



Vision • Commitment • Pride

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: 24-10N-1E

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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
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PROPERTY LOCATION

County: Jefferson Total Acres: 625 Latitude: -91.11 Longitude: 31.83
Section: 24 Township: 10N Range: 1E

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.

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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 northwest quarter of the county and is easily accessible by Rodney Road which disects the section running from the northwest to the southeast quarter of the section. Approximately 610 acres are forested, of the 625 total acres. The terrain is very steep over much of this section, making some areas accessible by foot traffic only.

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: Memphis and Natchez.

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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.

Archeological or Cultural Resources Were Identified:

A cemetery and Fellowship Baptist Church exist in the north central portion of the section, and is found in stand 9 as indicated on the attachment map. Fellowship Baptist Church is one of the earliest organized baptist churches in Jefferson County and was moved here from its original location. This site has been buffered and designated with blue paint on the trees around site. No forest management activities will occur inside this protected area.

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*.

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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 been 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.

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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

Memphis

The Memphis component makes up 72 percent of the map unit. Slopes are 17 to 40 percent. The parent material consists of loess. 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 very 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 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The Natchez component makes up 23 percent of the map unit. Slopes are 15 to 50 percent. The parent material consists of loess. 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 low. 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 7e. This soil does not meet hydric criteria.

STANDS

STRATA 1 (Stand 8)

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Stand Description

This stand consist of aproximately 281 acres of mixed hardwood and pine pulpwood. This area was hand planted with loblolly pine in 1987 on the ridge tops and upper slopes and the lower slopes were allowed to naturally regenerate to hardwood. The stand was slow to develop because of the large amount of locust that shot up in the stand. The locust were injected, but with little success of removing them from the stand.

Stand Recommendations

This stand will be managed as a hardwood stand, with harvest leaning to a natural regeneration.

Activity Recommendations

Harvest

This area should be ready to be thinned in 2016. Pines will be thinned on the ridges, and the lessed desirable species will be removed when thinning the hardwood areas.

Site Improvement

The area will be sprayed in 2017 with an aerial broadcast herbicide application for the removal of locust. Chemicals and rates will be determined based on the vegetation present at that time by a licensed applicator.

Fire Protection

A prescribed fire in 2018 is recommended for this site in order to reduce fuel loading, control vegetation, 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 and other certified prescribed burning vendors are available to conduct prescribed burning.

STRATA 2 (Stand 7)

Stand Description

Consist of approximately 84 acres of pine regeneration that was planted in 1996. Stand development is behind because of a large amount of hardwood encroachment in the understory and main canopy. Some areas, mostly the steeper slopes have been completely encroached by hardwood saplings and pulpwood. The pine are developing well on the ridges and some of the upper slopes.

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Stand Recommendations

This stand will be managed to grow to a 35 to 40 year rotation. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

Harvest

This area should be ready to be thinned in 2016. Pines will be thinned on the ridges, and the less desirable species will be removed when thinning the hardwood areas.

Fire Protection

A prescribed fire in 2018 is recommended for this site in order to reduce fuel loading 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 and other certified prescribed burning vendors are available to conduct prescribed burning.

STRATA 3 (Stands 1 and 2)

Stand Description

This area consist of approximately 61 acres of a mixed stand of hardwood sawtimber. There are some large mature pine saw timber scattered throughout the stand. Some of this area is steep, making it difficult for harvesting operations.

Strata Recommendations

Only selective cutting will occur in this strata due to the aggressive terrain. The harvesting will focus on removing the mature timber and will not remove more than 50 percent of the existing stand. The trees selected for harvest will be marked by the MFC to obtain our goals of sustaining future forest productivity.

Activity Recommendations

Site Improvement

The area along with stand 8 will be sprayed in 2017 with an aerial broadcast herbicide application for the removal of locust. Chemicals and rates will be determined based on the vegetation present at that time by a licensed applicator.

Harvest

In 2012, selective cutting will occur in this strata due to the aggressive terrain. The harvesting will focus on removing the mature hardwood and pine timber and all

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undesirable seed sources for future growing stock. This stand will be managed as a natural hardwood stand favoring various red oak, white oak, and yellow poplar mostly.

