Nantahala-Pisgah Forest Partnership

A lasting voice for innovative management and investment in the public forests of North Carolina's mountains.

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June 25, 2020

Comments on the Nantahala and Pisgah National Forests Proposed Land Management Plan

Attn: Plan Revision Team Leader
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Submitted to the CARA Online Portal at: https://cara.ecosystem-management.org/Public/CommentInput?Project=43545

List of Partnership Member and Affiliate Organization Endorsement

Member Organizations:

- Access Fund
- American Whitewater
- Back Country Horsemen of North Carolina
- Carolina Climbers Coalition
- Carolina Land & Lakes Resource Conservation & Development Council
- Carolina Mountain Club
- Columbia Forest Products
- Defenders of Wildlife
- EcoForesters
- Evergreen Packaging
- Graham County, NC Government
- International Mountain Bicycling Association
- MountainTrue
- National Wild Turkey Federation of North Carolina
- North Carolina Chapter of The Nature Conservancy
- North Carolina Council of Trout Unlimited
- North Carolina Horse Council
- North Carolina Wildlife Federation
- Southern Appalachian Mineral Society
- Southern Off-Road Bicycle Association
- The Wilderness Society
- Wild South

Affiliate Organizations:

- Audubon North Carolina
- North Carolina Chapter of The Sierra Club
- Southern Environmental Law Center

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Introduction

We, **The Nantahala-Pisgah Forest Partnership** ("Partnership") formed in February of 2013 as a collaborative group of more than 30 organizations representing a diverse cross-section of public lands interests, including recreation, forest products, local government, cultural heritage, conservation, wildlife, hunting, angling, and other forest user groups. The Partnership was created with the goal of working collaboratively and in parallel to the US Forest Service planning process. Representing a diverse spectrum of interests, partners have worked to foster civic engagement, generate positive guidance, and develop recommendations for creating the best possible revised management plan for the Nantahala and Pisgah National Forests.

Over the last seven years the Partnership has engaged in robust public dialogue in support of the planning process. The Partnership has utilized a variety of sources including national, regional, tribal, and local community expertise with an emphasis on public participation and information sharing in order to reach consensus. Partnership members and affiliates have volunteered thousands of hours to build consensus around and support for recommendations that will facilitate a Forest Plan which best addresses the interests of our many stakeholders as well as the needs of the environment, local communities, and the countless species that call the Nantahala and Pisgah home. Members and affiliate organizations have developed and vetted proposals, shared concerns, built understanding and developed solutions to accommodate all members' values and interests. Our approach has been to strive to reach community-supported, science-based methods for forest management, interpretation, and investment. The comments that are provided in this document represent the culmination of this painstaking, intentional, and deliberative process. They have been crafted with the intent of creating a lasting voice for the innovative management of and public investment in the future of our beloved National Forest.

While the Partnership was created as a collaborative to inform the planning process, we have committed to continuing our work throughout the plan implementation process and at the project level. In addition, the Partnership has been involved, and will continue to be involved, with issues relating to the National Forest system as a whole as well as on the legislative and federal level. The Partnership has always been and will continue to be an open and transparent collaborative, with membership open to all stakeholders of interest in the plan revision and implementation processes. Our charter is posted online and our monthly meetings are open to anyone who would like to observe.

The vision statement of the Nantahala Pisgah Forest Partnership is as follows:

We envision a thriving, resilient forest within its natural range of variation, able to support healthy ecosystems, wildlife populations, local economies, and traditional uses. We envision a forest with the connectivity and integrity to remain resilient in the face of the changes and challenges of the future.

<u>Reader's Guide</u>

In accordance with the mission of the Partnership, we have actively worked to achieve broad consensus on a robust set of recommendations for the Revised Nantahala Pisgah Forest Plan, that balances all stakeholder needs to the fullest extent possible. Our process was lengthy, and with the relationships and trust that was built over many years of monthly meetings, the recommendations that we are presenting are substantive and cover almost every aspect of the Draft Plan. On some of the issues, partners successfully negotiated and compromised to an unprecedented degree, and the agreement therefore includes pieces that individual members would not support for their own sake. In other words, we attempted to identify the core set of connected agreements that were necessary to create a critical mass of support, which we believe is imperative to working effectively with each other and the Forest Service throughout plan implementation. Like the Forest Plan itself, all of the recommendations in this document are connected to one another and are inseparable from the whole. ***Members' full support is conditional upon these interrelated recommendations moving forward together.***

According to the Partnership's charter: "Consensus is defined as a decision that all members can live with. Participants may support an idea fully, partially, or not at all." For the recommendations presented we achieved consensus and everything is within the Partnership's zone of consent. (See illustration below.)

Section 1 includes integrated recommendations, presented by issue. The Partnership's intent is to merge multiple interests' needs by highlighting the most difficult and cross-cutting issues, and to chart a path forward towards resolution. This work is supplemented by all of the detailed recommendations that follow in later sections.

Section 2 presents critical information and a recommendation on the integrated issue of Economic Development that is woven throughout all interests. The Partnership's intent is to demonstrate the vital inclusion of economics and to request that this be incorporated more explicitly in the Plan.
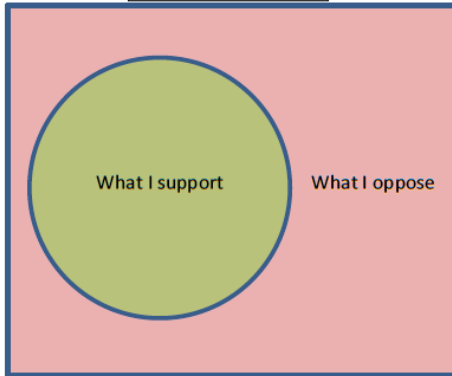
Section 3 includes substantive and cross-cutting recommendations for inclusion of Climate Change throughout the Plan. The Partnership's intention is to provide actionable recommendations on a topic where the science is relatively young and is evolving considerably.

Section 4 reports essential and discrete comments on plan components that are critical for incorporation. The Partnership's intention is to provide feedback to the Forest Service from specific interest groups in the order that the Draft Plan is presented. These individual recommendations are equally important to the Partnership as all other integrated materials presented. Within this section, recommended changes are *italicized*.

Section 5 conveys a crucial External Agreement that the Partnership has reached with regard to support for Congressional Designations. It includes two tiers of designations and details timing and requirements for full support following plan finalization and implementation. For some, this agreement that is external to the Forest Plan is critical to meeting their interests' needs and is incorporated here to demonstrate collective commitment from the Partnership. In addition, we believe that a clear path by which wilderness advocates can earn the support of collaborative colleagues for specific places will help to smooth project implementation.

ZONE OF CONSENT - ILLUSTRATION

1. Binary Model

What I support   What I oppose

2. Concentric Model

What s/he opposes

What s/he can live with *so long as* other needs are being met

What s/he doesn't oppose

What a stakeholder wants
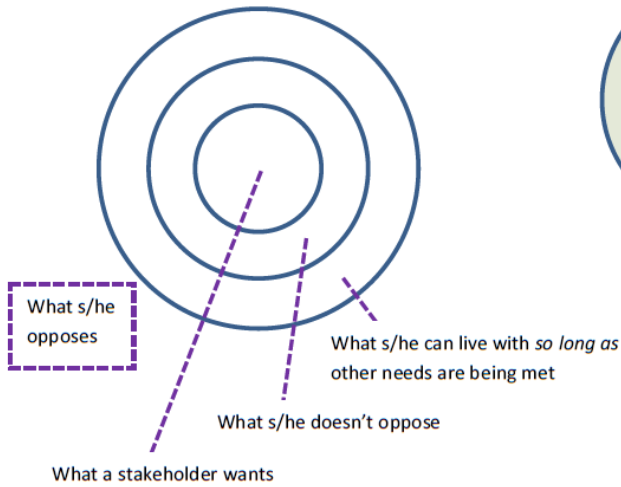
3. Concentric Model Applied to Multi-Stakeholder Collaboration

3.a.

Timber

Conservation   Game Wildlife

Recreation

3.b.

3.c.

Enlarging zone of consent

4. Takeaways:

- The zone of consent represents the scope of all actions that the Forest Service can take without opposition by the consenting stakeholders. Consent is important because public lands management is essentially a "vetocracy," in which each stakeholder has the ability to frustrate action benefiting other stakeholders.
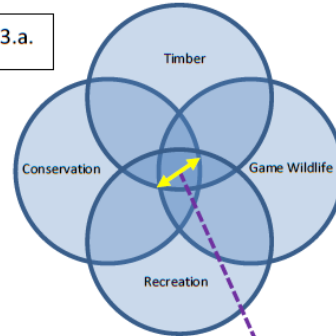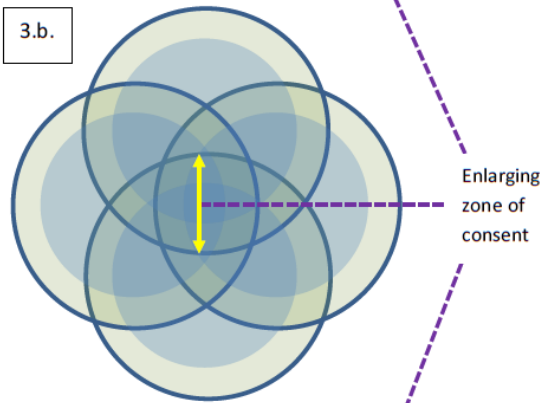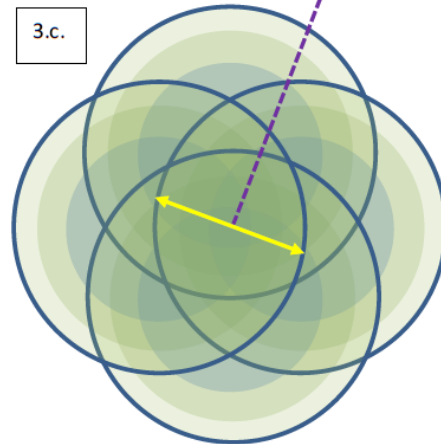- The boundaries of the concentric circles should be described with increasing specificity. E.g., at the center, I support old growth. At the outer circle, I can live with logging so long as projects also identify existing old growth for long-term protection. This specificity should be mirrored in the Forest Plan to provide meaningful guidance for line officers.
- At 3a, the zone of consent is small.
- At 3b, the zone of consent is larger, but fragile. While a stakeholder may not oppose the action in itself, s/he may nonetheless oppose the action's ancillary impacts (including physical impacts, fiscal impacts, or cultural impacts).
- At 3c, the zone of consent is broadest *and* most durable, because all stakeholders have "skin in the game." If your needs are being met, there is more to lose by introducing friction into the system.
- A collaborative Forest Plan is a promise to meet the conditions necessary to enlarge the zone of consent. Failure to do so (during implementation) is a breach of trust. Accordingly, the Forest Service must make progress for all stakeholders in projects.

5. Consent v. Consensus

The NPFP is advocating for "tiered objectives," which would allow us to move from consent to consensus during Plan implementation. In order to move from modest goals to more ambitious goals (for each stakeholder), a certain amount of progress must first be made for all interests. This kind of progress requires more than grudging consent; it requires broad buy-in that we're on the right track. All parties (stakeholders and the agency) must earn each other's support over time.

Section 1: Integrated Recommendations, by Issue

This section includes integrated recommendations, presented by issue. The Partnership's intent is to merge multiple interests' needs by highlighting the most difficult and cross-cutting issues, and charting a path forward towards resolution. This work is supplemented by all of the detailed recommendations that follow in later sections.

As explained further below, the Partnership is recommending that the final Plan include:

- A balanced approach in which suitable management areas are treated as working lands, including rotational forestry, and in which other management areas like EIA and AT will allow more nuanced project development. This approach is expected to efficiently address forest products' needs, wildlife habitat goals, and young forest restoration goals because priority conservation areas will be excluded from the suitable base.

- More active management at the forestwide level and in particular Management Areas;

- More specificity about where and why active management will be prioritized, specifically as it relates to wildlife habitat needs;

- More specificity about where and why active management will be prioritized, specifically as it relates to ecological restoration work;

- Clearer sideboards on timber harvest and roadbuilding to prevent project-level conflict and ensure that agency and stakeholder resources are not wasted;

- Harnessing partner investments to better improve water quality and transition to managed recreation on maintainable system trails;

- Promotion of economic development and sustainable recreation by streamlining some special use permits for outfitters, guides; and

- Adaptive management approaches that allow us to stretch toward the top end of our goals without impeding other related goals, violating legal requirements, or exceeding predicted impacts.

We are also sharing an external Partnership agreement (i.e., an agreement that would not be included in the Forest Plan) to work together to ensure appropriate levels and geographic distribution of project activities as a prerequisite for Partnership support of Tier 2 Wilderness and Wild & Scenic River Recommendations.

Please note that, if taken individually, the pieces of this agreement would not have full Partnership support. Recommendations to meet one resource need often create tensions with other resources. These integrated recommendations by issue address those tensions with a package of recommendations that work together to achieve the most for all interests' needs with the least conflict and harm to other interests.

1. **Tiered Objectives for Active Management**

Issue	Draft Plan Content	Recommended Plan Content
Open Forest Woodlands	Tier 1: 1,500-4,000 acres/decade restored open conditions Tier 2: 4,000 to 6,000 acres/decade	Tier 1: We support the restored acres objective and in addition, recommend providing a minimum of 13,500 new acres per decade that are in progress towards restored open woodland condition. Tier 2: We support the restored acres objective and in addition, recommend providing a minimum of 31,000 new acres per decade that are in progress towards restored open woodland condition.
Prescribed Fire / Wildfire	Tier 1: 6,500-10,000 acres (annual) Tier 2: 10,000-20,000 acres Includes only Rx fire only	Tier 1: 10,000-25,000 acres (annual) Tier 2: 25,000-40,000 acres Each tier includes prescribed and wildfire acres
Young Forest Creation	Tier 1: 650-1,200 acres (annual) Tier 2: 1,200-3,200 acres	Tier 1: 1,200-1,600 acres (annual) Tier 2: 1,600-3,200 acres

This recommendation is for this planning cycle and is intended to meet the needs of Partnership members who are primarily advocating to increase levels of disturbance-created habitats in order to move toward the Natural Range of Variation (NRV) and support healthy populations of wildlife species associated with those habitats. It is also supported by members who are primarily advocating for the forest products industry because active management for these purposes will also produce sawtimber, pulpwood, and other forest products to support local economies.

For prescribed fire, the recommendation provides our best estimate of what is reasonably achievable with current budgets at Tier 1 (based on other neighboring forests' actual performance—about 3% of fire-adapted forests annually) and what is needed to achieve a historically consistent return interval at Tier 2. These numbers are much higher than current

levels of prescribed fire, but they also include wildfire. Burning more acres will likely lead to more variety in localized fire intensity, which is expected to contribute to young and open forest conditions. Many of the acres included in this objective are successive burns on the same areas.

For open woodland forests, we support the Forest Service's intent to provide **restored** conditions at the levels in the draft. And we also want to make it clear that we would like to see higher levels needed in progress to move towards meeting the desired conditions. We have recommended new tiered objectives for acres and progress and these are in line with the Partnership's 2017 recommendations. To be clear, meeting the objective for the restored condition will require more treatment, including repeated treatments of the same acres with fire, noncommercial treatment, commercial treatment, or a combination thereof. This recommendation should be considered along with the list of priority treatments (condition-based objectives) listed below, which indicate the degree of canopy removal appropriate in different ecozones.

For young forests, we recommend increasing Tier 1 levels of young forest creation to match our 2017 Partnership recommendations—a minimum of 1,200 acres annually. These levels have not been achievable with available budgets under the current plan, but we believe that they will be achievable under a plan that adopts the Partnership's recommendations for preventing conflict and that enhances efficiencies. In addition, this recommendation should be considered along with our objectives for priority treatments (condition-based objectives), discussed below, which we believe will lead to greater levels of young forest habitat in the Ecological Interest Area (EIA), as compared to the current Draft Plan.

2. **Recreation and Trails**

Issue	Draft Plan Content	Recommended Plan Content
Transition to bikes and horse only on system trails	Forestwide Standard 11 prohibits bike and horse use except on designated trails.	New Tier 1 Objective: To assess non-system trails individually at the project level and determine whether to adopt, relocate, or close them. New Tier 2 Objective: Implementation of S-11 through broad closure order(s) will not occur until GA-level milestones for recreation need/demand are met. New standard: User-created trails that are created after the collaborative trail complex planning process will be promptly decommissioned and if needed, closed through specific closure orders.
Adding new trails to the system; protecting and restoring water quality where affected by trails	Forestwide Standard 14 differs by alternative: Alt B: New trails may be added if sustainable. Alt C: No new trail miles may be added without closing miles elsewhere. Alt D: Trail bank allows 30 miles of new trail over the life of the plan. Beyond 30 miles, new additions must be offset by closures elsewhere.	Any proposed trail or trail complex must be shown to be financially, socially and ecologically sustainable and therefore we don't support a "cap" on trail mileage. The Plan should include an "indicator" of progress toward sustainability—e.g., increase in percent of trails meeting National Quality Standards (NQS), decrease miles of trail not meeting NQS, number of volunteer hours or miles of trails maintained.

		Proposed new trails should be considered favorably when indicators show progress toward trail sustainability.
Horse trails in Wilderness and proposed Wilderness	No new horse trails in Wilderness.	Delete this language.

The Forest Service's main priority for the trail system is to reduce impacts to water quality. That desire is shared by the Partnership. Relatedly, the Forest Service wants trail use by bikes and horses, in the future, to occur only on system trails, because non-system trails cannot lawfully be maintained to protect resources. The Partnership agrees that this should be a desired future condition.

The current draft includes an objective to increase the percentage of trails not impacting water quality. It also includes a standard that prohibits bike and horse use of non-system trails. Additionally, the draft includes three alternatives for adding new trails. The most permissive standard would allow new trails that are demonstrated to be sustainable; the least permissive standard would prevent the net gain of trail mileage; and a third standard would cap new trails at 30 miles, beyond which new additions would have to be offset by closures elsewhere.

These Draft Plan components would not support the desire of partners, who provide much of the capacity for trail work, to grow the trail system to meet demand, improve network connectivity, and provide better user experiences. Similarly, the draft would not support sustainable economic development by allowing for new opportunities in areas that are relatively underutilized. In fact, the loss of non-system trails would cause a sharp loss of recreation opportunity.

We recommend that the final plan be built around the premise that partner contributions are the best way to improve water quality, and that partner contributions should therefore be rewarded and encouraged. First, we recommend that the transition to system trail use for bikes and horses not be implemented through an immediate, broad closure order. Instead, we recommend an approach in which such an order would be issued only after GA-level milestones for recreation demand are met. Such an approach would allow us to work together, trail by trail, to close it, add it to the system, or replace it on a better alignment. Second, this trail-by-trail approach will work only if we can realistically add non-system trails or other new trails that meet similar demands to the system. We therefore recommend against a "cap" on the trail system. We also recommend against a standard that turns on a subjective determination of whether a proposed trail is "sustainable." Instead, we recommend

a standard that allows new trails to be added after measurable progress toward trail sustainability goals as described in the table above.

Together, these changes are intended to reward partner contributions that will both improve water quality and better meet demand for quality recreation opportunities. We believe that meeting demand is the best way to address the problem of non-system trails, whether by building new trails or, in some cases, adopting non-system trails into the system. Once the demand currently being served by non-system trails is being provided on sustainable system trails, the remaining non-system trails can be appropriately closed by order. We also support a standard to prevent non-system trails from proliferating in the meantime: new user-created trails (digging) would be prohibited and such trails should be ineligible for addition to the system.

Separately, we recommend deletion of any plan-level decision to prohibit new horse trails in Wilderness and Proposed Wilderness. Equestrian use is allowed in Wilderness Areas. This change is important to ensure that equestrian groups are able to support other recommendations related to wilderness designation.

See Section 4, Chapter 2 for additional and significant Recreation interest recommendations.

3. **Non-Native Invasive Species (NNIS)**

Issue	Draft Plan Content	Recommended Plan Content
NNIS impacts from active management and associated roads and trails	Tier 1: Treat 750-1,000 acres annually; inventory 1,000-2,000 acres annually. Tier 2: Treat up to 3,000 acres annually; inventory up to 4,000 acres annually. There is a standard that off-road equipment be free of plant material before entering the NF.	Tier 1: Treat 750-2,000 acres annually; inventory 1,000-2,500 acres annually. Tier 2: Treat up to 4,000 acres annually, inventory up to 4,000 acres annually. Include a desired condition that priority NNIS are not spreading. Include an objective that all new harvest units and associated roads (including a 100-foot buffer) should be monitored for new infestations of priority NNIS. In the event that pre-implementation data is unavailable, assume absence as a baseline. In order to operate within Tier 2 for active management, this minimum level of monitoring (see above) must be achieved on a continuing basis, and there should be no net spread of priority NNIS due to new, uncontrolled infestations in areas/roads monitored. This condition may be met by preventing or promptly controlling new infestations, or offsetting new infestations by demonstrating eradication or

		control of previously existing infestations. For purposes of this recommendation, "control" means that the Forest Service is dedicated to NNIS control and will work with partners to ensure NNIS are accounted for and not worsened by inaction.

To address the risk of Non-Native Invasive Species, the recommendation sets an expectation that ground-disturbing activities may expand, provided that there is not an overall spread of NNIS. The recommendation acknowledges that no matter how hard we try, we may not prevent all new infestations. However, we need to dedicate adequate resources to monitor and control infestations as they occur.

Specifically, this recommendation increases the Tier 1 and Tier 2 objectives for NNIS treatment, to better accommodate the need for pretreatment and to correspond to the increased level of active management we have recommended, particularly at Tier 1. In order to operate within Tier 2 for active management activities, it would be mandatory to monitor for and control the spread of NNIS, consistent with a desired condition to prevent spread.

A documented failure to prevent NNIS spread would not necessarily prevent expansion of active management to new areas, but it would require an adaptive management response and supplemental analysis to reassess the acceptable limits on the extent of NNIS spread and supplemental action to slow or halt instances of spread.

4. Landscape-Level Progress toward NRV ("Condition-based objectives")

Issue	Draft Plan Content	Recommended Plan Content
Silvicultural Objectives	See Issue#1	In revising ECO-O-2, include a collaboratively supported list of priority treatments (see list below). Include a Tier 1 objective that 25% of regeneration harvest and 50% of thinning harvest would be priority treatments. At Tier 2, 50% of regeneration harvest and 75% of thinning harvest would be priority treatments. For each GA, identify which priority treatments should be emphasized.
Timber Analysis	Draft analysis shows volume that "could" result from Tier 1 and Tier 2 objectives	Identify explicit tradeoffs between alternatives resulting in different forest salable products. Identify which priority treatments are expected to have the most opportunities in each GA.

