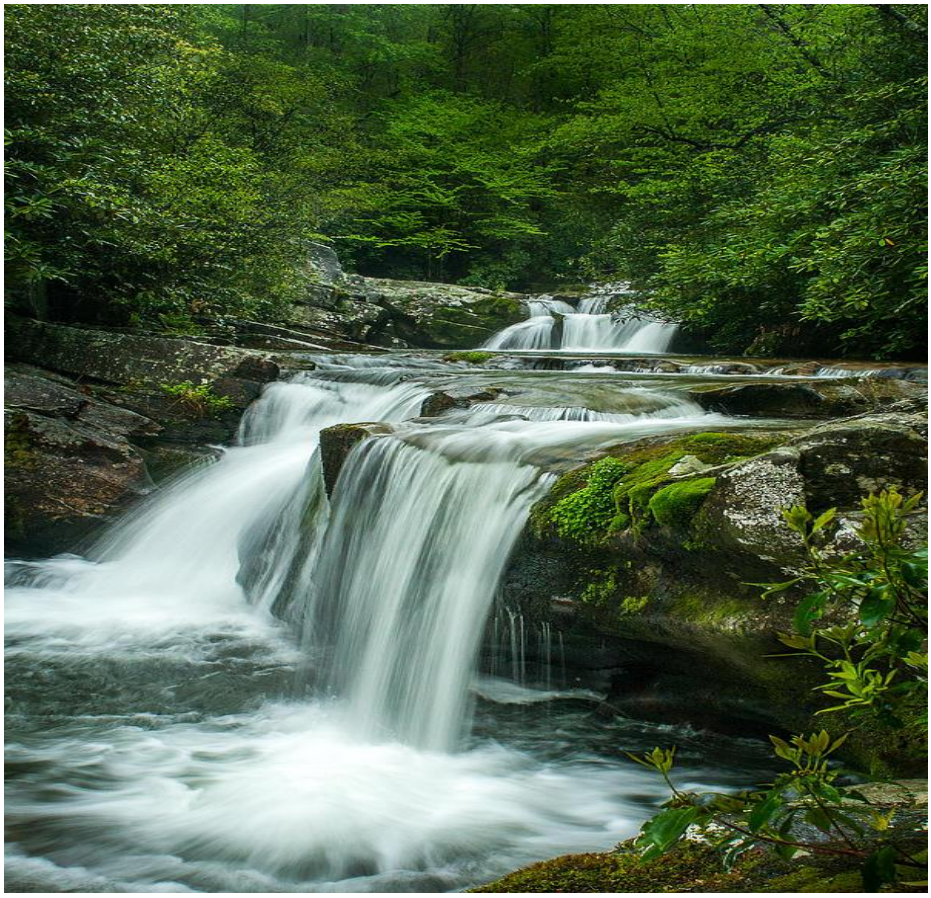
Revising the Land Management Plan
Nantahala and Pisgah National Forests

October – November 2014
Public Meeting Handout



Wildcat Falls, Joyce Kilmer Memorial Forest

Proposed Management Area Framework
And Forest-wide Desired Conditions

Significant Issues

Comments received during the initial scoping period and public meetings were reviewed, and four significant issues were identified to help managers develop the revised forest plan and craft alternatives for analysis. The four significant issues are:

Wildlife Habitats

- There a number of opinions concerning the desired amount of young forest, old forest, and interior or core forest available to provide wildlife habitat. Interests ranged from creating additional suitable habitat for the large suite of wildlife species that benefit from young forest conditions, to focusing on allowing only natural disturbance processes to prevail without human intervention. The best available scientific information indicates that the available supply of both very young forests and very old forests is limited on all lands in the plan area.

Special Designations

- There are range of opinions regarding the number, kinds, and extent of special designations and recommended special designations. Interests range from having only a small percent of the Nantahala and Pisgah NFs in special designation, to having tens or hundreds of thousands of acres in special designations.

Access

- There is disagreement regarding the extent to which the road and trail systems should provide access to Pisgah and Nantahala NFS. The interests range from those who wish to reduce the miles of system roads by eliminating many closed roads and limiting new road construction, to those who desire many closed road be open for motorized use. The current road system has a backlog of maintenance needs. Trail users generally wish to retain and increase trails miles for some uses, while the current trail system is in reality financially unsustainable.

Recreation

- Many forest recreationists have a favorite activity they wish to see perpetuated and possibly enhanced, and many have a particular type of setting they prefer for enjoying their chosen activity. Some interests include more challenging sports that may impact forest resources. Varying types of trail users may conflict with one another, such as equestrians or hikers and mountain bikers. Different overall management approaches may result in varying amounts along a spectrum of recreation opportunities. Hunters and anglers desire different forest settings than tourists visiting high-use scenic corridors.

