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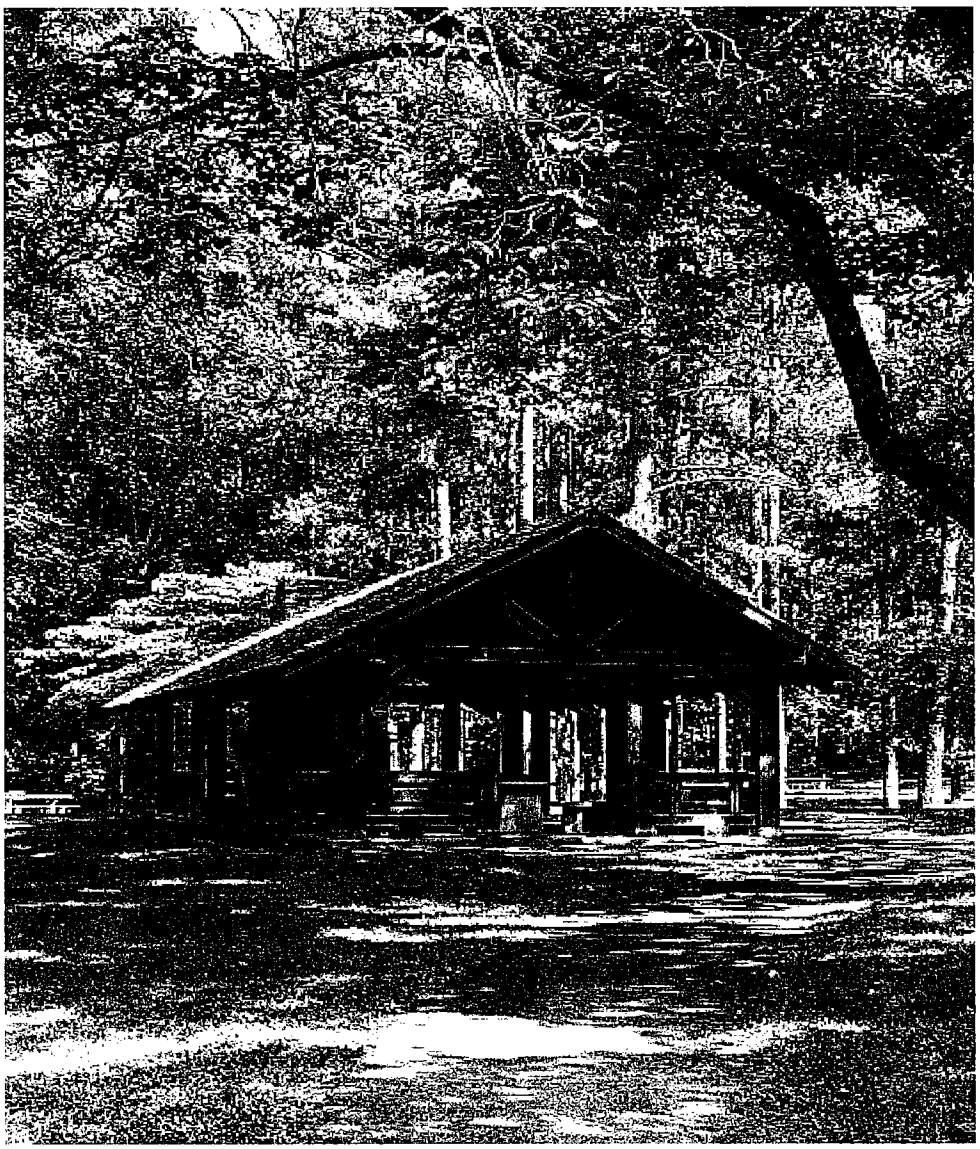
United States
Department of
Agriculture

Forest Service
Southern Region

Final Environmental Impact Statement for the Revised Land and Resource Management Plan

Sumter National Forest



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The picnic shelter on the cover was originally named the Charles Suber Recreational Unit and was planned in 1936. The lake and picnic area including a shelter were built in 1938-1939. The original shelter was found inadequate and a modified model B-3500 shelter was constructed probably by the CCC from camp F-6 in 1941. The name of the recreation area was changed in 1956 to Molly's Rock Picnic Area, which was the local unofficial name. The name originates from a sheltered place between and under two huge boulders once inhabited by an African-American woman named Molly.

Final Environmental Impact Statement for the Revised Land and Resource Management Plan

SUMTER NATIONAL FOREST

Oconee, Chester, Fairfield, Laurens, Newberry, Union, Abbeville, Edgefield, Greenwood, McCormick and Saluda Counties in South Carolina

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Abstract:

Nine alternatives for the revision of the *Land and Resource Management Plan* are described and compared. **A** - would emphasize production of goods and services beneficial to local economies and communities. **B** - would be biologically driven, emphasize restoring the natural resources and processes, and emphasize creating and maintaining wildlife habitats. **C** - was not developed in detail. Alternative C—commonly known as the zero timber cut alternative—did not need to be further evaluated in detail in the FEIS. **D** - would emphasize reaching and maintaining a balanced age class. This "balance of age classes" would occur on lands identified as suitable for timber harvest. **E** -dispersed and developed recreational areas and opportunities would be increased in this alternative. **F** - is the "No Action Alternative" (Current Management). This is the management under the existing 1985 Forest Plan, as amended. **G** - would emphasizes wilderness. Semi-primitive, wildlife, and nature-oriented recreational opportunities would be emphasized. **H** - was not developed in detail. When the management prescriptions applicable to this alternative were allocated, there was virtually no difference between this alternative and Alternative G. **I** - emphasizes management of forest ecosystems through restoration and maintenance, which ensures healthy watersheds; provides for sustainable and diverse ecosystems that support viable plant, wildlife, and fish populations; and provides for high quality, nature-based recreation opportunities, especially in non-motorized settings with high quality landscapes. **Alternative I is the alternative selected by the Forest Service.**

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CHAPTER 1

PURPOSE AND NEED

PROPOSED ACTION

The purpose of this proposed action is to revise the Sumter Land and Resource Management Plan (LMP). The revised LMP guides all natural resource management activities on the Sumter National Forest (SNF) to meet the objective of Federal law, regulations, 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 SNF was approved August 1985. As of November 1, 2002, there are 14 amendments to the existing LMP. Revision of the LMP is now needed to satisfy regulation requirements and to address new information about the forest and its uses.

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

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

FOREST PLAN DECISIONS

National Forest System resource allocation and management decisions are made in two stages. The first stage is the LMP level decisions, which allocates lands and resources to various uses or conditions by establishing management areas and management prescriptions for the land and resources within the plan area. The second stage is approval of project level decisions.

Land and Resource Management Plans do not compel the agency to undertake any site-specific projects; rather, plans establish overall goals and objectives (or desired resource conditions) that the individual national forest strives to meet. Land and Resource Management Plans also establish limitations on what actions would be authorized, and what conditions would be met, during project level decision.

The primary decisions made in a LMP include:

1. Establishment of the forestwide multiple-use goals and objectives (36 CFR 219.11(b)).

2. Establishment of forestwide management requirements (36 CFR 219.13 to 219.27).

3. Establishment of multiple-use prescriptions and associated standards for each management area (36 CFR 219.11(c)).

4. Determination of land that is suitable for the production of timber (16 U.S.C. 1604(k) and 36 CFR 219.14).

5. Establishment of allowable sale quantity for timber within a time frame specified in the plan (36 CFR 219.16).

6. Establishment of monitoring and evaluation requirements (36 CFR 219.11(d)).

7. Recommendation of roadless areas as potential wilderness areas (36 CFR 219.17).

8. Where applicable, designation of lands administratively available for oil and gas leasing; and when appropriate, authorization of the Bureau of Land Management to offer specific lands for leasing (36 CFR 228.102 (d) and (e)).

The authorization of site-specific activities within a plan area occurs through project decision making, which is the implementation stage of forest planning. Project level decision requires compliance with NEPA procedures and a determination that the project is consistent with the LMP.

The following Environmental Impact Statements contain environmental analyses that are not repeated in this EIS, but provide supporting documentation for some of the forest plan decisions.

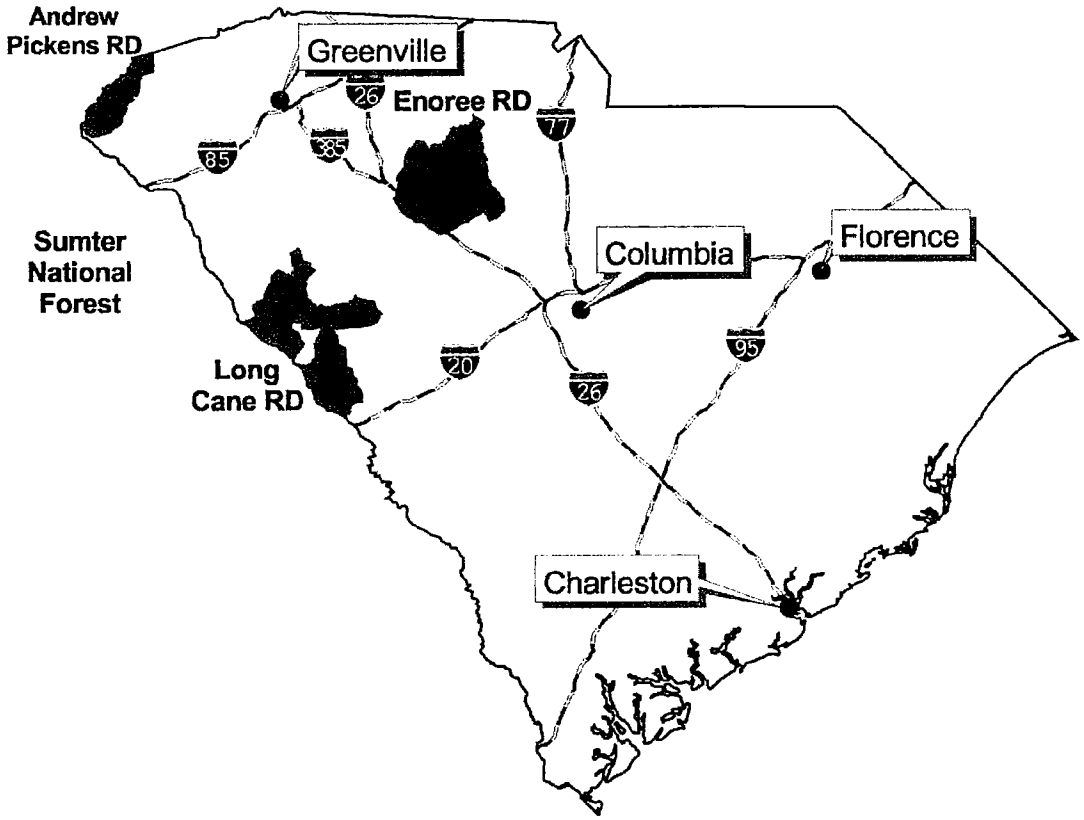
- *Final Environmental Impact Statement for Gypsy Moth Management in the United States: A Cooperative Approach* (USDA, Forest Service and APHIS, Washington DC, November 1995)

- *Final Environmental Impact Statement for the Management of the Red-cockaded Woodpecker and its Habitat on National Forests in the Southern Region* (RCW EIS) (USDA Forest Service, Southern Region, June 1995)
- *Final Environmental Impact Statement for the Suppression of the Southern Pine Beetle* (USDA Forest Service, Southern Region, February 1987)
- *Final Environmental Impact Statement for Vegetation Management in the Appalachian Mountains* (USDA Forest Service, Southern Region, July 1989)
- *Final Environmental Impact Statement for Vegetation Management in the Coastal Plain/Piedmont* (USDA Forest Service, Southern Region, January 1989)
- *Final Environmental Impact Statement for Forest Service Roadless Area Conservation* (USDA Forest Service, Washington Office, November 2000)

FOREST PROFILE

The Sumter National Forest includes approximately 362,000 acres of National Forest System land in the mountains and piedmont of South Carolina. The forest is divided into three ranger districts located in 11 counties. The Andrew Pickens District is located in western Oconee County. The Enoree District is located east of Interstate 26 in Chester, Fairfield, Laurens, Newberry, and Union Counties. The Lone Cane District lies east of J. Strom Thurmond Lake in Abbeville, Edgefield, Greenwood, McCormick, and Saluda Counties.

Location Map
For the
Sumter National Forest



November 11, 2002

REASON FOR REVISION

The need to revise these plans is driven by the changing conditions identified in the Southern Appalachian Assessment (SAA) and in individual forest assessments, as well as the changing public values associated with these national forests. These conditions and values make it appropriate that all of these Southern Appalachian Forest Plan revisions (the Chatahooche-Oconee, Alabama, Cherokee, Sumter and Jefferson National Forests) be done simultaneously. The Forest and Rangeland Renewable Resources Planning Act (RPA), as amended by the National Forest Management Act of 1976 (NFMA), requires that each national forest be managed under a forest plan. The purpose of a forest plan is to provide an integrated framework for analyzing and approving future site-specific projects and programs. Regulations require that forest plans be revised on a 10-to-15-year cycle, or sooner if conditions or the areas covered by the plan change significantly.

Information from the previous analyses and efforts of the individual national forests to update their Analysis of the Management Situation (AMS) were used by the national forests to determine what decisions should be reanalyzed or changed in LMP revision. The main objective of the AMS has been to do the analysis leading to a proposal to change forest management direction. A draft AMS was completed for the Sumter National Forest in August 1996.

PLANNING PROCESS

Forest planning occurs within the overall framework provided by implementing the regulations of NFMA and NEPA. National, regional, and forest planning form an integrated three-level process. This process requires a continuous flow of information and management direction among three Forest Service administrative levels. Information from forest planning flows upward to the national level for use in the RPA program where, in turn, information flows back to the forest level. In this structure, regional planning is the principal process for conveying information between forest and national levels.

Planning actions required by the NFMA and used in this planning process are:

1. Identification of issues, concerns, and opportunities.
2. Development of planning criteria.
3. Inventory of resources and data collection.
4. Analysis of the Management Situation.
5. Formulation of alternatives.
6. Estimation of effects of alternatives.

7. Evaluation of alternatives.
8. Recommendation of preferred alternative.
9. Approval and implementation.
10. Monitoring and evaluation.

The results of planning steps 1-8 are described in this document. Refer to appendix A, "Summary of Public Involvement" and appendix B, "Analysis Process," for more detail on the results of these steps.

PUBLIC INVOLVEMENT

Public involvement is a key part of the planning process. Providing for public comment helps identify what people want from the national forests in the form of goods, services, and environmental conditions. Issues submitted by the public, as well as from within the Forest Service, guided the need to change current management strategies. Some of the issues listed below were obtained from appeals of the forest plans. The public also submitted issues during public involvement efforts conducted by Forest Service personnel during the past 7 years.

In addition to the emerging issues, the need for change was identified through the Analysis of the Management Situation. This analysis also provides a basis for formulating a broad range of reasonable alternatives. A detailed account of the public involvement process is in appendix A, "Summary of Public Involvement."

SIGNIFICANT ISSUES

The following issues and planning questions were used to develop alternatives for the forest plan revision process. The first twelve issues are common to the five national forests in the Southern Appalachian area that are working together through the revision process. The last two issues are local issues developed for the Sumter National Forest.

Issues–Southern Appalachian National Forests

1. **Terrestrial Plants and Animals and Their Associated Habitats:** How should the national forests retain/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, and (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 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 products are appropriate?

6. **Aesthetic/Scenery Management:** The issue surrounding the management of 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 increasing demand for recreational opportunities and experiences be addressed on the national forests while protecting forest resources? Should the forests restrict equestrian use to designated routes only? 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/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 recommended for wilderness designation be managed? How should the patterns and intensity of use, fire, and insects and diseases be managed in the existing wilderness areas?

9. **Forest Health:** What conditions are needed to maintain the ability of the forests to function in a sustainable manner as expected or desired? Of particular concern are the impacts of exotic or non-native 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 River System, and how should rivers that are eligible, but not suitable, be managed?

12. **Access/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?

Issues–Sumter National Forest

13. **Chattooga River Watershed:** How can the national forest manage the Chattooga River watershed for desired social and ecological benefits while protecting the outstanding values of the Chattooga Wild and Scenic River corridor? Should the river be open or closed to public boating above Highway 28?

14. **Minerals:** What type of restrictions should we place on mineral development?

PLANNING PROCESS RECORDS

The SNF Interdisciplinary Team is responsible for developing the revised forest plan. Efforts were made to provide detailed explanations of each step of the revision in the form of process (or planning) records. This DEIS contains summaries of the process records and includes references to the parent records. Process records are on file in the Forest Supervisor's Office. To review these records, contact:

Forest Supervisor's Office
4931 Broad River Road
Columbia, SC 29212
Telephone: 803-561-4000

CHAPTER 2

ALTERNATIVES

INTRODUCTION

This chapter summarizes and compares the alternatives that were developed as potential management strategies for the Sumter National Forest. It explains the alternative development process, provides reasons why some of these alternatives were later eliminated from detailed study, describes the alternatives that are considered in detail, and lastly, compares how the alternatives respond to the significant issues identified in Chapter 1.

CONSISTENCY ACROSS FORESTS/STATE LINES

In an effort to have a consistent approach to the development of revised forest plans across the Southern Appalachian forests, various teams were assembled and actions taken. In addition to the individual Forest Interdisciplinary Teams (IDTs), the following teams comprised of individuals from the five forests worked on coordinating, developing, and analyzing the forest plan alternatives:

- The Steering Team is comprised of the Forest Supervisors of the five national forests and the Director of Planning. They provided oversight and direction to the overall planning effort.

- The SAP (Southern Appalachian Planners) Team included the Forest Planners from the five national forests and the Regional Planners. This group held numerous meetings, most open to the public, to develop and implement a coordinated approach to developing and analyzing the alternatives.

- The FWRBE (Fisheries, Wildlife, Range, Botany, and Ecology) Team was comprised of various specialists (wildlife, fisheries, etc.) from the forests and the region. This team developed a consistent approach to addressing those issues relating to terrestrial and aquatic species and their habitats including threatened, endangered, and sensitive species; species of viability concern; and rare communities. Most of these meetings were also open to the public.

- The SARRWAG (Southern Appalachian Recreation, Rivers, Wilderness Advisory Group) included recreation specialists from the forests and the region and developed a consistent approach to addressing recreation-related issues, evaluating roadless areas, managing wildernesses, studying wild and scenic rivers, and where applicable – management of the Appalachian Trail.

- The Riparian Team, comprised of hydrologists, soil scientists, and aquatic biologists, worked on developing a consistent approach to addressing water-and riparian-related issues.

In addition to the team efforts described above, some specific actions were taken to achieve a consistent approach to the planning process. They include, for the five forests:

- Working on the same schedule/timeline, starting with the issuance of a Notice of Intent to revise the forest plans for the five forests (on August 2, 1996), continuing on through the publication of these Final Environmental Impact Statements, and eventually will include the publication of the Final Environmental Impact Statements.

- Developing a common set of significant issues, which are described in Chapter 1.

- Developing a common set of management prescriptions. A team of representatives from the five forests and the regional office held a series of meetings, some of which were open to the public, to develop a common set of "generic" management prescriptions. First, different "categories" of prescriptions were identified and then "emphasis" statements were developed to address the various issues. Descriptions of the "desired conditions" that would result from implementing the management prescriptions were then developed. Later, the Forest IDTs took these "generic" descriptions of the management prescriptions and "localized" them to meet local conditions. The management prescriptions used on the Sumter National Forest are listed in Table 2-1.

- Coordinating an approach to development of the alternatives, described below.

ALTERNATIVE DEVELOPMENT

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 are:

A. Produce high levels of goods and services compatible with local economies and communities.
B. Priority is given to restoring natural resources and processes.
C. Nature operates in conjunction with minimal human intervention.
D. 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 presented 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.

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

ALTERNATIVES ELIMINATED FROM DETAILED STUDY

As described above, there were originally nine different alternatives. However, as the planning process proceeded, it was determined that two of the alternatives did not need to be further evaluated in greater detail. Descriptions of those two alternatives and the reasons they were not studied further are explained below.

Alternative C

Alternative C would emphasize resource management with minimal human intervention to the natural resources. Active management would be for the protection of resources, for meeting legal requirements, and for maintaining current recreation opportunities.

Potential old-growth areas would, within a few decades, come to represent the majority of the forest as a result of minimal management activity. There would be no regular, periodic harvest of green timber; therefore, no "suitable" forest land. The landscape character would change, moving toward high scenic integrity. Emphasis would be on dispersed and non-motorized recreation opportunities. No new developed recreation facilities would be constructed.

