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Mr. Allen Nicholas
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U.S. Forest Service
160 Zillicoa Rd., Suite A
Asheville, North Carolina 28801

Subject: Audubon North Carolina Comments on the Nantahala Pisgah Draft Forest Management Plan and Draft Environmental Impact Statement

Dear Supervisor Nicholas,

Thank you for the opportunity to comment on the Proposed Management Plan and Draft Environmental Impact Statement for the Nantahala and Pisgah National Forests. Audubon North Carolina staff and our state level advocacy network of close to 40,000 individuals care deeply about our public lands and their role in bird conservation. For seven years now, Audubon Director of Conservation Curtis Smalling has dedicated countless hours to participating in this important process. He has served on various partnerships and committees and interacted with Forest Service staff on an almost monthly basis during that time. It is also important to note that Audubon North Carolina is the state office of the National Audubon Society in North Carolina and that our nine Audubon chapters (and four campus chapters) are independent organizations and may submit comments independently of the national and state organization, and those comments may differ in content and focus.

In addition, Audubon North Carolina is a proud member of the collaborative Nantahala Pisgah Forest Partnership (the Partnership), a group of more than 30 members and affiliates representing a diverse cross-section of public lands interests, working together since 2013 to create a lasting voice for innovative management and public investment in the public forests of North Carolina's mountains for the future. The Partnership recently reached a major milestone in crafting and signing consensus recommendations for improving the Draft Forest Plan, and we fully support those recommendations, which were submitted as comments on the Draft Plan. We have crafted these organizational comments to be complementary and supplementary to the Partnership recommendations, with the interests of our many partners in mind.

Further we were invited to participate in the National Forest Foundation led Stakeholder's Forum which has also produced a final document at their June 29th meeting which we have accepted as an accurate reflection of our conversations around these important issues. These group comments are seen as complimentary and not in conflict, and our further organizational comments that follow will focus on rationale and details around what we think are critical to successful management for birds and the habitats they depend upon in the Nantahala and Pisgah National Forests. These additional comments will lay out what we think is most important to the success of the new plan, both for birds and their habitats, but also so that meaningful and successful restoration, protection, and community engagement can grow and flourish over the coming new plan period.

We have been very pleased with the approach taken by the National Forest Planning Team during this process. Their transparency, frequent updates, and willingness to take a number of deep dives into the draft plan components and allow access to the specialists who created the draft EIS has been very helpful. We also appreciate their willingness to answer numerous questions around the more energizing aspects of the plan and to make those questions and answers part of the public record.

In addition, we applaud the inclusion of a "Connecting to Communities" and Partnerships" themes across all elements of the plan. We support all of the desired conditions for Community Connections (page 23), especially desired condition statements 8-10 regarding inclusion and diversity of forest visitors, volunteers, and partners.

However, recent guidance and recommendations to the Forest Service by the Trump administration would seem to place considerably less emphasis on these pillars of cooperation and inclusion. The recent proposed changes to the NEPA process specific to projects on the National Forest that included language stripping many of the public notification requirements of NEPA are problematic. Audubon provided more detailed comments on these proposed changes that can be found here. As late as last week additional guidance to the National Forests from the administration would streamline and fast track approval of energy projects on National Forest lands. This is especially troubling given the very sparse mention of these types of projects is mentioned in the Draft Forest Plan. In fact it appears that only one draft plan component addresses this topic at all (p. 27) in the section regarding climate change under desired condition: CC-DC-08 which states "Renewable energy opportunities, such as biomass, firewood, hydropower, geothermal, wind, and solar, are considered." These and other more traditional energy extraction projects have the potential for a wide array of impacts to the forest and many opportunities for goal interference with other parts of the plan. The DEIS (and Appendix B of the DEIS) does consider a wide range of hardrock mineral leases and alternative energy based on 2005 analysis, but falls short of translating those analyses into actionable direction in the Plan. But as the analysis in Appendix B states there are "major gaps in data compared to assessing potential impacts on surface resources" (p. B-19). Fast tracking these projects without sufficient public input would create tension and make implementation of the plan over this next planning cycle more difficult and challenging and may have far reaching negative impacts.