Management Area Descriptions

Management Areas (MAs) are areas that have similar management intent and a common management strategy. They are delineated to provide plan direction for areas to meet specific management needs. This direction does not substitute for, or repeat, forestwide direction. The Management Areas identified in the revised plan are listed in Table 1 and described in further detail below.

Table 1. Revised Plan Management Areas

Management Area	Estimated Acres	Timber Production[1]	Timber Harvest[2]	Notes
1 - Forest Habitat Diversity	501,000	Yes	Yes	meet resource or restoration objectives
2A - Restoration and Connectivity	191,700	Yes	Yes	meet resource or restoration objectives
2B - Restoration and Connectivity	24,100	No	Yes	less access than MA 1
3 – Backcountry (includes Inventoried Roadless Areas)	134,600	No	Yes	meet resource or restoration objectives less access than MAs 1 and 2
4 - Significant Recreation and Heritage Corridors	46,600			
4A - Appalachian Trail		No	Yes	benefit the qualities and characteristics of the AT
4B - Scenic Byways		No	Yes	maintain scenic vistas meet resource or restoration objectives
4C - National Heritage Corridors		No	Yes	maintain or restore heritage characteristics
4D - Designated Wild and Scenic Rivers		No	Yes	maintain outstanding resource values (ORVs) meet designation (i.e. wild, scenic, or recreational) objectives
5 - Special Interest Areas (SIAs) and Research Natural Areas (RNAs)	15,400	No	Yes	SIA: maintain, enhance, or restore unique feature(s) RNA: manage for maintenance of natural conditions and processes
6 - Wilderness Study Areas and Recommended Wilderness Areas	26,900	No	No	protect wilderness attributes
7 - Congressionally Designated Wilderness	66,550	No	No	protect wilderness attributes
8 - Experimental Forests	12,250	No	Yes	meet research objectives protect areas from effects to research and educational values
9 - Roan Mountain	7,900	No	Yes	maintain, enhance, or restore unique feature(s)

Management Area	Estimated Acres	Timber Production[1]	Timber Harvest[2]	Notes
10 - Concentrated Recreation Areas	1,200	No	Yes	meet resource objectives maintain visitor safety
11 - Cradle of Forestry	6,800	No	Yes	manage for educational, interpretive, and historical forestry practices
12 - Administrative Sites	350	No	Yes	maintain visitor safety

[1] **Timber production** is defined as the purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use (36 CFR 219.19).

[2] **Timber harvest** is defined as the removal of trees for wood fiber use and other multiple-use purposes (36 CFR 219.19).

MA 1 – Forest Habitat Diversity and Resilience

Management Area 1 contains portions of many ecozones that provide the best opportunities for restoring a diversity of forest age classes and forest conditions. High-quality wildlife habitat is provided for the broad range of species that benefit from grassy openings, young forest, and edges juxtaposed with mature and older forest. Public access is provided through a combination of roads open to motor vehicles, roads closed to motorized use but open for other types of use, trails, and cross-country access by foot travel.

These areas provide suitable habitat for a variety of plant and animal populations associated with early successional forest habitats. A mosaic of early successional habitat patches of various sizes is interspersed throughout a predominately forested landscape. The area also contains forest communities greater than 100 years of age and permanent herbaceous openings providing both wildlife habitat diversity and visual diversity. Both timber regeneration and prescribed fire play an important role in the maintenance of many of the forested communities found throughout this management area.

MA 2 – Restoration and Connectivity

Management Area 2 provides opportunities for restoring a diversity of forest age classes and forest conditions, but with less emphasis on young forest and spatial heterogeneity, and more emphasis on connectivity of habitats. High-quality wildlife habitat is provided for species that benefit from predominantly mature and older forests in both open and closed-canopy conditions; with lesser amounts of young forest, edges, and grassy openings than in Management Area 1. Some open roads provide motorized access to the forest. Access is also provided by foot and possibly other means on roads closed to motorized use, on trails, and cross-country by foot. New road construction is limited to low service levels.

These areas provide suitable habitat for a variety of plant and animal populations with less dependence on early successional forest. A mix of forest successional stages characterizes these areas, but the focus is on mid- to late-successional forests. Portions of these areas are managed by natural processes, and fire contributes to the older aged forest component across the area. Prescribed fire plays an important role in the maintenance of many of the forested communities found throughout this management area, with timber regeneration playing a lesser role than in Management Area 1. Management Area 2A is designated

as suitable for timber production; Management Area 2B is designated as not suitable for timber production.

MA 3 – Backcountry

Management Area 3 areas are often remote and unroaded, allowing for large blocks of relatively undisturbed forested conditions. This management area includes all the inventoried roadless areas that are not within wilderness, wilderness study areas, or areas recommended for wilderness.

These areas are primarily shaped by natural processes (floods, storms, insects, diseases, and fires). Forests feature predominantly mid- to late-successional forest communities with a continuous forested canopy.

