

NOT SUITABLE 13

Description

The analysis areas covered under this prescription are 5,731 acres of water. There are approximately 292 named perennial streams covering 1,391 miles, and 43 flood control projects on the National Forests.

The analysis areas covered by this prescription were assigned to the "Water" FORPLAN prescription.

General Direction

Direction for the available water of the Forest is to protect the water quality according to the standards defined in the Statewide 208 Water Quality Management Plan and Federal Standards.

Management Practices

1. Dam administration and management. (L28)
2. Provide habitat diversity, in conjunction with other resource activities, through surveys, planning, prescriptions, monitoring, cooperation and administration. (C01)
3. Maintain wood duck boxes. (C04-636)

Standards and Guidelines

1. All Forest-wide standards and guidelines will apply.

NOT SUITABLE 14

Description

The analysis areas covered under this prescription include arterial and collector roads (13,545 acres), Administrative Sites (163 acres), and trails outside developed recreation sites (150 miles). The visual quality objective for roads and administrative sites is maximum modification within the cleared area. The visual quality objective for trails is retention and partial retention. The area involved is the road or trail bed, cuts and fills and drainage. At administrative sites the area involved is the building and grounds, parking and roads.

The analysis areas covered by this prescription were assigned to the "Minimum Level" FORPLAN prescription.

General Direction

Construct and manage roads in accordance with the transportation analysis.

Construct and maintain trails in accordance with "Trails South."

Construct buildings in accordance with the 10-year FA&O plan on page 4-77.

Management Practices

1. Transportation Planning and Inventory. Collector and Local Road Construction/Reconstruction (L01, L06-18, L29)
2. Road Maintenance and Management (L19, 744-750)
3. Trail Inventory and Planning: Construction/Reconstruction (L20-L22)
4. Construction and Maintenance of Buildings (L24-L25)
5. Trails maintenance. (L23)

Standards and Guidelines

1. Forest-wide standards and guidelines will apply.

PRESCRIPTION FOR ANALYSIS AREAS SUITABLE FOR TIMBER PRODUCTION

SUITABLE 1

Description

Acreage suitable for Timber Management	1,018,248
Yellow Pine Working Group	498,713
Hardwood Working Group	142,349
Delta Hardwood Working Group	52,495
Slash Pine Working Group	103,322
Longleaf Pine Working Group	178,183
Pine-Hardwood Working Group	19,508
Moderate Yield Slash Pine Working Group	19,218
Moderate Yield Hardwood Working Group	4,460

This area contains all acreage suitable for timber management in coordination with other resources.

Table 4-7 displays this area by productivity class and management area.

The majority of this area is in a recreation opportunity spectrum class of "Roaded Natural" with a visual quality objective of maximum modification.

Management Direction

This area will be managed to produce coordinated levels of outputs of all resources. The pine and pine-hardwood working groups will be managed for timber production at a high intensity level, the moderate yield hardwood at a low intensity level, and the other hardwood working groups at a medium intensity level.

Management Practices

A01 & A02 Planning and Inventory
A03 Cultural Evaluation and Assessments
A04 Cultural Protection and Enhancements
A10 Trail Reconstruction
A11 Trail Construction
A12 Trail System Maintenance and Operation
A13 Visual Resource Improvement
A14 Visual Resource Monitoring
E04 Reforestation 441, 443 Seeding & Planting
E05 TSI 451 Release & Weeding
452 Precommercial Thin
454 Control of Understory Vegetation
455 Fertilizing
C03 Non-structural Wildlife Habitat Improvement
D02-06 Range Program (Cost)
E06 & C07 Thin (MBF)
L4,5,8,9,12,13,14,18,&29 Construction & Reconstruction Roads
and Bridges (Miles)
E06-07 Harvest Cut Natural (Seedtree/Shelterwood)
E04 449 Site Preparation for Natural Regeneration
E04 447 & 443 Site Preparation for Artificial Regeneration
E04 446 Fencing
P14 & P15 Fuel Treatment Area Maintenance & Vegetation Treated
by Burning

General Direction

Range

The permittee will be encouraged to cooperate with the Forest Service in resolving resource conflicts which may occur as a result of his/her permitted livestock use. (4-3) See Appendix K for planning question and facet. (4-3) is planning question 4, facet 3.

Determining fencing needs for regeneration areas will be on a case by case basis. If fencing is required, the Forest Service and the permittee will work together to complete the proposed project. (4-3)

Wildlife

Conversion of pine type to hardwood and hardwood to pine is expected to balance on all Management Areas. However, the Bienville Ranger District and De Soto National Forest will be below the level that is desired for wildlife. See prescription for Management Areas 1, 2, 3, and 5. The decision to convert from one forest type to another will be based on several social, biological, and economic factors such as soil type, hard mast needs, timber markets, presence of root stock, and species composition of the stand presently occupying the site. (5-4)

Timber

Where the demand is present offer commercial fuelwood sales. (6-6)

Where commercial firewood sales are not available, limit permits for live trees to surplus material in regeneration areas. (6-6)

Integrated Pest Management

Use herbicides when their use provides best means of carrying out management guidelines. (6-7)

The most efficient method will usually be used to apply the chemical. Label restrictions will be precisely followed in order to minimize adverse environmental effects. (6-7)

Integrated Pest Management (IPM) is a strategy which manipulates forest pests to achieve resource management objectives. Detection and monitoring of forest pests will be carried out by all Forest personnel in performance of their regular duties. Aerial and ground surveys will be carried out on a periodic basis with Forest Pest Management groups of State and Private Forestry. (6-7)

Standards and Guidelines

Range

Grazing capacity estimates will be determined utilizing FSH 2209.21 (Range Analysis Handbook) and adjusted according to the management practices employed on the allotment. (4-1)(4-2)(4-3)

Areas open for grazing will be stocked within capacity estimates. (4-1)(4-2)(4-3)

Livestock will be removed from National Forest between 11/30 & 4/1 when dictated in the allotment management plan. (4-1)

Livestock will be provided adequate protein and mineral supplements by the permittee when grazing use on National Forests is permitted on a yearlong basis. (4-1)(4-2)

Stocking will be maintained at a level that will prevent damage to plantations. (4-2)(4-3)

Fertilization may be utilized to draw livestock away from regeneration areas. (4-2)

Prescribed burns will be planned to draw livestock away from regeneration areas and provide better forage quality, quantity, and availability. (4-2)

Salting and supplemental feeding stations will be located away from regeneration areas until pines have made adequate height growth. (4-2)

Natural longleaf regeneration areas will only be fenced after other methods of controlling livestock have failed. (4-3)

The cost of constructing range improvements will be shared with the permittees where possible. Maintenance functions will be the responsibility of the individual permittee. (4-4)

Wildlife

Generally, hardwood regeneration will be accomplished only in those stands over 90 years of age and in compartments with more than 20% hardwood forest type containing a desirable hard mast component.

