



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
SOUTH PIKE

Prepared By:
NELSON HEARN
MFC

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-01-26

Plan Type:
Stewardship / Stewardship

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

Property Name: 16-1N-7E

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FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: SOUTH PIKE
Mailing Address: 1010 HIGHWAY 48 E
City, State, Zip: MAGNOLIA, MS 39652
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-783-3742
Fax Number:

E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: NELSON HEARN , SERVICE FORESTER
Forester Number: 00379
Organization: MFC
Street Address: PO BOX 255
City, State, Zip: MAGNOLIA, MS 39652
Contact Numbers: Office Number: 601-783-3255
Fax Number:

E-mail Address: nhearn@mfc.state.ms.us

PROPERTY LOCATION

County: Pike Total Acres: 636 Latitude: -90.51 Longitude: 31.05
Section: 16 Township: 1N Range: 7E

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

Fire Protection

The goal is to protect the resource from wildfires, by establishing and maintaining firebreaks around the property; annually inspect possible signs of insect infestations and disease; and prohibit grazing until terminal bud is beyond reach of livestock.

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.

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PROPERTY DESCRIPTION

General Property Information

This section consist of approximately 636 acres with 585 acres in timber and 51 acres non-forest. This section is located approximately 2 miles East of the Pike County-Amite County line, in the Osyka Community. Access to this section is by Elarton Road which runs Northwest to the Southeast through the section.

Archeological or Cultural Resources

These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

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 management measures will be applied immediately in order to preserve these sensitive areas.

Water Resources

Terry's Creek is located in the Southwest corner of the section. Terry's Creek, and 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.

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:

The soil associations found on this section include Cahaba, Ora, Ruston, and Falaya that are described in greater detail under soil types.

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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
- 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.

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.

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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.

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.

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

Cahaba(smithdale)

The Cahaba(smithdale) soils are found on the section. Slopes are 17 to 35 percent. This component is on coastal plains. The parent material consists of 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 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 7e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

Ora

The Ora soils are found on this section. Slopes are 2 to 8 percent. This component is on uplands. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 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 low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The Ruston component makes up 30 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

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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.

Ruston

The Ruston soils are found this section. Slopes are 8 to 17 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 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.

Falaya

The Falaya soils are found on this section. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium. 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 very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

STRATA

Strata 1

Stand Description

This 142 acre stand number 6 of containerized Loblolly Pine was hand planted in 2010 on a clear-cut tract of mature pine sawtimber that was site prepared by aerial spraying prior to tree planting.

Stand Recommendations

This stand will be managed as a Loblolly Pine plantation and will be grown to a 30 to 35 year rotation. The stand will need to be evaluated in 2021 to estimate the timing of a first thinning.

Activity Recommendations

Harvest

This 142 acre stand no. 6 of hand planted containerized Loblolly Pine in 2010 will be evaluated in 2021 for a first thinning within the next 5 years.

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Strata 2

Strata Description

Strata no. 2 consist of 96 acres of machine planted old field Loblolly Pine with 47 acres in stand 8 thinned in 2010. Stand 13 with 49 acres was sold for a first thin in the spring of 2011 and will be cut in 2012. These stands will be grown to a 30 to 35 year rotation.

Stand Recommendations

Stand 8 with 47 acres of once thinned Loblolly Pine in 2010 will need a second thin in 2018.

Stand 13 with 49 acres that was sold for a first thin in 2011 will also need a second thin in 2018.

These two stands will be grown to 30 to 35 years of age, harvest cut, site prepared, and replanted with Loblolly Pine.

Activity Recommendations

Harvest

Stand 8 will have a second thin in 2018 targeting the removal of forked, diseased, and suppressed trees with a target basal area of 70 to 80.

Harvest

Stand 13 with 49 acres of 18 year old Loblolly Pine on old fields is under contract for a first thin in 2012. A second thin will be made in 2018. The stand will have a final harvest at age 35 to 40.

Strata 3

Stand Description

This stand consist of approximately 154 acres of predominately bottomland hardwood with scattered pine sawtimber. Much of this area is in the flood plain of Terry's Creek and has limited access due to wet conditions year round. A select cut to remove as much as possible of the pine overstory where the ground is operable is planned for 2020.

Stand Recommendations

This stand will be managed as an SMZ; however, the pine and some poor quality hardwoods can be select marked for removal in 2020.

Activity Recommendations

Harvest

This stand will be thinned in 2020. It will be a pay as cut sale.MFC personnel will select the trees for removal by marking.

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Strata 4

Strata Description

This strata consist of 47 acres of understocked mature pine sawtimber with 24 acres in stand 10 and 23 acres in stand 2.

Strata Recommendations

Stands 2 and 10 need to be harvest cut, site prepared and replanted with containerized Loblolly Pine.

