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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 16-10-15

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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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:	653	Latitude:	-88.77	Longitude:	32.72
Section:	16	Township:	10N	Range:	15E		

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.

INTRODUCTION

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

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads 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 western part of the county on Old Jackson Road. Access to and within the section is good. This section has a total of 653 acres, of which 638 acres are forested and 15 acres are classified as non-forest.

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.

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 form 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*

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

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

SX
The Sweatman component makes up 61 percent of the map unit. Slopes are 5 to 12 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 6e. This soil does not meet hydric criteria. The Smithdale component makes up 20 percent of the map unit. Slopes are 5 to 12 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 4e. This soil does not meet hydric criteria.

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.

STRATA

Strata 1

Strata Description

Strata one is comprised of stands 3, 5, 10, and 13. These stands total 290 acres and are pulpwood-sized Loblolly pine plantations. These stands were first thinned in 2009 and have average heights of 45 feet and basal areas average 90 square feet per acre.

Activity Recommendations

Harvest

Stand 13, (11 acres), is scheduled for a regeneration harvest in 2017. Because of it's small size, this stand will be harvested when an adjoining stand, (stand 6), is harvested in the same year.

Harvest

Stands 10, (119 acres), will need to be thinned to an average basal area of 80 square feet per acre in 2020. This treatment will target poor quality, diseased, and suppressed trees within the stand.

Harvest

Stands 3 and 5, (160 acres), will need to be thinned to an average basal area of 80 square feet per acre in 2021. This treatment will target poor quality, diseased, and suppressed trees within the stand.

Fire Protection

A prescribed fire is recommended for stand 3, (40 acres), in order to reduce fuel loading and the potential for a wildfire to occur, in 2012. 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.

Fire Protection

A prescribed fire is recommended for stands 5 and 10, (239 acres), in order to reduce fuel loading and the potential for a wildfire to occur, in 2014. 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.

Aerial Application of Herbicide

During the summer prior to planting, site preparation in the form of an aerial application of a herbicide should be applied to Stand 13, (11 acres), in 2018, to control competing vegetation. The herbicide should conform to the manufacturer recommended rates and specifications. This work will have to be contracted by a vendor and be completed by October 1. See "What You Should Know About Aetial Herbicide Application" 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. Stand 13, (11 acres), is scheduled for a burn in 2018.

Regeneration

Following site preparation, stand 13, (11 acres), should be planted with genetically improved loblolly pine seedlings, in 2018. 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

Stands 8, 11, and 12 are mixed pine-hardwood sawtimber stands. These stands will be managed as streamside management zones and/or habitat diversity zones. The steep terrain and proximity to the small streams make these stands inoperable.

Strata 4

Strata Description

Strata 4 contains stands 1 and 7, (284 acres), which are submerchantable Loblolly pine plantations. These stands have an average height of 15 feet and averages 500 trees per acre.

Activity Recommendations

Harvest

Strata 4, (284 acres), is scheduled for a first thinning in 2018. 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.

Strata 5

Strata Description

Strata 5 has only one stand, (6), which is a total of 16 acres of pine sawtimber. The timber in this stand is of good quality and averages 100 trees per acre and has average heights of 80 feet.

Strata Recommendations

Activity Recommendations

Harvest

A regeneration harvest is scheduled for this strata, (stand 6, 16 acres), in 2017.

Aerial Application of Herbicide

During the summer prior to planting, site preparation in the form of an aerial application of a herbicide should be applied to Stand 6, (16 acres), in 2018, to control competing vegetation. The herbicide should conform to the manufacturer recommended rates and specifications. This work will have to be contracted by a vendor and be completed by October 1. See "What You Should Know About Aetial Herbicide Application" 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. Stand 6, (16 acres), is scheduled for a burn in 2018.

Regeneration

Following site preparation, stand 6, (16 acres), should be planted with genetically improved loblolly pine seedlings, in 2018. 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.

