



Vision • Commitment • Pride

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:  
Copiah County BOE

Prepared By:  
Miles Henderson  
MS Forestry Commission

Time Period Covered by This Plan:  
2012 - 2021

Date Plan Prepared:  
2012-01-18

Plan Type:  
Stewardship / Stewardship

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

**Property Name: S16 T9N R9E**

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**MISSISSIPPI FORESTRY COMMISSION  
FOREST STEWARDSHIP MANAGEMENT PLAN**

**LANDOWNER INFORMATION**

Name: Copiah County BOE  
Mailing Address: 254 West Gallatin St.  
City, State, Zip: Hazlehurst, MS 39083  
Country: United States of America  
Contact Numbers: Home Number:  
Office Number: 601-894-1341  
Fax Number:  
  
E-mail Address:  
Social Security Number (optional):

**FORESTER INFORMATION**

Name: Miles Henderson , Copiah County Service Forester  
Forester Number: 02512  
Organization: MS Forestry Commission  
Street Address: P.O. Box 229  
City, State, Zip: Hazlehurst, MS 39083  
Contact Numbers: Office Number: 601-894-1131  
Fax Number:  
E-mail Address: mhenderson@mfc.state.ms.us

**PROPERTY LOCATION**

County: Copiah    Total Acres: 639    Latitude: -90.3    Longitude: 31.75  
Section: 16    Township: 9N    Range: 9E

**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

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and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

**PROPERTY DESCRIPTION**

*General Property Information*

This section is located near the Stronghope community in Southeast Covich County. Sandhill road provides the primary access from the west, while Monticello Road provides the access to the east side of the section. Bahalia Creek flows east to west across the section. Much of the section is bottomland hardwood with poor drainage in certain areas. Other stand types within this section are Loblolly pine and hardwood reproduction. It provides excellent opportunity for both timber and wildlife management.

*Water Resources*

Several perennial water resources were identified during a reconnaissance of the property. The perennial streams and drains 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.

*Archeological and Cultural Resources*

A house exists in the west side of the section along Sandhill Road as indicated on the attached map. This site has been buffered and designated with yellow paint and flagging on trees around the site. No forest management activities will occur inside of this protected area.

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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*.

#### **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.

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*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 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.

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**SOIL TYPES**

*Soils*

Aerial silt loam (Ae)- Well drained with a slope range of 0-2%. Available water capacity is high. The erosion hazard is slight and the runoff is slow. The site index for loblolly pine is 95 and 110 for Cherrybark oak.

Gillsburg silt loam (Gb)- Poorly drained soil with a slope range of 0-2%. The erosion hazard is slight and the runoff is slow. The site index for Cherrybark oak is 100 and 90 for loblolly pine. Subject to occasional flooding. Available water capacity is high.

**STRATA**

*Strata 1*

Stand Description

Strata 1: Stands 18, 25

Acres: 184

These are mature stands of bottomland hardwood and scattered Loblolly Pine that was established in 1934. The hardwood consists of various red oak species, hickory, and sweetgum. These stands have areas of excellent grade sawtimber and areas of poor sawtimber quality.

Strata Recommendations

Stand 18 (98 acres) is scheduled for a final harvest in 2020, and Stand 25 (86 acres) is scheduled for a final harvest in 2016, respectfully. Once final harvesting has been completed reforestation activities will be conducted, including aerial application of herbicides. Genetically improved red oak seedlings will be used to reforest these stands. Once established they will be managed on a 65 to 75 year rotation.

Activity Recommendations

Harvest

Stand 18 (98 acres) is scheduled for a final harvest in 2020. This type of harvest removes all merchantable timber from this stand.

Stand 26 (86 acres) is scheduled for a final harvest in 2016. This type of harvest removes all merchantable timber from this stand.

Site Preparation

Stand 18 will be aerially sprayed with herbicides to control unwanted hardwood competition and herbaceous weeds. This activity will be completed in 2021.

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Stand 26 will be aerially sprayed with herbicides to control unwanted hardwood competition and herbaceous weeds. This activity will be completed in 2018.

