Vision • Commitment • Pride

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
HARRISON COUNTY BOE

Prepared By:
Randy Wilson
MS Forestry Commission

Time Period Covered by This Plan:
2011 - 2021

Date Plan Prepared:
2012-02-15

Plan Type:
Stewardship / Stewardship

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

**Property Name: 16_6_9**

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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## LANDOWNER INFORMATION

| | | |
|---|---|---|
| Name: | HARRISON COUNTY BOE | |
| Mailing Address: | 11072 Highway 49 | |
| City, State, Zip: | Gulfport, MS 39503 | |
| Country: | United States of America | |
| Contact Numbers: | Home Number: | |
| | Office Number: | 228-539-6503 |
| | Fax Number: | |
| E-mail Address: | jtrosclair@harrison.k12.ms.us | |
| Social Security Number (optional): | | 646000430 |

## FORESTER INFORMATION

| | | |
|---|---|---|
| Name: | Randy Wilson , Service Forester | |
| Forester Number: | 00000 | |
| Organization: | MS Forestry Commission | |
| Street Address: | 14601 County Farm Rd. | |
| City, State, Zip: | Gulfport, MS 39503 | |
| Contact Numbers: | Office Number: | 228-831-3359 |
| | Fax Number: | |
| E-mail Address: | rwilson@mfc.state.ms.us | |

## PROPERTY LOCATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| County: | Harrison | Total Acres: | 648 | Latitude: | -88.89 | Longitude: | 30.52 |
| Section: | 16 | Township: | 6S | Range: | 9W | | |

## 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.

## 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 composed of 296 acres of slash pine to be harvest planted in 2013. There are 194 acres in naturally occurring longleaf and slash pine. The Tchoutachabouffa River runs the length of the property from north to south and along with Mill Creek composes 147 acres of streamside management zones with mixed hardwood, cypress and pines. These areas will be managed in accordance with Mississippi's Best Management Practices.

The section can be accessed by USFS Road 444 off of CC Road.

*Recommended Activities*

During the time period covered by this management plan, reforestation, prescribed fire, invasive species control and boundary line maintenance will be performed.

*Water Resources*

Tchoutachbouffa River and Mill Creek were identified as significant water resources during reconnaissance of the property. These water resources along with 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.

*Archeological/Cultural Resources*
Krohn cemetery is located in the southeast corner of this section off of Krohn Road. An access road beside the cemetery is the only access to stand two. During activities within this stand, all reasonable measures will be taken to avoid detrimental impact to the cemetery.

## GENERAL PROPERTY RECOMMENDATIONS

*Forest Protection*
A healthy vigorously growing stand is the best defense to an attack form 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

Boundary lines are scheduled to be maintained in 2018.

**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.

*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

*Harleston*

The Harleston component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on stream 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during

January, February, March, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90.

*Poarch*
The Poarch component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on ridges. The parent material consists of sandy and loamy marine deposits. 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. A seasonal zone of water saturation is at 45 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 73. Slash Site Index = 90.

*Atmore*
The Atmore component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions. The parent material consists of loamy marine deposits. 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 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. A seasonal zone of water saturation is at 6 inches during January, February, March, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 72. Slash Site Index = 90.

*Eustis*
The Eustis component makes up 42 percent of the map unit. Slopes are 8 to 17 percent. This component is on hillslopes. The parent material consists of Sandy Marine Deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is 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 1 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The Poarch component makes up 33 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes. The parent material consists of sandy and loamy marine deposits. 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. A seasonal zone of water saturation is at 45 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

*Smithton*
The Smithton component makes up 85 percent of the map unit. Slopes are 0 to 2 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 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 occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. Loblolly Site Index = 86.

*Nugent*
The Nugent component makes up 55 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of sandy alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 57 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The Jena component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of loamy alluvium. 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 frequently 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 5w. This soil meets hydric criteria.

## STRATA

*Strata 1 (Stand 1)*
Strata Description

This strata occupies 2 acres in the southeast corner of the section. A wildfire swept across this area in 2003. The pulpwood size timber is a result of natural regeneration from the few residual survivor trees from the wildfire.

