



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Lowndes County BOE

Prepared By:
S. Todd Matthews
MS Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-28

Plan Type:
Stewardship / Stewardship

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

Property Name: Steens 16-17S-17W

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**MISSISSIPPI FORESTRY COMMISSION
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LANDOWNER INFORMATION

Name: Lowndes County BOE
Mailing Address: 1053 Highway 45 South
City, State, Zip: Columbus, MS 39701
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-329-5722
Fax Number: 662-244-5043

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

FORESTER INFORMATION

Name: S. Todd Matthews , Service Forester
Forester Number: 02102
Organization: MS Forestry Commission
Street Address: 717 5th Street N.
City, State, Zip: Columbus, MS 39701
Contact Numbers: Office Number: 662-327-3352
Fax Number:
E-mail Address: tmatthews@mfc.state.ms.us

PROPERTY LOCATION

County: Lowndes Total Acres: 649 Latitude: -88.32 Longitude: 33.59
Section: 16 Township: 17S Range: 17W

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 fires, firebreak 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.

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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.

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 is referred to as "Steens" section, and is located on the west side of Dickerson Road. Approximately 217 acres of the tract is pine pulpwood. Approximately 4 acres is in pine sawtimber. Approximately 235 acres is in mixed pine and hardwood pulpwood. Approximately 97 acres is considered to be Streamside Management Zones, and the remainder of the tract is non-forested. This section has approximately 553 forested acres.

Water Resources

Intermittent streams and drains were identified on this section and will be managed in accordance with Mississippi's Best Management Practices. While these are intermittent streams, they tend to hold water most of the year. The section is prone to flooding for long periods of time. The primary causes of flooding are beaver damage and lack of culverts along Dickerson Road. One culvert was recently installed; however no action has been taken to control beavers.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

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.

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No Archeological or Cultural Resources Were Identified:

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.

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.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A vigorous, 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*.

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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

Boundary lines on this section have not previously been maintained. The Mississippi Forestry Commission will work with the Lowndes County School Board to establish the boundary lines, and then maintain them on a 4 year rotation.

SOIL TYPES

PuB

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.

PuA

The Prentiss 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 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 2w. This soil does not meet hydric criteria. Loblolly Site Index = 88.

St

The Steens component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions. The parent material consists of loamy alluvium. 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 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 21 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

RuC2

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

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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.

CoC2

The Caledonia component makes up 85 percent of the map unit. Slopes are 5 to 8 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 moderate. 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 = 90.

Gy

The Guyton component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces. The parent material consists of loamy 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 low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 9 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface. Loblolly Site Index = 85. Slash Site Index = 90.

SnF

The Smithdale component makes up 43 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillslopes. 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 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 7e. This soil does not meet hydric criteria. The Saffell component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillslopes on hills. The parent material consists of gravelly 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 low. 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 7e. This soil does not meet hydric criteria.

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STRATA

Strata 0 (includes stands 11,20)

Strata Description

These stands are considered non-stocked. They are comprised mostly of low value hardwoods such as black gum and cypress inside of SMZs or areas that are typically too wet to harvest. While SMZs are not on a harvest schedule, these areas may be re-evaluated for a select thinning when adjacent stands are being harvested.

Strata 1 (includes stand 23)

Strata Description

This is a 32 acre loblolly pine stand that was originally part of stand 1. Logging complications prevented the thinning from being completed. It was originally planted in 1991 and averages 400 trees per acre and 120 square feet of basal area.

Activity Recommendations

Harvest

This stand is scheduled to be thinned in 2013. This stand should be thinned to Basal Area 75 +/-5.

Fire Protection

A prescribed burn should be carried out on this property in the late fall or early winter of 20?? and be repeated on a two or three year rotation thereafter. Prescribed fire when used correctly can greatly benefit the health and vigor of a stand. It reduces the undesirable tree species that often crowd out or suppress pines. These unwanted understory trees and shrubs species not only compete for water, nutrients, and growing space, but often contain dead needles and leaves that act as ladder fuels allowing a fire to climb into the overstory crowns. Prescribed fire also reduces the hazardous fuel loads within the stand and prevents damage in the event of a wildfire.

