



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Jefferson County Schools

Prepared By:
J. Ted Ratcliff
Miss. Forestry Comm.

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-01-04

Plan Type:
Stewardship / Stewardship

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

Property Name: 16-8N-4E

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FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Organization: Jefferson County Schools
Name: Jefferson County Schools
Mailing Address: P.O. Box 157
City, State, Zip: Fayette, MS 39069
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-786-3791
Fax Number:
E-mail Address:
Social Security Number (optional): 640000000

FORESTER INFORMATION

Name: J. Ted Ratcliff, Service Forester
Forester Number: 00717
Organization: Miss. Forestry Comm.
Street Address: P. O. Box 452
City, State, Zip: Meadville, MS 39653
Contact Numbers: Office Number: 601-754-9111
Fax Number: 601-384-2437
E-mail Address: ratcliff@mfc.state.ms.us

PROPERTY LOCATION

County: Jefferson Total Acres: 612 Latitude: -90.81 Longitude: 31.66
Section: 16 Township: 8N Range: 4E

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.

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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 section is located in the eastern portion of the county in the Union Church Community about sixteen miles east of Fayette. Access is by the Union Church-Meadville Road that runs just north of the section. You will have to cross private land through a gate that has a School Board lock on it at the hunting camp. This section of approximately 612 acres, with all of the area being forested except for small food plots and woods roads.

Water Resources

Fifteen mile creek runs through the east side of the section. A SMZ has been identified and 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: Smithdale and Lexington.

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Archeological or Cultural Resources

These areas can range from churches, old cemeteries, or Indian mounds to old home sites or other areas of historical significance.

No Archeological or Cultural Resources Were Identified:

No Archeological or Cultural Resources Were Identified during the reconnaissance of the property. However, if Archeological or Cultural Resources are discovered anytime on the property special management measures will be applied immediately to preserve these sensitive areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy and 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.

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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.

SOIL TYPES

Smithdale

Smithdale soils are found on this section. Slopes are 17 to 40 percent. 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 Lexington component makes up 35 percent of the map unit. Slopes are 12 to 20 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

STANDS

STRATA 1 (Stands 3 and 11)

Stand Description

Consist of approximately 41 acres of pine pulpwood that was planted in 1992. Stand development is behind because of a large amount of hardwood encroachment in the

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understory and main canopy. Some areas have been completely encroached by hardwood saplings and pulpwood.

Stand Recommendations

This stand will be managed to grow to a 35 to 40 year rotation. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

Harvest

This stand is scheduled to be first thinned in 2012. Since row integrity is poor, corridors that are a maximum 20 foot wide and at least 30 feet apart will be cut by the Buyer. Crop trees will be left to a 70 square foot basal area. Crop trees are considered to be trees that are sawlog size or have the potential to be sawlog quality trees.

Fire Protection

A prescribed fire is recommended in 2013 and 2020 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 and other certified prescribed burning vendors are available to conduct prescribed burning.

Harvest

A 2nd thin in 2021 will be taken into consideration the growth of the stand and the local market. The stand should be thinned back to a 70-80 basal area. Only pulpwood size, lower quality form, overcrowded and suppressed, or diseased stems should be removed.

STRATA 2 (Stands 1 and 2)

Stand Description

The stand consist of 173 acres of mature pine sawtimber. There is also a large amount of hardwood in the midstory and understory.

Stand Recommendations

This stand will be managed as a loblolly pine sawtimber stand, upon final harvest it will be converted to Loblolly pine.

Activity Recommendations

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Site Preparation

The areas will be site prepared with an aerial broadcast herbicide application following the harvests. Chemicals and rates will be determined based on the vegetation present at that time by a licensed applicator.

This site will need a site preparation burn. The objective of the burn will be to remove the accumulation of debris on the site, which will improve planting conditions for the tree planting personnel. The burn should be done by a certified burner or the landowner using a burn plan and a permit to burn.

Harvest

Both stands are planned to be harvested with a clear cut, stand 1 is for year 2013 and stand 2 is for year 2015 . Volumes to sale will be determined with a minimum of 10 % cruise.