STRATA 4 (Stand 5)

Stand Description

This stand consist of about 140 acres which consist predominately of mixed hardwood with scattered patches of pine on some of the ridges. Much of the area is very steep and has deep ravines through it. The timber ranges from pulpwood to sawtimber in size.

Stand Recommendations

This stand will be managed as a mixed stand, upon final harvest it will be converted to loblolly pine where possible. The lower slopes and bottoms will be managed for red oak and other hardwoods.

Activity Recommendations

Harvest

This stand will be harvested with a clear cut in 2018. Volumes to be advertised for sale will be determined with a minimum of 10 % cruise.

Site Preparation

The area will be site prepared with an aerial broadcast herbicide application. Chemicals and rates will be determined based on the vegetation present at that time by a licensed applicator.

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 an 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

STRATA 5 (Stands 3, 4, and 6)

Strata Description

This strata is composed of 45 acres of mixed hardwood and pine and will be managed as a Streamside Management Zone (SMZ). These stands will be managed to protect stream

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banks and water way integrity. These stands will be thinned when adjoining stands have scheduled harvest.

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.

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

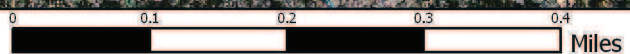
RODNEY ROAD Sect.24-T10N-R1E

2012 to 2021

625.38 Acres



(12/28/2011)



LEGEND



Property



Property

Category 1: Stands



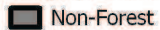
Clear Cut
Non-Stocked
Reproduction
Sub-Merchantable
Pulpwood
Chip-n-Saw
Sawtimber
Poles

Category 2: Stands



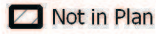
Clear Cut
Non-Stocked
Reproduction
Sub-Merchantable
Pulpwood
Chip-n-Saw
Sawtimber
Poles

Category 3: Non-Forest Stands



Non-Forest

Category 4: Not in Plan Stands



Not in Plan

Category 5: Features Only Plan Stand



Features Only Plan

Property Roads/Trails



Drive Ways
Access Road
Logging Road
Skid Trail
Farm Road
Hiking Trail
Horseback Riding Trail

Boundary Lines



Archeology
Cemetery
Drilling Sites
Education
Forest Health
Invasive Species
Management Compartment
Military Area
Natural Area

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
24 10N 1E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
3	1	Harvest, Mechanical, Thin, Machine, Loblolly	7	\$245.00	\$6,641.46
3	2	Harvest, Mechanical, Thin, Machine, Loblolly	54	\$1,890.00	\$51,826.50
Yearly Totals			61	\$2,135.00	\$58,467.96
2016					
1	8	Harvest, Mechanical, Thin, Machine, Loblolly	281	\$9,818.20	\$80,728.05
2	7	Harvest, Mechanical, Thin, Machine, Loblolly	84	\$1,677.40	\$32,021.57
Yearly Totals			364	\$11,495.60	\$112,749.61
2017					
1	8	Vegetation Control, Chemical, Broadcast, Aerial, Woody	281	\$30,910.00	\$0.00
3	1	Vegetation Control, Chemical, Broadcast, Aerial, Woody	7	\$830.40	\$0.00
3	2	Vegetation Control, Chemical, Broadcast, Aerial, Woody	54	\$6,480.00	\$0.00
Yearly Totals			342	\$38,220.40	\$0.00
2018					
1	8	Fire Protection, Other, Burn, Hand, Hazard Mitigation	281	\$8,430.00	\$0.00
2	7	Fire Protection, Other, Burn, Hand, Hazard Mitigation	84	\$2,520.00	\$0.00
4	5	Harvest, Mechanical, Regeneration, Machine, Loblolly	140	\$4,900.00	\$137,228.00
Yearly Totals			505	\$15,850.00	\$137,228.00
2019					
4	5	Regeneration, Artificial, Plant, Hand, Loblolly	140	\$15,400.00	\$0.00
4	5	Site Preparation, Other, Burn, Hand, Debris	140	\$4,200.00	\$0.00
4	5	Site Preparation, Chemical, Broadcast, Aerial, Combination	140	\$15,400.00	\$0.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
		Yearly Totals	420	\$35,000.00	\$0.00
		Grand Totals	1,692	\$102,701.00	\$308,445.57