisions. While we appreciate this perspective, we note that it is without purchase in the 2012 Planning Rule and encourage the agency to better support its contention that compliance with the provisions of Management Approach 1a – 1d is mandatory with text and rationale from the 2012 Planning Rule or case law.

unknown and unknowable. While other proposed plan components provide many parameters that may guide future project-level activities, it appears that the Management Approaches are the mechanisms by which these parameters or sideboards are integrated into place-based work on the ground. Thus, the site-specific way in which the other proposed plan components manifest on any given National Forest is unknown and unknowable until individual Adaptive Strategies are completed.

Similarly, in our scoping comments we observed that because the Adaptive Strategies would only apply in certain areas (at the time, to "one landscape" to be identified later) and not the entire national forest unit, it was not possible to know "where plan components apply," thus implicating compliance with the 2012 Planning Rule.[9] Although the Forest Service has amended the proposed Adaptive Strategies to eliminate that reference, the problem remains: several plan components contain uncertain geographic references that call into question where plan components will apply. For example, Management Approach 1b directs the agency to "Identify *areas* that have the inherent capability...," indicating that places that do not have inherent capability are not subject to Management Approach 1b – but those areas are not yet known. DEIS, 23. Similarly, Standard 2a requires proactive stewardship "*where conditions meet the definitions and associated criteria* of old-growth forest...," but those areas are not currently known so it is impossible to know where on the landscape Standard 2a would apply. DEIS, 29. Likewise, Guideline 1 states that "in *areas* that have been identified in the Adaptive Strategy...," management activities should be for the purpose of recruitment of future old growth forest; but because those areas have not been identified yet because the Adaptive Strategies have yet to be written, it is impossible to know where the Guideline applies. DEIS, 33.

To address these infirmities, we strongly suggest that the Forest Service convert the proposed Management Approaches to Standards or other plan components that provide greater clarity regarding where the Management Approaches apply and how they would be developed and implemented, including at what scale (unit, region, etc.). In the alternative, we suggest the agency substantially revise Management Approaches 1a and 1b in either of two ways outlined infra.

It is our preference, however, that the Forest Service eliminate Management Approaches 1a and 1b altogether and replace them with a new Standard 4, discussed infra.

1. Critique of Existing Management Approaches.

Among other content, as written, each Adaptive[10] Strategy must "ground-truth the accuracy of applied old forest definition" and "identify and prioritize areas for the recruitment, retention and

[9] The Planning Rule states that "...a plan amendment is required to add, modify, or remove one or more plan components, *or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas*)." 36 C.F.R. § 219.13(a) (emphasis added). Because forthcoming Adaptive Strategies will determine "where plan components will apply," an additional planning/amendment process will be required once the location of the applicability of the current proposed amendment's plan components is known.

[10] We note that there is nothing inherently "adaptive" about the Adaptive Strategies. DEIS, D-2 (setting the direction to "Determine indicators to use as performance measures to learn ***if*** an adaptive management action is needed"

promotion of old growth forests, based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old-growth forests conditions within the plan area." DEIS, 21 (Management Approach 1a). The amendment goes on to require the agency to "Identify areas that have the inherent capability to sustain future old-growth forest (i.e. areas of likely climate or fire refugia) over time and prioritize them for proactive stewardship" for one or more of 8 purposes.[11] *Id*. (Management Approach 1b).

Although the stepped-down nature of the Adaptive Strategies should allow for appropriate localized tailoring of the amendment to local ecological conditions, we have concerns about whether this approach will in fact meet the purpose and need of the amendment and the associated Desired Conditions.

Management Approach 1b is clear that areas that have the "inherent capability" to sustain future old growth[12] should be prioritized for proactive stewardship, and that areas with inherent capability are "areas of likely climate or fire refugia." DEIS, 23, 100 ("NOGA-FW-DC-02 emphasizes that areas with "inherent capability," as defined in 36 C.F.R. § 219.19, represent higher than average value for the long-term persistence of old-growth, and is designed to promote retention of old-growth in appropriate locations given the anticipated impacts of climate change. NOGA-FW-MA-1b clarifies that these are areas of likely climate or fire refugia. NOGA-FW-GDL-01 supports NOGA-FW-DC-02 by constraining vegetation management projects in areas identified as compatible with and prioritized for the development of future old-growth forest to actions that help to promote those desired conditions").[13]

While the concept of climate and/or fir refugia is a promising one, as the Forest Service acknowledges, "Currently, reliable information about the location of old-growth forests relative to fire refugia across the National Forest System (NFS) is lacking." DEIS, 67; Eco Report, 25 (same). The agency also recognizes that despite this lack of information, the data that the agency does possess suggests that climate/fire refugia is likely to decline over time. Eco Report, 26 (Table 4 showing a decline in refugia between mid and end of century). Consequently, not only does the agency not have a robust understanding of where climate/fire refugia is likely to be

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(emphasis added)). Because the name of these strategies is misleading, we suggest the agency utilize language that more accurately reflects the nature of this plan component to avoid setting expectations that will not be met.

[11] Taken together, it is reasonable to expect the Adaptive Strategies to set forth the types of prescriptions/proactive stewardship that would be employed to achieve the Desired Conditions. While the Strategies have yet to be developed, the Forest Service's recent *Technical Guidance for Standardized Silvicultural Prescriptions for Managing Old-Growth Forests* appears to be what the agency expects will be used to develop projects. Draft Social, Economic and Cultural Impacts Analysis Report (Socioecon Report), 37. We look forward to working with the Forest Service to implement changes to the Technical Guide.

[12] We believe that the agency probably intends to provide that this plan content be written as "to sustain old growth forest in the future." "Future old growth forest" – as the Management Approach is currently written – refers to mature forests, which is unlikely to be the Forest Service's intent. We request clarification on this point.

[13] It appears that by expressly linking future old growth recruitment to climate/fire refugia, that there could be a situation where a line officer "determines" that an area currently identified as old growth forest exceeds the carrying capacity of old growth forest in the future *particularly in the absence of either a refugia analysis or a Historic Range of Variation (HRV) analysis*, and designates that area for timber harvest that removes old growth characteristics from the area. DEIS, 104-106; Eco Report, 100. While this may not be a common occurrence, it is a possible one that the agency should address in the FEIS and ROD.

located on any given national forest (nor an estimate of when this data might be available[14]), but also the occurrence of such refugia – which is the linchpin of the Adaptive Strategies – is projected to decline over time. While this may be the inevitable outcome of a warming planet, linking a policy to steward and recruit old forest over time will invariably be ineffective if the policy mechanism to do so relies on a scientific principle that is not viable due to a lack of available information and will not in fact conserve older forests over time. Consequently, reliance on the identification and use of climate/fire refugia to recruit future old growth forests places the entire amendment at risk.

This is a significant infirmity inherent in the preferred alternative. To address it, we suggest that as in the proposed action scoped in the NOI, the Forest Service not tie "inherent capability" specifically to climate/fire refugia. Again, while refugia may be an important and useful emerging concept – and some locales may possess sufficient localized data to identify and map it, such as in the Pacific Northwest – its application to the entire NFS is uncertain. There are other ways to identify what lands have the inherent capability to steward current and future old growth forests than reliance on the refugia concept. Remaining silent on how "inherent capability" is determined gives the agency the flexibility to use refugia data and information where available, and to use other tools and metrics to assess where current and future old growth can be sustained over time when such data is missing.

2. Management Approach 1c.

This plan component allows for the creation of Adaptive Strategies by multiple units and for the use of existing direction that meets the required criteria of an Adaptive Strategy. DEIS, 24. While we do not oppose this approach, it highlights that the amendment lacks direction regarding the scale at which Adaptive Strategies will in fact be developed. For example, it is possible (or probable) that existing forest collaborative groups, Collaborative Forest Landscape Restoration Projects, Tribes, counties, states, or other ongoing partnerships may want to develop their own Adaptive Strategy aside from the scale at which the agency intends to develop these Strategies. It is also possible that a single forest (or group of forests) may receive public and/or governmental requests from multiple *disparate* parties to develop Adaptive Strategies.

We understand that the Forest Service has not yet made a decision regarding the scale at which Adaptive Strategies will be developed and implemented, which has resulted in confusion regarding the scope of the amendment and how the public and Tribes will be able to engage in the development of the Strategies. We urge the Forest Service to develop an implementation plan to accompany the FEIS and ROD that clearly outlines the scale at which Adaptive Strategies will be developed and the timeline for development (aside from completion within 2 years of adoption of the NOGA).

[14] The preferred alternative requires the preparation of Adaptive Strategies within two years. DEIS, 26 (OBJ1). However, it is not at all clear that the type of information necessary to identify and map refugia will be available within the two-year window, casting doubt on the ability of units to comply with Objective 1 or the other plan components that rely on the identification of refugia.

3. Suggested Changes to Management Approaches.

Should the Forest Service retain the adaptive strategies and Management Approaches, they should be revised to better achieve their desired outcomes. In particular, the only place in NOGA where mature forest conservation is arguably addressed is in the Management Approaches; and yet as drafted, these plan components are unwieldy, jargony, bloated, and legally fraught. To be clear, we do not expect these plan components to put all mature forests on the trajectory of becoming old growth: we recognize that some mature forests will be managed for other multiple use objectives, and that all seral age classes must be appropriately represented on the landscape. However, to provide sufficient old growth necessary for landscape ecological integrity, the selected alternative must effectively also manage some mature forests to become old growth in the future. The following two options address this need.

a. Option 1.