Regeneration

This areas will be planted with genetically improved, containerized loblolly seedlings following site preparation. Spacing will be done on an 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

STRATA 3 (Stands 4 and 6)

Stand Description

The stand consist of 164 acres of mature pine sawtimber. The understory consist of a large amount of hardwood brush.

Stand Recommendations

This stand is mature and will be regenerated back into Loblolly Pine following the scheduled harvest.

Activity Recommendations

Harvest

This strata will be harvested with a clear cut in 2018. Volumes to sale will be determined with a minimum of 10 % cruise.

Fire Protection

A prescribed fire in 2016 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 and

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other certified prescribed burning vendors are available to conduct prescribed burning.

Site Preparation

The area will be site prepared with an aerial broadcast herbicide application following the harvest. Chemicals and rates will be determined based on the vegetation present at that time by a licensed applicator.

This site will need a site preparation burn. The objective of the burn will be to remove the accumulation of debris on the site, which will improve planting conditions for the tree planting personnel. The burn should be done by a certified burner or the landowner using a burn plan and a permit to burn.

Regeneration

This area will be planted with genetically improved, containerized loblolly seedlings. Spacing will be done on an 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

STRATA 4 (Stand 10)

Stand Description

This stand consist of approximately 75 acres of pine plantation that was planted in 2008 following a harvest. This stand is well stocked and in good growing condition.

Stand Recommendations

This stand will be managed as a pine plantation to grow for 35 to 40 years. At maturity it will be regenerated back into Loblolly Pine.

STRATA 6 (Stands 8 and 9)

Stand Description

Consist of approximately 93 acres of pine that was planted in 2001. Stand development is behind on the west side near the creek because of a large amount of hardwood encroachment in the understory and main canopy. Some areas have been completely encroached by hardwood saplings and pulpwood.

Stand Recommendations

This stand will be managed as a pine plantation to grow for 35 to 40 years. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

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Harvest

This stand should be ready to be thinned in 2016. This will be a first thin, pay as cut sale. The row integrity is poor so corridors will have to be cut by the logger. Corridors will be no wider than 20 feet. The distance between corridors will be no less than 30 feet.

Crop trees shall be left uncut and evenly distributed over the sale area at an average stocking rate of 70 square feet basal area. Areas where basal areas are below 70 square feet shall not be thinned.

Fire Protection

A prescribed fire in 2017 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 and other certified prescribed burning vendors are available to conduct prescribed burning.

STRATA 7 (Stands 5 and 7)

Stand Description

This stand consist of approximately 64 acres in a Streamside Management Zone. Timber is predominately hardwood ranging from sawtimber size to premerchantable. The basal area is approximately 60 square feet.

Strata Recommendations

Since this strata will be managed as a permanent SMZ, only selective cutting will occur in these areas. Selective cutting will occur as adjoining sales are performed. The harvesting will focus on removing the mature timber and will not remove more than 50 percent of the existing stand.

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.

