

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Copiah County BOE

Prepared By: Miles Henderson MS Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-18

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: S16 T2N R2W

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LANDOWNER INFORMATION

Name: Copiah County BOE
Mailing Address: 254 West Gallatin St.
City, State, Zip: Hazlehurst, MS 39083
Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-894-1341

Fax Number:

E-mail Address:

Social Security Number (optional):

FORESTER INFORMATION

Name: Miles Henderson, Copiah County Service Forester

Forester Number: 02512

Organization: MS Forestry Commission

Street Address: P.O. Box 229

City, State, Zip: Hazlehurst, MS 39083

Contact Numbers: Office Number: 601-894-1131

Fax Number:

E-mail Address: mhenderson@mfc.state.ms.us

PROPERTY LOCATION

County: Copiah Total Acres: 648 Latitude: -90.41 Longitude: 32.01

Section: 16 Township: 2N Range: 2W

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information

This section is located in the northeast portion of Copiah County. Primary access is off Brewer Road. There are several pine plantations ranging from 12 years to 19 years old. There is also some mature timber, although the quality is not very good. Burning on this section is difficult due to smoke management considerations. The largest plantation was machine planted in 1998. There is one small progency test area, approximately 2 acres, located in the north-east corner.

Water Resources

A perennial water resource was identified during a reconnaissance of the property. The perennial stream and drains will be managed in accordance with Mississippi's Best Management Practices.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil.

Archeological and Cultural Resources

A church exists along Brewer Road as indicated on the attached map. This site will be buffered and designated with yellow paint and flagging on trees around the site. No forest management activities will occur inside of this protected area.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy, vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- · Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining

access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

Soils

Kolin silt loam (Kob2)- Moderately well drained, with a moderate erosion hazard. Available water capacity is high and runoff is medium. The site index for loblolly pine is 85. Slope is 2-8%.

Loring silt loam (Lob2)(Loc2)- Moderately well drained with a slope range of 2-5%. Available water capacity is moderate. The erosion hazard is moderate and the runoff is medium. The site index for loblolly pine is 95.

Lorman-Smithdale Association (LS)- Moderately well drained, with a severe erosion hazard. The slope ranges from 17-40%. The site index for loblolly pine is 80. Available water capacity is high and runoff is rapid.

STRATA

Strata 1
Stand Description
Strata 1: Stand 13

Acres: 16

This is a Loblolly Pine stand that was machine planted in 1992. This stand was first thinned in 2009 and is currently in good health and growing well.

Stand Recommendations

This stand will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return this stand to full production.

Activity Recommendations

Harvest

This stand is scheduled for a second thin in 2016, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin to reduce the stocking to 75 square feet of basal area per acre.

Strata 2
Stand Description
Strata 2: Stand 6

Acres: 2

This is a Loblolly Pine progency test area. This area is still being actively managed.

Strata Recommendations

It is not clear as to the future of this stand, for now management will be restricted to the directions given through the Cooperative.

Activity Recommendations

No activies are scheduled for this stand during this planning period.

Strata 3
Strata Description

Strata 3: Stands 22,25

Acres: 227

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These stands were machine planted on a 10' x 7' spacing at a rate of 622 trees per acre in 1998 using 1st generation Loblolly Pine seedlings. A herbaceous weed control was completed in Spring 1999. These stands are well stocked and healthy. Due to a high basal area of 145 sq. ft. per acre and an average DBH of 8.3", these stands are scheduled for a first thin in 2012.

Stand Recommendations

These stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to

maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

Activity Recommendations

Harvest

These stands will be first thinned in 2012. This will be a row thin, removing every third row, reducing the stocking to 75 square feet of basal area per acre. This thin will remove about 35% of this strata's volume.

Stand 22(104 acres) is scheduled for a second thin in 2018, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin to reduce the stocking to 75 square feet of basal area per acre.

Stand 25(123 acres) is scheduled for a second thin in 2020, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin to reduce the stocking to 75 square feet of basal area per acre.

