



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Kemper County BOE

Prepared By:
Matt Persons
MFC

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-13

Plan Type:
Stewardship / Stewardship

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

Property Name: Kemper 16-12-16

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FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Kemper County BOE
Mailing Address: P.O. Box 219 Main Ave
City, State, Zip: DeKalb, MS 39328
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-743-2657
Fax Number: 601-743-9297

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

FORESTER INFORMATION

Name: Matt Persons , Service Forester
Forester Number: 02485
Organization: MFC
Street Address: 201 Firetower Rd.
City, State, Zip: DeKalb, MS 39328
Contact Numbers: Office Number: 601-743-5529
Fax Number:
E-mail Address: rpersons@mfc.state.ms.us

PROPERTY LOCATION

County: Kemper Total Acres: 643 Latitude: -88.67 Longitude: 32.89
Section: 16 Township: 12N Range: 16E

DISCLAIMER

This information was derived from a small sampling of forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

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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 property is located in the northern part of the county on Mississippi Highway 39, near the Gholson community. Access to and within the section is good. Of the 643 acres within this section, 30 are classified as non-forest and 613 as forested. Due to the rocky and sandy nature of the soils present, this section affords excellent winter-time logging opportunities.

Water Resources

A small creek runs through the southwestern part of the section. This creek, along with all 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

Ma

The Mantachie component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of 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 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. Loblolly Site Index = 98.

Mo

The Mooreville component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of 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 high. Shrink-swell potential is moderate. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 95.

SS

The Smithdale component makes up 46 percent of the map unit. Slopes are 5 to 40 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 Ruston component makes up 16 percent of the map unit. Slopes are 5 to 8 percent. This component

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is on coastal plains. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

SY

The Sweatman component makes up 46 percent of the map unit. Slopes are 12 to 35 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. The Smithdale component makes up 40 percent of the map unit. Slopes are 12 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.

STRATA

Strata 1

Strata Description

Strata 1 contains only one stand, (8), and is 112 acres of a submerchantable Loblolly pine plantation. This stand has an average height of 12 feet and averages 500 trees per acre. Due to the small size, no activities are planned for this strata during the life of the plan.

Strata 2

Strata Description

Strata 2 is comprised of stands 3 and 6, which total 52 acres. These stand are classified as mixed pine-hardwood sawtimber. The average basal area is 90 square feet per acre, while the average height is 80 feet.

Activity Recommendations

Harvest

Strata 2, being 52 acres, is scheduled for a final harvest in 2015.

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Aerial Application of Herbicide

During the summer of 2016, prior to planting, site preparation in the form of an aerial application of a herbicide should be applied to Strata 2, (52 acres), to control competing vegetation and prepare the site for planting. The herbicide should conform to the manufacturer recommended rates and specifications. A herbicide representative should be contacted to write a rate and application method recommendation. See "What You Should Know About Aerial Herbicide Applications" in the attachment section of this plan.

Site Preparation Burn

A prescribed burn should be conducted to further prepare the site. A burn will reduce debris that may otherwise impede tree planting. The result will enable better accessibility by tree planters, improving overall uniformity and quality of the planting job. A prescribed burning plan should be developed and followed in the application of the burn. A certified prescribed burn manager should be employed to conduct the burn. The Mississippi Forestry Commission is available to conduct prescribed burning on a limited basis. This burn should take place 4-6 weeks after the chemical application. Strata 2 is scheduled for a site preparation burn in 2016.

Regeneration

Following site preparation, Strata 2, (52 acres), should be planted with genetically improved loblolly pine seedlings, in 2016. Seedlings should be planted at a rate of 691 trees per acre at a spacing of 7 feet x 9 feet. Planting should be done between December and March. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when considering planting.

Seedling care and handling, as well as planting, will conform to the established MFC guidelines. See "What You Should Know About Planting Your Stewardship Forest" in the attachment section of this plan.

Strata 3

Stand Description

Strata 3 contains stands 1, 11, and 14, which are fourteen year-old Loblolly Pine plantations. These stands average 50 tons of pulpwood per acre and have average heights of 35 feet.