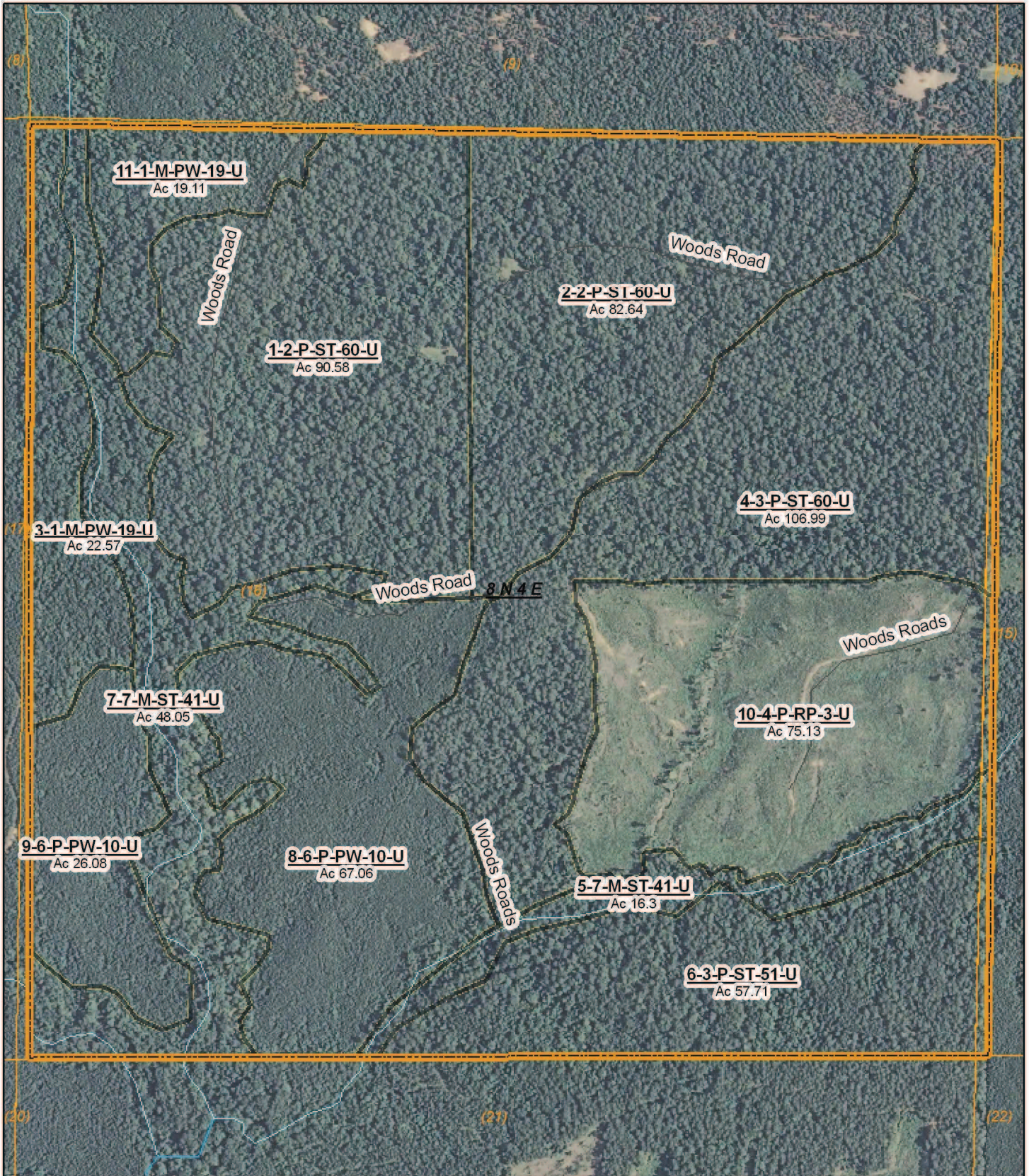


JEFFERSON COUNTY SCHOOLS

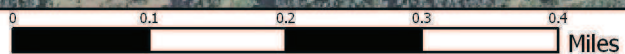
UNION CHURCH Sect.16-T8N-R4E

2012 to 2021

612.22 Acres



(12/27/2011)



LEGEND



Property



Property

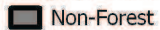
Category 1: Stands



Category 2: Stands

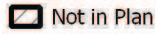


Category 3: Non-Forest Stands



Non-Forest

Category 4: Not in Plan Stands



Not in Plan

Category 5: Features Only Plan Stand



Features Only Plan

Property Roads/Trails



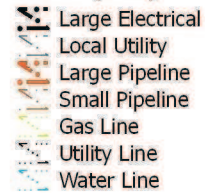
Boundary Lines



Boundary Lines (cont)



Utilities (Lines)