Fire Protection

A prescribed burn is recommended in 2014 to reduce fuel loads and the potential for a wildfire to occur. A prescribed burning plan must be developed and followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission (on a limited basis) and other certified prescribed burning vendors are available to conduct prescribed burning.

Strata 4
Stand Description
Strata 4: Stands 2,5,17,18,20

Acres: 95

These are Loblolly Pine stands that were established in 1993. Stands 2 and 5 (75 acres) were first thinned in 2008, and are currently in good health and well stocked.

Stand Recommendations

These stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

Activity Recommendations

Harvest

Stands 2 and 5 (75 acres) are scheduled for a second thin in 2016, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin, reducing the stocking to 75 square feet of basal area per acre.

Stands 17,18,20 (20 acres) are scheduled for a first thin in 2012, focusing on removing poor quality, diseased, or poorly formed trees. This will be an corridor thin, representing a third or fourth row thin, reducing the stocking to 75 square feet of basal area per acre.

Stands 17,18,20 (20 acres) are scheduled for a second thin in 2018, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin, reducing the stocking to 75 square feet of basal area per acre.

Strata 5
Stand Description

Strata 5: Stands 7,8,15,23

Acres: 109

These are sub-merchantable pine stands that were hand planted on a 10' x 7' spacing at a rate of 622 trees per acre in 1998 using 1st generation Loblolly Pine seedlings. This stand is well stocked and healthy.

Stand Recommendations

These stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

Activity Recommendations

Harvest

These stands will be first thinned in 2013. This will be a corridor thin, representing a third or fourth row thin, reducing the stocking to 75 square feet of basal area per acre.

Strata 6
Strata Description
Strata 6: Stands 11,12,16,21

Acres: 16

These are isolated stands of upland hardwood that contains a mixture of red oaks and Sweetgum.

Stand Recommendations

For now these stands will be managed as permanent Streamside-Management-Zones (SMZs). Mature timber will be harvested as timber sales are completed on adjacent stands. A minimum of 50% crown cover will be maintained to ensure that a quality SMZ is left. This SMZ is vital to reduce soil erosion and to protect water quality. Eventually these stands will be incorporated with adjoining stands and converted back into pine management.

Strata 7 Stand Description Strata 7: Stands 10,29

Acres: 80

These are mature stands of Loblolly Pine and mixed red oaks that were established in 1960. Stocking is poor in some areas, but due to age and stocking these stands are scheduled for final harvest in 2012.

Stand Recommendations

Once final harvested, these stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

Activity Recommendations

Harvest

These stands are scheduled for a final harvest in 2012. This type of harvest will remove all merchantable timber with these stands.

Site Preparation

These stands will be aerially sprayed with herbicides to control unwanted hardwood competition and herbaceous weeds. This activity will be completed in 2014.

Regeneration

These stands will be hand planted in 2014 using 2nd generation Loblolly pine seedlings. Seedlings will be planted on a 10' x 7' spacing at a rate of 622 trees per acre. A deviation from the recommended planting rates will be limited to plus or minus 40 trees per acre. Planting should be done between December and February. Compliance checks will be completed as these stands are planted to ensure proper planting. A survival study will be completed the following Fall to ensure sufficient

stocking. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when planting.

Strata 8

Strata Description
Strata 8: Stand 14

Acres: 20

This is a Loblolly Pine stand that was hand planted on a 10' x 7' spacing at a rate of 622 trees per acre in 1996 using genetically improved Loblolly Pine seedlings. This stand is well stocked and healthy.

Stand Recommendations

This stand will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return this stand to full production.

Activity Recommendations

Harvest

This stand will be first thinned in 2013. This will be a corridor thin, representing a third or fourth row thin, reducing the stocking to 75 square feet of basal area per acre.

Strata 9 Stand Description Strata 9: Stands 4,24

Acres: 66

These stands are permanent Streamside-Management-Zones (SMZs) that were established in 1960. These stands consist of White Oak, Red Oak, and Hickory.

