

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 T9N R10E

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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: 637 Latitude: -90.2 Longitude: 31.75

Section: 16 Township: 9N Range: 10E

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 off Beasley Road in southeast Copiah County. It has only one access road entering the section. There are several stand conditions ranging from Longleaf Pine plantations, reproduction and sub-merchantable Loblolly Pine plantations, to mature hardwood timber.

Water Resources

No perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified 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

No Archeological or Cultural resources were identified during a reconnaissance of the property. However, if Archeological or Cultural resources are discovered anytime on the property special managements measures will be applied immediately in order preserve these sensitive areas.

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%.

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 3

Acres: 74

This is a mature bottomland hardwood stand that was established in 1940. Species include various red oaks and white oak. The stand is slightly understocked with quality hardwood sawtimber. This is a low lying area that is wet during the winter months.

Strata Recommendations

This stand is scheduled for a final harvest in 2018. After the harvest has been completed it will be site prepared and reforested. The stand will be reforested using second generation Loblolly Pine seedlings on a 10' x 7' spacing at a rate of 622 trees per acre. It will managed on a 35 to 40 year rotation.

Activity Recommendations

Harvest

This stand is scheduled for a final harvest in 2018. This harvest will remove all merchantable timber within these stands. Following the final harvest, this stand will be reforested using 2nd generation Loblolly Pine seedlings.

Site Preparation

This stand will be aerially sprayed with herbicides to control unwanted hardwood competition and herbaceous weeds. Following the site preparation spray, a site preparation burn will be conducted to minimize logging debris and obtain better planter access. These activities will be completed in 2020.

Regeneration

This stand will be hand planted in 2020 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. A compliance check will be completed as this stand is 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 2
Stand Description
Strata 2: Stand 5

Acres: 81

This is a sub-merchantable pine stand that was hand planted on a 10' x 7' spacing at a rate of 622 trees per acre in 2001 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 2017. 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. This thin will remove about 35% of this strata's volume.

Fire Protection

A prescribed burn is recommended in 2019 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 3
Stand Description
Strata 3: Stand 7

Acres: 108

This is a Loblolly Pine stand that was established in 1994. This stand was first thinned in 2009 and is currently in good health and well stocked.

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

Fire Protection

A prescribed burn is recommended in 2012 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.

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 4

Stand Description

Strata 4: Stands 8,9,10

Acres: 24

These are Loblolly Pine stands that were open field machine planted in 1990. These stands were first thinned in 2004 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

These stands are scheduled for a second thin in 2012, 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.

These stands are scheduled for a third thin in 2019, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from previous thins to reduce the stocking to 75 square feet of basal area per acre.

Strata 5

Stand Description

Strata 5: Stand 11

Acres: 127

This is a Longleaf Pine stand that was established in 2005. Survival and growth have been excellent.

Strata Recommendations

This stand will be managed as a Longleaf Pine stand into the future. It will be managed on a 45 year rotation. Thinnings will be scheduled at approximately 15 years of age and every 7-8 years thereafter. Other management activities that maybe used are mid rotation release and/or silvicultural burning.

Strata 6
Stand Description
Strata 6: Stand 2

Acres: 202

This stand was hand planted in 2011 using 2nd generation loblolly Pine seedlings on a 10' x 7' spacing at 622 trees per acre. A compliance check was completed as this stand was planted to ensure proper planting and stocking. A survival check will be completed in the Fall to ensure an adequate survival rate.

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.

Strata 7
Stand Description
Strata 7: Stand 6

Acres: 8

This stand is a permanent Streamside-Management-Zones (SMZs) that was established in 1949. This area consists of mixed hardwood and scattered Loblolly Pine.

Stand Recommendations

This stand 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.

Strata 8
Stand Description
Strata 8: Stand 1

Acres: 7

This is an upland White Oak and Loblolly Pine stand that was established in 1951. This stand was left for wildlife management.

Strata Recommendations

This stand will be managed as a permanent wildlife area. Mature timber will be harvested as timber sales are completed on adjacent stands. A minimum of 50% crown cover will be maintained.