All inventoried roadless areas would be recommended for wilderness designation. Risk of loss of critical habitat for threatened and endangered species, danger to forest visitors, risk of damage to private property through Forest Service inaction, or introduction of an exotic pest would be considered unhealthy forest conditions requiring human intervention. Human intervention would also be used to maintain or increase existing rare communities. The majority of the eligible wild and scenic rivers would be recommended for inclusion to the National Wild and Scenic Rivers System. Roads not needed for legal requirements and other resource needs would be closed or obliterated.

Reasons Alternative C 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) From further analyses it was determined that this alternative, as originally envisioned, would not meet all the legal requirements of the National Forest Management Act of 1976 (NFMA), the Multiple-Use Sustained-Yield Act of 1960 (MUSYA) and the Endangered Species Act of 1973 (ESA); 2) Alternative C only addresses some, but not all, of the forest planning issues that have been identified by the public; 3) Other alternatives considered in detail provide for relatively low levels of management activities; and 4) Alternative C is similar to the "Minimum Level Benchmark" discussed in Appendix B.

The 219 regulations specify that the planning team should "formulate a broad range of reasonable alternatives according to NEPA procedures" (36 CFR 219.12(f)). With respect to meeting NEPA procedures, the alternatives developed need to respond to the "purpose and need". The "purpose and need" of revising the forest plan is to address the changing conditions that were identified in the Southern Appalachian Assessment, the Forest's Analysis of the Management Situation, and the changing public values as represented by the 12 common issues and 2 local issues. Alternative C, with its emphasis on "minimal human intervention" would not address all these issues, and would not meet the "purpose and need" as required by NEPA.

Another expression of the "purpose and need" of the forest plans is in the NFMA regulations where it states that the "resulting plans shall provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term net public benefits in an environmentally sound manner" (36 CFR 219.1). The Multiple-Use Sustained Yield Act states that the Secretary of Agriculture should "develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of the several products and services obtained there from" (Section 2). Again, with its focus on "minimal human intervention", Alternative C is not an alternative that would provide "for multiple use and sustained yield of goods and services".

Additionally, the requirement to "maintain viable populations of existing native and desired non-native vertebrate species in the planning area" (36 CFR 219.19) would not be met. When this alternative was originally developed, it was thought that relatively few acres would need to be "actively managed" in order to meet this requirement. However, after more analysis was conducted on the habitat needs of various species, it was determined that there are a number of species that depend on ecological communities that can only be maintained by frequent levels of disturbance. As is explained in Chapter 3 of this EIS, a significant level of management is needed (at least over the next 10 to 50 years) to restore and maintain these disturbance-dependant communities. A certain amount of "human intervention" is needed to get these communities into the desired conditions of composition and structure, so that in the future, natural disturbances along with appropriate prescribed fire levels could maintain these communities. However, the levels of management activities that would be needed over the next 10 to 50 years to create these conditions would be inconsistent with the overall goal of Alternative C to have "minimal human intervention".

To further illustrate the need for a certain level of active management, Chapter 4 of the Southern Forest Resource Assessment (Effects of Forest Management on Terrestrial Ecosystems) states:

- "The exact nature and condition of these forests and disturbance regimes are unknown, but the presence of large grazing herbivores and fire-adapted forest communities suggests that much of this forest land was relatively open and subject to regular disturbances" (p. 92).
- "Today there are more forested acres in the South than in the early 1900s. These forests, however, are greatly altered from forests encountered by European settlers. … The common theme for the last 10,000 years is that forests were managed to meet human needs, including those of Native Americans" (p. 93).
- "We should recognize, however, that removal of all human disturbances will have profound effects on the region's biota" (p. 93).
- "To avoid regional population declines and species losses, land managers must have the flexibility to promote active management. This region's biota does not thrive in a static system, and intentional neglect does nothing but promote

> additional extinctions and endangerment to species at risk... This flexibility should not extend to the other extreme of promoting intensive forestry for wildlife conservation, but it does suggest that some level of active management will be necessary to maintain many still extant but imperiled species, including many found on present or set-aside lands" (p. 93).

With respect to the agency's "Healthy Forests Initiative", a management emphasis of the agency is to change the situation where forests, overloaded with fuels, are vulnerable to severe wildland fires. Minimizing "human intervention" would increase susceptibility of the forest to insect and disease outbreaks, which would create increased fuel-loading problems, and increase the risks to other resources and to adjacent private lands. Alternative C would not address these problems and areas of concern.

Apart from the low levels of human intervention, the other aspects of this alternative such as large acreages in old-growth or late–successional conditions, maintaining roadless area characteristics, and providing for an emphasis on dispersed recreation activities, etc., are similarly represented in Alternatives E and G.

While Alternative C would address some of the issues, there are other management issues that have been raised by the public that this alternative does not address. In addition to the forest health and wildlife habitat management concerns expressed above, Alternative C does not address the issue that there are demands for various forest products such as high-quality sawtimber, which are of limited supply from private lands, but are available from National Forest lands.

Lastly, the Minimum Level Benchmark is "the minimum level of management which would be needed to maintain and protect the unit as part of the National Forest System together with associated costs and benefits" (36 CFR 219.12(e)(1)(i)). This is essentially the same management emphasis as Alternative C and a further description of this level of management can be found in Appendix B.

As a result of all these factors, it was determined that further study of this alternative was not needed.

Alternative H

Alternative H would provide for active resource management to achieve multiple-use objectives with all lands classified as unsuitable for timber production. There would be some timber harvest, but not under a sustainable harvest schedule as is done on suitable forest land. The active resource management would focus on providing a wide diversity of wildlife habitats. Small human-made openings would be made to mimic natural gap openings. Emphasis would be on area sensitive, interior species habitats and these areas would be managed for high to very high scenic integrity.

Old-growth allocation and management would be primarily on lands already withdrawn from the suitable timber base. Restoration of degraded watersheds would be emphasized to improve aquatic habitats and water quality. Highways and roads in the forest, trail and river corridors, and recreation-use areas would have forest stands with few, if any, broken views. Recreation areas and opportunities would be increased throughout a variety of settings.

Inventoried roadless areas adjacent to existing wilderness would be recommended for wilderness designation. Non-native pests and/or undesirable species would be controlled. All wild and scenic rivers would be recommended for inclusion into the National Wild and Scenic Rivers System (WS&R) if they do not conflict with other resources. Eligible wild and scenic rivers not recommended for inclusion into the WS&R would be allocated to a management prescription that protects these rivers and manages them similarly to congressionally designated rivers. Public access (travel-ways, use corridors, waterways, and trails, including off-highway vehicles) would be increased in high-use areas and/or improved to provide more opportunities for recreation.

Reasons Alternative H was Eliminated from Detailed Study

When the management prescriptions applicable to this alternative were allocated, there was 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.

ALTERNATIVES CONSIDERED IN DETAIL

Alternative A

- Goods and services to local economies emphasized.
- Timber management for sustained yield of high quality sawtimber.
- Wildlife management for public demand game and non-game species.
- Developed and dispersed recreation opportunities enhanced.
- High-quality scenery enhanced.
- Old growth on land withdrawn from suitable for timber production land base.
- Public access to the forest increased to enhance recreation opportunities.

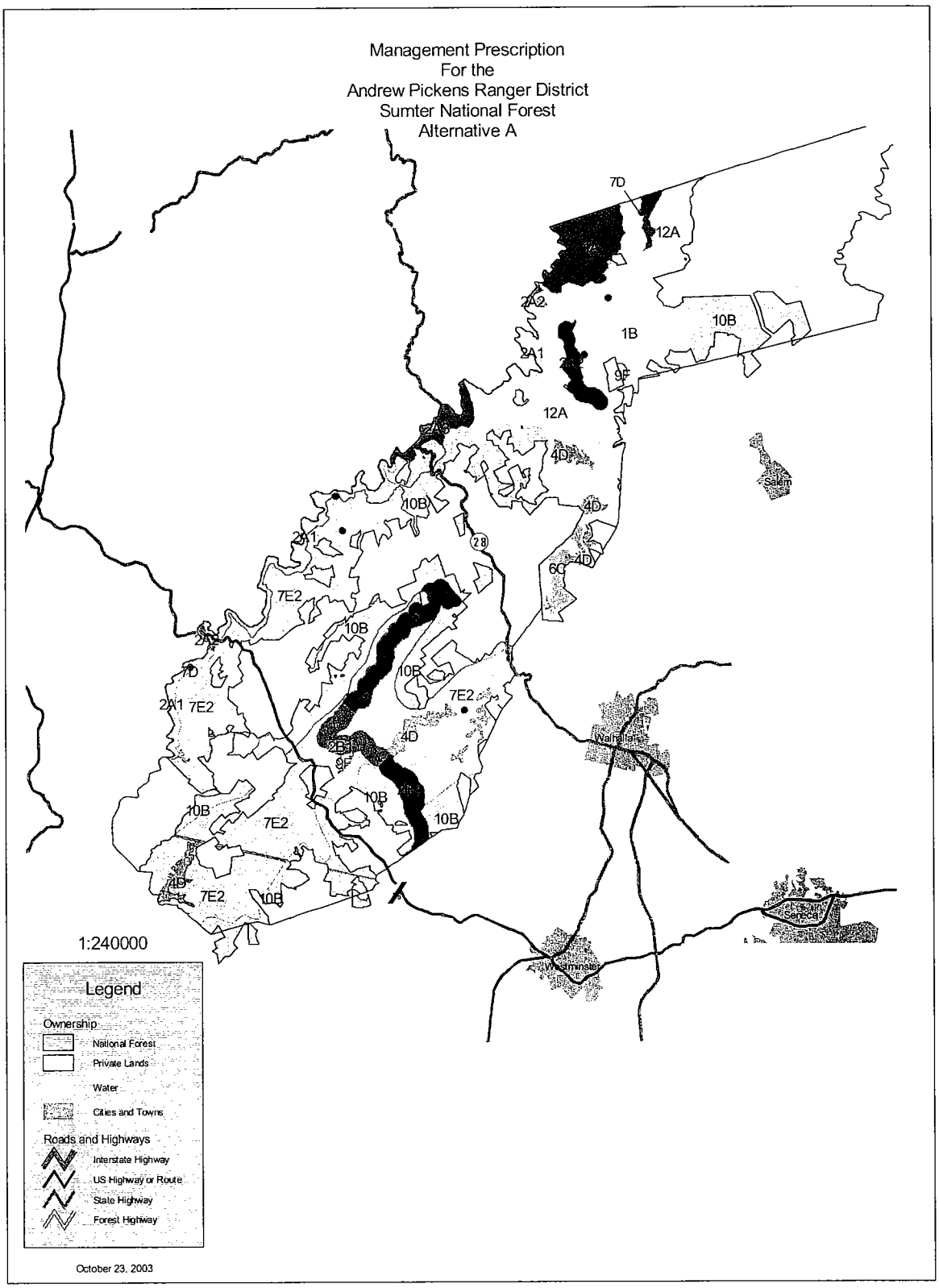
- Boating allowed on the Chattooga River above Highway 28 and below Burrell's Ford Bridge.
- Vegetation actively managed to reduce the risk of insects and diseases.

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 a 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. Boating on the Chattooga River would be allowed between Burrell's Ford Bridge and Highway 28. (Please refer to Appendix H.)

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 forest, trail and river corridors, and recreation-use areas would have forest stands with few, if any, broken views. 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 (travel-ways, use corridors, waterways, trails, including off-highway vehicle) would be increased in high-use areas and/or improved to provide for more recreation opportunities.

Legend

- 1.A-Designated Wilderness Area
- 1.B - Recommended Wilderness Study Area
- 2.A.1 - Designated Wild River Segments
- 2.A.2 - Designated Scenic River Segments
- 2.A.3 - Designated Recreational River Segments
- 2.B.1 - Eligible Wild and Scenic Wild River Segments
- 2.B.2 - Eligible Wild and Scenic Scenic River Segments
- 2.B.3 - Eligible Wild and Scenic Recreational River Segments
- 4.D - Botanical/Zoological Areas (All areas not shown)
- 4.F - Scenic Areas
- 4.G.1 - Calhoun Experimental Forest
- 5.A - Administrative Sites (All areas not shown)
- 5.C - Designated Utility Corridors
- 6.A - Emphasize Natural Processes
- 6.C - Old Growth Areas Managed with a Mix of Natural Processes and Restoration Activities (All areas not shown)
- 6.D - Old Growth Areas with a "Core" Surrounded by areas with extended forest rotations
- 6.E - Old Growth Area with a "Core" Surrounded by Areas under Uneven-Aged Management
- 7.A - Scenic Byway Corridor
- 7.C - OHV Use Areas
- 7.D - Concentrated Recreation Zone
- 7.E.1 - Dispersed Recreation Areas
- 7.E.2 - Dispersed Recreation Areas with Vegetation Management
- 8.A.1 - Mix of Successional Forest Habitats
- 8.A.2 - Area-Sensitive Mid- to Late-Successional Forest Habitats
- 8.B.2 - Woodland and Grassland Savanna Habitats
- 8.C - Wide Ranging Area-Sensitive Species (or Black Bear Habitat)
- 8.D - Red-Cockaded Woodpecker Habitat Management Areas
- 9.A.3 - Watershed Restoration Area
- 9.A.4 - Aquatic T/E/S Watersheds
- 9.E - Maintenance and Restoration of Xeric Pine and Pine-Oak Forests
- 9.F - Rare Communities (All areas not shown)
- 9.G.2 - Maintenance and Restoration of Upland Oak-Hickory and Mixed Pine-Oak Forests
- 9.H - Maintenance and/or Restoration of Plant Associations in the Chattooga River Watershed
- 10.A - Sustained Yield Timber Management
- 10.B - High Quality Forest Products
- 11 - Riparian Corridors (All areas not shown)
- 12.A - Remote Backcountry Recreation - Few Roads
- 12.B - Remote Backcountry Recreation - Non-Motorized
- Private Lands
- District boundary
- Town/City
- Primary Road
- Secondary Road


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative A
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12A
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4D
Salem
10B
4D
2A1
28
4D
6C
7E2
10B
2A1
7D
10B
2A1 7E2
7E2
4D
Walhalla
2B
9F
10B
10B
10B
7E2
4D
7E2
10B
Westminster
1:240000
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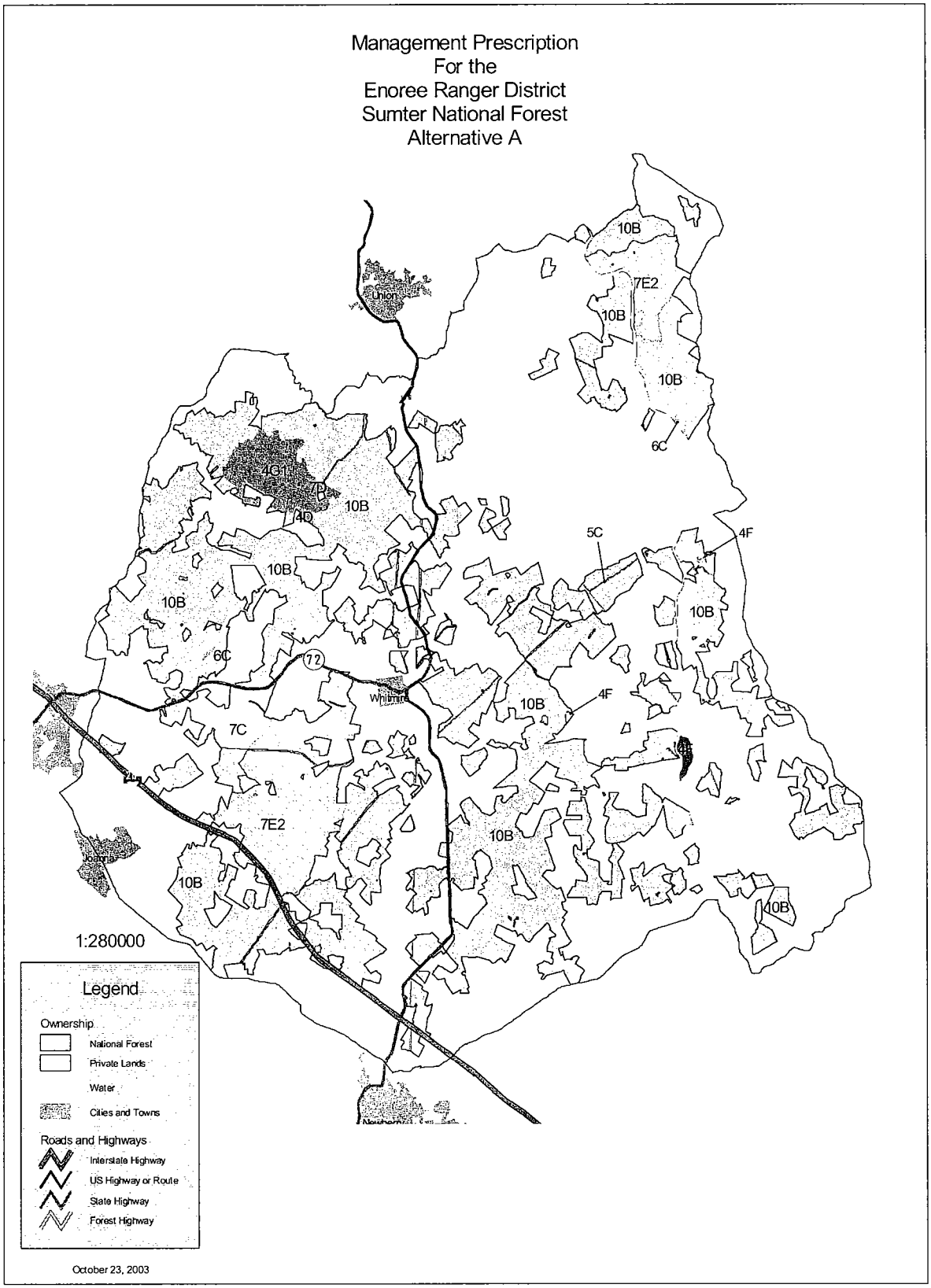
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative A
Union
Whitmire
Joanna
10B
7E2
6C
4G1
4D
5C
4F
7C
1:280000
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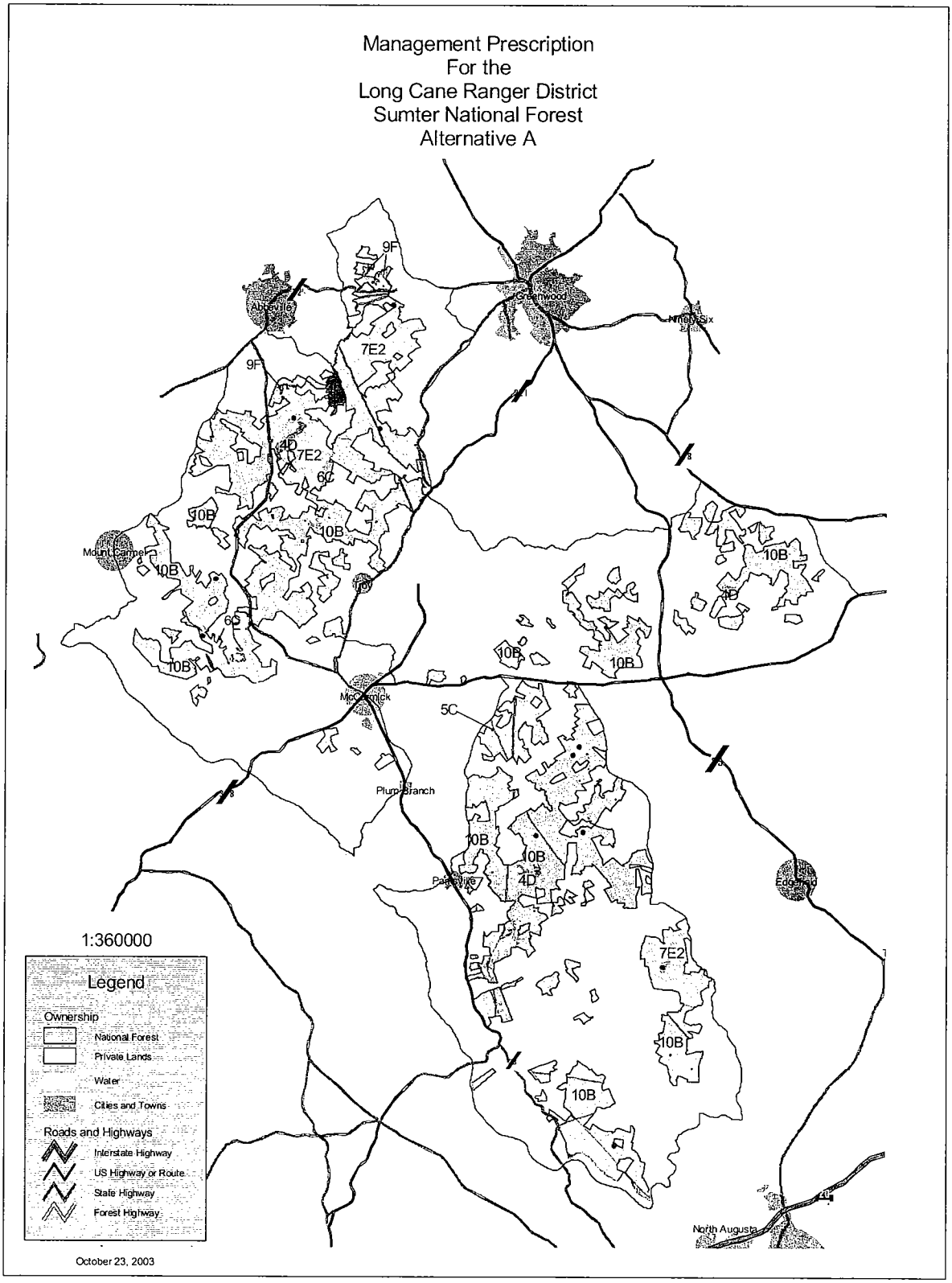
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003


Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
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10B
10B
6C
10B
10B
10B
4D
10B
5C
4D
7E2
10B
10B
1:360000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003

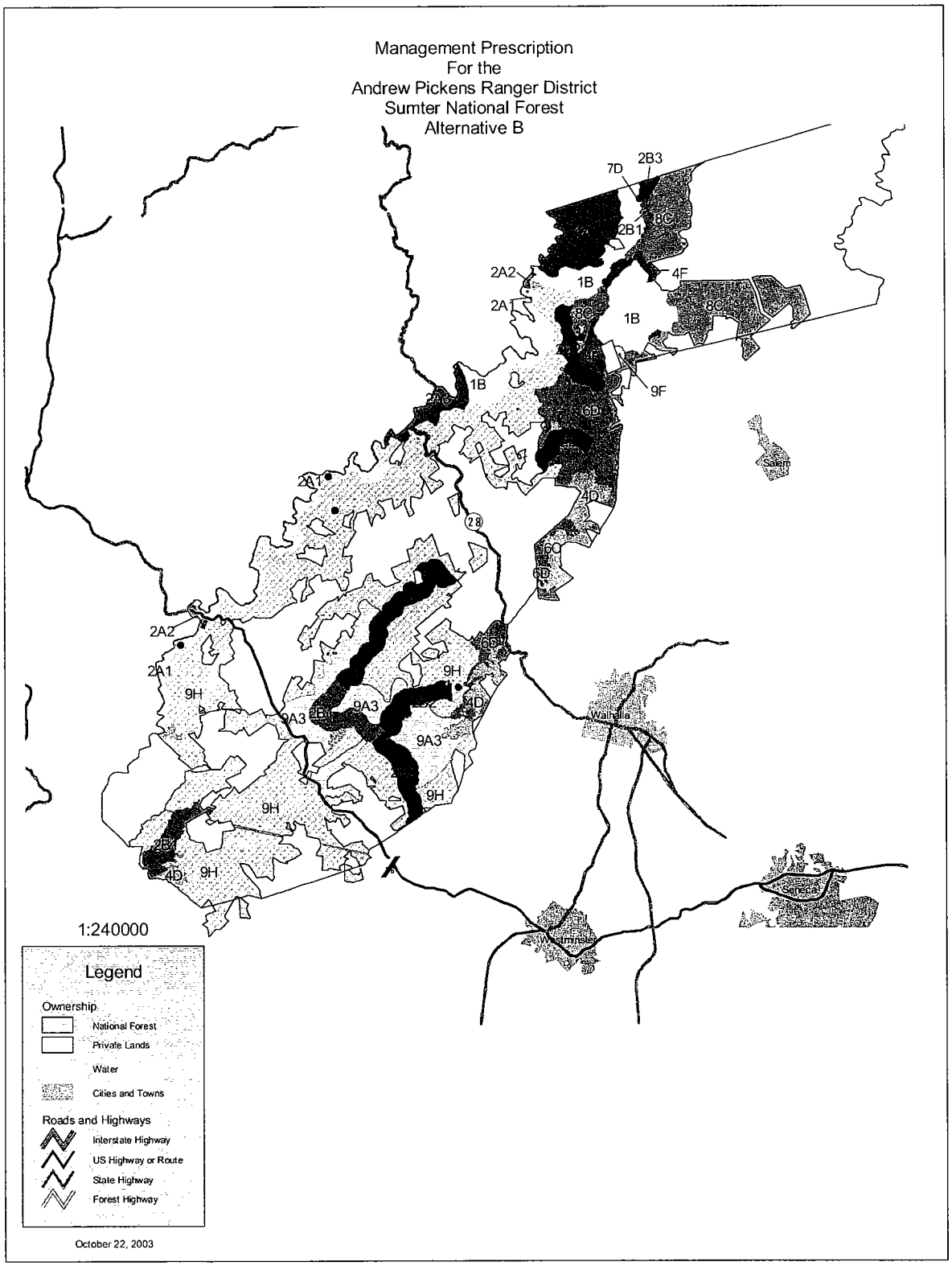
Alternative B

- Biologically driven to emphasize restoring the natural resources and processes.
- Creating and maintaining wildlife habitats emphasized.
- Natural process would be mimicked in a natural landscape pattern.
- Large and small openings may be created.
- Variety of recreation opportunities available if compatible with restoration.
- Equestrian use would be restricted to designated routes.
- Timber management done if wildlife habitats enhanced.
- Old growth emphasized with goal to create pre-settlement conditions.
- Riparian ecosystems emphasized.
- Scenic qualities would be enhanced over time (may have short-term impacts).
- Roadless areas with high value wildlife needs would not be recommended for wilderness.
- The role of insects and disease in ecosystem would be accepted, except in epidemic conditions. Non-native pests would be controlled.
- Generally, amount of long-term permanent access would be reduced. Access in the short-term may increase as needed to achieve management goals.
- Boating would not be allowed on the Chattooga River above Highway 28.

Alternative B would be *biologically driven*, emphasize *restoring the natural resources and processes, and emphasize 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 on providing a mix of 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 non-restoration areas. Management of wood products would only occur in concert with restoration management and creation of 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 to restore and maintain specific impaired or degraded resources, natural processes, communities, and wildlife habitats. In some areas of the forest, 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. Non-natives such as gypsy moth, hemlock wooly adelgid, Japanese privet, and kudzu would be controlled. Any restoration needs would be made compatible with wild and scenic river classification and its outstandingly remarkable values. In instances of degraded resources, areas in need of restoration, or areas where wildlife habitat needs occur, access 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 and animal communities.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative B
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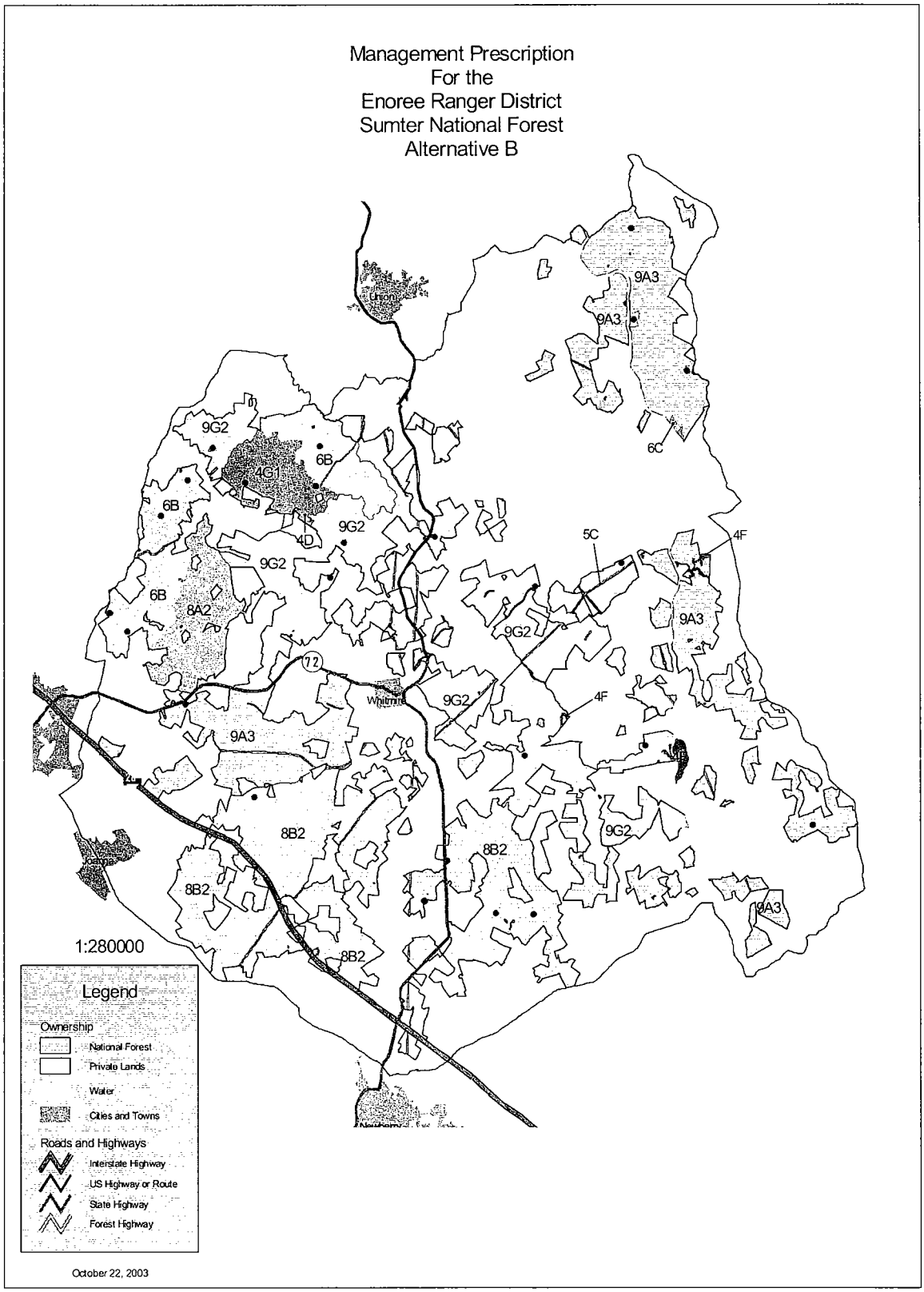
2B3
8C
2B1
2A2
1B
4F
2A1
8C
1B
9F
1B
6D
Salem
2A1
4D
28
6C
6D
2A2
2A1
9H
9A3
9A3
9A3
9H
9H
4D
9H
4D
Walhalla
Seneca
Westminster
1:240000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 22, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative B
Union
Whitmire
Jonesville
9A3
9A3
6C
9G2
6B
4G1
6B
4D
9G2
9G2
5C
4F
6B
8A2
9G2
9A3
72
9G2
4F
9A3
8B2
9G2
8B2
8B2
9A3
8B2
1:280000
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Ownership
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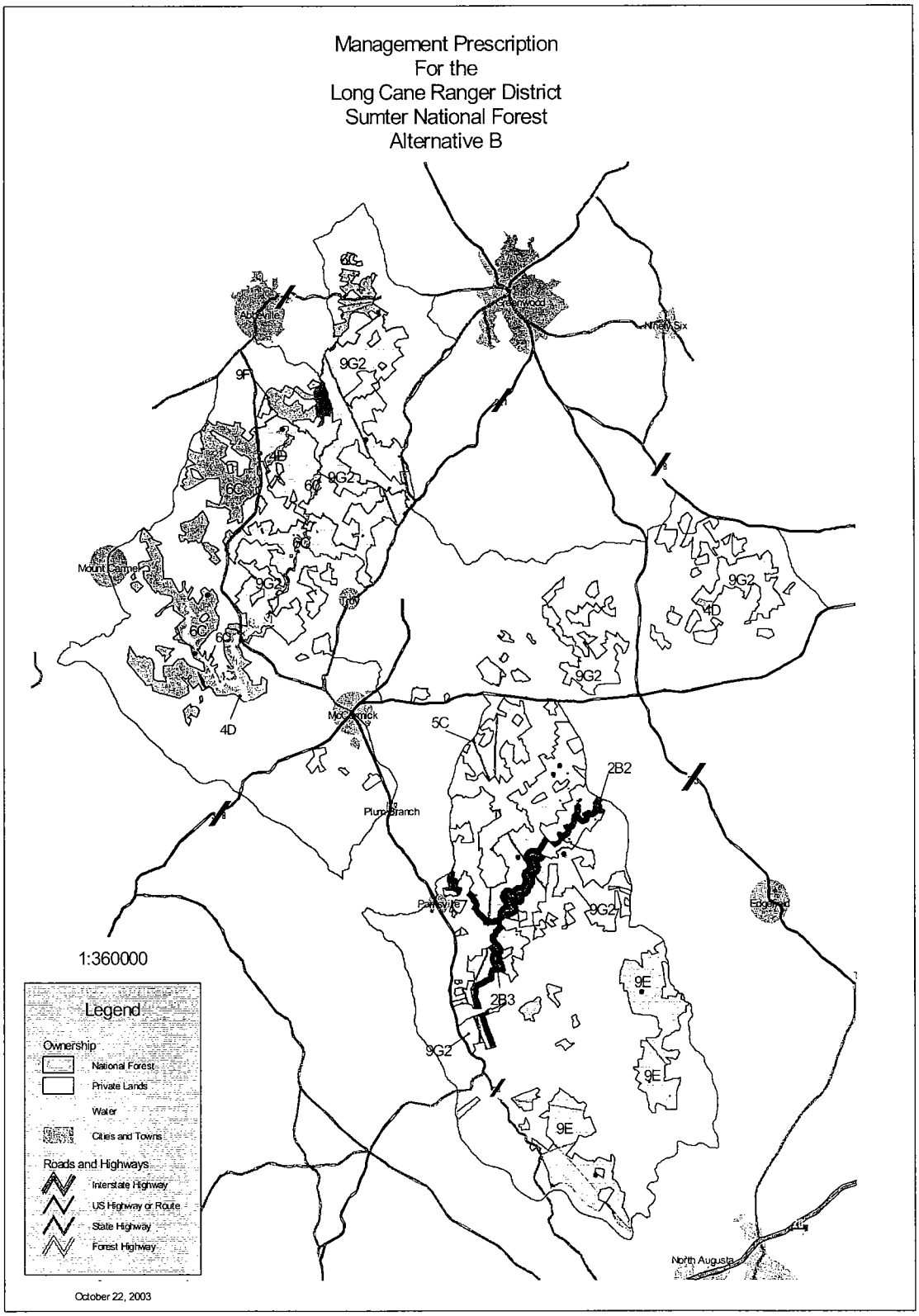
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 22, 2003


Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative B
Ninety Six
9F
9G2
4B
6C
6G
Mount Carmel
4D
McCormick
5C
2B2
Plum Branch
Parksville
2B3
9E
Edgefield
North Augusta
1:360000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 22, 2003

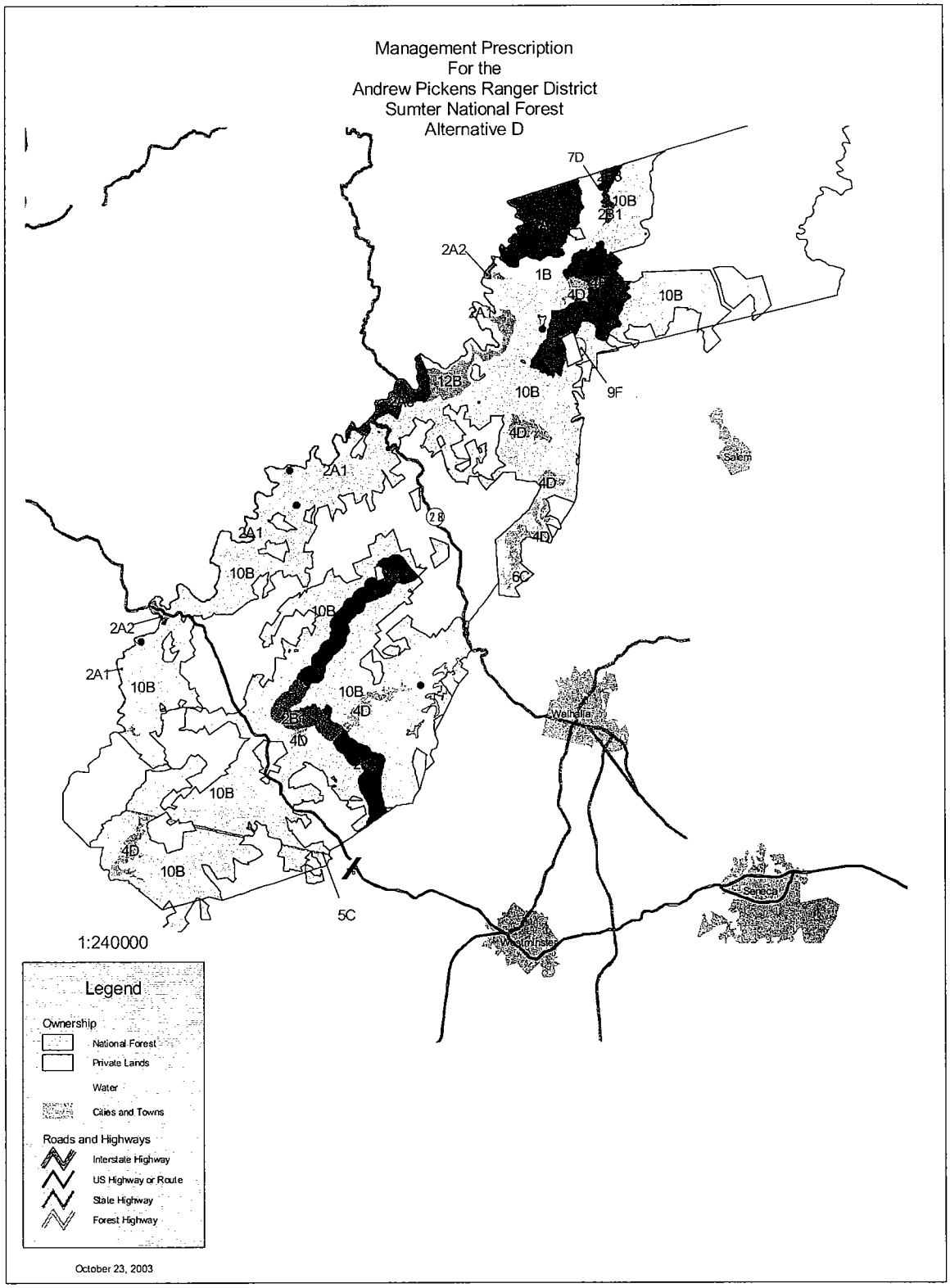
Alternative D

- All suitable lands would be available for sustained yield management.
- Major forest types would have a specific target "rotation" age and would be harvested and replaced with a new forest.
- Approximately equal acres in each age class.
- Age classes would be distributed across the forest in 15-40 acre blocks.
- Production of wood products and a variety of aquatic and wildlife habitats would be emphasized.
- Developed and dispersed recreation opportunities provided.
- Old growth provided on unsuitable lands.
- Access would increase and be maintained to facilitate alternative goal.
- Boating would not be allowed on the Chattooga River above Highway 28.

