



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Jones County BOE

Prepared By:
Aaron Nathaniel Rambin
Mississippi Forestry Comm.

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-01-04

Plan Type:
Stewardship / Stewardship

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

Property Name: 16_T8N_R13W

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	9
OTHER PLAN ACTIVITIES	12
PLAN MAP	14
PLAN MAP	15
STRATA ACTIVITY SCHEDULE	16

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Organization: Jones County B. O. E.
Name: Jones County BOE
Mailing Address: 5204 Hwy 11 N
City, State, Zip: Ellisville, MS 39437
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-649-5201
Fax Number:
E-mail Address: sethrash@jones.k12.ms.us
Social Security Number (optional): 646000536

FORESTER INFORMATION

Name: Aaron Nathaniel Rambin , Service Forester
Forester Number: 02418
Organization: Mississippi Forestry Comm.
Street Address: 101 N. Court St.
Suite E
City, State, Zip: Ellisville, MS 39437
Contact Numbers: Office Number: 601-477-3735
Fax Number: 601-477-3739
E-mail Address: arambin@mfc.state.ms.us

PROPERTY LOCATION

County: Jones Total Acres: 636 Latitude: -89.31 Longitude: 31.66
Section: 16 Township: 8N 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

General

This section consists of one full section of land containing 640 acres. This section is situated in the Big Creek Watershed, located in the mid-western portion of Jones County. More specifically, it is located 10 1/2 miles west of Laurel on Highway 84. Willie Hilbun Road is the only public road that transects the property and provides access. There are several woods roads that branch off of the public road to access the East portion of the section. A small pipeline right-of-way transects the property from the southeast to the northwest. Big Creek and several small intermittent streams flow through the section.

This section is composed of approximately five hundred and forty-nine (549) forested acres with the remaining eighty-six (86) acres in pasture and residential leases. It is predominately Loblolly Pine plantation ranging from seven (7) to twenty-four (24) years of age. There are no forest management activities scheduled to occur on the non-forested areas.

Approximately one hundred and twenty-eight (128) acres were thinned in fiscal year 2010. Approximately sixty-one (61) acres were thinned in fiscal year 2011.

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

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Water Resources

Big Creek is the primary perennial stream located on this section. This perennial stream along with all other intermittent streams and drains identified on the section 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.

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:

MISSISSIPPI FORESTRY COMMISSION

FOREST STEWARDSHIP MANAGEMENT PLAN

- 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

Properly maintained boundary lines are essential to successfully complete all forest management activities. Boundary lines mitigate the possibility of accidental timber theft and encroachment. Boundary lines will be marked with orange paint. The boundary lines will be repainted every six years unless unordinary circumstances require a shorter painting rotation.

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 such as thinning, prescribed burning and leaving buffer zones around harvested areas may be utilized to enhance the aesthetics of the section.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

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 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. This may be accomplished by allowing schools within the school district to utilize the sections for different classes where it is applicable. The forestry program at the local junior college could also be allowed to conduct projects on the sections to enhance their educational experience.

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 the landowner objectives the recreational use of this 16th section could prove to be an avenue for generating additional income. This can be accomplished by leasing forested areas for hunting and fishing purposes.

SOIL TYPES

Smithdale

The Smithdale component makes up 90 percent of the map unit. Slopes are 8 to 15 percent. This component is on coastal plains. 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 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.

MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN

Longleaf Site Index = 69. Slash Site Index = 85.

Benndale

The Benndale component makes up 90 percent of the map unit. Slopes are 0 to 8 percent. This component is on coastal plains. The parent material consists of Marine sediments or 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 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 2e. This soil does not meet hydric criteria. Loblolly Site Index = 94. Longleaf Site Index = 79. Slash Site Index = 94.

Prentiss

The Prentiss component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on terraces. The parent material consists of loamy alluvium deposits. Depth to a root restrictive layer, fragipan, is 20 to 32 inches. The natural drainage class is moderately well drained. 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 26 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 = 88.

Jena

The Jena component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on coastal plains. 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 does not meet hydric criteria. Loblolly Site Index = 100.

Malbis

The Malbis component makes up 90 percent of the map unit. Slopes are 2 to 5 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 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 36 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 = 80. Slash Site Index = 90.