Activity Recommendations

Harvest

Strata 3, (74 acres), is scheduled for a first thinning in 2013. This activity will target poor quality, diseased, and suppressed trees within the stand for removal. Residual basal areas should average 70 square feet per acre.

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Fire Protection

A prescribed fire is recommended for Strata 3, (74 acres), in order to reduce fuel loading and the potential for a wildfire to occur. 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. This burn is scheduled for 2016.

Strata 4

Strata Description

Strata 4 consists of stands 4 and 10, which are pine chip n'saw in size and total 209 acres. Current basal areas average 90 square feet per acre and average heights are 65 feet.

Activity Recommendations

Harvest

Strata 4, (209 acres), is scheduled for a second thinning in 2014. Poorly formed, diseased, and suppressed trees will be targeted during this activity. Residual basal areas should average 70 square feet per acre.

Fire Protection

A prescribed fire is recommended for this site in order to reduce fuel loading and the potential for a wildfire to occur. 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. Strata 4, (209 acres), is scheduled for a burn in 2013.

Strata 5

Stand Description

Strata 5 has two stands, (9 and 15), and are classified as hardwood pulpwood. This area covers 35 acres and will be managed as streamside management zones and habitat diversity zones. The steep terrain and it's proximity to the small creek makes this stand nearly inoperable. Consideration will be given to thin these stands when adjoining stands are harvested.

Strata 7

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Strata Description

Strata 7 contains stands 7 and 17, which cover 131 acres of two year-old Loblolly pine plantations. These stands average 540 trees per acre. Due to the young age, no activities are planned for this strata during the life of the plan.

Activity Recommendations

Site Preparation

Add Text For Site Preparation, Chemical, Broadcast, Aerial, Combination

Regeneration

Add Text For Regeneration, Artificial, Plant, Hand, Loblolly

OTHER PLAN ACTIVITIES

Boundary Lines

Maintenance of property boundary lines is important to prevent timber trespass. This activity will include blazing and painting of boundary line trees and may include permanent firelanes.

Line Description

Maintenance of property boundary lines is important to prevent timber trespass. This activity will be done every five years. Maintenance will include, blazing and painting of boundary line trees and may include permanent firelanes.

Activity Recommendations

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Property Activities

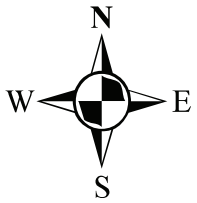
Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Property Activities

Routine inspections and general maintenance of the roads, firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Strata Activity Schedule
Kemper 16-12-16
County BOE

PlanYear	Strata	Activity	Acres	Revenue	Cost
2009	7	Site Preparation ,Chemical ,Broadcast , Aerial	131	\$0	\$11,104
			Year Sub-total	\$0	\$11,104
2010	7	Regeneration ,Artificial ,Plant , Hand	131	\$0	\$11,104
			Year Sub-total	\$0	\$11,104
2013	3	Harvest ,Mechanical ,Thin , Machine	73	\$11,007	\$2,568
2013	4	Fire Protection ,Other ,Burn , Hand	209	\$0	\$5,225
			Year Sub-total	\$11,007	\$7,793
2014	4	Harvest ,Mechanical ,Thin , Machine	209	\$103,683	\$7,316
			Year Sub-total	\$103,683	\$7,316
2015	2	Harvest ,Mechanical ,Final , Machine	52	\$58,918	\$1,817
			Year Sub-total	\$58,918	\$1,817
2016	2	Site Preparation ,Other ,Burn , Hand	52	\$0	\$1,298
2016	2	Site Preparation ,Chemical ,Broadcast , Aerial	52	\$0	\$4,395
2016	2	Regeneration ,Artificial ,Plant , Hand	52	\$0	\$4,412
2016	3	Fire Protection ,Other ,Burn , Hand	74	\$0	\$1,845
			Year Sub-total	\$0	\$11,950
		Grand Totals		\$173,608	\$51,085

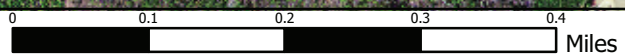


Kemper County Schools

16-12-16
2012 to 2021
642.78 Acres



(01/24/2012)



