

## RECORD OF DECISION

### USDA, FOREST SERVICE

Final Environmental Impact Statement  
Croatan and Uwharrie National Forests  
Land and Resource Management Plan (1986-2000)  
Carteret, Craven, Davidson, Jones, Montgomery, and Randolph Counties,  
North Carolina

#### I. INTRODUCTION

This record of decision documents approval of the Land and Resource Management Plan (Forest Plan) for the Croatan and Uwharrie National Forests for the next 10 to 15 years. It also presents reasons for selecting the alternative to be the Forest Plan for the 157,000-acre Croatan National Forest in the Coastal Plain and the 46,700-acre Uwharrie National Forest in the Piedmont of North Carolina. This decision considered estimated environmental, social, and economic consequences of eight alternatives, described in the Environmental Impact Statement (EIS).

The EIS and Forest Plan were developed under the National Forest Management Act (NFMA) and its implementing regulations (36 CFR 219). The EIS meets the requirements of the National Environmental Policy Act of 1969 (NEPA) and Council on Environmental Quality (CEQ) regulations (40 CFR 1500).

Land and resource management planning began with the identification of issues and concerns through public contacts with local civic and community organizations; individuals; local, State, and Federal agencies; private industries; adjacent landowners; various interest groups; and Forest Service employees. After public comments and management concerns were gathered and analyzed, eight major issues were identified.

Alternative management strategies, or possible Forest Plans, were then formulated to provide different ways to respond to the major issues. These issues were considered throughout the subsequent planning process.

The Forest Plan is part of the framework for long-range resources planning established by the Forest and Rangeland Renewable Resources Planning Act (RPA). The Forest Plan establishes general direction for 10 to 15 years, and must be revised at least every 15 years [36 CFR 219.10 (g)]. It replaces all previous resource management plans. Subject to valid existing rights, all permits, contracts and other instruments for the use and occupancy of National Forest System lands will be in conformance with the Forest Plan at the earliest possible date.

The Forest Plan provides management direction to produce goods, services, and uses in a way that maximizes long-term public benefits. It is not a plan for the day-to-day administrative activities of the Forest Service; it does not address such things as personnel matters, vehicle and equipment management, or organizational structure. The Forest Plan emphasizes the application of various management practices to achieve multiple-use goals and objectives in an economically efficient and environmentally sound manner. It does not emphasize site-specific decisions or specific resource outputs.

The Forest Plan may be amended or revised, if necessary, to respond to changing needs and opportunities, including resource management innovations and information developed during the monitoring of the Forest Plan. If a proposed amendment is significant, the Forest Plan will be revised through the same procedure used in the development and approval of the original Forest Plan. If an amendment is not significant, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

## II. DECISION

It is my decision to approve the Forest Plan (referred to as the Preferred Alternative E) that accompanies the Final EIS for the management of the Croatan and Uwharrie National Forests. The Preferred Alternative is a modification of the "Preferred Alternative" identified in the Draft Environmental Impact Statement (DEIS) and Proposed Land and Resource Management Plan (Proposed Forest Plan). The alternative was modified to respond to concerns raised during public review of the DEIS and Proposed Forest Plan.

I have made this decision after careful review of the public concerns about the DEIS and Proposed Forest Plan and consideration of the physical, biological, economic and social consequences of the alternatives disclosed in the EIS.

Highlights of significant decisions in the Forest Plan are:

The 95,000-acre pocosin ecosystem on the Croatan National Forest will be protected; no surface water management (drainage) or peat mining will be allowed.

An additional 28,000 acres of land will be provided for nonmotorized recreation use.

Developed recreation areas will be rehabilitated and new areas such as trailheads, water access points, cultural resource interpretation areas, and horse staging areas will be provided to support dispersed recreation opportunities.

Off-road vehicle (ORV) use will be allowed on open system roads and designated routes. No cross-country ORV travel will be permitted but 20 miles of ORV route will be added to the existing 15 miles of route by the year 2000.