The detailed consensus comments of the Partnership are meant to provide detailed comments on specific plan elements and so for these comments, we will only occasionally reference specific plan components by

number and specific language changes should be looked for in those comments from the Partnership. Where Audubon would like stronger language or changes to components not mentioned in the Partnership comments, we provide them here.

When this process began and we engaged with a variety of stakeholders, it became clear that the primary issues revolved around three broad topics. How much active management should occur on the forest and how should the why and where questions be answered? How much recreation should be allowed, promoted, regulated, encouraged and where should it happen? And finally, how much land should be off limits to timber production through designations? All of these questions are occurring in a landscape that is both highly valued by the various interests that use it for multiple purposes as well as in the context of a regulatory framework that dictates certain components of the planning process and production of a Draft Environmental Impact Assessment. The work of the Partnership, Forum, and others have mostly sought to find a middle path that acknowledges the goals and desired outcomes of the various stakeholders. We think it is important to point this out as the consensus agreements and comments were hard work that involved compromise and a willingness to establish sideboards that help ease tension at the plan and project level and allow important work to proceed on the forest after adoption of the new plan. It is also critically important to note that progress toward everyone's goals in the Partnership comments is predicated on the entire path forward being built into the final plan. That sounds like a difficult ask of the Forest Service, but a close read of the consensus document will show that most of the agreed upon components are already in the plan, and many of the suggestions are for clarification, resolution of internal plan component conflict, and other easily addressed concerns.

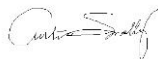
However knowing that many, many comments are being submitted with often competing interests it is prudent for our organization to point out some of the key components of the Partnership agreement that we feel are critical to a successful and implementable plan that we can support, even in the absence of full adoption of the Partnership comments. Our comments that follow highlight our most important take-aways from our review of the Draft Plan and DEIS on the high level topics outlined above.

Thank you for you and your staff during this lengthy process. Our staff have enjoyed their interactions with Service staff and look forward to a productive implementation of this new plan for the benefit of communities of stakeholders and the birds and other wildlife that also depend on the forest.

Sincerely,



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Audubon North Carolina –Comments on the Draft Nantahala and Pisgah National Forest Plan and Draft Environmental Impact Statement

Management of the Forest

During this planning cycle (15 – 20 years) Audubon supports plan components under Tier 1 for permanent openings (3750 acres), regeneration harvest (1200 acres per year), open forest(4000 acres), and prescribed fire (10,000 acres per year) and can support progress toward Tier 2 goals for these objectives only so long as concurrent robust monitoring and progress toward designations is also included in the plan (as outlined in the Partnership comments and below).

We also support progress toward the sideboards of the Natural Range of Variation described in the plan, only if landscape level (watershed, geographic area, and regional contexts) are included in the monitoring and adaptive management framework of the plan.

The management components of the plan needs to be a truly adaptive. The plan should be one that is responsive to new emerging realities related to invasive species, climate change, carbon storage and sequestration, and other ecosystem services and the role of the forest in a regional context (especially over multiple planning periods).

Retain the Ecological Interest Area management area for areas that are generally undeveloped and have relatively good ecological integrity, but which could potentially benefit from some restoration work.

Include a list of specific priorities for ecological restoration and ensure that they are actually included in projects when opportunities are present.

One of the outcomes of the forest wide assessment done at the beginning of the forest plan revision process was an identification by numerous stakeholders was a need for more active management on the forest than had been occurring under the current plan. Whether for increasing wildlife and hunting opportunities, managing for specific non-game species, a steady supply of forest products, or more fire to restore rare plant and animal communities, the call for more action was heard by the service. Historically there had been continual calls for more active management so this was nothing new to the planning process. The challenge was that during project planning under the old plan many projects were stalled or delayed due to conflicts with high conservation value areas like old growth presence or inclusion of State Significant Natural Heritage Areas in the project area. Estimates suggest that one out of every four acres proposed for management during the current plan were eventually removed from projects due to these conflicts. Markets, delays due to conflict, and other factors meant that for the past decade or so less than 1000 acres per year have been harvested on the forest, despite the existing plan calling for about 3300 acres per year to meet young forest goals.

