

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Hinds County BOE

Prepared By:
John Randall Giachelli
MFC

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-22

Plan Type: Stewardship / Stewardship

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

Property Name: 16-3N-4W

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	7
STRATA	8
OTHER PLAN ACTIVITIES	11
PLAN MAP	12
PLAN MAP	13
PLAN MAP	14
STRATA ACTIVITY SCHEDULE	15

LANDOWNER INFORMATION

Organization: Hinds County Schools Name: Hinds County BOE

Mailing Address: 13192 Hwy 18

City, State, Zip: Raymond, MS 39154 Country: United States of America

Contact Numbers: Home Number: 601-857-5222

Office Number: Fax Number:

E-mail Address: shandley@hinds.k12.ms.us

Social Security Number (optional):

FORESTER INFORMATION

Name: John Randall Giachelli, Service Forester

Forester Number: 02503 Organization: MFC

Street Address: 3139 Hwy 468 City, State, Zip: Pearl, MS 39208

Contact Numbers: Office Number: 601-420-6018

Fax Number:

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

PROPERTY LOCATION

County: Hinds Total Acres: 651 Latitude: -90.61 Longitude: 32.1

Section: 16 Township: 3N Range: 4W

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

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.

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 located in the southwestern part of Hinds County near Utica. Access to this section can be reached off of Hwy 18. Prescribed burning practices should be used carefully on this section due to the smoke sensitive areas nearby. This section consists of 218 acres of pine plantation, 228 acres of loblolly pine and mixed hardwood and 206 acres of non-forest.

Water Resources

No perennial water resources were identified during a reconnaissance of the property. However, 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: Oaklimeter, Memphis, Loring and Calhoun

Archaeological and Cultural Resources

The West half of this property has many residences. The tract is also split by highway 18. All forestry activities will be treated with care in these areas.

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

This section is located in an urban area and will not allow safe prescribed burning. Firebreaks should be maintained at all times. 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.

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.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

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.

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

Oaklimeter

Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium 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 high. 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 24 inches during January, February, March, November, 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.

Loring

Slopes are 5 to 17 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer, fragipan, is 14 to 35 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 28 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 95.

Calhoun

Slopes are 0 to 1 percent. This component is on depressions. The parent material consists of loess 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 low. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 9 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. Loblolly Site Index = 90. Slash Site Index = 90.

Memphis

Slopes are 5 to 17 percent. This component is on uplands. The parent material consists of loess 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 very 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 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. Loblolly Site Index = 105.

STRATA

Strata 1

Strata Description

Strata 1: Stands 2, 6, 19, 21 and 23

Acres: 120

This is a well stocked advanced generation Loblolly Pine plantation that was established in 2001.

Stand Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time frame, management activities such as thinnings, mid-rotation release to control undesirable species, and prescribed burning to improve wildlife habitat will be used to keep stands at full production. This area should be thinned when the average pine DBH is 6 inches and average basal area exceeds 110 square feet per acre. Either thin using a fourth or fifth row thinning or a cutter select corridor thin that represents a fourth or fifth row thinning scheme. Thin back to an average basal area of 70 square feet per acre, plus or minus 5 square feet per acre.

Activity Recommendations

Harvest

Stands 2, 6, 19, 21 and 23 will be first thinned in 2016 and second thinned in 2021.

All thinnings will reduce the basal area to 75sqft per acre by removing poor form and diseased timber. This will create a high quality sawtimber stand.

Stand Improvement

A chemical spraying of competing vegetation is scheduled for 2018 to reduce fuel loads and promote stand growth. This will be done aerially to target hardwood saplings.

Strata 2
Strata Description
Strata 2: Stand 1

Acres: 77

This is a well stocked Loblolly Pine plantation established in 2000.

Stand Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time frame, management activities such as thinnings, mid-rotation release to control undesirable species, and prescribed burning to improve wildlife habitat will be used to keep stands at full production. This area should be thinned when the average pine DBH is 6 inches and average basal area exceeds 110 square feet per acre. Either thin using a fourth or fifth row thinning or a cutter select corridor thin that represents a fourth or fifth row thinning scheme. Thin back to an average basal area of 70 square feet per acre, plus or minus 5 square feet per acre.