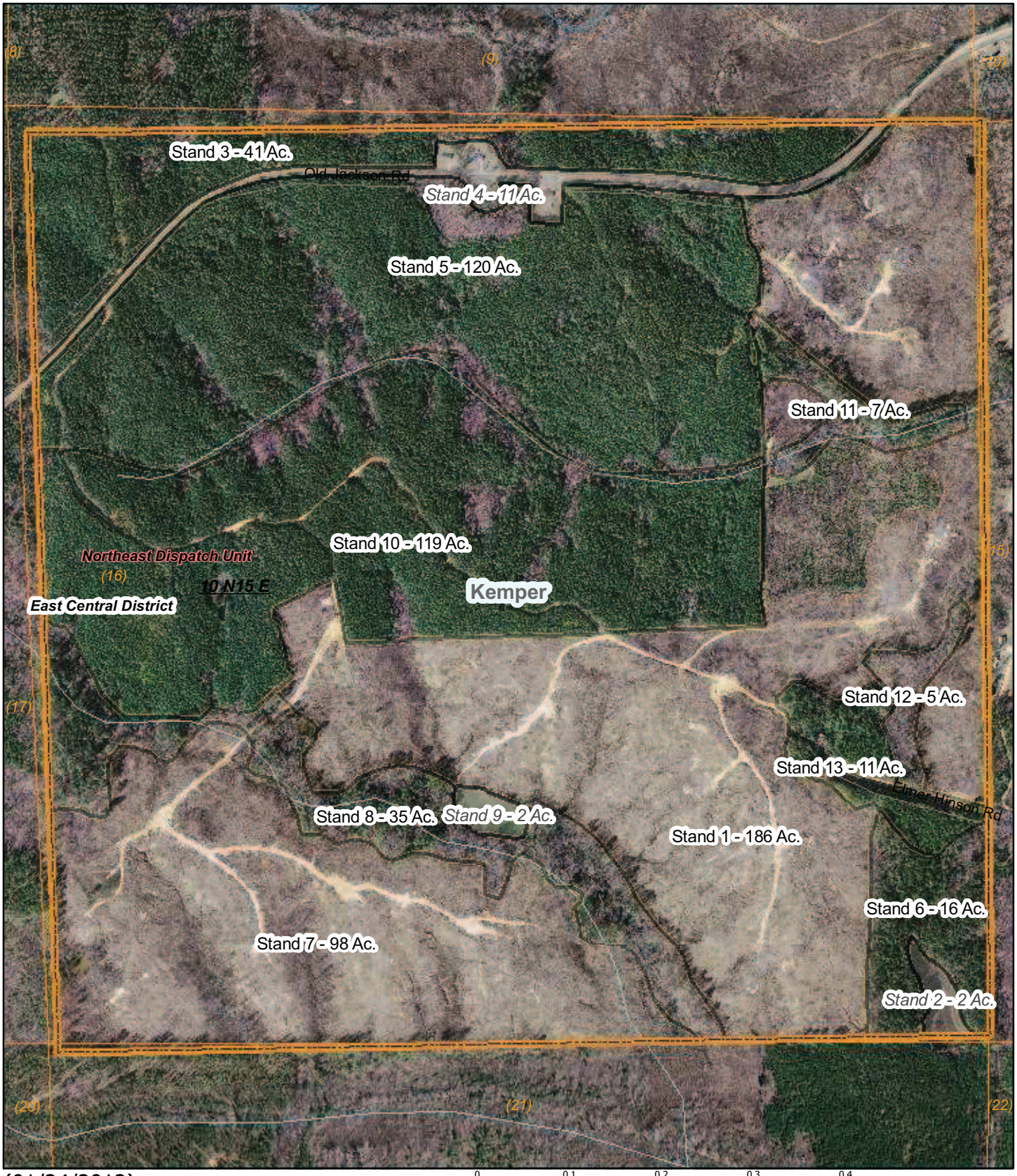
Seedling care and handling, as well as planting, will conform to the established MFC guidelines. See "What You Should Know About Planting Your Stewardship Forest" in the attachment section of this plan.

