



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Calhoun County BOE

Prepared By:
Lee Eaton
MS Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-15

Plan Type:
Stewardship / Stewardship

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

Property Name: Big Creek S16-23N-8E

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
INTRODUCTION	3
DISCLAIMER	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	6
STRATA	6
OTHER PLAN ACTIVITIES	8
PLAN MAP	9
PLAN MAP	10
STRATA ACTIVITY SCHEDULE	11

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Calhoun County BOE
Mailing Address: 119 W. Main St.
City, State, Zip: Pittsboro, MS 38951
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-412-3152
Fax Number:

E-mail Address:
Social Security Number (optional): 646000191

FORESTER INFORMATION

Name: Lee Eaton , Service Forester
Forester Number: 02046
Organization: MS Forestry Commission
Street Address: 405 E. Washington St.
City, State, Zip: Houston, MS 38851
Contact Numbers: Office Number: 662-456-3255
Fax Number:

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

PROPERTY LOCATION

County: Calhoun Total Acres: 289 Latitude: -89.46 Longitude: 33.86
Section: 16 Township: 23N Range: 8E

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.

DISCLAIMER

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 burning, fire break installation and maintenance, road installation and maintenance, pesticide applications, and timber harvesting.

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.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

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.

PROPERTY DESCRIPTION

General Property Information

This section is known as the "Big Creek" section and is located on County Road 320 northwest of the Big Creek community. The Chickasaw/Choctaw base line bisects this 16th section diagonally. Only the portion south of this line is public land and is being managed by the Mississippi Forestry Commission. The forested portions of this "half" section are predominantly in sub-merchantable pine plantation. Big Creek has approximately 282 forested acres. The remaining 8 acres consists of road right of ways and private residences.

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.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Houses and agricultural fields are present on and adjacent to the property. Management activities, especially prescribed burning and herbicide applications, will be performed in a manner which will minimize impacts to these areas.

Historical, Cultural, or Archeological Features

No "Special Sites" were identified during the reconnaissance and evaluation of the Big Creek 16th Section.

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

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

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.

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

Soil Types

Cuthbert

This is an upland soil with 8 to 12 percent slopes. It is comprised of 1/2 foot of fine sandy loam over 2/3 foot of sandy clay, overlying 4 feet or more of sandy clay loam to sandy loam. This soil has a site index of 78 for loblolly pine.

Dulac

This is a moderately well drained, highly erodeable upland soil with 5 to 8 percent slopes. It is comprised of 2 feet of silt loam over a silty clay loam fragipan about 1 foot thick, underlain by clay more than 2 feet thick. This soil has a site index of 76 for loblolly pine.

STRATA

Strata 2 - Stands 1, 5, and 8

Stand Description

This strata contains a total of 107 acres of 12 year old sub-merchantable pine which was hand planted in 1999. Present stocking consists of 544 trees per acre and a Basal Area of 90 square feet per acre.

Stand Recommendations

This strata should be managed to age 30 to 35 and then replanted with genetically improved loblolly pine. Typically, a pine plantation is inspected for first thinning needs

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

at age 12 to 14. A second thinning may be implemented 6 to 8 years after the first thinning. The final harvest should occur at age 30 to 35 depending on stand conditions.

Activity Recommendations

Harvest

The pine plantations within this strata should be thinned in 2015. Every fifth row should be harvested and the residual stand should be thinned to a basal area of 75 square feet by removing smaller, poorly formed trees to favor sawlog-quality trees.

Vegetation Control

This strata should be treated with a mid-rotation herbicide application at the labelled rate during the late summer of 2016. The purpose of this practice is to control the hardwood understory and reduce competition.

Fire Protection

A prescribed fire is recommended for this site in order to reduce fuel loading and the potential for a wildfire to occur. Prescribed burns should be implemented on a three year rotation. The burns should be performed in 2017 and 2020. A prescribed burning plan must be developed and followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission (on a limited basis) and other certified prescribed burning vendors are available to conduct prescribed burning.

Non-Forest

The balance of the property contains 8 acres of non-forested land consisting of road and utility rights of way, ponds, and farm-residential leases.