Monitoring & Adaptive Management		Track implementation in a project-level table (acres of each priority treatment and total acres); aggregate for forestwide totals (during bi-annual monitoring).
		If we fail to achieve the minimum percentages of priority treatments, adaptive management would be needed—supplemental analysis to consider whether projects are cumulatively failing to maintain and restore NRV.
		Validate assumptions that the priority treatments will maintain or restore compositional diversity at the stand level. If unable to validate, modify the treatment or remove it from the priority list.

List of Priority Conditions for Treatment	
Priorities	Anticipated level of harvest and volume based on estimation of opportunity (not prescriptive)
Thinning in Shortleaf Pine-Oak Ecozones to create 40-60% canopy closure conditions followed by prescribed fire.	14,300 accessible acres
Thinning in Pine-Oak Heath Ecozones to create 40-60% canopy closure conditions followed by prescribed fire.	7,600 accessible acres
Thinning in Dry Oak Ecozones to create 40-60% canopy closure conditions followed by prescribed fire.	23,500 accessible acres

Mid-story treatment targeting fire-intolerant species in fire-adapted ecozones.	200,000 accessible acres
Regeneration harvest of white pine dominated forest in a stand modeled as dry oak forest, combined with fire at an appropriate return interval. Treating this condition could be expected to improve composition.	11% of Dry Oak Ecozone is in this condition Of these 2,600 acres are accessible
Removal of poplar from a poplar dominated forest in a stand modeled as dry-mesic oak. Combined with follow-up prescribed fire and release of desired canopy trees, this treatment could be expected to improve composition. Without additional prescribed fire, this may or may not improve species composition, but should not degrade it either.	18% of Dry-Mesic Oak Ecozone is in this condition Of these 1,400 acres are accessible
Selective removal of white pine, poplar, cherry, and red maple from a site modeled as mesic oak ecozone where less than half the canopy is removed. Treating this condition could improve structure and composition if combined with release work and invasive plant control.	26% of Mesic Oak Ecozone is in this condition Of these 20,100 acres are accessible
Regeneration harvest of a white pine-hardwood dominated forest in a stand modeled as shortleaf pine-oak, combined with site prep burn and regular prescribed fire, and possibly including planting. Treating this condition is likely to move the site closer to its desired condition of a shortleaf pine-oak forest or woodland.	9% of Shortleaf Pine-Oak Ecozone is in this condition Of these 1,300 acres are accessible.
Removal of white pine, poplar, maple, and other hardwoods from a site modeled as shortleaf pine-oak, followed by regular prescribed fire. Treating this condition in this manner is likely to improve species composition and provide open woodland habitat.	18% of Shortleaf Pine-Oak Ecozone are in this condition Of these 2,600 acres are accessible

Harvesting white pine from white pine dominated coves with robust invasive species control. Treating this condition may or may not improve species composition but should not degrade it either.	9% of Cove Ecozones are in this condition Of these 8,200 acres are accessible
Harvesting poplar from poplar dominated coves with a low-quality herb layer and with robust invasive species control. Treating this condition will hopefully improve species composition, not further degrade the site, and will provide that invasive species infestations are prevented. Follow up treatments will occur to promote desirable species composition returning via natural regeneration. "Low quality" herb layer would mean <50% cover of native herbs and an absence of any plant species of conservation concern.	

This recommendation is needed because of a tension between project-level flexibility and long-term needs to restore NRV. Our highest priority restoration activities are sometimes not commercially viable on their own and may be different from "business as usual" priorities in the agency. As long as Forest Service budgets are inadequate, restoration will be "paid for" by harvest in other more productive forest types. As a result, project-level incentives tilt toward activities that are less likely to achieve our full range of restoration goals but are more commercially attractive.

We need project-level flexibility to take advantage of commercially valuable opportunities. Regeneration harvest in late-closed conditions but otherwise healthy forests can restore structural diversity at the broad scale, meet many species' needs, and also help to pay for other needed work elsewhere. In some areas, however, it can simultaneously degrade local compositional diversity. It can also create an imbalance in structural conditions between ecozones. (For example, past management created too much young forest in cove ecozones, but not enough in pine-oak heath.) Over time, the cumulative effect of project-level decisions could impede our progress toward ecozone desired conditions. The Plan therefore needs a mechanism to harness project-level flexibility to achieve long-term goals. Such a mechanism would give the Forest Service a basis to conclude that the Plan will actually maintain and restore ecological integrity.

This recommendation is also needed because of a separate tension between landscape-scale restoration of young forest and old growth. In our 2017 agreements, a dissent noted that Tier 2 harvest levels might cause goal interference with old growth restoration. The DEIS does

not identify a "ceiling" for goal interference between these needs, and Tier 2 harvest levels may already be above that ceiling, especially for some ecozones and levels of natural disturbance.

This recommendation is intended to address both tensions, while maintaining the same degree of project-level flexibility as in the current draft. Although individual projects would not be required to include priority treatments, half of the total regeneration harvest at Tier 2 would be priority treatments. Even if some projects result in a localized loss of compositional diversity, we could still be confident that the *program* of work will at least maintain compositional diversity. The recommendation also provides a justification for "extra" ESH: Resetting stands to correct species composition problems can be seen as accelerating their restoration to future old growth conditions that are characteristic for the particular site.

Note: The recommendation does not fully address the need to balance treatments between ecozones. If ecozones with fewer structural needs have more problems with species composition, this approach could delay progress toward restoring NRV (including old growth) for structure in those ecozones. However, as at the landscape level, the structural imbalance would be justified by improvements to species composition.

The recommendation is supported by old growth advocates, even with levels of harvest that may delay progress toward landscape- and ecozone-scale desired conditions for old growth, because "extra" acres will improve the ecological trajectories of treated stands. It is supported by wildlife advocates because it maintains flexibility and creates support for ambitious harvest levels that may arrest the decline of Early Successional Habitat (ESH) associates. It is supported by forest products advocates because it combines project-level flexibility with landscape-level certainty, which should limit project-level conflict and result in easier projects and more predictable outputs. And it is supported by ecological restoration advocates because it will support more restoration harvest, particularly in the EIA.

5. **Existing Old Growth and Patch Network**

Issue	Draft Plan Content	Recommended Plan Content
Initial Patch Network	Alt. B: 203,000 acres Alt. C: 256,000 acres Alt. D: 226,000 acres	We support the Alternative C Old Growth (OG) patch network. In addition, include all Group 3 and 4 MAs* in the designated patch network. Clarify that management activities otherwise allowed in Group 3 and 4 MAs are compatible with old growth management in the patch network; in other words, restoration activities and open area management generally otherwise allowed in those MAs can take place within Old Growth.
Whether to add newly found old growth to the patch network	Alt. B: Additional old growth "may" be added during implementation. Alt. C: No additional old growth will be added during implementation. Alt. D: Additional old growth "may" be added if it meets specified conditions.	Use a "cap" and "trade" approach. In order to add OG to the patch network, we would remove acres elsewhere into the suitable base. The "cap" is the initial OG network described above. Include direction to identify whether a stand is old growth during the initial stand exam, using the George Washington National Forest protocols or a collaboratively developed protocol for our Forest. Assuming that the OG network is the same as described above, patches could be traded to improve the quality of the network (using the criteria of representativeness, distribution, and localized benefits to species).

*Group 3 and 4 Management Areas include Special Interest Area, Backcountry, Recommended Wilderness (RW), Wilderness Study Area (WSA), Wilderness, and Research Natural Area (RNA).

There has been generally strong consensus in the Partnership around protecting existing old growth as a way to smooth project implementation. A cogent strategy to protect old growth gives conservation stakeholders the freedom to support projects that otherwise might be seen as a threat. Because the forest is aging, however, there has also been a concern that a standard allowing designation of newly found old growth may result in an ever-shrinking suitable base.

This recommendation would combine the flexibility in Alternative B to add old growth to the system with the certainty in Alternative C regarding the upper limit of the patch network's size. Certainty would benefit both forest products and old growth advocates. This recommendation would also provide the flexibility to add old growth as we find it to improve the quality of the network. We would add existing old growth while trading out or trimming lower quality patches elsewhere. To be eligible to "trade" out of the old growth network, a patch must be located in a Group 1 MA, so that it would be available for harvest in the same or a future project. In other words, it would not be possible to add an old growth patch in the Matrix MA and remove a patch in the Backcountry MA, because the Backcountry patch would still not be available for harvest.

The plan should clarify that not adding a patch to the network does not mean that it should be regenerated. It merely means that it remains available for treatment in the future, consistent with the relevant MA-level requirements. Similarly, the plan should clarify that adding a patch to the network does not mean that there is no need for management. Treatment may be prescribed in a newly added patch to maintain or restore the stand's old growth characteristics or to benefit Species of Conservation Concern (SCC), for example.

As recommended here, the initial patch network would include Group 3 and 4 MAs, with clear plan direction that old growth management in these MAs is intended to be consistent with (not more restrictive than) MA-level direction. This is needed to prevent the scenario where old growth is added in backcountry or other similar MAs, and removed in Matrix or Interface where it could be harvested, which would not reduce project level conflict. Because the initial patch network would include portions of the "old growth trending landscape," it would be larger on paper, but not at the expense of any flexibility to do active management.

It is important that we know whether stands in a project qualify as old growth as soon as possible so that we can make decisions about "trades" before investing staff time unnecessarily. Old growth conditions should be assessed during initial stand exams, following the George Washington National Forest's protocols (the most up-to-date in Region 8) or collaboratively developed protocols locally for our Forest.

In addition to reducing project level conflict and ensuring project success, this recommendation would also result in a higher quality old growth patch network. There would not be an incentive to add low quality patches to the network because existing patches would be traded out to make room for the new ones.

6. **Natural Heritage Natural Areas**

Issue	Draft Plan Content	Recommended Plan Content
Inclusion of NHNAs in SIA & EIA	Most "exceptional" NHNAs are included in SIA, although not necessarily in their entirety Alt. B: 68,765 acres of NHNAs in Group 1 MAs Alt. C: 34,383 acres of NHNAs in Group 1 MAs Alt. D: 67,567 acres of NHNAs in Group 1 MAs	"Exceptional" NHNAs to Special Interest Area "Very High" and "High" should not be mapped as "suitable": If within Matrix or Interface move to Ecological Interest Area; if within EIA, AT, WSR, or Group 3 or 4 MAs, they stay in those management areas. Natural Area boundaries should be field-verified at the project level. Bad boundaries may be corrected with administrative plan changes, which are the easiest way to change the plan. Other MA boundary adjustments would require project-level plan amendments. In either case, field verification would be conducted first.
Standards and Guides for NHNAs	Desired condition that "Unique ecological characteristics are maintained or enhanced." Standard to "coordinate" with NHP.	Clarify the draft desired condition to explain that the NHNA's "unique ecological characteristics" to be maintained or restored include not only element occurrences, but also exemplary natural communities as described by the NHP. Add standards (1) that coordination with NHP must occur before any stands in NHNAs are prescribed for treatment, (2) include field work to verify appropriate boundaries and (3) that

		coordination is intended to determine how best to maintain the rare and unique ecological characteristics of the NHNA.

This recommendation is intended to prevent project-level conflict around NHNAs. The Partnership recognizes that NHNAs are collectively among the most important areas on the NPNF for the maintenance and restoration of biodiversity and ecological integrity. However, we also recognize that portions of some NHNAs may be appropriate for timber harvest for at least two reasons. First, some NHNAs may need management in order to maintain their biological values. Second, portions of some NHNAs may not actually provide any rare or unique biological values because of incorrectly mapped boundaries or because portions have been harvested since they were originally mapped.

Our recommendation is meant to address concerns that Natural Areas in Matrix or Interface could be scheduled for regeneration harvest without adequate consideration for their rare or unique values. This recommendation would leave a flexible toolbox to achieve the draft desired conditions that these areas be managed for those rare and unique values.

MA boundaries for NHNAs should be subject to confirmation at the project level. If ground-level investigation reveals that a boundary was improperly marked (i.e., does not represent the values for which the area was identified and described) or that subsequent management has degraded those values, then it should be adjusted. For boundaries that were initially marked poorly, they should be corrected with an administrative plan change (the easiest way to change the plan). For boundaries that require adjustment for other reasons, such as because the Natural Area's values have been degraded, correction should be made using a project-level plan amendment to consider whether such degradation requires mitigation or should be offset by a change in management direction for other similar habitat. Any such boundary adjustments should be made in coordination with the Natural Heritage Program.

The Partnership supports the Forest Service's commitment to coordinate regularly with the Natural Heritage Program. However, this standard needs further clarification. First, coordination with NHP regarding boundaries or treatment needs must occur *before* stands within NHNAs are prescribed for management. Second, coordination with NHP must explicitly incorporate the Desired Condition to maintain or enhance the NHNA's unique or rare ecological characteristics.

As compared to Alternative C, the changes recommended here would shift about 13,000 acres of commercially viable forest from "suitable" to unsuitable management. However, while these acres are suitable on paper, regeneration would seldom be consistent with the desired condition to maintain or enhance their unique ecological characteristics. It would be

inefficient to prescribe these areas for regeneration only to remove them from a project after conflict erupts.

Our recommendation would allow harvest in NHNAs to the greatest extent compatible with the draft desired conditions, while avoiding unnecessary conflict and wasted resources where harvest is not compatible.

7. **Management Area Allocations***

MA	Draft Plan Content (acres)			Recommended Plan Content	Land Potentially Operable and Commercially Viable for Timber Harvest
	Alt B	Alt C	Alt D		
Matrix & Interface	621,000	496,000	618,000	501,646	193,066
Ecological Interest	0	79,550	26,000	68,890	24,896
Backcountry	87,697	229,011	107,065	159,405	18,131
Recommended Wilderness**	126,333	11,193	74,173	102,840	6,586***
Recommended National Scenic Area (excludes embedded wilderness)	0	0	0	6,464	2,015
All Other Management Areas	208,028	227,304	217,820	208,813	15,388

* Note: This summary does not include the shifts associated with re-mapping very high and high NHNAs.

**National Wild Turkey Federation can only support Recommended Wilderness designations that its local membership supports.

***The majority of these acres are in Craggy/Big Ivy and Unicoi Mountain.

This recommendation recognizes the following:

● The Partnership supports these land allocations in management areas not suitable for timber production because we also support commercial utilization of lands in the suitable base. We support suitable lands having rotational harvest. For that reason we

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support the Forest Service's desired condition that "Locally, young forest patch size will frequently exceed average natural disturbance gap size to provide for habitat diversity and benefit wildlife, and to facilitate restoration operations and financial considerations."

- Land allocations should leave room to meet stretch goals for all members' interests, from young forest to wilderness. The DEIS shows that any of the Draft Alternatives would leave adequate room to meet Tier 2 objectives. Any changes that we recommend to the Draft Alternatives should not upset this overall balance as our recommended changes are within the range of alternatives analyzed.

- Allocations are not just about maximizing flexibility or maximizing protection. Good allocations should tailor the management direction for different areas to guide the development of good projects, in which recommended work is likely to make it into a final decision and be implemented in an efficient manner.

- The EIA should be retained because it provides a framework to maximize restoration of forest structure and protection of existing ecological values in areas with relatively high ecological integrity. In our 2017 agreements, some members did not support the development of an EIA due to a concern that it would delay the planning process. Now that the work has been done, the Partnership supports the EIA. However, we encourage the Forest Service to actively look for opportunities for harvest in the EIA.

As in 2017, the biggest "allocations" question in terms of acreage is how to deal with the portions of Wilderness Inventory Areas (WIAs) that are not legally protected and are not otherwise addressed in our old growth and NHNA recommendations. WIAs are generally unroaded areas with no public motorized access. Familiar examples include areas like Daniel Ridge/Farlow Gap and Chunky Gal Mountain. These areas *currently* provide backcountry settings and have relatively high ecological integrity. On the other hand, they *could* be developed with road systems for scheduled timber harvest, and portions of some of them (e.g., Tellico Bald, Pigeon River Gorge) have been degraded by prior land uses and could benefit from active ecological restoration. These areas could theoretically be allocated to a wide variety of MAs, from Matrix to Recommended Wilderness. Alternative C largely allocates these areas to Backcountry or Ecological Interest Area, but Alternative B includes about 106,800 acres of WIAs (outside of old growth and NHNAs) to "suitable" MAs.

The mapping in Alternative C is closest to the Partnership's previous spatial recommendations. However, some Partnership members expressed a preference for Alternative B's allocations, because it has the most acreage in management areas suitable for timber production. In this recommendation, we are recommending a map that blends Alternatives B and C with some components of Alternative D. Our recommended allocations include more Recommended Wilderness than Alternative C, but not as much as Alternative

B. They also include more acres open to timber production than Alternative C, but not as much as Alternative B. And they include more Backcountry than Alternative B, but not as much as Alternative C. Examples of changes are noted below. Management Area boundaries can be found in the attached shapefile.

Group 1 MAs (Matrix and Interface)

Our recommended allocations include 501,646 acres in Group 1 MAs. As compared to 495,912 in Alternative C:

○ An 11,449-acre increase in suitable acres, with 10,216-acres from the following WIAs: Pigeon River (~1,871 acres Backcountry and 229 acres of EIA to Matrix), South Mills (811 acres Backcountry to Matrix), Cedar Rock Mountain (1,029 acres EIA to Interface), Steels Creek (1,673 acres EIA to Matrix), Boteler Peak (1,306 acres EIA to Matrix), Tellico Bald (913 acres of EIA and Backcountry to Matrix), Lickstone Ridge (787 acres EIA to Matrix), and Piercy Bald (1,597 acres EIA and Backcountry to Matrix and Interface).

○ A 3,281-acre decrease in suitable acres would come from the Craggy Mountains (1,079 acres in Shope Creek and the headwaters of Ox Creek from Matrix to Recommended NSA) and Panthertown Valley (2,132 acres of Matrix to EIA).

○ Minor differences also occur in numerous other locations.

EIA

Our recommended allocations include 68,890 acres in EIA. As compared to 79,550 acres in Alternative C:

○ A 6,344-acre increase in EIA comes from Backcountry: South Mills (239 acres Backcountry to EIA), Laurel Mountain (744 acres Backcountry to EIA), Upper Wilson Creek (1,289 acres Backcountry to EIA), and Steels Creek (4,072 acres Backcountry to EIA).

○ A 2,132-acre increase in EIA would come from Matrix in the Panthertown Complex.

○ A 11,993-acre decrease in EIA would come from a shift to recommended designations: the Unicoi Mountain WIA (2,491 acres EIA to Recommended Wilderness), the S. Nantahala Extensions (221 acres EIA to Recommended Wilderness), and Craggy Mountains (4,640 acres EIA to Recommended NSA, and 4,862 acres to Craggy Mountain Wilderness).

○ A further 9,574-acre decrease in EIA would come from a shift to Group 1 MAs with some of the larger examples being Steels Creek (1,673 acres EIA to Matrix), Boteler

Peak (1,310 acres EIA to Group 1), Tellico Bald (815acres EIA to Group 1), South Mills River (811 acres EIA to Group 1), Piercy Bald (1,597 acres EIA to Group 1), and numerous smaller changes in other locations.

Backcountry

Our recommended allocations include 159,405 acres in Backcountry—more than Alternative B but significantly less than Alternative C. As compared to Alternative C:

- Backcountry acres move to:
  - Group 1: Pigeon River (~1,871 acres)

  - EIA: South Mills (1,040 acres), Laurel Mountain (744 acres), Upper Wilson Creek (1,289 acres), Steels Creek (4,127 acres),

  - Recommended Wilderness (see below)

Recommended Wilderness*

Compared to Alternative B, our recommendation includes less recommended wilderness. Alternative B recommends 126,333 acres for wilderness, and our alternative recommends 102,840 acres for wilderness, with an additional 6,439 acres in the Craggy Mountains National Scenic Area (see areas referenced in Section 5).

Compared to Alternative C, our recommended allocations include more recommended wilderness. Alternative C recommends only 11,193 acres as wilderness. Although our recommendation would increase the acreage of recommended wilderness in Alternative C by 91,647 acres, it would not impair our ability to meet Tier 2 goals. Most of the recommended wilderness is allocated to the Backcountry MA in Alternative C. Only three areas would include acres that could otherwise contribute to habitat and timber objectives in Alternative C (11,547 total acres).

Area	County	Δ Acres	Alt. C MA	Recommendation
Unicoi	Cherokee	2,491	EIA	RW
S. Nant. Ext.	Macon	221	EIA	RW
Craggy	Buncombe	4,640	EIA	RNSA
		1,079	Matrix	RNSA

Of these, only the change for the Unicoi Mountains creates a substantial tension with local needs. The designation in Buncombe County is strongly supported locally, and the change in allocations for Macon County is very small. In order to address the tension around Unicoi Mountains, we recommend that the area be deferred as a Tier 2 wilderness recommendation. The Partnership would not support designation of this recommended area until we meet specified needs for young forest and timber in the surrounding area and at the landscape scale. (See Section 5 for details.)