Prescribed fire plays a role in the maintenance of forested communities. Prescribed fire is used to maintain or restore rare habitats and fire-associated forested communities, to improve forest structure, and to reduce fuel buildups.

These areas provide large tracts of backcountry recreation opportunities with a semi-primitive emphasis. Hiking, backpacking, mountain bike riding, horseback riding, rock climbing, nature study, hunting, and fishing are typical activities that may be available in a setting where freedom from the sights and sounds of modern civilization is important. Visitors see little evidence of humans or human activities other than backcountry recreation use, maintenance of wildlife openings, and occasional prescribed burning. Outdoor skills and self-reliance are important for visitors because of the remoteness of these areas.

Existing roads are maintained but no road construction or reconstruction is in evidence. Tree cutting in limited to generally occasional small diameter trees removed for maintaining, restoring, or enhancing other resource values.

MA 4 – Significant Recreation and Heritage Corridors

4A – Appalachian Trail

4B – Scenic byways (National and Forest designated byways)

4C – National Heritage Corridors

4D – Designated Wild and Scenic Rivers

Management Area 4 areas provide for the conservation and enjoyment of the significant scenic, historic, natural and cultural aspects of these travel corridors. There is a wide range of access options, from passenger and commercial vehicles and bicycles along motorized scenic byways to foot travel along the Appalachian Trail and boating on designated wild or scenic rivers.

Vegetation management, including timber harvest, is designed to maintain or enhance viewing opportunities appropriate to the various corridors (and in partnership with cooperative agencies and affiliated groups where appropriate). Corridor vegetation may be manipulated, for example, to open vistas or views into the interior of the forest, to restore or enhance a cultural landscape, to enhance wildlife viewing opportunities, or to select for flowering or showy native plants along the road or trail. Along

some corridors with a tradition of human use, more obvious vegetation management may be apparent that maintains the traditional experience of the corridor.

The four sub-categories in Management Area 4 may differ in their management objectives, standards, or guidelines.

Not suitable for timber production, but timber harvest may be used where it meets other resource objectives.

MA 5 – Special Interest Areas and Research Natural Areas

Special interest areas would be managed to perpetuate the rare species, conditions, or features that characterize the individual Special Interest Area. Research Natural Areas will be managed for scientific research. They represent current natural conditions, and designation of these areas allows natural physical and biological processes to prevail without human intervention.

Vegetation management activities may be used to maintain or restore the unique features or conditions for which the area was established. Timber production does not occur, but timber harvest may be used to maintain or restore the conditions for which the area was designated.

MA 6 – Wilderness Study Areas and Recommended Wilderness Areas

These areas are managed to protect their wilderness characteristics pending legislation as to their classification. Wilderness character consists of outstanding non-motorized, non-mechanized, primitive, and unconfined recreation opportunities for exploration, solitude, risk, and challenge where natural processes influence ecosystems with little or no human intervention. Timber production or surface occupancy for mineral or energy exploration or development is not allowed.

MA 7 – Congressionally Designated Wilderness

This area includes the congressionally designated Wildernesses of Linville Gorge, Shining Rock and Middle Prong on the Pisgah National Forest and Joyce Kilmer-Slickrock, Southern Nantahala and Ellicott Rock on the Nantahala National Forest.

Wilderness is managed to perpetuate the naturalness of the area while providing for recreational, scenic, scientific, educational, conservation, and historical use compatible with the wilderness resources and attributes. Timber production, timber harvest, and the use of motorized or mechanized equipment are not allowed.

MA 8 – Experimental Forests

These lands are experimental forests, and will be managed for forest research. The three designated experimental forests are Coweeta, Bent Creek, and Blue Valley.

Even though many management activities take place on these lands, they are not a part of usual Forest programs. These lands are dedicated to experimentation and education and are designated for use in national and international research programs. The Coweeta Hydrologic Laboratory is a Biosphere Ecological Reserve for long-term ecological research. A portion of the Bent Creek Experimental Forest has been developed as a regional center for study of trees and other woody plants, in cooperation with the Western North Carolina Arboretum. This management area is not suitable for timber production, however, timber harvest and other vegetation management activities may be used to achieve research objectives.

MA 9 – Roan Mountain

This area is Roan Mountain on the Appalachian Ranger District. It will be managed to maintain distinctive outstanding scenic qualities, wildlife and plant communities, spruce-fir and northern hardwoods. This management area is not suitable for timber production, however, timber harvest may be used to achieve other resource and restoration objectives

MA 10 – Concentrated Recreation Areas

This management area includes places where there is concentrated recreation use, both in developed recreation sites and dispersed recreation areas. This management area is not suitable for timber production, however, timber harvest may be used to maintain or enhance recreation sites, ensure visitor health and safety, or address forest health issues.