Activity Recommendations

Harvest

Stand 2 with 23 acres will have a harvest cut in 2012.

Harvest

Stand 10 with 24 acres will have a harvest cut in 2019.

Site Preparation

This 23 acre site of one year old cutover of mixed pine and hardwood will be site prepared by aerial spraying prior to tree planting with containerized Loblolly Pine. The combination rate of herbicides and water to be applied will be determined by a forestry herbicide specialist prescription . The spraying will be completed by October 15, 2013.

Site Preparation

This 24 acre site of one year old cutover of mixed pine and hardwood will be site prepared by aerial spraying prior to tree planting with containerized Loblolly Pine. The combination rate of herbicides and water to be applied will be determined by a forestry herbicide specialist prescription . The spraying will be completed by October 15, 2020.

Regeneration

Stand 2 with 23 acres will be hand planted with containerized Loblolly Pine on 8 x 10 spacing at 545 trees per acre after the site preparation is completed. Planting dates will be November 1,2013 thru February 15, 2014. The expexted Site Index at age 50 is 90.

Regeneration

Stsnd 10 with 24 acres will be hand planted with containerized loblolly pine on 8 x 10 spacing at 545 trees per acre after the site preparation is completed. Planting dates will be November 1,2020 thru February 15, 2021. The expexted Site Index at age 50 is 90.

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Strata 5

Strata Description

Stand 8 is a 32 acre tract of pine chip-n-saw that was thinned in 2010 that will need a second thin in 2018. The tract is about 26 years old and should be harvest cut at 35 to 40 years old.

Stand Recommendations

This 32 acre pine plantation will be thinned twice prior to the final harvest at age 35- 40. When regenerated it will be put back into Loblolly Pine.

Activity Recommendations

Harvest

Stand 8 with 32 acres of 22 year old chip-n-saw was first thinned in 2010.

Harvest

Stand 8 will need a second thin in 2018 to remove diseased , forked, and suppressed trees with a target basal area of 70 to 80.

Strata 6

Strata Description

This strata consist of 31 acres of machine planted Loblolly Pine in 2004. The stands include 12,21,and 17. The strata will need to be evaluated in 2017 due to Hurricane Katrina in order to decide to thin or harvest cut the stands in 2021.

Stand Recommendations

This 31 acre pine plantation will be thinned twice prior to the final harvest at age 35- 40. When regenerated it will be put back into Loblolly Pine.

Activity Recommendations

Technical

This 31 acre strata of Loblolly Pine plantations will be evaluated in 2017 in preparation for a possible first thin.

Harvest

This 31 acre strata of Loblolly Pine plantations will either be thinned or harvest cut in 2021 or 2022.

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Strata 7

Strata Description

This strata consist of 24 acres of mature understocked hardwood sawtimber that will be harvest cut in 2012.

Strata Recommendations

This 24 acres of understocked hardwood sawtimber will be harvest cut in 2012, site prepared, and regenerated with containerized Loblolly Pine.

Activity Recommendations

Harvest

This stand will have a final harvest cut in 2012.

Site Preparation

This 24 acre site of one year old cutover of hardwood sawtimber will be site prepared by aerial spraying prior to tree planting with containerized Loblolly Pine. The combination rate of herbicides and water to be applied will be determined by a forestry herbicide specialist prescription . The spraying will be completed by October 15, 2013.

Regeneration

The site will be hand planted with containerized loblolly pine on 8 x 10 spacing at 545 trees per acre after the site preparation is completed. Planting dates will be November 1,2013 thru February 15, 2014. The expexted Site Index at age 50 is 90.

Strata 8

Stand Description

This strata consist of 59 acres of containerized improved Long Leaf Pine that was planted on a aerial sprayed site in 2004 with 545 trees per acre on 8 x 10 spacing. Survival was very good , but there is encroachment of natural Loblolly Pine within the stand. This can be reduced by several hot fires under the right conditions prior to the first thin of the stand. This will require an experienced Longleaf Pine burn manager.

Stand Recommendations

This 59 acre stand will need to be thinned 3 times prior to a final harvest at age 45 to 50 .

Activity Recommendations

Technical

This 59 acre stand no. 16 of hand planted containerized Longleaf Pine in 2004 will be evaluated in 2016 for a first thinning within the next 5 years.

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Technical

This 59 acre strata of Longleaf Pine plantations will be cruised in 2021 for a possible first thin.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

Exterior property lines are painted orange.

Line Recommendations

Boundary lines should be repainted every 4 to 5 years.

Activity Recommendations

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Repaint 4 miles with orange paint in 2010.

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Repaint 4 miles with orange paint in 2015.

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Repaint 4 miles with orange paint in 2020.

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

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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.