Essential habitat for threatened and endangered species, including the red-cockaded woodpecker, American alligator, and bald eagle, will continue to be provided. Habitat management for the red-cockaded woodpecker on the Croatan National Forest will meet stipulations contained in the USDI Fish and Wildlife Service Biological Opinion of February 1985. Nesting and foraging habitat for this species will be increased by lengthening rotation ages to 80 years for loblolly pine and 100 years for longleaf pine. Timber harvests will result in more evenly distributed age classes of timber stands. The objective is to increase the red-cockaded woodpecker population from the existing 59 colonies to 90 colonies. Biological evaluations for the effects of management proposals on the American alligator and bald eagle will be made in conjunction with each specific project proposal.

Fish and wildlife habitat will be managed to maintain viable populations of existing native vertebrate species. Long-term viability of bear and turkey on the Croatan National Forest is of concern due to the relatively small acreage of the Forest and current hunting practices. These populations will be monitored in cooperation with the North Carolina Wildlife Resources Commission. Habitat diversity will be enhanced through variable types and quantities of habitat ranging from young vegetation to mature forests. Standards in Chapter III of the Forest Plan specify retention of well-dispersed groups of mast producing trees, snags, dens, and browse in all areas. Old-growth conditions will predominate in Wilderness and lands classified as unsuitable for timber production. Hardwood, pond pine, and longleaf pine acreage will remain unchanged.

Timber harvest volumes will average 9,130,000 board feet per year. Land classified as suitable for timber production will decrease from 132,600 acres at present to 68,300 acres, primarily because portions of the pocosin and lands growing hardwoods on the Croatan National Forest are presently classified as suitable for timber production and will be classified as unsuitable for timber production in the Forest Plan.

For the 33% of the Forests' land where timber production is an objective, even-aged management has been selected as the most appropriate silvicultural system (Appendix E, EIS). Clearcutting of approximately 873 acres per year is the optimum method of final harvest for meeting objectives and requirements of Forest planning. Where more appropriate, shelterwood harvest cutting methods will be used on about 92 acres per year. Approximately 18% of the allowable sale quantity will come from thinning about 560 acres per year.

Land acquisition, to consolidate ownership and to enhance special areas, will increase from the present 500 acres per year to 1710 acres per year.

The Forest Plan establishes standards to protect streams and adjacent riparian areas.

The Forest Plan does not:

Maximize any single resource use or public service;

Propose the use of any resource beyond the biological capability of the land to support that use; or

Propose management of any resource based solely on values in the market place.

### III. RATIONALE FOR DECISION

My decision to select the Preferred Alternative (Alternative E in the EIS) as the Forest Plan is based on the high level of diverse benefits and favorable response to public issues provided in the Preferred Alternative as compared to other alternatives. A number of considerations have a bearing on my decision regarding multiple uses of the Croatan and Uwharrie National Forests. No single factor or individual consideration has predominated in my decision. Instead, it was the consideration of many factors and their relationships that led to this decision. The following discussion summarizes important factors considered in my decision.

- (1) Laws, federal regulations, executive orders, and policy. The Forest Plan, to the best of my knowledge, complies with all legal requirements and policies applicable to the Croatan and Uwharrie National Forests.
- (2) Issues concerning management of the National Forests. The early identification of issues affecting the National Forests is consistent with well-reasoned management of public lands. Regulations to implement NFMA require that one or more alternatives in the EIS for the Forest Plan address each of the major issues. The response of each alternative to the eight major issues was a major consideration in the selection of the Preferred Alternative (EIS, Chapter II). The treatment of each issue is discussed in Chapter II of the Forest Plan. The reasons for choosing the Preferred Alternative as related to each issue are discussed below.

#### Issue 1. Transportation (Road Construction and Management)

The Forest Plan includes a modest level of new road construction (4.8 miles of new local road annually). The Preferred Alternative contains some road construction because roads are needed to provide access for desirable management activities such as fire suppression, timber harvest, timber stand improvement, and wildlife habitat improvement. However, to manage the Forests as economically as possible, and to provide remote areas for recreation use, relatively few miles of road will be built in relation to the mileage of road construction in most other alternatives. These new roads will facilitate a better distribution of timber harvests and provide a more even distribution of tree age classes. This more even distribution of tree ages will provide increased and improved habitat for wildlife, especially for the red-cockaded woodpecker on the Croatan National Forest.