In this alternative, changes to Management Approaches 1a and 1b are intended to streamline the Management Approaches and to focus narrowly on recruitment of old growth from mature age classes. Given the potentially significant analytical burden imposed by the development of the adaptive strategies, we recommend that required large landscape analysis be undertaken by the Regional or Washington Offices or the several Research Stations, freeing units to focus on other implementation priorities. Other tasks in the existing Management Approaches could be shifted into Appendix D, which outlines the process and content associated with the development of adaptive strategies (although we note this Appendix warrants significant augmentation to account for the extensive task list in Management Approaches 1a and 1b). The changes below restore the "collaborative" requirement that is missing in the proposed action, move Indigenous Knowledge and BASI into the introductory phrase, include a passive stewardship management pathway, and swap "areas" with "forests" to avoid a planning rule infirmity. *See,* 36 C.F.R. § 219.13(a) ("...a plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas)").

Management Approach 1a

Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and adhere to an Adaptive Strategy for Old-Growth Forest Conservation to ~~accomplish the following:~~

~~i. Effectively incorporate place-based Indigenous Knowledge and other forms of Best Available Scientific Information as equals to inform and prioritize planning and decision-making for the conservation and recruitment of old-growth forests through proactive stewardship.~~

~~ii. Ground-truth the accuracy of applied old-growth forest definitions.~~

~~iii. Provide geographically relevant information about threats, stressors, and management opportunities relevant to the ecosystem of the plan area to facilitate effective implementation.~~

~~iv. Identify tribal priorities and opportunities to support cultural, medicinal, food, and ceremonial values, practices and uses.~~

v. ~~I~~identify and prioritize ~~areas~~ forests for the recruitment, retention and promotion of old-growth forest~~s~~ conditions, while also recognizing the role other successional stages contribute to ecological integrity~~,~~ based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the ~~plan area.~~

~~vi. Engage in climate adaptation using explicit resistance, resilience, or transition approaches to address climate risks and achieve desired conditions, or otherwise intentionally accept alternative climate driven outcomes.~~

~~vii. Identify a program of work and partnerships that can support effective delivery of the plan monitoring requirements to inform adaptive management.~~

~~viii. Recognize the role of other successional stages that are important for ecological integrity.~~

Management Approach 1b

Identify ~~areas~~ forests that have the inherent capability to sustain future old-growth forest conditions ~~(i.e., areas of likely climate or fire refugia)~~ over time and prioritize them for either passive or proactive stewardship ~~for one or more of the following purposes:~~

~~i. To provide for long-term resilience;~~

~~ii. To reduce fire hazard, spread or severity, or the spread of potential insect or disease outbreaks;~~

~~iii. To provide landscape-level redundancy and representation of old-growth forests;~~

~~iv. To enhance landscape and patch connectivity where old-growth patches are isolated;~~

v. ~~T~~ to recruit and promote the development of future old growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible~~;~~ or to

vi. ~~To~~ retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments~~;~~

~~vii. To restore or enhance attributes identified as culturally significant; or~~

~~viii. To promote climate adapted species assemblages in areas where changing climatic conditions are likely to alter current conditions and change species assemblages over time.~~

A more concise formulation of the intent in these revised Management Approaches would combine Management Approaches 1a and 1b into a single Management Approach that reads:

Management Approach.

> Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and adhere to an Adaptive Strategy for Old-Growth Forest Conservation to identify and prioritize forests for the recruitment, retention and promotion of old-growth forest conditions based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the plan area. Identify forests that have the inherent capability to sustain future old-growth forest conditions either passive or proactive stewardship to recruit and promote the development of future old growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible~~;~~ or to retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments.

To fully realize the intent of this revised Management Approach, the following conforming changes to Guideline 1 should be made:

> In forests identified in the Adaptive Strategy for Old-Growth Forest Conservation for which continued development of old-growth forest conditions is necessary and optimal to meet Desired Conditions, ~~areas that have been identified in the Adaptive Strategy for Old-Growth Forest Conservation as compatible with and prioritized for the development of future old-growth forest~~, vegetation management ~~projects~~ should be for the purpose of developing those conditions through passive or proactive stewardship.

These alterations provide a conceptual target ("necessary and optimal") for old growth forest recruitment that could otherwise be the subject of multiplicative controversies in planning units across the country. While leaving maximum flexibility to local planning units, this language answers the question of "how much" and "which" mature forests should be managed on a trajectory for future old growth. These changes also swap "areas" with "forests" to avoid a planning rule infirmity regarding 36 C.F.R. § 219.13(a).

b. Option 2.

The following option is also intended to streamline the existing Management Approaches to focus on recruitment of old growth forests, but does so by directing the development of a decision support tool at the Regional, Washington, or Research Station level that would be used in project planning to meet that intent, identify the areas subject to Guideline 1, and creates an adaptive management framework to test whether application of Guideline 1 to those lands is moving the plan area towards Desired Conditions. Other changes include restoring the "collaborative" requirement that is missing in the current proposed action, moving incorporation of place-based Indigenous Knowledge and BASI into prefatory language, deleting (v), and consolidating "area" identification into Management Approach 1b, and shifting other tasks in the

existing Management Approaches into Appendix D. Conforming changes to the FEIS would be required.

Management Approach 1a

Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and utilize in project planning an Adaptive Strategy for Old-Growth Forest Conservation to recruit old-growth conditions consistent with Desired Conditions. The Adaptive Strategy should accomplish the following:

i. Develop a Decision Support Tool (see Management Approach 1b) to identify forests subject to Guideline 1; and
ii. Identify monitoring strategies and adjustments as appropriate to address uncertainties in assumptions informing the decision support tool.

~~i. Effectively incorporate place-based Indigenous Knowledge and other forms of Best Available Scientific Information as equals to inform and prioritize planning and decision-making for the conservation and recruitment of old-growth forests through proactive stewardship.~~
~~ii. Ground-truth the accuracy of applied old-growth forest definitions.~~
~~iii. Provide geographically relevant information about threats, stressors, and management opportunities relevant to the ecosystem of the plan area to facilitate effective implementation.~~
~~iv. Identify tribal priorities and opportunities to support cultural, medicinal, food, and ceremonial values, practices and uses.~~
~~v. Identify and prioritize areas for the recruitment, retention, and promotion of old-growth forests, based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the plan area.~~
~~vi. Engage in climate adaptation using explicit resistance, resilience, or transition approaches to address climate risks and achieve desired conditions, or otherwise intentionally accept alternative climate driven outcomes.~~
~~vii. Identify a program of work and partnerships that can support effective delivery of the plan monitoring requirements to inform adaptive management.~~
~~viii. Recognize the role of other successional stages that are important for ecological integrity.~~

Management Approach 1b

The Decision Support Tool will delineate or otherwise identify, at a level of specificity that can be readily applied during project development, which mature forests are necessary and optimal to meet Desired Conditions, in light of the following:

i. Inherent capability to sustain old growth conditions or presence of climate or fire refugia;

ii. Ecological integrity and the natural range of variation;
iii. Threats, stressors, and opportunities;
iv. Redundancy, representativeness, distribution, and connectivity;
v. Likelihood of achieving the old-growth forest definitions and associated criteria in the shortest timeframe;
vi. Attributes identified as culturally significant;
vii. Biodiversity values and ability to promote climate-adapted species assemblages under current and future conditions; and
viii. Ability to reduce or manage fire hazard, speed or severity, or the spread of potential insect or disease outbreaks through proactive stewardship.

~~Identify areas that have the inherent capability to sustain future old-growth forest (i.e., areas of likely climate or fire refugia) over time and prioritize them for proactive stewardship for one or more of the following purposes:~~

~~i. To provide for long-term resilience;~~
~~ii. To reduce fire hazard, spread or severity, or the spread of potential insect or disease outbreaks;~~
~~iii. To provide landscape-level redundancy and representation of old-growth forests;~~
~~iv. To enhance landscape and patch connectivity where old-growth patches are isolated;~~
~~v. To recruit and promote the development of future old growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible;~~
~~vi. To retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments;~~
~~vii. To restore or enhance attributes identified as culturally significant; or To promote climate adapted species assemblages in areas where changing climatic conditions are likely to alter current conditions and change species assemblages over time.~~

As with the first option supra, to fully realize the intent of this revised Management Approach, the following conforming changes to Guideline 1 should be made:

In forests identified in the Adaptive Strategy for Old-Growth Forest Conservation for which continued development of old-growth forest conditions is necessary and optimal to meet Desired Conditions, ~~areas that have been identified in the Adaptive Strategy for Old-Growth Forest Conservation as compatible with and prioritized for the development of future old-growth forest~~, vegetation management ~~projects~~ should be for the purpose of developing those conditions through passive or proactive stewardship.

For more discussion of this option, we refer the Forest Service to the comments submitted by the Southern Environmental Law Center.

