



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 16-11-14

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**MISSISSIPPI FORESTRY COMMISSION
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: 636 Latitude: -88.87 Longitude: 32.8
Section: 16 Township: 11N Range: 14E

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.

Water Quality

Streamside management zones have or will be established along the stream and a protective vegetative zone maintained along the perimeter. Water diversions will be installed and maintained where needed on access roads to prevent erosion.

PROPERTY DESCRIPTION

General Property Information

The property is located in the west central part of Kemper County, approximately one-half mile west of Mississippi Highway 495. Access is fair to the section and poor within the section. This section has a total of 636 acres, of which 24 acres are classified as non-forest and 612 acres are forested.

Water Resources

Several small drains and a beaver impoundment are located in the western and southwestern part of the section. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

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

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

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:

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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*

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.

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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.

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.

SOIL TYPES

SaB

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.

OrC2

The Ora 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 loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 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

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is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during February, March, April. 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 = 83.

RA

The Rosebloom component makes up 52 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. 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 low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The Arkabutla component makes up 34 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium 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 moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria.

SwD2

The Sweatman component makes up 90 percent of the map unit. Slopes are 2 to 5 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 3e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

Kn

The Kinston 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 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 6 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria. Loblolly Site Index = 100.

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STRATA

Strata 1

Strata Description

Strata 1 consists of stands 1 and 8, which covers 353 acres of eight year-old Loblolly pine plantations. These stands average 400 trees per acre, with an average height of 20 feet.

Activity Recommendations

Harvest

Stand 1 will be evaluated for a first thinning in 2019. The stand will need to be thinned to an average basal area of 80 square feet per acre. Due to the wet nature of the soils, this practice should be done in the summer/fall.

Harvest

Stand 8 will be evaluated for a first thinning in 2021. The stand will need to be thinned to an average basal area of 80 square feet per acre. Due to the wet nature of the soils, this practice should be done in the summer/fall.

Strata 2

Strata Description

Strata 2 consists of stands 7 and 10, which are submerchantable, three year-old, Loblolly pine plantations. These stands cover 159 acres and have an average of 500 trees per acre.

Strata Recommendations

No activities are planned for this strata during the life of the plan.

Strata 4

Stand Description

Strata 4 is comprised of mixed pine-hardwood sawtimber, (stand 2). This area will be managed as streamside management zones and habitat diversity zones. The wet soil conditions make this stand nearly inoperable. However, when adjoining stands are harvested, consideration will be made to implement possible harvest of this strata.

Strata 5

Strata Description

Strata 5 consists of stands 3, 4, and 11 which cover 88 acres of chip n' saw-sized, Loblolly pine plantations. These stands average 110 square feet of basal area per acre and have average heights of 70 feet.

Activity Recommendations

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Harvest

Stands 4 and 11, which total 36 acres, are scheduled for a second thin in 2013. This activity will concentrate on removal of poorly formed, diseased, and suppressed trees from the stand. The residual basal area should be left at 80 square feet per acre.

Harvest

Stand 3 of this strata being 52 acres is scheduled for a final harvest in 2020.

Harvest

Stands 4 and 11, which total 36 acres are scheduled for a final harvest in 2020.

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. Stand 3 is scheduled for burning in 2013. While stands 4 and 11 are scheduled for 2015.

Site Preparation

This entire strata (88 acres), will need a site preparation spray in 2021. Spraying is needed to control hardwood competition. This activity will have to be contracted by a vendor and should be completed by October 1, 2021.

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.

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Site Preparation

Four to six weeks after the site preparation spray, a prescribed burn should be completed to improve planter access and remove logging debris.

Regeneration

Strata 5 will need to be planted at a rate of 691 Loblolly Pine seedlings per acre during the planting season, (December-March) of 2021. A compliance check will be done by MFC crews to insure proper planting and correct number of trees.

