



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Forrest County Schools

Prepared By:
Jake Camp
MS Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-20

Plan Type:
Stewardship / Stewardship

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

Property Name: 16 3N 12W

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
INTRODUCTION	3
OBJECTIVES	3
PROPERTY DESCRIPTION	4
SOIL TYPES	5
GENERAL PROPERTY RECOMMENDATIONS	6
STRATA	8
OTHER PLAN ACTIVITIES	11
DISCLAIMER	11
PLAN MAP	12
PLAN MAP	13
STRATA ACTIVITY SCHEDULE	14

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Organization: Forrest Co Board of Education
Name: Forrest County Schools
Mailing Address: 400 Forrest St.
City, State, Zip: Hattiesburg, MS 39403
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-545-6055
Fax Number: 601-545-6054
E-mail Address:
Social Security Number (optional): 000000000

FORESTER INFORMATION

Name: Jake Camp , Service Forester
Forester Number: 02514
Organization: MS Forestry Commission
Street Address: 477 Southgate Rd.
City, State, Zip: Hattiesburg, MS 39401
Contact Numbers: Office Number: 601-583-4240
Fax Number: 601-583-2500
E-mail Address: jcamp@mfc.state.ms.us

PROPERTY LOCATION

County: Forrest Total Acres: 645 Latitude: -89.2 Longitude: 31.22
Section: 16 Township: 3N Range: 12W

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

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information

This property is in Section 16, Township 3 North, Range 12 West, Forrest County, Mississippi. Re-establishing and maintaining fire breaks along boundary lines would greatly reduce the threat of a wildfire crossing onto and/or in from adjacent properties. Furthermore, maintaining good relationships with lease holders and adjacent landowners will increase effective land management practices, somewhat reduce intentional and/or un-intentional causes of wildfires, and promote good public relations and environmental education within the community.

On the East side of Weldy Creek an area was discovered that may possibly contain American Indian Burial Mounds that could have some historical and archeological value. Further inspection of these suspected Burial Mounds by an expert in this field is recommended. Every effort should be taken to not disturb this unique Ragland Hills area to preserve the area's ecological integrity.

This tract contains 28 acres of non forested area which have no management activities planned.

Water Resources

Perennial streams, intermittent streams and drains identified within this property 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. However, this area is known habitat for endangered species such as the Red-Cockaded Woodpecker (*Picoides borealis*) and the Gopher Tortoise (*Gopherus polyphemus*). Continued surveillance should be done to ensure these species are preserved should their presence be discovered.

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**

Archeological and Cultural Resources

On the East side of Weldy Creek an area was discovered that may possibly contain American Indian Burial Mounds that could have some historical and archeological value. Further inspection of these suspected Burial Mounds by an expert in this field is recommended. Every effort should be taken to not disturb this unique Ragland Hills area to preserve the area's ecological integrity.

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:

SOIL TYPES

Heidel

The Heidel component makes up 90 percent of the map unit. Slopes are 12 to 30 percent. This component is on uplands. 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 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Slash Site Index = 90.

McLaurin

The McLaurin 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 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 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 72. Slash Site Index = 90.

Cadeville

The Cadeville variant component makes up 85 percent of the map unit. Slopes are 15 to 60 percent. This component is on coastal plains. The parent material consists of Clayey Fluviomarine. 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 very low. Available water to a depth of 60 inches is high. Shrink-swell potential is very 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 7e. This soil does not meet hydric criteria. Loblolly Site Index = 80.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Trebloc

The Trebloc component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of silty alluvium 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 high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is frequently 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. Loblolly Site Index = 95.

McLaurin

The McLaurin component makes up 50 percent of the map unit. Slopes are 2 to 12 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 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The Benndale component makes up 35 percent of the map unit. Slopes are 2 to 12 percent. This component is on coastal plains. The parent material consists of sandy loam alluvium 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 4e. This soil does not meet hydric criteria.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A health 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

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

- 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. Boundary Lines should be painted every 5 years. Currently this property is scheduled to have the boundary lines painted in 2013 and 2018.

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 been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

The unique ecology of the Ragland Hills area should be managed in a way to preserve the area.

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.

STRATA

Strata 3: Stands 9,13,14,16,17

Stand Description

This Strata contains approximately 60 acres of Clear Cut that had a final harvest conducted in FY' 11.

Strata Recommendations

It is recommended that after site preparation this stand be planted with loblolly pine at a rate of 605 to 691 trees per acre. Three to four years after planting an herbicide application should be conducted to release the pines from competing woody species. The stand should be carried to a full rotation age of 35 years with thinnings occurring at the approximate ages of 15 and 24 years of age. After the first thinning, prescribed burning should be conducted on a 2 to 3 year rotation to reduce competing vegetation and promote the production of high quality sawtimber.