The emphasis of Alternative D would be to reach and *maintain a balanced age class*. All suitable for timber production lands would be available for sustained-yield 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 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 lands unsuitable for timber production. Small blocks would be scattered throughout the suitable lands on steep slopes, streamside management zones, or similar areas. The forest 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. Semi-primitive experiences would be primarily on unsuited 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 non-native plant and animal species on suitable lands would be actively controlled and prevented. Some of the eligible wild and scenic rivers would be recommended for inclusion to the 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.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative D
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10B
2B1
2A2
1B
4D
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12B
10B
9F
4D
Salem
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4D
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4D
10B
6C
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10B
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4D
2B1
4D
Walhalla
10B
4D
10B
5C
Seneca
Westminster
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Water
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Roads and Highways
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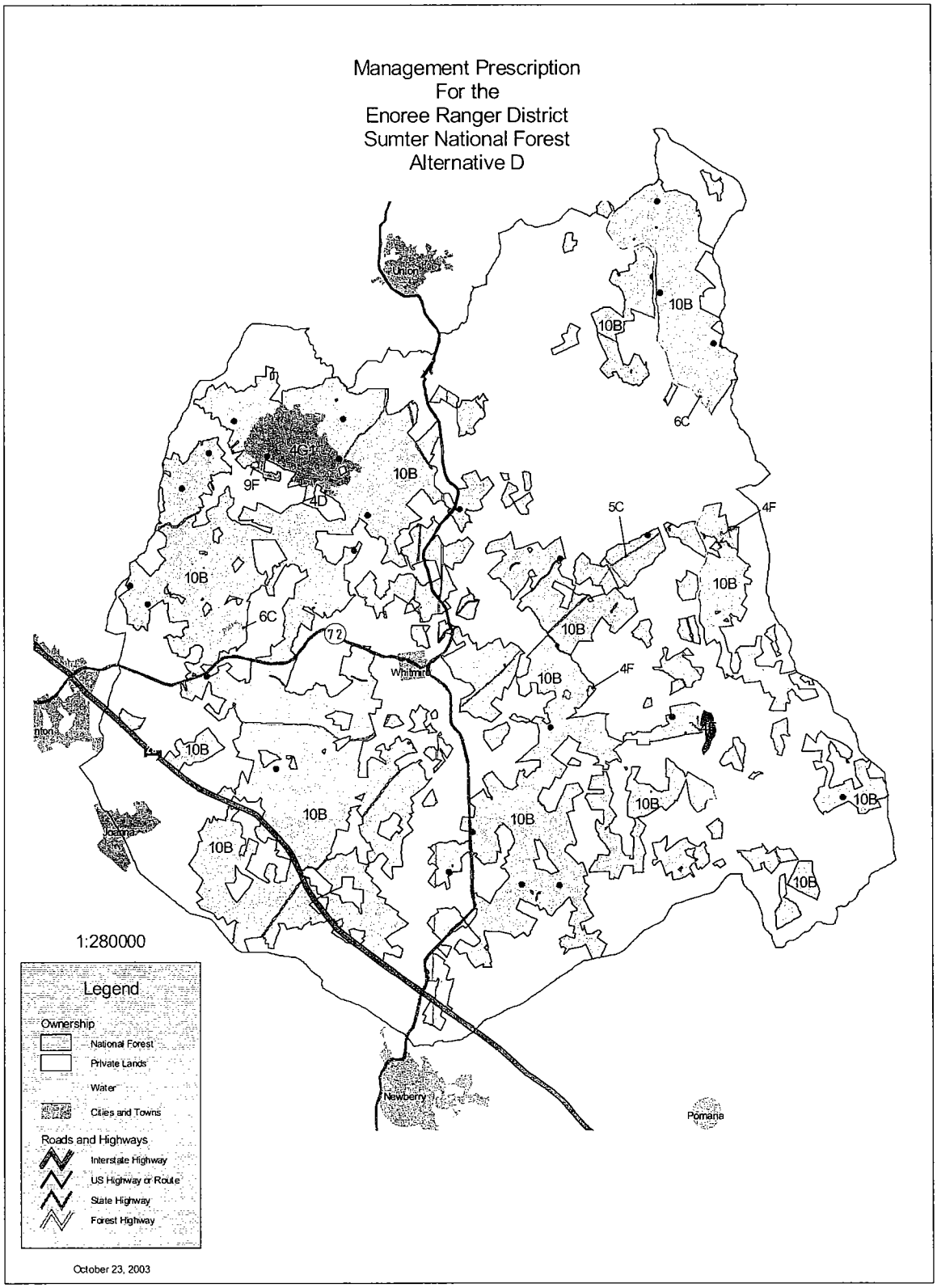
Forest Highway
October 23, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative D
Union
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10B
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10B
10B
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72
Whitmire
10B
4F
10B
10B
10B
10B
10B
10B
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10B
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Legend
Ownership
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Water
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Roads and Highways
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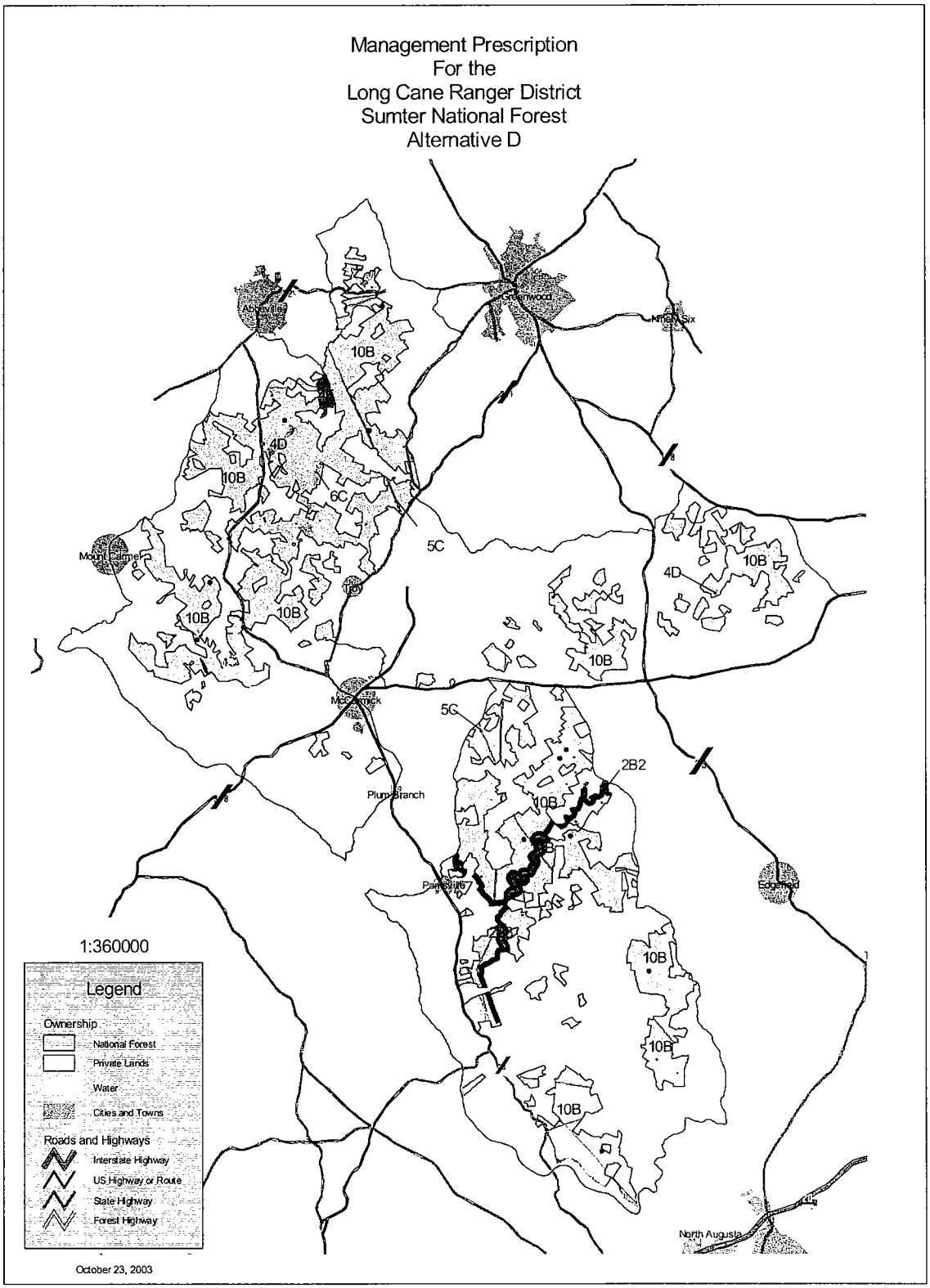
Pomaria
October 23, 2003


Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative D
Abbeville
Greenwood
Ninety Six
Mount Carmel
Troy
McCormick
Plum Branch
Parksville
Edgefield
North Augusta
10B
4D
6C
5C
2B2
1:360000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003

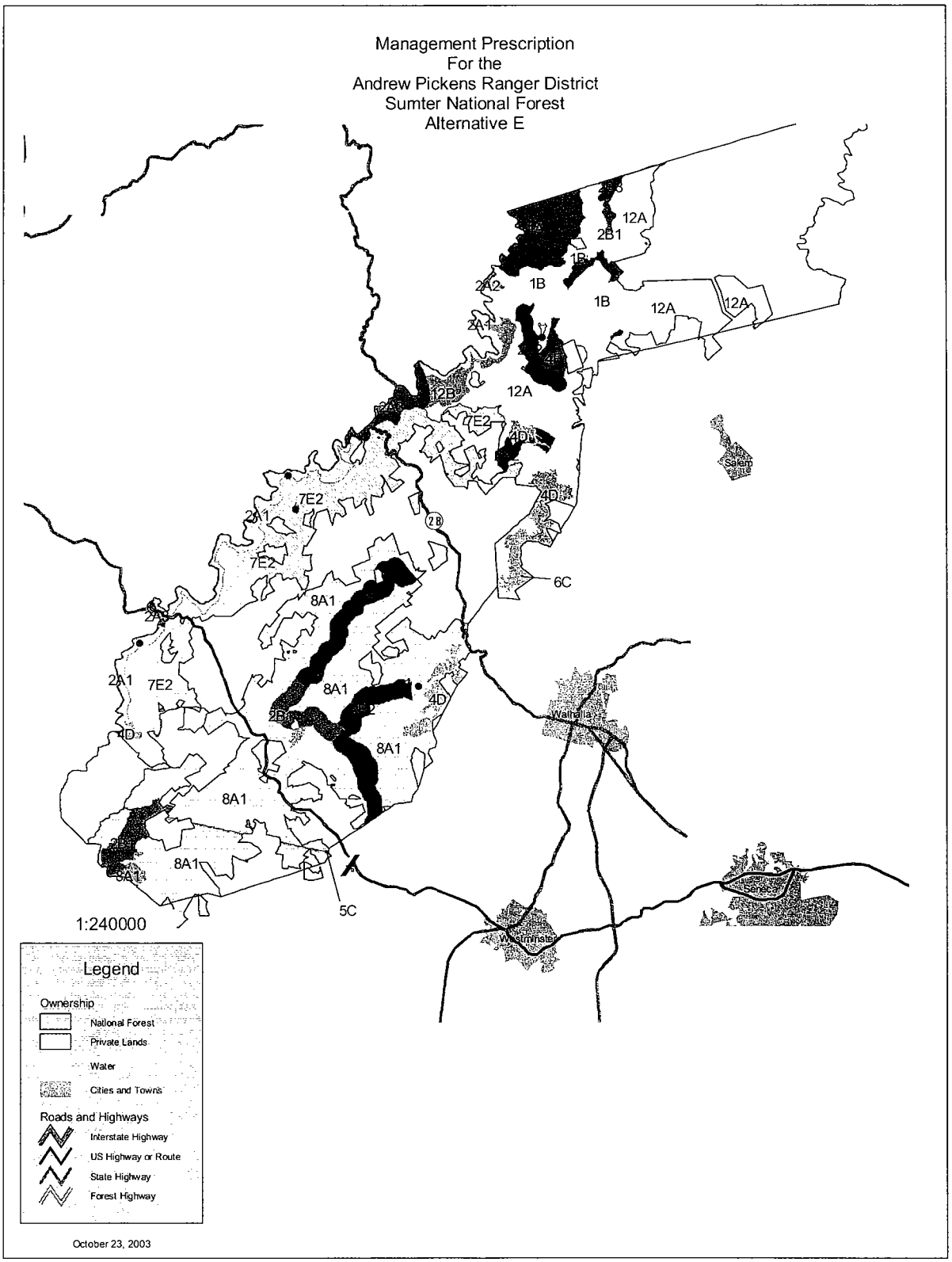
Alternative E

- Active resource management to attract recreation users.
- Most areas would maintain a forest canopy.
- Large block of the forest would be maintained in roadless condition to provide remote, backcountry recreation.
- A variety of developed and dispersed recreation opportunities would increase.
- Off-highway vehicle (OHV) use would increase.
- A variety of wildlife habitats would be maintained across the landscape.
- Timber management would be geared to high-quality large diameter trees.
- Boating would be allowed on the Chattooga River above Highway 28 and below NC-1107 (Grimshawes Bridge).
- Equestrian use would be restricted to designated routes.

A natural setting and concentrated facilities that could attract a *variety of recreation users* would be provided. Active resource management would be concentrated in certain locations and support 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. Boating on the Chattooga River would be allowed between NC-1107 (Grimshawes bridge) and Highway 28. (Please refer to Appendix H.)

A variety of different wildlife habitats would be maintained in blocks across the landscape. Habitat for area sensitive species would be accomplished through maintenance of a variety of successional classes 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 forest, trail and river corridors, view sheds, and recreation-use areas would have forest stands with few, if any, broken views. Many insect and disease impacts would be tolerated as part of a functioning natural ecosystem. Most wild and scenic rivers would be recommended for addition to the WS&R, with primary emphasis on protecting the resources. Public access (travel-ways, use corridors, waterways, trails, including OHV) would be increased in high-use areas and/or improved to provide for more recreation opportunities.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative E
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2A1
12B
12A
7E2
4D
Salem
4D
7E2
2A1
7E2
6C
8A1
2A1
7E2
8A1
4D
4D
Walhalla
8A1
8A1
8A1
8A1
5C
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Water
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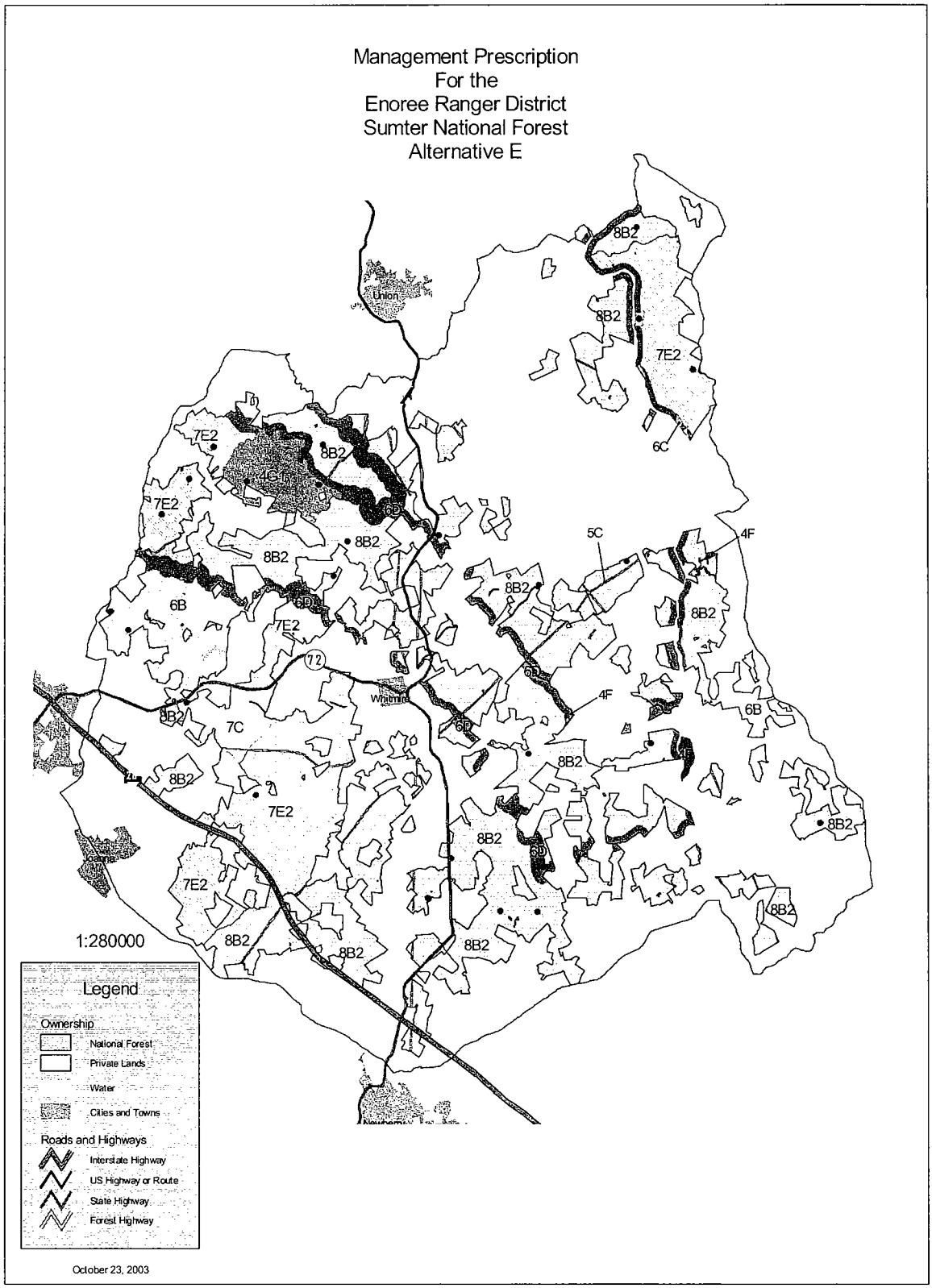
Forest Highway
October 23, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative E
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Whitmire
Jonesville
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Roads and Highways
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US Highway or Route
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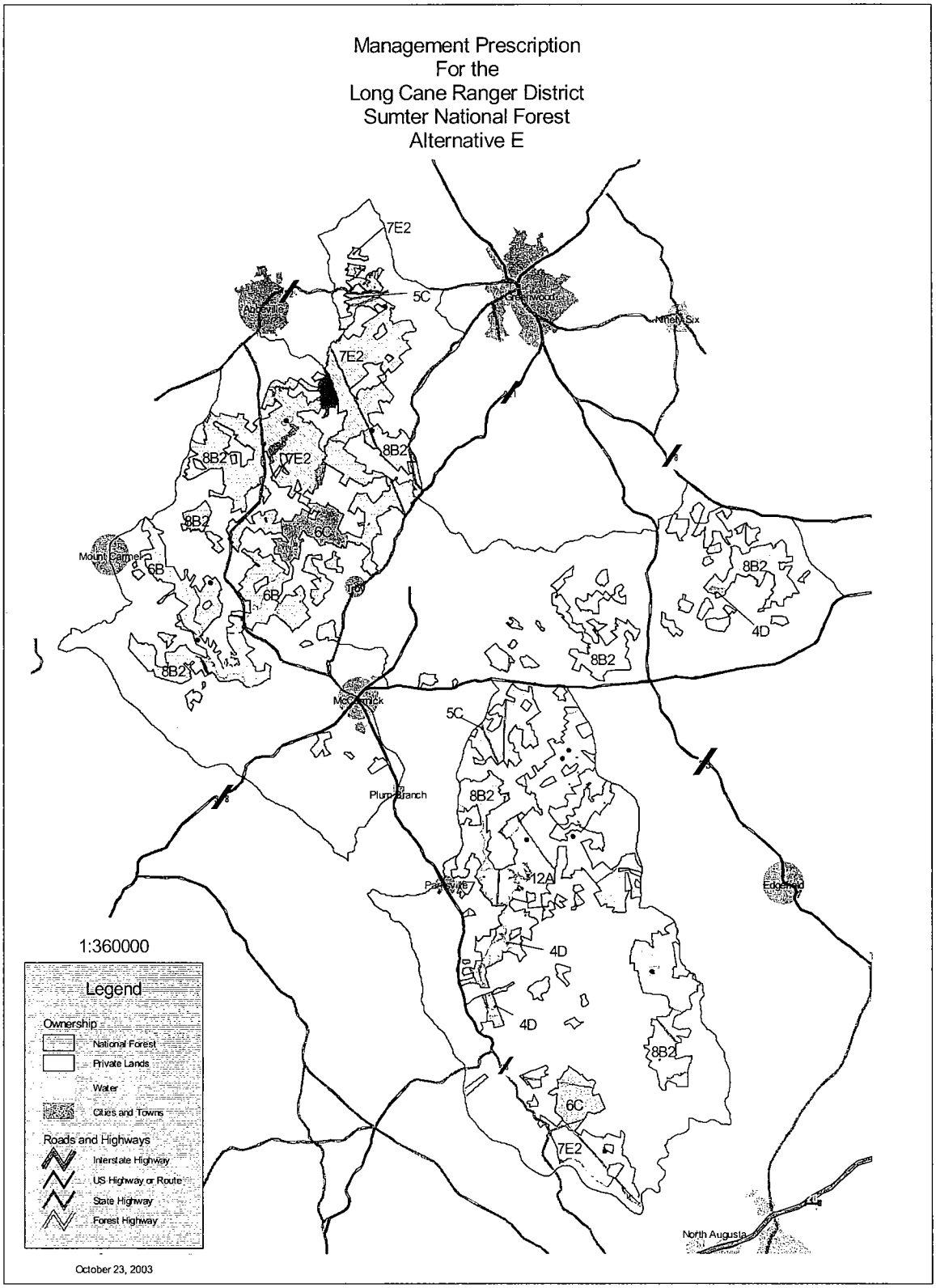
October 23, 2003


Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative E
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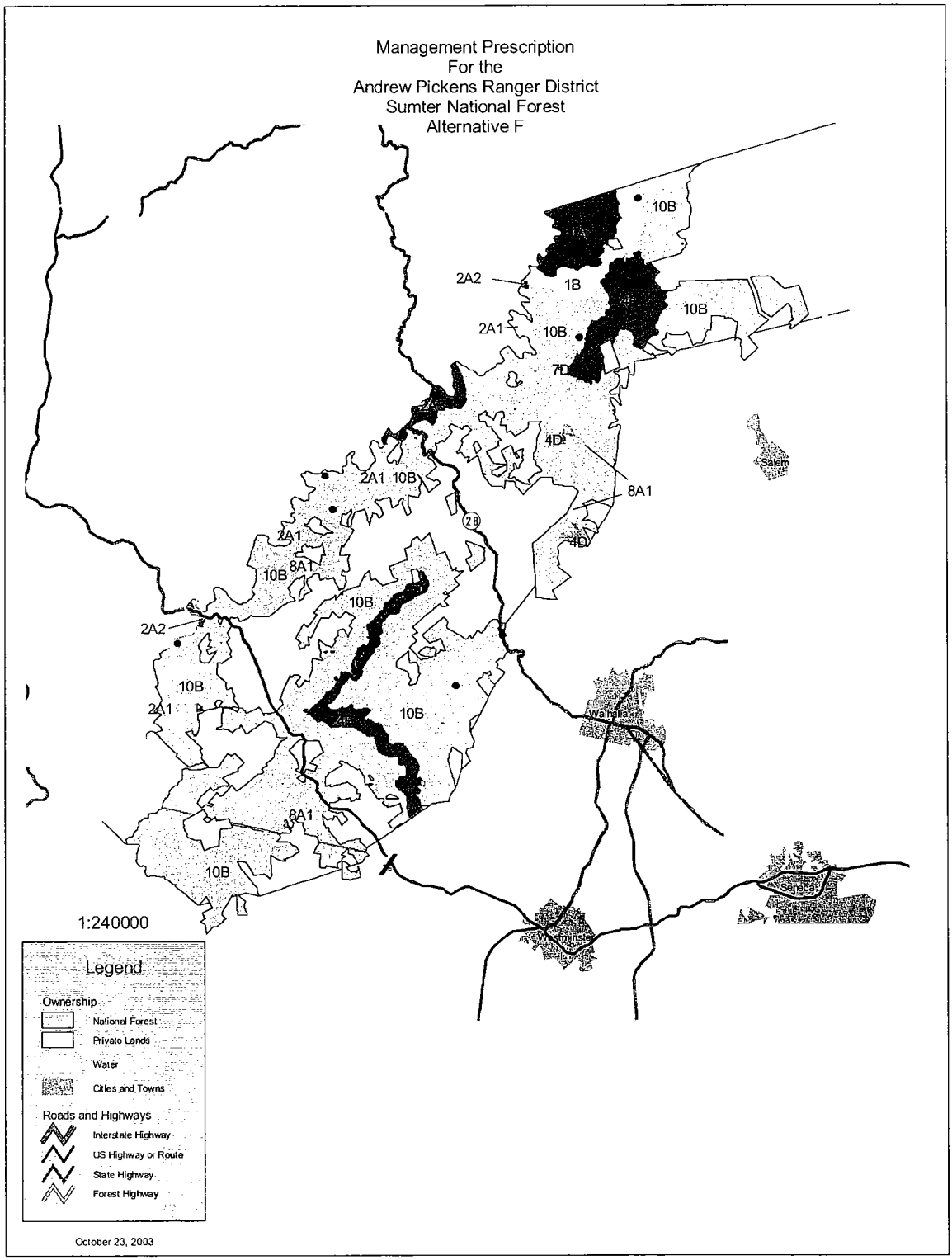
6C
Mount Carmel
6B
6B
Troy
8B2
8B2
4D
8B2
McCormick
5C
Plum Branch
8B2
Parksville
12A
Edgefield
4D
4D
8B2
6C
7E2
North Augusta
1:360000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003

Alternative F (Current Direction/No Action Alternative)

- Suitable for timber production lands available for sustained yield management.
- Critical habitat for PETS will be managed and protected.
- Viable populations of all native vertebrate and plant species will be maintained.
- Eight "special areas" will be managed to preserve unique scenic, cultural, or biological values.
- The Chattooga Wild and Scenic River will be managed to provide a range of high quality recreation opportunities characteristic of wild and scenic rivers.
- Production of wood products and a variety of wildlife habitats would be emphasized.
- Developed and dispersed recreation opportunities would be provided.
- Boating would not be allowed on the Chattooga River above Highway 28.

Current Management represents a continuation of the *Land and Resource Management Plan for the Sumter National Forest*, as amended. This forest plan was signed in August 1985 and has been amended 14 times since that date.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative F
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Salem
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8A1
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4D
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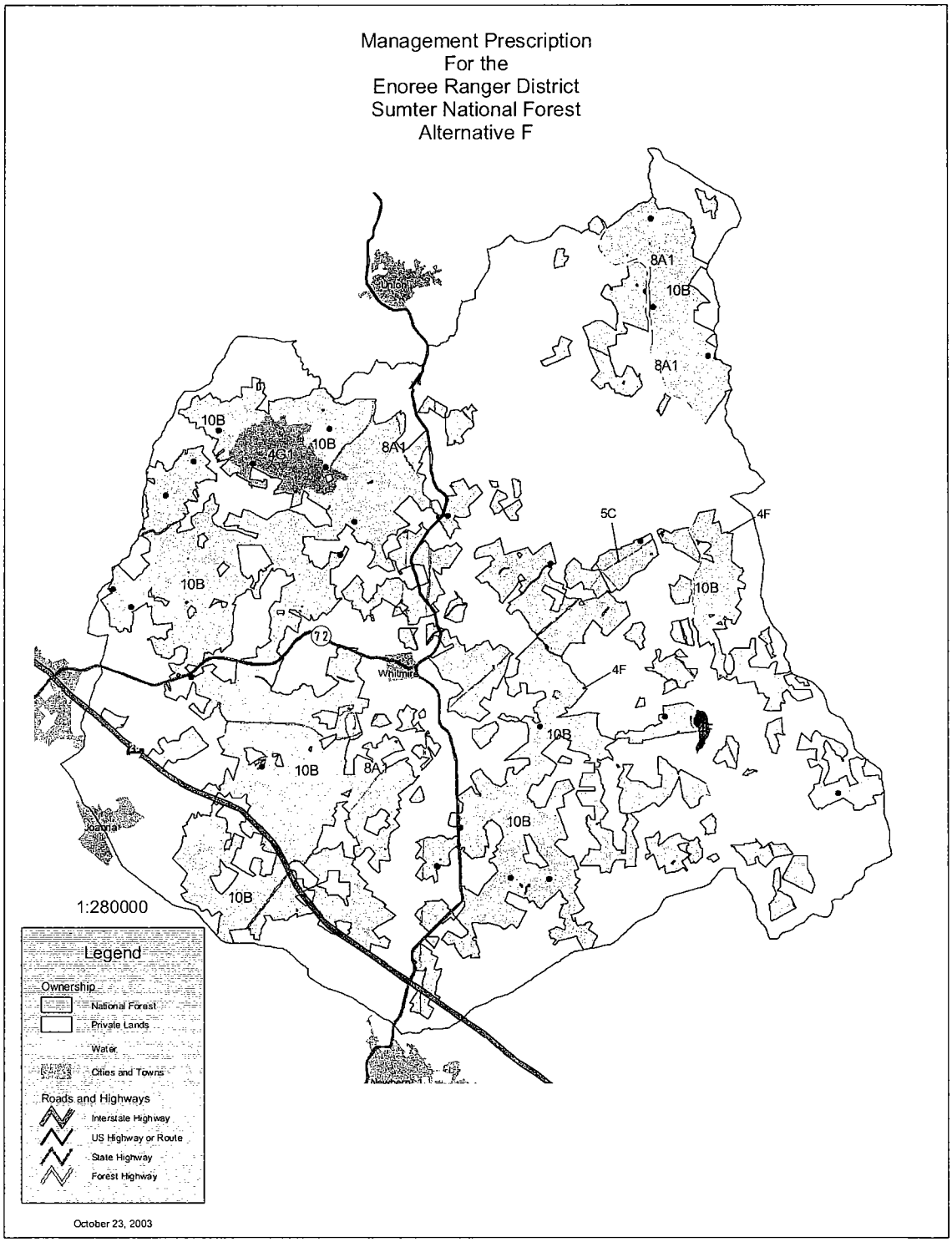
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative F
Union
Whitmire
Joanna
8A1
10B
8A1
10B
4G1
10B
8A1
5C
4F
10B
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72
4F
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8A
10B
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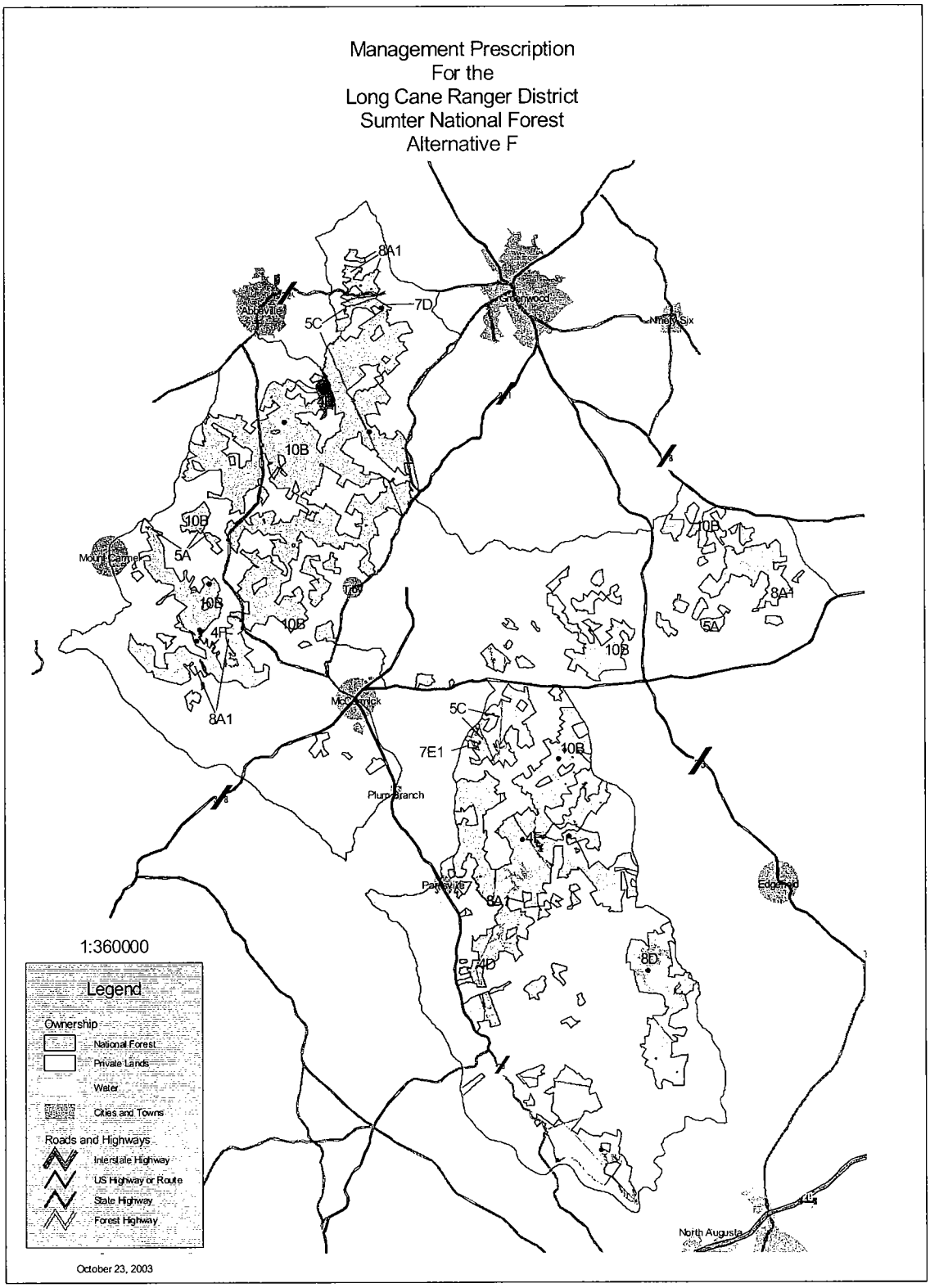
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003


Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative F
Abbeville
Greenwood
Ninety Six
Mount Carmel
McCormick
Plum Branch
Parksville
Edgefield
North Augusta
8A1
7D
5C
10B
5A
4F
7E1
8D
1:360000
Legend
Ownership
National Forest
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003

Alternative G

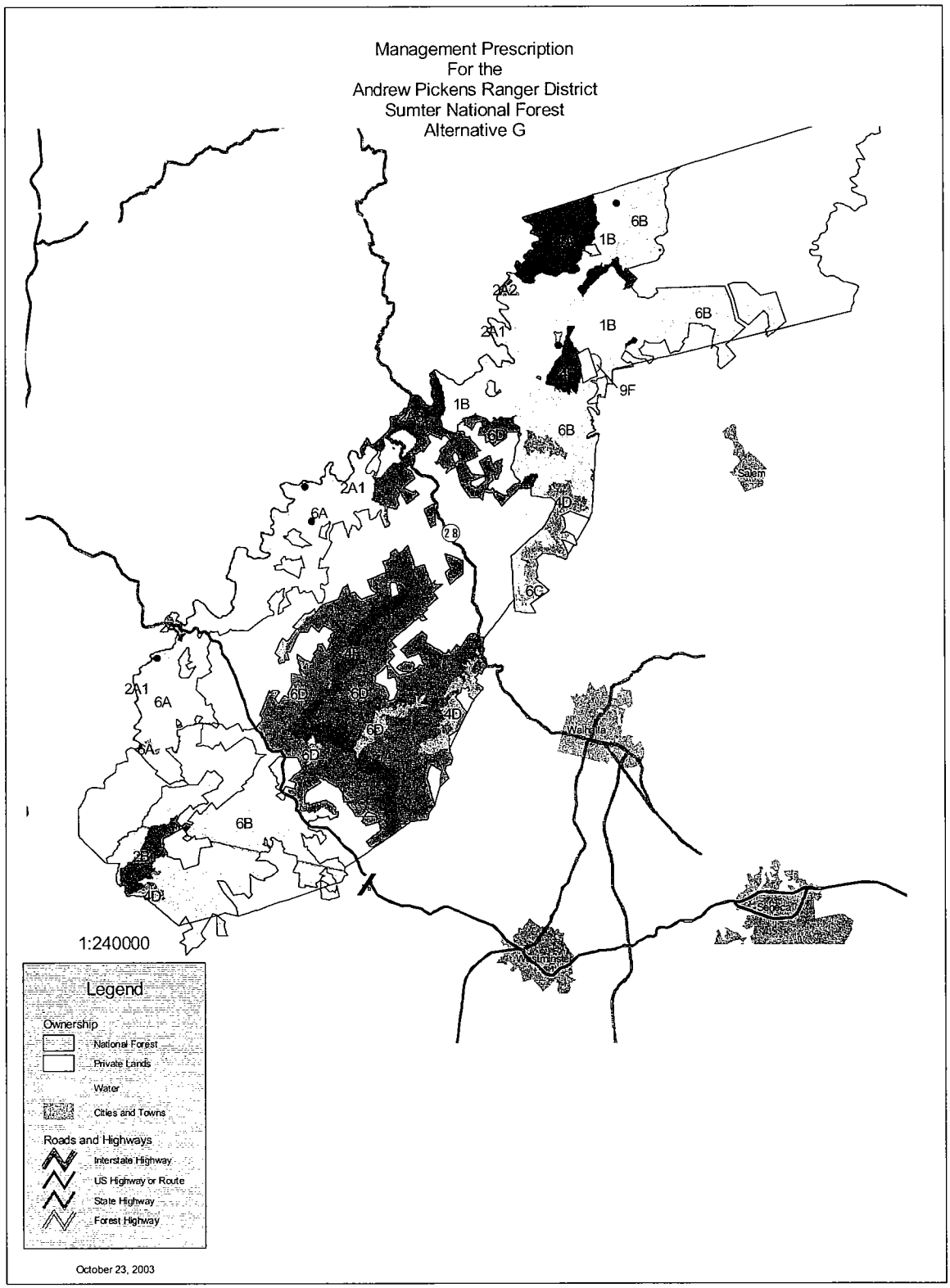
- Links large undisturbed areas together with corridors.
- Provides for threatened and endangered (T&E) management, species reintroduction, and watershed restoration
- Area-sensitive species habitat emphasized as well as a wide variety of other native plant and animal habitats, particularly late successional species.
- Nature oriented non-motorized recreation opportunities emphasized.
- Roadless areas recommended for wilderness.
- High quality timber produced outside the sensitive species habitat, movement corridors, and large undisturbed areas.
- Effects of native insects and diseases would be accepted.
- Fire would be used to restore natural ecosystem processes.
- Road network would be reduced.
- Roadless areas would be maintained as unfragmented habitat.
- Boating would not be allowed on the Chattooga River above Highway 28.

Alternative G would emphasize linking together, through land allocations, *movement corridors and large undisturbed areas,* T&E species, species reintroduction, and watershed restoration. National Forest System lands would provide habitat for area-sensitive 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 non-motorized 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 area-sensitive 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 predominant. 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 unfragmented wildlife habitat, landscape linkages, old-growth restoration, wilderness

designation, and other management that would maintain their unfragmented habitat and ecosystem function. Non-native pests would be controlled by means that least impact ecosystem function and unfragmented 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.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative G
6B
1B
2A2
2A1
1B
6B
9F
1B
6B
2A1
6A
4D
6G
2A1
6A
6A
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Legend
Ownership
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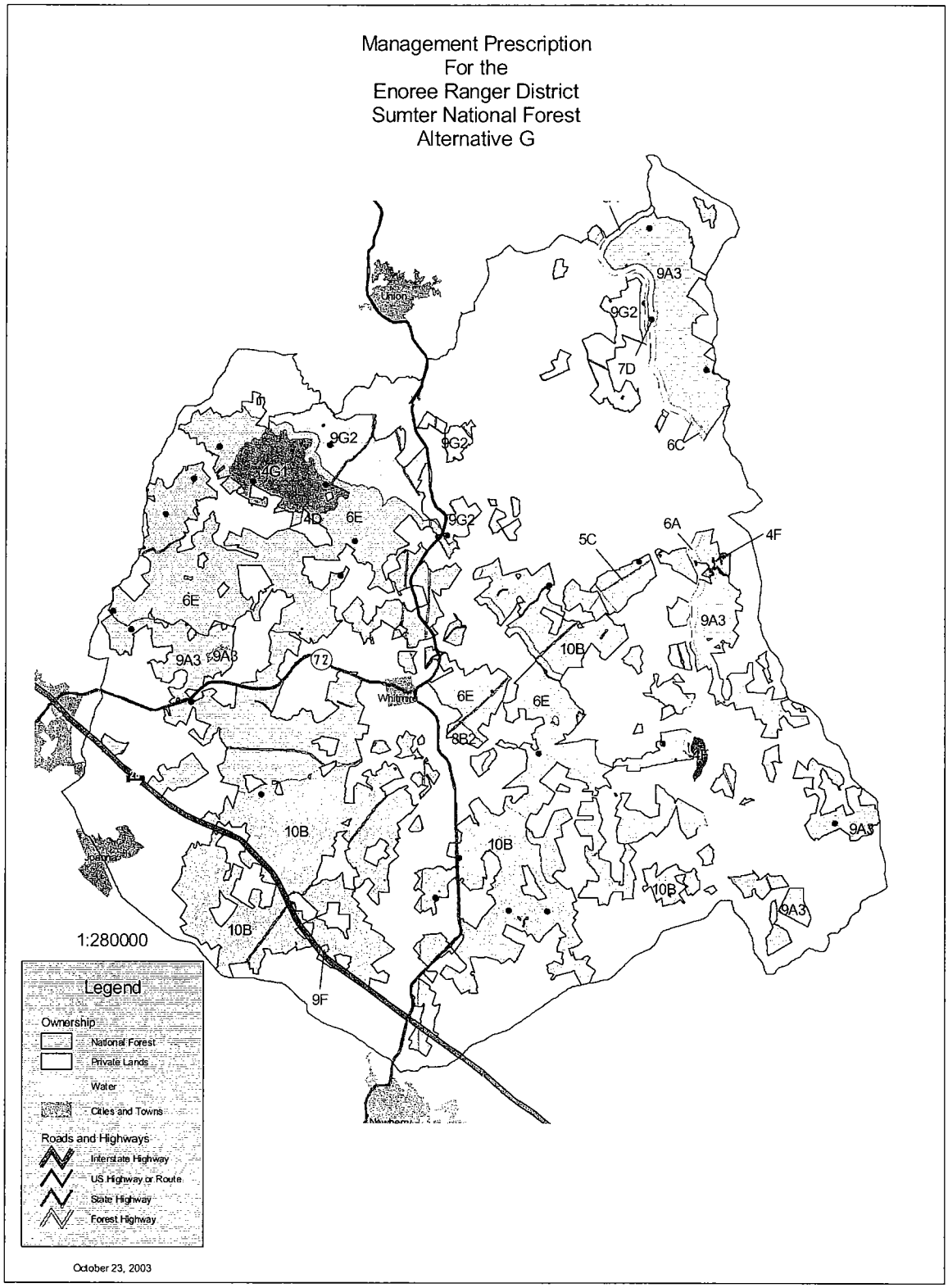
Private Lands
Water
Cities and Towns
Roads and Highways
Interstate Highway
US Highway or Route
State Highway
Forest Highway
October 23, 2003