OTHER PLAN ACTIVITIES

Boundary Lines

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

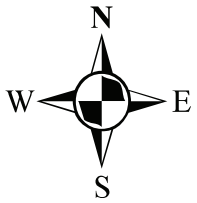
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Property Activities

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

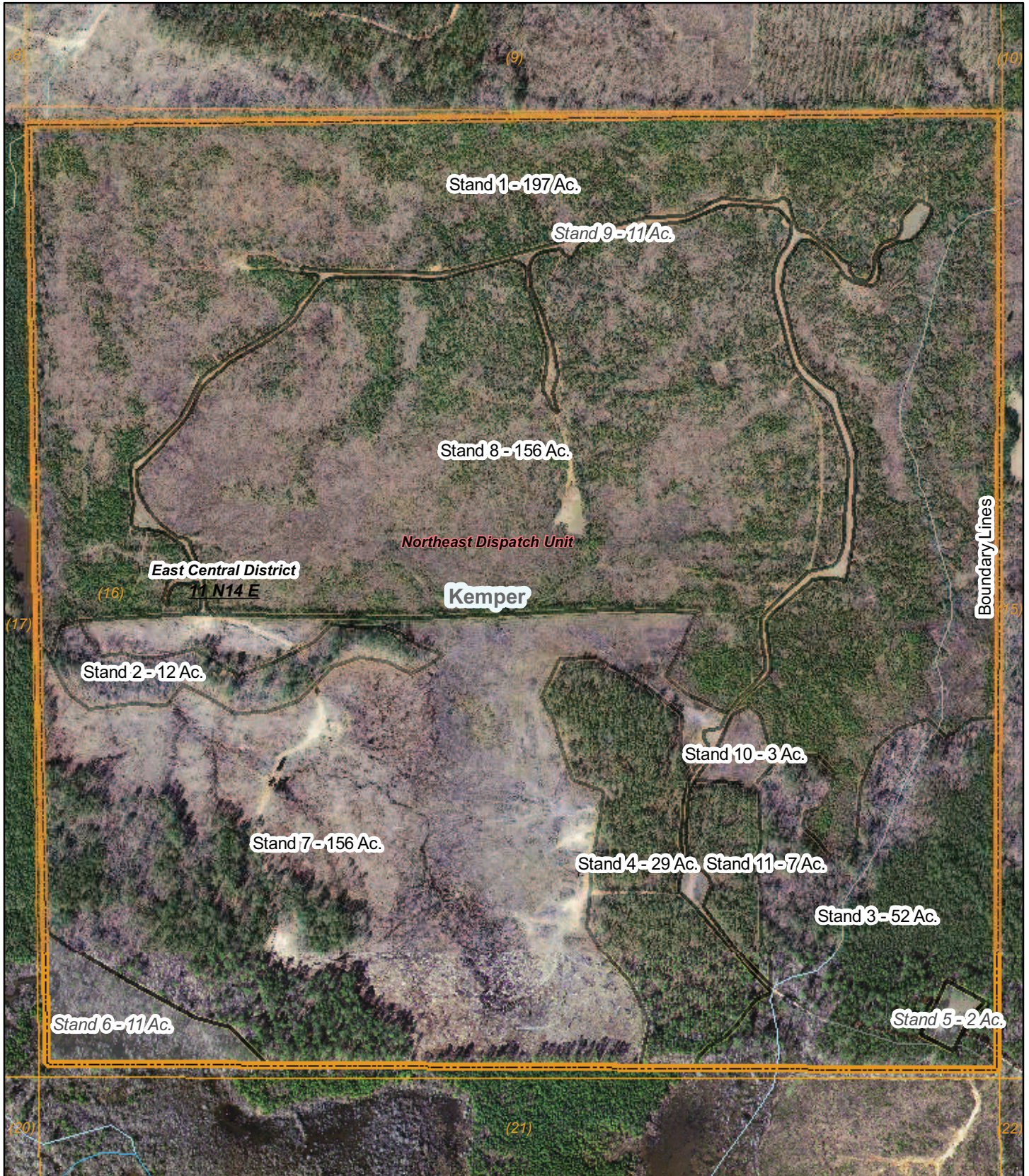
Strata Activity Schedule
Kemper 16-11-14
County BOE

PlanYear	Strata	Activity	Acres	Revenue	Cost
2013	5	Fire Protection ,Other ,Burn , Hand	35	\$0	\$875
2013	5	Harvest ,Mechanical ,Thin , Machine	37	\$23,700	\$1,283
			Year Sub-total	\$23,700	\$2,158
2015	5	Fire Protection ,Other ,Burn , Hand	36	\$0	\$900
			Year Sub-total	\$0	\$900
2019	1	Harvest ,Mechanical ,Thin , Machine	197	\$34,475	\$6,895
			Year Sub-total	\$34,475	\$6,895
2020	5	Harvest ,Mechanical ,Final , Machine	88	\$130,592	\$3,080
			Year Sub-total	\$120,376	\$3,080
2021	1	Harvest ,Mechanical ,Thin , Machine	156	\$27,300	\$5,460
2021	5	Site Preparation ,Chemical ,Broadcast , Aerial	88	\$0	\$7,040
2021	5	Site Preparation ,Other ,Burn , Hand	88	\$0	\$2,206
2021	5	Regeneration ,Artificial ,Plant , Hand	88	\$0	\$9,264
			Year Sub-total	\$27,300	\$23,970
		Grand Totals		\$205,851	\$37,003