Most newly constructed roads will be closed to public vehicles. More new roads will be closed than in most other alternatives because the emphasis in the Preferred Alternative is on reducing possible human disturbance to wildlife, potential adverse effects on soil erosion, and road maintenance costs. Most existing roads will not be closed, however, because of the adverse social effects of closing roads that traditionally have been used by the public for motorized travel.

## Issue 2. Land Acquisition (Purchase and Exchange)

The acreage of acquired land in the Preferred Alternative is greater than in any other alternative. Public and private lands are intermixed within the boundaries of the Uwharrie National Forest with only 21% of the land in public ownership. One thousand sixty acres of land will be acquired each year for this Forest to increase wildlife habitat, enhance the Birkhead Mountains Wilderness and special areas, and increase efficiency of management. About 51% of the land within the boundaries of the Croatan National Forest is in public ownership. Approximately 650 acres will be acquired each year for this Forest to enhance Wilderness and special areas identified by the North Carolina Natural Heritage Program and improve management efficiency. Other alternatives would not provide the increase in consolidation of public land sought by the public.

## Issue 3. Pocosins

None of the approximately 95,000 acres of the Croatan National Forest that are in upland marshes or "pocosin" will be drained for timber production and no peat mining will occur. This decision was made because the peat mining, and drainage for agriculture and timber production, that take place on privately owned pocosin have resulted in a rapid shrinking of the acreage of natural pocosin in North Carolina. Public desires and scientific interest indicate that maintaining the pocosins of the Croatan National Forest in their natural condition would provide greater benefits than would result from timber and peat production. Most other alternatives would permit consideration of peat mining and some also include drainage for timber production.

## Issue 4. Wildlife and Fish Habitat

The Preferred Alternative was chosen because it will provide more improved habitat for many species of wildlife and fish than other alternatives. The acreage of direct wildlife habitat improvement, such as prescribed burning for browse production, is highest in the Preferred Alternative. The acreage of mature forest will be increased, particularly on the Croatan National Forest to improve habitat for black bear, wild turkey, and raccoon. Closing roads after management activities are completed will also benefit bear and turkey by reducing human disturbance. Although closing most existing roads would have a greater benefit on these animals, the decision is to keep most existing roads open to allow ongoing motorized use. On the Uwharrie National Forest, timber harvest and reforestation will benefit animals favored by younger stages of plant development. Areas of older trees will be retained to provide habitat for animals such as wild turkey and raccoon. The Preferred Alternative was also chosen because it maintains fish habitat by not allowing peat mining or drainage for timber production on the Croatan National Forest. Fish habitat is also maintained through the standards for management activities described in Chapter III of the Forest Plan.

Special protection for threatened, endangered, and sensitive plant and animal species is ensured in all alternatives as described in Appendix A of the Forest Plan. In the Preferred Alternative, the red-cockaded woodpecker is given primary consideration. Although all alternatives provide special protection for the woodpecker, the Preferred Alternative emphasizes management for the species. Because the red-cockaded woodpecker requires mature pines for nest excavation, minimum timber rotations of 80 years for loblolly pine and 100 years for longleaf pine on the Croatan National Forest will aid population increases.

#### Issue 5. Vegetation

All threatened, endangered, and sensitive plants will be protected in all alternatives as described in Appendix A of the Forest Plan. The Preferred Alternative includes a high level of prescribed burning on the Croatan which will benefit Venus' flytrap and other insect-eating plants. The unique characteristics of special-interest areas will be maintained through the practices and standards described in Chapter III of the Forest Plan. Additionally, nine sites on the Croatan and seven on the Uwharrie will be registered with the North Carolina Natural Heritage Program as requested by the majority of public comments.

The Preferred Alternative includes a modest level of timber production in comparison to most other alternatives. Because the Forests provide a relatively small proportion of the timber production in their areas, the higher levels of timber production included in other alternatives is not needed to support local employment in timber-related industries. Alternatives providing larger timber production were not chosen because they also included greater road construction and less protection of the pocosin ecosystem. The Preferred Alternative provides an adequate amount of timber to support the local economies while providing other public benefits from the Forests.