4. Preferred Approach.

Although either alternative Management Approach option discussed supra would better meet the proffered intent of the adaptive strategies, we believe that they remain unwieldy and subject to too much interpretation by both line officers and stakeholders ("too much surface area"). Therefore, we strongly recommend that that the Forest Service take an alternative approach that jettisons the Adaptive Strategies altogether and, in their place, adopts a new Standard that reads:

> Standard 4
>
> Where conditions do not currently meet the definitions and associated criteria of old-growth forest, at the appropriate ecological scale identify, prioritize, and manage forests for the recruitment of old-growth forest conditions sufficient to meet Desired Conditions through either passive or proactive stewardship based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forest conditions within the plan area.

This Standard – which could be rephrased as a Guideline – is short, concise, clear, and provides essential direction to line officers to recruit "sufficient"[15] old growth forests from mature age classes. The architecture of this Standard compliments the existing decision-making pathway in the other Standards, which direct management "*where conditions meet* the definitions and associated criteria of old growth forest...:" the new Standard proscribes management "where conditions *do not currently meet* the definitions and associated criteria of old growth forest...." It also allows appropriate flexibility regarding the scale at which identification and prioritization is to occur ("appropriate ecological scale," likely at the unit level): again, the intent is *not* to recruit all mature forests into old growth across the NFS, but rather adequate amounts to meet the Desired Conditions; and some mature forest will be managed for other multiple use objectives. This Standard should be paired with the decision support tool described above and/or other technology developed by the Regional or Washington Offices or Research Stations to assist in the identification and prioritization of mature forests for recruitment. Conforming changes in the FEIS would need to explain how the decision support tool, identification, and prioritization process works, and Appendix D updated accordingly.

Adoption of this new Standard, and eschewment of all Management Approaches in their entirety, is our preferred approach to addressing the need to recruit old growth forests to meet the NOGA's purpose and need and the intent of EO 14072.

[15] We recognize that this phrase is imbued with significant line officer discretion, but also note that any such determination would be required to utilize BASI to reach any conclusion.

F. Other Plan Components.

We support the Statement of Distinctive Roles and Contributions, Goal, Objectives, and second Plan Monitoring plan components. We point out that the first Plan Monitoring plan component may in fact be an Objective as defined by the 2012 Planning Rule because it contains a timing component. *See*, 36 C.F.R. § 219.7(e)(ii) ("An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets"). Plan Monitoring 1 also is similar in format to the other Objectives in the preferred action. DEIS, 26-27 (Objectives 1 – 4).

While we support Plan Monitoring 1 – and the other Objectives – we point out that Objectives "should be based on reasonably foreseeable budgets." 36 C.F.R. § 219.7(e)(ii). We are concerned that the development and implementation of the Adaptive Strategies and required monitoring provisions will be costly and as such may not be prioritized for implementation. In that event, the purpose and need of the amendment would not be met, nor the intent of Executive Order 14072. We look forward to working with the agency to ensure that it has sufficient funding to implement the preferred action and its monitoring requirements.

G. Rate of Achievement.

The DEIS and supporting documentation is clear that the only difference between action alternatives is the rate of achievement of Desired Conditions, and the rate of achievement is based on *commercial* timber harvest. DEIS, 102 ("The difference between action alternatives are the standards which essentially influence the rate and manner of obtaining the desired conditions"); Eco Report, 97 ("Given the combination of NOGA-FW-STD-03 and the preservation of all tools that could help implement proactive stewardship activities, including *commercial* timber harvest, Alternative 2 is anticipated to lead to the achievement of desired conditions at the fastest rate") (emphasis added). Although we understand the truism that the ability to sell timber can help offset the cost of preparing the timber for sale, the Forest Service's focus on "*commercial*" is flawed.

Although the 2012 Planning Rule distinguishes between "timber harvest" and "timber production" and the preferred alternative would prohibit proactive stewardship for the purposes of timber production, the Planning Rule does not use "commercial" in either definition. Nor do these definitions include a reference to the "sale" of timber. Indeed, nowhere in the 2012 Planning Rule is the word "commercial" used. Attaching "commercial" to either of these definitions confuses the underlying issue of which alternative will best achieve the purpose, need, and Desired Conditions of the amendment.

Alternative 3 would revise Standard 3 to prohibit "commercial timber harvest" as a result of proactive stewardship, thus reducing the "rate of achievement" of the Desired Conditions by this alternative. Alternative 4 would eliminate all Standards, which will increase the rate of achievement.[16] DEIS, 108. But focusing on "commercial" harvest (or timber production) is a red

[16] The Forest Service states that the existence of other plan components "would still guide old-growth management towards greater ecological integrity. As such, the rate of progress towards desired conditions under this alternative [Alternative 4] would likely be second fastest only to the proposed action because all funding and management tools

herring: the issue the agency seems to be addressing is one of the *sale* of either old growth trees (which should only occur on rare occasions, as a result of the various exceptions) or the merchantable by-product of proactive stewardship that does not include the cutting and removal of old growth trees: this by-product may be *commercially valuable*, and therefore appropriate for *sale*, but its nature as "commercially valuable" per se is irrelevant to whether the removal of the biomass at issue will speed the achievement of the Desired Conditions.

Said another way, the construction of the amendment and analysis erroneously equates "commercial" harvest with "timber harvest" and distinguishes the effects of the alternatives based on whether the *sale* of timber occurs and at what level, when instead the relevant inquiry should be whether biomass is removed through any mechanism – not just "commercial" sale. DEIS, 106-108. In fact, there are numerous proactive stewardship activities – *and contracting mechanisms* – that could achieve the Desired Conditions. For example, the DEIS and supporting documentation explain that 40% of timber harvest – 3.1 billion board feet annually – on NFS lands occurs through Good Neighbor Authority, goods for services, or stewardship contracts, not commercial timber sales. Socioecon Report, 22. Biomass removal can occur through not just the removal of commercially valuable species in a timber sale, but also through the introduction of prescribed fire, precommercial thinning, mastication, and other types of biomass removal through service or stewardship contracts. DEIS, 107, 125.

The current emphasis of the DEIS and supporting documentation on "commercial" harvest is a distraction. Instead, the agency should focus on the ecological and socioeconomic effects of biomass removal generally, and the level to which each alternative will facilitate such removal and result in the corresponding effects.

On the flip side, we also note that the agency recognizes that there is a lack of wood processing infrastructure in many or even most locations where proactive stewardship may occur, making such stewardship less likely. Socioecon Report, 31. The workforce necessary to undertake proactive stewardship is similarly limited. *Id*. Additionally, noncommercial tree species are prevalent in areas where proactive stewardship is appropriate and likely to occur, which is likely to limit stewardship activities because they will be unable to pay their way out of the woods without additional investment. *Id*. Given these realities, it is questionable at best whether *any* of the action alternatives will achieve the Desired Conditions at any appreciable rate.

Thus, on one hand the agency overemphasizes the role of the *sale* of merchantable restoration byproducts, while on the other hand fails to wrestle with the probable *lack* of "commercial" activity given the dearth of available infrastructure, workforce, and economically valuable byproduct.

To address this issue, the final amendment should make clear that while commercial tools will sometimes be appropriate to implement proactive stewardship activities or that stewardship

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are available but not all old-growth treatments are necessarily optimized for proactive stewardship purposes." DEIS, 108. This is an irrational conclusion, because the NOGA without Standards that constrain management action so as to conserve old growth forests is essentially the status quo ante, which the agency acknowledges does not adequately steward old growth forests (and hence the purpose and need for the amendment).

activities may have a commercial byproduct, commercial purposes should not play a role in planning those activities.

II. ANALYTICAL CONSIDERATIONS.

This section briefly analyzes the proposed action from a National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), and Endangered Species Act (ESA) perspective.

A. Effects Analysis.

As a programmatic forest plan amendment, it should not come as a surprise that the underlying environmental effects analysis is coarse and at a high level: and that is certainly the case here. The DEIS acknowledges that the actual effects of the amendment will be analyzed at the project level. DEIS, 119. What effects analysis does appear in the DEIS assumes that the amendment will only "last" for 15 years: the agency assumes all forest plans will be revised by 2040 and will develop new plan content that subsumes NOGA. Draft Biological Evaluation (BE), 1.

1. Ecological Effects.

The DEIS and supporting documentation conduct a very cursory review of the effects of NOGA on wildlife, acknowledging for example that because of proactive stewardship, "there may be impacts to understory species and other resources valued by people. These potential impacts would be evaluated in project-level environmental analysis." DEIS, 117. While the documentation vaguely intimates that there will be negative effects to some wildlife and other ecosystem components because of increased proactive stewardship activities, it also spends a great deal of time discussing the potential *positive* ecological consequences of expanded proactive stewardship. Eco Report, 39-45. Elsewhere in the documentation, the Forest Service claims that NOGA will result in little change over the status quo, BE, 10, but this is inconsistent with other statements in the record that some forests will experience a substantial change in old growth management over the status quo, DEIS, C-5;[17] Eco Report, 95. At the end of the day, the draft biological evaluation concludes that there will be ***no effect*** to sensitive or listed species. BE, 7, 10.