Strata Recommendations

This strata will be managed along with Stand 2 in the future.

*Strata 2 (Stand 2, 5, and 6)*
Strata Description

This strata is composed of 194 acres of naturally occurring mixed longleaf and slash pine. Stand 2 (50 acres) is located east of the river and is predominately longleaf. Stands 5 (118 acres) and 6 (26 acres) are located west of Mill Creek and are predominately slash with some longleaf on the drier upland sites.

This strata is approximately 34 years old with a basal area of 50 to 70 with approximately 110 trees per acre.

Strata Recommendations

This strata is scheduled for prescribed burning in 2014 and 2017. Due to the close proximity of DeSoto National Forest, the burning may be at no cost to the landowner. It is entirely possible that the prescribed burning in Stand 2 may set up natural longleaf regeneration follwoing the burn in 2017. The forester in charge will further assess this possiblity going into the next management period.

*Strata 5 (Stands 3, 7, and 8)*

Strata Description

This strata is composed of 147 acres along the Tchatachabouffa River and Mill Creek. The timber is composed of mixed hardwood with some scattered pine. The soil is extremely poorly drained with deep gullies along the river.

Strata Recommendations

During extrememly dry periods this strata may prove operable. If such conditions exist, the forester will evaluate these areas and possibly schedule a harvest at their discretion. Great care will be taken in this strata to ensure that harvest activities do not interfer with Mississippi's Best Management Practices.

This strata may also be used as a natural fire break for the prescribed fire scheduled in 2013, 2014 and 2017 in strata 5 and 6.

*Strata 6 (Stand 4)*

Strata Description

This strata was clearcut in 2011. It is scheduled to be sheared and bedded in 2013 and reforested with improved slash in 2014. The strata will be machine planted at a rate of 605 trees per acre. Some areas in the south central portion of this strata will not be planted due to their extremely wet condition. As a result the planted area will be 205 acres.