Some portions of the plan that give us some concerns include a lack of triggers tied to monitoring to advance to Tier 2 (and beyond) objectives, the use of persistence as the definition of species level sustainability, the lack of clearly defined species goals in almost all cases for both rare and demand species targets, and a lack of deeper analysis of the full landscape needs for an all lands approach that acknowledges the role the forest plays in the a wider range of social and ecosystem services, and the “costs” associated with a much higher level of activity and the impact of those activities on existing populations of all forest species.

That said, these concerns are not a call for no activity or management, but rather a call for a more cautious approach that creates a robust monitoring program that is tied to the adaptive management framework called for in the new planning rule. Every acre of the forest (and adjacent and regional lands) currently provides habitat for a range of species, and conversion of large acreages to different age and structural classes as written in the plan creates losses for existing populations of certain species in favor of other species. Audubon’s work in forestry over the years has looked for ways to have “addition without subtraction” of species when conducting forestry efforts across a forested landscape. And while I appreciate that these considerations are often delegated to project level filters, we have to be sure that the current sets of DOGS (Desired Condition, Objectives, Goals, and Standards) build in this thinking wherever possible and that these considerations are explicit for managers.

We feel that the desired condition for open woodlands as stated in the draft plan covering almost half the forest is too high. We prefer the detail provided in the Partnership comments that are more nuanced and allow for more canopy retention in more mesic settings. And while we do see and support some efforts to create these habitats for specific species recovery goals (like elk), we would like to see those goals tied to population objectives, especially for demand species that regionally are not in short supply. In fact for deer and turkey we would like to see an acknowledgement that desired objectives in the plan for these species are a recreation and access goal, not a biologically driven one that currently lacks an explicit population goal. The impact of deer populations on the success of regeneration (both natural and after harvest) are well documented and can have landscape level impacts on the pace of recovery and desired conditions, and so a wholesale approach to increase numbers with no targets, caps, or desired population goals is problematic. Grouse, Cerulean and Golden-winged Warblers are decline driven wildlife species driving management goals for young forest and open condition and again, specific population goals would help us set goals for young forest.

As an example, we believe that Tier 1 even-aged young forest management for Golden-winged Warblers, in tandem with maintenance and creation of permanent openings will meet stated population goals as outlined by the GWWA working group of about 25,000 acres on the landscape at any one time, sufficient to double the existing population. Add to that mix, the real challenges of managing open woodlands that will likely also create at least marginal GWWA habitat for extended periods of time, and we quickly exceed the acreage goal for the species. This is especially true for a species like GWWA that appears to be limited by wintering grounds habitat loss (Gunnar, 2018) rather than breeding season habitat effects. Likewise while we know we lack structural components for Grouse, we also know that climate and West Nile Virus are having measurable impacts on the species. Again these facts are not a call to do nothing, but rather to be cautious, evaluate our progress toward a real population goal tied to habitat goals and at a time scale that

reflects the measurable species response. And that should be true for rare and endangered species across the forest as well.

On the other side of the equation, the forest is currently some of the best habitat in the eastern US for forest interior and canopy closed system birds. Many of these species like Black-throated Blue Warbler, Ovenbird, Hooded Warbler, Kentucky Warbler, Swainson's Warbler, Acadian Flycatcher, Veery, and Wood Thrush are tied to complex understories under mostly closed canopies. These conditions will likely be lost given the current desired condition for open woodlands at 40-60% canopy closure with fire maintained loss of shrub and mid-story components. The modeling done in the ESE tool used for the CEIS mutes those effects across alternatives by including species from every possible age class and structural type for every ecozone and structural type and by using persistence as the measure of sustainability. What we should be driving at with all of our habitat work is either an increase in density or richness or ideally both. What we don't want to do is lose all of our forest interior species across 40% of the forest (over multiple planning cycles) by trading conservative interior species for widely distributed and abundant species and calling that success because we can check the persistence and richness boxes. If we do that, especially in the context of what is happening across all lands in the region, we will have won stand level battles but lost the war for a large number of forest interior birds. The fact that the current system is a largely closed canopy one and that forest birds are doing well should be the strength we are playing to and planning around rather than feeling that this is a resource that can take some losses and still persist. And if persistence is our stated goal at the species level, then there is no need to push for increases in habitat or populations for demand species (Wild Turkey, Deer, Bear) either.