#### Issue 6. Recreation

To respond to the demands of increasing numbers of recreation users, the Preferred Alternative provides for a variety of recreation experiences. However, the Preferred Alternative provides for the least motorized use of all alternatives because most newly constructed roads will be closed. Alternatives emphasizing more motorized use are not selected for the Forest Plan because of possible human disturbance to wildlife and decreased opportunities for nonmotorized use. Opportunities for nonmotorized use are emphasized in the Preferred Alternative to meet public desires and because such use can be provided with little cost and minimal adverse environmental effects. Developed recreation facilities, such as lake and stream access areas, trailheads, cultural resource sites, and horse staging areas, will be provided to meet public desires and improve user experience and environmental quality.

### Issue 7. Off-Road Vehicles (ORV's)

Opportunities for moderate levels of ORV use are provided in the Preferred Alternative to meet public desires and complement ORV use on private lands. To reduce environmental damage, disturbance of wildlife, and user conflicts, the Preferred Alternative calls for the Forests to be closed to cross-country ORV travel. To provide opportunities for off-road vehicle travel, use will be permitted and encouraged on designated routes. A moderate level of ORV opportunities is chosen to reduce conflict with other benefits of the Forests such as nonmotorized recreation use and protection of wildlife from possible human disturbance. In addition to open roads, approximately 10 miles of ORV route will be designated on the Croatan and 25 miles on the Uwharrie.

### Issue 8. Fire Management

Because uncontrolled wildfire is a major threat to the Forests, the Preferred Alternative calls for a high level of fire management, particularly prescribed burning to prevent or lessen the severity of wildfires. The Preferred Alternative also includes the largest number of acres of prescribed burning for wildlife habitat of all alternatives. Prescribed burning is a cost effective method for producing habitat and food for animals. Other alternatives provide habitat and food supplies through greater acreages of timber harvest.

- (3) Comments received from the public and elected officials. The National Forests in North Carolina received 303 letters from individuals, organizations, and agencies concerning the DEIS and Proposed Forest Plan. The primary concerns were protection of the pocosin ecosystem on the Croatan, habitat for the red-cockaded woodpecker and other animals and plants, land acquisition for consolidation and special areas, timber harvest levels, road construction and management, and paving Catfish Lake Road.

A summary of comments and the Forest Service's response have been included in Chapter VI of the EIS.

These public comments resulted in several changes in the Forest Plan. Most of these changes are discussed in the highlights of significant decisions (Section II).

The Federal Highway Administration is now studying the need and environmental consequences of paving Catfish Lake Road. Public comments regarding the need and possible effects of paving the road have been forwarded for inclusion in the environmental analysis of the proposed project.

- (4) Comments of Federal and State Agencies. Chapter VI of the EIS documents the contacts made with other Federal, State and local agencies. To the best of my knowledge, the Forest Plan is compatible with plans of these agencies.

Four Federal and three State agencies responded to the DEIS and Proposed Forest Plan. These comments are included in Chapter VI of the EIS.

The USDI Fish and Wildlife Service expressed concern regarding the effects of surface water management (altered drainage) and peat mining on the Croatan. As noted above, drainage of the pocosin and peat mining will not be permitted in the Forest Plan. Concern was also expressed about the selection of management indicator species (MIS); additional MIS have been added to address this concern. The effects of implementing the Forest Plan on the MIS will be monitored. An additional concern was the combination of information for the Croatan and Uwharrie; to address this concern, information has been provided separately for the two Forests in the Forest Plan and EIS.

The North Carolina Department of Natural Resources and Community Development (NCDNRCD) was concerned about some of the same issues as the USDI Fish and Wildlife Service. In addition, the NCDNRCD emphasized the unique character of the National Forests in relation to private land surrounding them. This concern has been taken into account by emphasizing older stages of vegetation intermixed with younger plants on private and public lands.

Modifications made in the Forest Plan as a result of these comments are discussed further in the Forest Service's responses to comments in Chapter VI, EIS.

- (5) National and regional goals as expressed in the 1980 Resource Planning Act (RPA) Program and the Regional Guide for the South. Alternative B was prepared in response to the targets and goals assigned to the Croatan and Uwharrie National Forests in the Regional Guide for the South. Though this alternative was not selected, management under the Forest Plan will meet or exceed 1980 RPA targets for developed and dispersed recreation use, trail construction and reconstruction, reforestation and timber stand improvement acres, water quality goals, fire management effectiveness, land purchase and exchange, property boundary lines, and arterial and collector road construction and reconstruction.