Activity Recommendations

Site Preparation

An aerial herbicide application should be performed before October 15 2011 to chemically control competing vegetation.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Site Preparation

The area should be site prep burned to reduce any logging debris and ensure an adequate planting surface.

Regeneration

Following site preparation, the area should be planted with genetically improved loblolly pine seedlings. Seedlings should be planted at a rate of 650 to 691 TPA.

Stand Improvement

An aerial herbicide application should be performed no earlier than August 1, 2016 and before October 31, 2016 to reduce competing woody vegetation, thereby, helping to maximize sawtimber production.

Strata 7: Stands 5,7,12,15

Strata Description

These stands contain approximately 402 acres of a naturally generated pine hardwood mix that was select thinned in FY'97. The stands are composed of sawtimber size product class timber.

Strata Recommendations

It is recommended that this strata have a full rotation age of 45 years of age with thinnings occurring at the approximate ages of 20 and 30 years depending upon stand growth and density. Prescribed burning should be implemented on a 2-3 year rotation. Also, an aerial herbicide application should be conducted in the near future to release the seedlings from competing vegetation.

Activity Recommendations

Site Preparation

Heavy mechanical site prep, such as a shearing, raking, and piling or windrowing should be performed to clear woody debris and facilitate an adequate planting surface.

Harvest

A clear-cut harvest is scheduled to be conducted in Stand 12 in FY 2013.

Stand Improvement

An aerial herbicide application should be performed no earlier than August 1, 2017 and before October 31, 2017 to reduce competing woody vegetation.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Regeneration

It is recommended that containerized Longleaf Pine be planted at a rate of 605 to 650 trees per acre.

Forest Health

A prescribed burn should be carried out on this property in FY 2012 to keep with the 3 year burning schedule.

Harvest

In Stand 5 a low and/or select thinning is scheduled for FY 2013 depending upon stand growth and density. The thinning should be conducted during the summer months to minimize soil disturbance and compaction.

Strata 8: Stand 11

Strata Description

This stand is approximately 41 acres of Longleaf Pine that was established in 1984 and was select thinned in FY'97. The stand is composed of pole to sawtimber size product class timber.

Strata Recommendations

It is recommended that this strata have a full rotation age of 45 years of age with thinnings occurring at the approximate ages of 20 and 30 years depending upon stand growth and density. Prescribed burning should be implemented on a 2-3 year rotation. Also, an aerial herbicide application should be conducted in the near future to release the seedlings from competing vegetation.

Activity Recommendations

Forest Health

A prescribed burn should be carried out on this property in FY 2012 to keep with the 3 year burning schedule.

Harvest

A low and/or select thinning is scheduled for FY 2013 depending upon stand growth and density. The thinning should be conducted during the summer months to minimize soil disturbance and compaction.

Strata 9: Stands 6, 8

Strata Description

This strata contains approximately 114 acres of bottomland mixed pine hardwood & has been set aside as a Streamside Management Zone. Perennial streams, intermittent streams and drains will be managed in accordance with Mississippi's Best Management Practices.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Stand Recommendations

Considering the bottomland component within these stands it is recommended that they should be managed following Mississippi Best Management Practices. Harvesting activities should be done when the thinnings of adjacent stands are conducted. Currently the area should be allowed to persist in its natural state there by providing a variety of browse, hard and soft mast and cover that supports a thriving wildlife population of several different species.

The unique ecology of the Ragland Hills area should be managed in a way to preserve the area.

OTHER PLAN ACTIVITIES

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. Boundary Lines should be painted every 5 years. Currently this property is scheduled to have the boundary lines painted in 2013 and 2018.

