



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Leflore County BOE

Prepared By:
Wesley James Howard
MS Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-13

Plan Type:
Stewardship / Stewardship

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

Property Name: S16-T16N-R2W

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FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Leflore County BOE
Mailing Address: 1901 HWY 82 West
City, State, Zip: Greenwood , MS 38930
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-453-8566
Fax Number:

E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: Wesley James Howard , Service Forester
Forester Number: 02521
Organization: MS Forestry Commission
Street Address: 9600 Hwy 17
City, State, Zip: Carrollton, MS 38917
Contact Numbers: Office Number: 662-237-6732
Fax Number:

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

PROPERTY LOCATION

County: Leflore Total Acres: 651 Latitude: -90.41 Longitude: 33.25
Section: 16 Township: 16N Range: 2W

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.

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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

Section 16_T16N_R2W is +/- 651 acres of bottomland hardwood species except for a cypress and tupelo gum brake and agricultural land on the west side. The timber consists of mature hardwood sawtimber and hardwood pulpwood. Dominate species are pecan, willow oak, overcup, nuttall oak, elm, and sweetgum. The section is 4 miles southwest of Swiftown, MS. County Road 529 runs through the northwest quarter of this section. Humphreys County resides on the south end of the property line and is divided by the Yazoo River. Property's topography is low, with areas containing water year round. Access will become an issue during wet months for management activities such as harvesting. Mississippi Best Management Practices should be followed to prevent damage.

Water Resources

The Yazoo River resides on the southern boundary of the section. An Intermittent stream runs along the south west portion of the section and drains directly into the Yazoo River. Mississippi's Best Management Practices will be applied which will include stream side managements zone along each water source if harvesting activities occur adjacent to the water source.

Cypress tupelo slough is found in the central portion of the section. The slough holds water throughout most of the year.

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.

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Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of this property.

If any threatened and /or endangered species are discovered, immediate management procedures will be applied to protect these sensitive natural resources for future generations.

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. Mississippi Best Management Practices will be implemented to prevent any adverse effects.

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 vigorous growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

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.

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:

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- 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.

Water Quality Protection

The objective of the landowner is to protect, conserve, and enhance all water resources and drainages on or transecting the property. This objective can be met by implementing Mississippi's Best Management Practices in all aspects of management practices. Protection for water resources must be given in order to maintain the water quality. This protection will be done by the use of stream side management zones (SMZ's) as well as following all Mississippi Best Management Practices.

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.

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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, "etc".

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 section is leased out for waterfowl hunting opportunities. Part of the section is a Green Tree Reservoir (GTR). This portion of the section is flooded annually during winter months providing cover and food sources for waterfowl species.

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

The GTR on the section provides a great opportunity for waterfowl hunting. Waterfowl hunting has become a highly acquired activity. The section is leased because of this unique attribute annually. This section has annual lease income of \$8,000.

SOIL TYPES

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Generated brief soil descriptions are created for major components. The Bruno soil is a minor component. The Arkabutla, frequently flooded component makes up 45 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 somewhat poorly 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 frequently flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

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The Alligator component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on backswamps. The parent material consists of clayey alluvium. 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 very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon

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is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

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The Dundee component makes up 95 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat 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 rarely flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

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The Askew component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 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 high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

STRATA

Strata 1

Strata Description

This 290.82 acres is made up of four separate stands (#1,#4,#5,#9). This strata is approximately 68 years old bottomland hardwood forest with pecan, willow oak, overcup oak and elm being the dominant species. This strata has a basal area of 116 and 117 trees per acre with an average diameter of 19 inches. There is an estimated 63 tons of hardwood pulpwood to the acre and 55 tons of hardwood sawtimber to the acre. The Mississippi Department of Wildlife, Fisheries and Parks built a Green tree reservoir on the section during the 1970's. The MDWFP no longer runs the Green tree on the section. The section is leased out for waterfowl hunting and is flooded annually by a well on the property. This flooding has resulted in areas of the section to have high mortality of dominate trees. The section is scheduled to conduct a timber sale in 2013 thus flooding could limit the areas of harvesting.

Strata Recommendations

Stand 9 will be harvested by final harvest method or seed tree method in 2013. The stand 9 will be reaching the management age of 65 years. Stand 9 could begin to decline in growth and yield values and begin to increase in mortality. Harvesting by seed tree method will release the stand and create openings for natural regeneration or final

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harvesting will allow for capturing the highest monetary value of the stands. The harvesting technique will be based on the amount of natural regeneration of desirable species available at the time of harvest. Seed tree method will be used if enough desirable hardwood species regeneration such as oak is adequate enough to fully restock the stand. Final harvest method will be used if there is not an adequate stocking of natural regeneration. If final harvest method is chosen the stands will be re-planted with desirable hardwood species to achieve full stocking. Stand 1, 4, and 4 will be looked at for potential harvesting when stand 9 is being harvested. This section is flooded for waterfowl habitat and to limit the number of years for flooding harvesting in the other stands will be considered. The stands health will also be a factor considering the number of years that these stands hold water during flooding. If stands are not thinned or harvested they will be at a later time but are not scheduled for this plan period.