This stand is scheduled to be burned in 2016, 2019 and 2021.

Strata 2 (includes stands 6,7,10,12,13,14,15,21,22)

Strata Description

These stands are primarily mixed stands of pine and hardwoods due to failed plantings. The last sale for these stands was in 1989. It should be mentioned that these stands flood regularly and hold water for long periods of time. Average pine basal area is 50 and the hardwood basal area averages 60 square feet per acre. There are about 180 pine and 200 hardwood stems per acre.

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Activity Recommendations

No activities are recommended for these stands during the timeframe of this management plan.

Strata 3 (includes stand 1)

Strata Description

This 172 acre loblolly pine stand was thinned in 2008. The logger did a poor job and the trees have not recovered as would normally be expected. Much of this stand floods and remains under water for long periods of time. It was planted in 1991. The basal area averages 80 square feet per acre and the average trees per acre is 240.

Activity Recommendations

Vegetation Control

A mid-rotation release is scheduled for this stand for 2012. Application rates include 4 quarts of glyphosate and 12 ounces of Imazapyr with 25 gallons of water per acre.

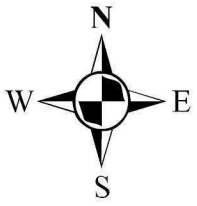
Harvest

This stand is scheduled to have its second thinning in 2016. During the thinning the stand should be reduced to a basal area of 70-80%. This operation should be monitored carefully as the remaining trees will be the final objective for this strata.

Fire Protection

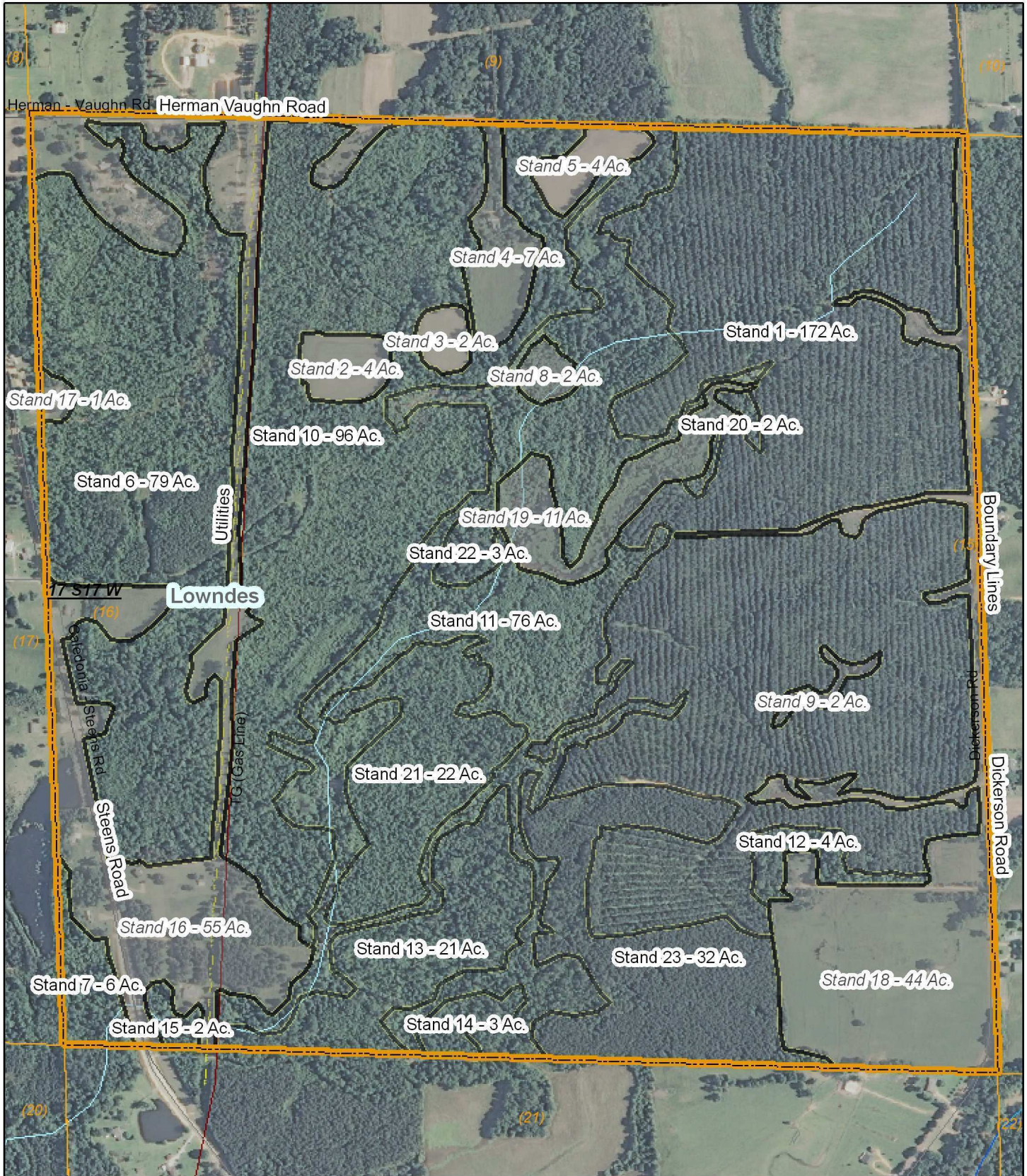
A prescribed burn should be carried out on this property in the late fall or early winter of 20?? and be repeated on a two or three year rotation thereafter. Prescribed fire when used correctly can greatly benefit the health and vigor of a stand. It reduces the undesirable tree species that often crowd out or suppress pines. These unwanted understory trees and shrubs species not only compete for water, nutrients, and growing space, but often contain dead needles and leaves that act as ladder fuels allowing a fire to climb into the overstory crowns. Prescribed fire also reduces the hazardous fuel loads within the stand and prevents damage in the event of a wildfire.