There are also a number of benefits of these closed systems to the region and those should be weighed in our conversion of habitats from one to another. Carbon storage versus sequestration, water retention versus water delivery and run off, air quality, climate resilience, thermal regulation, soil chemistry and nutrient cycling all present tradeoffs at the scale at which the plan lays out the need for young forest and open woodlands.

Again these factors direct us toward caution but allow us to easily support Tier 1 goals for most management directives during this planning cycle and in the alternatives, but have some fears related to the stated final desired condition that those tiers point us toward in the Plan. There has been a lot of discussion in the various stakeholder forums and comments to the service about pushing management levels to Tier 2 and beyond almost immediately during this plan cycle. A truly adaptive management approach requires us to monitor, inform, and respond. Much of the impacts, both positive and negative to habitat management occurs at a pace that is slower than that and so just as we often start every conversation about the need for change on the forest with the words "due to past management history" the fear we have is that if we get too far out in front of what the response variables can tell us about our true impacts both at the stand level (where we are often content to evaluate) and also at the regional scale (or at least Geographic area scale) then we are flying blind and likely to overshoot net benefits across all species. We also feel that any attempt to move beyond the levels of impacted acres defined in the DEIS require an additional analysis of the plan or a formal plan amendment if the plan has been adopted.

The current Tier 2 goals of the draft plan are to have between 60,000 and 90,000 acres of young forest through regeneration harvests that are obtained through annual harvests of up to 1200 acres under Tier 1 and up to 3200 acres under Tier 2. The reasoning for this level of harvest is largely driven by two goals – steady supply of timber that can help pay for restoration on other parts of the forest (and help communities through timber sales) and to provide young forest conditions for a variety of wildlife species. But we know that this is in pretty big contrast to current levels of that young forest condition currently on the forest. Much of the regional disturbance at this scale and pace occurs outside of the forest service ownership and is largely anthropogenic.

The planning rule places an emphasis on an “all lands approach” that requires the plan to evaluate the context of forest service lands and the role they play regionally for plan components (like air quality, water quality and quantity, species presence and abundance, and other factors). The lands of the service are recognized by a variety of studies and stakeholders as critical areas of forested lands in the region (see TNC, NC Forest Service Assessment and Audubon Priority Forested areas) as well as serving as important climate resilience anchors and landscape connectors for people, recreation, and forest interior species, as well as a variety of high priority species for conservation and recovery. While the current plan lays out that regional importance in the assessment, introductory material (pg. 12 and 17) and Desired Conditions (pg. 45), the Objectives for Terrestrial Ecosystems do not reflect any language that places those objectives in an adaptive framework to evaluate the landscape level effects of the management objectives laid out there (pg. 77-80). Most existing Standards and Guidelines are very specific to management action or timber practice with no Standards or Guides outlining sideboards for landscape level approaches. And while the National Forest is often perceived as a monolith of ownership it is in fact not as contiguous as most of the public thinks. A quick analysis of 12 digit HUC watersheds with forest service ownership for instance reveals that not a single 12 digit HUC watershed is 100% owned by the USDA Forest Service. So control of the management of all watersheds is a shared responsibility with other managers, whether public or private.