MA 11 – Cradle of Forestry

This specially designated "birthplace of forestry and forestry education in America," was designated "to promote, demonstrate and stimulate interest in and knowledge of the management of forest lands under principles of multiple use and sustained yield…"

MA 12 – Administrative Sites

This management area would include ranger district offices, Job Corps Centers, the Beech Creek and Chilhowie Seed Orchards, work centers, and other facilities. Sites are managed to serve and support resource programs and are maintained to protect capital investment.

Forest-wide Desired Conditions

Desired conditions describe how the resources on the forest should look and function. In some cases, a desired condition matches the current condition; so the goal is to retain existing characteristics. In other cases, the desired condition is not identical to the current condition, and future management is expected to help existing conditions trend toward the desired condition. Desired conditions are timeless in that they have no specific date by which they are to be completed. Desired conditions are the focus of the plan and are the basis for developing objectives and other plan components. A future project or activity must be consistent with or help trend toward desired conditions.

Silviculture Desired Conditions

- Forest lands provide sites for study in cooperation with research partners and demonstrate sustainable ecosystem management techniques to meet restoration and ecosystem resiliency objectives.
- Healthy native ecosystems are not adversely impacted by non-native species.
- Ecosystems provide a haven for an array of native at-risk species such as eastern and Carolina hemlocks, butternut, American beech, American chestnut, and other at risk species.
- Diverse vegetation patterns across the landscape achieve multiple resource objectives and sustain healthy ecosystems.
- A variety of vegetation species or community types provide well-distributed habitats across a range of age classes, vegetative stages, and healthy functioning structural layers.
- A sustainable level of high quality hardwood sawtimber is available on lands suitable for timber production.

Threatened & Endangered, Species of Conservation Concern Desired Conditions

- Federally listed Threatened & Endangered (T&E) species occur across their natural range on the forest. Species of conservation concern (SCC) are dispersed across the forest at natural abundances and densities with suitable habitat connectivity.
- Unoccupied T&E habitat remains suitable for species recovery.
- Fire occurs with the severity and frequency needed to maintain fire adapted T&E species habitat.
- Habitats that support T&E species or SCC are not adversely impacted by non-native species.

Unique Habitats Desired Conditions

- Rare habitats are present and naturally functioning.
- Recreation use within unique habitats does not negatively impact the persistence of associated species and ecosystem functions.
- Interpretive information regarding rare or unique habitats does not facilitate negative impacts to these areas.

Wildlife Desired Conditions

- Habitat is present for the diversity of native and desired non-native animal species typical of the Southern Appalachian region, resulting in populations that are robust and resilient.
- Structural features that support animal diversity, such as snags, dens, and downed wood are evident.
- Native trees with exfoliating bark provide roosting habitat for bats.
- Hard and soft mast producing trees and shrubs are prolific across the forest.
- Habitat conditions promote thriving populations of game animals such as deer and grouse.

Aquatic Desired Conditions

- Aquatic ecosystems are diverse, with properly functioning streams providing high quality habitat for all native and desired non-native aquatic species, resulting in populations that are robust and resilient.
- Quality habitat in streams, rivers, and lakes provides opportunities for fish and other aquatic organisms to hide, spawn, and forage.
- Riparian areas along streams and rivers and around reservoirs, lakes, and ponds are dominated by native vegetation capable of adding large woody debris to streams for hydrologic stability and in-stream habitat and nutrients.

Non-native Invasive Species Desired Conditions

- The introduction of new populations or species of non-native plants and insects rarely occurs and is detected at an early stage.
- Existing targeted non-native invasive species are eradicated, controlled, or contained, and the establishment of new infestations is promptly detected and prevented.

Ecozone Desired Conditions

Rich Cove Forest Ecozone

- The overstory consists of numerous hardwood canopy trees, with tulip poplar and red maple present but not dominant. An older, closed-canopy predominates, with a mosaic of different size openings dispersed throughout to providing structural and age class diversity. There is a diversity of tree and herbaceous species regeneration in the mid-story and understory.
- Shrub density is less than 30 percent and primarily consists of deciduous species.
- The understory contains a well-developed herbaceous layer that is typically dense and rich in species diversity. Desirable medicinal species, such as ginseng, are well distributed in historical population densities.
- A much greater portion of the landscape supports closed canopy forest compared to open canopy forest. Fire is infrequent in this system.
- Young forest is represented in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions are present in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.

Table 2. Rich Cove Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-10	11-100	11-100	101-140	101-140	140+	140+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Acidic Cove Forest Ecozone

- A diversity of hardwood tree species occurs in the canopy, mid-story, and understory. An older, closed-canopy predominates, with a mosaic of different size openings dispersed throughout to providing structural and age class diversity. There is a diversity of tree species regeneration in the mid-story and understory.
- Eastern hemlock-dominated forests persist in suitable areas.
- Shrub densities, primarily evergreens, vary from 30 to more than 75 percent.
- Herbaceous species are present in the understory in relatively low densities. Bryophytes are abundant and occupy the forest floor, tree bark, and shrub leaf surfaces.
- A much greater portion of the landscape supports closed canopy forest compared to open canopy forest. Fire is infrequent in this system and the evergreen shrub layer serves as a fire barrier.

- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.

Table 3. Acidic Cove Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-10	11-100	11-100	101-140	101-140	140+	140+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Floodplain Forest Ecozone

- A diversity of hardwood tree species occur in the canopy, mid-story, and understory. An older, closed-canopy predominates, with a mosaic of different size openings dispersed throughout to providing structural and age class diversity. Regeneration for all canopy species is found in the mid-story and understory.
- The diversity of native herbaceous and shrub species is not impaired by non-native invasive species.
- Shrub densities are highly variable, ranging from less than 25 to more than 75 percent, depending on site productivity. Evergreens are the dominant shrub species.
- The understory contains a well-developed herbaceous layer with many annuals that is typically dense and rich in species diversity. Demand species, such as ginseng, are distributed in historical population densities, ranging from 100 to more than 1,000 individuals.

  A much greater portion of the landscape supports closed canopy forest compared to open canopy forest. Fire is rare in this system.

Table 4. Floodplain Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open
Age (years)	0-10	11-100	11-100	101-140	101-140
Landscape % *	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Dry Oak Ecozone

- The overstory consists of oak and some other deciduous hardwood canopy trees, with pitch pine and table mountain pine present but not abundant. Aggressive native tree species, such as

red maple and white pine, are not evident. The dominant oak species are present and regenerating in the mid-story and understory.

- Shrub densities generally range from 10 to 50 percent. Grasses, particularly species such as little bluestem and Indian grass, are abundant in the understory. A diverse herbaceous layer occurs within open canopy sites while a sparse herbaceous layer occurs within closed canopy sites.
- Old-growth conditions, both woodlands and closed canopy forests, are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Prescribed fire and wildfires occur across greater than 60 percent of the landscape every 7 to 15 years. Frequent burns create a woodland structure providing suitable habitat for abundant grasses which provide fine fuels to sustain the fires.

Table 5. Dry Oak Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-20	21-70	21-70	71-100	71-100	>100	>100
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Dry-Mesic Oak Ecozone

- The overstory consists of oak and some other deciduous hardwood canopy trees. Aggressive native tree species, such as red maple and white pine, are present but not abundant. A diversity of oak and hickory species are present and regenerating in the mid-story and understory.
- Shrub densities, primarily deciduous species, range from 25 to 50 percent.
- A diverse herbaceous layer occurs within open canopy sites while a sparser layer occurs within closed canopy sites. Grasses are dispersed and evident within fire-maintained sites but not as dominant as within dry oak and pine-oak ecozones.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions, both woodlands and closed canopy forests, are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.

  Prescribed fire and wildfires occur across greater than 50 percent of the landscape every 7 to 26 years. Frequent burns create a woodland structure with dispersed grasses and herbs providing fine fuels to sustain fires within the woodlands.

Table 6. Dry-Mesic Oak Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-15	16-75	16-75	76-130	76-130	130+	130+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Mesic Oak Ecozone

- The overstory is dominated by both red and white oak and contains a variety of hickory and other deciduous tree species. Aggressive native tree species, such as red maple, tulip poplar, and white pine, are present but do not dominate. All the abundant oaks and hickories are present and regenerating in the mid-story and understory.
- Deciduous shrubs occur in groups and generally provide less than 30 percent cover. Herbaceous species are diverse both within closed canopy forests and woodlands. Grasses are a minor component.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions, both woodlands and closed canopy forests, are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.
- A greater portion of the landscape supports closed-canopy forest compared to woodlands.
- Prescribed fire and wildfires occur across less than 50 percent of the landscape every 11 to 30 years. Periodic burns help to regenerate the dominant oak species.

Table 7. Mesic Oak Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-10	11-80	11-80	81-130	81-130	130+	130+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

High Elevation Red Oak Ecozone

- Red oak is regenerating and present in the mid-story and understory. A diversity of other hardwood species is present.
- Shrub densities are highly variable, ranging from 30 to 75 percent cover.
- A moderately diverse herbaceous layer occurs across sites with an open shrub layer. A sparse herbaceous layer occurs within dense shrub sites, particularly those with evergreen cover.

Harvested species, such as Galax, are well distributed in historical population densities, ranging from dense patch sizes covering 1/10 acre to several acres.

- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions, both woodlands and closed canopy forests, are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.
- Prescribed fire and wildfires occur across less than 50 percent of the landscape every 11 to 30 years. Periodic burns help to regenerate red oak and reduce densities of more aggressive northern hardwood species, such as sugar maple and American beech.