This stand is scheduled for a prescribed burn in 2019.

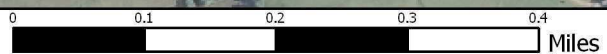


Steens

S16-T17S-R17W
2012 to 2021
649 Acres



(01/23/2012)



Steens



Property

- Property

Category 1: Stands

- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchutable
- Pulpwood
- Chip-n-Saw
- Sawtimber
- Poles

Category 2: Stands

- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchutable
- Pulpwood
- Chip-n-Saw
- Sawtimber
- Poles

Category 3: Non-Forest Stands

- Non-Forest

Category 4: Not in Plan Stands

- Not in Plan

Category 5: Features Only Plan Stand

- Features Only Plan

Restricted Sites

- Archeology
- Cemetery
- Red-Cockaded Woodpecker
- Gopher Tortoise
- Picture Bogg Plant

Forest Health (Points)

- Cogan Grass
- Kudzu
- Japanese Climbing Fern
- Chinese Tallow
- Privet
- Southern Pine Beetle
- Sirex Wasp
- IPPS

Hydrology (Points)

- Concrete Dam
- Beaver Dam
- Earthen Dam
- Permanent
- Temporary
- Wooden
- Other
- Culvert
- Pond

Wildlife (Points)

- Food Plot
- Water Hole
- Feeder

Boundary Corners

- Property
- Section
- Quarter Section
- Areas

Structures

- Barn
- Tractor Shed
- Out Building
- Single-Family
- Multi-Family
- Camp House
- Club House
- Office Building
- Manufacturing
- Warehouse
- Chicken House
- Horse Stall
- Milking Parlor
- Hog Pen
- Blind
- Stand
- Hospital
- Nursing Home
- Dr. Clinic
- State Facility
- Office
- Work Center
- Materials Depot
- Prison
- School
- Church
- Mosque
- Synagogue
- Other

