



United States  
Department of  
Agriculture

Forest Service  
Southern Region

# Summary Environmental Impact Statement and Revised Land and Resource Management Plan

## *Cherokee National Forest*



Supervisor's Office  
P.O. Box 2010  
Cleveland, TN 37320

2800 N. Ocoee Street  
Cleveland, TN 37312

Office: (423) 476-9700  
Fax: (423) 339-8650

Ocoee/Hiwassee Ranger District  
Rt. 1, Box 348-D  
Benton, TN 37307  
Office: (423) 338-5201  
Fax: (423) 338-6577

Nolichucky/Unaka Ranger District  
4900 Asheville Highway, SR70  
Greeneville, TN 37743  
Office: (423) 638-4109  
Fax: (423) 638-6599

Tellico Ranger District  
250 Ranger Station Road  
Tellico Plains, TN 37385  
Office: (423) 253-2520  
Fax: (423) 253 -2804

Watauga Ranger District  
P.O.Box 400 (4400 Unicoi Drive)  
Unicoi, TN 37692  
Office: (423) 735-1500  
Fax: (423) 735-7306

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.



---

## **SUMMARY**

---

### **INTRODUCTION**

The Forest Service has prepared this Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This EIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives.

The purpose of this proposed action is to revise the Cherokee Land and Resource Management Plan (LMP). The LMP guides all natural resource management activities on the Cherokee National Forest (CNF) to meet the objectives of federal law, regulation, and policy. The proposed action would also affect a wide range of socioeconomic factors as they relate to natural resources. The existing LMP for the CNF was approved April 1, 1986. As of October, 2003, there are 27 amendments to the existing LMP. Revision of the LMP is now needed to satisfy legal requirements and to address new information about the forest and its forest uses.

The regulations implementing the National Forest Management Act (NFMA) instruct the Regional Forester to make periodic revisions to the LMP and to provide the basis for any revision. The instructions to revise forest plans and the basis for revision are found in Code of Federal Regulations (CFR) 36 CFR 219.10(g).

The EIS describes the analysis of several alternatives for revising the LMP of the CNF and discloses the environmental effects of the alternatives. The EIS is guided by the implementing regulations of the National Environmental Policy Act (NEPA) found in the Council of Environmental Quality (CEQ) Regulations, 40 CFR 1500. The companion document to the EIS is the Revised Land and Resource Management Plan (LMP)—a detailed presentation of the preferred alternative.

The national forests in the southern Appalachian area have applied several efforts to begin their revisions. The main objective was to do the analysis leading to a proposal to change forest management direction. A key part of that analysis, for significant portions of each of the forests, has been the Southern Appalachian Assessment (SAA). On February 24, 1995, a Notice of Intent (NOI) was placed in the Federal Register (Vol. 60, No. 37) that identified the relationships between the SAA and the forest plan revisions of the National Forests in Alabama, Chattahoochee-Oconee National Forests, Cherokee National Forest, Jefferson National Forest, and Sumter National Forest. Since then, preparation of an Analysis of the Management Situation (AMS) for each forest has included updating resource inventories, defining the current situation, estimating supply capabilities and resource demands, evaluating the results of monitoring, determining the need for change (36 CFR 219.19(e)(5)),

reviewing previous public comments, and participating in public meetings or other outreach.

The management direction is basically the same for all five Southern Appalachian forests. Each forest has, based upon local conditions, tailored management prescriptions to provide for the local need. Common definitions have been used to provide a high level of consistency.

## **ORGANIZATION OF THIS SUMMARY**

This document is divided into two sections. The first summarizes the Environmental Impact Statement, and the second part summarizes the key provisions of the Revised Land and Resource Management Plan.

## **SUMMARY OF THE ENVIRONMENTAL IMPACT STATEMENT**

### **Significant Issues**

The following issues are common to Southern Appalachian forests: National Forests in Alabama, Chattahoochee-Oconee National Forests, Cherokee National Forest, Jefferson National Forest, and Sumter National Forest.

The issues and planning questions are summarized in the following questions, which were used to develop alternatives for the LMP revision process.

#### **1. Terrestrial Plants and Animals and Their Associated Habitats.**

How should the national forests retain or restore a diverse mix of terrestrial plant and animal habitat conditions, while meeting public demands for a variety of wildlife values and uses?

#### **2. Threatened, Endangered, and Sensitive/Locally Rare Species.**

What levels of management are needed to protect and recover the populations of federally listed threatened, endangered and proposed species? What level of management is needed for Forest Service sensitive and locally rare species?

#### **3. Old Growth.**

The issue surrounding old growth has several facets, including: (1) How much old growth is desired? (2) Where should old growth occur? (3) How should old growth be managed?

#### **4. Riparian Area Management, Water Quality and Aquatic Habitats.**

What are the desired riparian ecosystem conditions within national forests, and how will they be identified, maintained and/or restored? What management direction is needed to help ensure that the hydrologic conditions needed for the beneficial uses of water yielded by and flowing through National Forest System lands are attained? What management is needed for the maintenance, enhancement, or restoration of aquatic habitats?

**5. Wood Products.**

The issue surrounding the sustained yield production of wood products from national forests has several facets, including: What are the appropriate objectives for wood product management? Where should removal of wood products occur, given that this production is part of a set of multiple use objectives, and considering cost effectiveness? What should be the level of outputs of wood products? What management activities associated with the production of wood product are appropriate?

**6. Aesthetics/Scenery Management.**

The issue surrounding the management of the visual quality has two facets: What are the appropriate landscape character goals for the national forests? What should be the scenic integrity objectives for the national forests?

**7. Recreation Opportunities/Experiences.**

How should the increased demand for recreational opportunities and experiences be addressed on the national forests while protecting forest resources? This includes considering a full range of opportunities for developed and dispersed recreation activities (including such things as nature study, hunting and fishing activities, and trail uses).

**8. Roadless Areas and Wilderness Management.**

Should any of the roadless areas on National Forest System lands be recommended for wilderness designation? For any roadless areas not recommended for wilderness, how should they be managed? How should areas that are recommended for wilderness designation be managed? How should the patterns and intensity of use, fire, and insects and disease be managed in the existing wilderness areas?

**9. Forest Health.**

What conditions are needed to maintain forest capacity to function in a sustainable manner as expected or desired? Of particular concern are the impacts of exotic or nonnative species, and the presence of ecological conditions with a higher level of insect and disease susceptibility.

**10. Special Areas and Rare Communities.**

What special areas should be designated, and how should they be managed? How should rare communities, such as those identified in the Southern Appalachian Assessment, be managed?

**11. Wild and Scenic Rivers.**

Which rivers are suitable for designation into the National Wild and Scenic Rivers System, and how should rivers that are eligible, but not suitable, be managed?

## 12. Access and Road Management.

How do we balance the rights of citizens to access their national forests with our responsibilities to protect and manage the soil and water resources, wildlife populations and habitat, aesthetics, forest health, and desired vegetative conditions?

### **Affected Environment**

The CNF is the largest wildlife management area and single largest tract of public land in Tennessee. It is the only National Forest in Tennessee. The only other Forest Service unit in the state is *Land Between the Lakes National Recreation Area* located on the Tennessee/Kentucky border. The CNF covers approximately 640,000 acres and is located in ten east Tennessee counties along the border with North Carolina. In addition, the Great Smoky Mountains National Park (GSMNP) divides the CNF creating a north and south end respectively.