DISCLAIMER

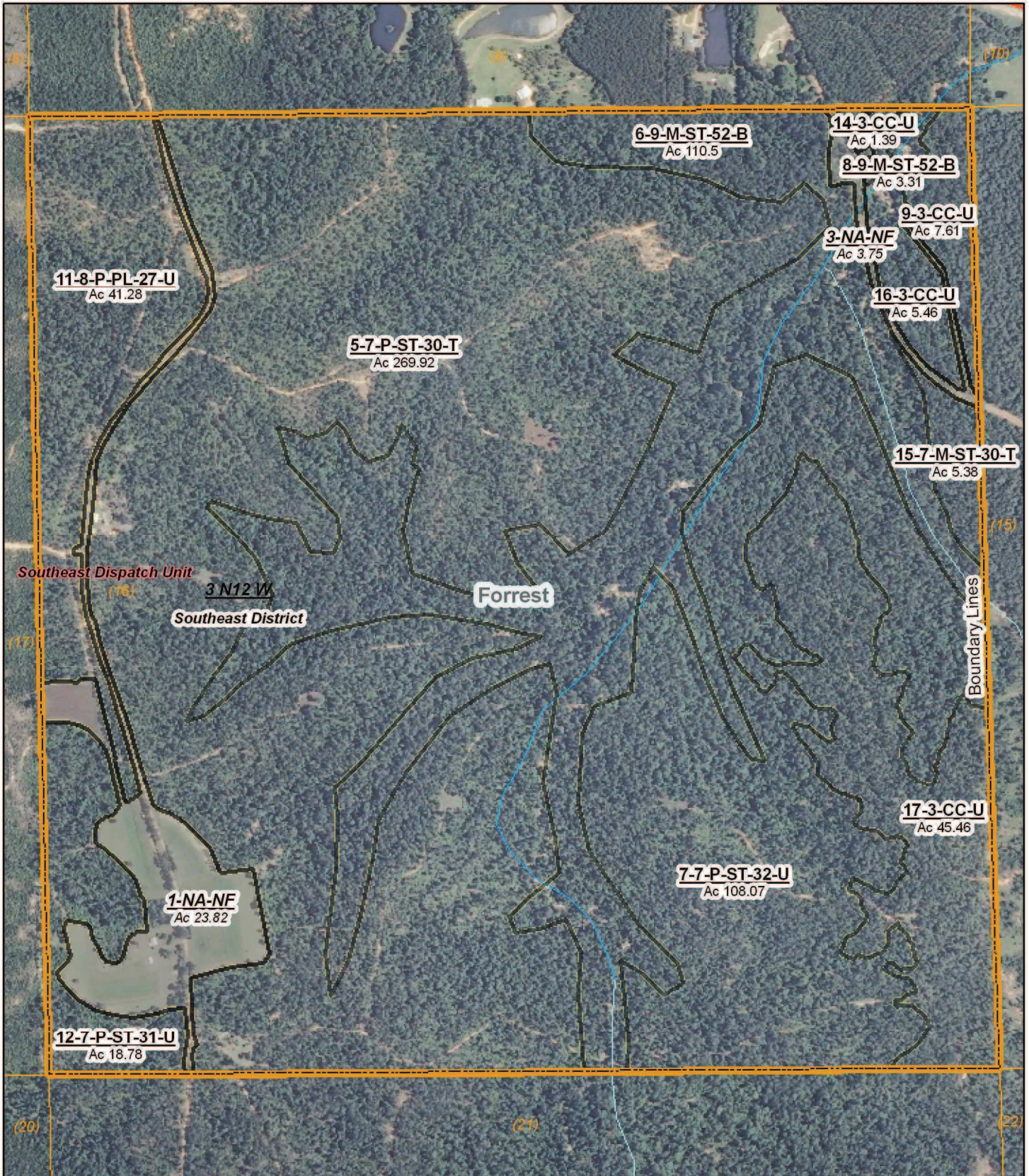
Disclaimer

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.

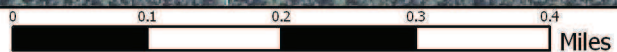


Forrest County Schools

16-3N-12W
2012 to 2021
644.96 Acres



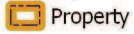
(01/24/2012)



16-3N-12W



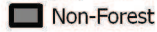
Property



Category 1: Stands



Category 3: Non-Forest Stands



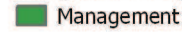
Boundary Lines



Management Compartment

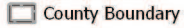


Management Compartment (cont)

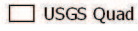


MFC Basemap

County Boundary



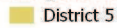
Quadrangle Grid



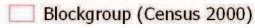
PLS Townships



Survey Districts



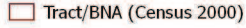
Blockgroup (Census 2000)



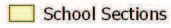
Block (Census 2000)



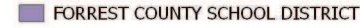
Tract/BNA (Census 2000)



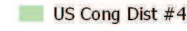
School Sections



Public School Districts



US Congressional District



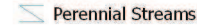
MS Senate



MS House



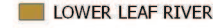
Perennial Streams



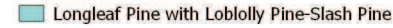
Intermittent Streams



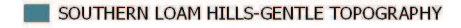
Hydrologic Units (Basins)



Historic Forest Boundary



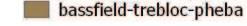
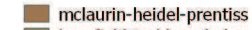
MS Forest Habitat