Table 8. High Elevation Red Oak Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-20	21-70	21-70	71-130	71-130	130+	130+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Pine-Oak/Heath Ecozone

- The overstory consists primarily of oak and pine canopy trees. Scarlet oak, chestnut oak, black oak, and other deciduous hardwoods are present, although not as abundant as pitch and table mountain pine. Aggressive native tree species, such as red maple and white pine, are not abundant. The two dominant pine species are present and regenerating in the mid-story and understory.
- Shrub densities generally are less than 50 percent and quite open in frequently fire-maintained sites. Short shrubs, such as low bush blueberry, are more prevalent within fire-maintained sites while mountain laurel dominates in closed canopy infrequently burned sites.
- Grasses, particularly species such as little bluestem and Indian grass, are abundant, greater than 50 percent cover, in the understory. A diverse herbaceous layer occurs within fire-maintained sites while a sparse layer occurs within closed canopy sites. A diverse assemblage of butterflies and moths occur within the fire-maintained sites as a result of the abundant legume and aster family species. Old-growth examples of woodlands and closed canopy forests are present across the ecozone.
- A small portion of the landscape supports closed-canopy forest. (Displayed in NRV table)
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Southern pine beetle outbreaks are limited due to management for appropriate species composition, density, structure, and age classes.

- Prescribed fire and wildfires occur across 75 percent of the landscape every 4 to 7 years. Frequent burns create a woodland structure providing suitable habitat for abundant grasses which provide fine fuels to sustain the fires.

Table 9. Pine-Oak / Heath Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open
Age (years)	0-20	21-70	21-70	71-130	71-130
Landscape %	9-16%	1-8%	18-27%	1-23%	37-55%

Shortleaf Pine Ecozone

- The overstory consists of 60 percent or more of shortleaf pine, pitch pine, or table mountain pine mixed with deciduous hardwood canopy trees, primarily oaks. Aggressive native tree species, such as red maple, Virginia pine, and white pine, are not evident. The desirable pines and oaks are present and regenerating in the mid-story and understory. Other species present in the mid-story and understory include pitch pine and other oaks.
- Woodlands, with 40 to 60 percent canopy cover, are prevalent, occurring over 50 percent of the landscape.
- Shrub densities generally range from 10 to 30 percent primarily consisting of shorter height (< 1.5 feet) species such as low bush blueberry and huckleberries. Grasses, particularly species such as little bluestem and Indian grass, are abundant, greater than 50 percent cover, in the understory. A diverse herbaceous layer occurs within fire-maintained sites while a sparse layer occurs within closed canopy sites. .A diverse assemblage of butterflies and moths occur within the fire-maintained sites as a result of the abundant legume and aster family species.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions, both woodlands and closed canopy forests, are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.
- Southern pine beetle outbreaks are limited due to management for appropriate species composition, density, structure, and age classes.
- Prescribed fire and wildfires occur across 75 percent of the landscape every 4 to 7 years. Frequent burns create a woodland structure providing suitable habitat for abundant grasses which provide fine fuels to sustain the fires.

Table 10. Shortleaf Pine Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-15	16-70	16-70	71-130	71-130	130+	130+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Northern Hardwood Forest Ecozone

- The overstory consists of numerous hardwood canopy trees, with yellow birch, sugar maple, black cherry, and beech dominant with a small evergreen component, either red spruce or eastern hemlock. An older, closed-canopy predominates, with a mosaic of different size openings dispersed throughout to providing structural and age class diversity. There is a diversity of tree and herbaceous species regeneration in the mid-story and understory.
- Shrub density is variable ranging from 20 to greater than 70 percent and is represented of deciduous species, such as hobblebush, and/or evergreen species, such as catawba and great rhododendron.
- The understory contains a well-developed herbaceous layer in that is typically dense and rich in species diversity. Desirable harvested species, such as ramps in open shrub sites to Galax in denser shrub sites, are well distributed in historical population densities.
- A much greater portion of the landscape supports closed canopy forest compared to open canopy forest. Fire is rare in this system.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.

Table 11. Northern Hardwood Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-15	16-75	16-75	76-130	76-130	130+	130+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Spruce-Fir Forest Ecozone

- Fraser Fir and/or Red Spruce are the primary dominant species representing greater than 70 percent of the canopy. They occur in the canopy, mid-story, and understory. An older, closed-canopy predominates, with a mosaic of different size openings dispersed throughout to

providing structural and age class diversity. There is a diversity of tree species regeneration in the mid-story and understory.