Strata 3 - Stands 2, 4, 6, and 10

Stand Description

This strata contains a total of 175 acres of 4 year old pine regeneration which was hand planted in 2008. Present stocking consists of 650 trees per acre.

Stand Recommendations

This strata should be managed to age 30 to 35 and then replanted with genetically improved loblolly pine. Typically, a pine plantation is inspected for first thinning needs at age 12 to 14. A second thinning may be implemented 6 to 8 years after the first thinning. The final harvest should occur at age 30 to 35 depending on stand conditions.

Activity Recommendations

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Harvest

The pine plantations within this strata should be thinned in 2021. Every fifth row should be harvested and the residual stand should be thinned to a basal area of 75 square feet by removing smaller, poorly formed trees to favor sawlog-quality trees.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Recommendations

Boundary lines should be re-painted with orange paint on a four year cycle.

Activity Recommendations

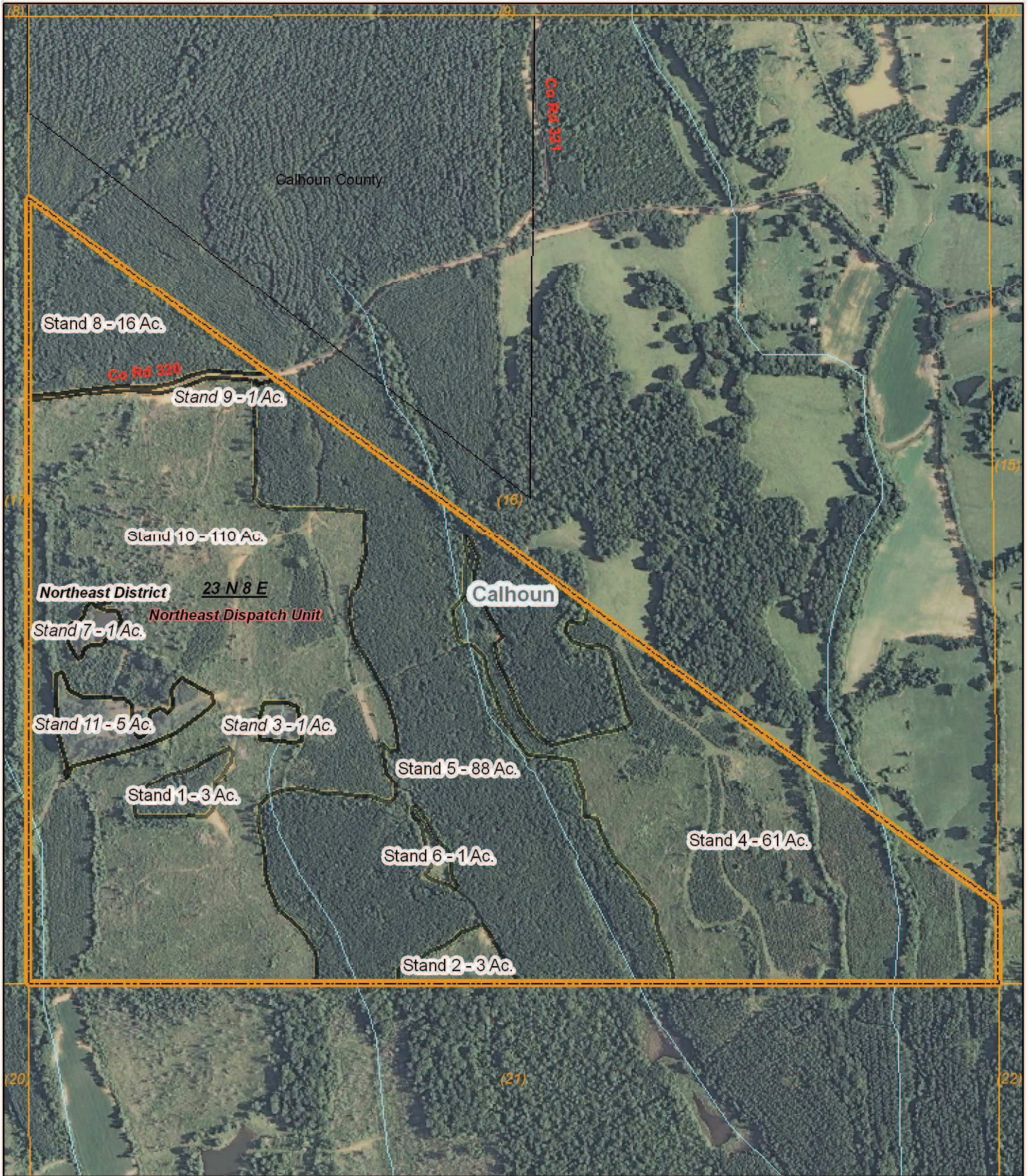
Property Activities

Boundary line maintenance will be performed in the years 2013 and 2017.

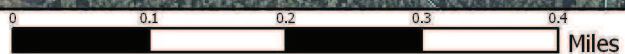


Big Creek 16th Section

S16-23N-8E
2011 to 2021
289.04 Acres




(12/07/2011)



Big Creek Legend




Property


 Property (1)

Category 1: Stands

 Sub-Merchantable (3)


 Reproduction (4)

Category 3: Non-Forest Stands

 Non-Forest (4)

MFC Basemap


County Boundary

 County Boundary (1)

Quadrangle Grid

 USGS Quad (1)


PLS Townships

 PLS Townships (1)

Survey Districts

 District 2 (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 (1)


School Sections

 School Sections (1)

Public School Districts

 CALHOUN COUNTY SCHOOL DISTRICT (1)

US Congressional District

 US Cong Dist #1 (1)

MS Senate

 8 (1)


MS House

 24 (1)

Intermittent Streams

 Intermittent Streams (4)

Hydrologic Units (Basins)

 YALOBUSHA RIVER ABOVE GRENADA DAM (1)

Historic Forest Boundary