The Tennessee valley and surrounding southern Appalachian Mountains have and continue to experience considerable growth in recent years. For the most part communities within the CNF proclamation boundary are small and rural in nature. Major cities adjacent to the CNF include: Johnson City, Elizabethton, Bristol, Kingsport, Newport, Greeneville, Knoxville, Athens, Cleveland, and Chattanooga. The CNF is within a day's drive of approximately 20 million people. Interstate highways 81 and 75 run parallel to the CNF's western boundary from Virginia to Georgia. Interstate Highway 40 enters the CNF east of Newport, TN from North Carolina. Numerous state highways traverse the CNF at various locations.

The CNF ranges in elevation from approximately 1,500 feet to over 5,000 feet. Forest canopy composition is pine and hardwood mix, with over 70 species of trees represented. The climate throughout the CNF is typical of the southern Appalachians with four distinct seasons. No one season is particularly harsh. Average rainfall is approximately 60-65 inches.

The CNF is divided into four ranger districts: Ocoee/Hiwassee Ranger District and Tellico Ranger District located south of GSMNP, and Nolichucky/Unaka Ranger District and Watauga Ranger District located north of GSMNP. Each unit consists of approximately 160,000 acres.

Approximately 90 developed recreation sites and more than 600 miles of trails are scattered throughout the CNF. Approximately 150 miles of the Appalachian Trail passes through the north end of the CNF. There are 66,389 acres of Congressionally-designated wilderness in 11 individual areas, and 85,195 acres of SAA-inventoried Roadless Areas (CNF portions). The CNF is home to 500 miles of coldwater streams, 72 species of trees, 43 species of mammals, 55 species of amphibians and reptiles, 55 fish species, and 156 species of insects. Popular recreation activities include hiking, camping, driving for pleasure, whitewater boating, mountain biking, hunting and fishing. The CNF provides all or part of the source water area for several community water systems. It also contains a portion of the Conasauga River watershed that is one of fifteen community based large scale watershed initiatives, that exist nation-wide. This initiative is designed to

demonstrate innovative ways to improve watershed, forest, range, water, and habitat conditions at a river-basin scale.

## **Alternatives**

### **Formulating Alternatives**

The alternative development process consisted of four different phases. The process involved a coordinated effort of the staffs of the five national forests of the Southern Appalachian area, with frequent meetings that were open to the public.

Phase I identified different ways the significant issues could be addressed.

Phase II developed four alternative themes using the information developed in Phase I. These alternative themes were the starting points for developing alternatives. The four themes were:

Produce high levels of goods and services compatible with local economies and communities.

Priority is given to restoring natural resources and processes.

Nature operates in conjunction with minimal human intervention.

Provide vigorously growing trees, commercial wood products and a variety of wildlife habitats in a generally naturally-appearing setting.

Phase III involved mapping the four alternative themes and Current Direction. The Phase III maps showed the land allocations, with each allocation consisting of a management emphasis, desired condition, and applicable management direction.

The objectives of Phase IV of the alternative development process were to analyze the four alternative themes to determine whether modifications were needed, whether other alternatives needed to be developed, and whether there were any areas of consensus. Public participation in both Phases III and IV was extensive and critically important to the overall process of developing alternatives. A description of public meetings and public involvement activities is available in Appendix A of the EIS.

Based on input from all five southern Appalachian national forests and the public on the five forests, changes were made and additional alternatives were developed to address a variety of issues and to provide a spectrum of alternatives to analyze and consider. The original four alternative themes (with some modifications) became Alternatives A-D, the Current Direction (No-Action) Alternative became Alternative F, and three new alternatives (Alternatives E, G and H) were developed.

Later, it was decided to develop a ninth alternative (Alternative I). A set of design criteria was developed for this alternative which incorporated those parts of Alternatives A-H where there appeared to be some general agreement from our publics. Also, as a part of the design of Alternative I, it was meant to roll through different iterations of coordinating efforts with our publics. As a result of this development strategy, this alternative was often referred to as the "Rolling Alternative".

## Description of Alternatives

### Alternative A

Alternative A would emphasize production of goods and services beneficial to local economies and communities. Local communities include any community that benefits economically from forest visitors and forest products. Timber management would provide sustained yield of wood products with emphasis on high-quality sawtimber and public-demand species including game and other species. Developed and dispersed recreation opportunities and high-quality scenery would be provided in a variety of settings both natural and managed. These would include both commercial recreation and increased public access.

Restoration of degraded watersheds would be emphasized to improve aquatic habitats and water quality. Old growth allocation and management would be primarily on lands already withdrawn (in current LMP) from the suitable timber base. Highways and roads in the forests, trail and river corridors, and recreation-use areas would have forest stands with few, if any, broken views to support enhancements in tourism and local, rural economies. Southern Appalachian Assessment inventoried roadless areas adjacent to or in close proximity to wilderness areas that are high-use areas also would be recommended for wilderness designation. Vegetation would be actively managed to reach and maintain a condition of low risk of insect and disease problems, especially in those areas where timber production would be the emphasis, or vegetation management would be permitted. Public access (travelways, use corridors, waterways, trails including off-highway vehicles (OHV)) would be increased in high-use areas and/or improved to provide for more recreation opportunities.

This alternative responds to the President's Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant vegetation communities.

### Alternative B

Alternative B would be biologically driven, emphasize restoring the natural resources and processes, and creating and maintaining wildlife habitats. Emphasis would be on restoration of vegetation to potential natural vegetation (plant associations) based on the ecological potential and capability of the land and providing a mix of the wildlife habitats for game and non-game species. Restoration activities would occur in areas where technology is available to implement. When possible, natural processes would be mimicked in a natural landscape pattern. Restoration activities would produce both large and small openings. Long-term restoration goals would be established for areas where technology is not currently available or for areas where restoration activities cannot be implemented or completed within the life of the revised LMP. A variety of recreation settings would occur in areas compatible with restoration activities and in areas non-restoration areas. Management for wood products would only occur in concert with restoration and creating wildlife habitats.

Timber sales would become a by-product of restoration management and wildlife habitats.

The long-term goal would be to provide old-growth conditions by old-growth community types within the ecological province or section similar to that existing before large-scale, extensive pioneer settlement and land uses. Riparian ecosystems would be managed to maintain water quality and aquatic ecosystems and to restore degraded conditions. Timber production would be a result of management activities to restore and maintain specific impaired or degraded resources, natural processes, communities, and wildlife habitats. In some areas of the forests, scenic resources would move gradually toward high to very high scenic integrity. Restoration of areas would result in short-term, low to moderate scenic integrity but with a long-term goal of high scenic integrity. A wide variety of recreation opportunities would be provided. Roadless areas with identified restoration needs or wildlife habitat needs in conflict with wilderness designation would not be recommended for wilderness; other roadless areas could be recommended for wilderness study. The role of native insects and disease would be accepted, except that epidemics would be suppressed to reduce large-scale catastrophic tree mortality. Exotics such as beech scale, gypsy moth, hemlock woolly adelgid, Japanese privet, and kudzu would be controlled where feasible. Any restoration needs would be made compatible with wild and scenic river classification and its outstandingly remarkable values. Access to degraded resources, areas in need of restoration, or areas where wildlife habitat needs occur could be temporarily provided to maintain or restore desirable ecological conditions. Access would be reduced as needed to restore and protect aquatic systems, soils, and plant/animal communities.

This alternative responds to the President's Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant communities.

