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# 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-T20N-R2W**

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**MISSISSIPPI FORESTRY COMMISSION  
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: 639    Latitude: -90.41    Longitude: 33.6  
Section: 16    Township: 20N    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*

Section16\_T20N\_R2W consists of +/- 639 acres. Section contains 350 acres of non-forested agriculture land and 289 acres of bottomland hardwood forest. Dominant species found are bitter pecan, willow oak, and hickory. The section is located 3 miles South West of Schalter, Mississippi. This section is accessible off County road 370. Property's topography is low, but is well drained.

*Water Resources*

Drainage ditch runs from the Northern property line to the Southern property through the Central portion of the section. 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.

*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 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.

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*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.

*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:

- 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.

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**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.

Currently boundaries are not clearly marked on the section. Boundaries should be surveyed and clearly marked. Boundaries will need to be established before any management activities such as harvesting can take place. Once the boundaries have been surveyed the MFC will maintain these boundaries.

*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.

*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".

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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*

The Leflore County School Board lease 313 acres of the section for hunting opportunities. The lease provides an annual income of \$3230.00 with the lease expiring 12/31/2014.

**SOIL TYPES**

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

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The Alligator, depressional component makes up 95 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions. 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 frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

**STRATA**

*Strata 1*

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**Strata Description**

This 288.98 acre strata is made up of one stand (#2,#3,#4). This strata is approximately 61 years old bottomland hardwood forest with pecan, willow oak, and hickory being the dominant species. This strata has a basal area of 92 and 128 trees per acre with an average diameter of 18 inches. There is an estimated 34 tons of hardwood sawtimber and 48 tons of hardwood pulpwood an acre.

**Strata Recommendations**

Stand #3 will be harvested in 2018 and stand #4 will be harvested in 2020 by final harvest or seed tree method. The stands will have reached the management rotation age of 65 years. Stands 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 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 the scheduled 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 there is not an adequate stocking of natural regeneration of desirable species. If final harvest method is chosen then the stand will be re-planted with desirable species to achieve full stocking. Stand #2 will be harvested in 2022 but will not be discussed in this plan because the planning period ends in 2021.

**Strata Activities**

Stands #3 and #4 are scheduled for a final harvest or seed tree harvest. Stand #3 is scheduled for harvest in year 2018 and stand #4 year 2022. If a final harvest is completed it will be reforested using multiple bottomland hardwood species seedlings planted on 12' x 12' (302 trees per acre) spacing. Stands will be managed on a 60 - 80 year rotation age. Until harvesting this strata will provide habitat for native wildlife species. After harvesting the stands will provide fresh vegetation providing new food sources and cover for native wildlife species.

**Harvest**

A final harvest or seed tree harvest is scheduled for stand #3 in 2018 and stand #4 in 2020

**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 final harvest is selected will be replanted on a 12' X 12' spacing (302 trees per acre) using mixed bottomland hardwood seedling species. The species planted will be determined by the site and soil type.



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*Strata 2 (Non-Forest)*

Strata Description

This 350 acre strata consists of stands #1. Stand #1 consists agricultural land. The Leflore County School board leases this land for agricultural production.

Strata Recommendations

Stand #1 is leased out by the Leflore County School board for agriculture production. The agriculture lease provides an annual income of \$29,500. The agriculture lease provides the highest and best use for this stand.

Strata Activities

During 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.

Section 16\_T20N\_R2W



**Section 16 T20N R2W**

Leflore County, Mississippi  
2012 to 2021  
639.36 Acres



(12/07/2011)

0 0.1 0.2 0.3 0.4 Miles


# Section16 T20N R2W



Property

 Property (1)

Category 1: Stands

 Sawtimber (3)

Category 3: Non-Forest Stands

 Non-Forest (1)

## MFC Basemap


County Boundary

 County Boundary (1)

Quadrangle Grid

 USGS Quad (1)


PLS Townships

 PLS Townships (1)

Survey Districts

 District 2 (1)


Blockgroup (Census 2000)

 Blockgroup (Census 2000) (1)

Block (Census 2000)

 Block (Census 2000) (4)

Tract/BNA (Census 2000)

 Tract/BNA (Census 2000) (1)


School Sections

 School Sections (1)

Public School Districts

 LEFLORE COUNTY SCHOOL DISTRICT (1)

US Congressional District

 US Cong Dist #2 (1)

MS Senate

 24 (1)

MS House

 34 (1)

Hydrologic Units (Basins)

 BOGUE PHALIA RIVER (1)

Historic Forest Boundary

 Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (1)

MS Forest Habitat

 MISCELLANEOUS ALLUVIAL FLOODPLAINS (1)

Physiographic Region

 Delta (1)

Soil Associations

 alligator-sharkey-forestdale (1)

Surface Geology

 ALLUVIUM (1)

MFC Districts

 MFC Districts (1)

MFC Dispatch Units

 MFC Dispatch Units (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for  
Leflore County BOE  
16 20N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
<b>2018</b>						
1	3	Harvest, Mechanical, Final, Machine, Misc Hardwood	105	\$3,675.00	\$80,430.00	
			Yearly Totals	105	\$3,675.00	\$80,430.00
<b>2019</b>						
1	3	Regeneration, Artificial, Plant, Hand, Misc Hardwood	105	\$13,125.00	\$0.00	
			Yearly Totals	105	\$13,125.00	\$0.00
			<b>Grand Totals</b>	<b>210</b>	<b>\$16,800.00</b>	<b>\$80,430.00</b>

Stand Activity Schedule for  
Leflore County BOE  
16 20N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
<b>2018</b>						
1	3	Harvest, Mechanical, Final, Machine, Misc Hardwood	105	\$3,675.00	\$80,430.00	
			Yearly Totals	105	\$3,675.00	\$80,430.00
			<b>Grand Totals</b>	<b>105</b>	<b>\$3,675.00</b>	<b>\$80,430.00</b>