Management Prescription
For the
Enoree Ranger District
Sumter National Forest
Alternative G
Union
Whitmire
Jonesville
Newberry
72
9A3
9G2
7D
6C
4G1
4D
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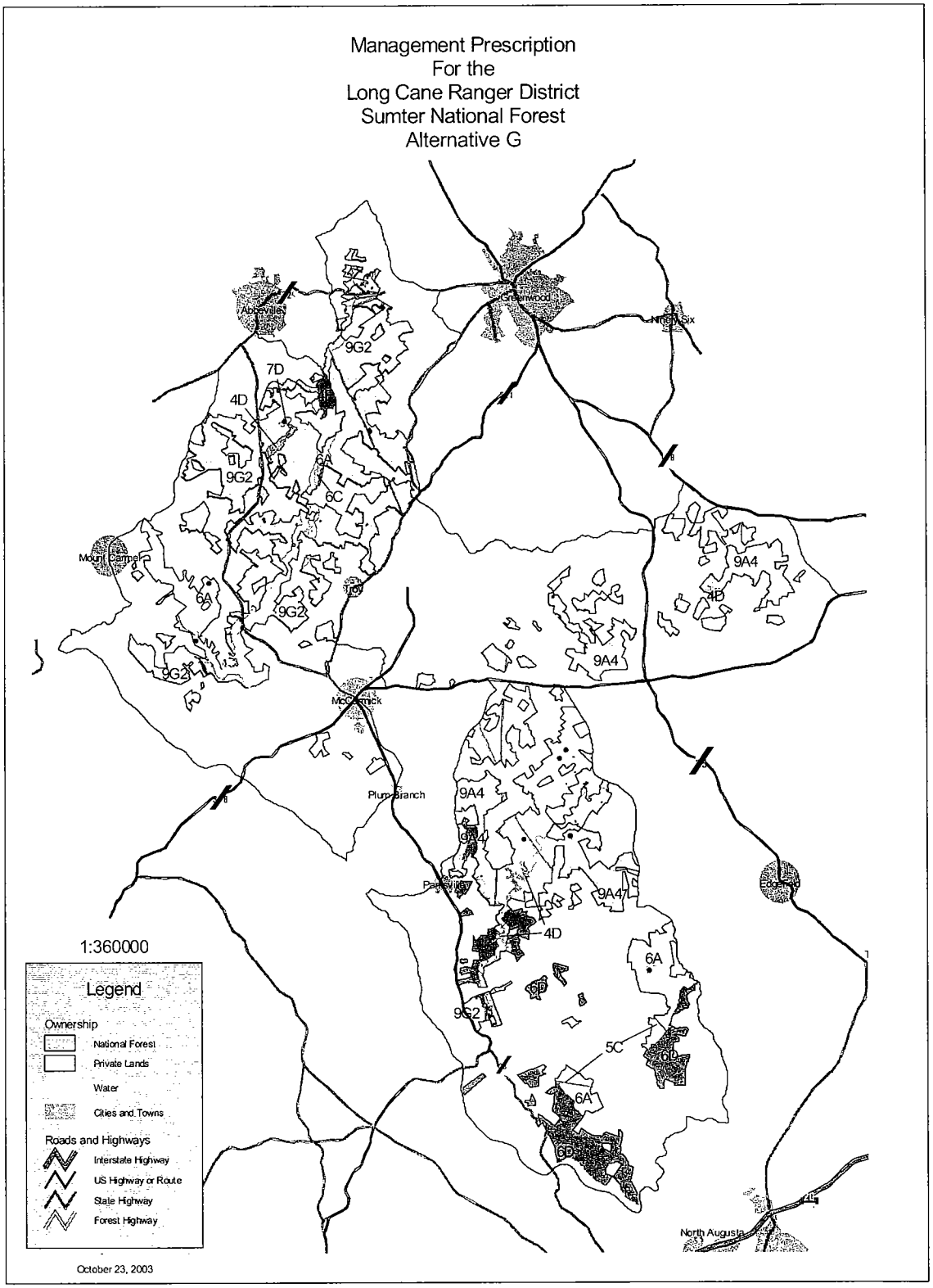
Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative G
Abbeville
Greenwood
Ninety Six
Mount Carmel
McCormick
Plum Branch
Parksville
North Augusta
9G2
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Alternative I (Selected Alternative)

- Ecosystem restoration and maintenance emphasized.
- Watershed restoration.
- Riparian areas maintained and/or restored.
- Sustainability of diverse ecosystems emphasized.
- Variety of old-growth communities.
- Forest health a priority.
- High quality nature-based recreation opportunities.
- Non-motorized settings with natural appearing landscapes emphasized.
- Boating would not be allowed on the Chattooga River above Highway 28.

Alternative I emphasizes management of forest ecosystems through restoration and maintenance, which ensures healthy watersheds; provides for sustainable and diverse ecosystems that support viable plant, wildlife, and fish populations; and provides for high quality, nature-based recreation opportunities, especially in non-motorized settings with high quality landscapes.

Habitat conditions that are suitable for maintaining viable populations of all vertebrate species native to the planning area will be emphasized. Early successional habitats would be created and maintained by a variety of events, conditions, treatments, and activities.

Management actions would be taken where needed to conserve and recover threatened, endangered, sensitive, and locally rare species.

A variety of large, medium, and small old-growth patches would be managed to meet biological and social needs. All existing inventoried old growth would be protected and future old growth would be provided where forest management maintains old-growth conditions over time.

Healthy watersheds would be maintained and degraded watersheds would be restored to maintain or improve water quality and aquatic habitats. Riparian ecosystems would be essentially unchanged, except for any actions needed to restore riparian vegetation cover and riparian functions and values.

Where silvicultural activities are needed to achieve the desired composition, structure, and function of forest ecosystems, a result of such activities would be to provide a stable supply of a variety of wood products for local needs. Some of the best sites that are currently accessible could be managed to provide a supply of high quality sawtimber on the Piedmont. Other lands would provide a variety of products as a result of other management activities.

National forest landscapes have a natural appearing or naturally evolving character and are managed to maintain or enhance their scenic integrity.

A spectrum of high quality, nature-based recreation settings would be provided, and there would be an emphasis on providing those recreation opportunities that are not widely available on non-Federal lands. The acres of land providing semi-primitive and non-motorized recreation opportunities would remain the same or increase from the amount currently inventoried.

Inventoried roadless and unroaded areas would be managed to retain their unroaded character. Most of the inventoried roadless areas adjacent to or connected with existing wilderness areas would be recommended for wilderness in order to enlarge existing wildernesses and consolidate their boundaries.

Replacing off-site species, thinning overstocked, regenerating mature stands, and restoring fire-dependent and fire-associated communities would improve the health of forest vegetation. Where appropriate and consistent with the values for which the forest is being managed, risks to forests from wildfire, insect and disease damage, and non-native or non-native invasive plants would be reduced.

The rare communities found on national forest lands would be protected or restored. All existing special management areas would continue their existing management direction. Additional areas may be identified for special management land allocations.

All rivers eligible for consideration as wild and scenic rivers would be managed to protect their "outstandingly remarkable values."

A minimum transportation system would be available that improves access for forest road users while protecting forest resources. Generally, access will be limited to those areas that can be accessed by maintaining or reconstructing existing system roads, or through the construction of temporary roads. New permanent roads would only be constructed in a few situations.

The Chattooga River watershed will be managed to emphasize recreation in association with the Chattooga Wild and Scenic River Corridor; maintenance of roadless values; dispersed recreation opportunities; and improved water quality.

Mineral exploration or development will be compatible with the desired condition of the appropriate management prescriptions or management areas.

Changes in Alternative I between Draft and Final

After the release of the Final Environmental Impact Statement, many changes to Alternative I were made to respond to public comments and improve the management direction. Important changes are the following:

:

1. Riparian prescription (Management Prescription 11) was modified to clarify the direction for the determination of riparian corridors during implementation. Minimum width slope classes were changed to 0-30% and the riparian acres were reestimated.

2. Added a goal, objective and standard to address the issue of instream flows.

3. Added two new parcels of land which have recently been purchased, one on the Andrew Picken's district with the other on the Enoree district.

4. Updated the management direction on the Chattooga River Corridor in order to incorporate Amendment #14 and be consistent with the Chattoahoochee and Nantahala Forests. This is reflected in desired conditions, and standards in management prescriptions 2A, 2A1, 2A2, and 2A3. Additional management direction was also added to the Chattooga River Watershed in Chapter 4 of the plan in terms of desired conditions.

5. Turkey and Stevens creek are no longer recommended for wild and scenic river designation since the suitability analysis was not completed. We defined an objective in the Forest plan to complete this analysis within 5 years. These areas are now allocated to management prescription 4D.

6. Additional goal, objective and standards where added to chapter 2 of the Forest plan to protect the outstandingly remarkable values of the 8 rivers that are presently eligible for Wild and Scenic river designation.

7. Objectives 7.07 through 7.10 for fire dependent communities in the draft Forest Plan, have been combined into one objective and moved under goal 20.

8. Mineral leasing and restrictions to mineral development through no surface occupancy and controlled surface occupancy are now defined in the glossary. We have also added an appendix to the Forest Plan to explain how a mining proposal is evaluated at the project level.

9. Desired conditions for the four management areas in Chapter 4 of the Forest Plan have been expanded.

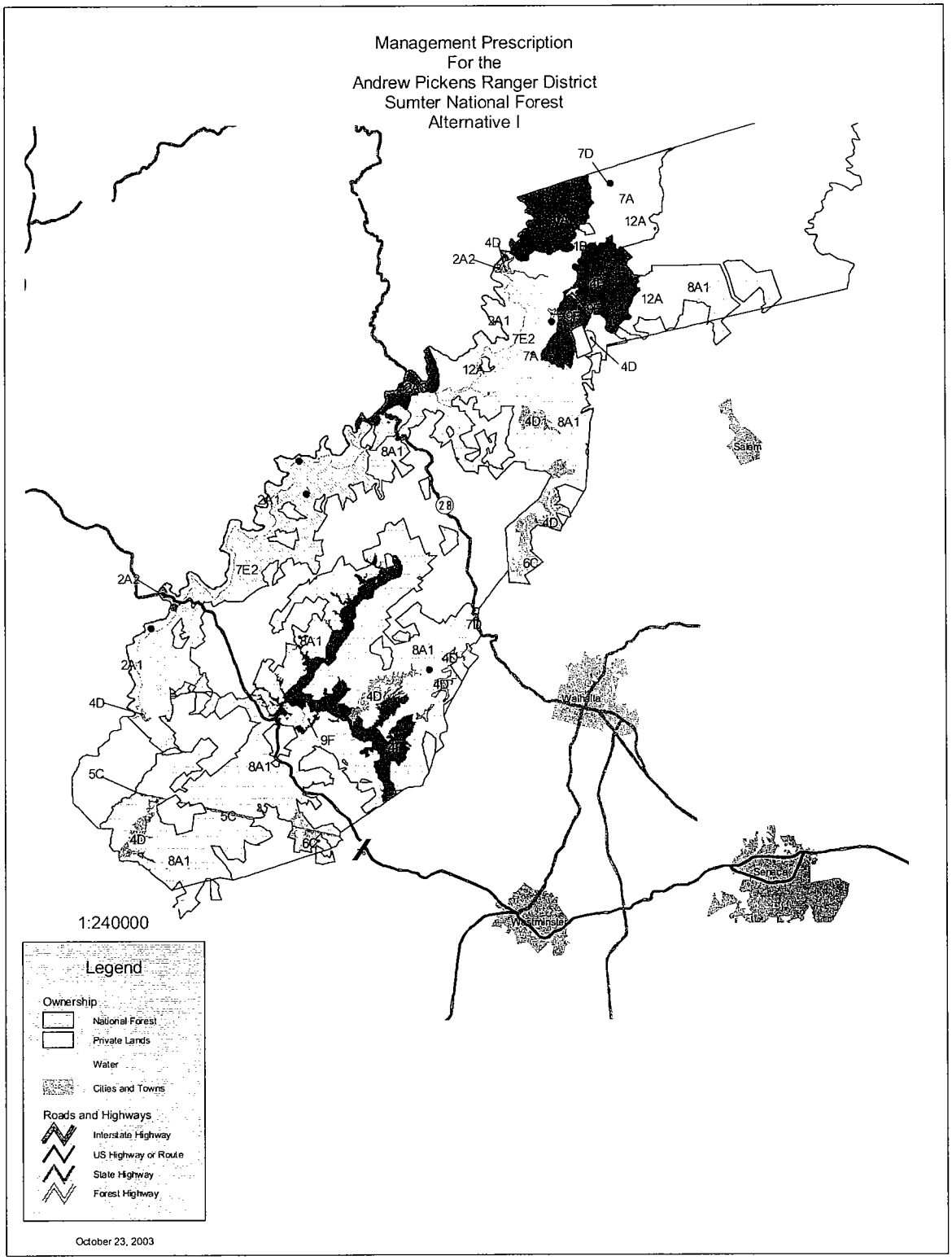
10. Updated the Management Indicator Species.

11. Updated the monitoring elements in Appendix E of the Forest Plan to better address the Forest Plan objectives.

12. Updated and moved the list of research needs in Appendix G to Chapter 5 of the Forest Plan.

13. Changed management prescriptions 7A (Scenic Byway) and 2A3 (Designated Recreation River) to unsuitable for timber production.

14. Estimated ASQ and LTSY again by rerunning the Spectrum model.


Management Prescription
For the
Andrew Pickens Ranger District
Sumter National Forest
Alternative I
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8A1
Salem
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Westminster
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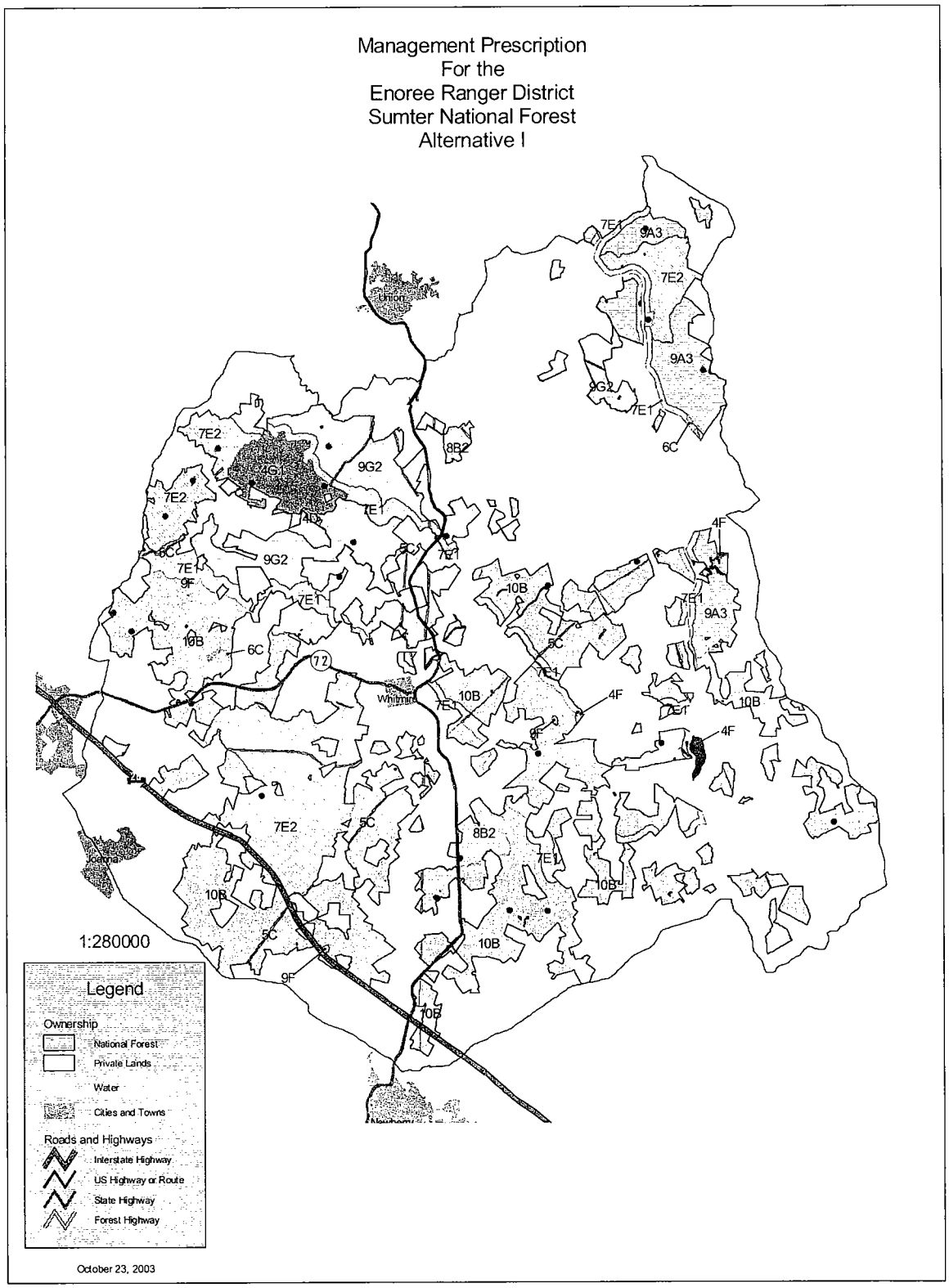
October 23, 2003


Management Prescription
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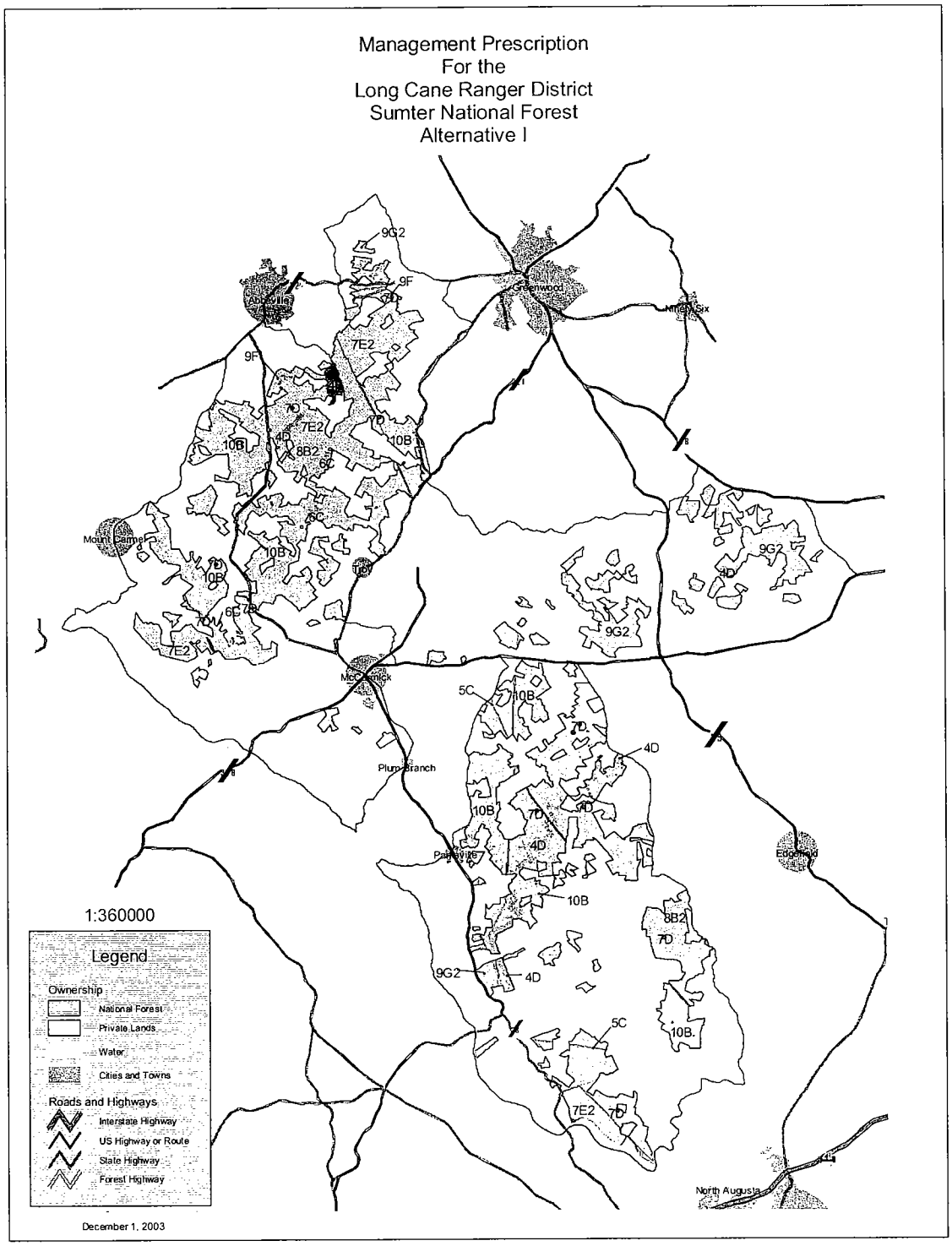
Management Prescription
For the
Long Cane Ranger District
Sumter National Forest
Alternative I
Greenwood
Mount Carmel
Plum Branch
Edgefield
North Augusta
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Cities and Towns
Roads and Highways
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State Highway
Forest Highway
December 1, 2003

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.