 Red Oak-Hickory-Shortleaf Pine (1)

MS Forest Habitat


 NORTHERN LOESSIAL LOAM HILLS (1)

Physiographic Region

 North Central Hills (1)

Soil Associations

 oaklimeter-una-urbo (1)

 sweatman-smithdale-susquehanna (1)

Surface Geology

 WILCOX (1)

MFC Districts

 MFC Districts (1)

MFC Dispatch Units

 MFC Dispatch Units (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for

16 23N 8E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2015					
2	1	Harvest, Mechanical, Thin, Machine, Loblolly	3	\$105.00	\$504.00
2	5	Harvest, Mechanical, Thin, Machine, Loblolly	88	\$3,064.95	\$14,711.76
2	8	Harvest, Mechanical, Thin, Machine, Loblolly	16	\$568.40	\$2,728.32
Yearly Totals			107	\$3,738.35	\$17,944.08
2016					
2	1	Vegetation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woody	3	\$240.00	\$0.00
2	5	Vegetation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woody	88	\$7,881.30	\$0.00
2	8	Vegetation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woody	16	\$1,461.60	\$0.00
Yearly Totals			107	\$9,582.90	\$0.00
2017					
2	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	3	\$75.00	\$0.00
2	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	88	\$2,200.00	\$0.00
2	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	16	\$406.00	\$0.00
Yearly Totals			107	\$2,681.00	\$0.00
2020					
2	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	3	\$75.00	\$0.00
2	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	88	\$2,189.25	\$0.00
2	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	16	\$406.00	\$0.00
Yearly Totals			107	\$2,670.25	\$0.00
2021					
3	2	Harvest, Mechanical, 1st Thin, Machine, Loblolly	3	\$105.00	\$504.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
3	4	Harvest, Mechanical, 1st Thin, Machine, Loblolly	61	\$2,130.80	\$10,227.84
3	6	Harvest, Mechanical, 1st Thin, Machine, Loblolly	1	\$30.10	\$144.48
3	10	Harvest, Mechanical, 1st Thin, Machine, Loblolly	110	\$3,848.25	\$18,471.60
Yearly Totals			175	\$6,114.15	\$29,347.92
Grand Totals			602	\$24,786.65	\$47,292.00