Activity Recommendations

Harvest

The fist thin is planned for 2014 with the second in 2020.

All thinnings will reduce the basal area to 75sqft per acre by removing poor form and diseased timber. This will create a high quality sawtimber stand.

Stand Improvement

A chemical spraying of competing vegetation is scheduled for 2018 to reduce fuel loads and promote stand growth. This will be done aerially to target hardwood saplings.

Strata 3

Strata Description

Strata 3: Stands 3, 4, 7, 9, 11, 20 and 24

Acres: 228

This is a well stocked natural pine and mixed hardwood stand that is approximately 58 years old. Most of this strata lies around homes and businesses.

Strata Recommendations

These stands will be managed to 65 to 75 year rotation. During this time frame management activities such as thinning from underneath to remove poor quality and overcrowded trees will be done. At the end of the rotation, a final harvest will be conducted and reforestation activities will be completed to return these stands to full production. There are no activities planned at this time. A harvest may be scheduled at a later date due to storm or insect damage.

Strata 4

Strata Description Strata 4 : Stand 17

Acres: 11

This is a well stocked Loblolly Pine plantation that was planted in 1999. Any harvests will have to be merged with another stand because of the minimum amount of acres in this stand.

Stand Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time frame, management activities such as thinnings, mid-rotation release to control undesirable species, and prescribed burning to improve wildlife habitat will be used to keep stands at full production. This area should be thinned when the average pine DBH is 6 inches and average basal area exceeds 110 square feet per acre. Either thin using a fourth or fifth row thinning or a cutter select corridor thin that represents a fourth or fifth row thinning scheme. Thin back to an average basal area of 70 square feet per acre, plus or minus 5 square feet per acre.

Activity Recommendations

Harvest

The first thinning of this plantation is scheduled for 2014. The basal area will be reduced by removing poor form and diseased timber. This thinning will be merged with strata 5.

Stand Improvement

A chemical spraying of competing vegetation is scheduled for 2018 to reduce fuel loads and promote stand growth. This will be done aerially to target hardwood saplings.

Strata 5

Strata Description

Strata 5: Stand 18

Acres: 10

This is a well stocked Loblolly Pine plantation that was established in 1991.

Stand Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time frame, management activities such as thinnings, mid-rotation release to control undesirable

species, and prescribed burning to improve wildlife habitat will be used to keep stands at full production. This area should be thinned when the average pine DBH is 6 inches and average basal area exceeds 110 square feet per acre. Either thin using a fourth or fifth row thinning or a cutter select corridor thin that represents a fourth or fifth row thinning scheme. Thin back to an average basal area of 70 square feet per acre, plus or minus 5 square feet per acre.

Activity Recommendations

Harvest

The first thinning of this plantation is scheduled for 2014. The basal area will be reduced by removing poor form and diseased timber. This harvest will be merged with strata 4.

Stand Improvement

A chemical spraying of competing vegetation is scheduled for 2018 to reduce fuel loads and promote stand growth. This will be done aerially to target hardwood saplings.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