This is critical to management moving forward as the plan sets regional goals through both the NRV model and Geographic Area goals. The NRV model was created using data from the region as a whole including private lands and so the attainment of NRV must include those lands and evaluation of the forest for attainment to NRV by ecozone without consideration of other lands in the region is flawed. As Mountain True’s analysis of departure shows, certain ecozones (like cove forest) are more departed on adjacent lands than on Forest Service lands (Kelly, 2013). Assessment of the departure from NRV across the region and the national forests role in attaining those conditions should be included explicitly in the monitoring framework (especially Category 2 Monitoring questions reflected in Table 2 pg. 275 of Chapter 5). The plan states on page 47 that “It is appropriate to be outside the range of desired conditions at the local scale in order to achieve social, economic, cultural or ecological desired conditions at the landscape scale” and so it would seem imperative to evaluate those desired and current conditions at broader spatial scales (like priority watersheds, geographic areas and regional contexts). In addition, the statement above is often interpreted to mean that it is OK to be above NRV for young forest or open condition but it should also be clear that in the regional context it may also be appropriate to be outside that range on the forest to supply structure and condition for any age or structural class (old growth for example) at broader scales. The

temporal scale of this attainment is also often overlooked and appears to be missing from the DEIS. The NRV model uses regional disturbance regimes and then forecasts that modeled range of variation over a 1000 year cycle (Blankenship, 2015). A management plan that seeks to maximize, then maintain the upper range of variation does not allow for additional major disturbance from natural and anthropogenic sources at multiple scales to oscillate during that long time horizon.

This broader context is important for bird conservation and informs the evaluation and monitoring of progress for interior species as well as young forest associates. Recent progress in understandings of the landscape level effects and threshold limits of certain species or suites of species help inform successful management for multiple targets. For examples see work on Golden-winged warblers (Crawford et al, 2016), Golden-cheeked Warbler (Butcher, 2010), threshold responses for multiple species from management intensity and scale (Bakermans et al, 2012; Becker, et al, 2011; Roberts and King, 2017) and behavioral drivers of distribution in managed landscapes (Desrochers et al, 1999; Akresh et al, 2014). Thinking about the design of condition monitoring at a variety of spatial scales is needed for effective adaptive management, and is now possible given the resolution of both vegetation data and bird abundance data from a variety of sources (Hansen et al, 2013; Fink et al, 2018) . The language presented below attempts to capture that need in the draft plan.

Specific Recommendations –suggested language in ***bold italics***

For Draft Plan Terrestrial Ecozones Section A – Broader Landscape {Pattern and Connectivity, Key Characteristics of Ecozones, and Restoration Priorities (beginning page 45)

ECO-DC-01 The ecological integrity of the landscape pattern and connectivity is enhanced and maintained broadly across the Forests. Landscape patches and connectors sustain a diversity of ecosystems and habitat types, enhancing conditions for native species. The landscape sustains an evolving network of structural classes (from young to old) within the natural range of variation for each ecological zone ***at multiple scales including within geographic areas and regionally.***

ECO-DC-03 Other landscape patches evolve through a combination of natural succession and natural and human-caused disturbances. These patches contain the most actively managed landscapes where management contributes to the landscape’s overall natural range of variation. These patches provide a mix of habitat types for a wide variety of species that depend on young forests as well as old. Young forests ***and other functional early successional habitats (e.g. open woodlands, permanent openings, daylighted road edges)*** are provided in a patch size and arrangement to provide high quality habitat for species dependent on these forest conditions. ***These open condition habitats contribute to the desired NRV at multiple scales including within the forest, within geographic areas, and regionally.***

ECO-DC-04 Smaller patch sizes that are surrounded by private lands contribute to the forested or open lands pattern in western North Carolina, ***dependent upon the desired conditions and NRV context of the patch location within its landscape context.***

ECO-DC-05 Connectors, in the form of linear corridors, cross the landscape to facilitate movement of priority species between patches, *but only where they will likely not contribute to the fragmentation of interior forest conditions or create barriers to movement of other priority species.*