The Forest Plan does not meet all assigned RPA Program goals and objectives. Goals in programmed sales of timber offered are not met because lower levels of timber harvest will result from classification of the pocosin ecosystem and areas growing hardwoods on the Croatan National Forest as unsuitable for timber production. Objectives in local road construction are not met because these are tied to levels of timber harvest greater than in the Preferred Alternative. Soil and water resource improvement targets displayed in the Preferred Alternative will provide adequately for the needs of the Forests. Acreages of fuel breaks and fuel treatment burning assigned by the RPA Program are not met; the Forest Plan includes the maximum number of such acres that can be provided within burning guidelines as discussed in Chapter IV of the EIS. The number of operating plans for minerals leases and permits assigned in the RPA Program exceeds the number projected in the Preferred Alternative.

- (6) Economic effects of plan implementation. NFMA requires the evaluation of many different aspects of alternatives, including economic and social factors. Present net value (PNV) is one indicator of economic effects. It represents the present value of priced benefits, both with market and assigned values, less the present value of all costs over a 150-year analysis period. The PNV for the Preferred Alternative ranks as the second lowest among the 8 alternatives. A detailed comparison of PNV among alternatives is shown in Chapter II of the EIS, and reasons for choosing the Preferred Alternative rather than alternatives with higher PNV are discussed in Section VI of this Record of Decision.

Returns to the U.S. Treasury, returns to the counties, and net cash flow for the 15-year period from 1986 to 2000, were the other economic factors considered. The Forest Plan ranks second lowest among the 8 alternatives on returns to the U.S. Treasury and returns to counties but provides benefits at a relatively low cost as indicated by the net cash flow. A comparison of these economic factors among alternatives is displayed in Chapter II of the EIS.

The annual budget for the Forest Plan is somewhat greater than the present budget but is almost identical to the "No Action" Alternative (Alternative A). The difference between the Forest Plan budget and the present budget is primarily due to increases in expenditures for fire management, wildlife habitat improvement, and road construction to achieve a better distribution of timber harvests. The latter part of Chapter II, EIS, contains a comparison of the economic factors considered in reaching the decision to implement the Forest Plan based on the Preferred Alternative. Appendix C of the Forest Plan compares the Forests' physical capability to produce goods and services with the present and estimated future demand for those resources or uses. This information was considered in reaching this decision.

- (7) Socio-Economic Benefits. Chapter IV of the EIS details the socio-economic effects of implementing all eight alternatives. The socio-economic setting of the affected counties of Carteret, Craven, Davidson, Jones, Montgomery, and Randolph is described in Chapter III of the EIS. None of the alternatives would significantly increase employment, income, or population as detailed in Tables B-8 and B-10 of Appendix B, EIS. These projected effects were considered in reaching my decision.
- (8) Physical and Biological Effects. The physical and biological effects of all alternatives are disclosed in Chapter IV of the EIS and are summarized in Chapter II of that document. The resource use that has the most significant and far reaching effects on other resources is the production of timber with its accompanying roads. Generally, the effects of the Forest Plan include short-term effects in areas disturbed by timber harvesting and road building with the relative permanence of road systems constituting the most significant long-term effect. There will be no significant adverse effects on threatened or endangered species of animals and plants. Mitigation measures ensure no significant effects on wetlands and floodplains. Increasing ages of trees will produce beneficial effects for some wildlife species, such as bear and red-cockaded woodpecker on the Croatan National Forest, but will increase the susceptibility of trees to insect and disease attack. Wildlife habitat will be maintained or improved. Fisheries habitat, water quality, and soil productivity will be protected through measures detailed in Chapter III of the Forest Plan.

#### IV. ALTERNATIVES CONSIDERED IN DETAIL

In addition to the Forest Plan (Preferred Alternative), there were 7 other alternatives considered in detail. All alternatives are described and compared in Chapter II of the EIS.

Alternative A (Current) is designed to achieve a future condition based on existing policies, current program direction, and current trends. This alternative is the "no action" alternative required by NFMA and NEPA Regulations.