*National Wild Turkey Federation can only support Recommended Wilderness designations that its local membership supports.
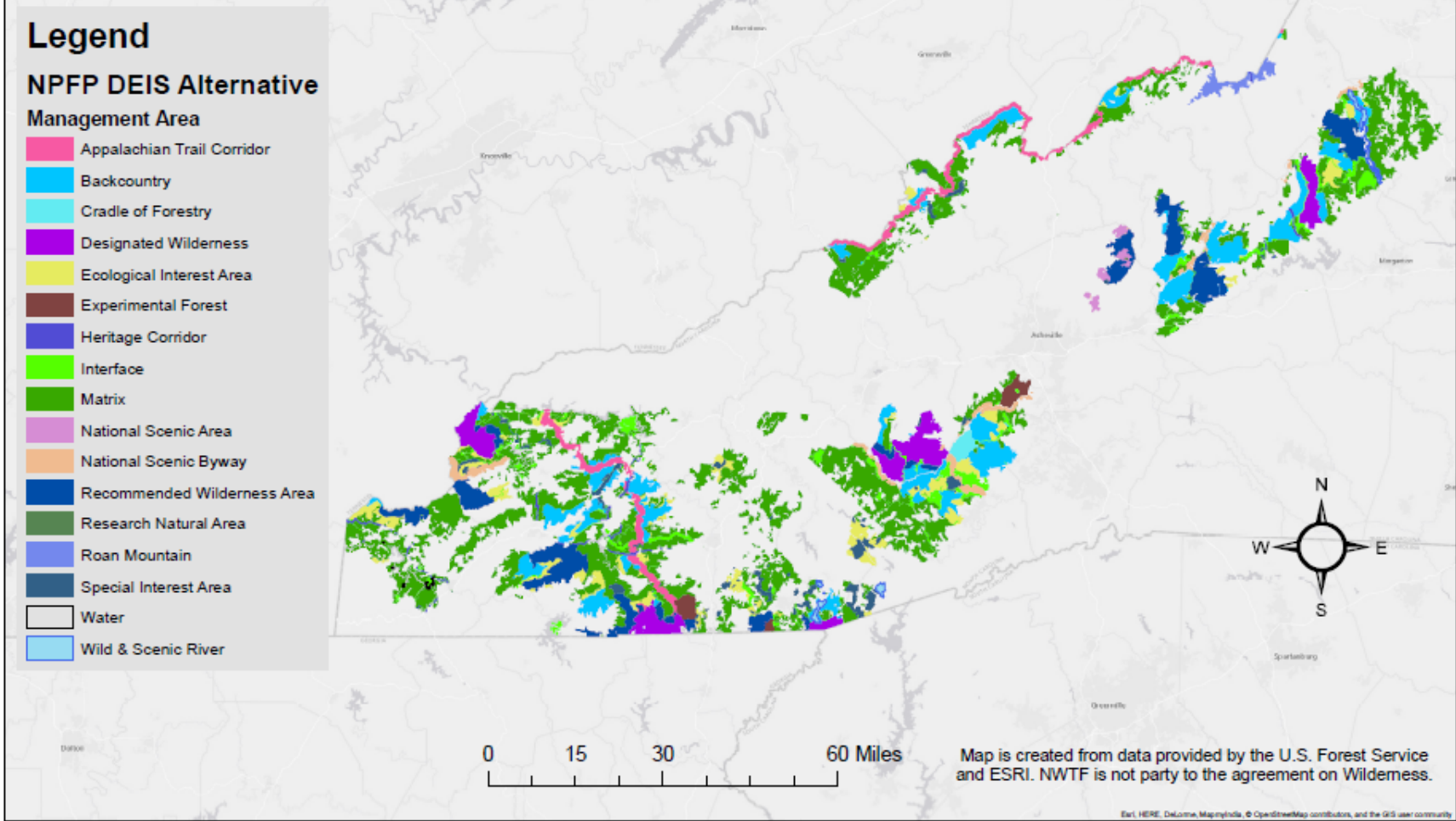
*GIS map files attached.

8. **Geographic Distribution and Flow of Forest Products**

Issue	Draft Plan Content	Recommended Plan Content
FSC Certification	Draft does not support FSC Certification because it deviates from requirements with respect to old growth, Streamside Zones, NHNAs.	Include an objective or other plan commitment to pursue FSC certification and assure that all plan components do not interfere with forest certification standards as written FSC-US Forest Management Standard (v 1.1) https://us.fsc.org/preview.fsc-std-usa-v1-1-2018.a-716.pdf Other recommendations throughout are expected to meet or exceed FSC requirements.
Stewardship Contracting and Agreements	N/A	New management approach describing the use of stewardship contracts and agreements to support pursuit of restoration opportunities across watersheds and between projects over time.
Harvest Unit Size	40-acre limit generally; 80-acre limit for SLP; 80-acre limit for off-site pine. Exceeding these limits requires Regional Forester approval and 60-day notice and comment.	Clarify plan standard limiting unit size. Harvest up to 80 acres should be allowed if necessary to accomplish stand-level goals to improve composition—e.g., to remove a seed source or to make the restoration treatment economically viable. This exception should be limited to the list of priority treatments (condition-based objectives).

Harvesting System	Echoes the NFMA requirement that harvesting systems not be chosen primarily to provide the greatest dollar return.	Clarify that this is a legal requirement but will not be limiting here because the harvesting systems have been selected and scheduled at the plan level primarily to meet other needs. Project-level selection of harvesting systems will be consistent with MA direction (e.g., to create ESH in Matrix or restore composition in EIA).
Project Selection & scaling forestwide objectives	N/A: the Draft does not provide guidance on the temporal and spatial distribution of project activities	Select project areas using HUC-12 watersheds, which can be enlarged if needed (e.g., due to resource needs or access considerations). Use GA-level assessment to inform watershed-level needs and priorities for all resources (interdisciplinary), taking into account the all-lands context. Consider using programmatic or landscape-scale projects to address needs that cannot be efficiently addressed in successive watershed-scale projects.

Encourage interdisciplinary projects that address multiple interests' needs within a given analysis area. |
| Local Harvest Objectives Needed to Earn Wilderness Support | No relevant Draft Plan content. | No additional plan content needed. We are sharing an external Partnership agreement that includes local harvest targets for some areas that will be met in order to earn support for designation(s) in that area. |

These recommendations, taken together, are intended to help ensure that timber harvests are more predictable, and that they are well distributed both temporally and spatially. The current draft does not include components to determine how much harvest is needed or allowed in any given analysis area, presumably because the Forest Service wants to be able to take advantage of opportunities where they are found rather than trying to do too much in an area with little opportunity or being constrained to do less in an area with greater opportunity. Although flexibility is important, predictable and broadly distributed harvests are important for both local economies and wildlife needs.

FSC certification is the global leader in forest stewardship. The goals and objectives surrounding their forest management are sustainable and should be adopted as our threshold. We are not committing to accepting their indicators as the finish line, but rather the start. This standard will assure necessary conversations are had around water objectives, old growth, natural heritage areas, and other special places in the forest. This Forestwide Objective will enhance forest resilience while not limiting other important values.

The ability of timber to "pay its way out of the woods" is often a hurdle to developing broadly supported projects. FSC Certification is one mechanism to provide forest product industry incentive to purchase products within projects from Forest Service timber sales. Increasing the demand for the forest products is expected to give the Forest Service more flexibility to pursue priority treatments. Similarly, relaxing the harvest unit size limitation is expected to provide more flexibility by lowering the cost-to-value ratio for priority treatments.

Stewardship contracting is recommended here as a good way to allow for project-level flexibility while also facilitating a shift toward priority treatments over time. Using this authority, excess receipts from one project can seed a project that might otherwise not break even. Stewardship contracts and agreements are expected to help us meet objectives for priority treatments (see "condition-based objectives," above). At Tier 2, priority treatments should make up ½ of all regeneration harvests. At Tier 1, however, this target is only ¼ of all harvest, so that greater receipts can help to "jump start" work under the new plan.

Relatedly, clarification of the "greatest dollar return" standard is intended to ensure that project developers can consider the economics of timber sales thoughtfully and transparently, including the balance of commercially valuable stands and priority treatments within a single project and over the course of many projects.

We also recommend that the Forest Service describe its expected project selection process.

- We recommend that the Forest Service use the HUC-12 watersheds, with flexibility to adjust analysis area boundaries because of resource needs or access considerations. A comprehensive watershed-level assessment of needs remains important for at least

two reasons: distributing project activities broadly and identifying management needs that might otherwise be overlooked, such as needs for recreation, control of NNIS, decisions about the road network, etc.

- We also recommend the Forest Service use the GA-level assessment completed during plan analysis to complement the HUC-12 approach. We note that the Draft Plan does not contain prescriptive guidelines for how much harvest is "needed" in any particular analysis area, no matter what scale. NRV is the foundation for harvest "need" in the plan, but it cannot reliably be applied to areas less than about 100,000 acres. GAs are approximately 100,000 acres in size and represent the minimum size units for meaningful NRV analysis. To step down the forestwide harvest objectives to the project level, we recommend using the GA-level analysis to assess departure from NRV and to identify the most common opportunities for priority treatments. GAs are also a better scale to make decisions about prescribed burning. The need for action in a particular watershed should be determined by reference to this GA-level assessment, taking into account the all-lands context to the extent such information is available. GA-level analysis/assessment should be included in the FEIS for the Plan.

- We recommend that the Forest Service consider programmatic or broader scale analyses for objectives that do not have a strong relationship to the GA or watershed scales. For example, spruce-fir restoration might be better approached through the landscape lens, including cross-boundary and cross-jurisdictional analysis of the best places to prioritize limited resources.

Finally, we are sharing an external agreement of the Partnership to ensure that project activities are occurring at agreed-upon levels in specific areas before supporting wilderness designations in those areas. (See Section 5 for details.)

9. Roads, Soil, and Water

Issue	Draft Plan Content	Recommended Plan Content
Water quality impacts from roads	There is a desired condition that the road system be sustainable. Moving from Tier 1 to Tier 2 levels of harvest involves expanding the road system further. Road system expansion is emphasized in the Matrix and Interface MAs. There are no limits on road density in any MA. There are no forestwide limits on the total extent of the road system. Objective to complete TAP within 3 years.	We recommend that basic road maintenance levels are set such that the backlog is not increasing. Include a Tier 1 objective that the road maintenance backlog be reduced so that at least 25% of all system roads can be maintained to standard, and a Tier 2 objective that increases to 50%. This requirement should apply at the District level. Create a "road bank" in which new miles may be added to the system after demonstrating incremental progress toward meeting sustainability goals. E.g., a certain number of miles are available for each 10% reduction in the road maintenance backlog. Create a new Objective for developing a Sustainability Inventory for the road network. Transportation analysis should create a risk assessment of roads that could be used for both ranking roads for maintenance and for the sustainability inventory. Include specific timelines for gathering information, as well as criteria for assessing risk/need, in preparation for TAP. Criteria should incorporate any GA-specific needs for access (e.g., EMS, lakeshore, etc.). Temporary roads must be decommissioned when no longer needed *"for the purpose for which it was constructed."* Temporary stream crossings must be completely removed (TA-S-08).

		New Standard: Roads shall not be constructed through rare communities or designated old growth patches unless there is no feasible alternative and are approved by the Forest Supervisor.
Aquatic Organism Passage and culverts		100% of stream crossings on newly constructed or reconstructed roads must be passable by the relevant aquatic organisms, based on stream size or biotic survey. All stream crossings, including culverts, should be right sized, in light of probable effects of climate change for storm intensity.
Daylighting	Tier 1: 2 miles annually Tier 2: 5 miles annually	New Guideline: Daylighting should not occur in streamside zones or relevant ecozones (cove forests) within areas important for rare salamander core habitat or connectivity.
Steep slopes and long-term soil productivity	ECO-S-6: Site specific review to determine harvest system for sustained slopes (>200') over 40%. SLS-S-2: Allows "substantial impairment" of up to 15% of the activity area, regardless of slope.	Revise Standard ECO-S-06: Cable logging shall be used for management on sustained slopes (>200ft) over 40% slope to guard against erosion and landslides unless site-specific analysis determines that other logging methods meet soil and water protection standards. Distance from bodies of water should be considered as a part of this analysis. In no case will "stacked" skid roads or trails be constructed on steep slopes. Recommended logging methods should be outlined in the project's environmental review documents.

	SLS-G-2: "minimum amount of soil should be exposed at any given time"	
Streamside Zones	Desired Condition that says: "Emphasize the protection of all stream channels. Protect the integrity of perennial, intermittent, and ephemeral stream channels including their bed and banks." SZ = 100' from perennial streams, 15' from intermittent streams. Within SZ, management must contribute to ecosystem restoration and not compromise aquatic system and riparian structure and function (except short term impacts for long term improvements)	All agree that the SZ Standard 2 should be changed to provide better protection for SZs. We recommend replacing the phrase "unless satisfactory mitigation measures have been designed" with the FSC language "except for designated stream crossings or when placement of disturbance-prone activities outside of the SZ would result in more environmental disturbance than placing such activities within the SZ." There are two proposals that could not be reconciled into one agreement and we are sharing both to present a range of agreement. Proposal 1: Draft Plan language for perennial waterbodies. Change intermittent SZs from 15 to 50 feet. Add 25 feet SZs for channeled ephemerals like neighboring Forest plans' provide. Proposal 2: Replace the Draft Plan language with the Appalachia Region Forest Stewardship Council SMZs. Could also include very basic setbacks for channeled ephemerals based on the West Virginia BMP manual. (See detail below.)

	State BMPs apply within 50 feet of both perennial and intermittent streams. No SZ or buffer for ephemeral streams. Standard that says: "Avoid ground disturbing activities, such as skid roads and trails, temporary or permanent roads, log landings and loading areas, and waste disposal sites within streamside zones, unless satisfactory mitigation measures have been designed."	Reach out to user organizations at the project level when work within the SZs has the potential to impact trails.
Highly Erodible Soils	Vegetation management activities, road and trail design shall be screened for the presence of highly erodible soils. If present, location and design measures shall be provided to reduce erosion potential and effects to natural resources.	Recommend adding a sentence at the end that says: "During planning of roads, trails, and other infrastructure not associated with vegetation management activities, first attempt to avoid highly erodible soils. If avoidance is not possible, design additional measures to limit erosion and sedimentation both during and after construction."

This set of recommendations is designed to address the tensions between ground disturbing activities (harvest and roads) and the protection of soil and water.

System Roads: The road system is the single greatest source of water pollution on the Forest, and the road maintenance backlog is our best proxy for risk to waters. To address sedimentation, we recommend requiring modest progress toward reducing the maintenance backlog for the road system. New roads could be added as the maintenance backlog for

existing roads is reduced. Progress toward reducing the backlog could be enhanced by additional funding (e.g., stimulus bill, WRC contributions, partner agreements, etc.), by reducing the cost of the road system (decommissioning, downgrading, or relocating roads), or by improving information about the needed maintenance schedule for roads through TAP, condition surveys, and "triaging" work on the right roads using existing budgets.

In addition, this recommendation would ensure that forest roads do not require Clean Water Act permits because they would meet requirements for aquatic organism passage (see 40 CFR 232.3(c)(6)(vii)). Aquatic passage would be provided for the relevant species in a particular stream. Culverts would be right sized in light of increased storm intensity due to climate change.

Temporary Roads: Temporary roads would be physically decommissioned after serving the need for which they were constructed, and stream crossings must be removed entirely. Road prisms should not be reused successively as temporary roads; instead, if re-use is needed, the road should be placed on the system (e.g., as a road in "storage" between entries). These standards are needed to prevent the proliferation of temporary roads as a way to avoid limits on system roads.

Daylighting: The draft objectives for daylighting will contribute to creation of young forest conditions. The Partnership supports this approach, provided that daylighting does not occur in riparian areas or cove forests within areas that are important to core habitat or connectivity for salamanders. These areas have been modeled and mapped by NGOs.

Streamside Zones: Despite much discussion over several months, members could not come to consensus on one recommendation for streamside zones in the Forest Plan. There are two proposals and we share them to demonstrate the range of agreement that we have reached.

Proposal 1: Leave the 100' of functional riparian buffer on either side of perennial streams and springs, ponds, reservoirs, bogs and wetlands unchanged from the Draft Plan. Also provide functional riparian buffer with identical language as that of the perennial SZs for 50' on each side of intermittent streams. Provide SZs for 25 feet on each side of a channeled ephemeral stream, including 25 feet upstream for the point at which the scoured channel begins (the "nick point"), using language similar to that of neighboring Forest Plans, including the Cherokee and Jefferson NFs.

Proposal 2: Replace the entire SZ-S-01 and SZ-S-02 with the Appalachia Region FSC SMZ Standards. These include functional riparian buffers with limited amounts of harvest on a sliding scale based on slope for perennial and intermittent streams. Perennial streams have a more protective inner buffer of 25' with outer buffers varying by slope. The total of inner and outer buffers for perennial streams ranges from 80'-165', depending on slope. Intermittent stream buffers range from 40'-80', depending on slope. Harvest in the outer buffer on

perennial streams and the entire buffer on intermittent streams can take up to 50% of the canopy using single-tree and group selection. Limited channel protections from the ground-disturbing activities within 25' of ephemeral streams could be provided based on the guidelines in the West Virginia forestry BMP manual.

While the FSC standards in most instances provide wider SZs, the fact that limited harvest is allowed, even to some extent in the inner buffer on perennials that are not classified high quality waters, made Proposal 2 unacceptable to some members. Likewise, while Proposal 1 limits the widths of perennial and intermittent SZs in most instances, the addition of the ephemeral SZs and the fact that there is very limited harvest potential in the SZs, made Proposal 1 unacceptable to some members.

10. Special Use Permits (SUP)

Issue	Draft Plan Content	Recommended Plan Content (See page 95, LSU-S-05 and Guidelines)
Guide Services: Assisting individuals and small businesses with obtaining Special Use Permits (SUPs) for Guide Services (e.g. fishing, hunting, hiking, canoeing/ kayaking), particularly in parts of the forest where few legal guides are currently available.	N/A	Additional Analysis: ● Using current monitoring data, identify categories of permits and localities (e.g. trails or rivers) expected to have only de minimis impact (no greater than ordinary use). New Guidelines: ● Develop and publish online a simplified guidance document fully explaining the application process for each guide permit category and any necessary guidelines to ensure the applicant is meeting the definition of de minimis impact. ● Develop a system for determining the total number of each type of guide permit available for a given locale (i.e. area or river). ● Commit to a reduced processing time for qualified applications that meet de minimis impact in locales with available permits. ● Publish current list of available permits by category and GA online to help applicants identify locations that have permits available and reduced permitting times. ● Review and update the online listing of active guide permit holders annually. Monitoring and Adaptive Management: ● Validate whether approved SUPs are in fact having only de minimis impact; supplement analysis and restrict categories, adjust number of permits and identify areas to pre-approve additional guide permits as needed.

Recreation Event Permits: Addressing concerns related to resource damage and user conflicts associated with SUPs for recreation events. Encouraging recreation events in underutilized areas.	N/A	New Guidelines: ● Require two weeks' public notice by signage at all trail heads and developed recreation areas for special use permit recreation and education events. ● Develop guidelines for - and require - performance bonds (i.e. damage deposits) to be paid at the time of the permit application when there is a possibility of damage to the trail system due to the permitted event. ● Develop and implement a plan for incentivizing groups to choose to host recreation events in GAs that are currently under-utilized. Monitoring and Adaptive Management: ● Develop and implement a monitoring protocol for determining negative impacts to trail systems and facilities as a result of a special event.

One major intent of this recommendation is to help distribute special use permits for both recreation events and small business guide services to areas of the Forest that are currently underutilized. Helping guide applicants to better understand the process and requirements for obtaining a special use permit and to identify areas where they are likely to be approved, should reduce delay and frustration. In addition, this will introduce new users to underutilized areas, creating economic benefits for the surrounding communities.

A second intent of this recommendation is to reduce user conflict and resource damage associated with Special Use Permit recreation events. Although the Code of Federal Regulations states that the request "does not unreasonably conflict or interfere with….authorized existing uses…," there is currently no uniform requirement in National Forests of NC to inform the public about a special event, nor is there any requirement to collect a bond or deposit in case of damage caused during the event.

11. Wild and Scenic Rivers

Issue	Draft Plan Content	Recommended Plan Content
Eligible Stream Recommendation	The Forest Service recognizes 9 Partnership-recommends additional streams as eligible for Wild and Scenic designation, bringing the total to 22 streams across the Forest. The Draft Plan does not find 12 streams eligible that were recommended by the 2017 NPFP Recommendation	The Partnership recommends that the North Fork of the French Broad River (6.5 miles); Panthertown Creek, Greenland Creek, and the East Fork of the Tuckasegee River (totally 8.6 miles); the East and West Forks of Overflow Creek (totaling 5 miles); and nine additional miles of Fires Creek, be found eligible for Wild and Scenic designation.
Eligible Stream Classification	Big Laurel and West Fork Pigeon are classified as Recreational. Overflow, Thompson, Whitewater are classified as Scenic.	Big Laurel and West Fork Pigeon should be classified as Scenic because they are not roadside, and visitors quickly and completely leave road corridors and experience a scenic landscape. This is especially true of the West Fork Pigeon which lacks even a riparian trail. Overflow, Thompson (below Hwy. 281), Whitewater (below private lands) should be classified as Wild because these streams have a wild remote character upon leaving the put in or trailhead. Whitewater River merits a Scenic classification from Silver Run Creek confluence to the private land tract, and a Wild classification starting just below

		private land tract (approx. 2,000 linear ft. above Democrat Creek confluence) to SC state line.
Chattooga River Management	WSR-S-31: Prohibits paddling the Chattooga River in NC April 1 – November 30 and on days not reaching 350cfs. WSR-S-32: Prohibits paddling on Chattooga tributaries. WSR-S-37: Requires all visitors stay on trails.	The Partnership recommends the removal of seasonal and flow based paddling limits, and removal of the paddling prohibition on tributaries which are on public lands with existing access. We request more explanation of the cross-country foot travel prohibition, and an updated monitoring plan reflective of these changes.

These recommendations are aimed at growing the roster of streams deemed eligible for Wild and Scenic designation in a manner that more accurately reflects the rivers' values and improving the management of a Wild and Scenic River to be more in line with monitoring results and river management policies and practices.

Eligibility Recommendations: Prior to this planning process, 104 miles on 11 major streams were deemed eligible for Wild and Scenic designation. Based on an assessment of the values of streams on the Forest, the Partnership recommended 20 additional streams be found eligible totaling 117 additional stream miles. The Draft Plan adopted roughly half of our recommendations: 9 rivers totaling 62 miles. Rather than reiterate our full original request, we discussed stream values again in the context of the Draft Plan and are seeking additional eligibility findings for 6 streams totaling 27 miles.

The streams we recommend are in several groupings. Three streams are in Panthertown Valley, an area recognized as a biological and recreational treasure in Ecological Interest Areas and Special Interest Areas, at the top of a watershed otherwise riddled with hydropower dams. The forks of Overflow are critical headwaters of the Chattooga Wild and Scenic River located in a Wilderness Study Area and Experimental Forest and contain many of the same values. Fires Creek is in an area underrepresented in river protections that is home to many dams and has special recreational and biological values that span many

Management Areas that vary by alternative. Lastly, the North Fork of the French Broad is a scenic whitewater paddling staple for Western North Carolina paddlers featuring iconic rapids, and it flows through Matrix and some Interface in all alternatives.

Chattooga River Management: Recreational management changes to the Chattooga River were not considered in the DEIS or Draft Plan, and management does not vary by alternative. Eight years of monitoring conducted since the management was updated in 2012 highlights opportunities and needs for change.