SOUTH PIKE SCHOOL DISTRICT

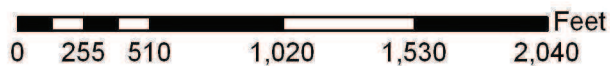
SECTION 16, T 1 N, R 7 E, PIKE CO., MS

2012-2021

636 ACRES



(11/09/2011)



16-1N-7E, LEGEND



Property

Property

Category 1: Stands

Sawtimber
 Pulpwood
 Chip-n-Saw
 Reproduction

Category 1: Stands (cont)

Sub-Merchantable

Category 3: Non-Forest Stands

Non-Forest

Property Roads/Trails

Access Road

Boundary Lines

Property

MFC Basemap

County Boundary

County Boundary

Quadrangle Grid

USGS Quad

PLS Townships

PLS Townships

Survey Districts

District 4

Blockgroup (Census 2000)

Blockgroup (Census 2000)

Block (Census 2000)

Block (Census 2000)

Tract/BNA (Census 2000)

Tract/BNA (Census 2000)

County Roads

County Roads

Interstate Highways

Interstate Highway

School Sections

School Sections

Public School Districts

SOUTH PIKE SCHOOL DISTRICT

US Congressional District

US Cong Dist #3

MS Senate

38

MS House

98

Perennial Streams

Perennial Streams

Hydrologic Units (Basins)

TANGIPAHOA RIVER

Historic Forest Boundary

Longleaf Pine with Loblolly Pine-Slash Pine

MS Forest Habitat

FRAGIPAN LOAM HILLS

Physiographic Region

SOUTH CENTRAL HILLS

Soil Associations

ora-smithdale-ruston
 gillsburg-waverly-collins

Surface Geology

CITRONELLE

MFC Districts

MFC Districts

MFC Areas

MFC Areas

MS Outline

MS Outline

Stand Activity Schedule for
SOUTH PIKE
16 1N 7E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
4	2	Harvest, Mechanical, Final, Machine, Loblolly	23	\$575.00	\$14,835.00
7	7	Harvest, Mechanical, Final, Machine, Loblolly	24	\$600.00	\$6,264.00
Yearly Totals			47	\$1,175.00	\$21,099.00
2014					
4	2	Regeneration, Artificial, Plant, Hand, Loblolly	23	\$2,875.00	\$0.00
4	2	Site Preparation, Chemical, Broadcast, Aerial, Combination	23	\$2,070.00	\$0.00
7	7	Regeneration, Artificial, Plant, Hand, Loblolly	24	\$3,000.00	\$0.00
7	7	Site Preparation, Chemical, Broadcast, Aerial, Combination	24	\$2,160.00	\$0.00
Yearly Totals			94	\$10,105.00	\$0.00
2016					
8	16	Technical, Maintain, Update, Hand, Management Plan	59	\$177.00	\$0.00
Yearly Totals			59	\$177.00	\$0.00
2017					
6	12	Technical, Maintain, Re-Cruise, Hand, Inventory	2	\$10.30	\$0.00
6	17	Technical, Maintain, Re-Cruise, Hand, Inventory	26	\$130.00	\$0.00
6	21	Technical, Maintain, Re-Cruise, Hand, Inventory	26	\$129.70	\$0.00
Yearly Totals			54	\$270.00	\$0.00
2018					
2	8	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	47	\$1,645.00	\$5,640.00
2	13	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	49	\$1,715.00	\$38,413.06
5	11	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	32	\$1,120.00	\$16,239.36

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
			Yearly Totals	128	\$4,480.00	\$60,292.42
2019						
4	10	Harvest, Mechanical, Final, Machine, Loblolly	24	\$840.00	\$21,612.48	
			Yearly Totals	24	\$840.00	\$21,612.48
2020						
3	23	Harvest, Mechanical, Thin, Machine, Loblolly	155	\$3,875.00	\$41,850.00	
4	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	24	\$2,640.00	\$0.00	
			Yearly Totals	179	\$6,515.00	\$41,850.00
2021						
1	6	Technical, Maintain, Update, Hand, Management Plan	142	\$710.00	\$0.00	
4	10	Regeneration, Artificial, Plant, Hand, Loblolly	24	\$2,880.00	\$0.00	
6	12	Harvest, Mechanical, 1st Thin, Machine, Loblolly	2	\$70.00	\$520.00	
6	17	Harvest, Mechanical, 1st Thin, Machine, Loblolly	3	\$105.00	\$780.00	
6	21	Harvest, Mechanical, 1st Thin, Machine, Loblolly	26	\$910.00	\$6,760.00	
8	16	Technical, Maintain, Re-Cruise, Hand, Inventory	59	\$354.00	\$0.00	
			Yearly Totals	256	\$5,029.00	\$8,060.00
			Grand Totals	841	\$28,591.00	\$152,913.90