

RECORD OF DECISION

USDA, FOREST SERVICE

Final Environmental Impact Statement  
National Forests in Mississippi  
Land and Resource Management Plan

Adams, Amite, Benton, Chickasaw, Choctaw, Copiah, Forrest,  
Franklin, George, Greene, Harrison, Jackson, Jasper, Jefferson,  
Jones, Lafayette, Lincoln, Marshall, Newton, Oktibbeha, Pearl  
River, Perry, Pontotoc, Scott, Sharkey, Smith, Stone, Tippah,  
Union, Wayne, Wilkinson, Winston, and Yalobusha Counties,  
Mississippi

I. INTRODUCTION

This Record of Decision documents the approval of the Land and Resource Management Plan (Forest Plan) for the National Forests in Mississippi. The National Forests in Mississippi include the Bienville, Delta, De Soto, Holly Springs, Homochitto, and Tombigbee National Forests containing 1,140,215 acres.

The Final Environmental Impact Statement (FEIS) describes six alternatives including the preferred alternative (Forest Plan). It also describes the environment to be affected and discloses the consequences of the alternatives.

The Forest Plan provides for long-range multiple use management of outdoor recreation, timber, watershed, minerals, wilderness, wildlife and fish, which results in sustained yields of goods and services for the benefit of the American people. The Forest Plan also provides broad direction for dealing with applications and permits for occupancy and use of the National Forest by the public. Permits, contracts, and other instruments for the use and occupancy of National Forest System lands will conform with the Forest Plan by the earliest possible date. Activities affecting the National Forests in Mississippi must be in compliance with the Forest Plan.

The FEIS and Forest Plan were developed under the National Forest Management Act (NFMA) (36 CFR 219). The FEIS meets the requirements of the National Environmental Policy Act of 1969 (NEPA) and Council on Environmental Quality (CEQ) regulations.

Land and resource management planning began with the identification of issues and concerns from within the Forest Service and through public contacts with local, civic and community organizations, individuals, private industries, adjacent landowners and various interest groups. After public statements and management concerns were gathered and analyzed, seven major issues were identified, these are: (1) Road system development; (2) Land adjustment and rights-of-way acquisition; (3) Recreation management; (4) Range management; (5) Hardwood-wildlife management; (6) Timber management; and (7) Standards for special uses.

A number of alternatives was then formulated which provides different ways to respond to the major issues, management concerns, and resource opportunities. Throughout the subsequent steps of land and resource management planning, the issues and concerns were considered in the evaluation and decision making process.

## II. DECISION

It is my decision to select Alternative 5 from the FEIS as the Forest Plan for the National Forests in Mississippi. Pursuant to this, I am approving the Forest Land and Resource Management Plan, which is designed to accomplish the objectives of Alternative 5 in the FEIS. Alternative 5 is a modification of the "preferred alternative" identified in the Draft Environmental Impact Statement (DEIS) and Proposed Land and Resource Management Plan (Forest Plan). The alternative was modified in response to concerns raised during the public review of the DEIS. Modifications include revision of the management requirements for the red-cockaded woodpecker and addition of electrical hookups for some selected camping areas as determined by a study for need and economy.

This decision is made after public review of the DEIS and my review of the public responses and the environmental consequences disclosed in the FEIS.

Chapter 4 of the Forest Plan sets goals, objectives, standards, guidelines, and management prescriptions for the National Forests in Mississippi.

Highlights of significant decisions in the Forest Plan follow.

- There will be changes in the management of the timber resource, primarily in the methods used to determine when and how a forest stand will be harvested. Increasing demands for all goods and services from National Forests require more intensive and integrated timber resource management. Current timber management practices use a single rotation age for each forest type and they balance age classes in the forest by controlling the acreage harvested and regenerated. The Forest Plan will select acreage for regeneration by choosing the best mix of age classes which provide the necessary productive capabilities of the timber, range, recreation, soil, water, and wildlife and fish resources to achieve the overall multiple use objectives. This results in increased resource output levels with increased returns to the treasury.
- The hardwood forest type will be managed to develop and enhance wildlife and riparian habitat, aesthetics, enhance water quality by providing filter strips along streams, and to provide forest products. Within filter strips the primary objective is to maintain healthy, vigorous stands of hardwood trees with a high percentage of hard mast producing species. Timber harvest and other silvicultural practices are permitted in the filter strips in support of the primary objective
- Several management practices will be followed which will aid in the retention and increase of hardwoods. In compartments with less than

20% hardwoods, efforts will be directed towards increasing the hardwood component up to 20%. Hardwood regeneration cuts will not be made in compartments containing less than 20% hardwood, except in sparse, low quality or damaged stands, or where necessary for wildlife considerations.

