

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Lawrence Board of Education

> Prepared By: Steven J. Williams M.F.C.

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-24

Plan Type: Stewardship / Stewardship

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

Property Name: S16 T6N R20W

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LANDOWNER INFORMATION

Organization: Lawrence Board of Education
Name: Lawrence Board of Education

Mailing Address: 346 Thomas E.

Jolly Dr.

City, State, Zip: Monticello, MS 39654
Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-587-2506

Fax Number:

E-mail Address:

Social Security Number (optional):

FORESTER INFORMATION

Name: Steven J. Williams, Service Forester

Forester Number: 02085 Organization: M.F.C.

Street Address: P.O. Box 374

City, State, Zip: Monticello, MS 39654

Contact Numbers: Office Number: 601-587-7515

Fax Number:

E-mail Address:

PROPERTY LOCATION

County: Lawrence Total Acres: 645 Latitude: -90.02 Longitude: 31.49

Section: 16 Township: 6N Range: 20W

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 is a 640 acre school section located Arm community in Lawrence county. The topography of this section falls in the Pearl River flood plain. This results in a flat contour which in turn means poor drainage.

Archeological and 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 management measures will be applied immediately in order to preserve these sensitive areas.

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. The following soils are identified for this property:

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthly vigorous growing stand is the best defense to an attack form 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

Rosebloom

The Rosebloom component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly 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 frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Ruston

The Ruston component makes up 90 percent of the map unit. Slopes are 5 to 8 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 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 91. Longleaf Site Index = 76. Slash Site Index = 91.

Providence

The Providence component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately 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. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 87. Longleaf Site Index = 73.

Paden

The Paden component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer, fragipan, is 18 to 30 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 80.

Rosella

The Rosella component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. Loblolly Site Index = 80.

STANDS

Stand Clear Cut (S#1)

Stand Description

This is a three and four year cutover that has been planted with various hardwoods in 2008 containing 38 acres.

Stand Recommendations

This is a hardwood stand now and I recommend that it goes back into hardwood after final harvest.

Stand Pulpwood (S#6)

Stand Description

This is a planted pine plantation along with natural seeded pine. The age of the stand is 14-15 years old and contains 26 acres.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Vegetation Control

A mid rotation herbicide brush control application should be performed in the year 2012.

Ground Application of Herbicide - A mid rotation herbicide spray in the form of a ground application should be applied to the tract to control competing vegetation. The herbicide should comform to the manufacturer recommendation rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Harvest

This stand will need to be thinned in the year 2017. A mechanical corridor thin will be used, with the remaining basal area around 70.

Stand Chip-n-Saw (S#11)

Stand Description

This is a three and four year cutover that has been planted with various hardwood in 2008 containing 76 acres.

Stand Recommendations

This is a hardwood stand now and I recommend that it goes back into hardwood after final harvest.

Stand Chip-n-Saw (S#8)

Stand Description

This is a 18-20 year old stand that has been thinned twice. This stand consist of C-N-S and small sawtimber.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Harvest

This stand will need to be thinned in the year 2017. A mechanical corridor thin will be used, with the remaining basal area around 70.

Vegetation Control

A mid rotation herbicide brush control application should be performed in the year 2012.

Ground Application of Herbicide - A mid rotation herbicide spray in the form of a ground application should be applied to the tract to control competing vegetation. The

herbicide should comform to the manufacturer recommendation rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Stand Regeneration (S #9)

Stand Description

This is a fresh cutover that was site prepared and planted in January 2012.

Stand Recommendations

This is a hardwood stand now and I recommend that it goes back into hardwood after final harvest.

Stand Regeneration (S#7)

Stand Description

This is a three and four year cutover that has been planted with selected hardwoods.

Stand Recommendations

This is a hardwood stand now and I recommend that it goes back into hardwood after final harvest.

Stand Pulpwood (S#12)

Stand Description

This is a planted pine plantation along with naturally seeded stand that is 15 years in age.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Harvest

This stand was due to thin in 2010, but due to inclement weather it was rescheduled to sell in 2013.

Stand Pulpwood (S#3)

Stand Description

This is a planted pine plantation along with naturally seeded stand that is 13 years in age.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Harvest

This stand is scheduled for a thinning in 2013.

Vegetation Control

A mid rotation herbicide brush control application should be performed in the year 2015.