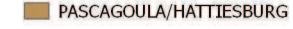
Physiographic Region



Soil Associations



Surface Geology



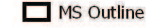
MFC Districts



MFC Dispatch Units



MS Outline



Stand Activity Schedule for
Forrest Co Board of Education
16 3N 12W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
7	7	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	1	\$150.00	\$0.00
7	7	Forest Health, Other, Burn, Hand, Southern Pine Beetle	108	\$1,296.00	\$0.00
7	12	Forest Health, Other, Burn, Hand, Southern Pine Beetle	19	\$228.00	\$0.00
7	18	Forest Health, Other, Burn, Hand, Southern Pine Beetle	65	\$783.24	\$0.00
7	18	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	65	\$9,790.50	\$0.00
7	19	Forest Health, Other, Burn, Hand, Southern Pine Beetle	205	\$2,455.80	\$0.00
7	19	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	205	\$30,697.50	\$0.00
8	11	Forest Health, Other, Burn, Hand, Southern Pine Beetle	41	\$492.00	\$0.00
Yearly Totals			709	\$45,893.04	\$0.00
2013					
7	7	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	1	\$150.00	\$0.00
7	12	Harvest, Mechanical, Final, Machine, Misc Pine	19	\$665.00	\$11,305.00
7	18	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	2	\$140.00	\$0.00
7	18	Harvest, Mechanical, Final, Machine, Misc Pine	65	\$2,275.00	\$27,218.75
7	19	Invasive Species Control, Chemical, Broadcast, Hand, Cogan Grass	2	\$140.00	\$0.00
8	11	Harvest, Mechanical, Final, Machine, Misc Pine	41	\$1,435.00	\$12,658.75
Yearly Totals			130	\$4,805.00	\$51,182.50
2014					
7	12	Regeneration, Artificial, Plant, Hand, Longleaf	19	\$2,565.00	\$0.00
7	12	Site Preparation, Mechanical, Shear/Rake, Machine, Cut-Over	19	\$4,750.00	\$0.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
7	19	Harvest, Mechanical, Thin, Machine, Loblolly	205	\$7,175.00	\$73,543.75
			Yearly Totals	243	\$14,490.00
2015					
7	7	Forest Health, Other, Burn, Hand, Southern Pine Beetle	108	\$2,700.00	\$0.00
7	18	Forest Health, Other, Burn, Hand, Southern Pine Beetle	65	\$1,631.75	\$0.00
7	19	Forest Health, Other, Burn, Hand, Southern Pine Beetle	205	\$5,116.25	\$0.00
8	11	Forest Health, Other, Burn, Hand, Southern Pine Beetle	41	\$1,025.00	\$0.00
			Yearly Totals	419	\$10,473.00
2016					
3	9	Stand Improvement, Chemical, Release, Aerial, Woody Stems	8	\$800.00	\$0.00
3	13	Stand Improvement, Chemical, Release, Aerial, Woody Stems	1	\$100.00	\$0.00
3	14	Stand Improvement, Chemical, Release, Aerial, Woody Stems	1	\$100.00	\$0.00
3	16	Stand Improvement, Chemical, Release, Aerial, Woody Stems	5	\$500.00	\$0.00
3	17	Stand Improvement, Chemical, Release, Aerial, Woody Stems	45	\$4,500.00	\$0.00
			Yearly Totals	60	\$6,000.00
2017					
7	12	Stand Improvement, Chemical, Release, Aerial, Woody Stems	19	\$1,900.00	\$0.00
			Yearly Totals	19	\$1,900.00
2018					
7	7	Forest Health, Other, Burn, Hand, Southern Pine Beetle	108	\$2,700.00	\$0.00
7	18	Forest Health, Other, Burn, Hand, Southern Pine Beetle	65	\$1,631.75	\$0.00
7	19	Forest Health, Other, Burn, Hand, Southern Pine Beetle	205	\$5,116.25	\$0.00
8	11	Forest Health, Other, Burn, Hand, Southern Pine Beetle	41	\$1,025.00	\$0.00
			Yearly Totals	419	\$10,473.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2021						
7	7	Forest Health, Other, Burn, Hand, Southern Pine Beetle	108	\$2,700.00	\$0.00	
7	18	Forest Health, Other, Burn, Hand, Southern Pine Beetle	65	\$1,631.75	\$0.00	
7	19	Forest Health, Other, Burn, Hand, Southern Pine Beetle	205	\$5,116.25	\$0.00	
8	11	Forest Health, Other, Burn, Hand, Southern Pine Beetle	41	\$1,025.00	\$0.00	
			Yearly Totals	419	\$10,473.00	\$0.00
			Grand Totals	2,418	\$104,507.04	\$124,726.25