- Even-aged management using clearcutting as the primary harvest cutting method will be used. Clearcutting was determined to be the optimum method except for selected situations where seed tree or shelterwood methods are more appropriate (FEIS, Appendix G).
- Management of the road system will be coordinated with resource management needs. A Forest Transportation Analysis of each Ranger District will be completed to conform with the objectives of the Forest Plan. As compartments are entered, the District Ranger will document the resource objectives, the physical and environmental constraints on the road, the traffic service level, and how the road will be managed following construction.

Basically, all arterial and collector roads are in place, any new construction and reconstruction will be low traffic service levels such as dead-end local roads (Forest Plan, Appendix A). While these will be classified as system roads, they will generally be managed for intermittent use.

The implementation of these road management policies will result in the closure of many newly constructed or reconstructed local roads which in the past remained open.

- Self-sustaining (viable) populations of all native vertebrate (both game and non-game) and plant species will be maintained. Mitigating management practices such as designation of riparian area management zones and the planting of hardwood on the De Soto National Forest and Bienville Ranger District, (FEIS, Appendix B) will ensure that the habitat needs for these species are maintained and/or improved. The high population of deer will be maintained. The habitat for turkey will provide the opportunity for increased turkey population over the next decade and beyond.
- The Forest Plan contains management prescriptions (detailed in Chapter 4) which provide diverse habitat for both early and late successional species. Late seral (older and/or larger trees) stages of pine and hardwood are provided in areas such as wilderness, special areas, red-cockaded woodpecker colonies, recruitment stands and foraging areas. Also, a minimum of 25 acres for each 1,000 acres in the general forest area will be identified and managed for large size class trees. Late seral stages will increase under the Forest Plan.
- The Forest will be managed for the eventual recovery of the endangered red-cockaded woodpecker. Management is based on the U. S. Fish and Wildlife Service's 1985 Biological Opinion. Longer rotations, 80 years for longleaf pine and 70 years for other pine species, protection of existing colony sites, and designation of recruitment stands are planned.

- The two wilderness areas (Black Creek and Leaf) will be managed to protect those characteristics and values which led to wilderness designation. These areas will be managed to preserve examples of large, relatively undisturbed ecosystems and to provide increased opportunities for a wilderness experience.
- A number of "special areas", such as Owl Creek Mounds, Bienville Pines Scenic Area, and Harrell Prairie, will continue to be managed to preserve unique scenic, cultural, or biological values. A number of "study areas" will be managed to retain their values while being evaluated and recommended for either "special area" or general forest area (Forest Plan, pg 4-104).

The Forest Plan does not:

- Maximize any single resource use; multiple use management is emphasized.
- Propose the production of any resource beyond the biological capability of that resource.
- Propose management of any resource based solely on values in the market place. Non-market values received equal consideration.
- Give site specifics such as stand locations and what mitigating measures will be required under various circumstances. These site specific decisions will be made in an environmental analysis that is prepared in conjunction with individual projects or compartment prescriptions.

### III. RATIONALE FOR DECISION

The decision to select Alternative 5 as the Forest Plan was based on its ability to provide a high level of diverse public benefits.

No single factor or individual consideration constitutes the total rationale for the decision. Instead, it was the consideration of many factors and their interrelationships that led to this decision.

The list of considerations possible in decision making for the multiple use of the National Forests in Mississippi is extensive. The following discussion brings forth many important facts considered in the decision.

- A. Laws, federal regulations, executive orders, and policy. The Forest Plan, to the best of our knowledge, complies with all legal requirements and policies applicable to the National Forests in Mississippi.

B. Issues concerning management of the National Forests in Mississippi. NFMA regulations require the early identification of issues affecting the National Forests in Mississippi, and require that one or more alternatives in the FEIS address each of the major issues. How well each of the alternatives responded to the seven major planning questions identified in the scoping process was a major consideration in the selection of the Forest Plan (FEIS, Chapter 2). Since all six alternatives fully responded to issues on special uses, waste disposal, and mineral leases, selection of Alternative 5 as the Forest Plan did not affect the treatment of these issues. The treatment of each planning question is discussed below.

1. How can the National Forests in Mississippi best develop, operate, and maintain a transportation system that will be compatible with present and future resource management objectives?

This issue is addressed by developing a systematic approach to road management. It begins with a transportation analysis which conforms with the objectives of the Forest Plan. As an area is entered, the specific resource objectives, design criteria, physical, biological, and environmental considerations, traffic service level, and operation and management requirements are developed.