Activity Recommendations

Stand 9 will be scheduled for a final harvest or seed tree method in 2013. If final harvest is it will be reforested using multiple hardwood species seedlings planted on 12' X 12' (302ac) spacing. It will be managed on a 65 - 80 year rotation. Until harvesting this strata will provide habitat for native wildlife species. After harvest this strata will produce new vegetation that will provide new food sources and cover for native wildlife species.

During the time frame of the plan monitoring will be conducted regularly to make sure that the stands are in good vigour condition and no major transformations have occurred that could alter the goal for future harvesting. Over the course of the plan this strata will provide habitat for native wildlife species on the property.

Harvest

Stand 9 is scheduled for a final harvest in 2013.

Regeneration

Regeneration will be based on the type of harvesting method that is used. If a seed tree harvest is completed then the stand will be regenerated by natural regeneration of unharvested trees. If the stand is final harvested will be replanted on a 12' X 12' spacing (302 ac.) using mixed bottomland hardwood seedling species. The species planted will be determined by the site and soil type.

Strata 2

Strata Description

This 113.77 acres is made up of two separate stands (#6,#7,). This strata is approximately 17 year old bottomland hardwood pulpwood forest with nuttall oak, willow oak, and sweetgum being the dominate species being the dominant species. This strata has a basal area of 90 and trees per acre of 330 with an average diameter of 10 inches.

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Strata Recommendations

There are no activities planned for this strata other than monitoring. This stand is on a 65 - 80 year rotation age and has not reached maturity. However during the time frame of this plan a management decision of thinning may be made if the strata shows that thinning is necessary to release the stands in order achieve the highest yield value.

Strata Activities

During the time frame of the plan monitoring will be conducted regularly to make sure that the stands are in good vigor condition and no major transformations have occurred that could alter the goal of reaching maturity. Over the course of the plan this strata will provide habitat for native wildlife species on the property.

Strata 3 (Non-Forest)

Strata Description

This 185 acre strata consists of stands #1, #2 and #3. Stands 1 and 3 consist of 139 acres of agricultural land. The Leflore County School board leases this land for agricultural production. Stand #2 consists of 46 acres of swamp privet and button bush thicket. This area once was in timber. The annual flooding killed the timber creating this large area of buckbrush and swamp privet. This area holds water most of the year, because the drainage system in the Green tree decayed over the years and does not allow for the water to flow as needed.

Strata Recommendations

Stand #1 and #3 are leased out by the Leflore County School board for agriculture production. The agriculture lease provides an annual income of \$10,800. The agriculture lease provides the highest and best use for this stand.

Strata Activities

uring the time frame of the plan monitoring will be conducted periodically to insure no damaging activities are occurring that could impact other stands on the section. No activities are planed for the time period of the plan.



Section16 T16N R2W Leflore County, Mississippi

Property

Property (1)

Category 1: Stands

Sawtimber (5)
 Pulpwood (2)

Category 3: Non-Forest Stands

Non-Forest (3)

MFC Basemap

County Boundary

County Boundary (2)

Quadrangle Grid

USGS Quad (3)

PLS Townships

PLS Townships (2)

Survey Districts

District 2 (2)

Blockgroup (Census 2000)

Blockgroup (Census 2000) (2)

Block (Census 2000)

Block (Census 2000) (9)

Tract/BNA (Census 2000)

Tract/BNA (Census 2000) (2)

County Roads

County Roads (2)

School Sections

School Sections (2)

Public School Districts

LEFLORE COUNTY SCHOOL DISTRICT (2)

Public School Districts (cont)

HUMPHREYS COUNTY SCHOOL DIST (3)

US Congressional District

US Cong Dist #2 (2)

MS Senate

22 (1)
 13 (1)
 24 (1)

MS House

51 (1)
 48 (1)
 34 (1)

Major River

Major River (1)

Perennial Streams

Perennial Streams (3)

Intermittent Streams

Intermittent Streams (9)

Hydrologic Units (Basins)

UPPER YAZOO RIVER (2)

Historic Forest Boundary

Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (2)

MS Forest Habitat

MISCELLANEOUS ALLUVIAL FLOODPLAINS (2)

Physiographic Region

Delta (2)

Soil Associations

alligator-sharkey-forestdale (2)
 dundee-forestdale-dubbs (1)

Surface Geology

ALLUVIUM (7)

MFC Districts

MFC Districts (1)

MFC Dispatch Units

MFC Dispatch Units (1)