This will not apply to stands classified as sparse, low quality, damaged, or if regeneration is necessary to create more wildlife desirable habitat. (5-3)

During the silvicultural prescription process hardwood stands, other than those qualifying silviculturally, will be analyzed for regeneration needs. To meet wildlife objectives the analysis will consider the following:

--Project hardwood regeneration so that when in regulation, no general forest hardwood stand will be over 170 years of age.

--No more than 15% of the hardwood management type acreage in the compartment will be regenerated in any one period while meeting the 170 year old criterion.

--Normally, stands less than 10 acres in size will not be created. (5-3)

Normally, conversions of pine to hardwood will be considered when the following conditions exist:

1. When less than 20% of the compartment is in the hardwood forest type.
2. If the inventory of root sprouts, stump sprouts and seedlings indicate that a desirable hardwood stand containing 40% hard mast species, i.e., oaks, hickories, etc., can be obtained.
3. When soils are capable of producing hardwood trees which will meet the production objectives of this Plan. (5-4)

Conversion of hardwood to pine will be considered when the following conditions exist:

1. When 20% or more of a compartment is in hardwood forest type, the objective is to have at least 40% basal area of the hardwoods in hard mast producing hardwood evenly distributed. Until this objective is met, no conversion of existing hardwood stands, key areas, or inclusions will be considered unless the stands are damaged.

2. When soils indicate that pine is the preferred management type.
3. When the inventory of hardwood root sprouts, stump sprouts, and seedlings indicate that a desirable stand of hardwood trees with a component of hard mast species totaling 40%, and meeting the product objectives of the Plan cannot be obtained.
(5-4)

Conversion of pine to hardwood will occur only on those soils capable of producing trees which will meet the product objective of the Plan. (5-4)

Timber

Use the even-aged system for all working groups. (6-1)

Use clearcutting and genetically improved stock for all pine types except for approximately 10% which will be regenerated by the seedtree and shelterwood cutting methods where soil, slope, or visual quality considerations preclude artificial regeneration. (601)

In hardwood working groups, use clearcutting with natural regeneration from advance reproduction and sprouts of desirable species or shelterwood where advanced reproduction is not adequate. Hardwood artificial regeneration will be used whenever natural systems will not meet desired objectives. (6-1)

The new stand shall meet the following restocking guidelines. Where natural means are used and the stand has not been regenerated within 3 years after site preparation, the stand will be examined and given remedial treatment as necessary. (6-1)

Restocking Guideline
No. of Stems per Acre @ Age 3

<u>Forest Type</u>	<u>Lower*</u>	<u>Upper</u>	<u>Target</u>
Loblolly & Shortleaf	300	900	500-700
Slash & Mod. Slash	300	900	500-700
Longleaf <u>1/</u>	400	1200	600-900
Hardwood & Mod. Hwd. <u>2/</u>	150	500	250-350
Pine Hardwood <u>3/</u>	300	900	400-600

1/ Height-growth seedlings. Use T. Croker's guides for natural regeneration. 300 height-growth seedlings are the minimum for an adequately stocked stand. Additional stems will come out of the grass in the following year or two. The total number of seedlings necessary to obtain 300 height-growth seedlings varies depending upon incidence and severity of brownspot disease, seedling size, site index and brush-grass competition. Professional judgment must be exercised to determine if sufficient grass stage seedlings are present to obtain the minimum height-growth seedlings. Check longleaf stands annually for height-growth seedlings and prescribe burning needs until the stand is certified.

2/ Stocking number refers to desirable hardwood which should contain 40% hard mast producers.

3/ These stands should contain 31-69% pine.

* Stands with less than minimum stocking will be evaluated based on such items as site index, hardwood competition, and economics to determine if they will be carried at less than minimum stocking or replanted.

Planting spacing should be varied based on site-specific factors and expected survival to establish a new stand in the desired range of these restocking guidelines. (6-1)

Pre-commercial thinning of pine (usually done before age 10 to 15 years) is considered when stem density exceeds the upper level of restocking standards.

Follow thinning standards found in the appendix section of the National Forests in Mississippi Marking Guide. (6-1)

Additional instruction can be found in the Forest Service Manual, Silvicultural Prescription Handbook, the timber marking guides, hardwood management guidelines, Timber Stand Improvement Instruction, Herbicide Handbook, seedling care and planting instructions, and erosion control and wildlife seeding guides. (6-1)

MANAGEMENT AREAS

The Forest has been divided into twelve management areas (MA) comprised of analysis areas (AA). The AA's fall in two general groupings - those suitable for timber production and those allocated to other resource uses (lands not suitable for timber

production). Management areas coincide with Ranger Districts except the Tombigbee R.D. is divided into three MA's: the Yalobusha (part of the Holly Springs National Forest), the Trace and Ackerman which are separated units of the Tombigbee National Forest. The numbering scheme for the MA's matches the Forest Service accounting system for these units; the numbers are 1-11 and 17.

The use of administrative units for management areas facilitates scheduling, planning, implementing, and financing the Forest Plan. The National Forests in Mississippi are six widely separated proclaimed National Forests. Each MA is relatively uniform in timber productivity within itself (Table 4-6). However, between management areas, both productivity and timber value vary widely. The State has been divided into five market areas for timber appraisal purposes. The Forest Plan economics and yield tables were based on similar yields within a National Forest and the similar values within the market areas.