This schizophrenic analysis is particularly problematic. The intent of NOGA is to increase proactive stewardship of old growth forests across the NFS, and it is reasonable to expect both positive and negative environmental consequences as a result. It is also reasonable to present these consequences in a straightforward manner, evaluate and weigh them, and conclude that on balance, implementation of NOGA is appropriate. But that's not the analysis in the DEIS and supporting documentation: instead, it concludes that NOGA will have absolutely zero effect on

[17] It is not clear how the determinations in Appendix C ("Comparison of Current Management of Old Growth to Amendment") were reached, many of which appear subjective and perhaps erroneous. For example, Table 1 indicates that the Malheur National Forest "is anticipated to experience noticeable change in terms of old growth direction," DEIS, C-3, but elsewhere in the record the Forest Service states that the Eastside Screens (and the 21" rule) will continue to apply to the Malheur because it is the "more restrictive" plan content when compared to the NOGA. As such, there should be *no change* over the status quo for this Forest, contrary to Table 1.

wildlife and their forest habitats (and makes no conclusions on effects to aquatic resources, for example), which is strange, since the record elsewhere sings the praises of the ecological values of old growth forests. This conclusion does not flow from the "facts found," such as they are. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983) (federal agencies must "articulate a satisfactory explanation for its action [that demonstrates] a rational connection between the facts found and the choice made").

Although the action alternatives include several exceptions that the agency recognizes will result in the harvest of some old growth forests, the DEIS does not analyze the environmental consequences of those exceptions. The supporting documentation states that the use of these exceptions is expected to be "minimal" and affect less than 5% of the old growth on each National Forest, Eco Report, 100, but there is no basis in the DEIS or supporting documentation for this assumption. Indeed, the Ecological Report acknowledges that the exceptions in STD2 may result in the loss of old growth forests at relevant scales. *Id*., 98. If that is the case, then the preferred action does not meet the purpose and need, nor does it achieve the Desired Conditions of the amendment.

Similarly, the DEIS and supporting documentation do not – and cannot – analyze the environmental consequences of the implementation of the Adaptive Strategies. As discussed elsewhere, the amendment relies on the future development of substantive place-based Adaptive Strategies, the content of which is unknown and unknowable. While other aspects of the proposed amendment such as the proposed Standards, Guidelines, and Desired Conditions provide many parameters that may guide future project-level activities, Adaptive Strategies are the mechanism by which these parameters or sideboards are integrated into place-based work on the ground. Thus, the site-specific way in which the other proposed plan components manifest on any given National Forest is unknown and unknowable until individual Adaptive Strategies are completed.

Finally, the DEIS and supporting documentation do not address the effects of the amendment on carbon sequestration, carbon fluxes, carbon storage, and broader climatic change. EO 14072 requires the Forest Service to implement a policy to "retain and enhance carbon storage." EO 14072 § 2. The agency also recognizes that the Council on Environmental Quality's *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* calls on agencies to "consider the projected [greenhouse gas] emissions or reductions for proposed actions and their reasonable alternatives...and use this information to assess potential climate change effects" using "the best available information and science." DEIS, 13. Likewise, the Forest Service has issued its own guidance requiring consideration of carbon effects.[18] More fundamentally, this analysis is required by NEPA.[19] Yet other than acknowledging that old-growth forests store significant amounts of carbon, the analysis of how

[18] *See* U.S. Forest Serv., *Climate Change Considerations in Project Level NEPA Analysis* (2009); Leslie Brandt & Courtney Schultz, *Climate Change Considerations in National Environmental Policy Act Analysis*, U.S. Forest Serv. (2016), https://perma.cc/4VS7-NSAC.

[19] *Diné Citizens Against Ruining Our Env't v. Haaland*, 59 F.4th 1016, 1035 (10th Cir. 2023) ("The impact of [greenhouse-gas] emissions on climate change is precisely the kind of [ ] impacts analysis that NEPA requires agencies to conduct") (*quoting Ctr. For Biological Diversity v. Nat'l Highway Traffic Safety Admin*., 538 F.3d 1172, 1217 (9th Cir. 2008)).

and whether the plan amendments will lead to enhanced carbon storage is absent from the DEIS and supporting documentation. Eco Report, 13-17, 44.

The absence of this analysis leaves the agency without key information necessary to its decision, violates agency guidance, is inconsistent with Executive Order 14,072, and is unlawful.

2. Socioeconomic Effects.

Like the ecological effects analysis, the socioeconomic analysis in the DEIS and supporting documentation is internally inconsistent and reaches the surprising (and likely capricious) conclusion that NOGA will have ***no*** effect on the timber industry and associated rural communities outside of Alaska.[20] DEIS, 121; Socioecon Report, 36 ("Alternative 2 is not expected to have economic effects to the timber industry because there will be no change in ASQ, PTSQ or land suitability. Similarly, Alternative 2 will have no effects on the restoration related economy because proactive stewardship activities will allow for goods for services exchanges to continue at current levels. Because there are no effects to the timber or restoration economy, rural community well-being should experience no effects").[21] For example, the documentation states that timber harvest is likely to increase as a result of NOGA, Socioecon Report, 15, 34; DEIS, S-14, and that this increase in proactive stewardship increases the pace or rate of achievement of the Desired Conditions, Socioecon Report, 37; DEIS, 119, 121, 125; Eco Report, 97, 101). With all the increase in proactive stewardship, it is simply unreasonable to then conclude that NOGA will have no effect on the industry or local communities.

In summary, the socioeconomic analysis is at the very least internally inconsistent and at worse arbitrary and capricious. We recognize the important benefits to the industry and communities that a science-based proactive stewardship-focused conservation policy *should* have on these sectors. The agency must do a better job clearly explaining these benefits.

3. Cumulative Effects.

The NOGA DEIS and supporting documentation do not conduct any kind of cumulative effects analysis on any resource or regarding any past, present, and reasonably foreseeable future federal actions including but not limited to the Northwest Forest Plan amendment (which is a concurrent planning effort with substantial intersection with NOGA), Blue Mountains forest plan revision, Tongass forest plan revision, or other forest plan revision or amendment efforts across the NFS.

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[20] Presumably, this is because microsales of old growth would continue to occur under NOGA (even though the effects of SASS were specifically *not* included in the underlying analysis. Eco Report, 100). However, the Forest Service also predicts that the Tongass "is not likely to experience overly noticeable change in terms of old growth plan direction, though there could be slight nuances that need attention when proposing project-level activities." DEIS, C-2. On the other hand, for the Chugach, the Forest Service predicts that "this unit is anticipated to experience very noticeable change in terms of old growth plan direction." *Id.* But then why not make this distinction between the two Alaska forests rather than lumping them together?

[21] These sentences are not based in reality. While it is true that NOGA does not change the timber targets for Forests, the mere existence of a target says nothing about whether timber harvest or proactive stewardship will increase as a result of the direction in NOGA. It is clearly the intent of NOGA to increase proactive stewardship across the NFS, which belies the claim that such an increase in active forest management will have no effect on industry or communities.

DEIS, 125-126. The failure to conduct even a cursory cumulative effects analysis is arbitrary, capricious, and not in accordance with NEPA. *Neighbors of Cuddy Mountain v. USFS*, 137 F.3d 1372, 1379-80 (9th Cir. 1998) ("To 'consider' cumulative effects, some quantified or detailed information is required….General statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided").

In particular, the Northwest Forest Plan amendment is a reasonably foreseeable future action subject to NEPA review and a cumulative effects analysis. The agency's NEPA regulations define "reasonably foreseeable future actions" as "those Federal or non-Federal activities not yet undertaken, for which there are existing decisions, funding, or identified proposals. Identified proposals for Forest Service actions are described in § 220.4(a)(1)." 36 C.F.R. § 220.3 (definitions). In turn, §220.4(a)(1) states:

> (a) Proposed actions subject to the NEPA requirements. As required by 42 U.S.C. 4321 et seq., a Forest Service proposal is subject to the NEPA requirements when all of the following apply:
>
> > (1) The Forest Service has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated (see 40 CFR 1508.23);
> >
> > (2) The proposed action is subject to Forest Service control and responsibility (see 40 CFR 1508.18);
> >
> > (3) The proposed action would cause effects on the natural and physical environment and the relationship of people with that environment (see 40 CFR 1508.14); and
> >
> > (4) The proposed action is not statutorily exempt from the requirements of section 102(2)(C) of the NEPA (42 U.S.C. 4332(2)(C)).

36 C.F.R. § 220.4(a)(1). In this instance, the Forest Service has published a notice of intent to prepare an EIS to analyze the effects of a climate-smart amendment to the Northwest Forest Plan, the Secretary of Agriculture has appointed a 21-member federal advisory committee to provide consensus recommendations to the agency on the amendment, that Committee has transmitted a first set of consensus recommendations and plan components to the Secretary and Chief of the Forest Service, and the agency expects to release a draft EIS for the amendment in October 2024 based on those recommendations. This effort is "funded" and is an "identified proposal." 36 C.F.R. § 220.3. Thus, it is plain that "the Forest Service has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated," "the proposed action is subject to Forest Service control and responsibility," "the proposed action would cause effects on the natural and physical environment and the relationship of people with that environment" as evidenced by the preparation of an EIS for the amendment, and "the proposed action is not statutorily exempt from the requirements of section 102(2)(C) of the NEPA." Consequently, the Northwest Forest Plan

amendment is a reasonably foreseeable future action the effects of which must be addressed in a cumulative effects analysis somewhere, either in the NOGA FEIS or in the Northwest Forest Plan DEIS.