Alternative B is designed to achieve the Forests' share of the 1980 RPA Program as expressed in the President's Revised Statement of Policy of March 30, 1981, and the Regional Guide for the South.

Alternative C is designed to achieve the maximum present net value from the production of all resources of the Forests that have a market value or to which a value can be assigned.

Alternative D is designed to achieve a substantial increase in timber harvest levels. Road construction is commensurate with increases in timber harvest.

Alternative E (Preferred) was originally designed to achieve a high level of diversity of plant and animal communities and species on the Forests. It is a modification of the Preferred Alternative in the Draft EIS based on public response to the Draft.

Alternative F is designed to achieve the optimum variety of recreational uses on the Forests. Motorized and developed recreation opportunities are emphasized.

Alternative G is designed to achieve a low level of landscape modification and an increase in nonmotorized recreation opportunities.

Alternative H is designed to provide a high level of access throughout the Forests for motorized recreation use.

Table 1 displays the significant differences among the various alternatives. Data are summarized from the more complete comparison in Chapter II of the EIS.

Table 1. Outputs, Activities, and Benefits With Significant Differences Among Alternatives.

Output/Activity	Alternative							
	A CURRENT	B	C	D	E PREFERRED	F	G	H
<b>RECREATION</b>								
Developed Use .....	Thousand Recreation Visitor Days Per Year.....							
1986-2000	130	82	162	133	130	162	130	162
Dispersed Use (Includes Wild- life and Fish) .....	Thousand Recreation Visitor Days Per Year.....							
1986-2000	714	746	749	748	628	714	630	717
Off-Road Vehicle Travel Routes .....	Total Miles Constructed by 2000.....							
By 2000	20	45	55	40	35	40	20	75
<b>LANDS</b>								
Land Purchase .....	Acres Per Year.....							
1986-2000	170	330	130	140	1150	120	120	130
Land Acquired Through Exchange .....	Acres Per Year.....							
1986-2000	280	500	220	240	560	235	185	180
<b>WILDLIFE AND FISH</b>								
Wildlife Habitat Improvement .....	Acres Per Year.....							
1986-2000	2170	2340	2830	2830	8200	2820	2270	2160
Diversity <sup>1/</sup> .....	Index.....							
1986-2000	1.06	1.16	1.19	.85	1.43	1.09	1.47	.75

<sup>1/</sup>The diversity index compares each alternative to the present situation on the following elements: hard mast produced; early successional habitat; old-growth; and freedom from human disturbance. Higher numbers indicate greater diversity.

Table 1. Outputs, Activities, and Benefits With Significant Differences Among Alternatives (cont.).

Output/Activity	Alternative							
	A CURRENT	B	C	D	E PREFERRED	F	G	H
<b>TIMBER</b>								
Altered Drainage .....	Acres Per Year of Surface Water Management for Timber Production.....							
1986-2000	0	305	400	0	0	0	0	3
Allowable Sale Quantity.....	Thousand Board Feet Per Year.....							
1986-2000	11560	16825	19775	21420	9130	13905	8370	16565
Clearcutting Harvest.....	Acres Per Year Harvested by Clearcutting.....							
1986-2000	1148	1822	1599	2169	873	1255	688	991
Shelterwood Harvest.....	Acres Per Year Harvested by Shelterwood.....							
1986-2000	0	853	1261	103	92	341	317	909
<b>FIRE</b>								
Prescribed Burning .....	Acres Per Year.....							
For Fire Prevention								
1986-2000	5000	14000	8000	8300	8000	8000	8000	8000
For Wildlife								
1986-2000	2127	2293	2773	2773	8035	2763	2225	2117
For Site Preparation:								
1986-2000	1051	1712	1571	2056	792	1201	645	983
<b>ROADS</b>								
Local Road Construction.....	Miles Per Year.....							
1986-2000	4.6	6.2	7.4	6.8	4.8	6.3	4.9	6.1
Local Road Management.....	Miles Open to Public Vehicular Use.....							
By 2000	165	194	171	172	165	155	113	215

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

The identification of the environmentally preferred alternative is based upon the effects on the physical and biological environment. A detailed discussion of the environmental effects of the alternatives is included in Chapter IV of the EIS.