In most cases the same prescriptions will be used on similar AA's in each MA. For example, the thinning prescription for Yellow Pine Age Class 3 would be the same on all MA's. The application of constraints in the FORPLAN model varied. Some were applied to all MA's, others to one or more proclaimed National Forest, and others varied in their application between MA's depending upon the purpose of the constraint. Standards and guidelines unique to a specific MA are shown under the individual MA headings. Forest-wide standards and guidelines are applied to all MA's.

The following AA's occur on various MA's and have been identified on the maps accompanying this plan. The applicable standards and guidelines are found under forest-wide standards and guidelines, management prescriptions, and management areas.

- RCW Colonies and Recruitment Stands
- Trails
- Tank Maneuver Area
- Artillery Impact Area and Buffer
- Military Rifle Range
- Potential Botanical Areas
- Experimental Forests
- Utility Corridors
- Wild and Scenic River Study Area and Black Creek Float Trip
- Black Creek Wilderness
- Leaf Wilderness
- Ashe Forest Tree Nursery
- Erambert Forest Seed Orchard

- Gavin Plantation Auto Tour and Unmanaged "40"
- Research Natural Area
- USFS Hydrology Laboratory
- Archaeological Site
- SCS Plant Materials Center
- Other Agency Special Use
- State Park
- Botanical Area

- Scenic Area
- Developed Recreation Area
- Administrative Sites
- General Forest Grazed
- General Forest Non-Grazed

Additional acres of unsuitable forest land were not mapped. These were the areas classed as lands not physically suited for timber production due to lack of site preparation technology or an inability to restock within 5 years. Included in this category are limestone outcroppings, sterile river outwash, and waterlogged soils.

ALLOCATION OF MANAGEMENT PRESCRIPTIONS

The assignment of prescriptions by management area and analysis area for the planning horizon can be found in Appendix G.

Actual allocation will vary from that scheduled due to:

Standards and guidelines which limit hardwood regeneration primarily to compartments with more than 20% hardwood.

Site-species relationships will preclude a large percentage of the conversion from slash pine to yellow pine. Much will be converted to longleaf.

Resource considerations other than timber may result in regenerating earlier age classes.

Stand condition classes (sparse, damaged, etc.) may require regeneration in age classes other than those selected by FORPLAN.

These variations from the FORPLAN schedule are not expected to have an appreciable impact on the volume produced during the 50-year planning period.

PROPOSED AND PROBABLE MANAGEMENT PRACTICES

FORPLAN scheduled, by 10 year plan periods, certain management practices for vegetation manipulation to achieve Plan objectives.

Proposed acres are those estimated by FORPLAN for period 1. Probable acres are those estimated by FORPLAN for period 2.

These were the management practices which could be modeled. Those for the first two plan periods (1986-1995 and 1996-2005) are shown, respectively, as proposed and probable management practices for AA for each management area. Other practices were determined outside of FORPLAN by special area operation or management plans, and are

found in the prescriptions for lands unsuitable for timber production.

BIENVILLE - MANAGEMENT AREA 1

Table 4-14
DESCRIPTION

Bienville Management Area		
Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	71,881	2,996
Hardwood	9,748	4
Longleaf	0	0
Slash	0	0
Pine-Hardwood	0	0
Moderate Hardwood	0	0
Moderate Slash	0	0
Water		11
Permanent Openings		1,344
TOTALS	85,984	4,355

Suitable Timber Analysis Areas Working Group Acres

Beginning Age Class	YP	Hdwd.	Mod. Slash	Mod. LL	Slash	Hdwd.
1	10,542	187				
2	3,107	184				
3	3,792	438				
4	9,412	1,951				
5	21,975	--				
6	13,183	4,213				
7	7,861	1,434				
8	1,327	568				
9	444	74				
10+	278	659				
ROS Acres			Semi-Primitive Motorized	Roaded Natural		Rural
Recreation Opportunity Spectrum			--	84,072		1,912

VQO Acres	Preservation	Retention-	Partial Retention	Modification	Maximum Modification
Visual Quality Objective	324	743	5,160	11,713	68,044

**MANAGEMENT PRESCRIPTIONS
APPLIED - BIENVILLE**

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-15

**PROPOSED & PROBABLE MANAGEMENT PRACTICES - BIENVILLE
Lands Suitable for Timber Production**

Practice	Yellow Pine Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Art. Regeneration	5	2,848	4,275
	6	1,130	8,981
	7	111	1,597
Nat. Regeneration	6	3,072	
	7	2,361	2,867
	8	527	240
	9	181	
	10	39	
Conversion to Hdwd. Intermediate Cut	5	300	
	1	7,379	7,379
	2	2,175	2,175
	3	2,710	2,710
	4	6,588	6,588
	5	10,186	
Practice	Hardwood Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Intermediate Cut	1		159
	2	129	
	3		307
	4		
	5		
	6	2,949	

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)	Acres/ Miles	Proposed Practice	Probable Practice
Shockaloe National				
Recreation Trail	(14 4-110)	23Mi	5	3,5
Bienville Pines				
Scenic Area	(11 4-107)	189Ac	1,2	1,2
Harrell Prairie				
Botanical Area	(11 4-107)	135Ac	1	1
Singleton Prairie				
Botanical Study Area	(10 4-104)	80Ac	5,6	
Durand Oak Prairie				
Botanical Study Area	(10 4-104)	40Ac	5,6	
Developed Recreation				
Base Camps 1 & 2	(4 4-97)	57Ac	1,3,5	1,3,5
RCW Colony & Recruitment				
Recruitment	(1 4-94)	2499Ac	1,2,3,4	1,4
Roads & Admin. Sites				
Roads & Admin. Sites	(14 4-110)	1079Ac	1,2,4,	1,2,4
Water				
Water	(13 4-110)	11Ac	1,2	1,2
Utility Corridors				
Utility Corridors	(9 4-103)	265Ac	2,4,8	2,4,8
TOTAL ACRES		4355		

**BIENVILLE MANAGEMENT AREA
STANDARDS AND GUIDELINES**

YELLOW PINE WORKING GROUP

Both natural and artificial systems will be utilized in regenerating pine stands on the Bienville. Natural systems will be considered when the following conditions exist:

- Soils prevent the use of heavy equipment in site preparation for artificial systems; i.e., clay soils, moisture condition.
- Site index is 80 or below.
- When clay soils such as those present in the southeast portion of the District prohibit machine planting.
- When high quality seed trees are present.
- When terrain is such that precommercial thinning can be accomplished with mechanical equipment.

