



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Humphreys County Schools

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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**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Humphreys County Schools
Mailing Address: 401 4th st
City, State, Zip: Belzoni, MS 39038
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-247-6000
Fax Number: 662-247-6004

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: Humphreys Total Acres: 682 Latitude: -90.41 Longitude: 33.24
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 +/- 682 acres of agriculture fields, Yazoo River, and bottomland hardwood bottomland hardwood forest. The hardwood forest consists of 472 acres of sawtimber, pulpwood, and sub-merchantable stand types. Dominant species include nuttall oak, willow oak, bitter pecan, and sweetgum. The section is located approximately 6 miles North East of Belzonia, Mississippi. The section is divided by the Yazoo River. County road 14 is used to access the West half of the section. The East side of the section is accessed by Highway 435. The North boundary line joins the Leflore County school section 16-T16N-R2W. The section Property's topography is low, but the section is well drained.

Water Resources

The Yazoo River divides the section and runs from the North West corner to the South East corner of the section. The section contains an oxbow lake that resides on the East side of the Yazoo River. The section drains into the Yazoo River watershed. Mississippi's Best Management Practices will be followed at all times during any management activities.

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.

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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

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 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 Humphreys County School Board leases all forested acres out for hunting opportunities. The hunting lease provides an annual income of \$4,300.

SOIL TYPES

4

The Alligator component makes up 90 percent of the map unit. Slopes are 0 to 3 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 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 3e. This soil meets hydric criteria.

STRATA

Strata 1

Strata Description

This 373 acre strata is made up of stands 1, 6, and 8. This strata was approximately established in 1950. This stand is a fully stocked bottomland hardwood mixed forest with sweetgum, nuttall oak, willow oak, and bitter pecan being the dominate species. This strata has a basal area of 122 and 120 trees per acre. This strata contains 21 tons of pulpwood and 58 tons of sawtimber per acre.

Strata Recommendations

Stands 1 and 6 will be harvested by final harvest method or seed tree method in 2014. The stands will be reaching the management age of 65 years. Stands could begin to

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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 stand. 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.

The remaining stand 8 will be monitored throughout the course of the plan. Stand 8 could be harvested if the stand show signs of high mortality due to over maturity or lack of natural regeneration. The goal of the MFC is to not have clearcuts over 110 acres. It could be necessary to cut larger areas to gain the highest monetary values of the stands.

Activity Recommendations

Stand 1 and 6 is scheduled for a final harvest or seed tree harvest in 2014. 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.

During the time frame of the plan monitoring will be conducted periodically to ensure the stands are in good vigor condition and no major transformations have occurred that could alter the goal for future harvesting.

Harvest

A final harvest or seed tree cut is scheduled for stand 1 and 6 in 2014.

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 100 acre strata is made up of stands 3 and 7. This strata was approximately established in 2006. Stands 3 and 7 are a sub-merchantable stands with nuttall oak, sweetgum, and willow oak being the dominate species. Stands were harvested in 2006 and planted on a 12' x 12' spacing (302 seedlings per acre) using nuttall oak and willow oak species following harvesting. This strata has average of 375 trees per acre.

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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 achieve the highest yield value.

Strata Activities

During the time frame of the plan monitoring will be conducted at least once annually 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 208 acre strata consists of stands 2, 4, 5, and 9.. Stand 2 consists of 117 acres of agricultural land and an old sludge pit from drigging the river. The Humphreys County School board leases the agriculture land. Stand 4 is a 19 acre buckbrush and bald cypress slough that holds water during wet months. Stand 5 is an oxbow lake that holds water year round. Stand 9 is the Yazoo River that divides the section.

Strata Recommendations

Stand 2 is leased out by the Humphreys County School board for agriculture production. The agriculture lease provides an annual income of \$2,500. The agriculture lease provides the highest and best use for this stand. There are no recommendations for stands 4, 5, and 9.