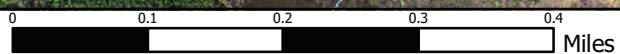


Kemper County Schools

16-11-14
2012 to 2021
635.62 Acres




(01/24/2012)



16-11-14





Property

 Property (1)


Category 1: Stands

 Sub-Merchantable (4)


 Sawtimber (1)

 Chip-n-Saw (3)

Category 3: Non-Forest Stands

 Non-Forest (3)

Boundary Lines


 Property (1)

Management Compartment


 Management (1)

MFC Basemap


County Boundary

 County Boundary (1)

Quadrangle Grid

 USGS Quad (2)


PLS Townships

 PLS Townships (1)

Survey Districts

 District 2 (1)


Blockgroup (Census 2000)

 Blockgroup (Census 2000) (1)

Block (Census 2000)

 Block (Census 2000) (1)


Tract/BNA (Census 2000)

 Tract/BNA (Census 2000) (1)

County Roads

 County Roads (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

 43 (1)

Intermittent Streams

 Intermittent Streams (2)

Hydrologic Units (Basins)

 YOCKANOOKANY RIVER (1)

Historic Forest Boundary

 Loblolly/Shortleaf Pine-Oak (1)

MS Forest Habitat


 LOWER LOAM HILLS (1)

Physiographic Region

 North Central Hills (1)

Soil Associations

 rosebloom-bibb-arkabutla (1)

 ora-savannah-prentiss (1)

Surface Geology

 WILCOX (1)


MFC Districts

 MFC Districts (1)

MFC Dispatch Units

 MFC Dispatch Units (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for

16 11N 14E

Strata	Stand	Activity			Acres	Est. Cost	Est. Revenue
2013							
5	3	Fire Protection, Other, Burn, Hand, Fuel Reduction		35	\$875.00	\$0.00	
5	4	Harvest, Mechanical, Thin, Machine, Loblolly		29	\$1,027.25	\$18,968.91	
5	11	Harvest, Mechanical, Thin, Machine, Loblolly		7	\$256.20	\$4,730.92	
Yearly Totals				72	\$2,158.45	\$23,699.82	
2015							
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction		29	\$725.00	\$0.00	
5	11	Fire Protection, Other, Burn, Hand, Fuel Reduction		7	\$175.00	\$0.00	
Yearly Totals				36	\$900.00	\$0.00	
2019							
1	1	Harvest, Mechanical, Thin, Machine, Loblolly		197	\$6,895.00	\$34,475.00	
Yearly Totals				197	\$6,895.00	\$34,475.00	
2020							
5	3	Harvest, Mechanical, Final, Machine, Loblolly		52	\$1,820.00	\$77,168.00	
5	4	Harvest, Mechanical, Final, Machine, Loblolly		29	\$1,015.00	\$34,220.00	
5	11	Harvest, Mechanical, Final, Machine, Loblolly		7	\$245.00	\$8,988.00	
Yearly Totals				88	\$3,080.00	\$120,376.00	
2021							
1	8	Harvest, Mechanical, Thin, Machine, Loblolly		156	\$5,460.00	\$27,300.00	
5	3	Site Preparation, Chemical, Broadcast, Aerial, Combination		52	\$4,160.00	\$0.00	
5	3	Site Preparation, Other, Burn, Hand, Cut-Over		52	\$1,289.00	\$0.00	
5	3	Regeneration, Artificial, Plant, Hand, Loblolly		52	\$5,413.80	\$0.00	

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
5	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	29	\$2,320.00	\$0.00
5	4	Site Preparation, Other, Burn, Hand, Cut-Over	29	\$733.75	\$0.00
5	4	Regeneration, Artificial, Plant, Hand, Loblolly	29	\$3,081.75	\$0.00
5	11	Regeneration, Artificial, Plant, Hand, Loblolly	7	\$768.60	\$0.00
5	11	Site Preparation, Other, Burn, Hand, Cut-Over	7	\$183.00	\$0.00
5	11	Site Preparation, Chemical, Broadcast, Aerial, Combination	7	\$560.00	\$0.00
Yearly Totals			420	\$23,969.90	\$27,300.00
Grand Totals			813	\$37,003.35	\$205,850.82