STRATA

Strata 1

Strata Description

Strata 1: Pulpwood

These stands are classified as pulpwood and are composed of loblolly pine plantations that were planted in 1995.

Stands: 2, 16, 18, 26

Strata 1 Total Acres: 128.67

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A second thinning is scheduled for the stands in this strata in fiscal year 2018. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will be thinned by removing stems that display poor growth, poor form, and disease. The target basal area will be seventy-five (75) square feet per acre.

Strata 2

Strata Description

Strata 2: Chip-N-Saw

These stands are classified as chip-n-saw and are composed of loblolly pine plantations that were planted in 1995.

Stands: 5, 17, 24

Strata 2 Total Acres: 61.37

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A second thinning is scheduled for the stands in this strata in fiscal year 2019. This harvest operation will focus on improving the stand quality, growth, and vigor. The

MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN

stands will be thinned by removing stems that display poor growth, poor form, and disease. The target basal area will be seventy-five (75) square feet per acre.

Strata 3

Strata Description

Strata 3: Sub-Merchantable

These stands are classified as sub-merchantable and are composed of loblolly pine plantations that were planted in 2005.

Stands: 8, 21, 22, 25

Strata 3 Total Acres: 15.06

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

A first thinning is scheduled for the stands in this strata in fiscal year 2019. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will be thinned by removing every fifth row. Stems that display poor growth, poor form, and disease located within the four (4) leave rows will also be removed. The target basal area will be eighty (80) square feet per acre.

Strata 4

Strata Description

Strata 4: Chip-N-Saw

These stands are classified as chip-n-saw and are composed of loblolly pine plantations that were planted in 1988.

Stands: 6, 19

Strata 4 Total Acres: 24.71

Strata Recommendations

These stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN

Activity Recommendations

Harvest

A second thinning is scheduled for the stands in this strata in fiscal year 2014. This harvest operation will focus on improving the stand quality, growth, and vigor. The stands will be thinned by removing stems that display poor growth, poor form, and disease. The target basal area will be seventy-five (75) square feet per acre.

Strata 5

Strata Description

Strata 5: Sawtimber

These stands are classified as sawtimber and are composed of natural pine that was established around 1963.

Stands: 1

Strata 5 Total Acres: 204.59

Strata Recommendations

These stands will be clear cut of all merchantable timber and reforested with more productive Loblolly Pine plantations. After the stands are reforested, the stands will be managed to a 35 to 40 year rotation. During this time management activities such as thinnings, mid-rotation release, and prescribed burning will be used to keep the stands at full production and improve wildlife habitat.

Activity Recommendations

Harvest

These stands will be harvested of all merchantable timber in fiscal year 2014. Timber market conditions will be closely monitored to ensure the proper timing of the timber sale in order to maximize the timber sale revenue.

Site Preparation

These stands will be treated with a chemical site preparation in the late summer or early fall following the final harvest. The treatment should be completed several weeks before the first hard frost occurs. This treatment is scheduled to be completed in fiscal year 2015.

Regeneration

These stands will be replanted following all site preparation activities in fiscal year 2015. The stands will be planted with Loblolly Pine Seedlings at a rate of 605 trees per acre. This stocking will be accomplished by spacing the seedlings 6 feet by 12

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

feet. The tree planting should be completed between December 2014 and February 2015.

Technical

A seedling survival inventory should be completed in the fall of 2016 to ensure that the stands are adequately stocked.

Strata 6

Strata Description

Strata 6: Sawtimber

These stands are classified as sawtimber and are composed of natural mixed species stands that were established around 1963.

Stands: 3, 7, 10, 13, 14, 15, 23

Strata 6 Total Acres: 115.49

Strata Recommendations

These stands should be maintained in their current health and condition to protect the water quality of the streams and enhance wildlife habitat. Selective harvesting may be completed within these stands during harvesting of adjacent stands, but the integrity of the stands should be maintained.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

Generally, these lines consist of permanent boundary lines that delineate the sixteenth section boundary. They are usually well established and readily identifiable by a permanent fire lane and a painted line.

Line Recommendations

All boundary lines will be repainted on a six (6) year rotation to ensure that they kept in good condition. Unordinary circumstances such as new surveys and timber loss from weather may require the boundary lines to be painted on a shorter rotation.