The Forest Plan calls for no new major through-road construction. When all Forest roads are in place, local roads open to traffic yearlong will be reduced from 1,131 to 981 miles. Local roads open to traffic on a seasonal basis will increase from 800 to 3,030 miles (Forest Plan, pg 4-82).

2. Is the acreage and location of the National Forest land in Mississippi adequate to meet resource goals efficiently? What should be the priority for land adjustments and rights-of-way acquisition?

Land adjustment priorities will be to consolidate ownership to meet the timber demands more efficiently and acquire lands with high site indexes.

Priority for rights-of-way acquisition will be to acquire access for removal of market goods.

The production capability of the total Forest will not be decreased by land exchanges.

3. How much and what types of recreation opportunities should be provided on the National Forests in Mississippi?

The issue of recreation and wilderness is addressed in the Forest Plan through the management of developed recreation sites, dispersed recreation, and wilderness areas to provide a broad spectrum of recreational opportunities. Existing developed recreation sites, trails, and designated areas of concentrated public use will be retained. Congress reviewed the wilderness situation and in 1984 enacted legislation that designated two areas as wilderness: Black Creek and Leaf. This legislation also released all other roadless and

RARE II inventoried areas. Management for the wilderness use of these areas will be consistent with the Wilderness Act and national policy.

All of the alternatives will provide sufficient supplies of developed recreation, dispersed recreation, and wilderness opportunities to satisfy anticipated demand over the next 50 years (Forest Plan, pg 2-7). The Forest Plan fully provides for the anticipated demand for recreation and wilderness.

The Forest Plan contains standards and guidelines designed to protect cultural resources (Forest Plan, pg 4-5).

4. How should the range resource be managed on the National Forests in Mississippi?

The range program will be managed to increase permitted livestock under comprehensive range allotment management; to improve the quantity, quality and availability of forage commensurate with other multiple uses; and to continue monitoring and evaluation for possible resource conflicts (Forest Plan, pg 4-80).

The Forest Plan provides for management of the range resource on the De Soto National Forest with a slight increase in available forage over current management. This increase will result from the timber management activities planned. Forage production will be more than adequate to satisfy anticipated use.

5. How can the National Forest meet future demands for hardwood lumber, pulp, fuel, and other uses while maintaining the hardwood portion of wildlife habitat necessary to carry the desired wildlife, game, and non-game populations?

Future demands for hardwood lumber, pulp, fuel, other uses, and a continuing supply of hardwood habitat for desired wildlife, game, and non-game populations will be met by managing hardwood intensively for wildlife, utilizing moderate intensity timber practices. This will provide a continuing high level supply of hardwood for multiple use needs.

Because hardwood furnishes more productive wildlife habitat, riparian habitat, aesthetics, stream bottom filter strips which improve water quality, and market commodities, the Forest Plan objective is to increase the hardwood component to 20%. The Forest Plan converts 5,000 acres from pine to hardwood (FEIS, pg 2-62). In addition, hardwood regeneration cuts will not be made in compartments containing less than 20% hardwood, except in sparse, low quality, damaged stands or where necessary for wildlife considerations.

Fuelwood will be provided to the extent possible without limiting wildlife habitat. It will generally be unmerchantable material on pine regeneration cuts and hardwood sawtimber topwood. Unlawful fuelwood cutting will be controlled by increased law enforcement. In some areas salvage cutting and dead and down fuelwood permits will be

limited to reduce the loss of snags and den trees. Firewood demand is expected to increase. Demand for readily accessible firewood currently exceeds supply on all Districts.

The contribution of hardwood habitat for desired wildlife, game and non-game populations is addressed in greater detail in the discussion of silvicultural systems under issue 6 below.

6. What silvicultural system or combination of systems will meet multiple use needs while providing an even flow, non-declining yield of timber?

Productive soils and a favorable climate provide the capability for the high production of quality sawtimber while maintaining a healthy environment for wildlife and several endangered species.

Even-aged management using both natural and artificial regeneration best meets multiple use needs while providing an even flow of timber. Clearcutting was determined to be the optimum harvest cutting method, except for situations where seed tree or shelterwood is more appropriate (FEIS, Appendix G).

The even-aged silvicultural system allows timber to be harvested at different ages. The mixture of harvest ages is chosen which best meets multiple use objectives. The even-aged silvicultural system combined with the use of a linear computer program provides for the multiple use objectives to be accomplished by using the highest production capabilities of the various resources that give the best combination of benefits at the least cost.