**Regeneration**

Stand 18 will be hand planted in 2021 using miscellaneous red oak species. Seedlings will be planted on a 10' x 10' spacing at a rate of 436 trees per acre. A deviation from the recommended planting rates will be limited to plus or minus 40 trees per acre. Planting should be done between December and February. Compliance checks will be completed as this stand is planted to ensure proper planting. A survival study will be completed the following Fall to ensure sufficient stocking. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when planting.

Stand 26 will be hand planted in 2018 using miscellaneous red oak species. Seedlings will be planted on a 10' x 10' spacing at a rate of 436 trees per acre. A deviation from the recommended planting rates will be limited to plus or minus 40 trees per acre. Planting should be done between December and February. Compliance checks will be completed as this stand is planted to ensure proper planting. A survival study will be completed the following Fall to ensure sufficient stocking. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when planting.

*Strata 2*

**Stand Description**

Strata 2: Stands 19 and 31

Acres: 68

These stands were hand planted in 2011 using 2nd generation loblolly Pine seedlings on a 10' x 7' spacing at 622 trees per acre. Compliance checks were completed as these stands were planted to ensure proper planting and stocking. Survival checks were completed the following Fall to ensure an adequate survival rate.

**Stand Recommendations**

These stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

*Strata 3*

**Stand Description**

Strata 3: Stand 6,10,28



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Acres: 98

These stands were final harvested in 2011. Following the final harvest, these stands will be reforested using miscellaneous red oak seedlings.

**Strata Recommendations**

Reforestation activities will be conducted, including aerial application of herbicides. Genetically improved red oak seedlings will be used to reforest this stand. Once established they will be managed on a 65 to 75 year rotation.

**Activity Recommendations**

**Site Preparation**

These stands will be aeriually sprayed with herbicides to control unwanted herbaceous weeds. This activity will be completed in 2012.

**Regeneration**

These stands will be replanted using miscellaneous red oak seedlings such as Cherrybark, Nuttall, and Willow Oak. Seedlings will be planted on a 10' x 10' spacing at a rate of 436 trees per acre. A deviation from the recommended planting rates will be limited to plus or minus 40 trees per acre. Planting should take place between December and March. Adverse weather conditions such as prolonged dry or cold periods should be taken into consideration when planting. A survival check will be conducted in the late fall to ensure adequate stocking within the stands.

*Strata 4*

**Stand Description**

Strata 4: Stands 1 and 8

Acres: 59

These stands were hand planted in 2000 using miscellaneous hardwood species such as Nuttall, Cherrybark, and Shumard Oak. These seedlings were planted on a 10' x 10' spacing at 436 trees per acre. Survival was good and will be monitored annually.

**Stand Recommendations**

These stands will be managed to approximately 65-75 years. These stands should be monitored annually for future management needs. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

*Strata 5*

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Stand Description

Strata 5: Stands 21 and 29

Acres: 53

These are hardwood reproduction stands that were regenerated naturally. Hardwood species within these stands consist of red oak, white oak, poplar, hickory, and sweetgum

Stand Recommendations

These stands will be managed to approximately 65-75 years. These stands should be monitored annually for future management needs. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

*Strata 6*

Stand Description

Strata 6: Stands 2,14,20,23,34

Acres: 53

These are Loblolly Pine stands that were open field machine planted in 1993. These stands were first thinned in 2007 and are currently in good health and well stocked.

Stand Recommendations

These stands will be managed to approximately 35-40 years. During this time frame, management activities such as thinning and herbicide applications will be used to maximize growth. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return these stands to full production.

Activity Recommendations

Harvest

These stands are scheduled for a second thin in 2013, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the first thin to reduce the stocking to 75 square feet of basal area per acre.

A third thin is scheduled for these stands in 2019, focusing on removing poor quality, diseased, or poorly formed trees. This will be an operator select thinning, using existing corridors from the previous thins to reduce the stocking to 75 square feet of basal area per acre.