OTHER PLAN ACTIVITIES

Property Activities

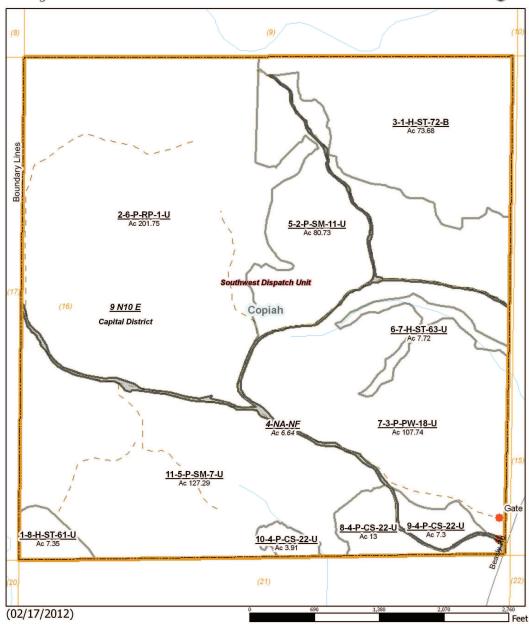
Activity Recommendations

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



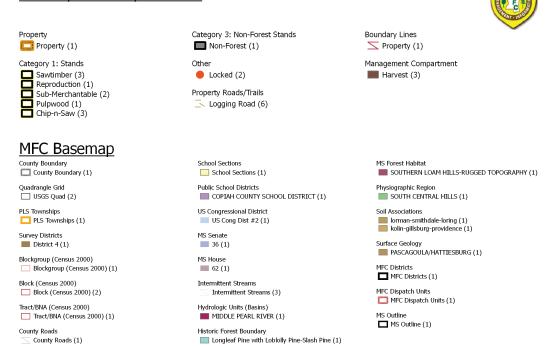
Copiah Board of Education
SEC 16; TWN 9N; RGE 10E
2012 to 2021 637.12 Acres





SEC 16 TWN 9N RGE 10E

SEC 16; TWN 9N; RGE 10E



Stand Activity Summary for Copiah County BOE 16 9N 10E

Filters Applied: County: Copiah

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

STR: 16 9N 10E

Activity:

Year: 2012 Through 2021

STR	Strata	Stand	Activity		Est. Cost	Est. Revenue				
STR Strata Stand Activity Acre Cost Revenue 2012										
16 9N 10E	3	7	Fire Protection, Other, Burn, Hand, Fuel Reduction		\$2,700.00	\$0.00				
16 9N 10E	4	8	Harvest, Mechanical, 2nd Thin, Machine, Loblolly		\$455.00	\$5,850.00				
16 9N 10E	4	9	Harvest, Mechanical, 2nd Thin, Machine, Loblolly		\$255.50	\$3,285.00				
16 9N 10E	4	10	Harvest, Mechanical, 2nd Thin, Machine, Loblolly		\$136.85	\$1,759.50				
			Yearly Totals	132	\$3.547.35	\$10.894.50				
2016										
16 9N 10E	3	7	Harvest, Mechanical, 2nd Thin, Machine, Loblolly		\$3,780.00	\$54,000.00				
			Yearly Totals	108	\$3.780.00	\$54,000.00				
2017										
16 9N 10E	2	5	Harvest, Mechanical, 1st Thin, Machine, Loblolly		\$2,825.55	\$27,448.20				
			Yearly Totals	81	\$2,825.55	\$27.448.20				
2018										
16 9N 10E	1	3	Harvest, Mechanical, Final, Machine, Misc Red Oak		\$2,590.00	\$136,678.00				
			Yearly Totals	74	\$2.590.00	\$136.678.00				
2019										
16 9N 10E	2	5	Fire Protection, Other, Burn, Hand, Fuel Reduction		\$2,018.25	\$0.00				
16 9N 10E	4	8	Harvest, Mechanical, Thin, Machine, Loblolly		\$455.00	\$8,840.00				
16 9N 10E	4	9	Harvest, Mechanical, Thin, Machine, Loblolly		\$255.50	\$4,964.00				

STR	Strata	Stand	Activity		Acre	Est. Cost	Est. Revenue				
16 9N 10E	4	10	Harvest, Mechanical, Thin, Machine, Loblolly		4	\$136.85	\$2,658.80				
				Yearly Totals	105	\$2,865.60	\$16,462.80				
2020											
16 9N 10E	1	3	Regeneration, Artificial, Plant, Hand, Loblolly		74	\$6,290.00	\$0.00				
16 9N 10E	1	3	Site Preparation, Chemical, Broadcast, Aerial, Combination		74	\$5,920.00	\$0.00				
16 9N 10E	1	3	Site Preparation, Other, Burn, Hand, Debris		74	\$1,850.00	\$0.00				
				Yearly Totals	222	\$14.060.00	\$0.00				
				Grand Totals	722	\$29,668.50	\$245,483.50				