Some of the multiple use objectives which the Forest Plan will achieve are outlined below. This is basically a combination of the timber, wildlife, and recreation resources.

The timber sale program is the Forest's primary source of revenue. This resource contributes both directly and indirectly to the local community and to the economy. Aside from the direct effects on employment and supplies of wood products, it also has important influences on the production and use of other resources such as wildlife and recreation. Wildlife management to enhance habitat will be achieved by timber management practices. This is the most economical and broad scale method for wildlife managers to achieve wildlife goals (FEIS, pg G-33). Overall, the Forest Plan furnishes a high level of timber without significant detriment to recreation, fish and wildlife, and water quality.

One of the reasons Alternative 5 was selected as the Forest Plan was the comparatively high revenues generated and the high return, through the 25% payments, to the counties of Mississippi (FEIS, Table B-25). Alternative 5 shows an increased level of employment (FEIS, pg B-43) which is the second highest among the alternatives.

Planned timber sales in the Forest Plan provide an allowable sale quantity of 510 MMCF for the first 10-year period. Long-term sustained yield capacity (LTSYC) is 760 MMCF per decade. LTSYC will

be reached by the third decade. LSYC of the Forest Plan is the second highest of the six alternatives considered.

The wildlife resource is affected primarily by the type and amount of timber cutting that is done. Unlike many other resources the wildlife resource has many different outputs such as deer, turkey, squirrel, etc. If one species is emphasized the result may be a decrease in habitat for another. Early seral stage associates can be emphasized at the expense of late seral stage associates. To measure these relationships four outputs are analyzed: deer, an early vegetational stage associate; turkey, a mid to late vegetational stage associate; cavity nesters, a late vegetational stage associate; and wildlife and fish user days (WFUD) which is strongly correlated with deer and turkey production, the high demand species.

The habitats for deer, turkey, and cavity nesters were analyzed in terms of habitat capability index (HCI) which is carrying capacity. For deer and turkey there is a direct correlation between HCI and the number of animals that can be supported. For cavity nesters the correlation is between HCI and pairs of birds.

The Forest Plan provides for 5,360,000 wildlife and fish user days (WFUDS) during the first decade. The overall demand for hunting and fishing will exceed the supply about the middle of the first decade.

The Forest Plan provides more deer habitat than any alternative during the first decade, 298,740 HCI's. The demand for deer will exceed supply in the latter part of the first 10-year period of the plan.

The Forest Plan provides for 265,810 HCI's of turkey habitat during the first decade. The turkey habitat capability should exceed the population beyond the end of the first decade.

The Forest Plan provides for 730,090 HCI's of cavity nester habitat during the first decade. Demand for cavity nesters will not exceed habitat capability in the first decade.

Threatened, endangered, and sensitive species of both animals and plants and their management in relation to other resources are addressed in the Forest Plan by the inclusion of standards and guidelines that affect the management of all resources (Forest Plan, Chapter 4). The four federally listed endangered species are the eastern indigo snake, red-cockaded woodpecker, American alligator, and Mississippi sandhill crane. There are eight under consideration for threatened and endangered status: gopher tortoise and seven plant species (Forest Plan pgs 4-48 through 4-51). In addition, there are 30 sensitive animals and 27 sensitive plants (Forest Plan, Appendix I) listed with the State of Mississippi that are recognized as existing on, or near, the National Forests in Mississippi. The Forest Plan provides for habitat management that enhances the well-being and recovery of these species.

Late seral stages of pine and hardwood are provided in all alternatives, and at levels greater than current. Currently, there

are 46,105 acres of pine and 57,102 acres of hardwood 80 years or older. This is 9% of the total Forest area. The Forest Plan provides 106,387 acres of pine and 95,871 acres of hardwood 80 years or older at the end of the second decade.

Integrated pest management will be used as the strategy in managing pest populations to achieve resource management objectives.

Fire will continue to be prescribed at periodic intervals in pine stands. Fire will be applied to forest fuels, in a definite place, for a specific purpose, under specified weather conditions, to achieve resource management objectives. It is used in all pine forest types, but not hardwood. The major uses of prescribed fire are summarized in the Forest Plan (Forest Plan, pgs 4-40 through 4-41).

The overall management for goods and services gives consideration to the interrelations among plants, animals, soil, water, air, and other environmental factors. The multiple use-sustained yield management of the Forest for renewable resources does not impair the productivity of the land.