Ground Application of Herbicide - A mid rotation herbicide spray in the form of a ground application should be applied to the tract to control competing vegetation. The herbicide should comform to the manufacturer recommendation rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Stand Pulpwood (S#4)

Stand Description

This is a planted pine plantation along with naturally seeded stand that is 11 years old.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Harvest

This stand is scheduled for a thinning in 2013.

Vegetation Control

A mid rotation herbicide brush control application should be performed in the year 2015.

Ground Application of Herbicide - A mid rotation herbicide spray in the form of a ground application should be applied to the tract to control competing vegetation. The herbicide should comform to the manufacturer recommendation rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Stand Sawtimber (S#13)

Stand Description

This is a natural stand of pine sawtimber that is over 40 years in age.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Harvest

This stand is scheduled for a regeneration cut in 2017.

Site Preparation

<u>Aerial Application of Herbicide</u> - During the summer prior to planting, site preparation in the form of an aerial application of a herbicide should be applied to the tract to control competing vegetation. The herbicide should conform to the manufacturer recommended rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Regeneration

<u>Planting</u> - Following site preparation, the area should be planted with genetically improved containerized loblolly pine. Seedlings will be planted at a rate of 544 trees per acre at a spacing of 8 X10 feet. 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 March. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when planting.

Stand Pulpwood (S#15)

Stand Description

This is a planted pine plantation along with naturally seeded stand that is 15 years in age.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Activity Recommendations

Vegetation Control

A mid rotation herbicide brush control application should be performed in the year 2015.

Ground Application of Herbicide - A mid rotation herbicide spray in the form of a ground application should be applied to the tract to control competing vegetation. The herbicide should comform to the manufacturer recommendation rates and

specifications. A herbicide representative should be contacted to write a rate and application method recommendation.

Harvest

This stand will need to be thinned in the year 2017. A mechanical corridor thin will be used, with the remaining basal area around 70.

Stand Regeneration (S # 5)

Stand Description

This is a fresh cutover that was site prepared and planted in January 2012 containing 13 acres.

Stand Recommendations

This stand will be managed as a pine stand on a 35 to 40 year rotation, and will be regenerated back into pine following the final harvest.

Stand Sawtimber (S#14)

Stand Description

This is a natural stand of pine sawtimber that is over 40 years in age and 179 acres.

Stand Recommendations

This stand can go back as hardwood or as pine, after final harvest.

Activity Recommendations

Harvest

This stand is scheduled for a thinning in 2015.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

Boundary lines have been established and are painted in orange paint.

Line Recommendations

Boundary lines should be repainted every four years

Activity Recommendations

Property Activities

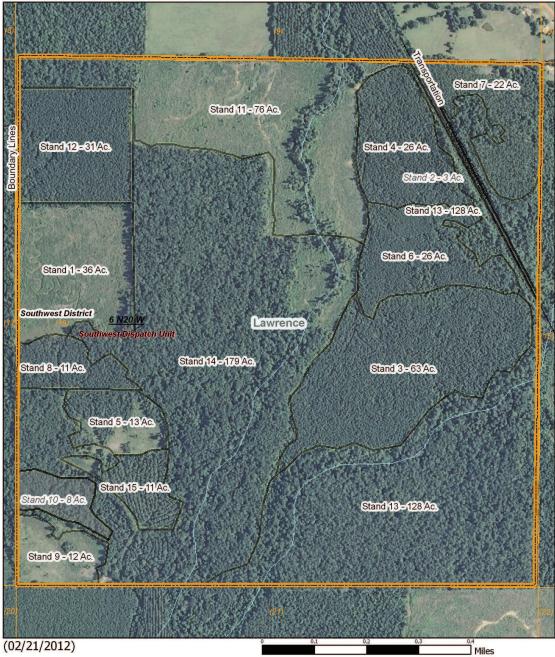
Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.