Restoration Priorities – beginning page 59

ECO-DC-06 Ecological restoration is focused on restoring the key characteristics of ecozone composition and structure, function and processes needed to maintain those key characteristics over time *and monitored for attainment across multiple spatial scales (forest service lands, priority watershed, geographic area, and regionally).*

ECO-DC-19 A network of future old growth forests representing all ecozones and elevations are dispersed across the Forests in large, medium and small patches. Large and medium patches provide habitats for forest interior species. Small patches function to improve the distribution or connectivity of a particular ecozone or species throughout the landscape or to support locally important conditions, *and the forest's contribution to these conditions across multiple spatial scales (stand, priority watershed, geographic area, and regionally) is evaluated through the monitoring program.*

B. Terrestrial Wildlife Habitat Types Across all Ecozones (beginning page 71)

ECO-DC-24 Unfragmented interior forest conditions continue to occur across the landscape *as predicted by NRV at multiple spatial scales (stand, priority watershed, geographic area, and regionally) and the monitoring program evaluates the forests' contribution to that attainment of NRV over time at landscape scales.* The distribution may change as the forest or management actions occur (See Table 7)

Management Approaches (page 79)

Add: Establish prescribed periodic evaluation of forest contribution to NRV attainment at larger spatial scales (geographic area and regional scales) reflecting the context of dynamic threats and changes to public and private lands (e.g. climate related threats, development pressure, invasive pests and pathogens, harvest intensity on adjacent lands etc)

Chapter 5: Monitoring and Adaptive Management (beginning page 272) note key plan components column missing from all tables as indicated on page 274.

We would also like to reiterate some monitoring plan components and language we provided for the consensus Partnership comments and provided in the table below.

<u>Monitoring Question(s)</u>	<u>Indicators</u>	<u>Reporting Period</u>
<u>MQ 1-8-T2</u> What are the trends and conditions of NRV by ecozones within priority watersheds?	<u>Acres of age class distribution both within FS ownership within watershed and inclusive of lands outside FS ownership</u>	<u>4 years</u>
<u>MQ 1-9-T2</u> What are the trends and conditions of NRV by ecozones not within priority watersheds?	<u>Acres of age class distribution both within FS ownership within watershed and inclusive of lands outside FS ownership</u>	<u>4Years</u>
<u>MQ 6-2-T2</u> What is the status and trend in carbon stocks on the national forest and at other spatial scales?	<u>FIA reports on carbon status and partner r</u>	<u>4 years</u>
<u>MQ 6-3-T2</u> What natural and anthropogenic disturbances have occurred and if possible describe how forest resources have responded and describe the attainment of NRV at multiple scales.	<u>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.</u>	<u>10 years</u>

We feel strongly that without these components, the plan will not be a truly adaptive management plan that is responsive to changing factors at play at all scales through the life of the plan. We would also like to thank the service staff for their willingness to tackle these issues for the final monitoring plan, including their support of our engagement with the Nicholas School internship program to help chart a course for these elements to be included in the final plan.

Climate

The plan must require that all infrastructure (e.g. stream crossings and culverts) be designed and maintained to accommodate increased storm intensity and frequency.

The Forest Service should monitor disturbance trends across all lands in the planning area and commit to mitigate their impacts if unexpected levels of disturbance are occurring during implementation.

New or reconstructed road stream crossings must provide passage for all relevant aquatic organisms.

Unroaded areas should be protected to provide intact, connected forests.

The Forest Service should provide a full accounting of the Nantahala and Pisgah National Forests' role in sequestering and storing carbon within the monitoring program established in the Final Plan, along with the cumulative impact of management and disturbance trends across the National Forest System.

As Audubon's 2019 Survival By Degrees Report (National Audubon Society, 2019) shows, climate change and the immediate threats associated with those changes (extreme rain events, spring heat, etc.) are one of the existential threats to bird survival. The large intact forests of the Nantahala Pisgah National Forests create a system more resilient to these threats, and management and restoration should protect that function rather than degrade it (see Schwenk, et al, 2012; Martin, et al, 2016; Stralberg et al, 2019). Audubon's work (Wilsey et al, 2019) clearly show the relationship to climate induced threats (severe storms, spring heat, sea level rise) and vulnerability to birds at a fairly fine scale, and the western region of North Carolina will be subject to many of those threats, placing many species of our high elevation systems at risk. More than a third of North Carolina's climate threatened breeding species are mountain specialists.