Management Prescription Acres by Alternative

Table 2-1 provides a description of the management prescriptions. Table 2-2 shows the Sumter National Forest acres that would be allocated to each management prescription for each alternative.

Table 2-1 Management Prescription Titles

Management Rx	Management Prescription Title
1A	Designated Wilderness/ Wilderness Study
1B	Recommended Wilderness Study
2A1	Wild River
2A2	Scenic River
2A3	Recreational River
2B1	Eligible Wild River prior to Designation
2B2	Eligible Scenic River prior to Designation
2B3	Eligible Recreational River prior to Designation
4D	Botanical - Zoological Areas
4F	Scenic Areas
4G1	Experimental Forest
5A	Administrative Areas
5B	Communication Sites
5C	Utility Corridors
6A	Natural Process Emphasis
6B	Areas Managed to Restore/Maintain Old-Growth Characteristics
6C	Old-Growth Areas Managed with a Mix of Natural Processes and Restoration Activities
6D	Core Areas of Old Growth surrounded by Areas with Extended Forest Rotations
6E	Core Areas of Old Growth surrounded by Areas under Uneven-Aged Management
7A	Scenic Byway Corridor
7C	OHV Use
7D	Concentrated Recreation Zone
7E1	Dispersed Recreation
7E2	Dispersed Recreation with Vegetation Management
8A1	Mix of Successional Forest Habitats
8A2	Area-Sensitive Mid- to Late-Successional Forest Habitats
8B2	Woodland and Grassland Savanna Habitats
8C	Black Bear Habitat Management
8D	Red-Cockaded Woodpecker Habitat Management
9A3	Watershed Restoration
9A4	Aquatic Habitat Watersheds
9E	Maintenance and Restoration of Pine and Pine-Oak Forests
9F	Rare Communities
9G2	Maintenance and Restoration of Pine and Pine-Oak Forests
9H	Management and Restoration of Plant Associations in the Chattooga River Waters
10B	High Quality Forest Products
11	Riparian Corridors
12A	Remote Backcountry Recreation - Few Roads
12B	Remote Backcountry Recreation - Non-Motorized

Table 2-2 Management Prescription Acres by Alternative

	Alt A	Alt B	Alt D	Alt E	Alt F	Alt G	Alt I
Management Rx							
1A	2,855	2,855	2,855	2,855	2,855	2,855	2,855
1B	7,638	7,068	2,106	5,083	2,281	6,293	1,982
2A1	3,290	2,511	3,290	3,290	3,275	3,290	3,290
2A2	224	202	202	72	161	202	224
2A3	1,030	1,030	1,030	1,157	1,030	1,030	1,030
2B1	1,372	2,500	1,372	2,536		1,206	
2B2	4,366	8,790	6,025	5,957			
2B3	204	2,071	2,032	204			
4D	3,931	3,171	2,917	4,410	1,557	4,953	4,399
4F	1,284	2,328	4,978	2,341	8,642	5,711	10,020
4G1	4,862	4,862	4,862	4,862	4,862	4,862	4,862
5C	2,912	2,919	2,906	2,888	2,971	2,888	2,948
6A						33,444	
6B		13,046		16,020		25,272	
6C	1,399	21,148	1,386	7,241		1,564	1,640
6D		5,844		14,479		34,958	
6E						45,361	
7A							3,044
7C	3,485			3,485			
7D	558	584	584	569	727	555	605
7E1					1,180		12,575
7E2	71,003			74,854			61,938
8A1				28,252	25,973		41,544
8A2		6,963					
8B2		44,581		143,416		769	8,320
8C		7,792					
8D					716		
9A3		46,900				39,002	11,360
9A4						39,248	
9E		16,317					
9F	547	311	737	521		513	916
9G2		119,474				55,467	43,080
9H		37,821					
10B	238,048		322,595		304,435	51,648	139,528
11							
12A	12,079			35,387			4,929
12B			1,210	1,210			
Water	1,761	1,761	1,761	1,761	1,761	1,761	1,761
Total	362,850	362,850	362,850	362,850	362,850	362,850	362,850

Includes 285 Acres of RX 5A (Administrative Areas) ; 4 acres of RX 5B (Communication Sites); approximately 63,000 acres of RX 11(Riparian Corridors) for Alt. I, 67,000 acres for Alt. A, B, D, E, G, and approximately 13,400 acres for Alt. F.

Includes 2240 Acres of Non-Forest Lands

Comparison of Alternatives by Issue

Issue 1 - Terrestrial Plants and Animals and Their Associated Habitats

Public comments reflect a broad array of interests and concerns revolving around "biodiversity." This term broadly refers to the distribution, variety, and abundance of plant and animal communities, ecosystems, and individual species. Some people contend biodiversity objectives should be achieved through active multiple-use management, while others contend biodiversity can only be achieved through passive management emphasizing "natural" processes.

The revised LMP considers the distribution and abundance of communities across the landscape. Opinions conflict regarding the potential effects of management activities on species requiring large tracts of contiguous forested land. Some people contend these areas should be left "undisturbed," while others contend that these areas should be managed to provide a variety of successional classes. Specific comments were made supporting the establishment of "corridors" that link patches of suitable habitat. Several species groups and individual species were named: black bear, ruffed grouse, salamanders, and Neotropical migratory birds like the cerulean warbler.

Questions have not been resolved over the issue of minimum area-size requirements of early successional habitat—whether these areas should be clustered or distributed as evenly as possible over the landscape—and whether or not these areas are adequately provided for on private lands.

There is also a question of scale: To what extent should wildlife habitat goals and opportunities be developed within the context of neighboring public and private lands? Should existing habitat conditions from these non-NFS lands be considered in developing the goals for NFS lands, or should only NFS lands be considered?

Other comments received relate to forest composition and the desire for increases in the hardwood and mixed forest cover types. The LMP would establish habitat management objectives for terrestrial habitat groups and the restoration management direction needed to achieve those objectives.

In addressing this issue, management activities would strive to:

- Maintain or increase habitats where species need large, contiguous forested landscapes and where the management of national forest 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 2-3 shows the comparison of Issue 1 by alternative.

TABLE 2-3. 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 - 1st Decade	10.9	4.5	9.8	6.5	12.6	4.5	7.4
Early Successional Habitat - 5th Decade	8.4	6.4	8.8	7.2	11.8	4.5	8.0
Mid- to Late-Successional Habitat - 1st Decade	69	78	70	73	67	75	71
Mid- to Late-Successional Habitat - 5th Decade	64	70	63	76	54	83	67
Late Successional Habitat - 1st Decade	37	46	39	42	35	43	41
Late Successional Habitat - 5th Decade	27	41	24	43	12	56	34
	Percent of Forested Acres						
Mid- to Late-Successional Mesic Deciduous(non-Oak) Forests - 1st Decade	9.5	9.2	9.5	9.4	9.4	8.8	9.0
Mid- to Late-Successional Mesic Deciduous (non-Oak) Forests - 5th Decade	7.5	8.7	7.2	8.8	2.9	9.4	8.5
Mid- to Late-Successional Oak, Oak-Pine Forests - 1st Decade	14.6	13.4	13.9	14.8	13.6	15.2	14.9
Mid- to Late-Successional Oak, Oak-Pine Forests - 5th Decade	8.0	11.2	6.8	11.3	4.6	15.2	10.8
Mid- to Late-Successional Pine, Pine-Oak Forests - 1st Decade	42	49	44	46	41	48	44
Mid- to Late-Successional Pine, Pine-Oak Forests - 5th Decade	46	53	46	53	44	55	44
Permanent Openings, Old Fields, Linear Strips	**Acres in Thousands**						
Acres in Mgt. Prescription Allowing New Permanent Openings	317	69	326	253	335	54	251
MIS – Community Indicators	**Trends**						
Hooded warbler	+	=	+	+	+	=	+
Scarlet tanager	+	=	=	+	=	+	+
Pine warbler	-	+	=	=	-	+	-
Acadian flycatcher	+	+	+	+	=	+	+
Prairie warbler	+	=	+	+	+	=	+
Pileated woodpecker	+	+	+	+	+	+	+
Field Sparrow	+	+	+	+	=	=	+
Swainson's Warbler	=	+	=	+	-	+	+
American Woodcock	+	-	+	=	+	-	+
Brown-headed nuthatch	=	+	=	+	=	=	+

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

The national forests of the Southern Appalachians provide potential and occupied habitat for numerous threatened and endangered species. Legal mandates require national forests to manage habitats at levels that accomplish the recovery of federally listed species and maintain viable populations for sensitive (PETS) species as important components of diverse, functional ecosystems. The LMP revisions will determine habitat objectives or forestwide standards needed to protect or restore existing species and habitats and implement recovery objectives that have been established for threatened and endangered species by the U.S. Fish and Wildlife Service (USFWS).

The concern includes determining where no habitat management is needed and where national forests should manage to create conditions suitable for PETS species. There could also be opportunities to restore habitat conditions that could allow for the reintroduction of particular species.

Management strategies for PETS species become complex in light of the factors previously mentioned and because of the scale questions that affect the national forests. The range of some species covers multiple forests, and their management strategies need to be coordinated between forests. Other species occur only on the periphery of National Forest System lands and actions taken on national forest lands will only minimally influence their recovery. In the case of aquatic species where conservation measures occur on public lands, activities that occur on other ownerships within a watershed could prevent improvement of habitat quality and expansion of suitable habitat; therefore, movement toward recovery would not be noticeable.

Concerns have also been expressed for those species that are "locally rare." These are species that are not "rare" within their biological range but are "rare" on a national forest or in a particular state. Concerns about how these species and their habitats will be managed involve coordination with State Natural Heritage Programs and State wildlife agencies.

In addressing this issue, management activities would strive to:

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

Table 2-4 shows the comparison of Issue 2 by alternative. This table shows/describes the number of species/habitat combinations ranked as very high, high, and moderately high risk to species viability on the Sumter National Forest, the Andrew Pickens and Piedmont Districts combined. This information was derived from a species viability analysis conducted for this Forest Plan.

TABLE 2-4. 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	49	50	49	50	68	51	49
Species/Habitat Relationships Rated as High Risk	79	79	79	80	75	81	79
Species/Habitat Relationships Rated as Moderately High Risk	120	122	120	123	117	122	120
Total	248	251	248	253	260	254	248
Aquatic Species Viability	**Number of Species/Number of Watersheds**						
Low Risk	2/4	2/4	2/4	2/4	2/4	2/4	2/4
Moderate Risk, FS May Positively Influence	5/13	5/13	5/13	5/13	5/13	5/13	5/13
High Risk, Little Opportunity for FS Influence	3/18	3/18	3/18	3/18	3/18	3/18	3/18
High Risk, FS May Positively Influence	0	0	0	0	0	0	0
Very High Risk, Little Opportunity for FS Influence	0	0	0	0	0	0	0

Issue 3 – Old Growth

The public expressed concerns and a variety of viewpoints about old-growth forests on public lands. Some concerns reflected the need for more of a focus on old growth than what is included in the existing LMP. Others commented that the spatial distribution and linkages of old-growth patches were important, that old-growth communities were under-represented on private lands, and that the national forests provided the best opportunity to provide for these communities. Comments were made that old-growth communities are currently underrepresented on national forests, and timber harvest activities are likely to reduce them further. Others stated that "protecting" old growth was an inappropriate underutilization of resources: old growth is adequately represented and protected in current LMP through wilderness, lands identified as unsuitable for timber production, and by relatively low harvest levels and long rotations on lands allocated for wood production.

People associate many values with old growth; some values are compatible, others present conflict. Old growth provides both biological and social values. Old-growth communities provide large den trees for wildlife species such as black bear, large snags for birds and cavity nesters, and large cover logs for other wildlife. Ecologically, old growth provides elements for biologic richness, gene conservation, and riparian area enhancement. Old-growth areas provide certain recreational experiences, research

opportunities, and educational study. Other areas have associated historical, cultural, and spiritual values (e.g., "just knowing" old-growth areas exist). Old-growth areas are a source of large-diameter, high-value hardwoods, which are limited in supply and in high demand for such products as furniture and construction finish-work. Some people say that each old-growth community type provides its own unique set of values.

Another concern is about how old growth should be managed, maintained, or restored. Many people state that old-growth areas should be protected or "preserved" and that there should be no harvesting within these areas. Another view is that old growth should be a self-perpetuating state where human intervention is unnecessary. Some expressed a concept of different levels of old-growth management, including undisturbed "core" areas with more actively managed "buffers" of old growth around them. Others say that insect and disease risk can be relatively high in old-growth stands and could (for some community types) threaten the retention of those stands as old growth. There is concern that fire exclusion could favor a buildup of fire-intolerant, but shade-tolerant, species that could eventually replace the original old-growth type. This view is that active management, including timber harvest and prescribed fire, could be used to accelerate the development of old-growth attributes. Given the dynamic nature of forests, some believe there is a need to plan for replacement of old growth. Others have expressed concern about fragmentation of old growth that might result from moving old growth around and not having designated old-growth areas. Some expressed concerns about costs of managing old growth and the possibility of reduced wood production and timber values.

The Draft 1995 RPA Program discusses the need for "old-growth management areas" and LMP revisions would address what is a desirable distribution and representation of old-growth communities. The LMP would provide management direction for areas allocated to old growth as well as which lands are suitable or unsuitable for timber production. Additional small patches of existing old growth will be managed to protect those characteristics, as they are encountered on the landscape under each alternative.

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 2-5 shows the comparison of Issue 3 by alternative. This table shows acres of future old growth allocated, including old-growth compatible prescriptions, on the Sumter National Forest.

TABLE 2-5. ISSUE 3 – OLD GROWTH

Alternative/Units of Comparison	A	B	D	E	F	G	I
Old Growth	Acres in Thousands						
Acres of Allocated Old Growth (Rx 6's)	1,399	40,038	1,386	37,740	0	140,599	1,640
Total Acres Future Old Growth	87,940	116,260	77,155	121,100	17,520	148,050	95,766

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

Although water supplies in the South are abundant, expanding urbanization and development are creating increased demands and impacts on the waters of the South. According to the SAA, two-thirds of reported water quality impacts are due to non-point sources. Soil erosion and stream sedimentation—as well as nutrient, chemical, and bacterial contamination—can result directly or indirectly from land uses. Beneficial uses of water are often undesirably and unintentionally affected by water quality degradation created by land uses. Growth in South Carolina is expanding to rural areas, and an increasing percentage of the landscape is being affected, including some watersheds with Sumter National Forest lands.

The SAA also indicates that forestry practices have a low potential for impact on aquatic resources and that agricultural runoff, stormwater discharges, roads, urban/suburban development, dams and mining have caused the largest alterations in waters of the region. However, the SAA indicates that the impacts on water are greatest for land uses and activities near streams. (Some examples of this include overused campsites and lack of maintenance on roads and trails.) Water quality impacts also increase with the proportion of a watershed that is disturbed. In addition, many eroded and unproductive areas acquired under the Weeks Law were destined to become National Forests. In South Carolina, a long legacy of land use abuses resulted in severe surface erosion, channel adjustment and water quality effects that continue to some degree.

National forests were originally established, in part, to secure favorable water flows. The 1972 Clean Water Act requires states to establish water quality standards for streams and water bodies, including designation of beneficial uses, criteria to protect beneficial uses, and an antidegradation policy. The Forest Service must meet, or exceed, these State procedural and substantive requirements for water quality on the national forests. National forest management should protect the beneficial uses, namely cold water, cool water, or warm water fisheries; recreation and municipal water supplies; habitats for other indigenous aquatic life; and aquatic PETS species.

Some people have expressed concern about national forest management effects on water quality, specifically about the effects of timber harvesting, recreational uses, and road building on water and in-stream habitats. Streamside protection measures, harvesting practices, in-stream habitat management, and water quality monitoring methods in the existing LMP would be reevaluated. There are also concerns about off-forest effects on the water quality and aquatic habitats within the national forests. In some cases, water quality and aquatic habitat protection and improvement would require the support and cooperation of the public, industry, or neighbors within a watershed, depending on the prevalent land uses. The Sumter National Forest intends to limit effects of activities by ensuring quality planning and implementation of projects, and be a willing partner to help address water quality and aquatic habitat issues, especially within watersheds with National Forest ownership.

The maintenance and/or enhancement of aquatic habitats are also necessary to maintain healthy viable populations of fish, mussels, amphibians and other aquatic organisms. The protection of aquatic habitats for threatened, endangered, sensitive, game, and non-game species is necessary for the survival of these species. The desired conditions for aquatic habitats would also consider the conditions necessary to increase recreational fishing opportunities.

Riparian areas have value to many users for a variety of purposes. Habitats for a multitude of plant and animal species and most of the highest valued recreation sites reside in the riparian zone. Riparian areas are often the most productive sites for growing high-quality wood products. Competition for this "rich" resource is strong, making the issue an important one to almost every user group, visitor, and manager. This issue also relates to an area that was emphasized in the 1995 Draft RPA.

The SAA identified 1.5 million acres of seeps, springs, and streamside areas in forested cover, of which national forests contain around 219,000 acres. The future quality of these areas and their associated habitats is uncertain and would depend on the combined effects of public and private management activities, as well the effects from current and future threats such as the hemlock wooly adelgid. Since then, we have agreed to limit activities within the riparian corridor that includes a buffer along streams and waterbodies, floodplains, wetlands, bottomland hardwoods and mesic terraces.

Riparian areas cannot be managed as an isolated resource. Given the interrelated nature of riparian, aquatic, and upland ecosystems, the effects of most forms of management will need to be examined within the context of headwater drainages, perennial streams to entire watersheds.

The revised LMP will provide direction for the management of riparian areas and the habitats they contain. The LMP will address how timber,, road, wildlife, fishery, watershed restoration, mining, and recreational pursuits of many types can be provided for in a way that would not impair aquatic and riparian ecosystems. The LMP will ensure that the appropriate standards and land-use allocations are in place to meet or exceed State water quality standards and desired conditions for aquatic habitats.

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

- Watersheds 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 managed (and where necessary, restored) to protect and maintain their soil, water, vegetation, fish, and wildlife associated resources.

Table 2-6 shows the comparison of Issue 4 by alternative.

TABLE 2-6. ISSUE 4 – RIPARIAN AREA MANAGEMENT, WATER QUALITY, AND AQUATIC HABITATS

Alternatives/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 across 28 watersheds	1.5	1.5	1.5	1.3	1.9	0.7	1.5
MI – Aquatic Communities	Trends						
Cold water aquatic communities	+	+	+	+	+	+	+
Cool water aquatic communities	+	+	+	+	+	+	+
Warm water aquatic communities	+	+	+	+	+	+	+
Acres in Watershed Restoration Prescriptons	Acres in Thousands						
Acres Allocated to Mgt. Prescriptions 9As	0	46.9	0	0	0	39.0	11.4

Issue 5 – Wood Products

Some people feel that national forests are public lands that should be set aside, either for providing forest-related values other than timber, or as a reserve of timber. In contrast, others feel the purpose of national forests is to support the local or regional wood processing facilities and contribute to local economies; that national forests should emphasize utilizing the current forest growth capabilities or provide a community-based balance between wood production and recreation benefits. Still others see that the values they are concerned with, such as wildlife game species, can be best provided through habitat manipulation that includes the production of wood products. With recent policy changes of the Forest Service toward more ecology-based management, some people question whether the wood product role of national forests has changed. Others point out

that the national forests still need to be managed to provide for multiple uses, including wood products.