Pine stands occupying hardwood sites and capable of growing quality hardwoods may be converted. Such conversions will occur only in compartments containing less than 20% hardwood component.

Transition zones or "ecotone" areas will receive special treatment for mast production. Existing hard-mast species will be favored in all management activities and, where deficient, additional mast producing species may be established by planting or seeding in compartments with less than 20% hardwood.

BILOXI - MANAGEMENT AREA 2

**Table 4-16
DESCRIPTION**

Biloxi Management Area		
Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	3,366	76
Hardwood	1,950	1,339
Longleaf	41,078	3,613
Slash	32,034	799
Pine-Hardwood	0	0
Moderate Hardwood	3,658	2,299
Moderate Slash	16,894	6,976
Water		50
Permanent Openings		3,322
TOTALS 117,454	98,980	18,474

**Suitable Timber Analysis Areas
Working Group Acres**

Beginning Age Class	YP	Hdwd.	Mod. Slash	Mod. LL	Slash	Hdwd.
1	86	122	7,773	5,403	2,884	--
2	184	27	4,016	1,793	2,719	52
3	210	39	3,105	209	6,435	46
4	141	299	3,482	342	936	186
5	565	471	8,373	7,118	3,016	1,262
6	1,212	541	4,274	23,933	764	1,684
7	840	219	717	2,140	140	86
8	128	232	48	9	--	90
9	--	--	246	106	--	252
10+	--	--	--	25	--	--
ROS Acres			Semi-Primitive Motorized		Roaded Natural	Rural
Recreation Opportunity Spectrum			--		84,794	32,660
VQO Acres	Preservation	Retention-	Partial Retention	Modifi-cation	Maximum Modification	
Visual Quality Objective	910	1,175	7,047	16,443	91,879	

MANAGEMENT PRESCRIPTIONS APPLIED

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-17
PROPOSED & PROBABLE MANAGEMENT PRACTICES
BILOXI MANAGEMENT AREA
Lands Suitable for Timber Production
Longleaf Working Group

Practice	Beginning Age Class	Proposed Acres	Probable Acres
Artificial Regen.	6	727	2,520
	7	1,138	
	8	9	
	9	106	
	10+	25	
Natural Regen. Intermediate Cut	6	1,432	3,782
	1		
	2	1,255	
	3	146	
	4	239	
	5	4,983	

Yellow Pine Working Group

Practice	Beginning Age Class	Proposed Acres	Probable Acres
Artificial Regen.	4		141
	5	385	180
	6	1,002	
	7	800	40
Natural Regen.	6		210
	8	128	
Conversion to Hardwood Intermediate Cut	5	210	
	1	60	86

Slash Working Group

Practice	Beginning Age Class	Proposed Acres	Probable Acres
Art. Regen., Convert to YP	4	2,461	836
	5	4,231	9,454
	6	3,850	
	7	637	
	8	48	
	9	247	
Art. Regen.	4		
	5		
	6		71
	7		80

Practice	Slash Working Group (cont.)		Probable Acres
	Beginning Age Class	Proposed Acres	
Conversion to Hardwood	5	219	
Intermediate Cut	1	5,441	5,441
	2	2,811	
	3	2,174	124

Practice	Moderate Slash Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Artificial Regen.	4	416	
	5	2,600	733
	6	432	
	7	140	
Intermediate Cut	2	1,903	

Practice	Moderate Yield Hardwood Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Regeneration Cut	8		252

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)		Acres/ Miles	Proposed Practice	Probable Practice
Big Foot Horse Trail	(14	4-110)	12Mi	5	3,5
Tuxachanie Nat. Recreation Trail	(14	4-110)	22Mi	5	3,5
Dev. Rec. Areas: P.O.W. Camp, Airey, Big Biloxi	(4	4-97)	67	1,2,3,4, 5,6,7,9	1,2,3,7
RCW	(1	4-94)	681	1,2,3,4	1,4
Potential Botanical Areas:					
Pitcher Plant	(10	4-104)	29	2,3,4,5,6	3
Railroad Creek Titi	(10	4-104)	881	2,3,4,5,6	3
Little Florida	(10	4-104)	50	5,6	
Keesler Rifle Range & Buffer	(2	4-95)	1189	2,4	2,4
Harrison Experimental Forest	(8	4-102)	3985	1,2,3,4	1,2,3,4
Pitcher Plant Areas	(9	4-103)	10000	4,5,	4
Roads & Admin. Sites	(14	4-110)	1089	1,2,4	1,2,4
Utility Corridors	(9	4-102)	296	2,8	2,8
Other Non-Suitable Lands	(9	4-102)	157	4,5	4
Water	(13	4-110)	50	1,2,3	1,2,3
			<u>18474</u>		

BILOXI MANAGEMENT AREA STANDARDS AND GUIDELINES

If possible, identify 5% of the pine acres in well distributed key wildlife areas to develop hard mast production capabilities for wildlife in compartments with less than 20% hardwood.

Restored oil well sites will be planted to hard mast producing trees and maintained as wildlife inclusions where mast is critically low.

Hardwood product objectives may not be met in key wildlife areas.

LONGLEAF WORKING GROUP

There will be no net decrease in longleaf forest type.

Due to the low percentage of mast producing hardwoods on the Biloxi District, emphasis will be placed on increasing mast productivity of existing trees during thinning operations as well as establishing additional hardwoods.

Transition zones or "ecotone" areas will receive special treatment for mast production. Existing hard-mast species will be favored in all management activities and, where deficient, additional mast producing species may be established by planting or seeding.

The longleaf type will be managed to produce high quality poles as the product objective of this plan.

Longleaf will be regenerated both naturally and artificially. Normally, natural regeneration will be used when the following conditions exist:

--When the site index is less than 80.

--When soils and slope exceed the maximum tolerances in the Forest Standard and Guidelines table for "Tolerable Erosion Losses by Activity for Benchmark Soils" for the use of mechanized equipment in site preparation and planting.

--When the existing stand indicates that a high quality stand can be obtained through natural systems.