Activity Recommendations

Property Activities

This boundary line will be repainted with orange boundary line paint in fiscal year 2013.

MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN

Property Activities

This boundary line will be repainted with orange boundary line paint in fiscal year 2019.

Fire Control

Line Description

These lines consist of a permanent fire lane that is approximately fifteen (15) wide. These fire lanes are established and maintained where appropriate to improve access and help distinguish the boundary line.

Line Recommendations

All previously established permanent fire lanes will be maintained by disking, mowing, spraying, or pushing every two (2) years.

Activity Recommendations

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2012.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2014.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2016.

Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2018.

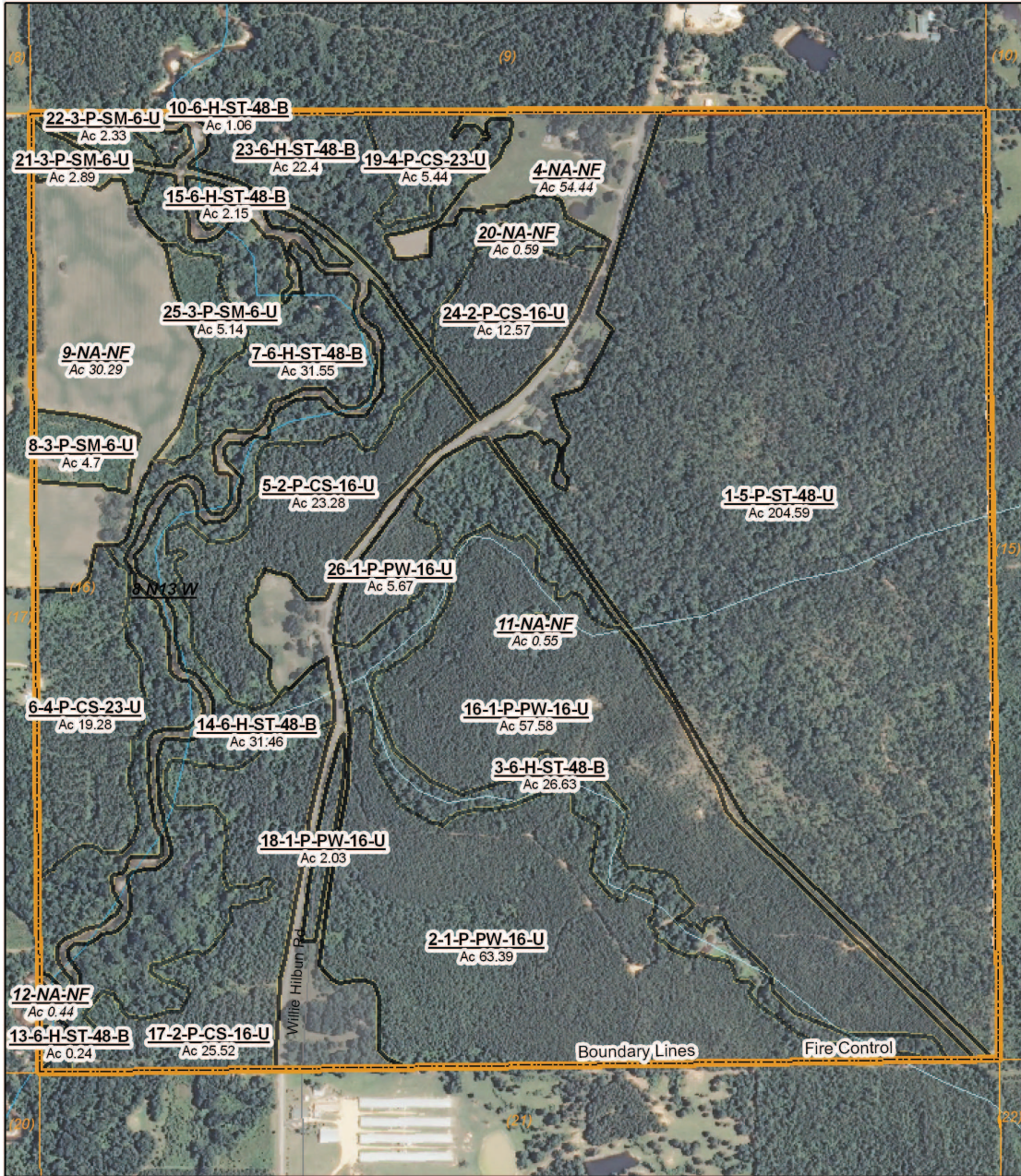
Fire Protection

These permanent fire lanes will be disked or pushed with a bull dozer in fiscal year 2020.