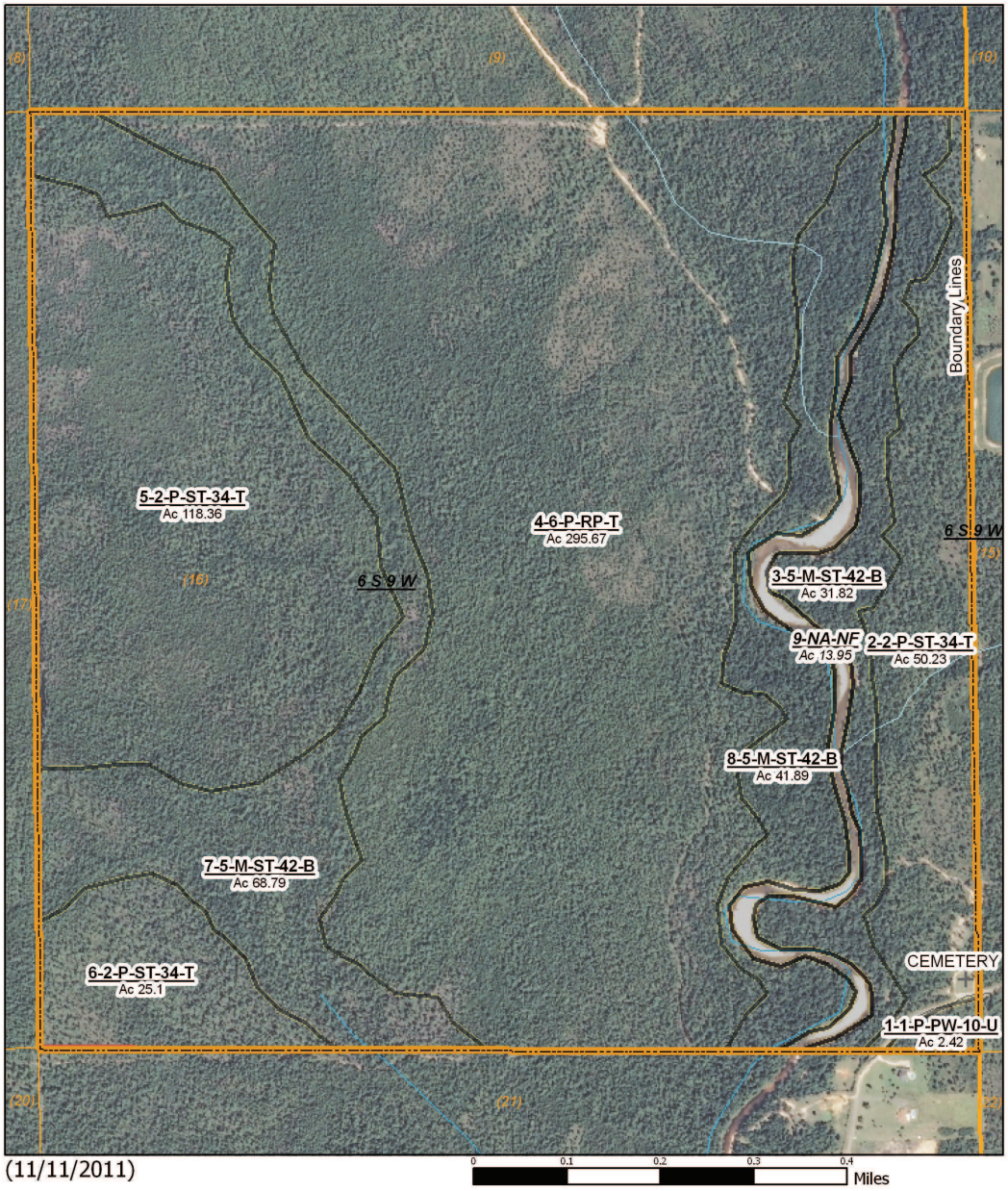
Strata Recommendations

This strata will be sheared and bedded in 2013 and replanted with improved slash pine in 2014 to allow time for the beds to stabilize. The slash is to be planted at a rate of 605 trees per acre.

The strata will be evaluated prior to the scheduled prescribed burn in 2017 in strata 2 to assess if a prescribed burn is possible. Due to the young age and intolerance of slash to early burning, it is highly unlikely the strata will be burned.

# HARRISON COUNTY BOARD OF EDUCATION

SECTION 16, TOWNSHIP 06S, RANGE 09W
2011 to 2021
640 ACRES



Stand Activity Schedule for
HARRISON COUNTY BOE
16 6S 9W

| Strata | Stand | Activity | Acre | Est. Cost | Est. Revenue |
|---|---|---|---|---|---|
| **2013** | | | | | |
| 6 | 4 | Site Preparation, Mechanical, Shear, Machine, Cut-Over | 205 | $22,242.50 | $0.00 |
| 6 | 4 | Site Improvement, Mechanical, Bed, Machine, Site Augmentation | 205 | $22,242.50 | $0.00 |
| | | Yearly Totals | 410 | $44.485.00 | $0.00 |
| **2014** | | | | | |
| 2 | 2 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 50 | $1,250.00 | $0.00 |
| 2 | 5 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 118 | $2,950.00 | $0.00 |
| 2 | 6 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 25 | $625.00 | $0.00 |
| 6 | 4 | Regeneration, Artificial, Plant, Hand, Slash | 205 | $18,450.00 | $0.00 |
| | | Yearly Totals | 398 | $23.275.00 | $0.00 |
| **2017** | | | | | |
| 2 | 2 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 50 | $1,250.00 | $0.00 |
| 2 | 5 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 118 | $2,959.00 | $0.00 |
| 2 | 6 | Fire Protection, Other, Burn, Hand, Fuel Reduction | 25 | $625.00 | $0.00 |
| | | Yearly Totals | 193 | $4.834.00 | $0.00 |
| | | **Grand Totals** | **1.001** | **$72.594.00** | **$0.00** |