The DEIS provides a wealth of information in the analysis of climate and its impacts to the forest, but much like with energy development, little of that makes it into the Draft Plan as plan components. We strongly support the extensive recommendations of the Partnership regarding building a plan that informs action on the Forest.

Recreation

As the most visited National Forest in the Eastern United States with over 4.5 million visitors annually, the natural settings for recreation should be protected to the greatest degree possible.

The new Plan should 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.

We know that recreation can, at times, have detrimental effects on birds from human disturbance and infrastructure development (Botsch et al, 2018; Milling, 2003). But we also know that access for human powered, motorized and non-motorized recreation, bird watching, hunting and fishing, and myriad other activities is an important part of the value and community of the National Forest.

We feel that the draft plan, while acknowledging this important part of the users of the forest is weak in terms of its support of sustainable recreation that includes bird watching and other activities. Many of the recommendations of the Partnership are geared at addressing these shortcomings of the draft plan and we support the collaborative approaches outlined within that document.

One of the areas that garners near unanimous support is the long standing and successful seasonal climbing closures for Peregrine Falcon nesting. We support continuing this important collaboration and support suggested changes to the language of the draft plan (above) to make that language of the plan components consistent across the plan including specific language for the geographic areas.

We would also point out that while the DEIS includes bird watching under the wildlife watching category of user groups (page 423) it should acknowledge the popularity of that pursuit and as a pursuit that regularly generates real dollar revenue for the forest, region and state. In fact according to 2016 National Survey (US Department of Interior, 2016), almost twice as many people (86 million) participated in wildlife watching as hunting and fishing combined and spent a total of almost \$76 billion dollars on their pursuits. Bird and other wildlife watchers also tend to represent a user group distinct from hunters and anglers. In the 2017 Survey of Birdwatchers in North Carolina (Escher et al, 2017), only 3% of birdwatchers surveyed self-identified as a hunter (p. 39). This follows trends identified in the landmark study from Manfredo et al (2018), that shows the divide among user interests and growth in wildlife and wildlife management in the US. The summary of that study being that the trend is for more users of the natural world see their role as one of protector or a “mutualist” to borrow the language of the study, rather than a “traditionalist”, further supporting the approach that natural settings are very important and only becoming more so for a majority of outdoor enthusiasts.

Designations

Backcountry, wilderness, and other similar areas must be included in the old growth patch network. And all priority conservation lands (Mountain Treasure Areas, State Natural Areas, and Existing old growth) should be placed into management areas that contribute toward future old growth.

Adding existing old growth to the old growth patch network should be mandatory

All Natural Heritage Natural Areas are unsuitable for timber production and should be placed in management areas (like Special or Ecological Interest Areas) that assure they can and will be managed (if needed) consistent with the values that led them to be designated by the State.

State Natural Heritage Areas should be managed to maintain their rare or exemplary ecological values. It is not enough to only avoid known rare species occurrences.

All Wilderness Inventory Areas should be managed to maintain or restore their wildland values by inclusion in management areas that make that more likely (Backcountry or SIA, EIA for example).

All Wilderness Inventory Areas should be off limits for the construction of new linear rights of way, like utilities or highways or other fragmenting features.

The following areas should be recommended for Wilderness or National Scenic Area designation in the revised plan: Craggy/Big Ivy (Wilderness and National Scenic Area), Overflow, Black Mountains, Mackey Mountain, Joyce Kilmer Extensions (excluding Yellowhammer), Southern Nantahala Extensions, Ellicott Rock Extension, Shining Rock Extensions, Harper Creek, Lost Cove, Snowbird, Tusquitee, Unicoi & Cantrell Top, and Middle Prong Extension.