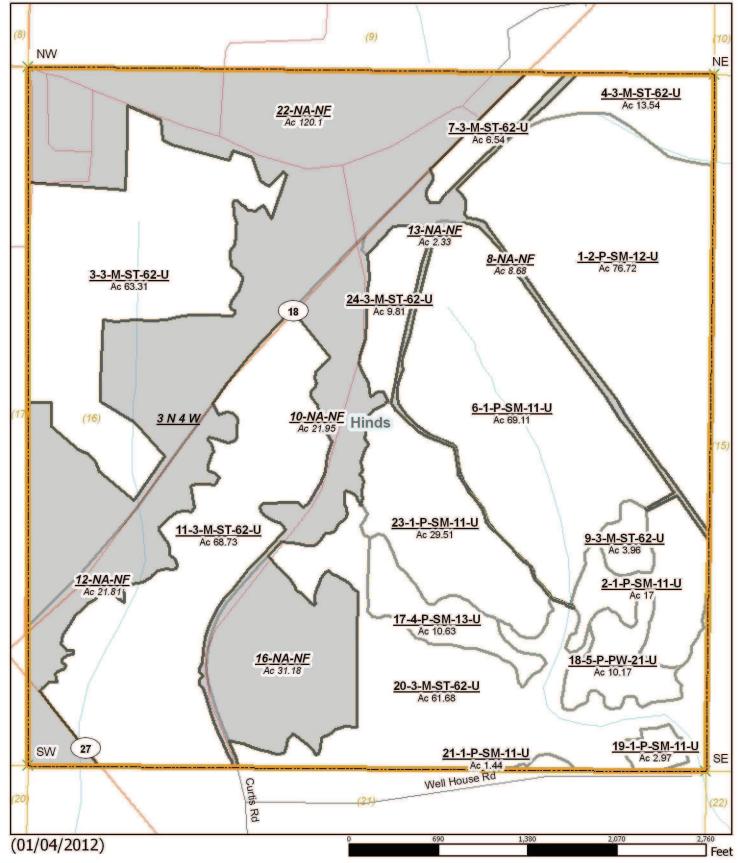
Boundary line painting will be on a five year rotation to prevent trespassing and timber theft starting in 2012.



Hinds County Schools

SEC. 16 TWN 3N RGE 4W 2012 to 2021 651.15 Acres



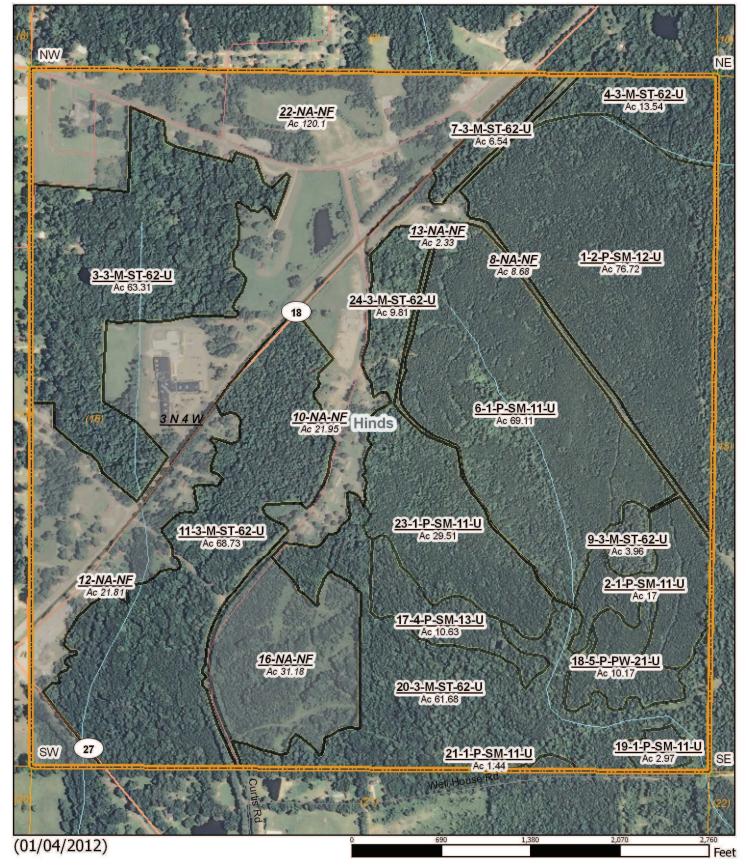




Hinds County Schools

SEC. 16 TWN 3N RGE 4W 2012 to 2021 651.15 Acres





Hinds County Schools

US/State Highways

State Highway (2)