Considerable concern has been expressed about where sustained-yield production of wood products will occur. Will there be any removal of wood products from certain areas such as riparian zones, wetland, special areas, or unique habitats? Some people state that timber harvesting is not needed in all areas, and that it causes too much damage to the environment. Other people state that the concerns about effects of production of wood products on the environment can be dealt with through LMP standards and that most areas should be kept available.

Other concerns were expressed about how much production of wood products will be expected from National Forest System lands. Some individuals express the need to adapt the allowable sale quantity (ASQ) objectives to the demands of the local or market area. Product sizes and mixes are sometimes a concern to local wood product consuming industries. Other people are also looking more to the South as a source of wood products nationally, given the decreased availability in other regions of the country. Additionally, the national forests in the Southern Appalachians hold a large share of the high-grade oak sawtimber and other high-quality hardwoods, which are in short supply but high demand.

Some people say there is a conflict between production of wood products from public lands and the wood market opportunities for private landowners. Other people are concerned that reduced production of wood products will lead to "unhealthy" aging of the national forests with increased pest problems that could affect both public and private lands. Some individuals regard production of wood products as a way to lower insect and disease risk and fire hazards. On the other hand, other people see opportunities to utilize trees being killed by insects and disease outbreaks. Still others are concerned that any production levels would cause conflicts and that if any wood products are produced they should be by-products of meeting other management needs. Some people question any wood product removal from national forests.

Concerns about how much and where wood products would be removed from National Forest System lands often relate to the practices that are used and the cost-effectiveness of production of wood products. Below-cost production of wood products (of which there is no agreed-upon definition) is a concern for some people. There are people who would like all below-cost timber sales to stop because they view this as subsidizing the wood products industry. There are others who want to be sure that, if below-cost sales are offered, either the resulting benefits to other resources justify the below-cost situation or the silvicultural practice(s) is the best way to meet the desired resource objectives.

Concerns are often expressed about the regeneration methods used to produce the wood products (e.g., clear cutting and single tree selection). Many people have commented that wood products should be removed only if it is done without requiring construction of new roads. Some have expressed concerns about the environmental effects of forest-type conversion from hardwood to pine and the size of harvest areas and frequency of harvests.

The LMP revisions would determine what lands would be suitable for sustained yield of wood products. This determination of suitable forestlands includes using the production of wood products as a means to achieve LMP resource objectives in a way that considers cost-effectiveness and economic efficiency.

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

- Determine 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 wood products when the Forest Service is in a unique position to make an impact on meeting the demand for those products.

Table 2-7 shows the comparison of Issue 5 by alternative.

TABLE 2-7. ISSUE 5 – WOOD PRODUCTS

Alternative/ Units of Comparison	A	B	D	E	F	G	I
Timber Management	Acres in Thousands						
Land Classified as Suitable for Timber Production	260,885	235,008	270,134	212,275	338,258	124,557	259,313
	MMCF / MMBF						
Allowable Sale Quantity (First Decade)	156/858	109/600	156/858	113/622	182/1000	79/435	139/763
Timber Sale Program Quantity (Total First Decade	156/858	109/600	156/858	113/622	182/1000	79/435	139/763
Timber Sale Program Quantity (Total Fifth Decade)	156/858	109/600	156/858	113/622	182/1000	79/435	139/763

Issue 6 - Aesthetics/Scenery Management

The LMP revisions must determine goals and objectives for the management of National Forest System lands. Some people pointed out that natural-appearing landscapes of high-quality scenery are one of the main reasons tourists and recreationists come to the Southern Appalachians. Scenic landscapes help to determine the success of recreation and tourism. Opinions vary as to the existing scenic condition. Some see the need for enhancement, restoration, and for increased opportunities to provide older and larger trees. Some think that a predominantly natural-appearing, non-industrial-looking forest

landscape character should be emphasized; and that certain areas of the national forests—such as travel and trail corridors, important view sheds, and other places with recreation use—should provide a higher level of scenery. Some people also commented that management for hardwoods should be increased because hardwoods tend to enhance the scenic quality of an area.

Another concern is with the increasing levels of private development on the edge of the national forests and the desires of these private landowners for high-quality scenery on the adjacent National Forest System lands.

Comments were made that public preferences for scenic quality should be evaluated and that aesthetic (scenic integrity) objectives should be established. Some people state that the existing Forest Plans allow for too much scenic degradation. To them the high visual impact management practices and uses—such as clear cutting and the building of roads, power lines, and electronic sites—are too dominant. Some people suggested that selecting low-impact practices and emulating natural processes would better manage the scenery of the national forests. Other individuals mentioned that while harvesting wood products does tend to cause a visual disruption, this effect is only temporary and that the harvest method used would be whatever is needed to meet resource objectives. Some commented that scenic quality would be restored through the use of salvage timber harvesting following disturbances like fires and insect outbreaks. Others said that the Forest Service should identify and implement methods that would reduce the visual impact of timber harvest so that harvesting can continue to be used as a management tool.

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

- Protection and enhancement of the scenic and aesthetic values of national forest lands in the Southern Appalachians.
- Management of national forests to provide a variety of landscape character themes with the predominant themes being natural appearing, natural evolving, and variations of these themes.

Table 2-8 shows the comparison of Issue 6 by alternative. This table shows/describes Scenic Integrity Objectives. The acres in each SIO class, ranging from very high (VH – unaltered) to low (L – moderately altered), were then totaled to develop the following range.

TABLE 2-8. ISSUE 6 – AESTHETICS/SCENERY MANAGEMENT

Alternative/Units of Comparison	A	B	D	E	F	G	I
Scenic Integrity Objectives	Total Forest Acres						
Very High	15,600	16,500	14,800	16,300	20,200	42,300	15,600
High	47,800	43,400	40,600	67,600	27,000	33,000	47,500
Moderate	110,900	131,600	67,500	131,800	22,400	198,000	112,800
Low	182,700	165,500	234,100	141,300	287,400	83,700	181,100

Issue 7 - Recreation Opportunities/Experiences

National forests provide a variety of dispersed and developed recreational opportunities. Forest Plan revisions would consider actions that are responsive to a wide array of forest visitors and the variety of experiences they desire. The economic benefits of these recreation opportunities to local communities and local commercial outfitters would be considered.

In the SAA area, for example, currently only around eight percent of the land (including the Great Smoky Mountains National Park (GSMNP)) can provide "remote" recreation settings. Many people feel that national forests should be the principle provider of these remote experiences. The Draft 1995 RPA Program reported that recreation demand levels would increase significantly on national forests, making it increasingly difficult to manage recreation sites at an acceptable quality standard. (The last RPA program was developed in 1995. Currently the Forest Service Strategic Plan (2000 Revision) provides broad overarching national guidance for forest planning and national objectives for the agency as required by the Government Performance and Results Act. All of the alternatives in this EIS incorporate these broad strategic objectives.)

People are using trails today for much more than backpacking. Mountain biking, horseback riding, and OHVs are all used on national forest trails. Due to the limited sources of supply, these trails are often congested and have become sources of conflict between users. In many cases, there is a strong interest in increasing the trail networks for all these uses. Increases in the trail miles would increase trail use opportunities and reduce the congestion on existing trails. The challenge would be with developing a trail system that recognizes conflicting uses and minimizes resource damage. Of particular concern is a policy for managing OHV use. Trails of national interest and trail systems that connect adjacent national forests (e.g., the Appalachian Trail) would have coordinated management direction.

Congestion in recreation use tends to occur on the shores of lakes and streams because these settings are in high demand. Some users are concerned with the lack of trailhead facilities. In those areas where developed sites and recreation facilities are congested, and the facilities and the resources are being damaged from overuse, opportunities for providing additional facilities need to be explored. Comments were made that the Forest Service should emphasize providing for recreational opportunities that are not generally available on private land. Other comments have been made to the effect that before the Forest Service builds new facilities, there would be an emphasis on maintaining and upgrading the existing facilities.

For some people, the quality of the recreation experience often goes down as the number of users goes up. Additional user control may become necessary to limit the number of people in overcrowded areas or in biologically sensitive areas. Some people are also concerned that timber harvesting activities or concentrated recreational use may result in a reduction of habitats for various huntable wildlife species, or a reduction in water quality that will affect fishing opportunities. Others state that timber harvesting has a beneficial effect on huntable wildlife.

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

- Provide a spectrum of high quality, nature-based recreation settings and opportunities that 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 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 that 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 2-9 shows the comparison of Issue 7 by alternative.

TABLE 2-9. ISSUE 7 – RECREATION OPPORTUNITIES/EXPERIENCES

Issue/Units of Comparison	A	B	D	E	F	G	I
Recreation Opportunity Spectrum	Acres						
Primitive (Rx's 1A and 1B)	10,493	9,923	4,961	7,938	5,136	9,148	4,837
Semi-Primitive Non-Motorized	4,462	5,011	5,872	7,036	3,275	37,940	3,290
Semi-Primitive Motorized	16,669	8,992	6,227	41,416	161	202	5,153
Roaded Natural	328,865	336,563	343,429	304,099	351,917	313,199	347,209
Rural/Urban	600	600	600	600	600	600	600
Recreation Management Allocations	Acres						
Acres with a Recreation Emphasis (Rx 7's)	75,047	584	584	78,908	1,907	555	78,162
Acres with a Backcountry Recreation Emphasis (Rx 12's)	12,079	0	1,210	36,597	0	0	4,929
Developed/Dispersed Recreation	Range						
Estimated Increase in Capacity of Developed Day Use Recreation Areas	Low	Low	Low	Low	Low	Low	Low
Estimated Increase in Capacity of Dev. Level 2 Campgrounds	Low	Low	Low	Low	Low	Low	Low
Estimated Increase in Capacity of Dev. Level 3 Campgrounds	Decrease	Low	Low	Decrease	Low	Low	Low
Estimated Increase in Capacity of Dev. Level 4 Campgrounds	High	Low	Low	High	Low	Low	Low
Estimated Increase in Hike-only Trails	Low	Low	Low	Low	Low	Low	Low
Estimated Increase in Hike and Bike Trails	High	Low	Low	High	Low	Low	High
Estimated Increase in Hike and Equestrian Trails	Low	Low	Low	Low	Low	Low	Low
Estimated Increase in Hike, Bike and Equestrian Trails	Moderate	Low	Low	Moderate	Low	Low	Moderate
Estimated Increase in Paddle Sports Trails	Low	Low	Low	Moderate	Low	Low	Low

Off-Highway Vehicle Roads and Trails	Acres						
Acres of Off-Highway Vehicle Use Areas (Rx 7C)	3,500	0	0	3,500	0	0	0
	Range						
Estimated Change in Motorized Roads and Trails	High	Low	Low	High	Low	Low	High
MIS - Demand Species	Trends						
Bobwhite quail	+	+	+	++	++	=	+
Eastern Wild Turkey	+	+	+	++	=	=	+
Black Bear	+	++	+	+	=	=	++
Hunting	Trends						
White-tailed deer	++	=	++	++	++	=	++
Wild turkey	++	=	++	++	++	=	++
Small game	++	=	++	++	++	=	++

Issue 8 - Roadless Areas and Wilderness Management

The sufficiency of the existing wildernesses continues to be debated. A wide spectrum of interest exists among the national forest community. Various alternatives in the LMP revisions would consider recommending some, all, or none of the roadless areas to Congress for wilderness designation.

Some people have indicated that all roadless areas should be recommended for wilderness designation, while others have said there is enough wilderness already and that the roadless areas should be managed to achieve other resource objectives. Comments have been received that all the areas identified in the Wilderness Society's "Mountain Treasures" should be recommended for either wilderness or some special area designation.

People have expressed concern over the fate of any roadless areas not recommended for wilderness. Some people have proposed that these areas be used to mitigate habitat fragmentation, or managed as scenic areas, or managed to provide a "remote" or "semi-primitive non-motorized" recreation experience. Others people propose that an area does not have to be labeled as "roadless" or "wilderness" in order to provide biological diversity. These people believe that in order to provide high-quality wildlife habitat, different types of disturbances are needed in order to create a variety of successional stages. Others would like to see the lands in roadless areas available for timber production.

Comments were received that even if certain areas do not meet the criteria for inclusion in the roadless area inventory, these areas should still be considered for inclusion in the wilderness system. Other individual comments indicated that the Forest Service should

consider obliterating roads within Forest Service jurisdiction in order to "create" areas that would then meet the criteria for inclusion in the roadless area inventory.

For areas that are already congressionally designated as wilderness, concerns have been expressed about how they are managed. The recommendation of any new areas to the wilderness system may also have an impact on how any existing wildernesses that are nearby are managed. These wilderness management concerns include patterns and intensities of uses, insect and disease management, fire management including the use of more management-prescribed fire, incorporating limits-of-acceptable change concepts into plan direction, and the mitigation of air pollution effects on wilderness resources. Existing wilderness standards would be reviewed to see if they are effective in achieving the desired future conditions of wilderness resources.

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.

Tables 2-10 and 2-11 show the comparison of Issue 8 by alternative.

TABLE 2-10. ISSUE 8 – ROADLESS AREAS AND WILDERNESS MANAGEMENT

ALTERNATIVE/UNITS OF COMPARISON	A	B	D	E	F	G	I
Wilderness/Roadless	Acres /Percentage						
Acres of Existing Wilderness	2,856	2,856	2,856	2,856	2,856	2,856	2,856
Recommended for Designation as WSAs	7,638	7,068	2,106	5,083	2,281	6,293	1,982
Percentage of Roadless Character Maintained (of all roadless areas, including areas recommended for WSA)	99	100	50	99	49	100	100

Table 2-11. Issue 8 – Roadless Areas Recommended for WSAs

Alt.	Roadless Areas Recommended for Designation as Wilderness Study Areas
A	Ellicott Rock 1 and 2, Bee Cove
B	Ellicott Rock 1 and 2, Big Mountain and Bee Cove
D	Ellicott Rock 1 and 2
E	Ellicott Rock 1 and 2, Bee Cove
F	Ellicott Rock 1 and 2
G	Ellicott Rock 1 and 2, Big Mountain and Bee Cove
I	Ellicott Rock 1 and 2

Issue 9 - Forest Health

Forest pests threaten economic, social, and biological values. Non-native pests are increasing in number of species and expanding their ranges. Risk to national forests by both native and non-native species is increasing, as is the debate over how forest insects and diseases should be viewed. Some of the major concerns related to this issue of forest health include oak decline, dogwood anthracnose, gypsy moth, balsam woolly adelgid, hemlock woolly adelgid, southern pine beetle, and invasive non-native pest plants.

Dead, dying, or down trees are viewed by some people as evidence of poor health or lack of good stewardship. These people believe that active management can improve and may be essential for forest health. Other individuals want more natural landscapes with little or no human intervention of any kind. They recognize that tree mortality can provide desirable ecological values such as standing dead snags, down trees, and canopy gaps that provide for new growth. Some people contend that current national forest management does not address the "real" threats to forest health, such as air pollution, non-native plant and animal species, and stream sedimentation. Nearby private landowners also express concerns about possible forest pest threats to their lands from National Forest System lands.

Concerns have been expressed about the changing ecological conditions and the susceptibility to insects, diseases, and pests. Some people state that these changed conditions are the result of fire-suppression activities, the limited use of prescribed fires, and a lower level of disturbance compared with historic levels. The level of management needed to protect special areas or values, such as wilderness or certain habitats for threatened and endangered species, often creates concerns about forest pest management. There are also concerns about the use of pesticides: some indicate that it is a tool that still needs to be used; others indicate the risks are too great and other methods should be used.

Others point out that insects and diseases have altered the ecological conditions, such as the elimination of the American chestnut by the non-native chestnut blight fungus and the wide-scale repeated defoliation by the gypsy moth. These changes affect other areas of concerns, such as wildlife habitats, recreation opportunities, and wood product values.

Where appropriate, the LMP would include an identification of the ecological conditions necessary to lessen the threats from forest pests. The management direction in the LMP should also be defined in such a manner that managers can determine the appropriate response when forest pests threaten an area.

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 non-native invasive species.

Table 2-12 shows the comparison of Issue 9 by alternative.

TABLE 2-12. ISSUE 9 – FOREST HEALTH

Issue/Units of Comparison	A	B	D	E	F	G	I
Forest Health Concerns				**Ranking**			
Southern Pine Beetle	M	L	M	M	L	H	M
Littleleaf Disease	L	H	L	H	L	H	M
Oak Decline	M	M	L	M	L	H	M
Gypsy Moth	M	M	L	M	L	H	M
Prescribed Fire				**Acres in Thousands**			
Estimated Acres Prescribed Burned (Total)	19.6	33.0	20.1	33.2	19.4	10.4	23.6
Restoration							
Acres with a Restoration Emphasis (Rx's9A3, 9E, 9G2, 9H)	0	220,512	0	0	0	94,469	54,440
Estimated Annual Acres of Invasive Plant Control	50	500	1,250	500	250	250	750

Issue 10 - Special Areas and Rare Communities

The current LMP identified several types of "special areas," which are areas the Forest Service has the authority to administratively designate. Areas can be designated for special or unique aesthetic, archeologic, biologic, geologic, historic, paleontologic, scientific resource values; or areas can be designated that provide unique and exceptional recreation experiences. Ecological communities such as caves, coves, rock outcrops, balds, and wetlands have been identified as possible "special areas." Concerns have been raised that some of these special areas are not adequately protected from activities in the surrounding areas, indicating the possible need for larger areas to be protected. In some cases, additional LMP direction would be needed to preserve and protect natural sites, as well as historic and prehistoric roads/trails.

Numerous concerns have been expressed about managing rare communities, such as those identified in the SAA. The assessment states that conservation of 31 rare terrestrial communities is key to conserving rare plant and animal species. Eighty-four percent of federally listed terrestrial threatened and endangered species in the Southern Appalachians is associated with rare communities and streamside habitats, which occur on less than one percent of the area. Similar groupings of listed aquatic and semi-aquatic species can be identified, although typing and inventory of rare aquatic communities has not been completed.

Comments have been made that rare communities are limited by past land uses and current management. Some express concern that timber harvesting and recreational uses would further reduce these communities if they are not protected. Other comments indicate that the biggest threats to these communities are from insects and diseases. Still others express that existing land allocations adequately protect most of these areas and there is no justification for establishing additional areas for special protection. The revised LMP would consider a range of management options for these areas and determine which options are needed to protect, maintain, or enhance these rare communities.

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

- Protection or restoration of the rare communities found on national forest lands.
- Manage areas with special geological, paleontological, botanical, zoological, cultural, or heritage characteristics (or where feasible, restored) to protect those characteristics.

Table 2-13 compares Issue 10 by alternative. This table shows acres allocated to special areas (includes botanical areas and scenic areas) and the management of rare communities across alternatives on the Sumter National Forest

TABLE 2-13. ISSUE 10 – SPECIAL AREAS AND RARE COMMUNITIES

Issue/Units of Comparison	A	B	D	E	F	G	I
Special Areas				Acres			
Acres Allocated to Special Areas (Mgmt. Rx 4D and 4F)	5,215	5,499	7,895	6,751	10,199	10,664	14,419
Rare Communities							
Rare Communities Managed According to the Rare Community Mgmt. Rx (9F)	Yes	Yes	Yes	Yes	No	Yes	Yes
				Acres			
Estimated Acres of Annual Restoration Activities for Table Mountain Pine	50	250	50	150	0	150	250
Estimated Acres of Annual Restoration Activities for Canebrakes	50	300	50	100	0	400	200
Estimated Acres of Annual Restoration Activities for Glades and Barrens	50	250	50	150	0	150	250

Issue 11 - Wild and Scenic Rivers

The designation of wild and scenic rivers is a multistage process. "Eligibility" is determined through an inventory of streams and rivers that have outstandingly remarkable values (ORVs). Eligible streams then are classified as wild, scenic, or recreational. Next, "suitability" studies of the streams and rivers are accomplished to determine which streams and rivers can be recommended to Congress for possible designation.

There may be some circumstances where not all the eligible rivers would be studied for suitability during the LMP revision process. For those eligible rivers that would not be studied for their suitability, the LMP revisions will need to establish management measures to protect or enhance their ORVs until the next stage is completed.

When eligible rivers are analyzed for their suitability in the revised LMP, the determination of whether or not to recommend an eligible river for designation would vary, based on the overall management emphasis of the LMP alternatives. Some people have responded that they want certain rivers or all eligible rivers recommended for national designation. For those rivers recommended for designation as WS&R, methods of protecting or enhancing the rivers' ORVs will vary according to their classification.

Rivers that do not become recommended for national designation would still be managed to protect their outstanding values. These rivers that are eligible, but determined to be not suitable, would be managed in a variety of ways ranging from preservation, to restoration, to simply following the state Best Management Practices and the Clean Water Act.

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

- Wild, scenic, and recreational rivers that are designated by Congress, recommended for designation, or are eligible for designation, will be managed to protect their outstandingly remarkable values.

Table 2-14 shows the comparison of Issue 11 by alternative.