When the agency conducts the required cumulative effects analysis, it will also need to establish the appropriate environmental baseline against which it evaluates the effects of the action. At this moment, the environmental baseline - or, no action status quo - is the 1994 Northwest Forest Plan as amended by some changes to the Survey and Manage program made in 2006. *Conservation NW v. Rey*, 674 F. Supp. 2d 1232, 1244–47 (W.D. Wash. 2009). However, when NOGA is finalized with a ROD, the environmental baseline for the Northwest Forest Plan amendment will change, and should then reflect the 1994 Plan as amended in 2006 *plus NOGA's provisions*.

This shifting environmental baseline poses a difficult analytical challenge.[22] Moreover, the 19 Northwest Forest Plan forests would implement NOGA for approximately a year before shifting to the Northwest Forest Plan amendment, but this transition period would likely not result in the continuation of ongoing or the development of new restoration and forest management projects, compromising existing public expectations. Cessation of planning and implementation of science-based forest management for a year (or more) on 19 national forests is unacceptable to many stakeholders and is inconsistent with Forest Service Wildfire Crisis Strategy and other management priorities. Consequently, given the timing of the Northwest Forest Plan amendment (estimated completion date of end of year 2025), *a carveout in the NOGA ROD that exempts that amendment process from NOGA is reasonable and advisable.*

B. Natural Range of Variation.

We have consistently asked the Forest Service to utilize the concept of natural range of variation/variability (NRV) in NOGA to determine how much (mature and) old growth forest was sustainable in the past and how much would be sustainable in the future, and to use this analysis to frame both the conservation and recruitment issues. The agency continues to reject this concept in the DEIS and supporting documentation, and in fact casts significant doubt on its robustness and utility. Eco Report, 2-3. This is strange, given both that NRV is hardwired into the 2012 Planning Rule and also that the agency eschews this concept in favor of climate/fire refugia, which is much less robust or actionable at this time. The Forest Service should address this issue in the FEIS and ROD.

C. Substantive Provisions of the 2012 Planning Rule Directly Related to the Amendment.

In prior comments, we raised the potential legal infirmity that the Forest Service did not properly identify all substantive provisions of the 2012 Planning Rule that are directly related to the amendment. Omitted substantive provisions of the rule include: 36 C.F.R. § 219.9(a)(1),

[22] This challenge is made even more difficult by proposed action Guideline 2 because it is not clear whether NOGA's more limited plan components are "more restrictive" than the Northwest Forest Plan's extensive plan components regarding late-successional and old growth management in different land use allocations. This lack of clarity creates management uncertainty and exposes the Forest Service to significant litigation risk.

"Ecosystem integrity;" 36 C.F.R. § 219.11(a)(1), "Lands not suited for timber production" and analytical requirements (i) through (vi); and 36 C.F.R. § 219.11(c), "Timber harvest for purposes other than timber production." This infirmity was not addressed in the DEIS and is particularly relevant given the foregoing assessment of the socioeconomic effects of NOGA.

D. Species of Conservation Concern.

We agree that designation of Species of Conservation Concern (SCC) is not necessary for NOGA. *See*, Consideration of Species of Conservation Concern for the Old-Growth Amendment, 1-3. The 2012 Planning Rule explains that

> For an amendment to a plan developed or revised under a prior planning regulation, if species of conservation concern (SCC) have not been identified for the plan area and if scoping or NEPA effects analysis for the proposed amendment reveals substantial adverse impacts to a specific species, or if the proposed amendment would substantially lessen protections for a specific species, the responsible official must determine whether such species is a potential SCC, and if so, apply section § 219.9(b) with respect to that species as if it were an SCC.

36 C.F.R. § 219.13(b)(6).

Although many units have not designated SCC, the amendment will not *substantially lessen* protections for these species because the intent of NOGA is to *increase* habitat protections for species that depend on old growth forests for some stages of their life histories; and for the same reasons, the effects analysis is unlikely to reveal *substantial adverse impacts to species about which there is substantial concern about the species' capability to persist over the long-term in the plan area*. Similarly, because active forest management across the remaining age classes will continue to occur including through the Wildfire Crisis Strategy, wildlife and SCC dependent on earlier successional stages will continue to have adequate habitat to persist over the long term, at least to the extent within the Forest Service's inherent authority and capability. The proposed amendments would not lessen "protections" for such species. Consequently, NOGA does not implicate 36 C.F.R. § 219.13(b)(6) and the Forest Service need not designate SCC for the proposed amendment.[23]

E. Alternatives.

The DEIS does not consider a mature forest conservation alternative. While we understand informally that the agency does not have the analytical capacity to extend the NOGA to mature forests, the DEIS instead explains that:

> The goal is not to manage all mature forest as future old-growth forest. Not all mature forest occurs in areas that will persist as mature forest or that can sustain succession towards old-growth forest. Past management – such as fire suppression, previous vegetation management and/or reforestation – and natural succession or regeneration may

[23] We note, however, that the effects analysis also clearly concludes that NOGA will benefit SCC, which belies the "no effect" ESA effects determination discussed herein.

have created mature forest or species distribution/composition that does not support desired ecological functions and conditions. Additionally, many of these acres are managed for multiple uses and provide necessary terrestrial habitat features that differ from those found in old-growth forest. For these reasons, mature forest is not being included in conjunction with old-growth forest for all aspects of the amendment; however, emphasis on identifying and prioritizing areas to be managed for future old-growth forest, which includes mature forest, is included in Management Approach 1.b and Guideline 3.

DEIS, 14. This narrative does not explain why a mature forest alternative was not considered.

Similarly, the DEIS and supporting documentation is completely silent on the Connecticut Approach, which we have embraced as an elegant solution for mature *and* old growth management.[24] There is no explanation regarding why the Connecticut Approach was not a reasonable alternative. 40 C.F.R. § 1502.14 (stating that an EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated").

F. Old Growth Forest Definitions.

The DEIS and amendment use a hybrid approach to defining old growth forests: the agency used *available definitions from 1989 plus regional definitions/the MOG inventory* for quantitative analysis, but the amendment requires the use of *existing forest plan definitions* for Adaptive Strategy and project development (where available; otherwise, the regional definitions were used). *Compare* DEIS, 58 *with* DEIS, 101. It is therefore unclear *what* was analyzed and *how*. Similarly, the analysis fails to acknowledge that for many forests, these definitions represent the *minimum* criteria needed to identify old growth and that the more that the minimum definitional threshold is exceeded (i.e., minimum number of old trees per acre), the higher the quality of old growth forest. This approach adds to the concern ("thinning to the minimum") discussed above that the preferred alternative allows for a reduction and potential elimination of the extant quality of old growth forests.

In addition, it is not clear that the definitions that the agency says it used are accurately captured in the analysis. For example, the Ecological Impacts Analysis Report evaluated existing regional definitions, but Table 2 appears to be inaccurate. Eco Report, 8-9 (omitting the notation that the Northwest Forest Plan has age-based criteria for old forest management, at least with respect to

[24] In comments on the Forest Service's advanced notice of proposed rulemaking (ANPR), the Connecticut Department of Energy and Environmental Protection, Division of Forestry suggested splitting mature forests from old growth forests, and managing each "bin" as follows:

- Old-growth forest passively managed.
- Old-growth forest actively managed to maintain old-growth characteristics.
- Mature forest passively managed to create old-growth forest.
- Mature forest actively managed to create old-growth forest.
- Mature forest actively managed to create other conditions such as young forest.

See, State Responses to Request for Information on Federal Old-Growth and Mature Forests, 12-14 (comments of Connecticut Department of Energy and Environmental Protection, Division of Forestry) (2022). This is a viable policy option that the Forest Service should have considered in the DEIS.

Late-Successional Reserves, which currently prohibits the harvest of forests older than 80 years of age; and omitting the notation that eastside forests in the Pacific Northwest Region have old forest plan components that include old and large tree metrics (e.g., "Designated Old Growth areas")). This may be an oversight or otherwise not significant, but it does raise questions about how some of these qualitative and quantitative assessments were made in the DEIS and supporting documentation.

Of note, the DEIS and supporting documentation defer the identification of patch or stand size – the scale at which old growth will be identified and proactively stewarded – to the development of the Adaptive Strategies. Eco Report, 10-11. This punt makes it more difficult to assess the actual ecological outcomes of the alternatives.

G. ESA Consultation.

The Forest Service explains:

> During Spring 2024, the Forest Service initiated conversations with U.S. Fish and Wildlife Service and National Marine Fisheries Service concerning ESA compliance for the old-growth amendment. After a series of technical assistance meetings, the three agencies determined Section 7 consultation was not warranted for the old-growth amendment at this time. The agencies determined that reasonable certainty of effects to species does not exist because of the national scale and programmatic nature of the old-growth amendment. The Forest Service commits to Section 7 consultation for any future old-growth conservation where impacts to listed species would occur.

DEIS, 108. This conclusion is not rational and does not flow from the facts found. The DEIS and supporting documentation acknowledge that there will be at least short-term adverse effects to listed species, while also extolling the virtues of the benefits of proactive stewardship on wildlife and habitats. DEIS, 109, 117; Eco Report, 39-45. Under the ESA, *any* effect – whether beneficial or adverse – requires consultation. *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 496 (9th Cir. 2011); 51 FED.REG. 19,926, 19,949 (June 3, 1986) ("Any possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement"). The failure to consult – at least programmatically[25] – violates the ESA and threatens the viability and durability of NOGA.