7. What standards and guidelines are needed to coordinate special uses, waste disposal, and mineral leases?

Special uses which are consistent with overall Forest Service objectives and cannot be serviced on private land will be allowed on suitable tracts of National Forest land. The National Forests in Mississippi will participate as needed with other federal agencies in evaluating the question of nuclear waste disposal. Requests for liquid or solid waste disposal sites will be evaluated carefully. The National Forests will maximize land available for energy-related mineral exploration consistent with the multiple use objectives in the Forest Plan. All alternatives contain the assumption that there will be minimal non-energy mineral development over the next 50 years because of lack of known mineral resources. If the mineral situation changes due to new mineral finds and/or national need, the Forest Plan will be amended to reflect the new conditions.

- C. Comments received from the public and elected officials. Of the responses received, 30 were from individuals; 23 from timber industry; four from other businesses; 11 from organizations; five from academic institutions; five from state agencies; and 11 from federal agencies. Appendix A of the FEIS documents the contacts made with other Federal, State, and local agencies. There are no known Indian tribes in the planning area; however, two bands of the Mississippi Choctaw Indians were contacted. Approximately 60 agencies were contacted during the planning process. To the best of our knowledge, the Forest Plan does not conflict with other plans and is compatible with them.

Substantive comments as summarized and the Forest Service responses are in Appendix I of the FEIS. All comments were considered. No new issues or concerns were raised. The major areas of concern were: (1) hardwood management in the riparian area; (2) uneven-aged versus

even-aged management of hardwood; (3) county returns and receipts to the treasury; (4) late seral stage; (5) rotations; (6) clearcutting; and (7) special areas. Not all comments were accommodated. Uneven-aged management was considered but the most valuable trees for timber and wildlife purposes require full sunlight in order to be successfully regenerated. The Forest cannot provide these species on a broad scale using uneven-aged management. Pesticides will continue to be used as part of the overall integrated pest management program. Pesticide use will be analyzed and modified for compatibility with the environment. Overall, the Forest Plan attempts to meet the combined concerns as well as, or better than, any other alternative.

- D. National and regional goals as expressed in the 1980 Resource Planning Act (RPA) Program and the Regional Guide for the South. The Forest Plan meets assigned 1980 RPA targets and goals for wildlife habitat improvement, sport fish, developed and dispersed recreation use, trail construction and reconstruction, water quality goals, fuel treatment and fuel break construction, and soil and water resource improvement. Timber goals are met for three decades; wildlife is met for one decade; and range is not met. Timber and wildlife goals are not met since they go beyond the biological capability of the Forest. Range forage is available at levels sufficient to meet permitted livestock targets should the demand develop.
- E. Economic effects of plan implementation. The NFMA requires the evaluation of many different factors including economic and social parameters. Present net value (PNV) is the present value of selected priced and nonpriced benefits minus the present value of all costs over the planning period. The PNV for the Forest Plan ranks as the second highest among the six alternatives (see Table 1) and captures 98% of the PNV of the highest alternative while providing a high level of outputs for all resources. This results in an increase of 9% over the projected PNV for current management. Chapter 2 of the FEIS provides a detailed comparison of PNV among alternatives.

The total income to the U.S. Treasury and returns to the counties are two other economic factors considered. Both are expected to follow the same trend when viewed over a 50-year period because returns to the counties generally are 25% of revenues to the United States. The Forest Plan produces increasing revenues to the Treasury and counties during the 50-year period.

The Forest Plan budget is 9% over current management in the first decade which is a reasonable increase in view of budget trends over the years and tight budgets forecast for the foreseeable future. The comparison of many of the economic parameters is treated in detail in the latter part of Chapter 2 of the FEIS, and they were considered in reaching this decision. Increases were primarily roads, trails, timber production, and stand treatment needed to support the overall multiple use program and cover inflation.

Chapter 2 of the Forest Plan contains a chart that allows a comparison of the demand for timber, wildlife and fish, recreation, water, and wilderness. Also included in this chart is the demand in relation to

the Forest's physical capability to supply, and the current and predicted use over time. The Forest Plan produces a reasonable, cost efficient mix of resource uses. Table 1 presents facts about these uses, costs, and benefits and they were considered in reaching this decision.

- F. Social-Economic Benefits. Appendix B of the FEIS contains a "Social and Economic Impact Analysis" detailing the social and economic effects of the six alternatives on the local economy. The Forest Plan is responsive because it contributes the most to community stability, employment, and the availability of the Forest to the public.

The Forest Plan provides the best mixture of market resources and amenity values. It therefore benefits a larger number of individuals and groups than the other five alternatives.