Monitoring has shown the seasonal paddling closure eliminates high quality paddling opportunities with no discernible benefit. This is the most important change to Chattooga River management for paddlers, and use across three reaches is expected to increase use from an average of 2 groups per year to 3 on the upper section, and from 10 groups per year to 20 on the next section downstream, the latter of which would require subsequent action from SC and GA Forests prior to implementation. The prohibition of floating at flows below 350cfs has no discernible benefit and a minor impact on paddlers. The Partnership recommends it be removed to reduce regulations. The Partnership recommends the prohibition of padding tributaries be removed, as there is no reason to prohibit paddling small tributaries to the Chattooga River on public lands, with existing access, and any such use would be extremely infrequent.

Requiring all recreationists to stay on trails in the WSR corridor effectively prohibits hunting, fishing, and other activities that require visitors to leave trails. There is no rationale provided for this highly unusual closure of 2,325 acres of Forest Service land to cross country foot travel. The Partnership requests this standard be explained prior to inclusion in the Final Plan.

Making these changes and addressing their minor effects in the FEIS would not require much work and would be well supported by all the available data.

12. Terrestrial Wildlife Habitat Considerations

Issue	Draft Plan Content	Recommended Plan Content and Additional Analysis
Total Habitat – Active Management	See Issue #1 50% of young forest from timber harvest in oak-dominated, northern hardwood, and rich coves. 50% of young forest in Wildlife Habitat Active Management Area (WHAMA)s "Range of sizes" of canopy openings depending on ecozone Guideline: Use irregular forest edges and vegetation transition to maximize structural diversity.	See Issue #1 (Tiered Objectives); Issue #4 (Condition-Based Objectives). To the extent that habitat management is needed or expected within unsuitable MAs, provide prescriptions to guide those projects—e.g., creation and maintenance of woodland habitat by thinning and prescribed fire.
Permanent or maintained openings	Tier 1 objective to maintain 3,750 acres of existing wildlife openings; Tier 2 objective to create 1,450 new acres (both decadal). Desired condition that openings be "within forested habitats" to ensure nesting and foraging habitats are close. They should also be >5	Add an Objective: "Develop an up-to-date inventory of wildlife openings and regularly maintain the 3750 acres of existing grass, forb and shrub openings. Strengthen communication and coordination between the United States Forest Service and the North Carolina Wildlife Resources

	acres, and 70% should be above 2,500' elevation.	Commission and others maintaining these open habitats such as partners in the Roan Mountain MA."

Develop a maintenance plan for permanent openings that can be used to determine which species will benefit from the specific habitat conditions. Based on this inventory and analysis, determine whether current objectives should be modified. |
| High-elevation birds | Desired condition: emphasis on young forests in montane oak ecosystems

Objective: 70% of young forest above 2,500 feet

Desired condition for Golden Winged Warbler (GWWA): open grassy and herbaceous areas with shrubby inclusions adjacent to mature forest.

Standard for grouse: Retain CWD at least 10" diameter and 10' long (drumming logs).

Guideline for multiple birds: manage open grassy areas to provide adjacent shrub/sapling habitat where practical

Guideline for GWWA: design management activities | For ruffed grouse, incorporate the Ruffed Grouse Conservation plan guidelines in project design. Grouse projects should create young forest above 3,500 feet elevation and will ideally include mesic sites dominated by mast producing overstory tree species. Where appropriate, include daylighting of roads between regenerating stands to provide movement corridors.

For Golden Winged Warblers, incorporate the GWWA International Working Group guidelines and target acres for management within WRC GWWA WHAMA. Design projects to ensure patch sizes are at least 5 acres in size and are located within two miles of an existing breeding territory. |

	between 2,500' and 3,000' to avoid colonization by BWWA	For both prescriptions, identify levels needed to meet long-range conservation goals for the species and track progress in the monitoring plan.
Elk	Ensure open forest restoration prescriptions provide elk habitat when located within occupied range or Elk WHAMA	The final plan should be more explicit about the long-term possibilities for expanding range and increasing herd size, taking into account connectivity barriers and efforts to mitigate them, as well as social factors. Elk habitat prescriptions should be designed to provide suitable forage and to assist elk movement into the desired future range.

| Salamanders (non-aquatic) | Ecozone desired conditions note presence of terrestrial salamanders.

See also Issue #5 (Old Growth). Old growth is noted to provide optimal habitat for some terrestrial salamanders.

Desired condition for "unfragmented interior forest conditions" without "edge" on 500,000-600,000 acres to support diversity, including terrestrial salamanders.

Desired condition for CWD as salamander habitat.

Standard for green salamander: Survey shaded rock outcrops for presence; 300 foot buffer; provide for connectivity and dispersal.

Desired condition: Roads do not contribute to migration stress of terrestrial salamanders; barriers mitigated where needed. | Provide standards or guidelines to ensure that "roads do not contribute to migration stress". To address this more explicitly, provide standards and guides on where and in what ecozones roads should receive extra consideration. NGO-mapped areas of core habitat and connectivity priority should be used to develop these standards or guidelines. |
|---|---|---|

Beaver	Standard: do not remove beaver or beaver dams except when needed to protect critical values. Trapping is allowed per WRC guidance.	The FS should work with WRC to refine trapping rules that limit removal of beavers from areas that would benefit from beaver activity. We also request that the FS collaborate with stakeholders and WRC to identify potential sites for beaver restoration or relocation projects to benefit aquatic habitats.

As explained elsewhere in this Section, we are recommending increases and clarifications in the levels of overall habitat management. We note that some species' needs, however, are not adequately taken care of by restoring NRV at the landscape and ecozone scales. For example, some species have elevation requirements; some species are range limited; and some species may need targeted efforts to expand their ranges. These needs will be difficult, if not impossible, to address at the project level. For example, are we creating enough quality habitat for ruffed grouse and Golden Winged Warbler? Are we avoiding fragmentation and restoring connectivity where needed to maintain resilient populations of salamanders? Are we helping elk reach the areas where they can find suitable habitat? These are the sorts of questions that require consideration across many projects over many years. For example, at the project level, we can ask whether a specific prescription will benefit grouse, but we cannot effectively ask whether we are creating enough quality habitat for grouse over time. That is a plan-level question.

We would like the final Plan to address these questions. The Partnership is very interested in helping to identify needs for specific habitat prescriptions. We also hope that the Forest Service will use the Spectrum model to confirm that our management area allocations are compatible with those needs. To the extent that active habitat work is needed in unsuitable management areas like Backcountry, we recommend developing prescriptions to accomplish that work. For example, where access is feasible within Backcountry, use thinning to provide open woodland forest condition by commercial or non-commercial means, followed by prescribed fire. One prescription that is working well in neighboring National Forests is non-commercial slashdown followed by prescribed fire. This is a strategy that is broadly supported by the Partnership at appropriate levels to meet restoration and habitat needs.

We also note that permanent openings can help to meet habitat needs even before harvest levels have caught up. To the extent it is within the capabilities of the Forest Service and partners, we recommend that the Forest Service consider increasing objectives for

maintenance and creation of wildlife openings. We also recommend that the Forest Service complete an inventory of current openings as a critical first step and explain how permanent openings will contribute to overall habitat needs. Additionally, we recommend that the Forest Service coordinate closely with WRC and stakeholders in the inventory, monitoring and maintenance of these openings.

Section 2: Economic Development

Public lands management can be seen as asset management. It is the responsibility of the Forest Service, as well as the public, to ensure that the value of the Nantahala Pisgah National Forest, as assets, is retained and enhanced over time through prudent observation of the economic impacts resulting from various activities and stewardship efforts across the Forest.

We recommend the Forest Service regularly monitor and assess publicly available government, user group, and industry data in order to assess the Return on Investment (ROI) of Forest Service resources for various activities and stewardship efforts across the Forest. This includes, but is not limited to, the economic impact of various active uses of these lands (recreation, timber), the costs of mitigation afforded by CO_2 utilization and clean and abundant water (climate), WNC outdoor and climate industry clusters (Collider/Outdoor Gear Builders), and the benefits that access to the Forest is lending to local and regional social determinants of health.

It is not the intention of this recommendation to request that the USFS undertake the task of performing all of the research necessary to accumulate such data. There is an expectation that the Forest Service will continue to remain in contact with collaborative partners and stakeholders in recreation, forest products, conservation, healthcare, tourism, economic development and local governments, thus providing the opportunity to retain access to data as it is commissioned and compiled by these various organizations. The importance of observing various activities is illustrated in the monumental economic impacts the various uses of National Forest lands have on the WNC region. This is illustrated in the following three graphs[1].

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[1]These graphs were generated by using the data found in the following studies:

North Carolina Economic Impact Study. American Horse Council, 2018, www.horsecouncil.org/product/north-carolina-economic-impact-study/.

Maples, James N, and Michael J Bradley. "Economic Impact of Non-Commercial Paddling and Preliminary Economic Impact Estimates of Commercial Paddling in the Nantahala and Pisgah National Forests." *Nantahala-Pisgah Economic Reports*, Outdoor Alliance, 5 Aug. 2017, www.outdooralliance.org/nantahalapisgah-economic-reports.

Maples, James N, and Michael J Bradley. "Economic Impact of Rock Climbing in the Nantahala and Pisgah National Forests." *Nantahala-Pisgah Economic Reports*, Outdoor Alliance, 5 Aug. 2017, www.outdooralliance.org/nantahalapisgah-economic-reports.

Maples, James N, and Michael J Bradley. "Economic Impact of Mountain Biking in the Nantahala and Pisgah National Forests." *Nantahala-Pisgah Economic Reports*, Outdoor Alliance, 5 Aug. 2017, www.outdooralliance.org/nantahalapisgah-economic-reports.

Duda, Mark Damian. "Mountain Trout Fishing: Economic Impacts on and Contributions to North Carolina's Economy ." *NC Trout Economic Report 2015*, North Carolina Wildlife Resources Commission, 2015, https://www.ncwildlife.org/Portals/0/Fishing/documents/Mountain%20Trout%20Fishing%20Economic%20Impacts%20on%20and%20Contributions%20to%20North%20Carolinas%20Economy.pdf.

FT JOBS FROM FISHING, PADDLING, MOUNTAIN BIKING, ROCK CLIMBING, & TIMBER ACTIVITIES ON NPNF LANDS (3,344 TOTAL)

- Timber, 5
- Fishing, 2,325
- Mountain Biking, 365
- Rock Climbing, 168
- Paddling, 481

Labor Income Generated by Fishing, Paddling, Mountain Biking, Rock Climbing, and Timber Activities on NPNF Lands

- Timber, $0.24
- Fishing, $82.55
- Mountain Biking, $9.08
- Rock Climbing, $4.08
- Paddling, $11.01

MILLIONS

Total Economic Output from Fishing, Mountain Biking, Rock Climbing, and Paddling Activities on NPNF Lands in Millions

Timber — Timber $1.17

Fishing — Fishing $244.04

Mountain Biking — Mountain Biking $24.87

Rock Climbing — Rock Climbing $11.57

Paddling — Paddling $8.36

$0.00 $100.00 $200.00 $300.00 MILLIONS

It is important to note that the graphs above are not representative of the full scope of economic impact resulting from various uses of Nantahala Pisgah National Forest lands. Regional level data was not available for recreational horseback riding, wildlife hunting and observation, or the economic impact of special places such as Wilderness Areas and historical sites. Economic impact from the climate industry cluster and climate change mitigation resulting from federally owned lands in WNC was not at hand at the writing of this document. Some data was available for clean and abundant water coming from the Forest, yet further processing of it is needed to determine the economic value of providing drinking water to surrounding towns and cities. Yet, each of these activities is creating a positive net effect on the economy across the region. State level and comparative data lends broad insight into the scale of these activities.

- Recreational Horseback Riding: In North Carolina, the employment total effect resulting from recreational horseback riding was 9,076 jobs in 2017. That same year, the economic output total effect of recreational horseback riding was $811.9 million statewide. It is likely that anywhere between 10-35% of the jobs and economic output total effect are generated within the NPNF region[2].
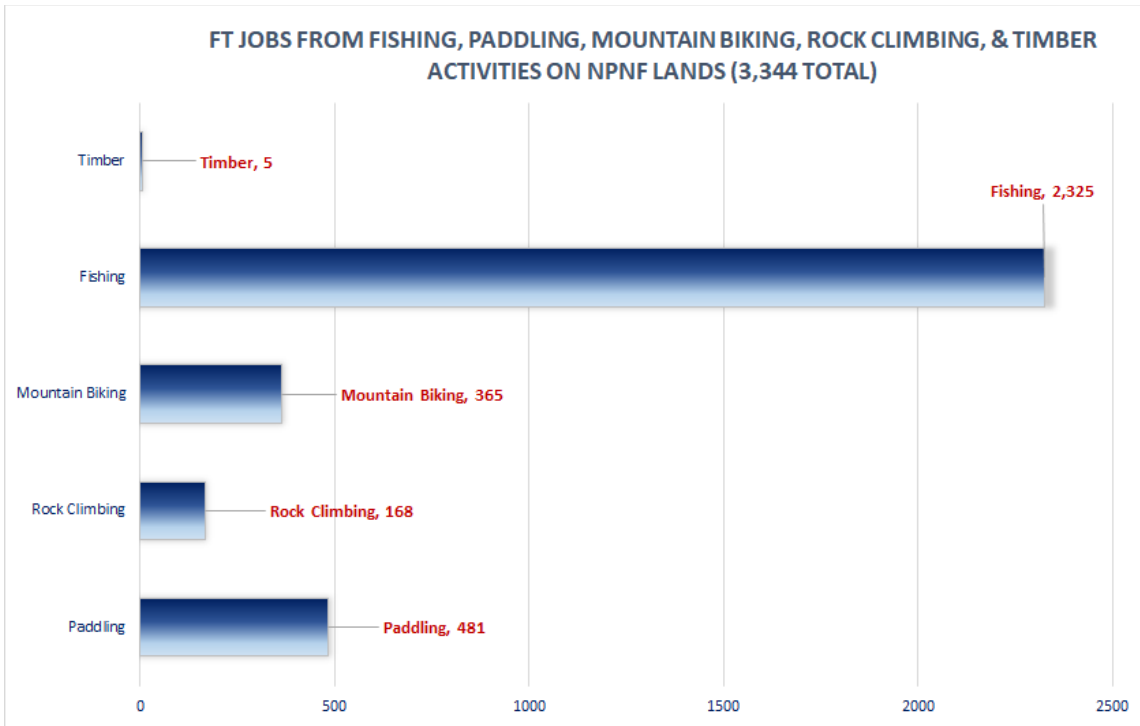
[2] *North Carolina Economic Impact Study*. American Horse Council, 2018, www.horsecouncil.org/product/north-carolina-economic-impact-study/
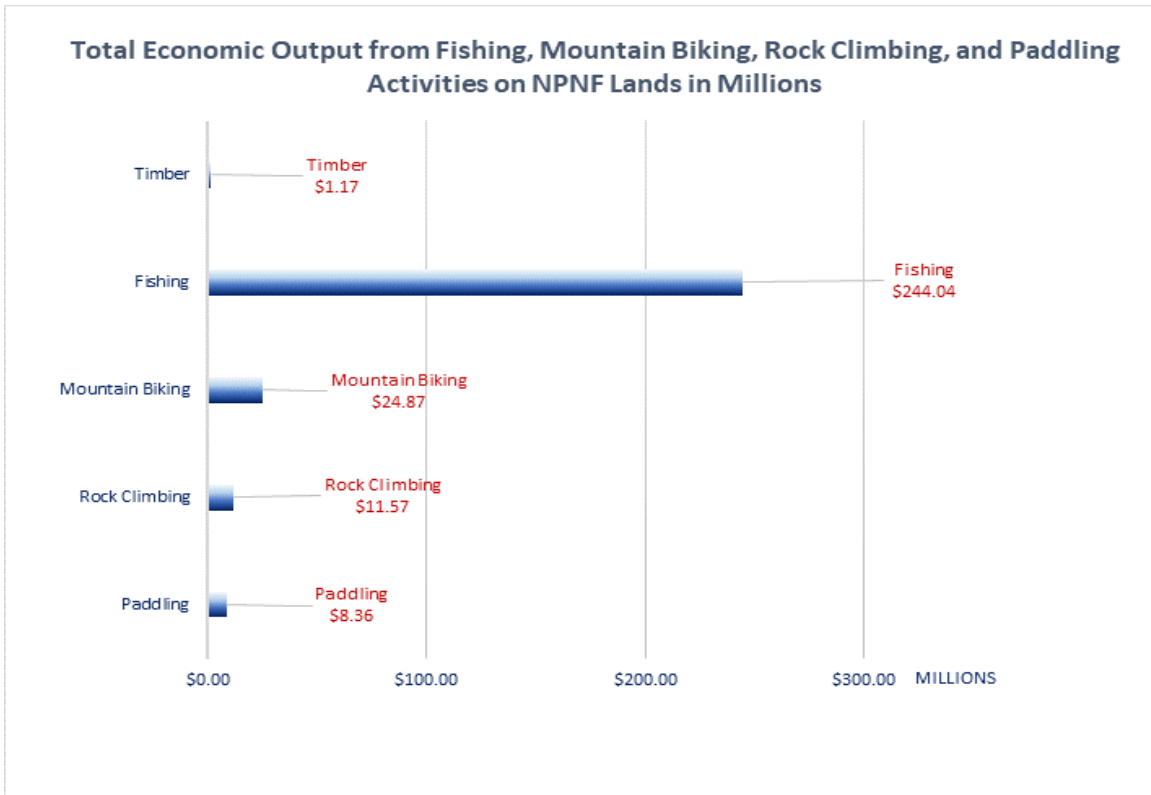
- Wildlife Hunting & Observation: The most recent data available at the writing of this document is from a 2011 U.S. Fish & Wildlife Services report. It is commonly held by the members of this Partnership that these numbers have likely increased as a result of inflation and an increase in participation. In 2011, 335,000 North Carolina residents participated in wildlife hunting. In that same year wildlife observation & wildlife hunting expenditures in NC totaled $930 million and $525 million respectively. This is a total of $1.8 billion in expenditures statewide for the year 2011.

- Wilderness: What generates economic impact from various uses is usually considered by two variables, expenditures and equipment sales that result in and from visitation to various locations across the Forest. Wilderness Areas in the Forest, like others across the nation, generate large visitation numbers and various economic impacts. Graham County reports that 35,000-40,000 people visit Joyce Kilmer every year. Many of these visitors come for the unique flora and wildlife observation noted above. Visitation to and exploration of Wilderness Areas and historic places generates a large economic impact across the region. These special places are frequently noted in the 'quality of life' narratives shared by economic developers and community planners across the region. This is not surprising as numerous studies have found that a very real and tangible benefit can be found between Wilderness areas and property values. Scenic views, proximity to recreational activities, the assurance no one will be building condos in your viewshed, and other aspects of wilderness are capitalized into private land values and real estate investments.

- Clean and Abundant Water: Coweeta Hydrologic Laboratory (Forest Service Southern Research Station) has synthesized the quantification of National Forests role in providing surface drinking water to residents of the Southern United States (Caldwell et al., 2014)[3]. This information is broken out by National Forest and could be used to refine the economic benefit of clean drinking water provided by the Nantahala and Pisgah National Forest.

This Partnership recommends that all interest groups work with public and private sector partners to perform research within 3 years of Plan finalization in order to measure the following data points:

- Full Time Equivalent positions sustained and supported (direct & indirect)
- Labor income generated (direct & indirect)
- Local and state tax revenues generated

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[3] Caldwell, P., C. Muldoon, C. Ford Miniat, E. Cohen, S. Krieger, G. Sun, S. McNulty, and P.V. Bolstad. 2014. Quantifying the Role of National Forest System Lands in Providing Surface Drinking Water Supply for the Southern United States. Gen. Tech. Rep. SRS-197. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 135 p.

- Overall economic output

Working with organizations such as Outdoor Alliance and/or regional Universities can help reduce or mitigate costs. Seeking similar regional Forest level and Geographic Area data points will serve to help the Forest Service understand how public lands use across various interest groups and stakeholders is generating value, impacting the regional economy and the return on investment that is being produced via the Forest.

Recommendations

The Partnership recommends that projects are developed and dispersed across the Forest equitably with the tasks of sustaining local & regional economic development successes, addressing current local economic development needs, identifying and growing local & regional economic development opportunities (recreation in underutilized areas), and identifying & monitoring the health of environmental assets (clean & abundant water).

Across the Forest geographically (Geographic Areas and counties), through Plan level decision that identifies areas that are underutilized for specific uses, Forest Service will assist individuals and small businesses with obtaining Special Use Permits (SUPs) for Guide Services (e.g. fishing, hunting, hiking, canoeing/ kayaking), particularly in parts of the Forest where few legal guides are currently available (See Section 1, Issue 10 above for further detail). In the charts below, the concentration of infrastructure, investment, and overuse is evident in the economic factors of mountain biking by district across the Forest.[4]
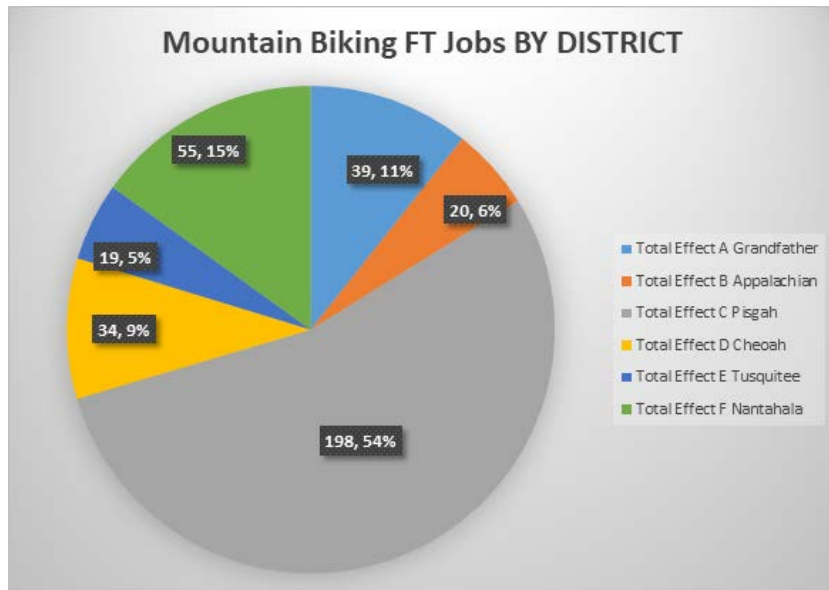
Mountain Biking FT Jobs BY DISTRICT

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[4] Maples, James N, and Michael J Bradley. "Economic Impact of Mountain Biking in the Nantahala and Pisgah National Forests." *Nantahala-Pisgah Economic Reports*, Outdoor Alliance, 5 Aug. 2017, www.outdooralliance.org/nantahalapisgah-economic-reports.