The lack of consultation on the amendment also creates a potential collision with the Ninth Circuit's decision in *Environmental Law Center v. U.S. Forest Service*, 789 F.3d 1075 (9th Cir. 2015). The law in this Circuit is clear that forest plans are "ongoing" federal actions that require reinitiation of consultation under the ESA when a species is newly listed, critical habitat is designated, or other new information comes to light that may affect listed species in a way not considered in the prior consultation. *Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1053–56 (9th Cir. 1994) (reinitiation required) and *Cottonwood Environmental Law Center v. U.S. Forest Service*, 789 F.3d 1075 (9th Cir. 2015) (same). In the Tenth Circuit, the courts have held that

[25] The Forest Service consults programmatically frequently, including at a national level (e.g., 2000 Roadless Rule, 2012 Planning Rule). There is no support in the record indicating that NOGA is somehow analytically different than either of these national rulemakings simply because it is a forest plan amendment.

forest plans are *not* ongoing major federal actions, and the reinitiation requirement does not attach. *See, Forest Guardians v. Forsgren*, 478 F.3d 1149, 1151 (10th Cir. 2007) (reinitiation not required). The case law in the other circuits is unresolved on this issue.

Here, given that NOGA will amend all 128 forest plans at once, there is clearly new information in the form new management direction that should – at least in the Ninth Circuit – trigger the requirement to reinitiate consultation on the underlying forest plans. The failure to do so at the programmatic NOGA level forces the reinitiation question down to the forest level and leaves these forests vulnerable to litigation to force reinitiation at the forest plan level. At the very least, the first projects that role out and purport to implement NOGA will be required to initiate consultation to address both the effects of the project and of NOGA, an analytical burden that is unlikely to be borne well by local agency personnel.

NOGA ESA compliance is a serious and significant infirmity that the agency must address.

III. INDIGENOUS KNOWLEDGE & TRIBAL INCLUSION.

The amendment recognizes the value of Indigenous Knowledge (IK) and refers to it in various plan content. DEIS, 19-22 (*see*, Statement of Distinctive Roles and Contributions, Goal 1, Management Approach 1a, Standard 2c). There is also a lengthy background section on Tribal Rights in the DEIS. DEIS, 90-98. However, beyond this, the DEIS and supporting documentation do not address how IK was integrated into the amendment, potential effects to cultural resources and sacred sites, and lacks direction about how to include IK in adaptive strategies and/or project design and implementation. To some degree, the Forest Service claims that this was intentional in an effort to protect Indigenous knowledge sovereignty, but the lack of information or analysis was raised by Tribes in scoping and left unaddressed. DEIS, 125; Socioecon Report, 70, 94-97.

Tribes have consistently raised concerns that the Forest Service has not authentically engaged in government-to-government consultation on NOGA. That failure has not been remedied with the publication of the DEIS and supporting documents.

IV. CONCLUSION.

To be an effective and durable conservation policy, the NOGA must achieve five primary objectives. *First*, the final amendments must include a clear passive stewardship management pathway for relevant MOG forests. *Second*, the selected alternative must include plan components that make it clear that existing old growth conditions may not be degraded through proactive stewardship. *Third*, and relatedly, the selected alternative must clarify that old growth forest definitions and associated criteria – whether developed at the regional level or contained in existing forest plans – are not minimum management targets, but rather are simply used to identify when a stand is meeting old growth characteristics. *Fourth*, the selected alternative must effectively provide for the recruitment of old growth forests from mature forest age classes. *Finally*, the selected alternative must clean up and limit the extensive exceptions to old growth conservation in the NOGA.

The Forest Service made important changes to the preferred action between the NOI and DEIS. Despite these improvements, other aspects of the preferred action changed for the worse and create new infirmities that should be addressed before the FEIS and ROD are released to ensure the viability and durability of the amendment.

Thank you for the opportunity to provide comments in response to the Forest Service's proposed national old growth forest plan amendment. We look forward to working with you to conserve and restore mature and old growth forests and ecological integrity across the National Forest System. If you have any questions about these comments, please contact Susan Jane Brown at sjb@silvix.org or 503-680-5513.

Sincerely,

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ATTACHMENT 1

ATTACHMENT 1

NOGA DEIS PROPOSED ACTION REDLINES AND MANAGEMENT APPROACHES ALTERNATIVES

Component	Redline(s)	Explanation / Comment	Alternatives
Glossary	**Stewardship:** The management of forests for any goods, benefits, and values that can be sustained for present and future generations (Dictionary of Forestry; Bethesda, MD: Society of American Foresters, Page 72 and 177). Also see the definitions of "co-stewardship," ~~and~~ "proactive stewardship," and "passive stewardship."	Adds "Passive Stewardship" as a management pathway to achieve Desired Conditions.	
Glossary	**Proactive stewardship:** ~~Refers to v~~ Vegetation management (e.g., prescribed fire, timber harvest, timber or biomass removal, hazardous fuel reduction, wildlife habitat improvement, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives) that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments. (Definition is also included in NOGA-FW-STD-02a) *Also see the definitions of "co-stewardship" and "stewardship".*	Adds types of proactive stewardship activities - currently listed only in STD 2a - into the glossary. Adds "timber or biomass removal" to make it clear that not only must the cutting have a proactive stewardship purpose, but also that the removal must also have such a purpose. Retaining cut biomass (down woody debris) is important in many forest ecosystems.	**"Proactive stewardship:** ~~Refers to~~ Intentional management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments, and includes both active vegetation management (e.g., prescribed fire, timber harvest, timber or biomass removal, hazardous fuel reduction, wildlife habitat improvement, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives)

			and passive management and restoration that focuses on reducing anthropogenic stressors where appropriate." FEIS would need to be updated accordingly and rely on the 2012 Rule for support. 36 C.F.R. § 219.19 (*"Maintain.* In reference to an ecological condition: To keep in existence or continuance of the desired ecological condition in terms of its desired composition, structure, and processes. Depending upon the circumstance, *ecological conditions may be maintained by active or passive management or both*" (emphasis added)); 77 Fed. Reg. 21,162, 21,209 (April 9, 2012) ("*Maintenance and restoration may include active or passive management* and will require different levels of investment based on the difference between the desired and existing conditions of the system"

			(emphasis added) (2012 Planning Rule preamble).
Glossary	**Passive stewardship:** Inactive vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments.	Adds definition of "Passive Stewardship" as an intentional management pathway/option to achieve Desired Conditions. Intent is no chainsaws.	
Glossary	**Vegetation management:** Includes – but is not limited to – prescribed fire, timber harvest, timber or biomass removal, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives (e.g. hazardous fuel reduction, wildlife habitat improvement). (Definition is also included in NOGA-FW-STD-02a)		
STD 1	Old growth forests will be ~~determined~~ identified using definitions and associated criteria established in the land management plan. Where these definitions and associated criteria are found to be incomplete (i.e., only address some but not all ecosystems found in the planning area for which old-growth forest does or may exist) or are non-existent in the plan, the planning unit's corresponding regional old-growth forest definitions and associated criteria, or successor regional definitions and criteria, will be applied in part when these are incomplete or in full when non-existent. Do not use minimum definitions for old growth forests as a target for management outcomes.	This addition is intended to ensure that old growth stands are not "thinned to the minimum" by default. This is necessary as a contrast to management focused on "the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments," as described in Std 2a.	
STD 2a	Where conditions meet the definitions and associated criteria of old-growth forest, manage the forest for the retention and	Addition of "passive stewardship" management option.	Incorporate previous Std 1 (non-degradation) ("Vegetation management

	enhancement of those characteristics using either passive or proactive stewardship approaches, as ecologically appropriate. ~~vegetation management may only be for the purpose of p~~ Proactive stewardship shall maintain, or contribute towards the restoration of the quality, structure, distribution, abundance, pattern, ecological processes, and composition characteristic of the desired old growth forest type, taking into account the contribution of the stand to landscape fire adaptation and watershed health and retaining the large trees contributing to old growth structure as appropriate for this forest type. ~~For the purposes of this standard, the term "vegetation management" includes – but is not limited to – prescribed fire, timber harvest, and other mechanical/non-mechanical treatments used to achieve specific silviculture or other management objectives (e.g. hazardous fuel reduction, wildlife habitat improvement). For the purposes of this standard, the term "proactive stewardship" refers to vegetation management that promotes the quality, composition, structure, pattern, or ecological processes necessary for old-growth forests to be resilient and adaptable to stressors and likely future environments.~~ Proactive stewardship in old-growth forests shall promote one or more of the following: [retain all that follows with the exception of (viii)]	Addition of "maintain or restore [to] reference conditions" to clarify the intent that existing OG may not be degraded, even though OG characteristics may sometimes be lessened when moving toward reference conditions. (This would allow treatments addressing previous type conversion, for example.) Adopts language from CFLRP (16 U.S.C. § 7303(b)(1)(D)) ("fully maintains, or contributes toward the restoration of, the structure and composition of old growth stands according to the pre-fire suppression old growth conditions characteristic of the forest type, taking into account the contribution of the stand to landscape fire adaptation and watershed health and retaining the large trees contributing to old growth structure"). Adds "distribution" and "abundance." Deleted provision is already defined in the glossary: removed for conciseness.	activities must not degrade or impair the composition, structure, or ecological processes in a manner that prevents the long-term persistence of old-growth forest conditions within the plan area.") Reincorporate old Std1 as Std 2 for "overall intent with OG stewardship" (i.e., don't degrade). Renumber Std2 to 3 and 3 to 4, each of which provide more specific direction on how USFS is to achieve the nondegradation concept articulated in old std1/reincorporated std2.
			Delete "Proactive stewardship in old-growth forests shall promote one or more of the following:" and all that follows as duplicative and unnecessary.