#### Alternative C

Alternative C was eliminated from detailed study. The management prescriptions applicable to this alternative were allocated and mapped, and some preliminary estimates of the impacts of this alternative were made. After considering this preliminary information, it was determined that Alternative C did not need to be further evaluated in detail in this EIS. The reasons are: 1) Alternative C is very similar to the Minimum Level Benchmark which is analyzed and discussed in Appendix B; 2) From ongoing analyses it was determined that this alternative, as originally envisioned could not meet all the legal requirements of the National Forest Management Act of 1976, the Multiple-Use Sustained-Yield Act of 1960 (MUSYA) and the Endangered Species Act of 1973 (ESA); 3) Other alternatives are being considered in detail which provide for relatively low levels of management activities; and 4) Alternative C only addresses some, but not all, of the forest planning issues that have been identified by the public.

### Alternative D

Alternative D would be to reach and maintain a balanced age class of timber. All suitable lands would be available for sustained-yield timber management. On suitable lands, each of the major forest groups pine, mixed, and hardwood would have a specific target rotation age or age at which it would be harvested and replaced with a new forest.

There would be an approximately equal number of acres within each 10-year age class up to that rotation age. This balance of age classes would occur on lands identified as suitable and would be distributed in 15- to 40-acre blocks throughout the lands being managed for sustained-yield timber production. Pine, mixed, and hardwood forests older than the rotation age also would occur on large blocks of land already withdrawn from sustained-yield timber production. Production of both commercial wood products and a variety of aquatics/wildlife habitats would be emphasized. Developed and dispersed recreation opportunities would be provided in a variety of settings both natural and managed. Water quality and riparian areas would be protected through Best Management Practices (BMPs), streamside management zones, and standards and restored if needed. Streamside management zones would be included in the suitable timber base, with minimum widths based on applicable regulations.

Large- and medium-sized blocks of old growth would be provided only on unsuitable land. Small blocks would occur scattered throughout the suitable lands on steep slopes, streamside management zones, or similar areas. The forests would appear highly variable in tree sizes and openings in the canopy would be seen from roadways and vista points. Potential for roaded natural experiences would increase as access roads for timber harvest are built or improved. The semi-primitive experiences would be primarily on unsuitable lands. Only those roadless areas that are already withdrawn from sustained-yield timber production by Congress, the Secretary of Agriculture, or the Chief of the Forest Service would be recommended as wilderness. Insects, diseases, and exotic plant and animal species on suitable lands would be actively controlled and prevented where feasible. Some of the eligible wild and scenic rivers would be recommended for inclusion to the Wild, Scenic and Recreational Rivers (WS&R). Access would be developed, maintained, and used as needed to meet the goal of balanced age classes, wildlife habitats, and production of timber products.

This alternative responds to the President's Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant communities.

### Alternative E

A natural setting and concentrated facilities would be provided that could attract a variety of recreation users. Resource management activities would be concentrated in certain locations and supports recreation use and visual quality. Most areas would maintain a forested canopy. Large blocks of the forest would be maintained in a

roadless condition to provide remote, backcountry recreation. Dispersed and developed recreation areas and opportunities would be increased. A variety of recreation experiences would occur including concentrated use and OHV use. A variety of different wildlife habitats would be maintained in blocks across the landscape. Habitat for early successional species would be maintained in a manner that would be unnoticeable to most forest visitors. A substantial amount of the forest would be allocated to providing old growth for biological and aesthetic settings in large, medium, and small patches.

Riparian ecosystems and streamside management zones would be designated, through allocation or standards, to provide water-quality protection and improvement. The overall long-term timber product objective would be large-diameter and high-quality sawtimber for species capable of reaching that objective. Highways and roads in the forests, trail and river corridors, view sheds, and recreation-use areas would have forest stands with few, if any, broken views to support enhancements in tourism and local, rural economies. Many insect and disease impacts would be tolerated as part of a functioning natural ecosystem. Most wild and scenic rivers would be recommended for adding to the WS&R, with primary emphasis on protecting the resources. Public access (travelways, use corridors, waterways, trails including OHV) would be increased in high-use areas and/or improved to provide for more recreation opportunities.

This alternative responds to the President's Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant communities.

#### Alternative F

Alternative F would continue with current management. Timber management would provide high quality sawtimber. Developed and dispersed recreation opportunities would be provided in a variety of settings. Roadless and wilderness areas would follow guidance of new roads policy. The number of open roads would remain under current management standards. All outstandingly remarkable values for eligible rivers recommended for designation under WS&R would be protected. A variety of wildlife habitats would be maintained across the landscape. Protection of rare communities would continue. Species management and protection for threatened, endangered, and sensitive species management would continue. Riparian area management would continue with emphasis from standards.

#### Alternative G

Alternative G would emphasize linking together through land allocations movement corridors and large undisturbed areas, threatened and endangered (T&E) species, species reintroduction, and watershed restoration. National Forest System lands would provide habitat for forest interior species and a wide diversity of native plants and animals, particularly late-successional species. Habitats on private lands would be considered. Backcountry, late-successional wildlife species, and nature-oriented

nonmotorized recreation opportunities would be emphasized. Most roadless areas would be recommended for wilderness. Old growth restoration areas around clusters of existing old growth and mature forests with old growth characteristics would provide natural old growth dynamics across the landscape of the Southern Appalachians. High-quality timber would be produced in long rotations in areas outside forest interior species habitat, movement corridors, and large undisturbed areas and would be accessed from existing roads. Effects of native insects and diseases would be accepted. Emphasis would be on establishing a naturally resilient forest that would avoid large outbreaks of forest pests. Fire would be used to restore natural ecosystem processes. Road network mileage would be reduced through closure and obliteration of roads not needed for ecosystem stewardship or restoration.

Emphasis would be on inventory, monitoring, conservation, and recovery of proposed, threatened, endangered, sensitive (PETS), and locally rare species. Riparian areas would be maintained as old growth for habitat and connectivity. Riparian area protection and restoration would be emphasized through watershed assessments and establishment of riparian corridors and reference watersheds. Naturally evolving and naturally appearing landscapes would be pre-dominant. Recreation would take place within a context set by habitat needs and ecosystem function.

Semi-primitive, wildlife, and nature-oriented recreation opportunities would be emphasized. Developed facilities would occur where they do not detract from ecosystem function and landscape connectivity. Roadless areas would be maintained as un-fragmented wildlife habitat, landscape linkages, old growth restoration areas, wilderness designation or proposed wilderness that would maintain their un-fragmented habitat and ecosystem function. Exotic pests would be controlled by means that least impact ecosystem function and un-fragmented habitat across the landscape. Eligible rivers that have outstanding botanical, ecological, fish, aquatic, or wildlife values would be recommended for inclusion to the WS&R.

This alternative responds to the President's Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant communities.

#### Alternative H

Alternative H was eliminated from detailed study. When the management prescriptions applicable to this alternative were allocated and mapped, there ended up being virtually no difference between this alternative and Alternative G. The allocations were essentially the same, and therefore, the environmental effects would be essentially the same. The only significant difference between Alternative G and Alternative H was that in Alternative G, the majority of those acres being managed through silvicultural harvesting methods were classified as acres suitable for timber production, while in Alternative H, those same acres and same management activities would be classified as unsuited for timber production. The timber harvesting levels planned for in Alternative H are close to the levels of

harvesting planned for in Alternative G. Since the main difference is primarily an administrative classification change, and there would be no differences in the overall outputs and environmental effects, it was decided that this alternative did not need to be considered further in detail in this EIS.