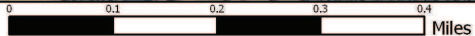


Jones County School District

Section 16, Township 8 N, Range 13 W
2012 to 2021
636.22 Acres



(12/06/2011)



Property Map Legend



Property Map Legend: Section 16, Township 8N, Range 13W

Property

Property (1)

Category 1: Stands

Sawtimber (8)
 Pulpwood (4)
 Chip-n-Saw (5)

Category 1: Stands (cont)

Sub-Merchantable (4)

Category 3: Non-Forest Stands

Non-Forest (5)

Fire Control

Permanent Fire Break (1)

MFC Basemap

County Boundary

County Boundary (1)

Quadrangle Grid

USGS Quad (1)

PLS Townships

PLS Townships (1)

Survey Districts

District 5 (1)

Blockgroup (Census 2000)

Blockgroup (Census 2000) (2)

Block (Census 2000)

Block (Census 2000) (3)

Tract/BNA (Census 2000)

Tract/BNA (Census 2000) (1)

County Roads

County Roads (2)

School Sections

School Sections (1)

Public School Districts

JONES COUNTY SCHOOL DISTRICT (1)

US Congressional District

US Cong Dist #3 (1)

MS Senate

42 (1)

MS House

88 (1)

Perennial Streams

Perennial Streams (1)

Intermittent Streams

Intermittent Streams (3)

Hydrologic Units (Basins)

UPPER LEAF RIVER (1)

Historic Forest Boundary

Longleaf Pine with Loblolly Pine-Slash Pine (1)

MS Forest Habitat

FRAGIPAN LOAM HILLS (1)

Physiographic Region

Pine Belt (1)

Soil Associations

jena-nugent (1)
 malbis-basin-escambia (1)
 mantachie-bibb-daleville (1)

Surface Geology

CATAHOULA (1)

MFC Districts

MFC Districts (1)

MFC Dispatch Units

MFC Dispatch Units (1)

MS Outline

MS Outline (1)

Stand Activity Schedule for

16 8N 13W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2014					
4	6	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	19	\$674.80	\$6,748.00
4	19	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	5	\$175.00	\$1,750.00
5	1	Harvest, Mechanical, Regeneration, Machine, Loblolly	205	\$7,175.00	\$380,258.60
Yearly Totals			229	\$8,024.80	\$388,756.60
2015					
5	1	Site Preparation, Chemical, Broadcast, Aerial, Combination	205	\$19,475.00	\$0.00
5	1	Regeneration, Artificial, Plant, Machine, Loblolly	205	\$27,675.00	\$0.00
Yearly Totals			410	\$47,150.00	\$0.00
2016					
5	1	Technical, Establish, Cruise, Hand, Inventory	205	\$205.00	\$0.00
Yearly Totals			205	\$205.00	\$0.00
2018					
1	2	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	63	\$2,218.65	\$22,186.50
1	16	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	58	\$2,015.30	\$20,153.00
1	18	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	2	\$70.00	\$700.00
1	26	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	6	\$198.45	\$1,984.50
Yearly Totals			129	\$4,502.40	\$45,024.00
2019					
2	5	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	23	\$814.80	\$8,148.00
2	17	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	26	\$910.00	\$9,077.12
2	24	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	13	\$455.00	\$4,550.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
3	8	Harvest, Mechanical, 1st Thin, Machine, Loblolly	5	\$164.50	\$1,222.00
3	21	Harvest, Mechanical, 1st Thin, Machine, Loblolly	3	\$105.00	\$780.00
3	22	Harvest, Mechanical, 1st Thin, Machine, Loblolly	2	\$81.55	\$605.80
3	25	Harvest, Mechanical, 1st Thin, Machine, Loblolly	5	\$179.90	\$1,336.40
Yearly Totals			77	\$2,710.75	\$25,719.32
Grand Totals			1.050	\$62,592.95	\$459,499.92