Fire Protection

A prescribed burn is recommended in 2021 to reduce fuel loads 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,

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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 7*

Strata Description

Strata 7: Stand 24

Acres: 16

This stand was hand planted in 1998 using miscellaneous hardwood species such as Nuttall, Cherrybark, and Shumard Oak. These seedlings were planted on a 10' x 10' spacing at 436 trees per acre. Survival was good and will be monitored annually.

Strata Recommendations

This stand will be managed to approximately 65-75 years. This stand should be monitored annually for future management needs. At the end of this rotation a final harvest will be conducted and reforestation activities will be completed to return this stand to full production.

*Strata 8*

Stand Description

Strata 8: Stands 7,12,22,26

Acres: 68

These stands are permanent Streamside-Management-Zones (SMZs) that were established in 1940. These stands consist of natural mixed hardwood such as White Oak, Red Oak, hickory, and sweetgum.

Stand Recommendations

These stands will be managed as permanent Streamside-Management-Zones (SMZs). Mature timber will be harvested as timber sales are completed on adjacent stands. A minimum of 50% crown cover will be maintained to ensure that a quality SMZ is left. This SMZ is vital to reduce soil erosion and to protect water quality.

**OTHER PLAN ACTIVITIES**

*Property Activities*

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Activity Recommendations

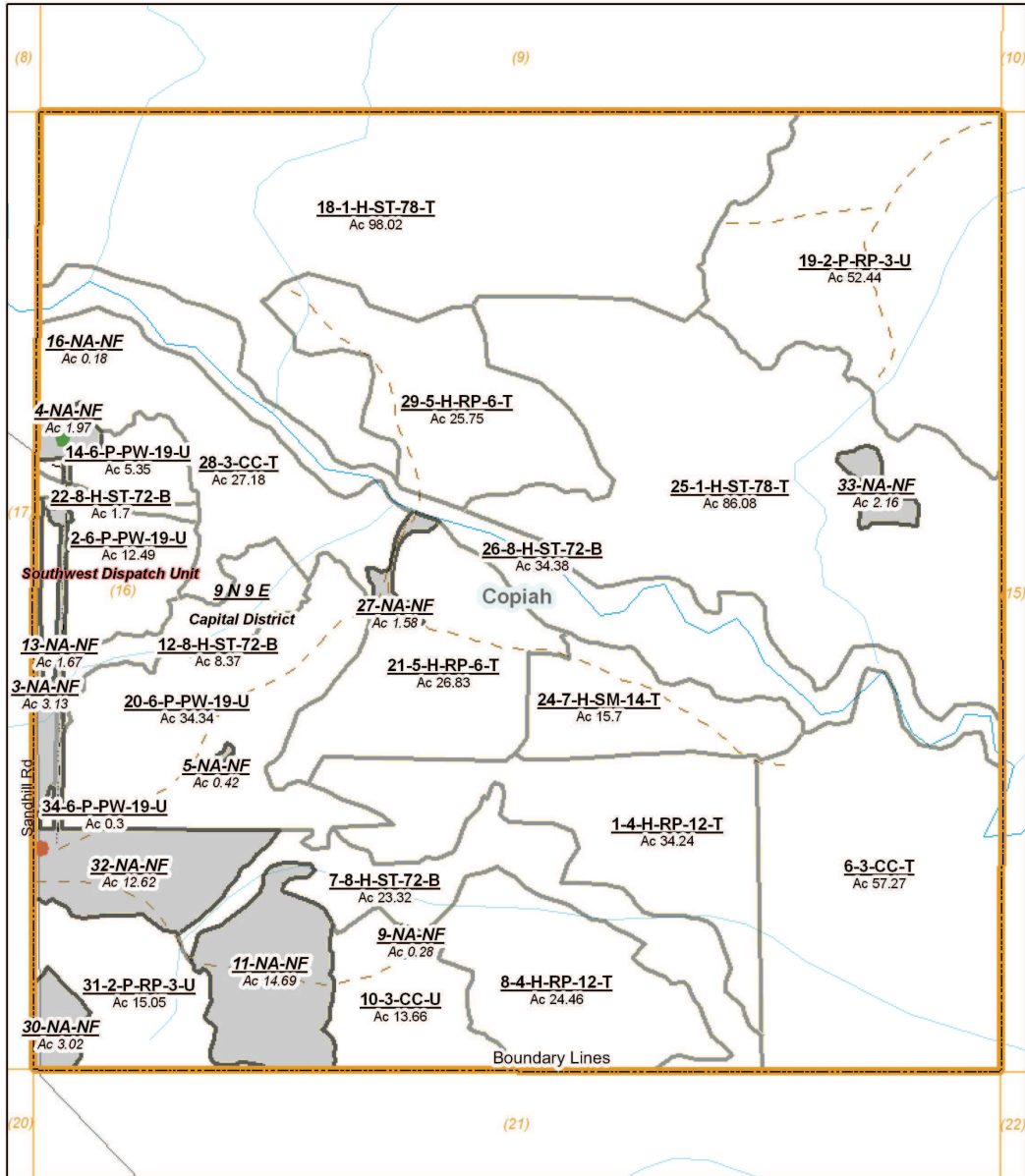
Routine inspections and general maintenance of the roads, firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