--When site preparation can be accomplished by fire and chemicals.

MODERATE SLASH WORKING GROUP

All stands will be bedded where needed and fertilized within two years of planting.

*-Areas proposed for bedding during the silvicultural examination and prescription will be examined by botanist with reference to

sensitive plants. The botanist's report will be considered before making the final determination as to bedding. _*

Fertilize all stands less than 20 years old which haven't stagnated.

Concentrate regeneration in operable stagnated stands.

Under normal conditions thinning would not be done in stands older than 30 years except to prevent mortality.

Mark as individual payment units and limit logging to dry time of year.

MODERATE HARDWOOD WORKING GROUP

Make only one entry, at age 80 or 90 for pine and hardwood sawtimber. Resource management requirements may mean carrying some stands beyond age 90.

Mark as individual payment units and limit logging to dry time of year.

A portion of the pine component in this working group will be maintained to help satisfy late seral stage requirements of the cavity nesters.

Regeneration will be by natural methods. No site preparation will be done except for severing mast producing sapling size trees to promote sprouting in transition zones.

Because of the possible adverse impacts of water and soil quality, skidding will normally be done by cable. However, low PSI equipment may be used when damage will not occur.

Manage transition zone for hard mast production.

SLASH PINE WORKING GROUP

Make two thinnings before age 30.

Thin no stands over 30 except to prevent mortality in stands with extended rotations.

Convert to longleaf and yellow pine at rates indicated by FORPLAN. Favor yellow pine on the clayie soils and longleaf on the moderately well drained and well drained sites.

YELLOW PINE WORKING GROUP

Normally, artificial systems will be utilized in regenerating yellow pine on the Biloxi District.

Pine stands occupying hardwood sites and capable of growing quality hardwoods may be converted. Such conversions will occur only in compartments containing less than 20% hardwood component.

Favor hard mast producers in thinning operations in compartments deficient in mast.

Manage transition zones (bay/maple to pine) for hard mast production in compartments with less than 20% hardwood.

BLACK CREEK MANAGEMENT - AREA 3

Table 4-18

DESCRIPTION Black Creek Management Area

Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	34,396	8,401
Hardwood	14,035	3,771
Longleaf	83,467	15,538
Slash	30,596	5,757
Pine-Hardwood	0	0
Moderate Hardwood	802	11,621
Moderate Slash	2,324	4,331
Water		546
Permanent Openings		17,268
TOTALS 232,853	165,620	67,233

Suitable Timber Analysis Areas Working Group Acres

Beginning Age Class	YP	Hdwd.	Mod. Slash	Mod. LL	Slash	Hdwd.
1	4,869	509	11,482	8,294	352	208
2	1,698	526	2,708	5,673	297	57
3	3,691	429	3,191	2,371	212	10
4	9,252	968	3,426	12,105	749	28
5	10,780	5,338	7,942	36,812	212	140
6	2,055	3,716	1,343	16,896	152	249
7	1,600	1,604	466	1,195	61	61
8	273	493	62	62	32	49
9	134	82	--	--	257	--
10+	--	478	--	89	--	--

ROS Acres	Semi-Primitive Motorized	Roaded Natural	Rural
Recreation Opportunity Spectrum	1,724	200,579	30,550

VQO Acres	Preservation	Retention	Partial Retention	Modification	Maximum Modification
Visual Quality Objective	6,988	2,500	13,971	32,599	56,058

MANAGEMENT PRESCRIPTIONS APPLIED

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-19
PROPOSED & PROBABLE MANAGEMENT PRACTICES
Black Creek Management Area
Land Suitable for Timber Production

Practice	<u>Slash Working Group</u>		Probable Acres		
	Beginning Age Class	Proposed Acres			
Artificial Regen.	6		190		
	7	73			
Artificial Regen., Convert to Yellow Pine	4	2,421	1,005		
	5	2,210			
	6	1,153			
	7	392			
	8	62			
Nat. Regen., Convert to Hardwood Intermediate Cut	5	2,000	2,000		
	1	8,037			
	2	1,896			
	3	2,234			
Practice	<u>Yellow Pine Working Group</u>		Probable Acres		
	Beginning Age Class	Proposed Acres			
Artificial Regen.	4		7,577		
	5	7,708			
	6	1,152			
	7	1,450			
	8	273			
	9	134			
	Natural Regen. Intermediate Cut	6		638	272
		1		272	
		3		272	
4		7,743			
5		2,004			
Practice	<u>Longleaf Working Group</u>		Probable Acres		
	Beginning Age Class	Proposed Acres			
Artificial Regen.	5		3,362		
	6	624			
	7	635			
	8	62			
	10+	89			

Table 4-19 (continued)

Practice	Longleaf Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Natural Regen.	5		2,532
	6	900	
Intermediate Cut	1		5,806
	2	3,971	3,971
	3	1,660	1,660
	4	8,474	8,474
	5	25,768	21,643
	6		11,827

Practice	Hardwood Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Natural Regen.	8	493	
	9	82	
	10+	478	
Intermediate Cut	1		356
	2	368	
	3		300
	4	678	
	5		3,737
	6	2,601	

Practice	Moderate Slash Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Artificial Regen.	4	333	
	5	212	
	6	152	
	7	61	
	8	32	
	9	257	
Intermediate Cut	2	297	

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)	Acres/ Miles	Proposed Practice	Probable Practice
Black Creek Trail Dev. Recreation Areas	(14 4-110)	41Mi	5	3,5
Ashe, Big Creek, Cypress Creek, Fairly Bridge, Janice, Moodys	(4 4-97)	56Ac	1,2,3,4, 5,6,7	1,2,3,5, 6,7
Paul B. Johnson State Park	(12 4-109)	84Ac	1	1
RCW	(1 4-94)	1376Ac	1,2,3,4,	1,4

Table 4-19 (continued)
Lands Not Suitable For Timber Production (continued)