Lawrence Cty BOE

Arm 16-6-20 2012 to 2021 644.61 Acres





<u>16-6-20</u>



Property Property (1) Category 1: Stands Pulpwood (5) Clear Cut (3) Chip-n-Saw (2)	Category 1: Stands (cont) Sawtimber (2) Category 3: Non-Forest Stands Non-Forest (2)	Transportation (Lines) Abandoned RR (1)
MFC Basemap County Boundary County Boundary (1)	School Sections School Sections (1)	MS Forest Habitat SOUTHERN LOAM HILLS-RUGGED TOPOGRAPHY (1)
Quadrangle Grid USGS Quad (1)	Public School Districts LAWRENCE COUNTY SCHOOL DIST (1)	Physiographic Region SOUTH CENTRAL HILLS (1)
PLS Townships PLS Townships (1)	US Congressional District US Cong Dist #3 (1)	Soil Associations guyton-rosebloom-cahaba (1) smithdale-ruston-malbis (1)
Survey Districts District 5 (1) Blockgroup (Census 2000)	MS Senate 39 (1) MS House	Surface Geology PASCAGOULA/HATTIESBURG (1)
Blockgroup (Census 2000) (1)	91 (1)	MFC Districts MFC Districts (1)
Block (Census 2000) Block (Census 2000) (3)	Intermittent Streams Intermittent Streams (2)	MFC Dispatch Units MFC Dispatch Units (1)
Tract/BNA (Census 2000) Tract/BNA (Census 2000) (1)	Hydrologic Units (Basins) MIDDLE PEARL RIVER (1)	MS Outline MS Outline MS Outline (1)
Active Railroads Active Railroads (1)	Historic Forest Boundary Longleaf Pine with Loblolly Pine-Slash Pine (1)	

Stand Activity Summary for Lawrence Board of Education 16 6N 20W

Filters Applied: County: Lawrence

Client Class: School Trust Land
District: Southwest District

Client: Lawrence Board of Educat

STR: 16 6N 20W

Activity:

Year: 2012 Through 2021

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STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012						
16 6N 20W	0	5	Regeneration, Artificial, Plant, Hand, Loblolly	13	\$1,254.50	\$0.00
16 6N 20W	0	9	Regeneration, Artificial, Plant, Hand, Loblolly	12	\$1,158.00	\$0.00
16 6N 20W	2	7	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	22	\$1,980.00	\$0.00
16 6N 20W	2	8	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	11	\$990.00	\$0.00
16 6N 20W	3	6	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	26	\$2,340.00	\$0.00
16 6N 20W	3	15	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	11	\$959.40	\$0.00
			Yearly Totals	95	\$8,681.90	\$0.00
2013						
16 6N 20W	3	3	Harvest, Mechanical, Thin, Machine, Loblolly	63	\$630.00	\$20,254.50
16 6N 20W	3	4	Harvest, Mechanical, Thin, Machine, Loblolly	26	\$260.00	\$8,359.00
16 6N 20W	3	12	Harvest, Mechanical, Thin, Machine, Loblolly	31	\$310.00	\$9,966.50
			Yearly Totals	120	\$1.200.00	\$38.580.00
2015						
16 6N 20W	1	14	Harvest, Mechanical, Thin, Machine, Loblolly	179	\$5,370.00	\$154,763.40
16 6N 20W	3	3	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	63	\$5,630.40	\$0.00
16 6N 20W	3	4	getation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woc	26	\$2,323.80	\$0.00
			Yearly Totals	267	\$13,324.20	\$154,763.40
2017						

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
16 6N 20W	1	13	Harvest, Mechanical, Final, Machine, Loblolly	128	\$3,840.00	\$130,145.28
16 6N 20W	2	7	Harvest, Mechanical, Thin, Machine, Loblolly	22	\$2,640.00	\$8,516.64
16 6N 20W	2	8	Harvest, Mechanical, Thin, Machine, Loblolly	11	\$1,430.00	\$4,258.32
16 6N 20W	3	6	Harvest, Mechanical, Thin, Machine, Loblolly	26	\$258.00	\$8,294.70
16 6N 20W	3	15	Harvest, Mechanical, Thin, Machine, Loblolly	11	\$110.00	\$3,536.50
		·	Yearly Totals	198	\$8.278.00	\$154.751.44
2018						
16 6N 20W	1	13	Site Preparation, Chemical, Broadcast, Aerial, Combination	128	\$12,800.00	\$0.00
			Yearly Totals	128	\$12,800.00	\$0.00
2019						
16 6N 20W	1	13	Regeneration, Artificial, Plant, Hand, Loblolly	128	\$16,000.00	\$0.00
			Yearly Totals	128	\$16,000.00	\$0.00
			Grand Totals	936	\$60.284.10	\$348.094.84