SEC 16 TWN 9N RGE 9E



**Copiah Board of Education**

SEC 16; TWN 9N; RGE 9E  
2012 to 2021  
639.37 Acres



(02/17/2012)

# SEC 16 TWN 9N RGE 9E



## SEC 16; TWN 9N; RGE 9E

### Property

Property (1)

### Category 1: Stands

- Reproduction (6)
- Pulpwood (5)
- Clear Cut (3)
- Sawtimber (6)
- Sub-Merchantable (1)

### Category 3: Non-Forest Stands

Non-Forest (13)

### Structures

Single-Family (1)

### Other

Locked (1)

### Property Roads/Trails

Logging Road (6)

### Boundary Lines

Property (1)

### Management Compartment

Harvest (4)

### Utilities (Lines)

Utility Line (1)

## MFC Basemap

### County Boundary

County Boundary (1)

### Quadrangle Grid

USGS Quad (2)

### PLS Townships

PLS Townships (1)

### Survey Districts

District 4 (1)

### Blockgroup (Census 2000)

Blockgroup (Census 2000) (2)

### Block (Census 2000)

Block (Census 2000) (7)

### Tract/BNA (Census 2000)

Tract/BNA (Census 2000) (1)

### County Roads

County Roads (1)

### School Sections

School Sections (1)

### Public School Districts

COPIAH COUNTY SCHOOL DISTRICT (1)

### US Congressional District

US Cong Dist #2 (1)

### MS Senate

36 (1)

### MS House

62 (1)

### Perennial Streams

Perennial Streams (1)

### Intermittent Streams

Intermittent Streams (7)

### Hydrologic Units (Basins)

MIDDLE PEARL RIVER (1)

### Historic Forest Boundary

Longleaf Pine with Loblolly Pine-Slash Pine (1)

### MS Forest Habitat

SOUTHERN LOESSIAL LOAM HILLS-RUGGED TOPO (1)

### Physiographic Region

SOUTH CENTRAL HILLS (1)

### Soil Associations

ariel-gillsburg-oaklimer (1)  
 kolin-gillsburg-providence (1)

### Surface Geology

PASCAGOULA/HATTIESBURG (1)  
 CATAHOULA (1)

### MFC Districts

MFC Districts (1)

### MFC Dispatch Units

MFC Dispatch Units (1)

### MS Outline

MS Outline (1)

