

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Jones County BOE

Prepared By: Aaron Nathaniel Rambin Mississippi Forestry Comm.

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-04

Plan Type: Stewardship / Stewardship

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

Property Name: 16 T6N R11W

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LANDOWNER INFORMATION

Organization: Jones County B. O. E. Name: Jones County BOE Mailing Address: 5204 Hwy 11 N

City, State, Zip: Ellisville, MS 39437 Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-649-5201

Fax Number:

E-mail Address: sethrash@jones.k12.ms.us

Social Security Number (optional): 646000536

FORESTER INFORMATION

Name: Aaron Nathaniel Rambin, Service Forester

Forester Number: 02418

Organization: Mississippi Forestry Comm.

Street Address: 101 N. Court St.

Suite E

City, State, Zip: Ellisville, MS 39437

Contact Numbers: Office Number: 601-477-3735

Fax Number: 601-477-3739

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

PROPERTY LOCATION

County: Jones Total Acres: 638 Latitude: -89.1 Longitude: 31.48

Section: 16 Township: 6N Range: 11W

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

General

This section consists of one full section of land containing 640 acres. It is located in southeastern Jones County. Ovett-Moselle Road and Highway 29 South are the two major public roads that transect the 16th section. These roads, along with several other public roads provide excellent access to most areas of the section. A gas pipeline right-of-way crosses the section from the southwest to the northeast.

This section is composed of approximately four hundred and seventy-nine (479) forested acres with the remaining one hundred and fifty-eight (158) acres in pasture and residential leases. It is predominately Loblolly Pine plantation ranging from three (3) to twenty-four (24) years of age. There are no forest management activities scheduled to occur on the non-forested areas.

Approximately two hundred and thirty acres (230) were thinned in fiscal year 2008.

Archeological or Cultural Resources:

These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

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.

Water Resources

Perennial streams, 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 reconnaisance 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

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

Properly maintained boundary lines are essential to successfully complete all forest management activities. Boundary lines mitigate the possibility of accidental timber theft and encroachment. Boundary lines will bemarked with orange paint. The boundary lines will be repainted every six years unless unordinary circumstances require a shorter painting rotation.

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 such as thinning, prescribed burning and leaving buffer zones around harvested areas may be utilized to enhance the aesthetics of the section.

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. This may be accomplished by allowing schools within the school district to utilize the sections for different classes where it is applicable. The forestry program at the local junior college could also be allowed to conduct projects on the sections to enhance their educational experience.

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 the landowner objectives the recreational use of this 16th section could prove to be an avenue for generating additional income. This can be accomplished by leasing forested areas for hunting and fishing purposes.

SOIL TYPES

McLaurin

The McLaurin component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on coastal plains. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 72. Slash Site Index = 90.

Smithdale

The Smithdale component makes up 90 percent of the map unit. Slopes are 8 to 15 percent. This component is on coastal plains. The parent material consists of Loamy Alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

STRATA

Strata 1

Strata Description

Strata 1: Reproduction

These stands are classified as reproduction and are composed of loblolly pine plantations that were planted in 2009.

Stands: 11, 17, 18

Strata 1 Total Acres: 50.46

Strata Recommendations

These stands should be inspected annually to ensure that they are in good health and growing well. There will be no other activities during the time frame of this management plan for these stands.

Strata 2

Strata Description

Strata 2: Sawtimber

These stands are classified as sawtimber and are composed of pine plantations that were established around 1987.

Stands: 4, 5, 10

Strata 2 Total Acres: 94.79

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Fire Protection

A prescribed burn is tentatively scheduled for these stands in fiscal year 2012. The main objective of this prescribed burn is to reduce fuel loads and competing vegetation. This burn will also improve access for Mississippi Forestry Commission employees and prospective timber buyers in future timber sales. The burn should be completed in the winter or early spring of 2011-2012.

Fire Protection

A prescribed burn is tentatively scheduled for these stands in fiscal year 2015. The main objective of this prescribed burn is to reduce fuel loads and competing vegetation. This burn will also improve access for Mississippi Forestry Commission employees and prospective timber buyers in future timber sales. The burn should be completed in the winter or early spring of 2014-2015.

Fire Protection

A prescribed burn is tentatively scheduled for these stands in fiscal year 2018. The main objective of this prescribed burn is to reduce fuel loads and competing vegetation. This burn will also improve access for Mississippi Forestry Commission employees and prospective timber buyers in future timber sales. The burn should be completed in the winter or early spring of 2017-2018.

Harvest

These stands will be harvested of all merchantable timber in fiscal year 2021. Timber market conditions will be closely monitored to ensure the proper timing of the timber sale in order to maximize the timber sale revenue.

Strata 3

Strata Description

Strata 3: Sub-Merchantable

These stands are classified as sub-merchantable and are composed of loblolly pine plantations that were planted in 2004.

Stands: 2 and 9

Strata 3 Total Acres: 53.33

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A first thinning is scheduled for the stands in this strata in fiscal year 2019. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will thinned by removing every fifth row. Stems that display poor growth, poor form, and disease located within the four (4) leave rows will also be removed. The target basal area will be eighty (80) square feet per acre.

Strata 4

Strata Description

Strata 4: Sub-Merchantable

These stands are classified as sub-merchantable and are composed of Longleaf Pine plantations that were planted in 1996.