Income Generated via Mountain Biking on NPNF by District

Mountain Biking Economic Output by District
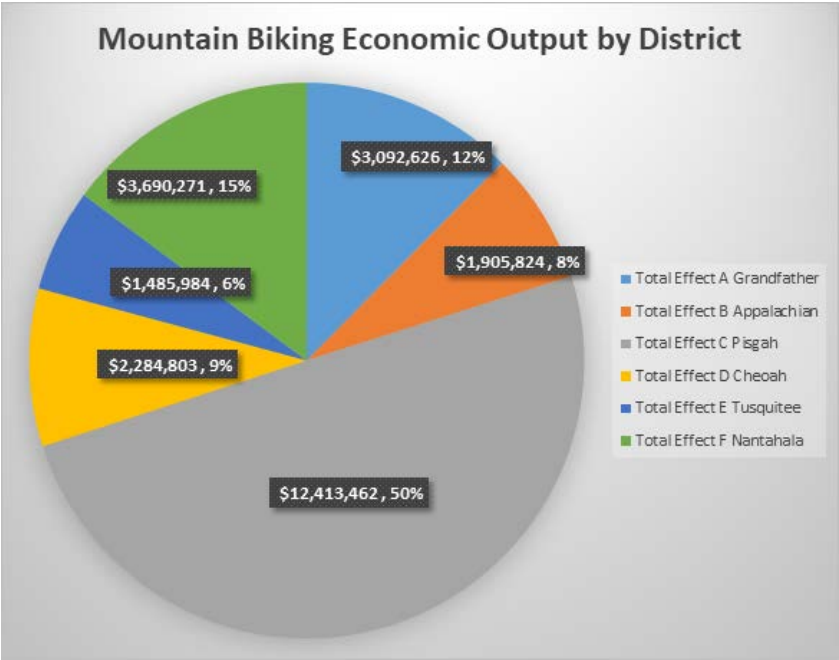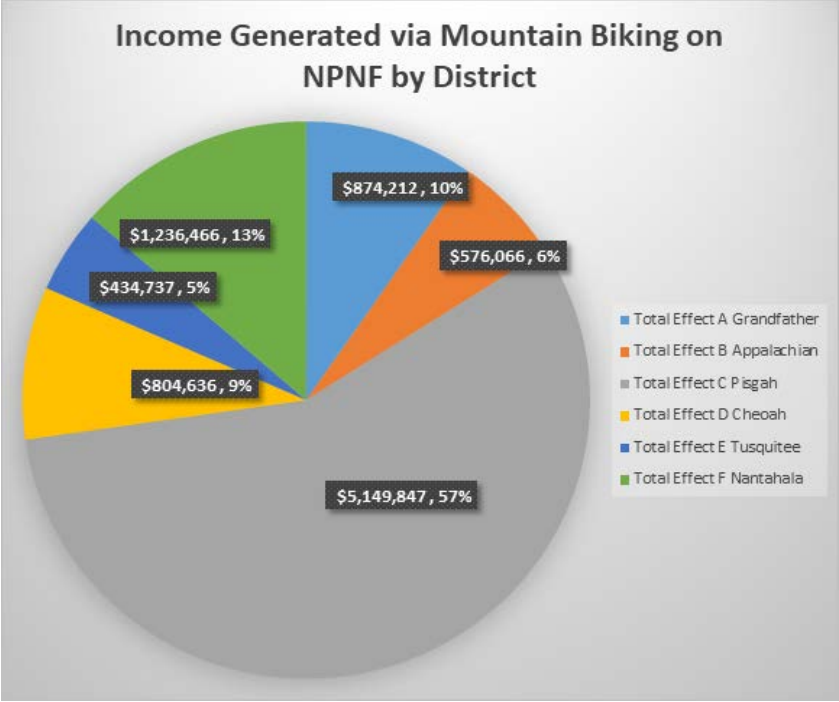
To help distribute use and economic benefits broadly, the Partnership recommends (across different types of recreational user groups):

1. *Include a programmatic analysis in the FEIS that covers special uses and identifies GAs, levels, and categories of uses that are considered to have no greater impact on resources than ordinary private use; include plan language that authorizes the issuance of those permits; and monitoring/adaptive management to ensure that they aren't having a greater impact than predicted (see corresponding recommendation in Section 1, Issue 10)*

2. *Commit to this within 3 years of finalizing the Plan.*

   a. *Sustain moderate-high levels of economic impact in currently heavily used areas and incentivize the implementation of projects that generate economic growth in economically distressed and underutilized areas.*

   b. *Prioritize projects that allow for a multiplier effect (timber + recreation + restoration).*

   c. *Assess publicly available data on economic impacts and outputs from regional industry and interest group leaders (via Regional Councils of Government, NC Department of Commerce, Outdoor Gear Builders, Outdoor Alliance, NC Economic Development Partnership).*

Note: Increased national recognition of the importance of outdoor recreation as an economic sector is shown by creation of the Outdoor Recreation Satellite Account at the US Bureau of Economic Analysis (BEA) in response to the requirements of the Outdoor Recreation Jobs and Economic Impact Act of 2016. The first economic report that was issued February 14, 2018 showed that in 2016 Outdoor Recreation accounted for $412 billion in GDP making up 2.2 percent of the US economy and was growing at a rate of 3.8 percent while the overall economy grew at 2.8 percent. Employment in the outdoor recreation economy was 4.28 million.

The Outdoor Industry Association has broken the BEA reported impacts from outdoor recreation down by state. In North Carolina outdoor recreation generates more consumer spending than the insurance and financial services industries combined; 56% of North Carolinians participate in outdoor recreation each year. These outdoor recreation activities generate $8.3 billion in wages and salaries for 260,000 people and $1.3 billion in state and local taxes. Nationally, Retail Trade saw $81.7 billion in output due to outdoor recreation activities. Accommodations and food services realized $55.7 billion and manufacturing $51.3 billion from outdoor recreation equipment and activity.

Section 3: Climate Change

The Partnership recommends this proposal in full and its intention to (1) highlight the importance of incorporating the Best Available Scientific Information into plan components, and (2) to create actionable guidance on how to manage National Forest lands to increase their resilience to the effects of climate change.

We recommend a guiding framework for a systematic approach on how to include climate informed strategies within an adaptive management program. We support clarifying terminology and incorporating reference to several national-level guidance documents from within the Forest Service into the Plan. Since the Draft Plan was released the Forest Service has developed [Integrating Climate Change Information Into Land Management Planning](#) and we recommend that this be incorporated into this section, where appropriate.

The climate change recommendations that follow are critical for inclusion into this consolidated body of recommendations as some partners need to see climate change addressed in a meaningful way to reach agreement on other portions of these recommendations. These recommendations do not intend to limit sustainable forest management activities on the National Forest in the name of carbon storage.

Within the Draft Plan's Background section on page 27:
- The Partnership recommends that the Forest Service use strong language to support active decision-making and actions in the "Desired Conditions" and "Management Approaches". Examples include:
  - Inserting language like, "*The Forest Service will actively take steps to assess ecosystem climate vulnerability and predicted future forest conditions and adjust management practices within an adaptive management framework*," rather than language that does not inspire action, such as "*keep in mind*."
  - Another example is stating that "*some factors are out of control*" should be provided in the context of an assessment of vulnerability to climate change factors and not dismissive. It might lead the Forest Service to state an active decision for "no action" after an assessment of an ecosystem type that cannot persist given vulnerability to climate change.
- The Partnership feels that some things were addressed within the DEIS that were omitted from this section of the forestwide plan components:
  - Specifically acknowledging uncertainty in the degree of climate change and impacts to ecosystems; and
  - Changes in growing seasons as a major driver.
- The Partnership recommends that a reference to the 2012 Planning Rule, as support for why the Forest must address climate change in Forest Plans, be added.

- The Partnership recommends that relevant insights and citations, for the context addressing the need for forest climate adaptation, be included. Citations from previous and ongoing USFS climate change assessments and guidance to incorporate include:
    - USFS climate adaptation main website for managing lands with information and links to collaborative work, adaptation tools, and policy resources.
    - USFS Office of Sustainability and Climate for the USFS climate strategy, with abundant resources on assessing vulnerability, adaptation strategies, and monitoring.
    - The Southern Forest Futures Project has several relevant resources, the Technical Report (covers climate impacts water resources, wildlife, invasive plants and pests, fire) and the Outlook for Appalachian-Cumberland Forests: A subregional report from the Southern Forest Futures Project with climate change forecasts.
    - USFS Climate Change Resource Center website with tools and educational support.
    - USFS Climate Tree Atlas and Bird Atlas websites provide additional support for vulnerability assessments.

Within the Draft Plan's Desired Conditions on page 27:
- The Partnership feels that a number of things were omitted from this section of the plan. These include:
    - Clear acknowledgement of the potential for streams' baseflow to be impacted by climate change. Many scientists think baseflow will decline with climate change;
    - Explicit language on managing natural forest regeneration for desired species composition, which will probably be an increasing challenge under a rapidly changing climate;
    - Explicit language on maintaining biological legacies, such as coarse woody debris and snags, as sources for biotic renewal and maintenance of old-growth characteristics that enhance resilience to climate changes;
    - Explicit language on managing for soil quality (i.e., structure, biota, pH), and maintenance of functional nutrient cycling. Healthy soil ecosystems and related ecosystem functions are critical buffers for rapid climate change impacts; and
    - Explicit language on connectivity for species migration and adaptation. These concepts are prominent in the DEIS and conclusions could be incorporated here as desired conditions.
- The Partnership recommends that the Desired Condition on renewable energy opportunities needs to be adjusted. We recommend:

- ○ Hydropower being removed. There are 400 existing significant dams in WNC. New hydropower is rarely counted as renewable because of its impacts. If it remains, recreation and ecology need to be considered in its siting.
  - ○ Adding an additional desired condition that considers ecologically sensitive siting which includes not impairing habitat connectivity, T&E species, and other critical ecological functions and services. This desired condition would not apply to firewood.

The Partnership recommends strongly that a plan Standard be added related to considering mitigation and adaptation to climate impacts. This Standard could then be referenced in other sections. For example, *"The Forest shall use a climate-informed management approach with adaptation and mitigation strategies to manage natural resources for desired conditions."*

More specifically, climate change as a potential 'stressor' to assess ecosystem vulnerability should be included in all relevant sections. To address potential climate vulnerabilities, climate adaptation strategies should be included as Desired Conditions, Guidelines, and/or Management Approaches in many sections of the Plan where objectives are listed, with a reference back to the above standard in the "Climate Change" section. For example;

- ● In the Watershed Section a Management Approach could be: *"Given that more climate change driven extreme weather events will increase stress on stream systems with flooding from heavy rainfall events and low flows from longer drought periods, baseflows are monitored in priority watersheds to guide adaptive management to mitigate future impacts."*
- ● In the Terrestrial Ecosystems section under Restoration Priorities, Desired Conditions should be added. Examples include:
  - ○ *"Terrestrial Ecozones are assessed for climate vulnerability and potential range shifts given climate changes, and management is (re)aligned with future forest conditions."*
  - ○ *"Management and restoration of fire-adapted ecozones is adapted to climate change driven shifts in seasonal burn windows."*

Within the Draft Plan's Management Approaches on pages 27-28, the Partnership recommends changes to the existing approaches as well as meaningful additions.

- ● The Partnership recommends this section be much improved by the addition of a guiding framework for a systematic approach on how to include climate-informed strategies within an adaptive management program. The Monitoring and Adaptive Management section of the plan (on pg. 3-4) is clear that monitoring questions can be used to support plan objectives, but it is not clear on how to adjust management given monitoring outcomes, i.e. how to adapt. Clarity on adaptive management will provide

a critical foundation for managers as climate science will continue to be updated and managers need to remain flexible to new data.

- ○ We recommend including a climate-informed adaptation framework for project implementation where specialists can (1) define the project's purpose and need related to explicit desired conditions, (2) assess the system climate vulnerability and other (natural) system threats,(3) reassess the project's purpose and need statements given climate change, and other impacts from interacting environmental and human factors, (4) if needed, decide what restoration/management tactics can be used to reach ecosystem goals (i.e., resist some changes for a period of time, enhance resilience, or aid in transition), (5) implement new tactics, (6) evaluate success in achieving goals, and (7) iteratively *revisit step 1*. A climate-informed adaptation framework will provide critical support and rationale for the following section on management approaches, such as, 'where species are susceptible, promote enhancing habitat'.
- ○ The Partnership recommends the Forest Service incorporate the adaptation framework (plus additional amendments) from the agency's [Responding to climate change in national forests: a guidebook for developing adaptation options](#) (see excerpt below with additions). For additional climate-informed adaptive frameworks as references, see the USFS [Climate Change Response Framework](#) and the Adaptation Workbook, and the [Climate-Smart Conservation Cycle from the National Wildlife Federation](#), or use a systematic approach from the Southern Forest Futures Project. We note that the Forest does not currently have a Forestwide vulnerability assessment as a foundation for an adaptive management framework. In lieu of this, there are many vulnerability resources to use at the project planning level, such as USFS [Climate Tree Atlas](#) and [Bird Atlas](#) websites.

Adaptation framework from USFS guidebook with Partnership additions in red boxes.
Responding to climate change in national forests: a guidebook for developing adaptation options

Step 1 Review
- Read background literature on climate science, climate projections, and ecosystem effects and vulnerabilities.
- Review project histories and applicable policy and legal documents.

Partnership recommends amending:
Step 1: (Add) Define system goals and objectives to guide lit review
Step 2: (Edit) Clarify "Assess relative project urgencies" for managers as, "Use climate background review to assess urgency of climate impacts on project objectives"
Step 2: (Add) Use scenario planning to compare climate trajectories and guide outlining management options

Step 4 Observe
- Monitor responses to treatments; modify project goals, objectives, and methods accordingly.
- Consider all outcomes as learning opportunities and feed knowledge to future projects.

Step 2 Rank
- Assess relative project urgencies based on information from background review.
- Develop priorities by using win-win, no-regrets, triage, or other strategies.

Step 3 Resolve
- Develop goals and objectives and prescribe actions needed.
- Implement treatments using project-appropriate approaches such as promoting resistance, developing resilience, assisting response, or realigning disturbed ecosystems.

Partnership recommends amending:
Step 3: (Edit) Rewrite goals and objectives, as needed, based on climate assessments, scenario planning, and project priorities.

- ○ The Partnership recommends the Forest Service provide clarity on why the Plan needs to take a strong approach to addressing climate change impacts within adaptive management planning. An example would be: *Climate change will continue to directly (changes in habitat suitability with warmer temperatures) and indirectly (facilitation of greater invasive pressure) impact natural resources on the Forest, therefore, a climate-informed reassessment of system goals is critical to maintaining desired ecological outcomes of the Forest Plan.*
- The Partnership recommends the Forest Service define and maintain clarity with the use of 'resiliency' and 'adaptability', as these terms are currently used interchangeably in the text at times. For example, a species or system can maintain *resilience* to change, whereas a species or system can *adapt* to the change. Also include other key terms, such as 'mitigation' and 'assisted migration', as relevant to the Plan. Consider adding definitions from the Southern Forest Futures Project, or from the Office of Sustainability and Climate, like these:
  - ○ *Adaptation Actions:* Facilitate long-term (decades to centuries) Unit-level resilience and/or resistance to potentially adverse effects of climate change or facilitates transitions to future states by minimizing disruptive outcomes.

Adaptation actions are supported by scientific principles and documented in the scientific literature. Examples: maintaining and enhancing biological diversity, reducing terrestrial or aquatic exotic species, modifying genetic guidelines for planting nursery stock, or investing in infrastructure that can withstand a disaster.

- ○ ***Resilience:*** The degree to which systems (e.g., a forest ecosystem, aquatic system, or human community) can recover from one or more disturbances without a major (and perhaps irreversible) shift in composition or function. Example of managing for resilience: removing barriers to aquatic organism passage to support recolonization of native species after the occurrence of local stressors related to climate change.

- The Partnership supports the emphasis on ecosystem processes and functions; however, we recommend inclusion of relevant climate adaptation options for managers like those listed in the USFS guidebook, Responding to climate change in national forests: a guidebook for developing adaptation options and Northern Institute of Applied Climate Science Adaptation Workbook.

- The Partnership supports the emphasis on resilient sites and would go further to recommend that the Forest Service will ***prioritize*** resilient sites.

- The Partnership recommends that Management Approaches should include language about responding to invasive species, not just monitoring them.

- The Partnership recommends these additions to the Management Approach regarding streamside zones: "*Protect and restore* native vegetation in streamside zones to help moderate changes in water temperature and stream flow *and enhance habitat*."

- The Partnership supports the Management Approach about disturbance from intense storms as written. We also recommend that a Management Approach be added to address other disturbances from climate related events. These disturbances, as well as the Forest's contribution to the regional conditions for ecosystem services and wildlife goals, should be included in landscape level monitoring for the life of the plan.

- The Partnership supports the emphasis on locally adapted genotypes to maintain genetic resiliency for use in restoration projects. We also recommend in cases where genetic diversity within a population has critically decreased due to climate change, that alternative genetic sources be identified through scientific and public input and then used in order to be more resilient to climate change.

- The Partnership recommends that a Management Approach be added that addresses the uncertainty in the degree of climate changes. This Approach would also include climate change's potential impacts on spread risk with multiple management tactics, for multiple ecosystem targets.

- The Partnership recommends that a Management Approach be incorporated that acknowledges forests' critical role in climate mitigation. Management alternatives

should consider the implications to carbon storage and carbon sequestration including carbon sequestered in forest products.

- The Partnership recommends the incorporation of freshwater in the Management Approaches. More specifically, we recommend including more about monitoring baseflow and ensuring that management maintains or enhances healthy baseflow in streams and how it is changing over time.

Section 4: Discrete Comments on Plan Components

Chapter 1: Introduction to the Nantahala & Pisgah National Forests

The Purpose of the Forest Plan

- See page 2. In reference to the statement "management emphasis has shifted from outputs to outcomes," the Partnership appreciates this statement, however, we do not feel that the entirety of the plan aligns with this. We recommend incorporating additional stronger condition based Objectives to make this statement more of a reality. Our recommendation within Section 1, Issue 4 would resolve this.

Public Input to Date

- See page 3, Nature of the Decisions Made in a Forest Plan. The Partnership appreciates that this section clearly lays out the decision space, which collaboratives have requested.

- See page 14. The following needs adjustment "New groups representing multiple interests formed during the plan development...." These paragraphs do a poor job of fully and transparently describing the collaborative engagement and the creation of the Stakeholder's Forum. The Partnership recommends that a more robust description be incorporated. This will aid other National Forests engaging in plan revision and their understanding of the collaborative efforts on the Nantahala Pisgah National Forest.

- See page 18, Nantahala and Pisgah National Forests Plan Revision Themes. The Partnership applauds and appreciates that an entirely new theme was created on "Partnering with Others" which includes Desired Conditions, Objectives, Standards and Guidelines.

Key Findings from the Assessment and Need for Change

- See page 15. The fourth bullet under "Across all Forest Resources" lists that we "Recognize ...the role of the forest's contribution for social and economic sustainability." The Partnership recommends that this bullet be modified or another added that addresses the contribution and role of the Forest in ecological services within the all lands context. While those resources are called out in later sections, they appear siloed to National Forest System Lands only.

- See page 16, Ecosystems, Unique Habitats, and Rare Species and Wildlife and Fish Habitat. This bulleted section completely omitted calling out the need for significantly increasing woodland or open forest condition at landscape scale.

- See page 18, Providing Clean and Abundant Water. The Partnership recommends adding "maintaining water quality" to the last sentence as follows: "Objectives under this theme address watershed improvement projects, *maintaining water quality*, road maintenance…"

Key Plan Concepts

- See pages 19-20. Regarding the section "Restoring and Maintaining Healthy Forests" the Partnership supports and reaffirms that this is a central pillar guiding future actions, and that the agency clearly defines "ecological restoration" and the associated Objective function, including using an all lands approach.

Chapter 2: Forestwide Plan Components

Public Involvement

- See page 21. The Partnership supports that there is a section with Desired Conditions, Objectives, and Standards/Guidelines on continued public involvement. The Partnership especially appreciates PI-DC-01, 02, 04, 05 and PI-G-01.

- See page 21, PI-DC-04. While this Desired Condition indicates all parties should be a part of early planning for projects, the Partnership would like recreation to be specifically mentioned in this Desired Condition, or alternatively, an Objective regarding the same.

- See page 21, Management Approaches. The Partnership strongly supports this statement in the Plan: "Encourage the formation of broadly-based user groups to assist, communicate, and support forest resources activities. Work with interested individuals and user groups to promote responsible, safe, and sustainable public use practices and to help the Forest Service communicate with the public and interested organizations."

- The Partnership recommends adding a new Guideline, COM-G-##, that states: "*The FS will engage stakeholders to evaluate and provide feedback on completed projects in an effort to improve future project design and implementation.*"

- The Partnership recommends adding a new Guideline, COM-G-##, that states: "*The FS shall engage stakeholders to evaluate proposed projects that resulted in a "no-sale" or that did not attract bids in order to better design projects that reflect the needs of local communities.*"

<u>Community Connections</u>

- See page 23, COM-DC-02. The Partnership recommends that this Desired Condition be adjusted. We recommend adding an emphasis on interpretation of management underway, including ecological restoration management.

- See page 24, COM-O-02. The Partnership recommends that this Objective be adjusted and describe how the baseline is measured related to "annually increasing."

<u>Geologic Resources</u>

- See page 29, GEO-DC-01. The Partnership strongly supports geological settings as the foundation of the Forests' ecological and biological diversity.

- See page 29, GEO-DC-05. The Partnership strongly supports ground disturbance activities not contributing to geologic hazards.

- See page 30, GEO-S-02. While the Partnership supports the first sentence of this Standard, we recommend that avoidance should be considered **before** special design measures. We recommend the following text changes: "If geologic hazards are present, *every attempt should first be made to avoid them. If relocation/avoidance is not feasible,* then specific location and design measures shall be provided *to minimize the effect of hazards associated with* management activities."

- See page 30, Management Approaches. The Partnership recommends changing this to a Standard and adding "shall" to the following statement: "On slope gradients of 40 percent or more, the design of cut and fill slopes of road, log landings, or other excavations *shall* include a debris flow hazard and risk assessment…." Requiring a flow hazard and risk assessment will help prevent landslides and the negative impacts to soil, water and infrastructure that they cause.

- See page 30, Management Approaches. The Partnership strongly supports the statement: "Emphasize ditch and culvert maintenance to prevent blockages diverting surface flows onto fill slopes." Clear culverts will help prevent landslides and the negative impacts to soil, water and infrastructure that they cause.