Strata Activity Schedule
Kemper 16-10-15
County BOE

PlanYear	Strata	Activity	Acres	Revenue	Cost
2012	1	Fire Protection ,Other ,Burn , Hand	41	$0	$1,025
			Year Sub-total	$0	$1,025
2014	1	Fire Protection ,Other ,Burn , Hand	239	$0	$5,964
			Year Sub-total	$0	$5,964
2017	1	Harvest ,Mechanical ,Final , Machine	11	$7,150	$385
2017	5	Harvest ,Mechanical ,Final , Machine	16	$24,000	$560
			Year Sub-total	$31,150	$945
2018	1	Regeneration ,Artificial ,Plant , Hand	11	$0	$1,155
2018	1	Site Preparation ,Chemical ,Broadcast , Aerial	11	$0	$935
2018	1	Site Preparation ,Other ,Burn , Hand	11	$0	$275
2018	4	Harvest ,Mechanical ,Thin , Machine	284	$49,775	$9,955
2018	5	Regeneration ,Artificial ,Plant , Hand	16	$0	$1,680
2018	5	Site Preparation ,Other ,Burn , Hand	16	$0	$400
2018	5	Site Preparation ,Chemical ,Broadcast , Aerial	16	$0	$1,360
			Year Sub-total	$49,775	$15,760
2020	1	Harvest ,Mechanical ,Thin , Machine	119	$29,750	$4,165
			Year Sub-total	$29,750	$4,165
2021	1	Harvest ,Mechanical ,Thin , Machine	161	$40,250	$5,635
			Year Sub-total	$40,250	$5,635
		Grand Totals		$150,925	$33,494

Kemper County Schools

16-10-15
2012 to 2021
653.33 Acres



(01/24/2012)

0 0.1 0.2 0.3 0.4 Miles

16-10-15

Property
Property (1)

Category 1: Stands
Sub-Merchantable (2)
Pulpwood (4)
Sawtimber (4)

Category 3: Non-Forest Stands
Non-Forest (3)

Management Compartment
Management (2)

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) (1)

Block (Census 2000)
Block (Census 2000) (2)

Tract/BNA (Census 2000)
Tract/BNA (Census 2000) (1)

County Roads
County Roads (2)

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)

Intermittent Streams
Intermittent Streams (2)

Hydrologic Units (Basins)
SUCARNOOCHEE 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
sweatman-smithdale-ora (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 10N 15E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
1	3	Fire Protection, Other, Burn, Hand, Fuel Reduction	41	$1,025.00	$0.00
		Yearly Totals	41	$1,025.00	$0.00
2014					
1	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	120	$2,989.75	$0.00
1	10	Fire Protection, Other, Burn, Hand, Fuel Reduction	119	$2,974.00	$0.00
		Yearly Totals	239	$5,963.75	$0.00
2017					
1	13	Harvest, Mechanical, Final, Machine, Loblolly	11	$385.00	$7,150.00
5	6	Harvest, Mechanical, Final, Machine, Loblolly	16	$560.00	$24,000.00
		Yearly Totals	27	$945.00	$31,150.00
2018					
1	13	Site Preparation, Chemical, Broadcast, Aerial, Woody	11	$935.00	$0.00
1	13	Site Preparation, Other, Burn, Hand, Debris	11	$275.00	$0.00
1	13	Regeneration, Artificial, Plant, Hand, Loblolly	11	$1,155.00	$0.00
4	1	Harvest, Mechanical, Thin, Machine, Loblolly	186	$6,525.05	$32,625.25
4	7	Harvest, Mechanical, Thin, Machine, Loblolly	98	$3,430.00	$17,150.00
5	6	Regeneration, Artificial, Plant, Hand, Loblolly	16	$1,680.00	$0.00
5	6	Site Preparation, Other, Burn, Hand, Debris	16	$400.00	$0.00
5	6	Site Preparation, Chemical, Broadcast, Aerial, Woody	16	$1,360.00	$0.00
		Yearly Totals	365	$15,760.05	$49,775.25
2020					

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
1	10	Harvest, Mechanical, Thin, Machine, Loblolly	119	$4,165.00	$29,750.00
		Yearly Totals	119	$4,165.00	$29,750.00
2021					
1	3	Harvest, Mechanical, Thin, Machine, Loblolly	41	$1,435.00	$10,250.00
1	5	Harvest, Mechanical, Thin, Machine, Loblolly	120	$4,200.00	$30,000.00
		Yearly Totals	161	$5,635.00	$40,250.00
		Grand Totals	**952**	**$33,493.80**	**$150,925.25**