Stand Activity Summary for  
Copiah County BOE  
16 9N 9E

**Filters Applied:** County: Copiah  
 Client Class: School Trust Land  
 District: Capital District  
 Client: Copiah County BOE  
 STR: 16 9N 9E  
 Activity:  
 Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
<b>2013</b>						
16 9N 9E	3	6	Regeneration, Artificial, Plant, Hand, Misc Red Oak	38	\$4,560.00	\$0.00
16 9N 9E	3	6	Site Preparation, Chemical, Broadcast, Aerial, Combination	38	\$2,850.00	\$0.00
16 9N 9E	3	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	14	\$1,120.00	\$0.00
16 9N 9E	3	10	Regeneration, Artificial, Plant, Hand, Misc Red Oak	14	\$1,750.00	\$0.00
16 9N 9E	3	28	Regeneration, Artificial, Plant, Hand, Misc Red Oak	27	\$3,375.00	\$0.00
16 9N 9E	3	28	Site Preparation, Chemical, Broadcast, Aerial, Combination	27	\$2,160.00	\$0.00
16 9N 9E	6	2	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	12	\$420.00	\$5,400.00
16 9N 9E	6	14	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	5	\$187.25	\$2,407.50
16 9N 9E	6	20	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	34	\$1,190.00	\$15,300.00
16 9N 9E	6	23	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	0	\$12.25	\$157.50
16 9N 9E	6	34	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	1	\$35.00	\$450.00
<b>Yearly Totals</b>				<b>211</b>	<b>\$17,659.50</b>	<b>\$23,715.00</b>
<b>2016</b>						
16 9N 9E	1	25	Harvest, Mechanical, Final, Machine, Misc Hardwood	86	\$3,010.00	\$146,544.00
<b>Yearly Totals</b>				<b>86</b>	<b>\$3,010.00</b>	<b>\$146,544.00</b>
<b>2018</b>						
16 9N 9E	1	25	Regeneration, Artificial, Plant, Hand, Misc Red Oak	86	\$10,750.00	\$0.00
16 9N 9E	1	25	Site Preparation, Chemical, Broadcast, Aerial, Combination	86	\$6,880.00	\$0.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
				Yearly Totals	172	\$17,630.00	\$0.00
<b>2019</b>							
16 9N 9E	6	2	Harvest, Mechanical, Thin, Machine, Loblolly	12	\$420.00	\$8,160.00	
16 9N 9E	6	14	Harvest, Mechanical, Thin, Machine, Loblolly	5	\$187.25	\$3,638.00	
16 9N 9E	6	20	Harvest, Mechanical, Thin, Machine, Loblolly	34	\$1,201.90	\$23,351.20	
16 9N 9E	6	23	Harvest, Mechanical, Thin, Machine, Loblolly	1	\$35.00	\$680.00	
16 9N 9E	6	34	Harvest, Mechanical, Thin, Machine, Loblolly	1	\$35.00	\$680.00	
				Yearly Totals	54	\$1,879.15	\$36,509.20
<b>2020</b>							
16 9N 9E	1	18	Harvest, Mechanical, Final, Machine, Misc Hardwood	98	\$3,430.00	\$195,608.00	
				Yearly Totals	98	\$3,430.00	\$195,608.00
<b>2021</b>							
16 9N 9E	1	18	Site Preparation, Chemical, Broadcast, Aerial, Combination	98	\$7,840.00	\$0.00	
16 9N 9E	1	18	Regeneration, Artificial, Plant, Hand, Misc Red Oak	98	\$12,250.00	\$0.00	
16 9N 9E	6	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	12	\$312.25	\$0.00	
16 9N 9E	6	14	Fire Protection, Other, Burn, Hand, Fuel Reduction	5	\$125.00	\$0.00	
16 9N 9E	6	20	Fire Protection, Other, Burn, Hand, Fuel Reduction	34	\$858.50	\$0.00	
16 9N 9E	6	23	Fire Protection, Other, Burn, Hand, Fuel Reduction	1	\$25.00	\$0.00	
16 9N 9E	6	34	Fire Protection, Other, Burn, Hand, Fuel Reduction	1	\$25.00	\$0.00	
				Yearly Totals	250	\$21,435.75	\$0.00
				<b>Grand Totals</b>	<b>870</b>	<b>\$65,044.40</b>	<b>\$402,376.20</b>