<u>Watershed</u>

- See page 31, Background. The Partnership recommends clarification that "6th level watersheds," used in multiple places on this page, are USGS Hydrologic Unit Code (HUC) 12s.

- See page 31, Background. The Partnership recommends adding definitions of the terms "properly functioning," "functioning at risk" and "impaired", as well as referencing the document where these definitions appear.

- See page 32, WSD-DC-01 and WSD-O-01. This Desired Condition states that watersheds will support the "quality, quantity and timing of water necessary to protect ecological functions and support beneficial water uses"; however, the objectives for developing and implementing watershed restoration action plans in priority watersheds discuss improving water quality and aquatic habitat, but do not address water quantity or timing. Flow is a master variable for the health of streams and affects baseflow, water quality, habitat creation, species movement, energy (i.e. food) entering the aquatic system and more.

  The Partnership recommends adding a bulleted item under Tier 1 of WSD-O-01 as follows: "*Track baseflow over time in priority watersheds. If baseflows are declining at or above 20% on a rolling 20-year average, analyze the causes of the flow reductions and determine options for improving baseflow to protect ecological functions and public water supply. Solutions for improving baseflow will be developed collaboratively and will not inhibit stream connectivity. The natural flow regime will be considered including timing, magnitude, duration, rate of change, and frequency of the river or stream's hydrograph.*"

- See page 33, Standards. Outstanding Resource Waters are omitted. The Partnership recommends adding a standard to address this: "*Outstanding resource values in watersheds classified as Outstanding Resource Waters (ORW) are considered during management activities.*"

- See pages 32-33, Objectives. Generally, the Partnership supports the Objectives for watershed restoration. However, we recommend that plan implementation actions occur on both Nantahala and Pisgah National Forests and are relatively spread out. We therefore recommend adding the following language: "Tier 1: Develop watershed restoration plans for 10 priority watersheds - *at least one per Ranger District* - over the life of the plan…."

Soils

- See page 35, SLS-G-01. The Partnership strongly supports that avoidance is listed first in reference to hydric soils.

- See page 35, SLS-G-02. The Partnership supports the last sentence in this Guideline and recommends that it be its own guideline, SLS-G-03: "*The minimum amount of soil should be exposed at any given time during project execution.*"

Water

- See page 36-37, Desired Conditions. The Desired Conditions are enumerated as Guidelines and need to be corrected.

- See page 36 Background. The Partnership strongly supports the statement, "One of the main aspects of protecting water quality is managing the streams and the land immediately adjacent to the streams."

- See page 37, WTR-DC-05. This Desired Condition discusses maintaining sufficient instream flows, yet the objectives do not address water quantity or timing. See the recommended language under the Watersheds section above for tracking flow and developing options for improvement, when needed, and add a reference to it within the Water section.

- See page 37, WTR-G-02. Consideration needs to be given to recreational paddling use in stream restoration projects, with an emphasis on safety, aesthetics, continued use, and collaboration. Large woody debris and other restoration structures can be very dangerous for paddlers or foreclose paddling entirely if designed and sited without recreation as a core project element. Each of these plan components needs to be improved with a goal of maintaining recreational safety and access. Recommended guideline language: "*When implementing large wood addition projects, project staff will investigate paddling use of the waterway, seek collaboration with the paddling community, and incorporate wood structure guidelines that facilitate reasonably safe paddling where use occurs.*"

Aquatic Systems

- See page 38, AQS-DC-01. The Partnership recommends editing the last phrase to read: *"All native aquatic species are considered and native brook trout are emphasized when possible."*

- See page 39, AQS-O-01 and AQS-O-02. The Partnership recommends deleting the phrase "Maintain or" and instead plan to "Expand the" occupied ranges of brook trout, freshwater mussels and other native aquatic species. Metrics for expansion should be determined by working with partners and inserted into the final Plan prior to completion.

- See page 39, AQS-O-03. Replacing a minimum of two impaired stream crossings annually is insufficient, additionally the Partnership recommends that these projects occur across the whole forest. We recommend the following:

- o Tier 1: Leave the first paragraph about working with partners to complete the AOP assessment. Then modify the 2nd paragraph as follows: "*Replace a minimum of two large impaired stream crossings annually, one in Pisgah and one in Nantahala NF. Additionally, replace a minimum of three small impaired stream crossings annually, making an effort to locate the projects across both Forests.*"

  - o Note: The FS says that the average cost of an AOP project is $60,000: https://www.fs.fed.us/restoration/Aquatic_Organism_Passage/overview.shtml Therefore, we recommend that a large project be defined as one that costs $60,000 or more and a small project be defined as one that costs $60,000 or less.

  - o Tier 2: *Replace three large and six small (one in each Ranger District) impaired stream crossings annually across both Nantahala and Pisgah National Forests.*

- See page 39, Standards. The Partnership recommends a new Standard, AQS-S-02 that states, "*No activities shall be undertaken to expand the range of non-native trout species into areas that are potentially suitable for native brook trout.*"

- See page 40, AQS-G-04. The Partnership recommends changing this guideline to a standard by replacing "should" with "shall" and adding the phrase "*unless protection of a native species from encroachment of a non-native species is being provided,*" to read as follows: "Aquatic organism passage projects *shall* use channel spanning structures or other stream-simulation techniques of fish-bearing streams, *unless protection of a native species from encroachment of a non-native species is being provided.*"

Streamside Zones

- See page 41, SZ-O-01 and SZ-O-02. The Partnership recommends that these projects should be in addition to the work implemented under watershed restoration action plans in priority watersheds (WSD-O-01, pgs. 32-33) and should be conducted across both Forests. The language should be reflective of this.

- See page 43, SZ-S-02. The language in this standard should be significantly revised to ensure better protections for streamside zones. The Partnership recommends replacing the phrase "unless satisfactory mitigation measures have been designed" with "*except for designated stream crossings or when placement of disturbance-prone activities outside of the SZ would result in more environmental disturbance than placing such activities within the SZ.*" (See Section 1, Issue 9 for further recommendations on this topic.)

Terrestrial Ecosystems

The Partnership has detailed comments on the complex and integrated "Terrestrial Ecosystems" section. Our recommendations cover landscape pattern and connectivity, ecological restoration, specific forest conditions like old growth and open forest, sustainable timber management practices, terrestrial wildlife habitat conditions, and forest health issues. The recommendations in this section are ordered based on the Draft Plan. **They are intended to be in addition to the recommendations presented throughout Section 1 and are equally as important.**

- See pages 44-45, Background. The Partnership appreciates the clarity about ecological integrity, ecological restoration, as well as mentioning both active and passive restoration methods and commercial and non-commercial methods.

- See page 45, Desired Conditions. The Partnership supports the Desired Conditions section, more specifically the mentions of ecological integrity, structural classes based on Natural Range of Variation (NRV) by ecozone, restoration in some areas focused on uncharacteristic vegetation, and management's contribution to desired condition of NRV.

- See page 45, ECO-DC-02. The Partnership recommends that the Draft Plan language be replaced with: "*Maintain sufficient forest in core unfragmented blocks where natural processes dominate across all ecozones and elevations to assure movement toward NRV of old growth as well as other ecological conditions expected under natural processes and natural disturbance. This will also contribute to realizing other ecozone desired conditions, will improve forest structure, related health and resiliency, and habitat diversity. Unfragmented blocks of forest will contribute to ecosystem function and resiliency by providing a protected reserve of ecosystems.*"

- See page 45, ECO-DC-05. The Partnership recommends additional language: "Connectors, in the form of linear corridors, cross the landscape to facilitate movement of priority species between patches, *in locations where they will likely not contribute to the fragmentation of interior forest conditions or create barriers to movement of other priority species.*"

- See page 60, ECO-DC-11. The Partnership recommends changing this Desired Condition as follows: "Ecozones with moderate moisture regimes *exhibit less severe fire effects, less frequent fire, or both* for restoring or maintaining key characteristics."

- See page 62-3, ECO-S-07.

- Part B. The Partnership recommends incorporation of language requiring a site visit during or shortly after a rain event so that the seeps and springs, as well as ephemeral and intermittent stream channels, can be more easily identified.

- The Partnership strongly supports parts C, E, F, J and K of this Standard.

● See page 63-64, ECO-S-08 and 09. The Partnership would like to point out that these Standards appear to have typos.

● See page 66, ECO-S-19, part iii. The Partnership recommends that "water yield values" be struck from part iii.

● See page 68, ECO-G-02. The Partnership recommends that the language should change "should" to "shall" and thus make this a Standard, rather than a Guideline.

● See page 68, Background. The Partnership strongly recommends the definitions for Old Growth be clarified and adjusted. The Forest Service appears to have two working definitions for old growth used in the Draft Plan and the DEIS. One describes conditions within an ecosystem and the other describes an age-class. **The Forest Service needs to be clear about which definition they are applying throughout the Plan and EIS**. The issue seems to be most pervasive in the DEIS.

● See page 69, ECO-DC-20 and ECO-DC-21. The Partnership notes that the Spectrum model, with inconsistent natural disturbance built into the model compared to the NRV model, is inconsistent with these Desired Conditions.

● See page 70, ECO-S-28. The Partnership recommends for this section the Forest Service use the definition of Old Growth that describes ecosystem characteristics when it comes to the addition of patches during project level analysis.

● See page 71, ECO-DC-22. The Partnership supports this Desired Condition, specifically that stream temperatures and channel integrity are preserved during these management activities.

● See page 72, 77, 78, Table 7, Table 9, ECO-O-04. The Partnership strongly recommends the Plan descriptions for forestwide desired amounts and Objectives for open forest condition be more clearly defined. Clarity is needed on these specific topics:

- The forestwide desired amounts for "open forest condition" seemingly include desired acres for permanent openings, young forest, and woodlands combined, not woodlands alone, as many have interpreted. The resulting open forest desired acres number (360-480k, Table 7) appears to be additive to the young

forest desired acres number (60-90k). Combined with the stated goal of forestwide 40-60% canopy density for open forest condition, significant Partnership concern has been generated about losing significant high-canopy closure, mature forest conditions that favor many wildlife species. Forestwide desired amount totals for permanent openings, young forest and open woodland forest should be separated. That said, other models for this region support the current open forest condition forestwide desired amount acreage target. Steve Simon's Ecozone model data suggests that there are 528,500 acres of fire adapted forest (~51%) on the Nantahala and Pisgah National Forests.

- The Plan needs to more clearly define and separate these forestwide targets and provide more nuance around the target open forest conditions based on the ecozone NRV analysis. A blanket 40-60% canopy closure characteristic implies this is the target for every ecozone. A finer-scale habitat desired condition for open forest (like Table 8 for young forests pg. 73) can provide direction on desired woodland conditions for each ecozone. This work has already been done in the analysis; it just needs to be included in the Plan itself. These Plan additions will alleviate partner concerns around widespread "forest opening" and provide project level desired condition direction for woodland restoration projects.

- The tiered objectives for open forest woodlands (ECO-O-04) appear to be *restored* open forest woodland condition acres. We support restored conditions objectives, and *would like this model to be paired with clear ecozone desired condition plan components* (as previously mentioned).

● See page 74, ECO-S-31. The Partnership recommends the following addition to this Standard: "*The use of non-native plant material in projects shall be open to public comment.*"

● See page 75, Background. The Partnership recommends adding language supporting partnership approaches to Hemlock Wooly Adelgid treatment.

● See page 76, ECO-DC-32. The Partnership supports this Desired Condition and recommends adding *"and in riparian areas"* to the end of the sentence.

● See page 77, ECO-G-17. The Partnership supports this Guideline.

● See page 77. The Partnership supports the management/eradication of feral hogs.

● See page 78, ECO-O-06. The Partnership recommends the following changes to this objective. (See Section 1, Issue 1 for additional details.)

	Objective Range*
Tier 1**	10,000-25,000 acres annually
10 year Target	100,000-250,000 acres/decade
Tier 2***	25,000-40,000 acres annually
10 year Target	250,000-400,000 acres/decade

*Acres burned by wildfire count towards the ten-year targets in either tier.

**As in the Plan, Tier 1 is based on a continuation of recent budgets and using existing USFS capacity.

***Tier 2 reflects objectives that are achievable with added capacity of partners and partner resources, including programs such as CFLR, added financial and personnel capacity through partnerships, 'All Lands' strategies and existing funded cooperative agreements.

The Partnership recommends significant increases in the draft Objective to align the Nantahala and Pisgah with neighboring National Forests targets and accomplishments. While neighboring forests generally target 5-8% of their total land area for prescribed burning each year, the Draft Plan Tier 1 Objective's upper limit of 10,000 acres represents just 0.8% of the total Forest. More than half of the Forest is fire-adapted, which is over 500,000 acres with nearly 400,000 acres of montane oak forests. 10,000 acres of annual burning is simply insufficient to stem the decline of disturbance-dependent plant and animal species and restore ecological integrity and resilience.

The 1.1 million-acre NPNF is the land conservation nucleus for western North Carolina. The Partnership commends the Forest Service for recognizing the importance of restoring and maintaining fire-adapted ecosystems in the Draft Plan. The Partnership strongly recommends the Forest Service align the burn objectives proportional to the need the Forest Service has identified. As it has been detailed in the Plan, increased burning is critical for meeting the desired conditions and restoring ecological integrity for six of the eleven ecozones represented on the Forest [pine oak heath (104,000 acres); shortleaf pine oak (47,000 acres); mesic oak (177,000 acres); dry mesic oak (103,000 acres) dry oak (49,000 acres), and high elevation red oak (40,000 acres)].

As nearly half of the Forest has been modeled as fire adapted (520,000 acres), 400,000 acres is an appropriate goal to strive for over ten years to move the needle

towards NRV and the desired future conditions described. (These will not be 400,000 unique acres, as burning is needed at repeated intervals on the same fire-adapted forest acre.) While 40,000 acres of fire per year is commensurate with annual burn objectives of adjacent National Forests and would move towards restoration goals at an appropriate pace, we understand that time is needed to rebuild fire management operations and integrate partnerships to meet burn goals. Large burns of 2,400 acres or more have been burned in a single burn day, so 5,000 acres per year/ranger district is achievable.

- See page 77-79, Objective. The Partnership recommends a new Objective be created stating the following: "*Develop a long-term plan for a more detailed and inclusive forest inventory of the Nantahala-Pisgah National Forests in order to better inform environmental analysis and forest management practices. The Forest Service will engage stakeholders to develop a standardized inventory program that can be implemented by Forest Service staff, stakeholders, NGOs, and other qualified volunteers from the community.*"

Plant and Animal Diversity

- See page 81, Background. The Partnership recommends the following language changes:
  - The Draft Plan states: "Not all Natural Areas possess the same caliber of unique ecological characteristics." This should be changed to: "*Natural Areas are rated by NCNHP on Representational and Element occurrence rankings that characterize the type and significance of the Natural Area's unique ecological and biodiversity characteristics.*"

  - The Draft Plan states: "Where Natural Areas have been identified on the Nantahala and Pisgah, the Forest Service retains the authority to manage these areas and the Forests will work with the Heritage Program to discuss the values inventoried and locations of unique characteristics versus more typical forest communities. Management opportunities for each area will also be discussed. Vegetation management, including prescribed fire, integrated pest management and timber harvest, is allowed when unique attributes of the area can be maintained or enhanced." This should be changed to: "*Where Natural Areas have been identified on the Nantahala and Pisgah, the Forest Service retains the authority to manage these areas. In consultation with the Heritage Program decide on management actions to preserve and restore the unique characteristics of Natural Areas. Vegetation management, including prescribed fire, integrated pest management and timber harvest, is allowed to maintain or restore the unique attributes of Natural Areas.*"

- See page 84, PAD-DC-04. The Partnership recommends making the following changes to the language of this Desired Condition: "*Desirable* ecological characteristics are maintained *or restored* within the North Carolina Natural Heritage Natural Areas."

- See page 87, Objectives. The Partnership recommends an additional objective: "*Coordinate with the NC Wildlife Resources Commission during project planning in potential project areas. Discuss unique values that are present in the area and management opportunities to enhance or maintain those values, including, but not limited to, the use of prescribed burning, thinning, regeneration and non-native invasive treatments.*"

- See page 88, PAD-S-05. The Partnership recommends changing this Standard by using the same language pertaining to peregrine falcons as used in PL-GLS-04: "*Continue to support conservation and protection of peregrine falcons through monitoring, seasonal closure of select rock faces, and collaboration with the climbing and recreation community.*"

- See page 88-89, PAD-S-06. The Partnership recommends modifying this Standard as follows: "Do not construct new trails across these features *where species and habitat conditions are confirmed to be present.*"

- See page 88, Management Approaches. The Partnership recommends a new approach be incorporated that directs when wildlife openings that are not being used, or are not included in the wildlife opening inventory, that they be considered for trail system inclusion.

Fire and Fuels

- See page 91, Standards. The Partnership recommends a new Standard as follows: "*If the agency uses a system trail or a proposed/potential trail for project access including fire lines, the agency shall restore the recreational values and sustainability to the trail.*"

- See page 91, Guidelines. The Partnership strongly supports these guidelines as written.

Lands and Special Uses

- See page 93, Desired Conditions. The Partnership recommends a new Desired Condition, as follows: "*Incentivize special use permit activities in GA's that are under-utilized.*" (See Section 1, Issue 10 for more details.)

- See page 93, LSU-G-02. The Partnership supports this Guideline.

- See page 95, LSU-S-12. The Partnership strongly supports this Standard.

<u>Transportation and Access</u>

- See pages 99, Objectives. The Partnership recommends adding a new Objective that states: *Decommission primitive roads from IRAs, subject to existing rights (e.g., maintaining Hendersonville reservoir infrastructure in N Mills), but where possible to maintain or enhance connectivity, consider converting to trails.*
(See Maps of Primitive Roads within IRAs, Appendix A.)

- See page 99, TA-O-03. Instead of emphasizing Priority Watersheds in this forestwide road maintenance plan, the Partnership recommends a focus on prioritizing maintenance for roads that are causing the most water quality concern across the Forest, followed by roads that have potential to cause the most degradation without regular maintenance. The Forest Service should assign degrees of the urgency for maintenance needed for each system road. This would provide a better understanding of the resources needed to adequately maintain the road network beyond periodic grading and gravel, and would help prioritize all urgent maintenance needs.

  The Objective in the Watershed section (page 33, WS-O-O1, Tier 2) will focus on the road maintenance needs in Priority Watersheds. If this road maintenance plan prioritizes roads across the entire Forest (on a Geographic Area or Ranger District basis), it should actually serve as a resource to help determine which Priority Watersheds get selected first for plan development and implementation - where the overlap for the biggest resource protection needs occurs.

  We again recommend (as we did in our October 2017 recommendations) that the Forest Service develop specific criteria for the road system in each Geographic Area that aligns with individual GA Goals and Objectives. For example, road access in the Fontana Lake GA might emphasize access to shoreline sites to increase recreational opportunities and road access in the Unicoi Mountains GA could emphasize restoring access for traditional plant harvesting and hunting and fishing.

- See page 99, TA-O-04. The Partnership recommends this Objective be limited to roads, and the references to trails be removed to ensure that the Objective's goal is not met by solely or primarily obliterating trails. Including trails would diminish the benefits of this Objective because trails have differing and typically lesser impacts than roads. Trails have already been addressed elsewhere in the Plan, and if need be, could be further addressed by separating the Objectives for obliterating unauthorized roads and trails in priority watersheds into two distinct objectives.

- See page 100, TA-O-06. The Partnership recommends that the second half of Tier 2 should be a stand-alone Objective (without tiers). "Determine the amount of unneeded roads in Backcountry and remove them from the system road network. Decommission or repurpose 10% of the roads over the life of the plan." (See also similar comments in the Chapter 4, Backcountry MA section below.)

- See page 100, TA-S-04. The Partnership recommends adding language:

  - To specify when replacing existing stream crossings or constructing new crossings, recreational stream access should be protected, mitigated, or enhanced if recreational use is evident or likely to occur. This will ensure that river access for paddling, fishing, and water play is not diminished through project work, and that such access will be made more sustainable through intentional design.

  - "*Location should avoid/minimize fragmentation or significantly changing the character of undeveloped areas.*"

  - Adding the phrase "within 90 days" to the end of the existing part vi. Within 90 days is standard for construction projects and seems reasonable for log landings and areas associated with road construction.

- See page 101, Management Approaches. Regarding the management approach for changes to the road system, the Partnership recommends adding number vii: "*Avoid or minimize fragmentation or significantly changing the character of undeveloped areas.*"

Recreation Settings

- See page 107, REC-O-01, subpoint i, For Tier 1: The Partnership recommends the Forest Service shorten the timeframe to "Implement collaborative recreational planning…" from 5 to 3 years.

Developed Recreation

- See page 110, REC-S-07. The Partnership recommends the following language be added to the Standard: "*Horse camping should be given priority over non-equestrian camping in designated horse camps.*"

- See page 111, Management Approaches (third paragraph). The Partnership recommends that following "To help achieve financial capability, an emphasis should be placed on reducing the deferred maintenance backlog and/or modifying existing facilities and/or services," the following sentence should be added: "*Priority actions should be determined through collaborative recreational planning.*"

Dispersed Recreation

The Nantahala-Pisgah National Forest visitation would place it as the third most visited National Park, with outdoor recreation serving as a vital element of the regional economy and quality of life. The Partnership recommends herein focus on sustainably meeting the growing demand for outdoor recreation on the Forest as a positive core public benefit, and on supporting the specific recreational activities that the Forest's unique exemplary rivers, crags, and landscape foster. We ask that the Forest Service shift perspective to more proactively support outdoor recreation and the Partnership reiterates our commitment to assist the Agency in meeting this goal.

- See page 113, REC-DC-28, and page 107, REC-O-01. The Partnership supports these plan components because they are sufficient to provide for the creation of, and partnership with, a Recreational User Council.

- See page 115, REC-S-10. The Partnership supports and appreciates the explicit support for cross-county foot travel.

- See page 113, REC-DC-23 and REC-DC-24. The Partnership would like the plan to address user-created informal paths which lead to places like scenic views, fishing spots, climbing areas, swimming holes, mineral collection areas, boater put-ins and other destinations. There needs to be a way to be able to provide continued access and address resource damage on these paths. Currently, the system/non-system binary trails approach does not offer a realistic "straight faced" solution, except closure or adding to the system, which is unacceptable loss of access for a large portion of Forest users. (See Section 1, Issue 2 for further recommendations on this topic.)