Alternative I (Preferred Alternative)

Alternative I was developed with extensive public input to address the Forest Service’s Natural Resource Agenda (Watershed Health, Recreation, Sustainable Forest Ecosystem Management, and Forest Roads) and the Regional Forester’s Emphasis Areas (Watershed Health/Water Quality, Habitat for wide-Ranging Species, T&E Recovery Plan, Old Growth, Semi-Primitive/Remote Recreation Opportunities, Roadless Areas, and Lands Suitable for Timber Production), and President’s Healthy Forest Initiative.

This alternative emphasizes the restoration and maintenance of forest ecosystems to provide high-quality water and diverse, resilient, self-reproducing aquatic populations in damaged and undamaged streams. Riparian areas would be managed to retain, restore and/or enhance the inherent ecological processes and functions of the associated aquatic, riparian, and upland components within riparian corridors.

Also emphasized would be the sustainability of diverse ecosystems that support viable plant, wildlife and fish populations including habitats for those species needing large contiguous forested landscapes. There would be a variety of old growth communities to meet biological and social needs. Forest health would be a priority to ensure a forest that is resistant to large-scale, catastrophic plant mortality from insects or disease, especially from non-native organisms.

This alternative would provide high quality, nature-based recreation opportunities, emphasizing non-motorized settings with natural appearing landscapes and those that are not widely available on non-Federal lands. Inventoried roadless areas, outstandingly remarkable river values, and high scenic areas, including scenic views at a range of distances, would be protected.

The Forest Service road system would be managed at the minimum level needed to implement this alternative and achieve the management objectives of the alternative.

This alternative responds to the President’s Healthy Forests Initiative by allowing for the management of forest vegetation and fuels, thus decreasing fuel-loading problems, the risks to other resources and to adjacent private lands and the potential for severe wildland fires. Prescribed fire will be utilized to reduce fuel-loading and to maintain fire dependant communities.

**Comparison of Alternatives**

This section compares the management alternatives from several different perspectives. The acreage allocated to each management prescription for each alternative is shown. The issues identified in Chapter 1 are discussed in detail, and the impact of each alternative on the issue is summarized. Table S-1 provides a

description of the management prescriptions. Table S-2 shows the CNF acres that would be allocated to each management prescription for each alternative.

Table S-1. Management prescriptions with respective titles used in mapping each of the alternatives	
Prescription (Rx)	Management Prescription Title
0	Custodial Management
1.A.	Designated Wildernesses/Wilderness Study Areas
1.B.	Recommended Wilderness Study Areas
2.B.1	Wild Rivers
2.B.2	Scenic Rivers
2.B.3	Recreational Rivers
4.A	Appalachian Trail Corridor
4.B.2	Proposed Research Natural Areas
4.E.1	Cultural/Heritage Areas
4.F.	Scenic Areas
5.A	Administrative Sites
5.B.	Designated Communication/Electronic Sites
6.A.	Natural Process
6.B	Areas Managed to Restore/Maintain Old-Growth Characteristics
6.C	Old-Growth Areas Managed with a Mix of Natural Processes and Restoration Activities
6.E.	Core Areas of Old-Growth Surrounded by Areas Under Uneven-Aged Management
7.A	Scenic Byway Corridors
7.B	Scenic Corridors and Sensitive Viewsheds
7.C	OHV Use Areas
7.D.	Concentrated Recreation Zones
7.E.1	Dispersed Recreation Areas
7.E.2	Dispersed Recreation Areas with Vegetation Management
8.A.1	Mid- to Late-Successional Forest Habitats
8.A.2	Area-Sensitive, Mid- to Late Successional Forest Habitats
8.B	Mix of Successional Habitats – Early Successional Habitat Emphasis
8.C	Black Bear Habitat Management
8.E.1	Ruffed Grouse Management
9.A.1	Source Water Protection Watersheds
9.A.2	Reference Watersheds
9.A.3	Watershed Restoration Areas
9.A.4	Aquatic Habitat Areas
9.B.1	General High-Elevation Forest Habitats
9.B.2	High-Elevation Balds
9.C	Restoration and Maintenance of Oak Forests: Maintain Existing Oak and Oak-Pine Mixed Stands
9.C.1	Dry and Xeric Oak and Oak-Pine Forests

Prescription (Rx)	Management Prescription Title
9.E.	Maintenance and Restoration of Pine and Pine-Oak Forests
9.F.	Rare Communities
9.H	Management, Maintenance, and Restoration of Plant Associations to their Ecological Potential
10.A	Sustained-Yield Timber Management
10.B	High-Quality Forest Products
12.A	Remote Backcountry Recreation—Few Open Roads
12.B	Remote Backcountry Recreation—Nonmotorized

Prescription	Units: Acres						
	Alt-A	Alt-B	Alt-D	Alt-E	Alt-F	Alt-G	Alt-I
1.A	67,750	67,837	67,755	68,109	34,928	68,262	66,661
1.B	27,972	1,290		49,881	33,743	73,667	20,265
2.A.3					32,416		
2.B.1		1,253	1,253	1,253		1,253	1,110
2.B.2	1,253		51				757
2.B.3							2,579
4.A	35,574	38,137	36,458	33,425	24,078	30,747	36,076
4.B.2	608	566	575	397		397	
4.D					1,629		
4.E.1				290	467		1,085
4.F	11,127	17,257	9,341	17,662	11,984	17,579	20,946
4.I	4,843			4,799		4,892	
4.K	4,331	4,468	4,468	4,468		4,468	4,601
5.A	1,427	1,427	1,427	1,427		1,427	1,524
5.B	377	377	377	377		377	604
6.A	10,991	50,367	*	15,798	*	19,015	*
6.B	*	*	*	6,518	*	6,518	*
6.C	2,094	*	*	*	*	*	*
6.E	7,891	*	*	6,097	*	6,097	*
7.A	37,080	6,652	35,424	40,932		58,458	17,536
7.B		1,896	11,045	14,209		223	41,441
7.C	3,472			3,472			11,139
7.D	2,019	2,652	2,019	5,515	3,256	1,845	2,043
7.E.1				184,299		11,692	
7.E.2	84,721		20,850	484		484	97,021
8.A.1					28,6284	68,091	28,999
8.A.2	19,309		9,212				
8.B		18,010					56,517

Units: Acres							
Prescription	Alt-A	Alt-B	Alt-D	Alt-E	Alt-F	Alt-G	Alt-I
8.C	56,135	43,776	117,073	48,367		51,400	94,948
8.E.1	2,615	2,608		3,029	79,950		
9.A.1	23,858	23,858					
9.A.2	18,118	18,081					
9.A.3	86,755	154,577		34,457			
9.A.4	23,517	23,545	7,967			8,184	
9.B.1		1,114	286				
9.B.2		1,403	1,323		1,074	48	
9.C		484					
9.C.1						58,281	
9.C.2		6,189					
9.E		16,697					
9.F	9,843	9,856	9,848	9,840		6,995	6,591
9.H	26,063	125,378					72,669
10.A	45,534		273,200		98,488		
10.B			29,779				
12.A	7,841			45,525		116,859	
12.B	16,656			39,166	31,545	22,486	38,652
no ma					5		
Grand Total	639,774	639,755	639,731	639,796	639,847	639,745	639,958
* No allocation to old-growth management prescriptions							

**Comparison Of Alternatives By Issue**

This section compares how the alternatives address the issues identified in Chapter 1 of the EIS.

**Issue 1 - Terrestrial Plants and Animals and Their Associated Habitats**

In addressing this issue, management activities would strive to accomplish:

- Maintain or increase habitats for those species needing large, contiguous forested landscapes, and where the management of National Forest System (NFS) lands can make a difference in their populations and viability.