Of the state's 2,520,638 population, 1,150,023 (46%) live in the Forests' primary influence zones. Within these zones, whites (802,023) comprise 70% of the population and minorities (348,000) 30%. This compares with an overall state makeup of 64% white to 36% minorities. The statewide minority population increased in number from 1970 to 1980 (815,770 to 887,206), but declined in percent of the total population (36.8% to 35.2%) during the same period.

Per capita income is low both in Mississippi and in the Forests' primary influence zones. The state average is only \$6,200, and the average within the primary influence zones, based on counties, is only \$5,673 for 1979. The 1980 state-wide per capita income for whites is \$6,484 and \$2,833 for blacks.

The 1980 figures on unemployment show that the primary influence zones contain 44% of the state's unemployed; and the unemployment rate, 7.2%, is slightly lower than the state's rate of 7.5%. The unemployment rate for whites was 5.2%, while the rate for blacks was 12.7%. The Forest Plan will result in an increase of about 250 jobs over the projected current management in the first decade.

- G. Physical or biological effects. The resource use that has the most significant effect on other resources is the production of timber with accompanying road construction. The relationship between timber and other resources can be compatible and often complementary.

The basic soil resource determines the capacity to produce. The soil and its relationship with water and climate are major factors in determining the amount and kind of resource outputs.

The Forest Plan was based upon a mix of uses that optimized compatibility. For a complete review of the many facts that explore this level-of-use question, Chapter 2 of the FEIS (Comparison of Alternatives) and Chapter 2 of the Forest Plan (Supply and Demand Comparison) display the many opportunities that were analyzed prior to the decision. In the following section, Table 1 summarizes the expected levels of production for both timber and wildlife.

#### IV. ALTERNATIVES CONSIDERED IN DETAIL

All alternatives are described and compared in Chapter 2 of the FEIS. Table I displays the significant differences between the alternatives. All alternatives meet the U. S. Fish and Wildlife Service 1985 Biological Opinion for red-cockaded woodpecker, except for Alternative 2.

Alternative 1 emphasizes both dispersed and developed recreation in a more natural appearing forest with less roading.

Alternative 2 represents current management of the National Forests in Mississippi based on existing policies, standards, and guidelines. It meets the requirements for development of a "no-action" alternative (defined as the current program of management). However, this alternative does not meet the habitat requirements for red-cockaded woodpecker. Current management produces a moderate mixture of resource yields with no single resource managed intensively or emphasized to the detriment of another.

Alternative 3 is a modification of alternative 2 to meet the habitat requirements of the red-cockaded woodpecker.

Alternative 4 is a wildlife emphasis to achieve either the current level or increasing levels of deer, turkey, and cavity nester habitat capability simultaneously, while furnishing current levels of other resources.

Alternative 5 manages the pine working groups intensively for timber and deer; the hardwood working groups moderately for timber, and intensively for turkey and late seral stage wildlife, while furnishing current levels of other resources.

Alternative 6 is designed to achieve as many of the Forests' RPA targets as possible. It responds to and incorporates the RPA Program objectives displayed in the Regional Guide for the South.

TABLE 1 PROJECTED RESOURCE YIELDS, ACTIVITIES OR BENEFITS WITH SIGNIFICANT DIFFERENCES BETWEEN ALTERNATIVES

Resource/Benefit	Unit of Measure	Alternatives					
		1	2	3	4	5	6
<b>TIMBER</b>							
LTSYC 4/	MMCF/Decade	430	760	760	610	760	790
ASQ 5/	Total MMCF 2/	1970	3110	3090	2640	3510	3620
Acres Regener.	M Acres 2/	635	742	740	565	901	970
Fuelwood Harv.	Total MMCF 2/	510	510	500	420	570	630
<b>WILDLIFE</b>							
Deer Habitat	M HCI 2/	1532	1528	1534	1475	1576	1562
Turkey Habitat	M HCI 2/	1290	1350	1350	1416	1289	1236
Cavity Nester Habitat	M HCI 2/	3412	3375	3391	3704	3179	3130
Wildlife and Fish User Days	M WFUDs 2/	27520	26710	26850	26320	27020	26650
<b>LATE SERAL STAGE (80 years &amp; older)</b>							
<b>PINE</b>							
Current		46	46	46	46	46	46
End 2nd Period		82	118	128	147	106	112
<b>HARDWOOD</b>							
Current		57	57	57	57	57	57
End 2nd Period		96	97	96	124	96	70
SPECIAL AREAS 3/	ACRES	3337	3337	3337	3337	3337	3337
PRESENT NET VALUE	MM\$ 2/	1474	1977	1956	1704	2131	2173
RETURNS TO U.S.	MM\$ 2/	3070	4520	4450	3850	4720	4870
RETURNS TO STATE	MM\$ 2/	767	1130	1112	962	1180	1217
TOTAL EMPLOYMENT 1/	Jobs	1219	1216	1209	1200	1464	1482
TOTAL INCOME 1/	MM\$/year	20.949	20.908	20.777	20.630	25.156	25.466

1/ Change from 1977 (Base Year). Jobs are defined as the number of jobs available over the first decade.