- See page 113, REC-DC-24. The Partnership recommends the following language be added to the Desired Condition to protect access to important places: "*Sustainable access to desirable recreation features that are accessed via cross country foot travel where a system trail is not feasible is maintained with site-specific erosion control methods employed through a collaborative process with stakeholders.*"

- See page 115-116, REC-O-07 and REC-S-14. The Partnership does not support the trail components of Alternative C. We support the following parts of Alternatives B and D:

    ○ Trail layout incorporates the most current design principles, minimizes adverse impacts to natural and cultural resources, and minimizes the opportunity for user conflict, particularly related to user safety;

    ○ The proposed trail is found to be ecologically, socially, and financially sustainable;

- The need for a new trail has been identified through a Forest Service led collaborative planning process or trail strategy.

The Partnership wants incentives for the work its members are doing, so our work can result in more trail miles. We do not support a cap on new trails. Within trail complexes new trails can be added if there is progress towards bringing trails in that complex up to standard.

Trail inventories and evaluation need to be completed before implementation of REC-S-11. Agreed upon user data should be allowed to complete these evaluations. Trail miles earned through incentives can be prioritized but should not be restricted to use within the GA in which they were earned. This will allow creation of new trails in underserved and underutilized GA's and will help to disperse recreation and economic benefits of trails across the forest. (See Section 1, Issue 2 for further recommendations on this topic.)

See page 113, REC-DEC-26, and page 115, REC-S-11. The Partnership cannot support these plan components until multi-use trail needs and opportunities are met first. REC-S-11 would immediately criminalize and foreclose existing valued use of high quality undesignated trails for which there is significant demand, support and use, which is not acceptable. We request that before enforcing REC-S-11 in any GA, there needs to be an evaluation of the trails in the area through a collaborative process to ensure there is adequate opportunity for multi-use trails. Trails which are determined to be needed in the trail system should be brought up to an agreed upon standard and added to the system. (See Section 1, Issue 2 for further recommendations on this topic.)

We recommend that the following thresholds be adopted for trails available for horse and bike use in the Eastern Escarpment, and also share this as an example of our recommended GA-specific approach described above.

Trails Available for Bike Riding: In the Eastern Escarpment there is currently a non-designated trail network legally used by mountain bikers that totals over 40 miles. The current designated miles are not meeting the need in this area as only 8 trails out of 59 are designated for bike use (37 miles out of 157 miles, or 23%). For comparison, the Pisgah Ledge Geographic Area has 175 miles out of 277 (63%) designated for bicycle use. We recommend that the mileage in the Eastern Escarpment be increased to a minimum of 74 miles to meet the demand, increasing to 38% of the total trail mileage in the Geographic Area.

Trails Available for Horseback Riding: In the Eastern Escarpment there is currently a non-designated trail network legally used by equestrians that totals 39 miles. The current designated miles are not meeting the need in this area as only 1 trail out of 59 are designated for horse use (2.5 miles out of 157 miles, or 1%). For comparison, the Pisgah Ledge Geographic Area has 76 miles out of 277 (28%) designated for horse use. We recommend that the mileage in the Eastern Escarpment be increased to a minimum of 49 miles to meet the demand, increasing to 25% of the total trail mileage in the Geographic Area.

● See page 114, REC-O-08. The Partnership recommends that this Tier 2 Objective be changed to 20 new loop trails distributed across the Forest, rather than 10 loop trails. There are already plans in the works to create these types of trails at the scale of the Draft Plan's Tier 2 Objective. While we recognize that this Tier 2 Objective for 10 new loop trails will be dependent on user assistance to reach, we feel this objective is too low.

● See page 116, REC-G-07. The Partnership supports the concept that "Motorized trails should not have mixed use with equestrians, and bikes or hiking is not encouraged," however we recommend adding that "*motorized trail systems that are closed seasonally to motorized use could be open to horse, bike & hiking during those times*."

● See page 108, REC-S-03. The Partnership recommends that the word "*mechanical*" be added in front of the term "surface penetrating tools" in REC-S-03 and universally in the Plan. This recommended change preserves current practices distinguishing ordinary garden and home tools which are simply extensions of the hand, versus mechanical (broader than mechanized) complex body activities, swinging an axe or sledge hammer, or shovel digging. The simple rock hammer is thus legal as long as there does not remain "significant disruption" of the surface area.

● See page 108, REC-S-03. The Partnership recommends that any such identification and closure process for surface penetrating tool use be carried out by Geographic Area.

● See page 114, REC-O-09. The Partnership does not support this Objective, which was proposed without any preliminary discussion with Access Fund, Carolina Climbers Coalition or the climbing community. The deferral of climbing guidance is the epitome of "planning to plan." The Forest Service needs to incorporate climbing into Plan components now, in this NEPA-governed planning process, not plan (or strategize) to do it later.

Throughout the planning process, the Partnership, and in particular the Access Fund and Carolina Climbers Coalition, have provided large amounts of input and climbing related information for planners to formulate objectives and guidelines in the forest plan, now, in this NEPA-governed planning process.

The Partnership objects to this Objective, and the Plan more generally, incorporating other distinct recreational activities into climbing management plan components. Slack lining and climbing and hiking or other recreational activities should not be mistaken as the same thing and such inaccuracies lead to poor, ineffective management.

The Draft Plan is inconsistent in including some climbing management direction in the plan now, such as page 259, CDW-S-05, but other direction is apparently deferred to a Tier 2 future climbing management strategy. The Partnership recommends a consistent approach that includes comprehensive forestwide climbing components in the plan now, that provides for tackling site, resource, or area-specific climbing management concerns in future projects or collaborative work.

- See page 116, REC-S-19. The Partnership finds this Standard to be too broad in that it is unclear whether old trails and climbing routes would be closed; and in other ways too limited in not including other effective management actions such as education, rerouting, etc. To more fully support sustainable climbing, we recommend this Standard be deleted, or replaced with the following language: *"Through a collaborative process, stakeholders, biologists, recreation groups, and regional Forest Service officials will work to identify areas of unique habitats in the forest. These groups will work to promote education and site specific plans to ensure that recreation does not have an adverse effect on unique habitats."*

- See Page 116. The Partnership has concerns with the lack of Guideline or Standard in the Recreation section, to provide climbing management direction for Forest managers and partners. Consistent with our 2017 Partnership recommendation we recommend inclusion of the following as a Standard or Guideline for climbing fixed anchors:

  Fixed anchors are defined as climbing equipment (e.g., bolts, pitons, or slings) left in place to facilitate ascent or descent of technical terrain. These anchors are a critical component of a climber's safety system. Fixed anchors are typically placed by the first ascensionist on technical ascents and descents (rappels) where removable anchor placements are not viable.

  Rock climbing fixed anchors can be placed in such a way to protect natural resources, improve social conditions, enhance safety, and provide outstanding recreational

opportunities. Fixed anchor hardware should be climbing-specific and comply with modern, currently accepted standards.

Climbers may use, place and maintain fixed anchors, including any fixed anchors established before the date of the enactment of this plan. Placement of new rock-climbing fixed anchors may require prior authorization to protect natural and cultural resources. Programmatic authorization is the primary mechanism for fixed anchor management as it protects resources while minimizing burden to land managers and forest visitors. Site specific authorization should only be implemented to manage areas with documented sensitive or endangered resources. Motorized drills are prohibited for placement of new fixed anchors in Wilderness.

Conservation Education and Interpretation

- The Partnership recommends the creation of a new Desired Condition as follows: "*Educational materials promoting the principles of sustainable timber harvest and ecological restoration are provided to the public in coordination with project design and implementation.*"

- See page 134, CE-DC-01. The Partnership supports this Desired Condition, "Conservation education and interpretation is integrated as a component in all program areas."

- See page 134, CE-DC-09. The Partnership supports this Desired Condition, "Partners assist the Forests in delivering interpretation and education that instills and promotes conservation and stewardship."

- See page 135, Management Approaches. The Partnership supports the following management approaches; "…incorporate best scientific knowledge; are interdisciplinary and unbiased…"

Chapter 3: Geographic Areas

- The Partnership recommends the following overall clarity to the Draft Plan. Many of the Goals throughout the plan use the phrases "emphasize" or "respond to" regarding an activity. The phrases "emphasize" and "respond to" are not defined, cannot be identified as not already occurring, and are not congruous with plan revision or direction. When talking about recreation needs and Goals throughout this section, replace "emphasize and respond to" with "*maintain and enhance access to.*"

Bald Mountains Geographic Area

- See page 138. The Partnership supports the Objectives related to recreation and the narrative including recreational interests.

- See page 139. There is an error in this section, the Mountains-to-Sea Trail does not go through the Bald Mountains.

Black Mountains Geographic Area

- See page 143, BLM-GLS-03. This Goal states "At mid elevations accessible by existing roads, emphasize restoration of structural and compositional diversity within rich cove ecozones for species such as ruffed grouse, American woodcock, bats, and many salamander species." The Partnership recommends the following change: At mid elevations accessible by existing roads, emphasize restoration of structural and compositional diversity within rich cove ecozones *that support the development of old growth age and structural characteristics, including a mosaic of different sized openings to mimic tree-fall natural gap disturbance that would support habitat for many salamander species and bats."*

- See page 146, BLM- GLS-06. The Partnership supports the recognition of the need for increased recreational activity in the area, and would like to see this Goal more inclusive of other recreational activities. Notes could be made of the multi-use trail plan in development in the Old Fort area.

- See page 146, BLM-GLS-06. The Partnership does not support "respond to" as a meaningful or effective goal.

- See page 147, BLM-GLS-12. This Goal states "Partner with Mt. Mitchell State Park to ensure recreation linkages & high-quality conservation education opportunities" the Partnership recommends adding the following to the end: "*and access for trail management and parking.*"

- The Partnership recommends the addition of an Objective to address lack of horse trailer parking to access the Buncombe Horse Range Trail.

Eastern Escarpment Geographic Area

- See page 150. In the second sentence of the second paragraph, the Partnership recommends adding the language: "*horseback riding in the Boone Fork complex.*"

- See page 151, EE-GLS-07. The Partnership supports the Goal: "respond to increasing demands for sustainable mountain biking & horseback riding." We would like to point out that there are not overnight accommodations for users in the Boone Fork

area, adding overnight accommodations in this area would help to make Eastern Escarpment more accessible to those traveling longer distances. We recommend adding the following: "*and partner with user groups to create overnight accommodations, to help disperse recreation use from more concentrated areas.*"

● See page 152, EE-GLS-12. The Partnership supports this Goal that states "Partner with wilderness and outdoor recreation groups to assist in managing Linville Gorge Wilderness and the Geographic Area's Wilderness Study Areas and in educating visitors about wilderness ethics and low impact camping and climbing techniques."

● The Partnership recommends the addition of language that recognizes collaborative efforts to increase multi-use trails in the Eastern Escarpment Geographic Area.

Pisgah Ledge Geographic Area

● See page 156, PL-GLS-04. The Partnership supports this Goal; however, we recommend that this language should be used for ALL Geographic Areas mentioning peregrine falcon closures. We recommend that each area re-words the Goal to this language already in the plan: "Continue to support conservation and protection of peregrine falcons through monitoring, seasonal closure of select rock faces, and collaboration with the climbing and recreation community."

● See page 157, PL-GLS-12. The Partnership recommends that this Goal be adopted as a Forestwide Standard: "Utilizing visitor education and collaboration with multiple user groups, improve interactions between users to enhance visitor experience and safety."

● See page 157, PL-GLS-16. The Partnership recommends that this Goal be adopted as a Forestwide Standard: "Work with recreation groups to maintain the integrity and resiliency of rare plant communities and species through site specific management, stewardship, and education."

North Slope Geographic Area

● See page 160, NS-GLS-01. This Goal states "Restore diverse forest structure and age classes in areas outside of designated Wilderness areas to improve forest resilience and to ensure connectivity of a range of suitable wildlife habitat over the long term across the geographic area." The Partnership recommends changing the Goal with the following: "Restore diverse forest structure and age classes in areas outside of designated Wilderness areas to improve forest resilience, *to trend towards the natural range of variability, and* to improve forest resilience and to ensure connectivity of a range of suitable wildlife habitat over the long term across the geographic area."

<u>Highland Domes Geographic Area</u>

- See page 166. The Partnership supports the recognition of the need to maintain and enhance recreational activities in the Panthertown area. We do question the need to add the Goal to reduce user-created trails in this section when it is already addressed elsewhere in the Plan.

<u>Great Balsam Geographic Area</u>

- See page 170, GB-GLS-01. The Partnership recommends changing the language in this Goal from "Conserve and improve high elevation red oak forests, northern hardwood forests, and spruce-fir forests" to the following: " Conserve and *restore* high elevation red oak forests, mesic oak, and spruce-fir forests with emphasis on desired conditions within these ecozones."

<u>Nantahala Mountains Geographic Area</u>

- See page 176, NM-GLS-01. The Partnership recommends changing the language in this Goal from "Restore and maintain age class and structural diversity utilizing a range of management approaches with focus on the mesic oak, high elevation red oak, pine-oak heath, acidic cove, and rich cove forests." to the following: "Restore and maintain age class and structural diversity utilizing a range of management approaches*, including active management and natural disturbance,* with focus on the mesic oak, high elevation red oak, pine-oak heath, acidic cove, and rich cove forests."

<u>Fontana Lake Geographic Area</u>

- See page 184, FL-GLS-12. While this Goal does speak to enhancing recreational opportunities in the area, we feel there are some recommendations missing. Locals have expressed that they would like to see more maintenance and an increase of trails, improved signage (including the Trail of Tears), maintenance of current infrastructure, and designation of both lakes and Cheoah River as recreation priority areas. Recommended Objectives would include increasing flow releases on the Cheoah River and providing horse camping options at Tsali (it is a long haul for many people to get there, making it impractical for a day trip).

<u>Unicoi Mountains Geographic Area</u>

- See page 192. While there are Goals addressing some types of recreation, the Partnership would like to see multi-use trails added in the Geographic Area. Local communities have indicated a desire to work with the recreational community to develop a better multi-use trail system which can enhance their economic development goals.

Chapter 4: Management Areas

<u>Interface</u>

● See page 200. The Partnership supports the incorporation of and emphasis on interpreting management activities for the public.

<u>Matrix</u>

● See page 206, Transportation and Access. The Partnership recommends the creation of an Objective that prioritizes maintaining and restoring various types and levels of access based on GA-specific criteria that aligns with GA Goals and Objectives. More specifically, the Partnership desires to increase access in areas where it is most important while also making progress towards downgrading, decommissioning or repurposing unneeded roads that are not currently receiving appropriate levels of maintenance. (Cross-reference page 99, TO-O-06.)

<u>Backcountry</u>

● See page 208. The Partnership recommends adjusting the following statement, "Backcountry recreationists may notice ecological restoration management, maintenance of existing wildlife openings, and occasional prescribed fire or fire lines in these areas." Prescribed fire is a form of ecological restoration management and as silviculture is greatly limited in this MA, fire should be used more readily to achieve the desired ecological conditions, and thus recreationists are more likely to notice it.

● See page 208-209, BAC-DC-02. The Partnership notes that this Desired Condition is inconsistent with the Spectrum model in the DEIS by not consistently incorporating natural disturbance.

● See page 210. The Partnership supports the Desired Conditions related to fire.

● See pages 211-212, Transportation and Access. The Partnership recommends upgrading the Management Approach around unneeded system roads to a Desired Condition and developing standards around the process for eliminating or repurposing them. As was stated in our October 2017 recommendations, we would like to see an **emphasis placed** on the elimination of unneeded roads in the Backcountry MA.

<u>Ecological Interest Areas & Special Interest Areas</u>

● See pages 214-220. The section on EIA and SIA is confusing. The Partnership recommends clarifying the differences between these in the text. See the following bullets for further guidance.

Ecological Interest Areas:

● See page 214. The Partnership supports the inclusion of all four components of ecological integrity.

● See page 214. The background section describing this MA fails to mention the importance and incorporation of fire-adapted forest systems which are in significant ecological need of restoration. The section takes a very narrow view of ecology and only includes "individual threatened, endangered, or rare species, and high quality natural communities and high quality old growth." However, it then goes on to talk about treating stands with uncharacteristic vegetation. This language does not support the Desired Conditions and Standards which follow.

Special Interest Areas:

● See page 215, EIA-S-02. The Partnership supports this Standard focusing on community composition.

● See page 215, EIA-S-04. The Partnership supports this Standard focusing on use of natural ignitions for resource benefit.

● See page 216, EIA-S-06. The Partnership supports this Standard focusing on using salvage of dead and dying trees only when compatible with biological resources.

● See page 216, EIA-S-07. The Partnership supports this Standard focusing on site-specific analysis requirements for any new road construction.

● Recreation is listed as a potential defining characteristic for SIAs: unique attributes may be recreational, should remain persistent over time, and can benefit from specific management direction to maintain the special attributes of the resources in question. However, despite the available recreational criteria, we noted that few Special Interest Areas utilize recreation as a defining unique attribute. In fact, in the current inventory only two SIAs are designated for unique recreational attributes, despite significant, longstanding recreational use within a majority of the listed SIAs. Linville Gorge, Looking Glass, and Whiteside Mountain-three of the Forest's most significant and highly visited recreational sites- are only three outstanding examples where recreation should be recognized as one of the unique attributes that warrants their SIA status. In recognition of their unique recreational attributes, including rock and ice climbing, we recommend recreation be listed in addition to the other qualifying criteria for the SIAs listed below. Climbing at these areas has remained persistent over time and could benefit from specific management direction to maintain the special attributes of the climbing resource.
    ● Black Mountains

- Craggy Mountains/Big Ivy
- Linville Gorge
- Bonas Defeat Gorge
- Cullasaja Gorge
- Ellicott Rock-Chattooga River Gorge
- Scaly Mountain and Catstairs
- Whiteside Mountain
- Whitewater Falls
- Dismal Falls
- Fork Ridge/Mount Hardy
- John Rock
- Black Rock Mtn/Granite City
- Looking Glass Rock
- Linville Dolomite
- Fodderstacks
- Upper Santeelah

Including recreation in these areas' unique attributes is important and necessary to more accurately account for the unique characteristics which make these areas special. Doing so will memorialize needed Plan revisions that can substantiate the continued maintenance of valuable recreation and climbing opportunities.

Wild and Scenic Rivers

- See page 246-251. The Partnership appreciates that the Wild and Scenic discussion in the Draft Plan allows prescribed burning, discusses protections on rivers and is supportive from an ecological perspective.

- See Section 1, Issue 11 of these comments for additional information on Wild and Scenic Rivers.

Congressionally Designated Wilderness

- See page 257, CDW-DC-04 and CDW-DC-05. The Partnership recommends that these Desired Conditions be adjusted. Trail-based language in these DCs currently excludes cross country, off-trail wilderness recreation, such as paddling, climbing, hunting or fishing. Planners should add language to include these other wilderness based recreational activities. More specifically, DC-04 could include brief mentions of wilderness paddling, hunting, fishing and climbing. DC-05 could include brief mention of wilderness climbing practice/ethics.

- See page 258, CDW-S-03. The Partnership recommends this Standard be eliminated. Horse trails are an historically recognized use of Wilderness Areas acknowledged in the Wilderness Act and the Planning Rule. Separate Plan components assure that trails of any type built in wilderness areas and elsewhere are environmentally sensitive and ecologically sustainable. This Standard is not needed, is counterproductive, and would set a bad precedent for disallowing horse trails in Wilderness. (See Section 1, Issue 2 for more information.)

- See page 259, CWD-S-05. The Partnership has concerns with this Standard and recommends modification to provide for a realistic and implementable Standard that manages for climbing as an appropriate Wilderness activity, including use of fixed anchors. We recommend the following language replace CWD-S-05:

  "Manage Wilderness climbing as an appropriate Wilderness activity that requires self-reliance and provides for solitude and unconfined recreation. Climbers are a key part of the community of partners and users in Wilderness. Allow climbing fixed anchors where necessary to provide for outstanding Wilderness climbing opportunities, improve social conditions, protect natural resources, and enhance climber safety. Climbers may use, place and maintain fixed anchors, including any fixed anchors established before the date of the enactment of this plan. Placement of new rock climbing fixed anchors may require prior authorization to protect natural and cultural resources. Programmatic authorization is the primary mechanism for fixed anchor management as it protects resources while minimizing burden to land managers and Forest visitors. Site specific authorization should only be implemented to manage areas with documented sensitive or endangered resources. Motorized equipment (e.g. power drills) are not allowed in Wilderness and shall not be used for placement of fixed anchors. Climbing that does not rely on the use of fixed anchors and is consistent with Leave No Trace ethics and skills should be the norm in Wilderness. Climbers should use removable protection whenever possible."

- See page 261. The Partnership recommends the following new language for the Management Approach section: *Manage Wilderness climbing as a Wilderness value and activity that requires self-reliance and provides for solitude and unconfined recreation; work collaboratively with public interest groups to educate users about the Forest's special Wilderness climbing areas, low-impact Wilderness climbing practices, appropriate Wilderness fixed anchor use, and resource concerns.*

- See page 262, Management Approach. The Partnership recommends the Forest Service approach Wilderness climbing as a Wilderness value. We recommend that the phrase "self-policing" be removed and replaced with "*education and low-impact practices*." Additionally, rationale for a climbing route inventory in Wilderness Areas is unclear and without basis.

<u>Recommended Wilderness & Wilderness Study Areas</u>

- See page 264, RW-S-05. This Standard is not appropriate given provisions in the Wilderness Act and the Planning Rule for horse use in Wilderness Areas and the history of horse use in Wilderness. The Partnership recommends the following changes: "*Manage the trail system for appropriate recreation opportunities, including horse trails where these can be constructed in an environmentally sensitive manner and maintained for ecological sustainability. Designating bicycle trails is not allowed.*"

<u>Roan Mountain</u>

- See page 268, RM-S-04. The Partnership recommends that this Standard be adjusted to be site or resource specific.

Chapter 5: Monitoring and Adaptive Management

The Partnership has numerous recommendations about the Monitoring and Adaptive Management Plan throughout this body of work. In addition, we recommend that the following key plan components be added to referenced tables within this section (see pages 274-282).