Stand Recommendations

These stands will be managed as permanent Streamside-Management-Zones (SMZs). Mature timber will be harvested as timber sales are completed on adjacent stands. A minimum of 50% crown cover will be maintained to ensure that a quality SMZ is left. This SMZ is vital to reduce soil erosion and to protect water quality.

OTHER PLAN ACTIVITIES

Property Activities

Activity Recommendations

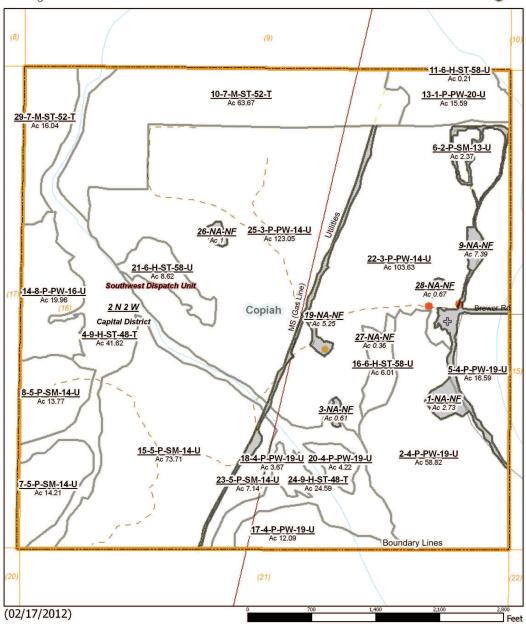
Routine inspections and general maintenance of the roads, firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.



Copiah Board of Education

SEC 16; TWN 2N; RGE 2W 2012 to 2021 648.38 Acres





SEC 16 TWN 2N RGE 2W

SEC 16; TWN 2N; RGE 2W



Property	Structures	Management Compartment
Property (1)	← Church (1)	Harvest (2)
	Camp House (1)	SMZ (1)
Category 1: Stands		Stand Improvement (2)
Pulpwood (9)	Other	1000
Sawtimber (8)	Locked (2)	Utilities (Lines)
Sub-Merchantable (5)	Property Roads/Trails	Gas Line (1)
Category 3: Non-Forest Stands		
Non-Forest (7)	Logging Road (5)	
Non Forest (7)		
MFC Basemap		
County Boundary	School Sections	Physiographic Region
County Boundary (1)	School Sections (1)	SOUTH CENTRAL HILLS (1)
Quadrangle Grid	Public School Districts	Soil Associations
USGS Quad (1)	COPIAH COUNTY SCHOOL DISTRICT (
PLS Townships	US Congressional District	smithdale-providence-saffell (1)
PLS Townships (1)	US Cong Dist #2 (1)	lorman-smithdale-loring (1)
Survey Districts	MS Senate	Surface Geology
District 2 (1)	36 (1)	CITRONELLE (1)
Blockgroup (Census 2000)	MS House	CATAHOULA (1)
Blockgroup (Census 2000) (1)	62 (1)	MFC Districts
Blockgroup (Cerisus 2000) (1)	02 (1)	MFC Districts (1)
Block (Census 2000)	Intermittent Streams	
☐ Block (Census 2000) (3)	Intermittent Streams (2)	MFC Dispatch Units
Tract/BNA (Census 2000)	Hydrologic Units (Basins)	MFC Dispatch Units (1)
Tract/BNA (Census 2000) (1)	BAYOU PIERRE (1)	MS Outline
ITACO DIVA (Cerisus 2000) (1)	BATOU FIERRE (1)	MS Outline (1)
County Roads	Historic Forest Boundary	— (-)
County Roads (1)	Shortleaf/Longleaf Pine-Upland Hardwo	ood-Loblolly Pine (1)
Natural Gas Lines	MS Forest Habitat	
Natural Gas Lines (1)	SOUTHERN LOESSTAL LOAM HTLLSRU	GGED TOPO (1)

Stand Activity Summary for Copiah County BOE 16 2N 2W

Filters Applied: County: Copiah

Client Class: School Trust Land
District: Capital District
Client: Copiah County BOE