Strata Activities

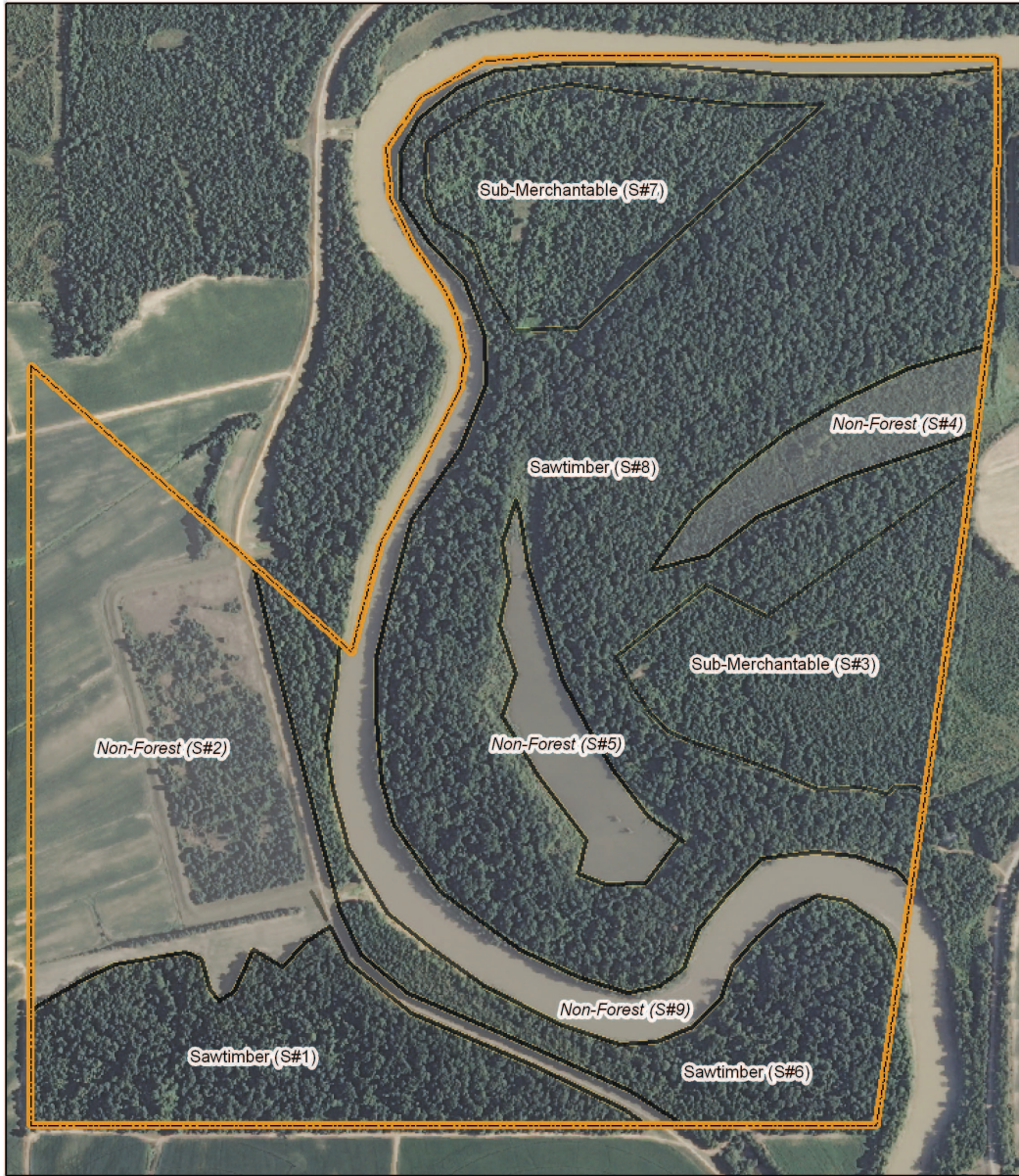
During the time frame of the plan monitoring will be conducted periodically to insure no damaging activities are occurring that could impact other stands on the section. No activities are planned for the time period of the plan.

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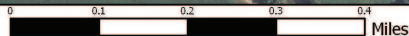


Section16-T16N-R2W

Humphreys County, Mississippi
2012 to 2021
682.19 Acres




(12/27/2011)




Section16-T16N-R2W Humphreys County, Mississippi




Property


 Property (1)

Category 1: Stands

 Sawtimber (3)


 Sub-Merchantable (2)

Category 3: Non-Forest Stands


 Non-Forest (4)

MFC Basemap


County Boundary

 County Boundary (2)


Quadrangle Grid

 USGS Quad (2)


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)

School Sections


 School Sections (4)

Public School Districts

 LEFLORE COUNTY SCHOOL DISTRICT (2)

 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 (3)


Perennial Streams

 Perennial Streams (23)

Intermittent Streams

 Intermittent Streams (8)

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)


Surface Geology

 ALLUVIUM (8)


MFC Districts

 MFC Districts (1)

MFC Dispatch Units

 MFC Dispatch Units (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for
Humphreys County Schools
16 16N 2W

| Strata | Stand | Activity | Acre | Est. Cost | Est. Revenue |
|---------------------|-------|------------------------------------------------------|------------|--------------------|---------------------|
| 2014 | | | | | |
| 1 | 1 | Regeneration, Artificial, Plant, Hand, Misc Hardwood | 63 | \$7,875.00 | \$0.00 |
| 1 | 1 | Harvest, Mechanical, Final, Machine, Misc Hardwood | 63 | \$2,205.00 | \$75,726.00 |
| 1 | 6 | Regeneration, Artificial, Plant, Hand, Misc Hardwood | 57 | \$7,125.00 | \$0.00 |
| 1 | 6 | Harvest, Mechanical, Final, Machine, Misc Hardwood | 57 | \$1,995.00 | \$68,514.00 |
| Yearly Totals | | | 240 | \$19,200.00 | \$144,240.00 |
| Grand Totals | | | 240 | \$19,200.00 | \$144,240.00 |

Stand Activity Schedule for
Humphreys County Schools
16 16N 2W

| Strata | Stand | Activity | Acre | Est. Cost | Est. Revenue |
|---------------------|-------|----------------------------------------------------|------------|-------------------|---------------------|
| 2014 | | | | | |
| 1 | 1 | Harvest, Mechanical, Final, Machine, Misc Hardwood | 63 | \$2,205.00 | \$75,726.00 |
| 1 | 6 | Harvest, Mechanical, Final, Machine, Misc Hardwood | 57 | \$1,995.00 | \$68,514.00 |
| Yearly Totals | | | 120 | \$4,200.00 | \$144,240.00 |
| Grand Totals | | | 120 | \$4,200.00 | \$144,240.00 |