- Provide habitat conditions necessary to maintain viable populations of all species native to the planning area, and to support desirable levels of selected species (e.g., species with special habitat needs, locally rare species, species commonly trapped/hunted, or species of special interest).

Table S-3 shows the comparison of Issue 1 by alternative. This table shows/describes projected successional stages for selected levels of all acres for Mesic Deciduous communities, high elevations, and acres with early successional habitat objectives, greater than four percent. This table shows that Alternatives D and F would provide most early successional habitat for both short and long-term implementation, including high-elevation early successional habitat; as well as highest proportion of mesic deciduous forest allocated to young age classes. Alternatives E and G would provide most mid- and late-successional habitat for both short-term and long-term. Alternatives E and G would provide most forest interior habitat with low early successional habitat objectives; Alternatives D and F would provide least. Alternatives B and F would provide highest acreage allowing new wildlife opening development; Alternatives D and G would be most restrictive on opening development. No clear trends for MIS populations are apparent across alternatives.

Table S-3 Issue 1 - Terrestrial Plants and Animals and Their Associated Habitats							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Successional Forest Habitats	Percent of Forested Acres						
Early Successional Habitat - 1 <sup>st</sup> Decade	3	3	5	<1	5	1	3
Early Successional Habitat - 5 <sup>th</sup> Decade	4	4	6	<1	8	2	5
Mid-, Late-, Old-Successional Habitat - 1 <sup>st</sup> Decade	83	83	81	86	81	84	83
Mid-, Late-, Old-Successional Habitat - 5 <sup>th</sup> Decade	85	84	76	97	73	91	83
Late- to Old Successional Habitat - 1 <sup>st</sup> Decade	46	46	43	48	44	47	46
Late- to Old Successional Habitat - 5 <sup>th</sup> Decade	70	69	57	82	54	77	67
	Acres						
Acres Maintained in high-elevation early-successional habitat	4,870	5,905	12,575	1,412	12,516	1,977	5,682
Mid-, Late-, and Old-Successional Mesic Deciduous* Forests in a Landscape with great than 70% cover and with Early Successional Habitat Objectives of 4-10%	139,881	173,478	92,825	218,169	75,891	186,681	121,841
	Percent of Forested Acres						
Proportion of Mid-, Late- and Old Mesic Deciduous* Forests	28	29	63	10	68	23	50

Table S-3 Issue 1 - Terrestrial Plants and Animals and Their Associated Habitats							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Allocated to Mgt. Prescriptions with an Early-Successional Habitat Objective of greater than 4%							
Permanent Openings, Old Fields and Balds	Percent of Total Acres						
Acres in Mgt. Pres. Allowing New Permanent Openings	60	70	32	53	62	41	56
MIS - Community Indicators	Trends**						
Pine warbler 1 <sup>st</sup> Decade	=	=	++	=	++	=	+
Pine warbler 5 <sup>th</sup> Decade	=	=	++	=	++	=	++
Acadian flycatcher 1 <sup>st</sup> Decade	+	+	+	+	+	+	+
Acadian flycatcher 5 <sup>th</sup> Decade	++	++	++	++	+	++	++
Scarlet tanager 1 <sup>st</sup> Decade	=	=	=	=	=	=	=
Scarlet tanager 5 <sup>th</sup> Decade	+	+	-	+	-	+	+
Hooded warbler 1 <sup>st</sup> Decade	+	+	-	+	-	+	-
Hooded warbler 5 <sup>th</sup> Decade	++	++	--	++	--	++	-
Pileated woodpecker 1 <sup>st</sup> Decade	+	+	-	+	-	+	+
Pileated woodpecker 5 <sup>th</sup> Decade	+	+	-	++	-	++	+
Prairie warbler 1 <sup>st</sup> Decade	=	=	+	-	+	-	=
Prairie warbler 5 <sup>th</sup> Decade	=	=	+	-	++	-	=
Chestnut-sided warbler 1 <sup>st</sup> Decade	=	=	+	-	+	-	=
Chestnut-sided warbler 5 <sup>th</sup> Decade	=	=	++	-	++	-	=
*Includes CISC Forest Types 13, 41, 46, 50, 51, 53-56, 58, 61-65, 68, 69, 72, 75							
**Population trend expressed as expected change from current levels: “++” relatively large increase; “+” increase; “=” little to no change; “-” decrease; “--” relatively large decrease							

**Issue 2 - Threatened, Endangered, and Sensitive/Locally Rare Species**

In addressing this issue, management activities would strive to accomplish:

Conserve and recover threatened, endangered, and sensitive species and their habitats.

Table S-4 shows the comparison of Issue 2 by alternative. This table shows that Alternatives D and F would result in highest number of species/ habitat relationships at risk, and Alternatives B and A would result in lowest number of species/ habitat relationships at risk. Numbers do not reflect the ability to mitigate these effects through management. The number of species relative to the number of watersheds for aquatic species does not vary by alternative. For a thorough comparison see the Terrestrial Viability Section an Aquatic Viability Section in Chapter 3.

Table S-4 Issue 2 – Threatened, Endangered, and Sensitive/Locally Rare Species							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Total Terrestrial Species Status Categories	Number of Species/Habitat Relationships						
Species/Habitat Relationships Rated as Very High Risk	156	139	175	158	231	158	139
Species/Habitat Relationships Rated as High Risk	172	179	225	173	166	173	210
Species/Habitat Relationships Rated as Moderately High Risk	221	223	205	219	209	219	219
Total	549	541	605	550	606	550	568

**Issue 3 - Old Growth**

In addressing this issue, management activities would strive to accomplish:

A variety of large, medium, and small old growth patches will be managed (through restoration, protection, or maintenance activities) to meet biological and social needs. These patches could include stands of either existing old growth or future old growth.

Table S-5 shows the comparison of Issue 3 by alternative. This table shows/describes acres of allocated old growth and future old growth by alternative. Future old growth includes all lands in old growth compatible management prescriptions, riparian area and unsuitable lands within suitable management prescriptions. Some of the lands included in the future old growth category will need to be examined to determine if they are appropriate for management as old growth. The amount of existing old growth on the CNF is not known at this time, but is anticipated to be low.

Table S-5. Issue 3 – Old Growth							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Old Growth	Acres in Thousands						
Acres of Existing Old Growth Protected	0	0	0	0	N/A	0	0
Acres of Allocated Old Growth (Rx 6's)	21	50	0	28	N/A	32	0
Total Acres Future Old Growth	385	373	320	528	N/A	467	359

**Issue 4 - Riparian Area Management, Water Quality, and Aquatic Habitats**

In addressing this issue, management activities would strive to accomplish:

Watersheds are managed (and where necessary restored) to provide resilient and stable conditions to ensure the quality and quantity of water necessary to protect ecological functions and support intended beneficial water uses.

Riparian ecosystems, wetlands and aquatic systems are managed (and where necessary restored) to protect and maintain their soil, water, vegetation, fish and wildlife associated resources.

Table S-6 shows the comparison of Issue 4 by alternative. This table shows the average percent increase in sediment over the existing condition that would result from Forest Service management activities for each alternative in period 1. Alternative D would result in the largest percent increase (0.63%) while Alternative G would result in the smallest (0.30%). The table also indicates the number of forest acres allocated to watershed restoration prescriptions (9.A's) by alternative.