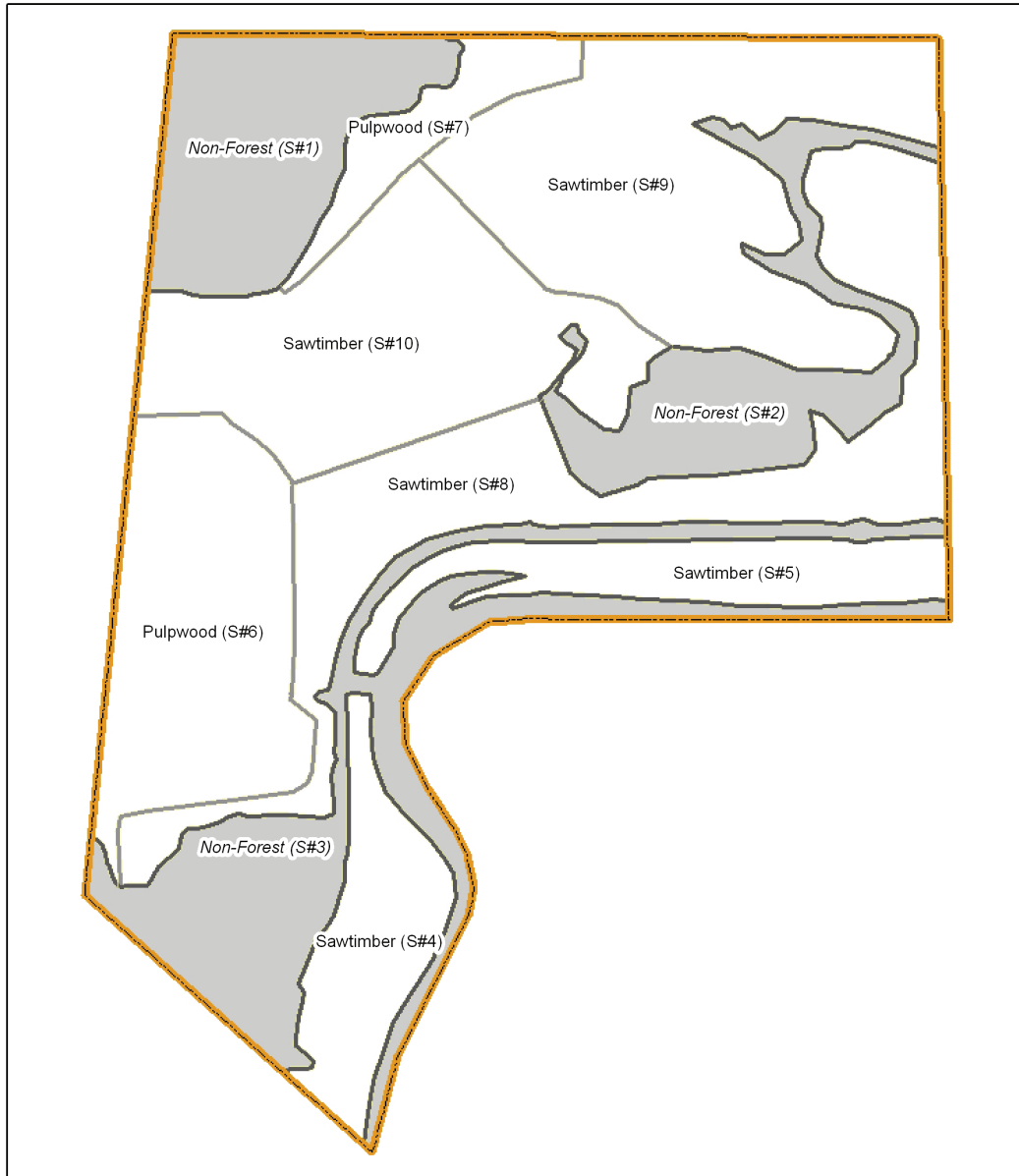
MS Outline

MS Outline (1)

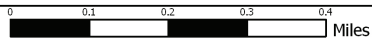


Section16 T16N R2W

Leflore County, MS
2012 to 2021
650.77 Acres



(11/03/2011)



Stand Activity Schedule for
Leflore County BOE
16 16N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2013						
1	9	Harvest, Mechanical, Final, Machine, Misc Hardwood	108	\$3,780.00	\$132,408.00	
			Yearly Totals	108	\$3,780.00	\$132,408.00
2014						
1	9	Regeneration, Artificial, Plant, Hand, Misc Hardwood	108	\$13,500.00	\$0.00	
			Yearly Totals	108	\$13,500.00	\$0.00
			Grand Totals	216	\$17,280.00	\$132,408.00

Stand Activity Schedule for
Leflore County BOE
16 16N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2013						
1	9	Harvest, Mechanical, Final, Machine, Misc Hardwood	108	\$3,780.00	\$132,408.00	
			Yearly Totals	108	\$3,780.00	\$132,408.00
			Grand Totals	108	\$3,780.00	\$132,408.00