2/ Total for the fifty year period.

3/ Acreage needed to protect, preserve or interpret unique scenic, archeological, historic, biological, or recreational qualities.

4/ Long-term Sustained Yield Capacity.

5/ Allowable Sale Quantity.

## V. IDENTIFICATION OF THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE AND COMPARISON WITH THE SELECTED ALTERNATIVE

The identification of the environmentally preferred alternative is based upon the effect on the physical and biological environment.

A detailed discussion of the environmental effects for each alternative is included in Chapter 4 of the FEIS.

Alternative 1 has been identified as the environmentally preferred alternative. It involves less disturbance to the physical and biological environment. Alternative 1 emphasizes non-market values such as aesthetics, primitive appearance, etc., plus developed recreation.

Although the Forest Plan has a greater overall effect on the environment than Alternative 1, it was selected because it provides high levels of needed public benefits that outweigh the environmental impacts. The Forest Plan better meets the laws governing National Forest management and the intent of Congress as expressed in recent appropriations. It also provides goods and services at a level closer to that indicated in the Regional Guide. The Forest Plan provides greater diversity, more habitat for deer, but less habitat for turkey and cavity nesters. Diversity is improved by having better distribution of age classes and more hardwood acreage.

The Forest Plan provides greater timber harvest to meet the local demands, better access for forest users, increased availability of fuelwood, and more prescribed burning. Hence, there is less chance for catastrophic fires, and young thrifty forests are less susceptible to insect and disease attacks. The Forest Plan will produce additional forage for cattle as a result of increased timber production rather than through direct expenditures to improve the range.

From an economic and social standpoint, the Forest Plan will provide much more employment and income in the local economy. The 25% returns to the counties would be about 55% higher under the Forest Plan and are needed to support local schools and roads. Returns to the United States Treasury would also be about 30% higher than under current management.

## VI. COMPARISON OF THE SELECTED ALTERNATIVE TO ALTERNATIVES WITH GREATER PRESENT NET VALUES

Alternative 6 is the only alternative with a greater present net value than the Forest Plan.

Alternative 6 has the highest present net value of all alternatives. It also provides the highest long-term sustained timber yield (790 MMCF per decade) and allowable timber sale quantity. In the first decade it favors habitat for early successional species (represented by deer) more than the Forest Plan, but over the entire 50-year planning period it projects somewhat less habitat for the early successional species and it has much less habitat for late successional species (represented by cavity nesters) than the Forest Plan. It projects slightly less habitat for species requiring mid-seral stages (represented by turkey). It provides for the largest increase in employment and income for the local economy, the highest 25% returns to the county governments, and the highest returns to the U. S. Treasury. The present net value for this alternative discounted over 150 years is \$2,173,000,000.

The Forest Plan (Alternative 5) provides a high long-term sustained yield of timber (760 MMCF per decade), and allowable sale quantity that is only about 30 MMCF lower than Alternative 6 per decade. It provides more diverse habitats and a significant increase in the hardwood component with only slightly longer rotations. Over the 50-year planning period, the projected habitat for wildlife requiring early, mid, and late seral stages is greater in all cases. Wildlife recreation visitor days are projected to be greater than Alternative 6. The increase in employment and income for the local economy, the 25% returns to the county, and returns to the treasury are second to Alternative 6. The present net value for the Forest Plan discounted over 150 years is \$2,131,000,000.

Alternative 6 would increase timber production with less emphasis on recreation, wildlife, water, soil and air quality. Thus, it is not as fully responsive to public concerns on multiple use management as the Forest Plan.

## VII. SPECIAL AREAS OR AREAS OF SIGNIFICANT PUBLIC INTEREST

In 1984 Congress designated Leaf and Black Creek as wilderness areas and returned Sandy Creek to multiple-use management. This legislation disposed of all RARE II inventoried areas. The Black Creek Wild and Scenic River proposal is still in the study process. The special areas in Mississippi were treated the same in all alternatives. These are listed under each management area in the Forest Plan.

