



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
East Jasper BOE

Prepared By:
Tim Hinton
Miss Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-27

Plan Type:
Stewardship / Stewardship

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

Property Name: 16-1-13

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LANDOWNER INFORMATION

Name: East Jasper BOE
Mailing Address: P.O. Drawer E
City, State, Zip: Heidelberg, MS 39439
Country: United States of America
Contact Numbers: Home Number:
Office Number:
Fax Number:
E-mail Address: rbrown@eastjasper.k12.ms.us
Social Security Number (optional): 000000000

FORESTER INFORMATION

Name: Tim Hinton , Service Forester, Jasper Co.
Forester Number: 02492
Organization: Miss Forestry Commission
Street Address: 37 C West 8th Ave.
PO Box 331
City, State, Zip: Bay Springs, MS 39422
Contact Numbers: Office Number: 601-764-2568
Fax Number:
E-mail Address: thinton@mfc.state.ms.us

PROPERTY LOCATION

County: Jasper Total Acres: 636 Latitude: -88.97 Longitude: 31.93
Section: 16 Township: 1N Range: 13E

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

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

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 16th section contains 640 acres of land located near the town of Heidelberg. It consists of primarily loblolly pine plantation although there are some hardwood stands on the property. County Road 8 runs along the southern boundary of this section and provides good access. This section is fully forested with the exception of 19 acres which includes a pipeline and two small fields. There is one residential lease on the southeast corner of the section. The topography of this site is gently rolling.

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

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.

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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. The following soils are identified for this property:

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*.

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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

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.

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.

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 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

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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.

SOIL TYPES

Sweatman

The Sweatman component makes up 90 percent of the map unit. Slopes are 8 to 17 percent. This component is on uplands. The parent material consists of loamy marine 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 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 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

Boswell

The Boswell component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on uplands. The parent material consists of clayey fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is 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 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 80.

Kirkville

The Kirkville component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is occasionally 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 2w. This soil does not meet hydric criteria. The Mantachie component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of loamy

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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 high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, 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.

Savannah

The Savannah 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 alluvium deposits. Depth to a root restrictive layer, fragipan, is 16 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 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 = 81.

Susquehanna

The Susquehanna component makes up 90 percent of the map unit. Slopes are 5 to 8 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 6e. This soil does not meet hydric criteria. Loblolly Site Index = 78.

Sweatman

The Sweatman component makes up 90 percent of the map unit. Slopes are 8 to 30 percent. This component is on uplands. The parent material consists of loamy marine 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 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 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

Jena

The Jena component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land

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capability classification is 5w. This soil does not meet hydric criteria. Loblolly Site Index = 100.

Heidel

The Heidel component makes up 50 percent of the map unit. Slopes are 8 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. The Troup component makes up 30 percent of the map unit. Slopes are 15 to 30 percent. This component is on coastal plains. The parent material consists of sandy over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively 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.

STRATA

Strata 1

Strata Description

Stands: 3, 7, 9, 10, 11 (498 Acres)

This strata consists of pine plantations of chip-n-saw sized timber approximately 22 years old.

Strata Recommendations

This strata will need to be thinned and burned to maximize sawtimber production.

Activity Recommendations

Fire Protection

A prescribed burn should be carried out on this property in the late fall or early winter of 2015 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.

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Harvest

Stands 9, 10, & 7 are scheduled for a 2nd thin in 2019, 2020 & 2021 respectively. These stands will be evaluated at that time to ensure a thin will be feasible. Residual basal area for the 2nd thin will be 75 square feet per acre.

Strata 2

Strata Description

Stands: 2 & 3 (58 Acres)

This strata consists of immature pine plantations approximately 13 years old.

Strata Recommendations

This strata is currently sub-merchantable but will be evaluated at age 15 for a first thin.

Strata 3

Strata Description

Stand: 2, 5 (96 Acres)

This strata consists of fully mature mixed pine and hardwood sawtimber that was damaged by Hurricane Katrina.

Strata Recommendations

Stand 5 will need to be clear-cut and reforested in the near future to maximize timber production.

Activity Recommendations

Harvest

Stand 5 will be clear-cut in 2014.

Site Preparation

Stand 5 will receive an aerial application of herbicide in the summer of 2016. This application will kill the competing vegetation on the site.

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Site Preparation

Stand 5 will then need to be burned to remove residual debris from the site and to allow for planter access.

Regeneration

After site preparation is complete, this strata will be planted with 2nd generation loblolly pine seedlings at a rate of 691 trees per acre.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

These lines consist of permanent boundary lines that define the section boundary. They are well established in most areas and are readily identifiable by a pushed or painted line.

Line Recommendations

Routine inspections and general maintenance of the roads, firelanes and boundary lines will ensure overall appearance and aesthetics of the property. These lines are usually maintained by painting, pushing and/or disking. They are generally pushed on a yearly basis and re-painted every 3 to 5 years.

Activity Recommendations

Property Activities

These boundary lines will be pushed and repainted in 2013 & 2018.

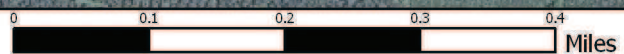


Section 16, Township 1 North, Range 13 East

Heidelberg Section
2012 to 2021
640 Acres



(01/12/2012)



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Property

- Property

Category 1: Stands

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

Category 2: Stands

- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchantable
- 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 Summary for

16 1N 13E

Filters Applied: County:
 Client Class:
 District:
 Client:
 STR: 16 1N 13E
 Activity:
 Year: Through

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013						
16 1N 13E	1	9	Fire Protection, Other, Burn, Hand, Hazard Mitigation	68	\$2,734.40	\$0.00
Yearly Totals				68	\$2,734.40	\$0.00
2014						
16 1N 13E	1	10	Fire Protection, Other, Burn, Hand, Hazard Mitigation	68	\$2,720.00	\$0.00
16 1N 13E	3	5	Harvest, Mechanical, Final, Machine, Loblolly	38	\$1,140.00	\$37,152.60
Yearly Totals				106	\$3,860.00	\$37,152.60
2015						
16 1N 13E	1	3	Fire Protection, Other, Burn, Hand, Hazard Mitigation	16	\$0.00	\$0.00
16 1N 13E	1	7	Fire Protection, Other, Burn, Hand, Hazard Mitigation	116	\$0.00	\$0.00
Yearly Totals				132	\$0.00	\$0.00
2016						
16 1N 13E	1	11	Fire Protection, Other, Burn, Hand, Hazard Mitigation	166	\$6,640.00	\$0.00
16 1N 13E	3	5	Regeneration, Artificial, Plant, Hand, Loblolly	70	\$8,400.00	\$0.00
16 1N 13E	3	5	Site Preparation, Other, Burn, Hand, Debris	70	\$2,450.00	\$0.00
16 1N 13E	3	5	Site Preparation, Chemical, Broadcast, Aerial, Woody	70	\$5,950.00	\$0.00
Yearly Totals				376	\$23,440.00	\$0.00
2019						
16 1N 13E	1	9	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	68	\$1,360.00	\$55,216.00
Yearly Totals				68	\$1,360.00	\$55,216.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2020							
16 1N 13E	1	10	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	131	\$2,620.00	\$106,372.00	
				Yearly Totals	131	\$2,620.00	\$106,372.00
2021							
16 1N 13E	1	7	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	116	\$2,320.00	\$94,192.00	
				Yearly Totals	116	\$2,320.00	\$94,192.00
				Grand Totals	997	\$36,334.40	\$292,932.60