Area	(Prescription Number and Page)		Acres/ Miles	Proposed Practice	Probable Practice
Black Creek Wild & Scenic River	(5	4-99)	6942Ac	1,2	1,2
Black Creek Wilderness	(6	4-100)	4560Ac	1,2	1,2
Leaf Wilderness	(7	4-101)	940Ac	1,2	1,2
Ashe Nursery	(3	4-96)	399Ac	1,3	1,3
Erambert Seed Orchard	(3	4-96)	590Ac	2,3,4,5, 6,7,8,9	2,3,5,7, 8,9
Camp Shelby Tank Maneuver Area	(2	4-95)	17042Ac	2,3,4,5, 6	2,3,4,5, 6
Camp Shelby Impact Area & Buffer	(2	4-95)	14512Ac	1,3,5	1,3,5
Permanent Wildlife Openings	(9	4-103)	115Ac	1,2	1,2
Utility Corridors	(9	4-103)	1261Ac	2,8	2,8
Pitcher Plant Areas	(9	4-103)	2000Ac	4	4
Other Non-Suitable Lands	(9	4-103)	14007Ac	4	4
Roads & Admin. Sites	(14	4-110)	2357Ac	1,2,4	1,2,4
Water	(13	4-110)	546Ac	1,2,3	1,2,3
Loblolly Bay Botanical Study Area	(10	4-104)	40Ac	5,6	
Ragland Hills Botanical Study Area	(10	4-104)	<u>285Ac</u>	5,6	
			67113		

**BLACK CREEK MANAGEMENT AREA
STANDARDS AND GUIDELINES**

Restored oil well sites will be planted to hard mast producing trees and maintained as wildlife inclusions where mast is critically low.

Hardwood product objective may not be met in key wildlife areas.

LONGLEAF WORKING GROUP

There will be no net decrease in longleaf forest type.

Increase mast production of existing trees by favoring mast producing hardwoods during thinning operations in compartments with less than 20% hardwood acreage.

Transition zones or "ecotone" areas will receive special treatment for mast production. Existing hard-mast species will be favored in all management activities and, where deficient, additional mast producing species may be established by planting or seeding in compartments with less than 20% hardwood.

The longleaf type will be managed to produce high quality poles as the product objective of this plan.

Longleaf will be regenerated both naturally and artificially. Normally, natural regeneration will be used when the following conditions exist:

1. When the site index is less than 80.
2. When soils and slope exceed the maximum tolerances, and excessive erosion is likely to occur from use of mechanized equipment in site preparation and planting.
3. When the genetic characteristics of the existing stand indicate that a high quality stand can be obtained through natural systems.
4. When site preparation can be accomplished by fire and chemicals.

SLASH WORKING GROUP

Make two thinnings before age 30. Thin no stands over 30 except to prevent mortality in stands with extended rotations.

Convert to longleaf and yellow pine at the rate indicated by FORPLAN. Favor yellow pine on the clayey soils and longleaf on the moderately well drained and well drained sites.

YELLOW PINE WORKING GROUP

Increase mast production by favoring hard mast producers in thinning operations in compartments deficient in mast.

Pine stands occupying hardwood sites and capable of growing quality hardwoods will be converted. Such conversions will occur only in compartments containing less than 20% hardwood component.

Manage transition zones for mast production in compartments with less than 20% hardwood.

MODERATE SLASH WORKING GROUP

All stands will be bedded where needed and fertilized within two years of planting.

Concentrate regeneration in operable stagnated stands regardless of age.

Under normal conditions thinning would not be done in stands older than 30 years except to prevent mortality.

Mark as individual payment units and limit logging to dry time of year.

Bedding is done only on level, wet sites, and only when needed to ensure survival and growth of managed trees. Beds must have an initial height no greater than 15 inches and blend with the natural landform.

MODERATE HARDWOOD WORKING GROUP

Make only one entry, at age 80 or 90 for pine and hardwood sawtimber.

Mark as individual payment units and limit logging to dry time of year.

A portion of the pine component in this working group may be maintained, until rotation, to help satisfy the requirements of the cavity nesters.

Regeneration will be by natural methods. No site preparation will be done except for severing mast producing sapling size trees to promote sprouting in transition zones.

Because of the possible adverse impacts on water and soil quality, skidding will normally be done either by cable or low PSI equipment.

Manage transition zone for hard mast production.

BUDE - MANAGEMENT AREA 4

**Table 4-20
DESCRIPTION
Bude Management Area**

Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	76,585	450
Hardwood	4,034	0
Longleaf	0	0
Slash	0	0
Pine-Hardwood	9,398	0
Moderate Hardwood	0	0
Moderate Slash	0	0
Water		63
Permanent Openings		1,092
TOTALS	91,622	1,605

**Suitable Timber Analysis Areas
Working Group Acres**

Beginning Age Class	YP	Hdwd.	Slash	LL	Mod. Slash	Pine Hdwd.
1	17,433	1,139				2,430
2	2,578	204				660
3	537	88				68
4	1,629	170				213
5	13,601	789				984
6	14,384	932				2,009
7	13,749	343				1,275
8	8,457	255				920
9	3,106	--				692
10+	1,111	114				147

Table 4-20 (continued)

ROS Acres		Semi-Primitive Motorized	Roaded Natural	Rural	
Recreation Opportunity Spectrum		--	79,352	12,270	
VQO Acres	Preservation	Retention-	Partial Retention	Modification	Maximum Modification
Visual Quality Objective	--	500	5,497	12,827	72,798

MANAGEMENT PRESCRIPTIONS APPLIED

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-21
PROPOSED & PROBABLE MANAGEMENT PRACTICES
 Bude Management Area
 Lands Suitable for Timber Production

Yellow Pine Working Group			
Practice	Beginning Age Class	Proposed Acres	Probable Acres
Artificial Regen.	5	1,080	6,022
	6	4,003	3,090
	7	7,000	5,078
	8	4,835	2,452
	9	1,772	651
	10+	783	328
Yellow Pine Working Group			
Practice	Beginning Age Class	Proposed Acres	Probable Acres
Natural Regen.	6	320	1,804
Intermediate Cut	1	12,203	12,203
	2	1,804	1,804
	4	246	246
	5	8,764	
Hardwood Working Group			
Practice	Beginning Age Class	Proposed Acres	Probable Acres
Natural Regen.	7		47
	8	255	
	10	114	
Intermediate Cut	1		797
	2	143	
	3		62
	4	119	
	5		552
	6		652