			Move Std 2a(i) through (xi) into analysis or a management approach
STD 2a(viii)	successional pathways and stand development needed to retain or develop old-growth characteristics in the future;	Addition to clarify that this proactive stewardship purpose is intended to cover maintenance or improvement of old-growth conditions, not re-setting forests to an earlier seral stage.	
STD 2b	Where no practicable alternatives exist, and after minimizing the effect to old-growth forest conditions, ~~T~~the cutting or removal of trees in old-growth forest for purposes other than proactive stewardship is permitted when (1) incidental to the implementation of a management activity not otherwise prohibited by the plan, and (2) the area – as defined at an ecologically appropriate scale – continues to meet the definition and associated criteria for old-growth forest after the incidental tree cutting or removal. Such cutting and/or removal is infrequent.	Addition is designed to allow for incidental effects to OG, but only when necessary. For example, if there is a practicable alternative to locating a utility ROW through existing OG, this standard would not permit the cutting or removal of trees in that OG forest. "Infrequent" language is borrowed from the Roadless Rule to further cabin the exception and provide a basis for an analytical conclusion that it is unlikely to have extensive effects.	Delete entirely: this STD has potential for significant abuse, and the DEIS recognizes that this exception has the potential to remove old growth forests at ecologically significant scales. DEIS, 104; Eco Report, 98.
STD 2c	Deviation from Standard 2.a and 2.b is only appropriate ~~may only be allowed~~ if the responsible official determines that vegetation management actions or incidental tree-cutting or removal are the minimum intervention necessary for the following reasons and includes the rationale in a decision document or supporting documentation.	Addition to clarify that deviations must be limited to the minimum necessary. In other words, the fact that a small deviation is necessary does not authorize a large unnecessary deviation. Note that this plan component is a Guideline (and not a Standard) because it allows deviation from its terms as long as the intent of the component is met. *See*, 36 C.F.R. § 219.7(e)(1)(iv) ("guideline").	

STD 2c(i)	In cases where this standard would preclude achievement of wildfire risk management objectives for municipal water supply systems as defined at 16 U.S.C. § 6511(12) ~~within municipal watersheds~~ or the wildland-urban interface (WUI) as identified in the 2010 Wildland-Urban Interface of the Conterminous United States map or successor map ~~defined in Section 101 of the Healthy Forest Restoration Act of 2003 (16 USC 6511) and its application by the local planning unit,~~ or would prevent protection of critical infrastructure from wildfire;	Incorporates HFRA definition at 16 U.S.C. § 6511(12) ("The term "municipal water supply system" means the reservoirs, canals, ditches, flumes, laterals, pipes, pipelines, and other surface facilities and systems constructed or installed for the collection, impoundment, storage, transportation, or distribution of drinking water")	Rather than reference the HFRA definition of WUI - which is outdated and no longer used by the agency - refer to and use the 2010 Wildland-Urban Interface of the Conterminous United States map
STD 2c(iv)	for culturally significant uses as informed by Tribes and Indigenous Knowledge; ~~, or for de minimis use for local community purposes~~	Adds new exception for Tongass (SASS) and removes "de minimis use for local community purposes" because outside of SASS context, there should be no removal of OG trees for "community use," which is vague and subject to abuse (i.e., OG larch harvest for firewood).	Deal with the Alaska issue by consulting with Southeast Alaska Tribes, ANCs, and deferring to Tongass plan revision rather than by shoehorning here. Projects with prior approval can cover the "gap" between NOGA and Tongass revision.
STD 2c(v)	In cases where adherence to Stds 2a and 2b would unreasonably interfere with ongoing research in areas designated for research purposes, such as experimental forests ~~or research natural areas~~; ~~or~~	Addition would narrow this exception while providing for ongoing research to continue even when it requires deviation from Stds 2a and 2b.	Strike reference to RNAs: RNAs are intended as reference areas and must be managed "in a virgin or unmodified condition except where measures are required to maintain a plant community which the area is intended to represent." 36 C.F.R. § 251.23. Furthermore, "Research Natural Areas

			may be used *only* for research and development, study, observation, monitoring, and those educational activities *that do not modify the conditions for which the Research Natural Area was established*." FSM 4063.02 (emphasis added). RNAs have been designated to "Protect against human-caused environmental disruptions…Serve as reference areas for the study of natural ecological processes including disturbance and climate change[, and]...Serve as baseline areas for measuring long-term ecological changes." FSM 4063.02. There should be no old growth forest harvest in RNAs.
STD 2c(vi)	in cases where it is determined – based on best available science~~, which includes~~ including Indigenous Knowledge – that the direction in this standard would preclude restoration of process, composition, or structure consistent with the natural range of variation and DC 1; or ~~is not relevant or beneficial to a particular species or forest ecosystem type~~.	Existing language is broader than its intended use. Replacement language would fully cover the examples where this exception would be justified, such as a previously type-converted stand or restoring characteristic fire to a system where it may consume OG (like jack pine). "Would preclude" formulation, similar to Std 2(c)(a),	Our preference is to delete this exception entirely because legitimate uses are allowed as "proactive stewardship" under Std 2a.

		clarifies that if the restoration purpose can be met without deviating from Stds 2a and 2b, then the action would not fall under this exception.	
STD 2c(vii)	for subsistence or transitional purposes on the Tongass National Forest.	Avoids inadvertently stretching the "de minimis" concept in Std 2c(iv) by trying to make it include SASS. DEIS should include text explaining the intent of "transitional purposes."	
GDL3	To preserve the cultural and historical value of old trees occurring inside and outside of old-growth forests, vegetation management projects should retain and promote the conservation and survivability of old trees that are rare when compared to nearby forested conditions that are of a noticeable younger age class or unique in their ability to persist in the current or future environment, and are not detracting from desired species composition or ecological processes.	Added "inside and" to require the retention of individual old trees in OG stands based on feedback from Dr. Jerry Franklin.	
DC 1	Old-growth forests, and sufficient mature forests to recruit old growth forests over time are on a trajectory to reflect pre-fire suppression species composition or anticipated future species composition based on likely future climatic conditions, occur in amounts and levels of representativeness, redundancy, ~~and~~ connectivity, and quality such that conditions are resilient and adaptable to stressors and likely future environments when considered at an appropriate ecological scale.	Includes appropriate species composition, quality, and scale as a desired condition of OG forests. Adds mature forest recruitment as a desired condition.	

Management Approach – Alternative 1

Component	Change	Comment	Alternatives
MA 1a	Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and adhere to an Adaptive Strategy for Old-Growth Forest Conservation to ~~accomplish the following:~~ ~~i. Effectively incorporate place-based Indigenous Knowledge and other forms of Best Available Scientific Information as equals to inform and prioritize planning and decision-making for the conservation and recruitment of old-growth forests through proactive stewardship.~~ ~~ii. Ground-truth the accuracy of applied old-growth forest definitions.~~ ~~iii. Provide geographically relevant information about threats, stressors, and management opportunities relevant to the ecosystem of the plan area to facilitate effective implementation.~~ ~~iv. Identify tribal priorities and opportunities to support cultural, medicinal, food, and ceremonial values, practices and uses.~~ ~~v.~~ Identify [delineate] and prioritize ~~areas~~ forests for the recruitment, retention and promotion of old-growth forest~~s~~ conditions, while also recognizing the role other successional stages contribute to ecological integrity~~,~~ based on: ecological integrity, inherent	Changes are primarily intended to dramatically pare back the "task list" for adaptive strategies and focus on identifying forests for OG recruitment. Operationally, the FEIS would explain that the ROs, WO, and/or research stations would be tasked with providing either the analysis or resources necessary for units to identify and prioritize mature forests for recruitment into OG so that units can focus on implementation rather than analysis. Restores the "collaborative" requirement that is missing in the current draft (but still intended). Moves IK and BASI into the introductory phrase. Swaps "areas" with "forests" to avoid planning rule infirmity re: 36 C.F.R. § 219.13(a) ("...a plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas)"). Shift other tasks as appropriate into App'x D.	Combine MA 1a and 1b as amended here into single MA that reads: "Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and adhere to an Adaptive Strategy for Old-Growth Forest Conservation to identify and prioritize forests for the recruitment, retention and promotion of old-growth forest conditions based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the plan area. Identify forests that have the inherent capability to sustain future old-growth forest conditions either passive or proactive stewardship to recruit and promote the

	capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the plan area. ~~vi. Engage in climate adaptation using explicit resistance, resilience, or transition approaches to address climate risks and achieve desired conditions, or otherwise intentionally accept alternative climate driven outcomes.~~ ~~vii. Identify a program of work and partnerships that can support effective delivery of the plan monitoring requirements to inform adaptive management.~~ ~~viii. Recognize the role of other successional stages that are important for ecological integrity.~~ ~~(Added alphanumeric bullets for easier reference.)~~		development of future old growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible~~;~~ or to retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments."
MA 1b	Identify ~~areas~~ forests that have the inherent capability to sustain future old-growth forest conditions ~~(i.e. areas of likely climate or fire refugia)~~ over time and prioritize them for either passive or proactive stewardship ~~for one or more of the following purposes:~~ ~~i. To provide for long-term resilience;~~ ~~ii. To reduce fire hazard, spread or severity, or the spread of potential insect or disease outbreaks;~~	Focuses on recruitment specifically and jettisons unnecessary qualifiers and language that introduce lack of clarity and litigation risk. Eliminates well-meaning but not actionable (due to lack of data) "refugia" concept. Swaps "areas" with "forests" to avoid planning rule infirmity re: 36 C.F.R. § 219.13(a) ("...a plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part	