- Shrub densities, primarily evergreens, vary from 30 to more than 75 percent.
- Herbaceous species are present in the understory in very low densities in shrub dominated sites while moderately diverse in more open sites. Bryophytes are very abundant and occupy the forest floor, tree bark, and rock surfaces.
- A much greater portion of the landscape supports closed canopy forest compared to woodlands. Fire is rare in this system.
- Young forest is represented across this ecozone in amounts that reflect natural disturbance regimes and support species diversity. Wildlife species that depend upon young forest have stable to increasing population trends.
- Old-growth conditions are present across the ecozone in amounts that support species diversity. Wildlife species that depend upon older forest conditions have stable to increasing population trends.

Table 12. Spruce-Fir Forest Natural Range of Variation

Age/Structural Classes	Young	Mid Closed	Mid Open	Late Closed	Late Open	OG Closed	OG Open
Age (years)	0-35	36-70	36-70	71-120	71-120	120+	120+
Landscape % *	WIP	WIP	WIP	WIP	WIP	WIP	WIP

* WIP -- Work in Progress

Lands and Special Uses Desired Conditions

- Land acquisitions and exchanges protect resource values and provide appropriate access for public services and other special uses.
- Special use permits support and contribute to the protection of natural resource values and the promotion of public health and safety.
- Special use activities blend into the landscape, do not draw attention to the activity or equipment, and leave little evidence of impacts.

Minerals and Geology Desired Conditions

- Mineral and mining activities meet the legal mandates to facilitate the development of mineral and energy resources in a manner that minimizes adverse impacts to surface and groundwater resources, and that do not detract from meeting other desired conditions applicable to the area.
- Past and present mineral developments are sufficiently reclaimed to provide for public safety and minimize impacts to culture and natural resources.
- Opportunities for recreational mineralogy or “rock hounding” are available and managed to ensure protection of natural resource values and the promotion of public health and safety.

- Mineral materials (e.g., gravel, aggregate) are available for road maintenance activities that support the Forest Service transportation system.
- Mineral materials (e.g., aggregate, building stone, landscaping rock) are available to support resource management needs, personal use, and commercial pursuits.
- Geologic hazards that pose a risk to public health and safety or facilities and infrastructure are identified and mitigated.

Recreation Desired Conditions

- Healthy and resilient landscapes and provide a diverse sense of place for community residents and visitors.
- A full range of recreation settings are available, ranging from primitive and unroaded backcountry to paved road developed areas, to provide a variety of year-round recreation opportunities.
- Diverse and high quality sustainable recreation, educational, and social opportunities are enhanced by the integrity, character, and valued attributes of unique place-based settings and ecosystems.
- For river segments that are eligible for wild and scenic rivers designation, outstandingly remarkable values (i.e., archaeological, scenic, fishery, wildlife, recreational, and botanical) and recommended classifications remain intact until further study is conducted or designation is conferred by Congress.
- Partnerships promote a connection to place and foster a sense of stewardship.
- Recreation enhances the quality of life for residents, provides tourist destinations for visitors, and contributes to the vitality and economic sustainability of local communities.
- Recreation opportunities are accessible to persons with disabilities and inclusive of a culturally diverse population.
- Recreation activities occur within the ability of the land to support them and with minimal conflict between users.
- Developed recreation areas are safe, clean, and well-maintained. Risks are identified and appropriately managed.
- Infrastructure and facilities are financially sustainable.

Trails Desired Conditions

- A sustainable trail system provides a range of high quality recreation experiences for different use types, with an emphasis on a quality experience over quantity of trail miles.
- Nationally designated trails maintain the characteristics and conditions for which they were established.
- Unsustainable trails are transitioned to a sustainable condition or decommissioned.
- Trailheads are well-designed and maintained.

- Appropriate connector trails enhance loops within the existing network and/or provide trail access to local communities.
- Unauthorized trails are not present on the forest.
- The sustainability of the trail network is supported by partner groups
- State-of-the-art information about trails is available and promotes a responsible user ethic
- Trail use occurs within the ability of the land to support it and with minimal conflict between users

Transportation and Forest Access Desired Conditions

- An ecologically, socially and economically sustainable system of designated roads and trails provides safe, legal, and reasonable access for recreation opportunities and resource management.
- The transportation system and its use have minimal impacts on resources including threatened and endangered species, heritage and cultural sites, watersheds, aquatic species, and vegetation.
- Unauthorized roads and trails are not present.
- Access to water is available for water-oriented activities, including fishing, motorized and non-motorized boating and other water sports. Access points are located in areas that do not degrade the aquatic resources and provide safe, reliable access for users.
- Access is designed to minimize conflicts between users.
- Access to the national forest is provided to Tribal members for hunting, fishing, and gathering as well as cultural and religious practices.

Scenic Values and Aesthetics Desired Conditions

- A wide variety of visually appealing, resilient landscapes are enjoyed by visitors. Scenic resources compliment recreation settings and experiences; the scenic integrity is high in places people prefer to visit and view.
- Landscape alterations complement and blend with the characteristic landscape. Development appears subordinate to and harmonious with the surrounding setting.
- Vistas along roads and trails reveal mid-and long-distance views of scenic forest habitats.
- Road, trail and river corridors have a variety of native flowering plants that add to the appeal of the travelway and improve wildlife viewing opportunities.