Monitoring Question(s)	Indicators	Reporting Period
MQ 1-8-T2 What are the trends and conditions of NRV by ecozones within priority watersheds?	Acres of age class distribution both within FS ownership within watershed and inclusive of lands outside FS ownership	4 years
MQ 1-9-T2 What are the trends and conditions of NRV by ecozones not within priority watersheds?	Acres of age class distribution both within FS ownership within watershed and inclusive of lands outside FS ownership	4Years
MQ 6-2-T2 What is the status and trend in carbon stocks on the national forest **and at other spatial scales?**	FIA reports on carbon status	4 years

MQ 6-3-T2 What natural and anthropogenic disturbances have occurred? If possible, describe how forest resources have responded with respect to the attainment of NRV at multiple scales.	Number and type of disturbance, permanence or otherwise temporal character of disturbance. Evaluation of above at multiple spatial scales ecozone, forest ownership, geographic area, regional and trend toward NRV at those scales. Evaluation of resilience and response at those same scales.	10 years

Section 5. External Partnership Agreement to Support Congressional Designations

The information contained within this section is in alignment with Partnership recommendations in Sections 1-4.

Tier 1 Agreements to Support Congressional Designations*

Wilderness Area	Acres	Uncertainty	Milestone	Timing for Full Partnership Support
Craggy / Big Ivy	8,728	n/a	n/a	Immediate
Overflow	3,899	n/a	n/a	Plan finalization
Blacks	10,984	n/a	n/a	Plan finalization
Mackey	13,613	n/a	n/a	Plan finalization**
Joyce Kilmer Ext. (excluding Yellowhammer)	2,639	n/a	n/a	Plan finalization
Southern Nantahala Ext.	11,207	n/a	n/a	Plan finalization
Ellicott Rock Ext.	823	n/a	n/a	Plan finalization
Shining Rock Ext.	1,698	n/a	n/a	Plan finalization
Total	**53,591**			

*National Wild Turkey Federation can only support Recommended Wilderness designations that its local membership supports.

**There will be collaborative support to create a fire management plan and support during public scoping notices pertaining to burning in this area.

National Scenic Area	Acres	Uncertainty	Milestone	Timing for Full Partnership Support
Craggy / Big Ivy	6,439*	n/a	n/a	Immediate
Total	**6,439**			

* Forest Service National Scenic Area acres only. Excludes acres in the Craggy Recommended Wilderness and Blue Ridge Parkway corridor.

Wild and Scenic River	Acres	Uncertainty	Milestone	Timing for Full Partnership Support
Nolichucky River	1,920	n/a	n/a	Immediate
North Fork French Broad	2,080	n/a	n/a	Plan finalization
Big Laurel River	896	n/a	n/a	Plan finalization
Overflow Creek	320	n/a	n/a	Plan finalization
Panthertown/Greenland/East Fork Tuckasegee	2,752	n/a	n/a	Plan finalization
South Mills River	3,520	n/a	n/a	Plan finalization
Thompson River	1,184	n/a	n/a	Plan finalization
Whitewater River	1,152	n/a	Tier 2	Plan finalization
Total	**13,824**			

Key:

Support = Members consent to full Partnership endorsement of designation even if they are unable to support them as individual organizations.

Immediately = No further conditions need to be met

Plan finalization = Support from the full Partnership will be given if and when the plan is finalized consistent with the consensus recommendations of the Partnership, including recommendations for landscape-scale restoration and wildlife habitat management.

Tier 2 Agreements to Support Congressional Designations*

| Area*	Acres	Uncertainty	Milestone	Timing for Full Partnership Support
Harper Creek	7,319	Mountain bike opportunities in Eastern Escarpment GA	A broadly supported strategy and new project-level proposals moving through NEPA that will provide: (1) between 15 and 20 additional miles of class 2 or 3 sustainable multi-use trails and (2) network connectivity providing loop options of varying length and commitment levels within the Upper Wilson Creek/Harper Creek/Sugar Knob complex;	The Partnership agrees to support this area for designation after multi-use trail milestones are met at the GA level and when timber harvest is within Tier 2 levels forestwide.
Lost Cove	5,934			
Snowbird	8,921	Projects are supporting sustainable economic development, including increased timber harvest; Trail maintenance.	Graham County's annual average of timber harvest within recommended Tier 2 levels (204-409 acres regen) (see 2017 agreements). Miles of trail maintained by volunteers.	The Partnership agrees to support this area for designation after project-level approval of timber harvest capable of meeting our recommended Tier 2 levels and a commitment by volunteer groups (SAWS or other) to maintain trails.

Tusquitee	19,431	Maintenance of balds, fire adapted forests; Ability to meet habitat needs for deer/turkey in Clay County (due to loss of portions of these WHAMAs to RW); Loss of potentially suitable acres' contribution to Tier 2 harvest at the landscape level.	Development of fire management plan for recommended area and Partnership fully supports burning within wilderness publicly during scoping period; Harvest for wildlife habitat and timber in or near Clay County should be within Tier 2 levels (proportional to total; Landscape-scale harvest levels within Tier 2.	The Partnership agrees to support this area for designation after development of a fire management plan, project-level approval of management providing quality deer and turkey habitat in or near Clay County within Tier 2 levels (proportional to total), and when timber harvest is within Tier 2 levels forestwide.
Unicoi	5,735	Loss of potential harvest on 2,491 acres that were mapped as EIA in Alt. C; Loss of potentially suitable acres' contribution to Tier 2 harvest at the landscape level.	Harvest for wildlife habitat and timber in or near Cherokee County should be within Tier 2 levels (proportional to total); Landscape-scale harvest levels within Tier 2.	The Partnership agrees to support this area for designation after project-level approval of young forest habitat in or near Cherokee County within Tier 2 levels (proportional to total), and when timber harvest is within Tier 2 levels forestwide.

Middle Prong Ext.	1,909	Spruce-fir restoration; Turkey and grouse habitat opportunities	Successful development of project in Lickstone Ridge area that includes spruce-fir restoration, as well as turkey and grouse habitat	The Partnership agrees to support this area for designation after project-level approval of a project that meets needs for spruce-fir restoration and turkey and grouse habitat in the Lickstone Ridge area and when timber harvest is within Tier 2 levels forestwide.
Total	**49,249**			

*National Wild Turkey Federation can only support Recommended Wilderness designations that its local membership supports.

Wild and Scenic River	Acres	Uncertainty	Milestone	Timing for Full Partnership Support
East Fork Overflow/West Fork Overflow	1,280	n/a	Tier 2	The Partnership agrees to support this area for designation when timber harvest is within Tier 2 within the GA.
Santeetlah	4,000	n/a	Tier 2	The Partnership agrees to support this area for designation when timber harvest is within Tier 2 within the GA.
West Fork Pigeon	2,240	n/a	Tier 2	The Partnership agrees to support this area for

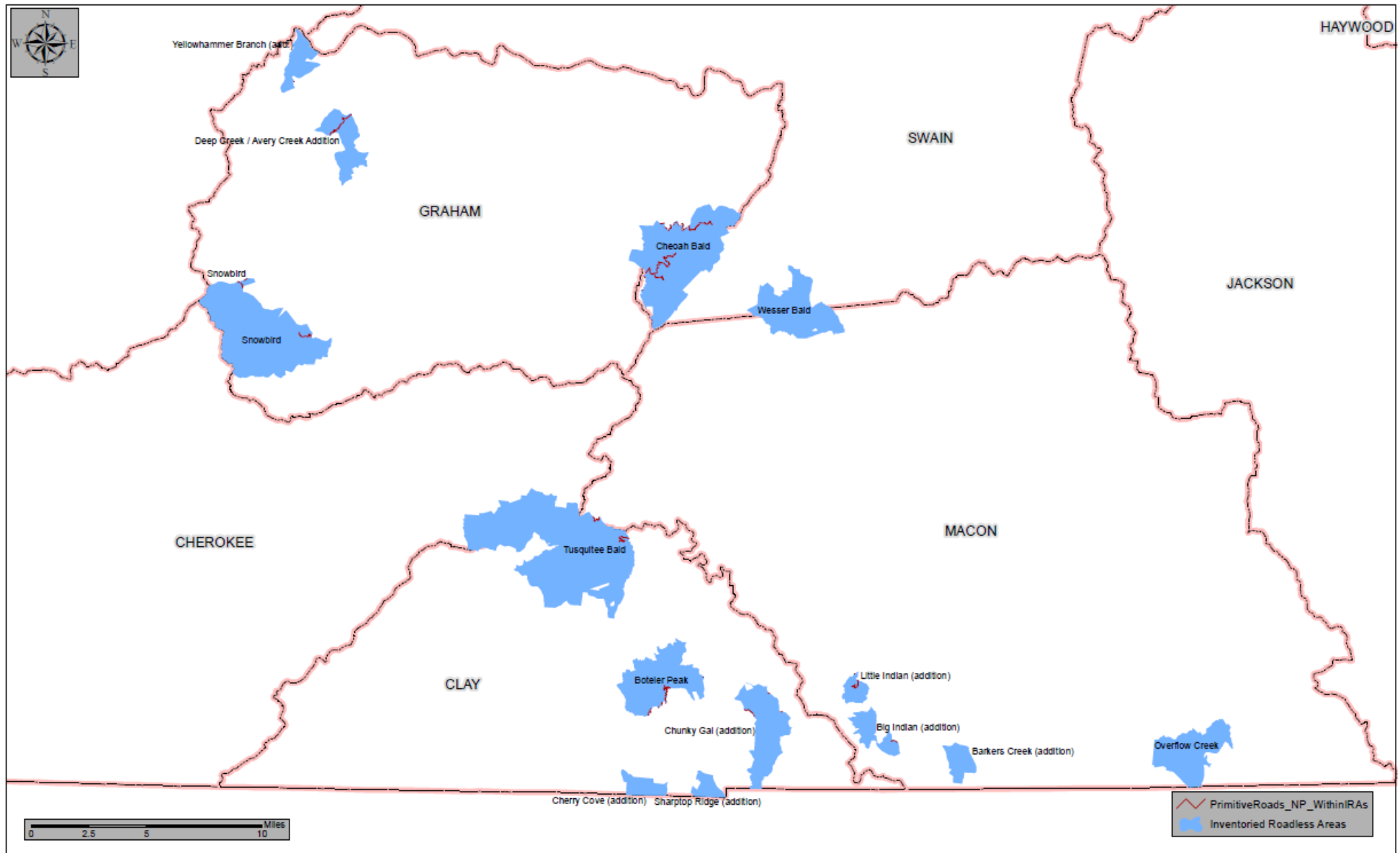|				designation when timber harvest is within Tier 2 within the GA.
Total	**7,520**			

NPFP Wilderness Recommendations
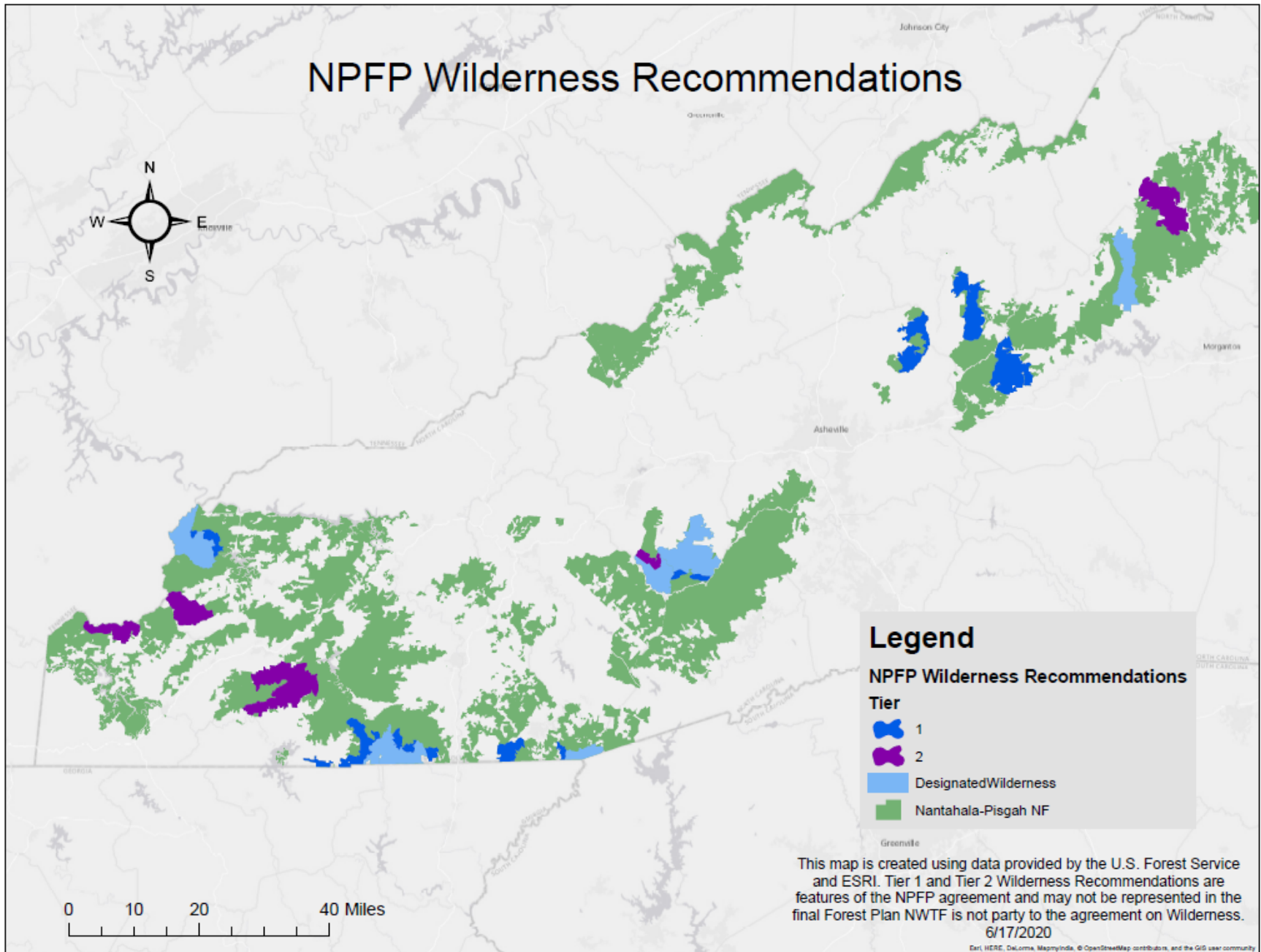
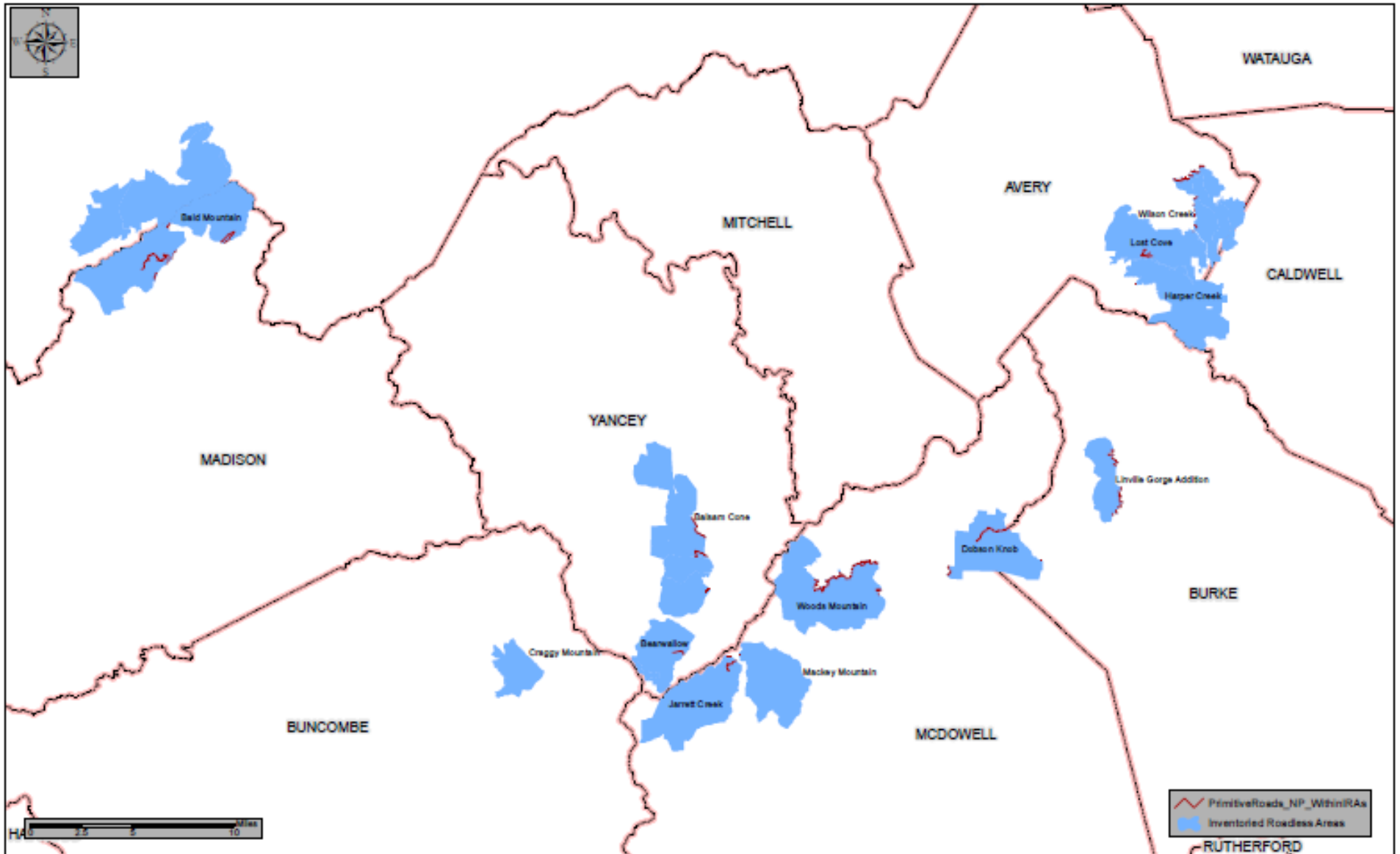*GIS map files attached.

Appendix A

Maps of Roads in IRA Areas

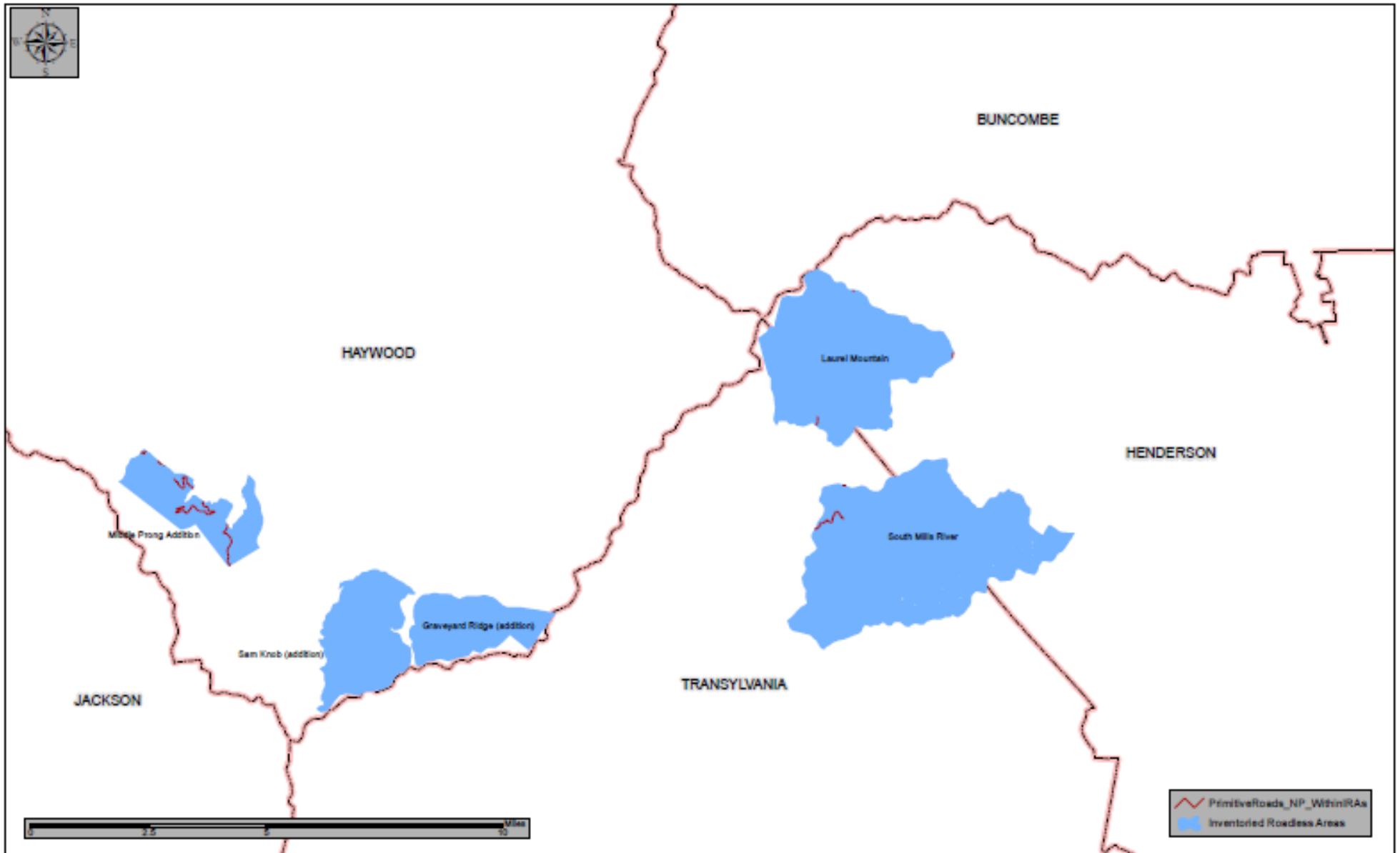# Roads within Inventoried Roadless Areas - Nantahala NF

*Available at https://www.dropbox.com/s/7ss7bolgk9752hz/Roads_IRAs_NantahalaNF_20170 913.pdf?dl=0_o Pisgah NF

Roads within Inventoried Roadless Areas - Pisgah NF

**Available at https://www.dropbox.com/s/wlz44z4vsf8p0c5/Roads_IRAs_PisgahNF_20170913 .pdf?dl=0 o Pisgah NF - Pisgah District: o

A-3

Roads within Inventoried Roadless Areas - Pisgah NF - Pisgah District

BUNCOMBE

HAYWOOD

HENDERSON

Laurel Mountain

Middle Prong Addition

South Mills River

Graveyard Ridge (addition)

Sam Knob (addition)

JACKSON

TRANSYLVANIA

Legend:
- PrimitiveRoads_NP_WithinIRAs
- Inventoried Roadless Areas

*Available at https://www.dropbox.com/s/g0z7rx46363gebh/Roads_IRAs_PisgahNFPisgahDist rict_20170913.pdf?dl=0