Table 4-21 (continued)

Practice	Pine-Hardwood Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Both Artificial Regen. -Pine	6	362	
And Natural Regen. -Hardwood	7	84	323
	8	38	358
	9	156	206
	10+		61
Intermediate Cut	1		795
	2	462	462
	3		48
	4	149	149

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)		Acres/ Miles	Proposed Practice	Probable Practice
Clear Springs Hiking Trail	(14	4-110)	2Mi	5	3,5
Homochitto Hiking Trail	(14	4-110)	20Mi	3	3,5
Dev. Rec., Clear Springs	(4	4-97)	58Ac	1,2,3,4, 5,6,7,9	1,2,3,4, 5,6,7
RCW	(1	4-94)	392Ac	1,2,3,4	1,4
Utility Corridors	(9	4-103)	537Ac	2,8	2,8
Rds. & Admin. Sites	(14	4-110)	544Ac	1,2,4	1,2,4
Water	(13	4-110)	63Ac	1,2,3	1,2,3
Other Non-Suitable Lands	(9	4-103)	<u>11Ac</u>	--	--
			1605		

BUDE MANAGEMENT AREA STANDARDS AND GUIDELINES

PINE HARDWOOD WORKING GROUP

The objective is to have no net increase or decrease in pine-hardwood forest type.

The National Forests in Mississippi Pine-Hardwood Management Guidelines will provide the direction for managing this type.

Retain about 50% of the hardwood component of pine-hardwood stands in mast producing trees such as southern red oak, cherrybark oak, hickory, water and willow oak, etc.

Species composition may range from 31-69% pine or hardwood.

The product objective of this type is commercial hardwood trees from 18" to 24" DBH and pine trees from 20" to 26".

YELLOW PINE WORKING GROUP

Both natural and artificial systems will be utilized in regeneration on the Bude District.

Artificial systems may be used when site preparation by mechanical equipment, chemicals or fire is possible. See Table L-1, Tolerable Erosion Losses by Activities for Benchmark Soils.

Natural systems may be used when these conditions exist:

1. When high quality seed trees are present.
2. When precommercial thinning can be accomplished with mechanized equipment.

CHICKASAWHAY - MANAGEMENT AREA 5

**Table 4-22
DESCRIPTION**

Chickasawhay Management Area		
Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	29,132	421
Hardwood	27,216	112
Longleaf	49,419	198
Slash	40,692	219
Pine-Hardwood	0	0
Moderate Hardwood	0	0
Moderate Slash	0	0
Water		264
Permanent Openings		2,629
TOTALS	150,302	3,843

Suitable Timber Analysis Areas Working Group Acres						
Beginning Age Class	YP	Hdwd.	Slash	Mod. LL	Mod. Slash	Hdwd.
1	647	999	14,357	6,968		
2	1,901	196	4,672	2,851		
3	2,021	549	2,636	2,682		
4	4,506	3,098	1,101	6,459		
5	13,971	8,964	17,803	22,324		
6	4,098	7,757	90	7,851		
7	1,097	4,717	33	179		
8	655	429	--	105		
9	139	415	--	--		
10+	97	92	--	--		

Table 4-22 (continued)

ROS Acres		Semi-Primitive Motorized		Roaded Natural	Rural
Recreation Opportunity Spectrum		--		149,245	1,057
VQO Acres	Preservation	Retention-	Partial Retention	Modification	Maximum Modification
Visual Quality Objective	--	1,200	9,018	21,042	31,260

MANAGEMENT PRESCRIPTIONS APPLIED

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-23
PROPOSED & PROBABLE MANAGEMENT PRACTICES
Chickasawhay Management Area

Lands Suitable for Timber Production

Practice	Slash Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Artificial Regen., Convert to Yellow Pine	4	812	7,762
	5	8,997	
	6	90	
	7	33	
Intermediate Cut	1	10,050	10,050
	2	3,270	
	3	1,845	
	4	202	
Practice	Yellow Pine Working Group		Probable Acres
	Beginning Age Class	Proposed Acres	
Artificial Regen.	4		3,201
	5	9,992	
	6	2,341	
	7	853	
	8	655	
	9	139	
Natural Regen.	10+	112	935
	4		
Intermediate Cut	6	1,092	200
	1	312	
	2	188	
	3	102	
	4	3,154	
5	3,520		

Longleaf Working Group			
Practice	Beginning Age Class	Proposed Acres	Probable Acres
Artificial Regen.	5		10,203
	6	508	
	7	179	
	8	105	
Natural Regen. Intermediate Cut	6	200	872 1,996 1,877 4,521 8,485
	1		
	2	1,996	
	3	1,877	
	4	4,521	
	5	15,627	

Hardwood Working Group			
Practice	Beginning Age Class	Proposed Acres	Probable Acres
Natural Regen.	8	429	
	9	415	
	10	107	
Intermediate Cut	1		699
	2	137	384 2,169 6,277
	3		
	4	2,169	
	5		
	6	5,430	

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)	Acres/ Miles	Proposed Practice	Probable Practice
Developed Recreation				
Turkey Fork	(4 4-97)	522Ac	1,2,5,9	1,3,5
Water	(13 4-110)	264Ac	1,2,3,	1,2,3
Rds. & Admin. Sites	(14 4-110)	1958Ac	1,2,4	1,2,4
Permanent Wildlife				
Openings	(9 4-103)	154Ac	1,2	1,2
Utility Corridors	(9 4-103)	517Ac	2,8	2,8
RCW	(1 4-94)	398Ac	1,2,3,4	1,4
Thompson Creek Bottom	(10 4-104)	<u>30Ac</u>	5,6	
		3843		

**CHICKASAWHAY MANAGEMENT AREA
STANDARDS AND GUIDELINES**

Restored oil well sites will be planted to hard mast producing trees and maintained as wildlife inclusions in compartments with less than 20% hardwoods.

There will be no net decrease in longleaf forest type.

Increase mast production of existing trees by favoring mast producing hardwoods during thinning operations in compartments with less than 20% hardwood.

Transition zones or "ecotone" areas will receive special treatment for mast production. Existing hard-mast species will be favored in all management activities and, where deficient, additional mast producing species may be established by planting or seeding in compartments with less than 20% hardwood acreage.