Watershed and Soils Desired Conditions

- Stream channels maintain natural condition and function without excessive erosion or deposition. Aquatic habitat quality and diversity is high.
- Impacts to stream channels and stream-side zones from wildfire suppression efforts are minimized.
- Watersheds are resilient and stable, supporting the quality and quantity of water necessary to protect ecological functions and support beneficial water uses.
- Soil productivity is sustained. Erosion and compaction are infrequent occurrences.

- Stream channels are connected to their floodplains so that high streamflow events can be processed through the ecosystem without excessive scour or deposition.
- Stream channels degraded by historic activities are exhibiting improved biological and hydrological function.
- Bogs and seeps are maintained or increasing in size.
- The quantity and quality of groundwater is maintained to provide flow to stream channels and sustain groundwater dependent ecosystems.
- Channeled ephemeral streams maintain their ability to filter sediment from upslope disturbances.
- Forest ecosystems and watersheds are not adversely impacted by air pollution.

Conservation Education Desired Conditions

- Conservation education and interpretation connects people with nature, inspires a stewardship ethic, and fosters an appreciation of the cultural heritage of the area.
- Conservation education and interpretation is available through a variety of media and sources.
- Conservation education and interpretation programs encourage participation by Tribes, youth, low income, and minority populations.

Heritage Resources Desired Conditions

- Significant prehistoric and historic sites and resources are preserved and protected for their cultural importance and retain their historical and scientific research value.
- All known cultural resources are evaluated for eligibility to the National Register of Historic Places.
- Cultural resource protection efforts span boundaries to encompass collaboration with other government, public, and private partners.
- Collections are available to scholars and the public for research and interpretation.
- American Indian tribes and individuals retain a connection to the land that fosters both traditional and contemporary cultural uses of the Forest.
- Traditionally used resources are not depleted and are available and are available for future generations.
- Traditional Ecological Knowledge (TEK) from American Indian Tribes and other sources is considered in forest management.
- The cultural landscape retains characteristic American Indian elements, including archeological sites, former Cherokee town sites, historic trail corridors, and other Tribal use areas.

Potential Wilderness Inventory Areas

As part of our plan revision effort, we have identified a number of areas that may be suitable for inclusion in the National Wilderness Preservation System. The next step in the process is to evaluate the suitability of each Potential Wilderness Inventory area, using criteria included in the Wilderness Act of 1964, section 2(c). The final inventory maps will be available on the Forest website in mid-November. It should be noted that not all lands evaluated are required to be carried forward for further NEPA analysis.

We are seeking input from the public to help us evaluate the areas identified in the inventory on the following criteria:

1. *Does the area generally appear to be affected primarily by the forces of nature?*

   This can be described as the degree of naturalness of the area, where the imprints of man's work is substantially unnoticeable. Factors to consider would include whether plant and animal communities have been substantially impacted by past management or the extent to which allowed improvements or historic activities represent a departure from naturalness.

2. *Are there opportunities within the area for solitude or to engage in primitive and unconfined recreation that leads to a visitor's ability to feel a part of nature*?

   The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre. Factors to consider include topography, presence of screening, distance from impacts, degree of permanent intrusions, sights and sounds from outside the area, the degree of challenge or risk while using outdoor skills.

3. *Is it practicable to both preserve this area and allow its use while maintaining it in an unimpaired condition?*

   This criteria relates to those areas that are less than 5,000 acres and are not contiguous to existing designated wilderness. Examples include small, self-contained areas such as islands, canyons, or other geographically isolated features.

4. *Does the area contain ecological, geological, or other features of scientific, educational, scenic, or historical value?*

   These values are not required, but their presence should be identified and evaluated where they exist. These features may include rare plant or animal communities, rare ecosystems, outstanding landscape features, historic and cultural resource sites, research natural areas, or high quality water resources and important watershed features.

5. *Can the area be managed to preserve its wilderness characteristics?*

   Factors to consider would include the shape and configuration of the area, legally established rights or uses within the area such as mining claims or motorized recreation, specific Federal or State laws that may be relevant, the proximity of non-Federal land, and the management of adjacent lands, both public and private.

Name_____ Date_____

The most useful comments for informing the process are substantive comments. Substantive comments are specific, comparative, or solution oriented. A substantive comment provides the reasons why and goes beyond just expressing an opinion.

How well do you think these proposed Management Areas represent the range of interests that have been expressed during the plan revision process?

How well do the Forest-wide Desired Conditions presented here represent your vision for the Forest in the future? Is there anything that you would like to add?

Information on forest plan revision is available online at www.fs.usda.gov/goto/nfsnc/nprevision
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