Alternative/Units of Comparison	A	B	D	E	F	G	I
Soil and Water	Percent Increase						
Average Percent Increase in Sediment Yields from FS Activities over Existing Levels for Period 1 (Across 24 Watersheds)	0.5	0.44	0.63	0.2	0.4	0.3	0.48
Acres in Watershed Restoration Prescriptions	Acres in Thousands						
Acres Allocated to Mgt. Pres. 9.A's	157	220	8.0	34.5	0	8.2	0

**Issue 5 - Wood Products**

In addressing this issue, management activities would strive to accomplish:

Where forest management activities are needed and appropriate to achieve the desired composition, structure, and function of forest ecosystems; a result of such activities will also be to provide a sustainable supply of wood products for local needs.

Provide supplies of those wood products where the Forest Service is in a unique position to make an impact on meeting the demand for those products.

Table S-7 shows the comparison of Issue 5 by alternative. This table shows acres suitable for timber production, Allowable Sale Quantity (ASQ), and projected sale quantities for first and fifth decades.

Table S-7. Issue 5 – Wood Products							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Timber Management	Acres						
Land Classified as Suitable for Timber Production	395,527	400,125	496,583	157,565	464,722	249,522	420,047*
	MCF / MMBF						
Allowable Sale Quantity (First Decade)	36,113	38,969	67,767	8,143	71,096	19,500	39,968
Timber Sale Program Quantity (Total First Decade)	36,113/ 199	38,969/ 214	67,767/ 384	8,143/ 45	71,096/ 391	19,500/ 107	39,968/ 220
Timber Sale Program Quantity (Total Fifth Decade)	64,383/ 354	66,225/ 364	111,341/ 612	14,583/ 80	127,028/ 699	37,757/ 208	81,491/ 448
*suitable with early successional objectives is 278,849 acres							

### Issue 6 - Aesthetics/Scenery Management

In addressing this issue, management activities would strive to accomplish:

Protect and enhance the scenic and aesthetic values of the NFS in the Southern Appalachians.

The national forests will be managed to provide a variety of landscape character themes with the predominant themes being Natural Appearing, Natural Evolving, and variations of these themes.

Table S-8 shows the comparison of Issue 6 by alternative. This table shows the range of Scenic Integrity Objectives (SIOs) and compares percentages across alternatives. SIOs are assigned by Management Prescription and define the different levels of acceptable alteration to the forest’s scenery. In contrast to Alternative F, all other alternatives would potentially increase the number of acres assigned with SIO’s of Very High, High, and Moderate. Scenic and aesthetic values are given the most protection and enhancement potential in Alternative G, with an emphasis on Wilderness, Wilderness study areas, remote backcountry recreation and old growth. Negative impacts to scenery from road construction vegetation management, insect and disease control, special use utility rights-of-way (ROW) and other activities would be the greatest in Alternative F. Alternative F also includes an SIO of Very Low on 36 percent of the total forest acreage.

Existing designated Wilderness is classified with an SIO of Very High and is considered naturally evolving. This acreage remains the same across all alternatives. The majority of forest acres are considered natural appearing; however, with a greater amount of acreage allocated to Wilderness study areas in Alternatives G, E, A, and I there could be a shift from natural appearing to natural evolving on approximately 14 percent to 23 percent of the forest.

Table S-8. Issue 6 – Aesthetics/Scenery Management							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Scenic Integrity Objectives	Percent of Total Forest Acres						
Very High	23	23	13	30	11	32	24

Table S-8. Issue 6 – Aesthetics/Scenery Management							
Alternative/Units of Comparison	A	B	D	E	F	G	I
Scenic Integrity Objectives	Percent of Total Forest Acres						
High	25	21	27	27	14	37	23
Moderate	41	39	31	40	13	17	34
Low	9	16	28	< 1	26	13	19
Very Low					36		
Note: In each alternative, approximately 1 to 3% of the total forest acres currently has no assigned SIO; these lands include uninventoried land acquisitions: recent A.T. acquisitions, tract on Starr Mountain, etc.							

**Issue 7 - Recreation Opportunities/Experiences**

In addressing this issue, management activities would strive to accomplish:

Provide a spectrum of high quality, nature-based recreation settings and opportunities which are not widely available on non-Federal lands.

Strive to meet the following recreation needs within the capabilities of the land:

- Hiking, biking, and equestrian trail systems, especially in non-motorized settings with high quality landscapes. (Provide separate-use trails where necessary to reduce user conflicts or to improve the quality of recreation experiences.)
- Designated OHV routes (which will occur primarily in roaded natural (RN1) settings).
- The high priority improvements, expansions, or additions of facilities providing developed recreation opportunities.
- Hunting, fishing, and non-consumptive wildlife opportunities.
- Improved interpretive opportunities or other special recreation needs locally identified.

The national forests will manage areas to provide for the backcountry (semi-primitive/remote) recreation experiences that are not available on other land ownerships.

Although the opportunities for outdoor recreation are extensive and the public demand for these opportunities is seemingly endless, the forest’s capability to meet these demands is neither static nor endless. Visitor preferences can shift over time, and both changing financial limitations and environmental impacts must be considered. In order to maximize value to the public with the limited resources available, the forest will focus on providing those recreation opportunities which are unique or of exceptional long-term value in a manner that focuses on maximizing visitor satisfaction within financial and environmental limitations.

A goal is to provide a spectrum of high quality nature-based recreation settings and opportunities that reflect the unique or exceptional resources

of the Forest and the interests of the recreating public on an environmentally sound and financially sustainable basis. Adapt management of recreation facilities and opportunities as needed to shift limited resources to those opportunities.

Table S-9 shows the comparison of Issue 7 by alternative. This table shows the alternative distributions of the Recreation Opportunity Spectrum (ROS) across the CNF. Total acreage of prescription areas that emphasize recreation is also compared as well as estimated changes in the supply of developed recreation, motorized and non-motorized trails. Trends in animal species are relative to big and small game hunting opportunities.

Table S-9. Issue 7 – Recreation Opportunities/Experiences							
Issue/Units of Comparison	A	B	D	E	F	G	I
Recreation Opportunity Spectrum	Acres in Thousands						
Primitive (Rx’s 1.A, 1.B, & 2.A.1)	95	68	67	117	67	140	87
Semi-Primitive Non-Motorized	68	93	75	73	75	53	70
Roaded Natural 2	189	198	190	195	167	237	195
Roaded Natural 1	288	281	308	255	230	210	288
Rural/Urban	<1	<1	<1	<1	<1	<1	<1
Recreation Management Allocations	Acres in Thousands						
Acres with a Recreation Emphasis (Rx 7’s)	127	113	69	249	4	73	169
Acres with a Backcountry Recreation Emphasis (Rx 12”s)	25	0	0	85	31	140	54
Developed/Dispersed Recreation	Percent Increase (Range)						
Estimated Increase in Capacity of Developed Recreation Areas	6-25	0-5	0-5	6-25	0-5	0-5	6-25
Estimated Increase in Non-Motorized Trails	6-25	0-5	0-5	>26	0-5	6-25	6-25
Off-Highway Vehicle Roads and Trails	Acres in Thousands						
Acres of Off-Highway Vehicle Use Areas (Rx 7.C)	3	0	0	3	<1	0	11
	Percent Increase (Range)						
Estimated Change in Motorized Roads and Trails	11-50	Decrease	11-50	11-50	0-10	decrease	11-50

Alternative G secures the greatest combined acreage of Primitive (P) and Semi-Primitive Non-Motorized (SPNM) recreation settings on the forest. To some extent, all alternatives convert a portion of the existing supply of RN1 to more primitive or remote ROS settings. Alternatives E, A and I provide the most similar distributions of ROS classes across the forest, but there are thematic differences between these alternatives. Alternative A is primarily focused on recreation development linked to commercial opportunities, so facility improvements would accommodate popular

activities that generate money for local economies. Alternatives E and I would maintain and provide facilities and settings that accommodate a broader range of developed and dispersed recreation activities. Alternatives B and D would place the least emphasis on recreation in comparison to the other alternatives.