16-12-16



Property

- Property (1)

Category 1: Stands

- Chip-n-Saw (2)
- Sawtimber (2)
- Sub-Merchantable (3)
- Pulpwood (5)

Category 3: Non-Forest Stands

- Non-Forest (5)

Property Roads/Trails

- Logging Road (2)

Management Compartment

- Management (1)

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) (6)

Tract/BNA (Census 2000)

- Tract/BNA (Census 2000) (2)

County Roads

- County Roads (2)

US/State Highways

- State Highway (1)

School Sections

- School Sections (1)

Public School Districts

- KEMPER COUNTY SCHOOL DISTRICT (1)

US Congressional District

- US Cong Dist #3 (1)

MS Senate

- 32 (1)

MS House

- 42 (1)

Perennial Streams

- Perennial Streams (1)

Intermittent Streams

- Intermittent Streams (2)

Hydrologic Units (Basins)

- SUCARNOOCHEE RIVER (1)
- NOXUBEE RIVER (1)

Historic Forest Boundary

- Loblolly/Shortleaf Pine-Oak (1)

MS Forest Habitat

- LOWER CLAY HILLS-RUGGED TOPOGRAPHY (1)

Physiographic Region

- North Central Hills (1)

Soil Associations

- smithdale-lucy-ruston (1)
- wilcox-falkner-sweatman (1)

Surface Geology

- NAHEOLA (1)
- PORTERS CREEK (1)

MFC Districts

- MFC Districts (1)

MFC Dispatch Units

- MFC Dispatch Units (1)

MS Outline

- MS Outline (1)

Stand Activity Schedule for

16 12N 16E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013					
3	1	Harvest, Mechanical, Thin, Machine, Loblolly	24	\$840.00	\$3,600.00
3	11	Harvest, Mechanical, Thin, Machine, Loblolly	48	\$1,675.10	\$7,179.00
3	14	Harvest, Mechanical, Thin, Machine, Loblolly	2	\$53.20	\$228.00
4	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	172	\$4,300.00	\$0.00
4	10	Fire Protection, Other, Burn, Hand, Fuel Reduction	37	\$925.00	\$0.00
Yearly Totals			282	\$7,793.30	\$11,007.00
2014					
4	4	Harvest, Mechanical, Thin, Machine, Loblolly	172	\$6,020.00	\$85,315.44
4	10	Harvest, Mechanical, Thin, Machine, Loblolly	37	\$1,296.05	\$18,367.62
Yearly Totals			209	\$7,316.05	\$103,683.06
2015					
2	3	Harvest, Mechanical, Final, Machine, Loblolly	3	\$101.85	\$3,302.85
2	6	Harvest, Mechanical, Final, Machine, Loblolly	49	\$1,715.00	\$55,615.00
Yearly Totals			52	\$1,816.85	\$58,917.85
2016					
2	3	Site Preparation, Other, Burn, Hand, Debris	3	\$72.75	\$0.00
2	3	Site Preparation, Chemical, Broadcast, Aerial, Combination	3	\$247.35	\$0.00
2	3	Regeneration, Artificial, Plant, Hand, Loblolly	3	\$247.35	\$0.00
2	6	Site Preparation, Other, Burn, Hand, Debris	49	\$1,225.00	\$0.00
2	6	Regeneration, Artificial, Plant, Hand, Loblolly	49	\$4,165.00	\$0.00

Strata	stand	Activity	Acre	Est. Cost	Est. Revenue
2	6	Site Preparation, Chemical, Broadcast, Aerial, Combination	49	\$4,147.15	\$0.00
3	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	24	\$610.50	\$0.00
3	11	Fire Protection, Other, Burn, Hand, Fuel Reduction	48	\$1,196.50	\$0.00
3	14	Fire Protection, Other, Burn, Hand, Fuel Reduction	2	\$38.00	\$0.00
Yearly Totals			229	\$11,949.60	\$0.00
Grand Totals			773	\$28,875.80	\$173,607.91