	~~iii. To provide landscape-level redundancy and representation of old-growth forests;~~ ~~iv. To enhance landscape and patch connectivity where old-growth patches are isolated;~~ ~~v. T~~ to recruit and promote the development of future old growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible~~;~~ or to ~~vi. To~~ retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments~~;~~ ~~vii. To restore or enhance attributes identified as culturally significant; or~~ ~~viii. To promote climate adapted species assemblages in areas where changing climatic conditions are likely to alter current conditions and change species assemblages over time~~.	of the plan area (including management areas or geographic areas)"). Adds passive stewardship as a management option.	
GDL 1	In forests identified in the Adaptive Strategy for Old-Growth Forest Conservation for which continued development of old-growth forest conditions is necessary and optimal to meet Desired Conditions, ~~areas that have been identified in the Adaptive Strategy for Old-Growth Forest~~	Provides a conceptual target ("necessary and optimal") for recruitment that could otherwise be the subject of multiplicative controversies in planning units across the country. While leaving maximum flexibility to local planning units, this language answers the question of "how much" and "which" mature forests	Delete the Guideline as duplicative of other plan components.

	~~Conservation as compatible with and prioritized for the development of future old-growth forest~~, vegetation management ~~projects~~ should be for the purpose of developing those conditions through passive or proactive stewardship.	should be managed on a trajectory for future old growth. Swaps "areas" with "forests" to avoid planning rule infirmity re: 36 C.F.R. § 219.13(a) ("...a plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas)").	

Management Approach – Alternative 2

Component	Change	Comment
MA 1a	Incorporating place-based Indigenous Knowledge and BASI, collaboratively develop and utilize in project planning an Adaptive Strategy for Old-Growth Forest Conservation to recruit old-growth conditions consistent with Desired Conditions. The Adaptive Strategy should accomplish the following: i. Develop a Decision Support Tool (see Mgmt Approach 1b) to identify forests subject to Guideline 1; and ii. Identify monitoring strategies and adjustments as appropriate to address uncertainties in assumptions informing the decision support tool. ~~Effectively incorporate place-based Indigenous Knowledge and other forms of Best Available Scientific Information as equals to inform and prioritize planning and decision-making for the conservation and recruitment of old-growth forests through proactive stewardship.~~ ~~Ground-truth the accuracy of applied old-growth forest definitions.~~	Intent is for MA to create a decision support tool (work that would be done at the regional/WO/research station level) for unit utilization, so that units do not need to spend time and energy doing so. DEIS would need to be updated accordingly to explain this concept and where the work will occur (i.e., RO/WO level). Enhances consistency at the Regional level. Changes are primarily intended to dramatically pare back the "task list" for adaptive strategies and focus on developing a decision support tool to identify the areas subject to Guideline 1 and an adaptive management framework to test whether application of Guideline 1 to those lands is moving the plan area towards Desired Conditions. Another minor change restores the "collaborative" requirement that is missing in the current draft (but still intended).

	~~Provide geographically relevant information about threats, stressors, and management opportunities relevant to the ecosystem of the plan area to facilitate effective implementation.~~ ~~Identify tribal priorities and opportunities to support cultural, medicinal, food, and ceremonial values, practices and uses.~~ ~~Identify and prioritize areas for the recruitment, retention and promotion of old-growth forests, based on: ecological integrity, inherent capability, threats stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forests conditions within the plan area.~~ ~~Engage in climate adaptation using explicit resistance, resilience, or transition approaches to address climate risks and achieve desired conditions, or otherwise intentionally accept alternative climate driven outcomes.~~ ~~Identify a program of work and partnerships that can support effective delivery of the plan monitoring requirements to inform adaptive management.~~ ~~Recognize the role of other successional stages that are important for ecological integrity.~~	Moves (i) (incorporation of place-based IK and BASI) into prefatory language. Delete (v) and consolidate "area" identification into Mgmt Approach 1b. Shift other tasks as appropriate into App'x D.
MA 1b	~~Identify areas that have the inherent capability to sustain future~~ ~~old-growth forest (i.e. areas of likely climate or fire refugia) over time and prioritize them for proactive stewardship for one~~ ~~or more of the following purposes:~~ ~~i. To provide for long-term resilience;~~ ~~ii. To reduce fire hazard, spread or severity, or the spread of potential insect or disease outbreaks;~~ ~~iii. To provide landscape-level redundancy and representation of old-growth forests;~~ ~~iv. To enhance landscape and patch connectivity where old-growth patches are isolated;~~	This change focuses Mgmt Approach 1b on development of the Decision Support Tool. This is similar to existing MA1b in structure, with several changes. The factors to consider have been consolidated from MAs 1a and 1b and rephrased for clarity. The concepts of "inherent capability" and "refugia" have also been moved as factors to consider rather than limitations on which forests can be identified and prioritized. This is desirable because we may get a better ROI by proactively stewarding areas with some level of risk.

	~~v. To recruit and promote the development of future old-growth forests where current conditions in mature forest are likely to achieve the old-growth forest definitions and associated criteria in the shortest timeframe possible;~~ ~~vi. To retain and promote the development of old-growth forests in watersheds, firesheds, or other relevant landscape units where amounts and distributions of existing old-growth forests lack resilience and adaptability to stressors and likely future environments;~~ ~~vii. To restore or enhance attributes identified as culturally significant; or~~ ~~viii. To promote climate-adapted species assemblages in areas where changing climatic conditions are likely to alter current conditions and change species assemblages over time.~~ The Decision Support Tool will delineate or otherwise identify, at a level of specificity that can be readily applied during project development, which mature forests are necessary and optimal to meet Desired Conditions, in light of the following: i. Inherent capability to sustain old growth conditions or presence of climate or fire refugia; ii. Ecological integrity and the natural range of variation; iii. Threats, stressors, and opportunities; iv. Redundancy, representativeness, distribution, and connectivity; v. Likelihood of achieving the old-growth forest definitions and associated criteria in the shortest timeframe;	This MA is also intended to identify “how much” mature is necessary to achieve OG Desired Conditions.

	vi. Attributes identified as culturally significant; vii. Biodiversity values and ability to promote climate-adapted species assemblages under current and future conditions; and viii. Ability to reduce or manage fire hazard, speed or severity, or the spread of potential insect or disease outbreaks through proactive stewardship.	
GDL 1	In forests for which continued development of old-growth conditions is necessary and optimal to meet the Desired Conditions, as identified through the Decision Support Tool developed as a part of ~~areas that have been identified in~~ the Adaptive Strategy for Old-Growth Forest Conservation ~~as compatible with and prioritized for the development of future old-growth forest~~, vegetation management projects should be for the purpose of developing those conditions through passive or proactive stewardship.	This change is intended to address two issues. First, it provides a conceptual target ("necessary and optimal") for recruitment that could otherwise be the subject of multiplicative controversies in planning units across the country. While leaving maximum flexibility to local planning units, this language answers the question of "how much" and "which" mature forests should be managed on a trajectory for future old growth. Second, by specifying which mature forests are subject to the guideline, it avoids the current draft's problematic deferral of drawing management area lines (the "areas" where the Guideline will apply) outside of the plan amendment process. This change should not require any further analysis because it merely effectuates progress toward the Desired Conditions, which should already be fully analyzed in the EIS.

“Management Approach” – Alternative 3 (elimination of Management Approaches and Adaptive Strategies)

Component	Change	Comment
STD 4	Where conditions do not currently meet the definitions and associated criteria of old-growth forest, [at the appropriate ecological scale] identify and prioritize [or: identify, prioritize, and manage] forests for the recruitment of old-growth forest conditions sufficient to meet Desired Conditions through either passive or proactive stewardship based on: ecological integrity, inherent capability, threats, stressors, and opportunities relevant to the plan area in order to provide for the long-term resilience of old growth forest conditions within the plan area.	In the event that Management Approaches are eliminated or changed substantially, a new Standard addresses the need to recruit OG forest conditions from mature age classes. Allows flexibility regarding the scale at which identification and prioritization is to occur (“appropriate ecological scale”) Should be paired with a Decision Support Tool/other technology developed by RO/WO/RS to assist in the identification and prioritization process. FEIS would need to explain how this works and App’x D updated accordingly.