

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Jefferson County Schools

Prepared By: J. Ted Ratcliff Miss. 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: 51-8N-1W** 

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# LANDOWNER INFORMATION

Organization: Jefferson County Schools
Name: Jefferson County Schools

Mailing Address: P.O. Box 157

City, State, Zip: Fayette, MS 39069
Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-786-3791

Fax Number:

E-mail Address:

Social Security Number (optional): 640000000

# FORESTER INFORMATION

Name: J. Ted Ratcliff, Service Forester

Forester Number: 00717

Organization: Miss. Forestry Comm.

Street Address: P. O. Box 452

City, State, Zip: Meadville, MS 39653

Contact Numbers: Office Number: 601-754-9111

Fax Number: 601-384-2437

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

# PROPERTY LOCATION

County: Jefferson Total Acres: 274 Latitude: -91.16 Longitude: 31.63

Section: 51 Township: 8N Range: 1W

# 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 south western portion of the county in the Cannonsburg Community. The south section line is the Adams-Jefferson county line. Access to the northern part of the section is off higway 61 through private property. The southern part can be accessed through the same landowner except from the Adams County side. This section of approximately 274 acres, is mostly forested except for small food plots. woods roads, and pipeline R.O.W. which total about 2 acres.

#### Water Resources

A perennial stream runs through this property. Also intermittent streams and drains were identified, both 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: Smithdale and Lexington.

# 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

No Archeological or Cultural Resources Were Identified during the reconnaissance of the property. However, if Archeological or Cultural Resources are discovered anytime on the property special management measures will be applied immediately to preserve these sensitive areas.

# GENERAL PROPERTY RECOMMENDATIONS

#### Forest Protection

A healthy and 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 within the forest, 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 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

#### **Smithdale**

Smithdale soils are the predominate soil found on this section. Slopes are 5 to 40 percent. 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 7e. This soil does not meet hydric criteria. The Lexington component makes up 35 percent of the map unit. Slopes are 12 to 20 percent. 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 6e. This soil does not meet hydric criteria.

#### **STRATA**

Strata 1 (Stands 1 and 8)

Stand Description

Consist of approximately 36 acres of pine pulpwood that was planted in 1995. Stand development is behind because of a large amount of hardwood encroachment in the understory and main canopy. Some areas have been completely encroached by hardwood saplings and pulpwood.

# Stand Recommendations

This stand will be managed as a loblolly pine plantation throughout the rotation and be harvested at maturity to be regenerated back into loblolly pine.

# **Activity Recommendations**

Harvest

The first thin in 2015 should be between 15 and 18 years of age and should be thinned to a basal area of approximately 70. This is followed by second and third thins at 5 to 7 year intervals taking into consideration the growth of the stand and the local market. Each time the stand should be brought back to a 70-80 basal area.

Strata 2 (Stand 7)

Strata Description

A 61 acre Hardwood stand which has most of the pine removed in 2012. The terrain is aggressive with quite a bit of underbrush. This stand has no activities planned.

#### Strata Recommendations

Manage as a hardwood stand with uneven aged management activity.

Strata 3 (Stand 6 and 10)

Stand Description

This strata was sold in 2011 as a clear cut harvested area of approximately 80 acres. All merchantable timber has yet to be removed and should be ready for site prep and planting after harvest. This strata is to be planted with 544 trees per acre of genetically improved containerized loblolly pine seedlings. Trees are to be planted on an 8 by 10 spacing. Before planting, the area is to be sprayed with a mix to control both herbaceous and woody stems. Also a burn will reduce the volume of logging slash. The strata will be managed as a pine stand and will be thinned at age 12 to 15, afterwhich a control burn will reduce the excess slash and keep the hardwood growth in check.

### Stand Recommendations

This stand will be managed as a loblolly pine plantation throughout the rotation and be harvested at maturity to be regenerated back into loblolly pine.

# **Activity Recommendations**

# Site Preparation

The heavy site preparation needed will be an aerial application of herbicides to be completed prior to October 24, 2013. The objective of the herbicide application will be to kill the competing vegetation currently on the site. The herbicides to use and the rate of application will be prescibed by a herbicide specialist.

### Site Preparation

This site will need a site preparation burn. The objective of the burn will be to remove the accumulation of debris on the site, which will improve planting conditions for the tree planting personnel. The burn should be done by a certified burner or the landowner using a burn plan and a permit to burn.

# Regeneration

This area will be planted with genetically improved, containerized loblolly seedlings. Spacing will be done on a 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

Strata 4 (Stand 2)

Strata Description

A 52 acre SMZ with no activities planned.