Alternative G has been identified as the environmentally preferred alternative. Of all the alternatives, it would result in the lowest amounts of potential erosion and sedimentation. It provides the lowest mileage of local roads open to public motorized use. It would provide the greatest diversity of wildlife, particularly on the Uwharrie, due to the mileage of closed roads and acres of mature forest with old trees intermixed with younger vegetation. Scenic qualities and opportunities for nonmotorized recreation would be emphasized in Alternative G.

The Forest Plan will result in slightly greater effects on the physical and biological environment than would Alternative G. Visual quality will be slightly decreased. Potential for soil erosion, sedimentation, and cultural resource disturbance will be greater, primarily due to increased levels of prescribed burning for habitat improvement. Wildlife diversity will be somewhat less on the Uwharrie but greater on the Croatan than it would be in Alternative G. There will be fewer acres of mature forest habitat on the Uwharrie than in Alternative G. Pocosin protection on the Croatan will be equal to that of the environmentally preferred alternative, Alternative G.

The Forest Plan was selected over the environmentally preferred alternative for several reasons. First, the Forest Plan is only slightly less environmentally preferable than Alternative G. Secondly, the Forest Plan provides the best habitat conditions for the red-cockaded woodpecker on the Croatan. Overall, it best provides for all public benefits and best meets public concerns as expressed in comments on the DEIS and Proposed Forest Plan. A complete discussion and comparison of environmental, economic, and social effects is shown for all alternatives in Chapters II and IV of the EIS.

## VI. COMPARISON OF THE PREFERRED ALTERNATIVE TO ALTERNATIVES WITH GREATER PRESENT NET VALUES (PNV'S)

Alternatives C, D, B, H, F, and A (listed in order of decreasing PNV) have greater PNV than the Preferred Alternative (Alternative E). The Preferred Alternative provides sizable gains over Alternative C in levels of visual quality, protection of the pocosin ecosystem on the Croatan, opportunities for nonmotorized recreation, and land acquisition for public ownership and enjoyment. It provides high quality habitat for animals and fish at the expense of public vehicular access. Returns to the U. S. Treasury and North Carolina, employment, and timber production are less in the Preferred Alternative than in Alternative C.

The Preferred Alternative is compared to other alternatives in Tables II-2 through II-6 in Chapter II of the EIS. In comparison to alternatives with greater PNV (Alternatives A, B, C, D, F, and H), the Preferred Alternative creates more net public benefits. Some of these net public benefits are:

Similar cost for managing the Forests (an annual average of \$3,072,000 compared to \$3,078,000 for Alternative A - Current);

Less road construction than any alternatives other than Alternative A (an annual average of 4.8 miles compared to 4.6 miles for Alternative A and 7.4 miles for Alternative C);

Greater protection of the pocosin on the Croatan (the Preferred Alternative provides protection for 95,000 acres of pocosin by not permitting surface water management or peat mining as compared to Alternative C which provides protection for 30,000 acres and allows surface water management on an average of 380 acres per year and consideration of peat mining on 5,500 acres of pocosin);

Lower potential soil erosion than any alternatives other than Alternative F (4,315 tons per year compared to 4,261 tons for Alternative F and 7,128 for Alternative C);

Lower potential yields of sediment than any alternatives other than Alternative F (1,130 tons per year compared to 1,029 for Alternative F and 1,479 for Alternative C);

Greater animal diversity on both Forests (a diversity index of 1.43 compared to 1.19 for Alternative C, and .75 for Alternative H);

Better habitat conditions for the red-cockaded woodpecker on the Croatan (rotations of 80 years for loblolly and 100 years for longleaf);

More pleasing visual quality over more area (118,900 acres with high levels of visual quality compared to 44,400 acres in Alternative C);

More opportunities for nonmotorized recreation (87,800 acres available for nonmotorized recreation compared to 34,800 in Alternative C); and

More responsiveness to public issues.

All alternatives, including the Preferred Alternative on which the Forest Plan is based, are compared in Chapter II of the EIS.