Property Property (1)		•
Category 1: Stands Sub-Merchantable (7) Sawtimber (7) Pulpwood (1)		
Category 3: Non-Forest Stands Non-Forest (6)		
Boundary Corners × Property (2)		
MFC Basemap County Boundary County Boundary (1)	School Sections School Sections (1)	MS Forest Habitat (cont) DEEP LOESS PLAINS (1)
Quadrangle Grid USGS Quad (1)	Public School Districts HINDS COUNTY SCHOOL DISTRICT (1)	Physiographic Region SOUTH CENTRAL HILLS (1)
PLS Townships PLS Townships (1)	US Congressional District US Cong Dist #2 (1)	Soil Associations memphis-loring-collins (1)
Survey Districts District 2 (1)	MS Senate 36 (1)	Surface Geology CATAHOULA (1)
Blockgroup (Census 2000) Blockgroup (Census 2000) (2)	MS House 63 (1)	MFC Districts MFC Districts (1)
Block (Census 2000) Block (Census 2000) (18)	Intermittent Streams Intermittent Streams (3)	MFC Dispatch Units MFC Dispatch Units (1)
Tract/BNA (Census 2000) Tract/BNA (Census 2000) (1)	Hydrologic Units (Basins) BAYOU PIERRE (1) LOWER BIG BLACK RIVER (1)	Incorporated Cities Incorporated Cities (1)
City Streets City Streets (16)	Historic Forest Boundary Shortleaf/Longleaf Pine-Upland Hardwood-Loblol	MS Outline MS Outline (1) Ily Pine (1)

MS Forest Habitat

SOUTHERN LOESSIAL LOAM HILLS-RUGGED TOPO (1)

Stand Activity Schedule for Hinds County Schools 16 3N 4W

Charte	C+d			Est.	Est.
Strata	Stand	Activity	Acre	Cost	Revenue
2014					
2	1	Harvest, Mechanical, Thin, Machine, Loblolly	77	\$2,695.00	\$20,020.00
4	17	Harvest, Mechanical, Thin, Machine, Loblolly		\$385.00	\$2,530.00
5	18	Harvest, Mechanical, Thin, Machine, Loblolly		\$350.00	\$4,150.00
		Yearly Totals	98	\$3.430.00	\$26.700.00
2016					
1	2	Harvest, Mechanical, Thin, Machine, Loblolly	17	\$595.00	\$6,558.60
1	6	Harvest, Mechanical, Thin, Machine, Loblolly		\$2,418.85	\$26,662.64
1	19	Harvest, Mechanical, Thin, Machine, Loblolly		\$103.95	\$1,145.83
1	21	Harvest, Mechanical, Thin, Machine, Loblolly		\$50.40	\$555.55
1	23	Harvest, Mechanical, Thin, Machine, Loblolly		\$1,032.85	\$11,384.96
		Yearly Totals	120	\$4.201.05	\$46.307.57
2018					
1	2	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$1,105.00	\$0.00
1	6	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$4,492.15	\$0.00
1	19	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$193.05	\$0.00
1	21	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$93.60	\$0.00
1	23	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$1,918.15	\$0.00
2	1	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$4,986.80	\$0.00
4	17	Stand Improvement, Chemical, Release, Aerial, Woody Stems		\$690.95	\$0.00
5	18	Stand Improvement, Chemical, Release, Aerial, Woody Stems	10	\$661.05	\$0.00

Strata	Stand	Activity		Acre	Est. Cost	Est. Revenue
			Yearly Totals	218	\$14,140.75	\$0.00
2020						
2	1	Harvest, Mechanical, Thin, Machine, Loblolly		77	\$2,695.00	\$17,710.00
			Yearly Totals	77	\$2,695.00	\$17,710.00
2021						
1	2	Harvest, Mechanical, Thin, Machine, Loblolly		17	\$595.00	\$4,505.00
1	6	Harvest, Mechanical, Thin, Machine, Loblolly		69	\$2,415.00	\$18,285.00
1	19	Harvest, Mechanical, Thin, Machine, Loblolly		3	\$103.95	\$787.05
1	21	Harvest, Mechanical, Thin, Machine, Loblolly		1	\$50.40	\$381.60
1	23	Harvest, Mechanical, Thin, Machine, Loblolly		30	\$1,032.85	\$7,820.15
	,		Yearly Totals	120	\$4.197.20	\$31,778.80
			Grand Totals	633	\$28,664.00	\$122,496.37