STR: 16 2N 2W

Activity:

Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2012							
16 2N 2W	3	22	Harvest, Mechanical, 1st Thin, Machine, Loblolly	104	\$3,640.00	\$34,320.00	
16 2N 2W	3	25	Harvest, Mechanical, 1st Thin, Machine, Loblolly	123	\$4,306.75	\$40,606.50	
16 2N 2W	4	17	Harvest, Mechanical, 1st Thin, Machine, Loblolly	12	\$420.00	\$4,080.00	
16 2N 2W	4	18	Harvest, Mechanical, 1st Thin, Machine, Loblolly	4	\$140.00	\$1,360.00	
16 2N 2W	4	20	Harvest, Mechanical, 1st Thin, Machine, Loblolly	4	\$140.00	\$1,360.00	
16 2N 2W	7	10	Harvest, Mechanical, Final, Machine, Loblolly	64	\$2,240.00	\$116,480.00	
16 2N 2W	7	29	Harvest, Mechanical, Final, Machine, Loblolly	16	\$560.00	\$28,960.00	
			Yearly Totals	327	\$11.446.75	\$227.166.50	
2013							
16 2N 2W	5	7	Harvest, Mechanical, 1st Thin, Machine, Loblolly	14	\$490.00	\$4,620.00	
16 2N 2W	5	8	Harvest, Mechanical, 1st Thin, Machine, Loblolly	14	\$481.95	\$4,544.10	
16 2N 2W	5	15	Harvest, Mechanical, 1st Thin, Machine, Loblolly	74	\$2 <i>,</i> 579.85	\$24,324.30	
16 2N 2W	5	23	Harvest, Mechanical, 1st Thin, Machine, Loblolly	7	\$249.90	\$2,356.20	
16 2N 2W	8	14	Harvest, Mechanical, 1st Thin, Machine, Loblolly	20	\$700.00	\$6,800.00	
			Yearly Totals	129	\$4.501.70	\$42.644.60	
2014							
16 2N 2W	3	22	Fire Protection, Other, Burn, Hand, Fuel Reduction	104	\$2,600.00	\$0.00	
16 2N 2W	3	25	Fire Protection, Other, Burn, Hand, Fuel Reduction	123	\$3,076.25	\$0.00	

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
16 2N 2W	7	10	Regeneration, Artificial, Plant, Hand, Loblolly	64	\$5,440.00	\$0.00
16 2N 2W	7	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	64	\$5,093.60	\$0.00
16 2N 2W	7	29	Site Preparation, Chemical, Broadcast, Aerial, Combination	16	\$1,280.00	\$0.00
16 2N 2W	7	29	Regeneration, Artificial, Plant, Hand, Loblolly	16	\$1,360.00	\$0.00
			Yearly Totals	387	\$18.849.85	\$0.00
2016						
16 2N 2W	1	13	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	16	\$560.00	\$7,200.00
16 2N 2W	2	6	Harvest, Mechanical, 1st Thin, Machine, Loblolly	2	\$70.00	\$740.00
16 2N 2W	4	2	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	59	\$2,065.00	\$25,370.00
16 2N 2W	4	5	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	17	\$580.65	\$7,465.50
			Yearly Totals	94	\$3.275.65	\$40.775.50
2018						
16 2N 2W	2	6	Vegetation Control, Chemical, Broadcast, Aerial, Woody	2	\$154.05	\$0.00
16 2N 2W	3	22	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	104	\$3,640.00	\$46,800.00
16 2N 2W	4	17	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	12	\$420.00	\$5,400.00
16 2N 2W	4	18	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	4	\$140.00	\$1,800.00
16 2N 2W	4	20	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	4	\$140.00	\$1,800.00
		·	Yearly Totals	126	\$4.494.05	\$55.800.00
2020						
16 2N 2W	3	25	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	123	\$4,305.00	\$55,350.00
			Yearly Totals	123	\$4,305.00	\$55,350.00
			Grand Totals	1.185	\$46,873.00	\$421.736.60