

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_T7N_R10W

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
PLAN MAP	14
PLAN MAP	15
STRATA ACTIVITY SCHEDULE	16

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

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

PROPERTY LOCATION

County: Jones Total Acres: 640 Latitude: -89 Longitude: 31.57

Section: 16 Township: 7N 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.

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 consists of one full section of land containing 640 acres. It is located within the boundaries of Desoto National Forest. The section is accessed by County Road 201C and County Road 213. There are no residential, farm or hunting leases on this section. This section is open to public use, as it is considered part of the Chickasawhay Wildlife Management Area.

This section is composed of approximately six hundred and thirty-one (631) forested acres with the remaining eight (8) acres in roads. It is predominantly Slash Pine plantation ranging from twenty-two (22) to thirty-five (35) years of age. There are no forest management activities scheduled to occur on the non-forested areas.

Approximately two hundred and seventy three (273) acres were first thinned in fiscal year 2009.

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.

Water Resources

All perennial water resources, 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.

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

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.

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. 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

This section is considered part of the Chickasawhay Wildlife Management Area. The section is open to public use in accordance to the rules of the management area.

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.

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.

Bibb

The Bibb component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of Stratifies Loamy and Sandy 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 9 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. Loblolly Site Index = 100.

Freest

The Freest component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on coastal plains. 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 high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April. 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 = 90. Slash Site Index = 85.

Susquehanna

The Susquehanna 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 clayey 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 very low. Available water to a depth of 60 inches is high. Shrink-swell potential is high. 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 = 78.

Freest

The Freest component makes up 90 percent of the map unit. Slopes are 0 to 8 percent. This component is on coastal plains. 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 high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April. 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. Slash Site Index = 85.

Trebloc

The Trebloc component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on valley flats. 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 moderate. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 9 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The Bibb component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. 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 moderate. Shrink-swell potential is low. This soil is frequently 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 5w. This soil meets hydric criteria.

STRATA

Strata 1

Strata Description

Strata 1: Pulpwood

These stands are classified as pulpwood and are composed of slash pine plantations that were planted in 1989.

Stands: 1, 2

Strata 1 Total Acres: 273.95

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

Fire Protection

A prescribed burn is tentatively scheduled for these stands in fiscal year 2016. The main objective of this prescribed burn is to reduce fuel loads and competing vegetation. This burn will also improve access for Mississippi Forestry Commission employees and prospective timber buyers in future timber sales. The burn should be completed in the winter or early spring of 2015-2016.

Harvest

A second thinning is scheduled for the stands in this strata in fiscal year 2017. 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: Sawtimber

These stands are classified as sawtimber and are composed of pine plantations that were established in 1982.

Stands: 5, 8

Strata 2 Total Acres: 140.35

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

Fire Protection

A prescribed burn is tentatively scheduled for these stands in fiscal year 2016. The main objective of this prescribed burn is to reduce fuel loads and competing vegetation. This burn will also improve access for Mississippi Forestry Commission employees and prospective timber buyers in future timber sales. The burn should be completed in the winter or early spring of 2015-2016.

Harvest

These stands will be harvested of all merchantable timber in fiscal year 2017. 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 2018.

Site Preparation

These stands will be treated with a site preparation prescribed burn in fiscal year 2018. The burn will be conducted no sooner than six (6) weeks following the chemical site preparation. This will ensure that the competing vegetation has had time to properly absorb the herbicide. The site preparation burn should be completed in the late fall of 2017.

Regeneration

These stands will be replanted following all site preparation activities in fiscal year 2018. 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 feet. The tree planting should be completed between December 2017 and February 2018.

Technical

A seedling survival inventory should be completed in the fall of 2019 to ensure that the stands are adequately stocked.

Strata 3
Strata Description

Strata 3: Sawtimber

These stands are classified as sawtimber and are composed of pine plantations that were established in 1977.

Stands: 4, 7

Strata 3 Total Acres: 177.49

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

These stands will be harvested of all merchantable timber in fiscal year 2013. 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 2014.

Site Preparation

These stands will be treated with a site preparation prescribed burn in fiscal year 2014. The burn will be conducted no sooner than six (6) weeks following the chemical site preparation. This will ensure that the competing vegetation has had time to properly absorb the herbicide. The site preparation burn should be completed in the late fall of 2013.

Regeneration

These stands will be replanted following all site preparation activities in fiscal year 2014. 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 feet. The tree planting should be completed between December 2013 and February 2014.

Technical

A seedling survival inventory should be completed in the fall of 2014 to ensure that the stands are adequately stocked.

Strata 4
Strata Description

Strata 4: Sawtimber

These stands are classified as sawtimber and are composed of natural mixed species stands that were established around 1955.

Stands: 3

Strata 4 Total Acres: 40.10

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.



