



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_10

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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: 645 Latitude: -88.99 Longitude: 30.52
Section: 16 Township: 6S Range: 10W

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

This section is composed of 77 acres of longleaf and slash plantations. There are 152 acres of naturally occurring longleaf and slash sawtimber. Eighty-two (82) acres are composed of mixed hardwood and slash pine on poorly drained soils. There are 44 acres in hand planted containerized longleaf pine seedlings.

Non-forest uses account for 299 acres on this section and include:

North Woolmarket Elementary/Middle School

Woolmarket Ball Field Complex,

Woolmarket Community/Senior citizen center

County road department office

County fire station

Department of Public Safety Complex

Concrete Plant

Shooting Range

A major subdivision borders the section on the southeast corner.

As a result of all these special uses, all forestry practices will be carried out in such a manner as to reduce any negative impacts at both an environmental and aesthetic level. Great care and planning will be given to promote silvicultural practices as beneficial to both the School District and the surrounding community.

The section can be accessed by Old Woolmarket Road and Highway 67.

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Water Resources

Perennial water resources were identified during a reconnaissance of the property and 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

The gopher tortoise was present on the non-forested portion of this section in 2009 and was relocated by authorized state and federal agencies. No other threatened and endangered species have been found since that date.

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

The non-forested portion (285 acres) of this section has many diverse cultural resources including; North Woolmarket Elementary/Middle School, Mississippi Department of Public Safety Complex, Woolmarket Senior Citizen Center and walking track, as well as the Harrison County road department. Other non-forest uses of this section include Metro Concrete and the Coast Pistol and Rifle Club.

There is also a small cemetery located across from the fire department off of Ball Park Road.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy 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

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- 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 on this section in 2015 and 2020.

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.

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, and parking.

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A small outdoor classroom and nature trail have been established in Stand 9. There has been interest in further developing this area into a more interactive and educational area for students. The prescribed practices in Stand 9 will be carried out with this use in mind, and great care will be taken to protect the educational improvements made within this stand.

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.

SOIL TYPES

Ruston

The Ruston component makes up 95 percent of the map unit. Slopes are 5 to 8 percent. This component is on coastal plains. The parent material consists of loamy fluviomarine 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. 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 3e. This soil does not meet hydric criteria. Loblolly Site Index = 84.

Smithdale

The Smithdale component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes. The parent material consists of loamy fluviomarine 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 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 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

Ponzer

The Ponzer component makes up 59 percent of the map unit. Slopes are 0 to 1 percent. This component is on drainageways. The parent material consists of Decomposed Organic Material over Loamy Alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell

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potential is low. This soil is frequently 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 60 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface. The Smithton component makes up 18 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 frequently 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 5w. This soil meets hydric criteria.

Poarch

The Poarch component makes up 90 percent of the map unit. Slopes are 2 to 5 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 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 73. Slash Site Index = 90.

STRATA

Strata 1 (Stands 1, 4, 8 and 13)

Strata Description

This strata consists of 65 acres of slash pine machine planted in 1986. The current basal area is 80 with 242 trees per acre with an average diameter of 7.7 inches.

Stands 1, 8 and 13 (43 acres total) are scheduled to receive a first thinning in 2013 which will reduce the residual basal area to 65. A 50 foot buffer will be left along the southern most boundary of these stands in consideration of the adjacent homeowners.

Stand 4 is a 21 acre naturally occurring stand of longleaf pine. The current basal area of this stand is 53 with 192 trees per acre and an average diameter of 7.0 inches.

Strata Recommendations

Stands 1, 8 and 13 are scheduled to receive a corridor thinning in 2013 which will reduce the residual basal are to 65. Followoing this thinning those stands are scheduled to receive a prescribed fire in 2016 and 2019.

Stand 4 is scheduled to receive a prescribed fire in 2016, and 2019. Due to the close proximity of adjacent homes, the senior citizen center and the school great care will be

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taken when burning this stand. This stand is in good health and will be scheduled for a harvest early in the next management period.

Strata 2 (Stands 9 and 11)

Strata Description

This strata is composed 154 acres of natural slash and longleaf pine sawtimber.

The current basal area of this strata is 36 with 70 trees per acre and an average diameter of 9.3 inches. Trees within this strata range from 14.5 inches to 7.3 inches in diameter.

This strata was salvaged following Hurricane Katrina and has received a prescribed burn in 2006 and 2009. As a result of the natural openings from Katrina and the prescribed burns advanced longleaf regeneration is present within the strata.

Strata Recommendations

This strata will be scheduled for harvest activities during the next management period. At which time pulpwood and chip and saw size timber on other sections should have matured into the next product class. This is being done in an effort to maintain a third of the land in pulpwood, a third in chip and saw and a third in sawtimber by early 2022.

This strata is scheduled to receive prescribed fire in 2012, 2016 and 2019.

Strata 5 (Stands 5, 6 and 7)

Stand Description

This strata is 83 acres and is composed of mixed pine and hardwood in the sawtimber size class. In accordance with Mississippi's Best Management Practices, this strata will be managed as a streamside management zone (SMZ).

Strata Recommendations

During extremely 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 interfere with Mississippi's Best Management Practices.

Stand 6 will be included in the prescribed fire scheduled for stand 11 in 2013, 2016, and 2019.

Strata 6 (Stand 10)

Strata Description

This strata is 45 acres and is composed of hand planted containerized longleaf planted in 2009. The seedlings were planted at 605 trees per acre. Since planting, the woody and

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herbaceous vegetation has resprouted and is endangering the continued survival of the seedlings.

Strata Recommendations

This strata is scheduled to receive prescribed fire in 2013 to reduce the woody and herbaceous competition. Following that burn the strata is scheduled to receive two more applications of prescribed fire in 2016 and 2019.

SECTION 16, TOWNSHIP 06S, RANGE 10W



SECTION 16, TOWNSHIP 06S, RANGE 10W

HARRISON COUNTY BOARD OF EDUCATION
2011 to 2021
640 ACRES



Stand Activity Schedule for
HARRISON COUNTY BOE
16 6S 10W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013					
1	1	Harvest, Mechanical, Thin, Machine, Slash	13	\$104.00	\$1,214.20
1	6	Harvest, Mechanical, Thin, Machine, Slash	26	\$208.00	\$3,097.12
2	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	130	\$2,340.00	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	42	\$630.00	\$0.00
6	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	44	\$660.00	\$0.00
Yearly Totals			255	\$3,942.00	\$4,311.32
2016					
1	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	13	\$314.00	\$0.00
1	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	21	\$525.00	\$0.00
1	6	Fire Protection, Other, Burn, Hand, Fuel Reduction	26	\$645.50	\$0.00
2	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	130	\$3,247.50	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	42	\$1,050.00	\$0.00
6	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	44	\$1,100.00	\$0.00
Yearly Totals			275	\$6,882.00	\$0.00
2019					
1	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	13	\$325.00	\$0.00
1	2	Fire Protection, Other, Burn, Hand, Hazard Mitigation	21	\$525.00	\$0.00
1	6	Fire Protection, Other, Burn, Hand, Fuel Reduction	26	\$650.00	\$0.00
2	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	130	\$3,250.00	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	42	\$1,050.00	\$0.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
6	8	Fire Protection, Other, Burn, Hand, Hazard Mitigation	44	\$1,100.00	\$0.00
		Yearly Totals	276	\$6,900.00	\$0.00
		Grand Totals	806	\$17,724.00	\$4,311.32