Stands: 8 and 15

Strata 4 Total Acres: 50.12

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A first thinning is scheduled for the stands in this strata in fiscal year 2013. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will thinned by removing every fifth row. Stems that display poor growth, poor form, and disease located within the four (4) leave rows will also be removed. The target basal area will be eighty (80) square feet per acre.

Strata 5

Strata Description

Strata 5: Pulpwood

These stands are classified as pulpwood and are composed of loblolly pine plantations that were planted in 1991.

Stands: 1, 3, 12, 13, 14, 16

Strata 5 Total Acres: 230.46

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A second thinning is scheduled for the stands in this strata in fiscal year 2015. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will be thinned by removing stems that display poor growth, poor form, and disease. The target basal area will be seventy-five (75) square feet per acre.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

Generally, these lines consist of permanent boundary lines that delineate the sixteenth section boundary. They are usually well established and readily identifiable by a permanent fire lane and a painted line.

Line Recommendations

All boundary lines will be repainted on a six (6) year rotation to ensure that they kept in good condition. Unordinary circumstances such as new surveys and timber loss from weather may require the boundary lines to be painted on a shorter rotation.

Activity Recommendations

Property Activities

This boundary line will be repainted with orange boundary line paint in fiscal year 2014.

Property Activities

This boundary line will be repainted with orange boundary line paint in fiscal year 2020.

Fire Control

Line Description

These lines consist of a permanent fire lane that is approximately fifteen (15) wide. These fire lanes are established and maintained where appropriate to improve access and help distinguish the boundary line.

Line Recommendations

All previously established permanent fire lanes will be maintained by disking, mowing, spraying, or pushing every two (2) years.

Activity Recommendations

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2013.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2015.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2017.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2019.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2021.



Jones County School District

Section 16, Township 6 N, Range 11 W 2012 to 2021 637.98 Acres





Property Map Legend

Property Map Legend: Section 16, Towhship 6N, Range 11W



Property [] Property (1)		e Control Permanent Fire Break (3)
Category 1: Stands Pulpwood (6) Sub-Merchantable (4) Sawtimber (3)	Category 3: Non-Forest Stands Non-Forest (2)	
MFC Basemap County Boundary County Boundary (1)	School Sections School Sections (1)	Physiographic Region — Pine Belt (1)
Quadrangle Grid USGS Quad (1)	Public School Districts JONES COUNTY SCHOOL DISTRICT (1)	Soil Associations mclaurin-smithdale-savannah (1)
PLS Townships PLS Townships (1)	US Congressional District US Cong Dist #4 (1)	mclaurin-heidel-prentiss (1) Surface Geology
Survey Districts District 5 (1)	MS Senate 42 (1)	PASCAGOULA/HATTIESBURG (1) MFC Districts MFC Districts (1)
Blockgroup (Census 2000) Blockgroup (Census 2000) (3)	MS House 88 (1)	MFC Dispatch Units MFC Dispatch Units MFC Dispatch Units (1)
Block (Census 2000) Block (Census 2000) (9)	Intermittent Streams Intermittent Streams (3)	MS Outline
Tract/BNA (Census 2000) Tract/BNA (Census 2000) (1)	Hydrologic Units (Basins) LOWER LEAF RIVER (1)	MS Outline (1)
County Roads County Roads (6)	Historic Forest Boundary Longleaf Pine with Loblolly Pine-Slash Pine (:	1)
US/State Highways State Highway (1)	MS Forest Habitat SOUTHERN LOAM HILLS-RUGGED TOPOGRA	PHY (1)

Stand Activity Schedule for

16 6N 11W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
2	4	Fire Protection, Other, Burn, Hand, Hazard Mitigation	34	\$844.75	\$0.00
		Yearly Totals	34	\$844.75	\$0.00
2013			ı		
4	8	Harvest, Mechanical, 1st Thin, Machine, Longleaf	47	\$1,629.95	\$12,108.20
4	15	Harvest, Mechanical, 1st Thin, Machine, Longleaf	4	\$140.00	\$1,040.00
		Yearly Totals	51	\$1.769.95	\$13,148.20
2015					
2	4	Fire Protection, Other, Burn, Hand, Hazard Mitigation	34	\$844.75	\$0.00
5	1	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	113	\$3,952.20	\$47,381.23
5	3	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	35	\$1,229.20	\$14,736.35
5	12	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	28	\$995.40	\$11,933.42
5	13	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	28	\$969.85	\$11,627.12
5	14	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	26	\$910.00	\$10,909.60
5	16	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	1	\$26.25	\$314.70
	1	Yearly Totals	265	\$8.927.65	\$96,902.42
2018					
2	4	Fire Protection, Other, Burn, Hand, Hazard Mitigation	34	\$844.75	\$0.00
		Yearly Totals	34	\$844.75	\$0.00
2019					
3	2	Harvest, Mechanical, 1st Thin, Machine, Loblolly	36	\$1,267.35	\$9,414.60
3	9	Harvest, Mechanical, 1st Thin, Machine, Loblolly	17	\$595.00	\$4,420.00

Strata	a Stand	Activity	Acre	Est. Cost	Est. Revenue
		Yearly Totals	53	\$1,862.35	\$13,834.60
2021					
2	5	Harvest, Mechanical, Final, Machine, Loblolly	17	\$595.00	\$17,510.00
2	10	Harvest, Mechanical, Final, Machine, Loblolly	44	\$1,544.20	\$45,443.60
		Yearly Totals	61	\$2.139.20	\$62.953.60
		Grand Totals	497	\$16,388.65	\$186.838.82