**Issue 8 - Roadless Areas and Wilderness Management**

In addressing this issue, management activities would strive to accomplish:

Wilderness, roadless and other unroaded areas are managed to provide their full range of social and ecological benefits.

Table S-10 and Table S-11 show the comparison of Issue 8 by alternative. These tables show how inventoried Roadless Area acreage is allocated by management prescriptions to Wilderness study areas or other prescriptions in which Roadless character is maintained. The acreage of existing Congressionally-designated Wilderness remains the same across all the alternatives. Inventoried Roadless Areas currently total approximately 85,195 acres in CNF. (This figure does not include an additional 2,366 contiguous acres in four Roadless Areas crossing boundaries into Jefferson and Pisgah National Forests, nor does it include acreage in the Pisgah NF portion of Bald Mountain Roadless Area that will be evaluated in a separate planning period.) The acres of inventoried Roadless Areas recommended for Wilderness Study are shown by alternative in Table S-11 and are described by name across alternatives. A separate acreage figure that represents inventoried Roadless Areas assigned by alternative to management prescriptions where Roadless character is maintained (other than in Rx 1.B) is shown also in Table S-10. The acreage total for Alternative F is the total of Management Area 14 acreage deferred from timber harvest and road construction, based on Amendment 6 of the 1986 LMP. Combining both WSA recommendations and other areas in which the Roadless character is maintained, the total acreage is greatest in Alternative G, I, and E, and lowest in Alternative D.

Alternative/Units of Comparison	A	B	D	E	F	G	I
Wilderness/Roadless	Acres in Thousands						
Acres of Existing Wilderness	66.4	66.4	66.4	66.4	66.4	66.4	66.4
Recommended for Designation as WSAs	27.7	1.4	0	49.2	0	73.1	19.4
Roadless Character Maintained	30.7	45.8	13.6	30.2	46.6	11.7	62.7*

\* With Roadbuilding direction included in Rx 4.F for Management Areas 8, 12, 15.

Alt.	Roadless Areas Recommended for Designation as Wilderness Study Areas
A	Big Laurel Branch Addition, Joyce Kilmer-Slickrock Addition, and portions of Bald Mountain, Bald River Gorge Addition, Big Frog Addition, Little Frog Addition NE, Sampson Mountain Addition, Upper Bald River

Alt.	Roadless Areas Recommended for Designation as Wilderness Study Areas
B	Joyce Kilmer-Slickrock Addition
D	No areas recommended for WSAs
E	Bald Mountain, Bald River Gorge Addition, Big Frog Addition, Big Laurel Branch Addition, Devil’s Backbone, Joyce Kilmer-Slickrock Addition, Little Frog Addition NE, Little Frog Addition NW, Sampson Mountain Addition, Slide Hollow, Upper Bald River, and a portion of Flint Mill Gap
F	No areas recommended for WSAs
G	Bald River Gorge Addition, Beaverdam Creek, Big Frog Addition, Big Laurel Branch Addition, Brushy Ridge, Devil’s Backbone, Joyce Kilmer-Slickrock Addition, Little Frog Addition NE, Little Frog Addition NW, London Bridge Branch, Sampson Mountain Addition, Slide Hollow, Stone Mountain, Sycamore Creek, Upper Bald River, and portions of Bald Mountain, Flint Mill Gap, and Rogers Ridge
I	Big Frog Addition, Joyce Kilmer-Slickrock Addition, Little Frog Addition NE, Little Frog Addition NW, Sampson Mountain Addition, Upper Bald River and a portion of Big Laurel Branch Addition

**Issue 9 - Forest Health**

In addressing this issue, management activities would strive to accomplish:

Forest ecosystems are managed, either through restoration or maintenance, to provide the desired composition (species mix), structure (age class distribution), function (resulting benefits), and productivity over time.

Management activities will reduce the impacts from exotic or non-native invasive species.

Table S-12 shows the comparison of Issue 9 by alternative. This table shows of the management prescription on risk of damage by the associated forest health community.

Issue/Units of Comparison	A	B	D	E	F	G	I
Forest Health Concerns	Ranking						
Gypsy Moth	stable	stable	reduced	increased	reduced	increased	stable
Southern Pine Beetle	stable	stable	reduced	increased	reduced	increased	stable
Oak Decline	stable	stable	reduced	increased	reduced	increased	stable
Beech Bark Disease	none	none	none	none	none	none	none

Table S-12. Issue 9 – Forest Health							
Issue/Units of Comparison	A	B	D	E	F	G	I
Forest Health Concerns	Ranking						
Littleleaf Disease	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-native Invasive Plants	Moderate increase	Moderate increase	High increase	Low increase	High increase	Low increase	Moderate increase
Storm Damage	none	none	none	none	none	none	none
Dogwood Anthracnose	Moderate reduction	Moderate reduction	reduced	Low reduction	reduced	Low reduction	Moderate reduction
Prescribed Fire	Acres						
Estimated Acres Prescribed Burned (Total)	16,000	16,000	16,000	10,000	16,000	16,000	20,000
Restoration	Acres						
Acres with a Restoration Emphasis (Rx's 9.C, 9.D, 9.E, 9.G, 9.H)	17,377	114,935	0	0	0	46,093	56,737

**Issue 10 - Special Areas and Rare Communities**

In addressing this issue, management activities would strive to accomplish:

Protect or restore the rare communities found on NFS lands.

Those areas with special geological, paleontological, botanical, zoological, cultural, or heritage characteristics will be managed (or where feasible restored) to protect those characteristics.

Table S-13 shows the comparison of Issue 10 by alternative. This table shows rare communities will be protected across all alternatives expect for Alternative F. The potential acres treated vary based upon how permissive the prescription allocations are to those activities under each alternative. For Special Areas, this table shows the number of acres allocated to management prescriptions specific to the A.T., cultural and heritage areas, designated scenic areas, and Roan Mountain. The acreage total for Alternative F was based on acreage from 1986 Forest Plan for Management Area 4 (national trails), Management Area 9 (Roan Mountain), Management Area 10 (balds), and Management Area 11 (cultural areas), as well as current scenic area acreage. The number of acres where these Special Areas are managed to protect their unique characteristics is greatest in Alternatives I, E, B, and G, and lowest in

Alternatives D and F. Botanical and zoological areas are addressed as Rare Communities.

Issue/Units of Comparison	A	B	D	E	F	G	I
Special Areas	Acres in Thousands						
Acres Allocated to Special Areas (RX 4's)	57	61	51	61	48	59	62
Rare Communities							
Rare Communities Managed According to the Rare Community Mgt. Pres. (9.F)	Yes	Yes	Yes	Yes	No	Yes	Yes
	Potential Acres Treated per Year						
Xeric pine and oak forest restored per year to open woodlands, savannahs, grasslands	485	485	600	520	600	485	570
Average annual acres of table mountain pine forest to be restored	40	45	50	40	55	45	50

**Issue 11 - Wild and Scenic Rivers**

In addressing this issue, management activities would strive to accomplish:

Wild, Scenic and Recreation Rivers which are designated by Congress, recommended for designation, or are eligible for designation, will be managed to protect their outstandingly remarkable values.

