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# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: PASS CHRISTIAN

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\_7\_13

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#### LANDOWNER INFORMATION

Organization: Pass Christian School District

Name: PASS CHRISTIAN
Mailing Address: 6457 Kiln-Delisle Road
City, State, Zip: Pass Christian, MS 39571
Country: United States of America

Contact Numbers: Home Number:

Office Number: 228-255-6200

Fax Number:

E-mail Address:

Social Security Number (optional):

## 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: 651 Latitude: -89.3 Longitude: 30.44

Section: 16 Township: 7S Range: 13W

#### **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 324 acres of sub-merchantable timber. One hundred and fifty-eight acres is in two year old slash pine. There are 94 acres of drains and flats with mixed hardwood and slash timber. Thirteen acres of slash pine in the sawtimber class is isolated within the drains of this section.

The non-forested areas of this section comprise 51 acres and are made up of a county ball park and walking track as well as a county road department facility and a volunteer fire station. Two county roads also run through this section.

The section can be accessed by Vidalia Road and Sixteenth Section Road.

#### Water Resources

Perennial water resources were identified during reconnaissance of the property as well as intermittent drains; these resources 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

There is a county ball park and a walking track on this section as well as a volunteer fire station.

#### 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. The following soils are identified for this property: Saucier, Smithton, Escambia, Nahunta, Atmore, Harelston, and Poarch.

#### **SOIL TYPES**

#### Saucier

The Saucier component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on coastal plains. The parent material consists of loamy over clayey marine deposits. 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 low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 39 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 80. Longleaf Site Index = 60. Slash Site Index = 80.

#### 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.

#### Escambia

The Escambia component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on coastal plains. 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 somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24

inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 80. Slash Site Index = 90.

#### Nahunta

The Nahunta 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 and 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 high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria. Loblolly Site Index = 95.

#### 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.

#### Harleston

The Harleston component makes up 90 percent of the map unit. Slopes are 0 to 2 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 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

#### 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.

#### 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 2013 and 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.

#### 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.

#### 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.

#### **STRATA**

Strata 2 (Stand 4)

Strata Description

This strata is made up of 13 acres of natural slash pine in the sawtimber size class. The basal area is 46 with 96 trees per acre. The stand is completely surrounded by intermittent drains which makes logging impossible except during extreme drought periods.

## Strata Recommendations

No management practices are scheduled for this strata during this management period.

Strata 4 Stands 5, 10, 13, 15, and 19)

### Strata Description

This strata is composed of 324 acres of stagnant slash pine in the sub-merchantable product class and has a basal area of 50 with 75 trees per acre. This strata is not growing due to the wet flats and poorly drained soils located in this area.

Stand 10 has a slightly higher basal area (90) with larger diameter trees (on average 6 inches in diameter) than does the other stands within this strata.

#### Strata Recommendations

A timber cruise is scheduled for stand 10 during 2014. The results of this cruise will determine if there is sufficient volume to conduct a thinning as scheduled for this stand.

If there is sufficient volume the stand will receive a corridor thinning, reducing the basal area to 60.

Stands 10 and 19 are scheduled to receive a prescribed fire in 2017.

Strata 5 (Stands 6, 14, 17, and 20)

## Strata Description

This strata is predominately naturally occurring mature slash with some longleaf pine sawtimber and occupies 94 acres along the drains and streams of the section. The basal area is 46 with 92 trees per acre.

This strata is in and around the perennial drains of the section. As a result they will be managed as streamside management zones (SMZs) in accordance with Mississippi's Best Management Practices.

#### Strata Recommendations

No management practices are scheduled for this strata during this management period. This strata will be managed as a streamside management zone due to poor operability as a result of soil conditions.

Strata 6 (Stands 1, 3, 7, 9, and 18)

#### Strata Description

This strata comprises 158 acres and is composed of machine planted slash pine that is two years old. There are 644 trees per acre.

#### Strata Recommendations

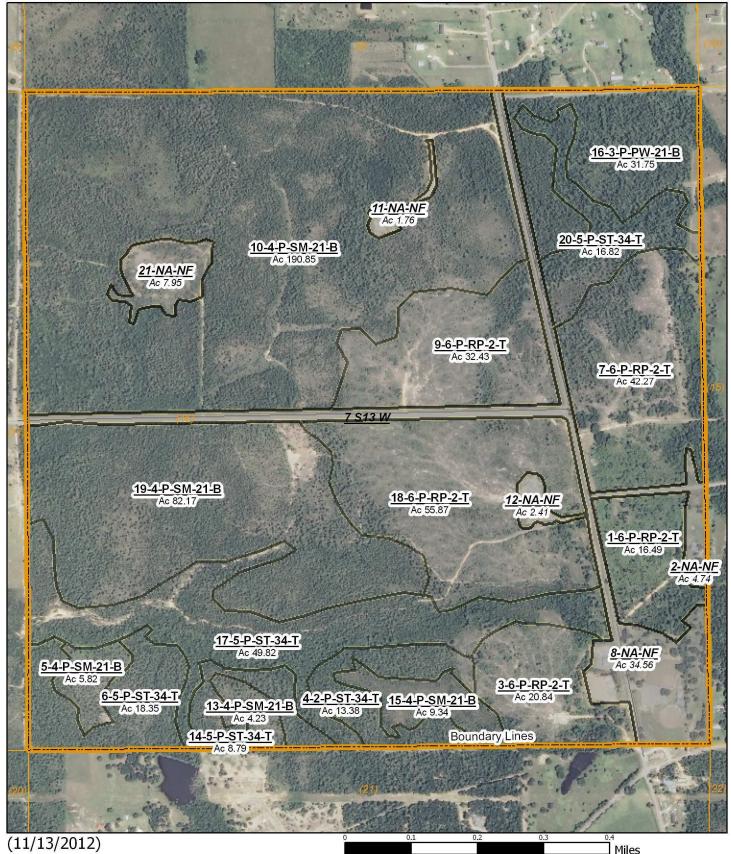
No management practices are scheduled for this strata during this management period.



# **PASS CHRISTIAN SCHOOL DISTRICT**

Section 16, Township 07S, Range 13W 2011 to 2021 640 Acres





## Stand Activity Schedule for Pass Christian School District

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2014						
4	10	Harvest, Mechanical, 1st Thin, Machine, Slash	191	\$6,685.00	\$36,969.96	
		Yearly Totals	191	\$6,685.00	\$36,969.96	
2017						
4	10	Fire Protection, Other, Burn, Hand, Fuel Reduction	191	\$4,775.00	\$0.00	
4	19	Fire Protection, Other, Burn, Hand, Fuel Reduction	82	\$2,050.00	\$0.00	
		Yearly Totals	273	\$6,825.00	\$0.00	
		Grand Totals	464	\$13,510.00	\$36,969.96	