Cruise Plots

- Pre-Cruise
- Post-Cruise

Other

- Towers
- Logging Deck
- Locked
- UnLocked
- Water
- Oil
- Natural Gas

Property Roads/Trails

- Drive Ways
- Access Road
- Logging Road
- Skid Trail
- Farm Road
- Hiking Trail
- Horseback Riding Trail

Boundary Lines

- Archeology
- Cemetery
- Drilling Sites
- Education

Boundary Lines (cont)

- Forest Health
- Invasive Species
- Management Compartment
- Military Area
- Natural Area
- Property
- Recreation
- Rights of Way
- SMZ
- Special Use
- Stand
- Surface Mining
- Threatened/Endangered Species
- Visual Buffer

Fire Control

- Temporary Line
- Permanent Fire Break

Wildlife (Lines)

- Green Strip

Fire

- Mitigation Burn
- Silviculture Burn
- Site-Prep Burn
- Wildfire

School Land Lease

- Hunting
- Minerals
- Recreation

Restricted Area

- SMZ
- Archeology
- Cemetery
- Visual Buffer
- Special Use
- Natural Area
- Education
- Recreation
- Military Area
- Large Utility
- Red-Cockaded Woodpecker
- Gopher Tortoise
- Picture Bogg Plant
- Coal
- Gravel
- Dirt
- Water
- Oil
- Natural Gas

Forest Health (Polygons)

- Cogan Grass
- Kudzu
- Japanese Climbing Fern
- Chinese Tallow
- Privet
- Southern Pine Beetle
- Sirex Wasp
- IPPS

School Land Classification

- Forest Land
- Farm/Residential Land
- Residential Land
- Agricultural Land
- Industrial Land
- Recreational Land
- Catfish Farming Land
- Other Land
- Commercial Land

Management Compartment

- Management
- Regeneration
- Site Preparation
- Post Plant
- Site Improvement
- Vegetation Control
- Stand Improvement
- Invasive Species Control
- Harvest
- Fire Protection
- Technical
- Wildlife Management
- Property Activities
- Roads
- SMZ
- Forest Health
- Recreation
- Site Restoration

Transportation (Lines)

- City Streets
- County Roads
- 3 Digit Highway
- Interstate Highway
- US Highway
- State Highway
- Natchez Trace Parkway
- Runways/Airports
- Active RR
- Abandoned RR

Hydrology (Lines)

- Mississippi River
- Major River
- Primary Stream
- Intermittent Stream
- Canal
- Ditch
- Earthen Dam
- Concrete Dam

Utilities (Lines)

- Large Electrical
- Local Utility
- Large Pipeline
- Small Pipeline
- Gas Line
- Utility Line
- Water Line

Stand Activity Schedule for
Lowndes County BOE
16 17S 17W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
3	1	Vegetation Control, Chemical, MRVM (Mid Rotation Vegetative Mgmt), Machine, Woody	172	\$8,600.00	\$0.00
Yearly Totals			172	\$8,600.00	\$0.00
2013					
1	23	Harvest, Mechanical, 1st Thin, Machine, Loblolly	32	\$1,120.00	\$7,360.00
Yearly Totals			32	\$1,120.00	\$7,360.00
2016					
1	23	Fire Protection, Other, Burn, Hand, Hazard Mitigation	32	\$800.00	\$0.00
3	1	Harvest, Mechanical, Thin, Machine, Loblolly	172	\$6,020.00	\$9,288.00
Yearly Totals			204	\$6,820.00	\$9,288.00
2019					
1	23	Fire Protection, Other, Burn, Hand, Hazard Mitigation	32	\$800.00	\$0.00
3	1	Fire Protection, Other, Burn, Hand, Hazard Mitigation	172	\$4,300.00	\$0.00
Yearly Totals			204	\$5,100.00	\$0.00
2021					
1	23	Fire Protection, Other, Burn, Hand, Hazard Mitigation	32	\$800.00	\$0.00
Yearly Totals			32	\$800.00	\$0.00
Grand Totals			644	\$22,440.00	\$16,648.00