Jones County School District

Section 16, Township 7 N, Range 10 W 2012 to 2021 640.05 Acres





Property Map Legend

Property Map Legend: Section 16, Township 7N, Range 10W



Property Property (1)		•
Category 1: Stands Pulpwood (2) Sawtimber (5)		
Category 3: Non-Forest Stands Non-Forest (2)		
MFC Basemap		
County Boundary County Boundary (1)	Public School Districts JONES COUNTY SCHOOL DISTRICT (1)	Soil Associations susquehanna-benndale-dorovan (1)
Quadrangle Grid USGS Quad (2)	US Congressional District US Cong Dist #4 (1)	Surface Geology CATAOULA (1)
PLS Townships PLS Townships (1)	MS Senate 42 (1)	PASCAGOULA/HATTIESBURG (1) Wildlife Management Areas
Survey Districts District 5 (1)	MS House 88 (1)	☐ Wildlife Management Areas (2)USFS Ownership
Blockgroup (Census 2000) Blockgroup (Census 2000) (2)	Intermittent Streams Intermittent Streams (6)	Private (1) Forest Service (1)
Block (Census 2000) Block (Census 2000) (4)	Hydrologic Units (Basins) LOWER LEAF RIVER (1)	USFS Boundary Desoto (1)
Tract/BNA (Census 2000) Tract/BNA (Census 2000) (1)	Historic Forest Boundary Longleaf Pine with Loblolly Pine-Slash Pine (1)	MFC Districts MFC Districts (1)
County Roads County Roads (1)	MS Forest Habitat SOUTHERN CLAY HILLS (1)	MFC Dispatch Units MFC Dispatch Units (1)
School Sections School Sections (1)	Physiographic Region Pine Belt (1)	MS Outline MS Outline (1)

Stand Activity Schedule for

16 7N 10W

		16 /N 10VV					
Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue		
2013	2013						
3	4	Harvest, Mechanical, Final, Machine, Slash	115	\$4,041.10	\$190,987.00		
3	7	Harvest, Mechanical, Final, Machine, Slash	62	\$2,170.00	\$102,556.68		
		Yearly Totals	177	\$6.211.10	\$293.543.68		
2014							
3	4	Technical, Establish, Cruise, Hand, Inventory	115	\$115.46	\$0.00		
3	4	Regeneration, Artificial, Plant, Machine, Loblolly	115	\$15,525.00	\$0.00		
3	4	Site Preparation, Other, Burn, Hand, Cut-Over	115	\$2,875.00	\$0.00		
3	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	115	\$10,925.00	\$0.00		
3	7	Technical, Establish, Cruise, Hand, Inventory	62	\$62.03	\$0.00		
3	7	Regeneration, Artificial, Plant, Machine, Loblolly	62	\$8,374.05	\$0.00		
3	7	Site Preparation, Other, Burn, Hand, Cut-Over	62	\$1,550.75	\$0.00		
3	7	Site Preparation, Chemical, Broadcast, Aerial, Combination	62	\$5,892.85	\$0.00		
		Yearly Totals	709	\$45,320.14	\$0.00		
2016							
1	1	Fire Protection, Other, Burn, Hand, Hazard Mitigation	237	\$5,915.75	\$0.00		
1	2	Fire Protection, Other, Burn, Hand, Hazard Mitigation	37	\$933.00	\$0.00		
2	5	Fire Protection, Other, Burn, Hand, Hazard Mitigation	24	\$609.25	\$0.00		
2	8	Fire Protection, Other, Burn, Hand, Hazard Mitigation	116	\$2,899.50	\$0.00		
		Yearly Totals	414	\$10,357.50	\$0.00		
2017							

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
1	1	Harvest, Mechanical, 2nd Thin, Machine, Slash	237	\$8,282.05	\$85,754.71
1	2	Harvest, Mechanical, 2nd Thin, Machine, Slash	37	\$1,295.00	\$13,408.80
2	5	Harvest, Mechanical, Final, Machine, Slash	24	\$852.95	\$44,353.40
2	8	Harvest, Mechanical, Final, Machine, Slash	116	\$4,060.00	\$211,120.00
		Yearly Totals	414	\$14.490.00	\$354.636.91
2018					
2	5	Regeneration, Artificial, Plant, Machine, Loblolly	24	\$3,289.95	\$0.00
2	5	Site Preparation, Other, Burn, Hand, Cut-Over	24	\$609.25	\$0.00
2	5	Site Preparation, Chemical, Broadcast, Aerial, Combination	24	\$2,315.15	\$0.00
2	8	Regeneration, Artificial, Plant, Machine, Loblolly	116	\$15,657.30	\$0.00
2	8	Site Preparation, Other, Burn, Hand, Cut-Over	116	\$2,899.50	\$0.00
2	8	Site Preparation, Chemical, Broadcast, Aerial, Combination	116	\$11,018.10	\$0.00
		Yearly Totals	421	\$35,789.25	\$0.00
2019					
2	5	Technical, Establish, Cruise, Hand, Inventory	24	\$24.00	\$0.00
2	8	Technical, Establish, Cruise, Hand, Inventory	116	\$115.98	\$0.00
		Yearly Totals	140	\$139.98	\$0.00
		Grand Totals	2,275	\$112.307.97	\$648,180.60