The following rivers should be included as Eligible Wild and Scenic Rivers: North Fork of the French Broad, Panthertown Creek, Greenland Creek, the East Fork of the Tuckasegee, the East and West Forks of Overflow Creek, and nine additional miles of Fires Creek. In addition, Big Laurel Creek and the West Fork of the Pigeon should be reclassified as “scenic” rather than “recreational” streams, and Overflow Creek, Thompson River, and Whitewater River should be reclassified as “wild” rather than “scenic.”

We appreciate the work of the forest service to work with stakeholders to change the way in which Management Areas (Mas) are defined (such as the use of the terms Interface, Matrix, and Backcountry as primary MAs). We do feel that in an effort to further reduce conflict at the project level, support the role of natural processes on the forest, and provide natural settings for forest users and the wildlife that reside there, we need a suite of designations to mitigate against the regional pressures on the systems and maintain a mix of approaches to ecosystem services and uses of the forest. Moreover, the “protection” of these areas from any or high levels of active management, creating favored landscapes for scenic views, solitary recreation, and wilderness character, which are shown to be primary motives for visitation to the forest. Designation can also provide some certainty for active management projects, lessening the possible areas of friction and contention during project planning and implementation. Having these areas designated, and in some ways constrained, identifies the appropriate approaches prior to project design rather than staff making decisions based on interpretation of the plan components.

We feel that this is especially true of the Special Interest and Ecological Interest Areas, which should be largely based on the presence of identified high conservation value locations by the North Carolina Natural Heritage Program (NCNHP). We agree with the recommendations of the Partnership in how these areas should be delineated based on their NCNHP rankings. And many of these areas can and should be managed to enhance or retain their unique ecological features.

In an analysis of a series of NC Wildlife Resources Commission proposed Wildlife Habitat Active Management Areas (WHAMAs) for six high priority species (Elk, Whitetailed Deer, Wild Turkey, Ruffed Grouse, Golden-winged Warbler, and Cerulean Warbler), Audubon confirmed that a vast majority of these WHAMAs occur within management areas open to active management across all Alternatives presented in the DEIS. For all species, well above 70% of the prescribed WHAMA fell within areas open to management, indicating that even Tier 2 levels of management are not hindered by more restrictive

designations like Wilderness. We acknowledge that not all locations within a management area are considered operable, but in further analysis conducted by the Nature Conservancy, enough suitable lands were contained within these active management areas to achieve Tier 2 goals during this planning cycle. This discussion would be more helpful however if demand species advocates were willing to set population or even density goals for the forest (as we have proposed for Golden-winged and Cerulean Warblers). If we had those we could evaluate the need more precisely and match those goals to the available operable base.

And as “Connecting Communities” and “Partnering With Others” are pillars of the themes of the new plan, it would seem that given how passionate both sides of the wilderness designation issue are, it would serve the community best for the Service not to act as gate keeper for possible Congressional designation but rather let the will of the people help shape that direction. Limiting those areas that can move forward by their omission from the plan as recommended wilderness would seem to limit public involvement in the ultimate implementation phase of the plan. Currently the Nantahala Pisgah Forests have less designated Wilderness as a percentage than the other national forests in the region. Recommending all of the areas included in the Partnership document would bring these forests more in line with their counterparts at about 17% of the total acreage of the forest.

And for those that might argue that designations limit progress toward NRV across the forest, the data on canopy reducing disturbance do not bear that out. An Audubon analysis of disturbance rates derived from satellite imagery from 2000-2018 (Hansen et al, 2013 data updated in 2019) across the forest are very low at a total loss of canopy of only about 1.4% forest wide for the period. But much of that loss is driven by fire related losses in wilderness of about 4% of total wilderness acres.

At a minimum, these high conservation value areas should be managed for their wilderness and ecological value, regardless of their management area designation, and the plan direction for these areas should be delineated in the plan components rather than leaving discretion to project level staff. We also encourage pre-project design consultation with a variety of partners with an interest in these areas to resolve conflicts and tensions and increase efficiency.

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