Table S-14 show the comparison of Issue 11 by alternative. This table shows the miles of rivers currently eligible for Wild and Scenic designation and the protection of their outstandingly remarkable values across alternatives.

Alternatives/Units of Comparison	A	B	D	E	F	G	I
Wild and Scenic Rivers	Miles						
Miles of Rivers Currently Designated	0	0	0	0	0	0	0
Miles of Rivers Eligible	40.6	40.6	40.6	40.6	40.6	40.6	40.6
Miles of Rivers Managed to Protect their Outstanding Remarkable Values (ORVs)	40.6	40.6	40.6	40.6	40.6	40.6	40.6
Miles of Rivers Recommended for W&SR Designation	1.3	1.3	1.3	1.3	1.3	1.3	1.3

In Table S-14, the miles of rivers eligible for Wild and Scenic designation only represent river miles located on the CNF. Under all alternatives, management emphasis for the eligible rivers and their corridors is focused on protection and enhancement of the values for which they were established, without limiting other uses that do not substantially interfere with public use and enjoyment of those values. The free flowing condition and outstandingly remarkable values (ORV's) determined for the eligible rivers would be protected under all alternatives regardless of recommendations from suitability studies. Miles of rivers recommended for Wild and Scenic designation include 1.3 river miles of the Nolichucky River.

**Issue 12 - Access and Road (Travelway) Management**

In addressing this issue, management activities would strive to accomplish:

Provide a transportation system that supplies and improves access for all forest road users within the capabilities of the land.

Accelerate the pace of decommissioning unneeded roads (classified and unclassified).

Provide better quality access by upgrading highly used forest roads; and any roads that are needed but are adversely effecting surrounding resource values and conditions.

Table S-15 shows the comparison of Issue 12 by alternative. This table compares acres of land allocated to the four FWRBE road options.

Alternative/Units of Comparison	A	B	D	E	F	G	I
Transportation System	Acres in Thousands						
Construction and Reconstruction Prohibited	113	70	69	158	100	165	127
Density of Open Roads and Motorized Trails Should Decrease Over Time	181	174	149	136	0	219	122
Density of Open Roads and Motorized Trails Should Remain Near Existing Levels	337	390	420	334	444	254	378
Density of Open Roads and Motorized Trails May Increase Over Time	8	5	2	12	82	2	13

## **SUMMARY OF THE REVISED LAND AND RESOURCE MANAGEMENT PLAN**

### **Purpose of the Revised Forest Plan**

#### **What is the Forest Plan?**

The CNF extends along the entire eastern border of Tennessee, broken in two by the GSMNP. The area includes approximately 640,000 acres.

This LMP will guide the management of the physical and biological resources within the CNF. To accomplish this, the LMP does the following:

- Establishes the management direction and associated long-range goals and objectives for the CNF for the next 10-15 years.
- Establishes management areas, which reflect biological, physical, watershed, and social differences in managing each area of land; management prescriptions, which reflect different desired conditions and provide the specific information used to develop projects to implement the LMP.
- Specifies the standards, which set the boundaries for achieving the goals, objectives and desired conditions.
- Identifies lands suitable for various multiple uses including timber production and establishes the Allowable Sale Quantity.
- Recommends to Congress new wilderness study areas and additions to existing wilderness areas.
- Establishes the monitoring and evaluation requirements needed to ensure that the expressed desired conditions can be met by applying the specified standards.

The LMP represents the preferred alternative (detail description in Chapter 2 of the EIS) for managing the land and resources of the CNF. It divides the forest into Management Areas based primarily on using geography for boundaries. The map accompanying the LMP displays the management areas and the management prescriptions to be used in each.

Forest plans make broad-scale decisions, similar to city zoning allocations. Plans do not require implementation of site-specific projects; rather they establish overall goals and objectives that the forest will strive to meet. The goals that are emphasized in the CNF LMP are to (1) ensure watershed health, (2) support viable populations of all native species, (3) restore the health of forest communities, (4) protect existing old growth, (5) protect and enhance scenery, (6) provide backcountry recreation experiences, and (7) provide high quality sawtimber.

Documentation of environmental impacts of the LMP is disclosed in the EIS. The EIS is required by the NEPA to disclose the potential effects of alternatives on significant resource-related issues associated with administering the CNF LMP. Seven alternatives were developed in detail in the EIS. A brief description of each alternative can be found in the Summary of the EIS. (For a detailed comparison of alternatives, refer to Chapter 2 in the EIS.)

## **WHAT IS DIFFERENT IN THE REVISED FOREST PLAN FROM THE CURRENT PLAN?**

### **Forest Allocations**

The 1986 LMP had only 18 management areas with the majority divided into just two—suitable for timber harvest and unsuitable for timber harvest. The other areas were the Appalachian Trail, Developed Recreation, Wildernesses, Wilderness Study Areas, and Special Areas (botanical, geological, and zoological).

The LMP now has 15 management areas with 46 management prescriptions used to delineate management based on local desires, needs and ecological classification system. These new prescriptions include things like rare communities, old growth, scenic corridors, and areas designed to optimize habitat for different groups of species that have similar needs. Backcountry recreation opportunities are very rare in the Southern Appalachian and the CNF has provided for the protection of these areas for future generations to enjoy.

Instead of using featured species boundaries as the existing LMP, the CNF is focusing on the current or desired uses of the land. Emphasis is on ecological habitat protection and restoration.

### **Old growth**

Under the 1986 LMP the CNF addressed old growth by setting aside 5% - 10% of every area that was harvested to become old growth. The 5%-10% was dependent on bear significance at the compartment level.

Most people think it is very important to protect old growth forests. The old growth management in this plan revision is based on Region 8 old growth report. This report recognizes three categories of old growth. The categories are existing, possible and future. Existing old growth is forest stands that meet all four criteria (age, past disturbance, basal area, and tree size) as described in the Region 8 old growth report. Currently, the CNF has no known existing old growth that meet all four criteria. Possible old growth consist of forest stands that meet one or more of the old growth requirements. There are approximately 24,000 acres that meet the minimum age requirement for possible old growth on the CNF. Future old growth are lands with old growth compatible management prescriptions. This LMP contains approximately 359,000 acres of future old growth compatible prescriptions.

### **Watersheds**

In the existing LMP, Management Area 18 addressed the aquatic environment. In the LMP, there are nine major watersheds within the CNF. There are 24 fifth level watersheds within the CNF. A watershed health index was developed as a measure of the condition of each fifth level watershed. The health index related sediment loads in watersheds to the relative abundance of locally adopted aquatic species.

### **Wilderness**

Management activities would strive to provide the full range of social and ecological benefits. The acreage of existing Congressionally-designated Wilderness remains the same.

### **Timber Harvest**

The 1986 LMP had an allowable cut of 40.5 million board feet; however, with Amendment 7, the allowable cut was revised to 34.5 million board feet. In the LMP the allowable cut will be 21.98 million board feet.

The decrease in allowable timber harvest is the result of a shift in management emphasis from timber production to establishing habitat for early successional habitat objectives (including protection and restoration of naturally occurring forested communities).

### **Roadless**

The roadless character will be maintained on all inventoried roadless areas; however, that does not mean that the Roadless Area Conservation Plan will be followed to the letter. Inventoried roadless is not a land allocation in the LMP; i.e., in some wildlife management areas, it may be necessary to make minor boundary adjustments.