The longleaf type will be managed to produce high quality poles as the product objective of this plan.

Longleaf will be regenerated both naturally and artificially. Normally, natural regeneration will be used when the following conditions exist:

-- When seed producing characteristics of existing trees indicate that natural regeneration can be accomplished in 5 years following harvest.

--When the site index is less than 80.

--When soils and slope exceed the maximum tolerances, and excessive erosion is likely to occur from use of mechanized equipment in site preparation and planting.

--When high quality seed trees are present.

--When site preparation can be accomplished by fire and chemicals.

Artificial regeneration may be used when the following conditions exist:

--When site index is at least 80.

--When mechanical equipment can be used for site preparation and planting. See Table L-1, Tolerable Erosion Losses by Activities for Benchmark Soils.

--When genetically improved seedlings are available.

--When, for any reason, it is anticipated that natural regeneration will require over 5 years.

--When it is desirable to change from another management type to longleaf.

YELLOW PINE WORKING GROUP

Increase mast production by favoring hard mast producers in thinning operations in compartments deficient in mast.

Pine stands occupying hardwood site and capable of growing quality hardwoods may be converted. Such conversions will occur only in compartments containing less than 20% hardwood component.

Manage transition zones for mast production in compartments with less than 20% hardwood.

SLASH WORKING GROUP

The slash type will be regenerated using artificial systems only.

Make two thinnings before age 30. Thin no stands over 30 except to prevent mortality in stands with extended rotations.

Convert to longleaf and yellow pine at rates indicated by FORPLAN. Favor yellow pine on the heavier soils and longleaf on the well drained sites.

DELTA - MANAGEMENT AREA 6

Table 4-24

DESCRIPTION
Delta Management Area

Vegetative Type	Suitable for Timber	Not Suitable for Timber
Yellow Pine	0	0
Hardwood	52,495	4,215
Longleaf	0	0
Slash	0	0
Pine-Hardwood	0	0
Moderate Hardwood	0	0
Moderate Slash	0	0
Water		1,683
Permanent Openings		1,125
TOTALS 59,518	52,495	7,023

Suitable Timber Analysis Areas
Working Group Acres

Beginning Age Class	YP	Hdwd.	Slash	LL	Mod. Slash	Mod. Hdwd.
1		8,051				
2		2,050				
3		1,940				
4		3,819				
5		2,073				
6		1,460				
7		2,778				
8		11,162				
9		7,321				
10+		11,841				

Table 4-24 (continued)

ROS Acres		Semi-Primitive Motorized		Roaded Natural		Rural
Recreation Opportunity Spectrum		35,325		24,193		--
VQO Acres	Preservation	Retention-	Partial Retention	Modification		Maximum Modification
Visual Quality Objective	480	1	3,571	8,332		47,134

MANAGEMENT PRESCRIPTIONS APPLIED

Assignment of management prescriptions are shown in Appendix G and the Proposed and Probable Management Practices Table which follows.

Table 4-25

PROPOSED & PROBABLE MANAGEMENT PRACTICES Delta Management Area

Land Suitable for Timber Production

Practice	Hardwood Working Group		Proposed Acres	Probable Acres
	Beginning Age Class			
Natural Regen.	9		3,735	83
Intermediate Cut	10+		1,492	5,144
	7		--	1,945

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)		Acres/ Miles	Proposed Practice	Probable Practice
Dev. Rec., Blue Lake, & Hunting Camps	(4	4-97)	437Ac	1,2,3,4,5,6,7	1,2,3,4,5,6,7,8
Research Natural Area Green Ash-Sugarberry Overcup Oak-Water Hickory Redgum	(11	4-107)	140Ac	4	4
Potential Cypress Bayou Botanical Area	(10	4-104)	320Ac	2,4,5,6	5
Proposed Dowling Bayou Archaeological Site	(10	4-104)	10Ac	1,6	1
Permanent Wildlife Openings	(9	4-103)	407Ac	1,2	1,2
Slough Buffer Area	(9	4-103)	2379Ac	3,6,7	3,6,7
Other Agency Use	(12	4-109)	929Ac	--	--

Table 4-25 (continued)

Lands Not Suitable For Timber Production

Area	(Prescription Number and Page)	Acres/ Miles	Proposed Practice	Probable Practice
Rds. & Admin. Sites	(14 4-110)	636Ac	1,2,4	1,2,4
Water	(13 4-110)	1683Ac	1,2,3	1,2,3
Utility Corridors	(9 4-102)	<u>82Ac</u>	2,8	2,8
		7023		

**DELTA MANAGEMENT AREA
STANDARDS AND GUIDELINES**

Natural regeneration will be attempted only where reproduction in the form of seedlings, stump sprouts or root sprouts is present. Shelterwood preparatory cuts will be done in qualifying stands where advanced reproduction is inadequate.

Artificial regeneration will be used in areas where advanced reproduction is not present and there is no reasonable assurance of obtaining natural reproduction.

As a general rule, regeneration cuts will be 10-20 acres in size. However, cuts up to 40 acres may be made if advance reproduction is present.

No surface occupancy for mineral development will be allowed in the greentree reservoirs, Research Natural Areas, Botanical Areas, sloughs, or buffers.

Protect cypress, sweet pecan, cedar (rock) elm, and swamp chestnut oak in timber sale and site preparation activities as needed for wildlife habitat.

Timber harvesting within three chains of inventoried sloughs and bayous will be for salvage and sanitation purposes only. These acres are not suited for timber production and any openings within this buffer will be to enhance wildlife. (Inventory of sloughs and bayous is found in Appendix N).

A three-chain buffer strip along the Yazoo, Little Sunflower, and Big Sunflower Rivers will be managed to enhance wildlife with a harvest by small cuts less than five acres. Management of these riparian areas will be designated to enhance habitat for cavity dwellers, and aid in stream bank stabilization.

To enhance sale packaging, transportation planning, and facilitate silvicultural and wildlife work, the Delta will be managed by the block system, normally consisting of 3 compartments each.

A water regime will be maintained for wintering waterfowl on selected greentree reservoirs. During spring drawdown, maintain water in sloughs within the greentree reservoirs to provide wood duck nesting habitat.