## VIII. MITIGATION AND MONITORING

Management of the National Forests in Mississippi will be guided by the requirements contained in the Forest Direction and Management Area Prescriptions found in Chapter 4 of the Forest Plan. These management requirements were developed through an interdisciplinary team effort and

contain measures necessary to mitigate or eliminate long-term adverse effects. Unavoidable adverse environmental effects from timber harvesting, prescribed burning, road construction, and other management activities will be temporary and will involve only a small percentage of the Forest at any one time. To the best of my knowledge, all practical mitigating measures have been adopted and are included in Chapter 4 of the Forest Plan. These mitigating measures include standards and guidelines designed to (1) protect riparian areas, flood plains, and wetlands; (2) minimize adverse effects on visual quality; (3) minimize the loss of soil and maintain site productivity and water quality; (4) protect cultural resources; (5) maintain viable populations of native vertebrate and plant species; (6) recover the red-cockaded woodpecker (a federally classified endangered species); and (7) provide for the proper use of pesticides.

Chapter 5 of the Forest Plan contains the monitoring program for the National Forests in Mississippi. The purpose of the monitoring program is twofold: (1) to evaluate whether Forest goals and objectives are being realized, and (2) to determine how closely management requirements have been followed. The results of monitoring and evaluation will be used to measure the progress of the Forest Plan's implementation. These results will also help to determine when Forest Plan amendments or revisions are needed.

## IX. IMPLEMENTATION

The Forest Plan will not be implemented sooner than 30 days after the Notice of Availability of the Forest Plan, FEIS, and Record of Decision appear in the Federal Register. The time needed to bring activities into compliance with the Forest Plan will vary, depending upon the type of project. Compliance with the Forest Plan will be completed as soon as possible.

Existing projects, as well as contractual obligations, will continue as originally planned and be brought into compliance with the Forest Plan as soon as practicable. During implementation, however, the following minimum requirements, subject to valid existing rights, will be met. The Forest Supervisor will assure that (1) annual program proposals and projects are consistent with the Forest Plan; (2) program budget proposals and objectives are consistent with management direction specified in the Forest Plan; and (3) implementation is in compliance with the Regional Guide and NFMA Implementing Procedures: 36 CFR 219.10 (e), 36 CFR 219.11 (d) and 36 CFR 219.27.

It is important to note that all proposals in the plan can be accomplished from physical, biological, economic and legal perspectives. However, it is not certain they will be accomplished. Outputs proposed by the plan are projections. The plan is implemented by way of various site-specific projects, such as the building of a road, development of a campground, or the sale of timber. If the budget is changed in any given year, the projects scheduled for that year may have to be rescheduled; however, the goals and land-activity assignments described in the plan will not change unless the plan is revised. If the budget is changed significantly over a

period of several years, the plan itself may have to be amended (36 CFR 219.10(e)).

During implementation, as various projects are designed, more site-specific environmental analyses will be performed with NEPA documentation as appropriate. Any resulting documents will be tiered to the Final Environmental Impact Statement for this plan, pursuant to 40 CFR 1508.28 (1984).

Proposals to use National Forest System lands will be reviewed for consistency with the Forest Plan. Management direction, contained in Chapter 4 of the Forest Plan, will be used to analyze any proposal involving the use of National Forest System lands. Permits, contracts, and other instruments for occupancy and use of these lands must be consistent with the management direction in Chapter 4 of the Forest Plan. This is required by the National Forest Management Act of 1976, 16 USC 1604 (1), and the NFMA Implementing Procedures, 36 CFR 219.10 (e).

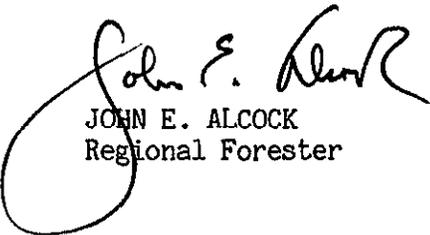
#### X. RIGHT TO ADMINISTRATIVE APPEAL

This decision is subject to appeal pursuant to 36 CFR 211.18. Notice of appeal must be in writing and submitted to:

John E. Alcock, Regional Forester  
Southern Region  
1720 Peachtree Road, N.W.  
Atlanta, Georgia 30367

A notice of appeal must be submitted within 45 days from the date of this decision. A statement of reasons to support the appeal and any request for an oral presentation must be filed within the 45-day period for filing a notice of appeal.

In accordance with 40 CFR 1506.10 (b) (2) and 36 CFR 211.18 (c) (3), the appeal period for the Forest Plan and FEIS cannot expire prior to thirty days after publication by the Environmental Protection Agency of the Notice of Availability of the FEIS.

  
JOHN E. ALCOCK  
Regional Forester

Date: 