## VII. AREAS OF SIGNIFICANT PUBLIC INTEREST

During public review of the DEIS and Proposed Forest Plan, significant interest was expressed in the protection of the pocosin ecosystem and special interest areas identified by the Natural Heritage Program of the State of North Carolina. On the Croatan National Forest, these special interest areas are: Cedar Point-White Oak River Marsh; Croatan Pocosins and Great Lake Sweet Gum Swamp; Flanner Beach; Gum Swamp Forest; Hunter's Creek Upland Forest; Island Creek; Little Road Longleaf Pine Woodlands and Savannas; Millis Road Savanna and Pocosin; and Patsy Pond. On the Uwharrie National Forest, these special interest areas are: Abner Bog; Badin Upland Depression Swamp; Birkhead Upland Forest; Gold Mine Branch Longleaf Pine; Pleasant Grove Hardpan Bog; Roberdo Bog; and Uwharrie River Slopes.

Chapter III of the Forest Plan contains management direction for the Forests, for all Management Areas, and for special interest areas that address these topics.

#### VIII. MITIGATION AND MONITORING

Management of the National Forests will be guided by the requirements contained in the Forest Direction and Management Area Prescriptions found in Chapter III of the Forest Plan. These management requirements were developed through an interdisciplinary team effort and contain measures necessary to minimize adverse impacts resulting from Forest Plan implementation. However, unavoidable adverse impacts remain that may result from Forest Plan implementation. These include soil erosion and stream sedimentation as a result of activities in the management of timber and other resources; particulate matter emissions into the atmosphere as a result of prescribed burning activities; reductions in visual quality as a result of timber harvesting, disturbance of wildlife due to road construction and subsequent use; and effects on water, vegetation, and visual quality that could result if pesticides are selected for use on specific projects.

To the best of my knowledge, practical and effective mitigating measures have been adopted. They include prompt restoration and revegetation of sites disturbed by management activities, thereby reducing erosion and sedimentation; prescribed burning under atmospheric conditions that will minimize effects of particulate emissions; adherence to visual quality standards to lessen visual impacts; closing some local roads to reduce disturbance of wildlife; and the use of registered pesticides according to label instructions if pesticide use is selected. Activities likely to result in adverse environmental effects will be monitored during implementation of the Forest Plan to assure the adequacy of mitigating measures.

Unavoidable adverse impacts and mitigating measures are shown in Chapter IV of the EIS. Standards under which activities are to be carried out are shown in Chapter III of the Forest Plan. Appendix D of the Forest Plan contains the detailed Monitoring and Evaluation Schedule.

#### IX. IMPLEMENTATION

The Forest Plan will not be implemented sooner than 30 days after the Notice of Availability of the Forest Plan, EIS, 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 for the South and NFMA Implementing Procedures: 36 CFR 219.10 (e), 36 CFR 219.11 (d) and 36 CFR 219.27.

All proposals in the Forest Plan can be accomplished from physical, biological, economic and legal perspectives. However, it is not certain that they will be accomplished. Outputs proposed by the Forest Plan are projections. The Forest Plan is implemented by various site-specific projects such as building a road or trail, or selling timber from a given area. 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 Forest Plan is revised. If the budget is changed significantly over a period of several years, the Forest 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).

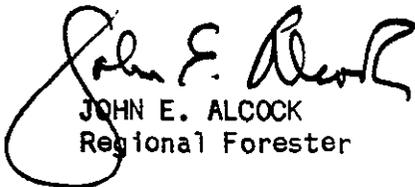
Proposals to use National Forest System lands will be reviewed for consistency with the Forest Plan. Management direction, contained in Chapter III of the Forest Plan, will be used to analyze any proposal involving the use of National Forest System lands. Permits, contracts, and other instruments for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

#### X. RIGHT TO ADMINISTRATIVE APPEAL

This decision is subject to appeal as outlined in 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 30 days after publication by the Environmental Protection Agency of the Notice of Availability of the Final EIS accompanying the Plan, or within 45 days from the date of this decision, whichever is later (40 CFR 1506.10(b)(2) and 36 CFR 211.18(c)(3)). The time allowed for filing a notice of appeal will not be extended. 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 unless an extension of time for preparing these is granted.

  
JOHN E. ALCOCK  
Regional Forester

Date: JUN 3 1986