#### Strata Recommendations

Since this strata will be managed as a permanent SMZ, only selective cutting will occur in these areas. Selective cutting will occur as adjoining sales are performed. The harvesting will focus on removing the mature timber and will not remove more than 50 percent of the existing stand.

Strata 5 (Stand 4 and 9)

Strata Description

A 19 acre stand of hardwood pulpwood with a light mixture of pines. Little to no activity is planned.

#### Strata Recommendations

This stand is to be managed as a hardwood stand.

# **DISCLAIMER**

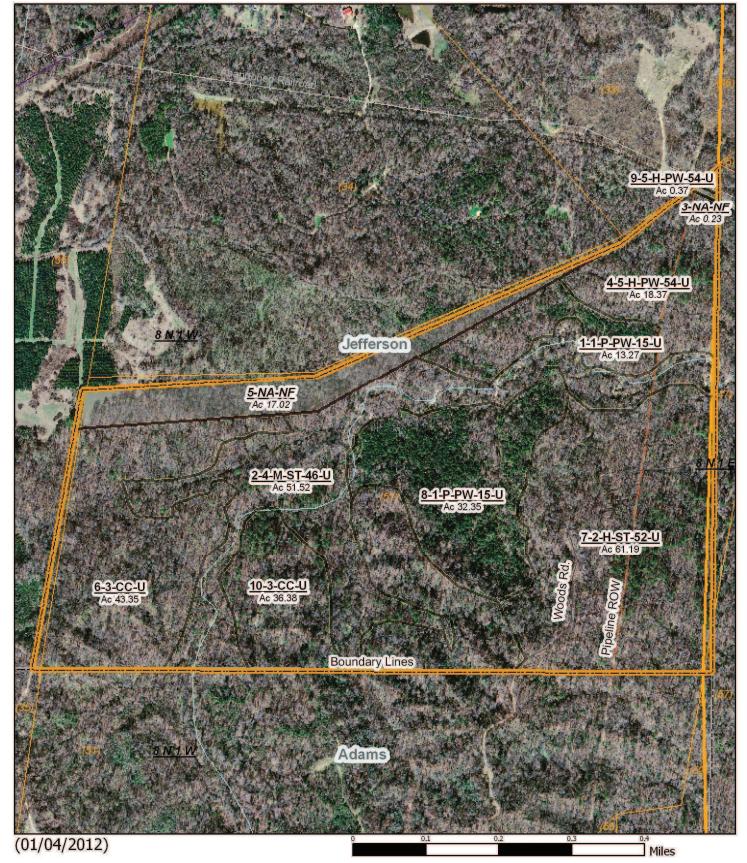
This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances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



# **JEFFERSON COUNTY SCHOOLS**

SEWELL LEASE 2012 to 2021 274.05 Acres





# **LEGEND**



# Property Property Category 1: Stands Clear Cut Non-Stocked Reproduction Sub-Merchantable Pulpwood Chip-n-Saw Sawtimber Poles Category 2: Stands Clear Cut Non-Stocked Reproduction Sub-Merchantable Pulpwood Chip-n-Saw Sawtimber Poles

Category 3: Non-Forest Stands

Non-Forest



Boundary Lines (cont) Property Recreation Rights of Way SMZ Special Use Stand Surface Mining Threatened/Endangered Species
Visual Buffer Utilities (Lines) Large Electrical Local Utility Large Pipeline Small Pipeline Gas Line Utility Line
Water Line

# Stand Activity Schedule for Jefferson County Schools 51 8N 1W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013					
3	6	Regeneration, Artificial, Plant, Hand, Loblolly	43	\$4,730.00	\$0.00
3	6	Site Preparation, Other, Burn, Hand, Cut-Over	43	\$1,290.00	\$0.00
3	6	Site Preparation, Chemical, Broadcast, Aerial, Combination	43	\$4,768.50	\$0.00
3	10	Site Preparation, Other, Burn, Hand, Cut-Over	36	\$1,080.00	\$0.00
3	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	36	\$4,001.80	\$0.00
3	10	Regeneration, Artificial, Plant, Hand, Loblolly	36	\$3,960.00	\$0.00
		Yearly Totals	238	\$19.830.30	\$0.00
2015					
1	1	Harvest, Mechanical, 1st Thin, Machine, Loblolly	13	\$390.00	\$3,900.00
1	8	Harvest, Mechanical, 1st Thin, Machine, Loblolly	32	\$960.00	\$9,600.00
		Yearly Totals	45	\$1.350.00	\$13.500.00
		Grand Totals	283	\$21.180.30	\$13,500.00