Stand Activity Summary for
Jefferson County Schools
16 8N 4E

Filters Applied: County: Jefferson
Client Class: School Trust Land
District: Southwest District
Client: Jefferson County Schools
STR: 16 8N 4E
Activity:
Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012						
16 8N 4E	1	3	Harvest, Mechanical, Thin, Machine, Loblolly	23	\$345.00	\$6,704.96
16 8N 4E	1	11	Harvest, Mechanical, Thin, Machine, Loblolly	19	\$286.65	\$4,740.04
16 8N 4E	2	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	91	\$3,170.30	\$0.00
16 8N 4E	2	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	83	\$2,892.40	\$0.00
16 8N 4E	3	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	107	\$3,745.00	\$0.00
Yearly Totals				322	\$10,439.35	\$11,445.00
2013						
16 8N 4E	1	3	Fire Protection, Other, Burn, Hand, Hazard Mitigation	23	\$1,840.00	\$0.00
16 8N 4E	1	11	Fire Protection, Other, Burn, Hand, Hazard Mitigation	19	\$1,520.00	\$0.00
16 8N 4E	2	1	Harvest, Mechanical, Regeneration, Machine, Loblolly	91	\$3,185.00	\$157,066.00
Yearly Totals				133	\$6,545.00	\$157,066.00
2014						
16 8N 4E	2	1	Regeneration, Artificial, Plant, Hand, Loblolly	91	\$9,963.80	\$0.00
16 8N 4E	2	1	Site Preparation, Other, Burn, Hand, Cut-Over	91	\$2,717.40	\$0.00
16 8N 4E	2	1	Site Preparation, Chemical, Broadcast, Aerial, Combination	91	\$10,010.00	\$0.00
Yearly Totals				272	\$22,691.20	\$0.00
2015						
16 8N 4E	2	2	Harvest, Mechanical, Regeneration, Machine, Loblolly	83	\$2,905.00	\$156,953.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
				Yearly Totals	83	\$2,905.00	\$156,953.00
2016							
16 8N 4E	2	2	Site Preparation, Other, Burn, Hand, Cut-Over	83	\$2,490.00	\$0.00	
16 8N 4E	2	2	Regeneration, Artificial, Plant, Hand, Loblolly	83	\$9,130.00	\$0.00	
16 8N 4E	2	2	Site Preparation, Chemical, Broadcast, Aerial, Woody	83	\$9,130.00	\$0.00	
16 8N 4E	3	4	Fire Protection, Other, Burn, Hand, Hazard Mitigation	107	\$3,210.00	\$0.00	
16 8N 4E	6	8	Harvest, Mechanical, Thin, Machine, Loblolly	67	\$2,345.00	\$23,716.66	
16 8N 4E	6	9	Harvest, Mechanical, Thin, Machine, Loblolly	26	\$780.00	\$9,231.82	
				Yearly Totals	449	\$27,085.00	\$32,948.48
2017							
16 8N 4E	6	8	Fire Protection, Other, Burn, Hand, Hazard Mitigation	67	\$2,010.00	\$0.00	
16 8N 4E	6	9	Fire Protection, Other, Burn, Hand, Hazard Mitigation	26	\$780.00	\$0.00	
				Yearly Totals	93	\$2,790.00	\$0.00
2018							
16 8N 4E	3	4	Harvest, Mechanical, Regeneration, Machine, Loblolly	107	\$3,745.00	\$191,637.00	
16 8N 4E	3	6	Harvest, Mechanical, Regeneration, Machine, Loblolly	58	\$2,030.00	\$77,407.38	
				Yearly Totals	165	\$5,775.00	\$269,044.38
2019							
16 8N 4E	3	4	Site Preparation, Other, Burn, Hand, Debris	107	\$3,210.00	\$0.00	
16 8N 4E	3	4	Regeneration, Artificial, Plant, Hand, Loblolly	107	\$11,770.00	\$0.00	
16 8N 4E	3	4	Site Preparation, Chemical, Broadcast, Aerial, Woody	107	\$10,165.00	\$0.00	
16 8N 4E	3	6	Regeneration, Artificial, Plant, Hand, Loblolly	58	\$6,380.00	\$0.00	
16 8N 4E	3	6	Site Preparation, Chemical, Broadcast, Aerial, Woody	58	\$5,510.00	\$0.00	
16 8N 4E	3	6	Site Preparation, Other, Burn, Hand, Debris	58	\$1,740.00	\$0.00	

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
				Yearly Totals	495	\$38,775.00	\$0.00
2020							
16 8N 4E	1	3	Fire Protection, Other, Burn, Hand, Hazard Mitigation	23	\$677.10	\$0.00	
16 8N 4E	1	11	Fire Protection, Other, Burn, Hand, Hazard Mitigation	19	\$573.30	\$0.00	
				Yearly Totals	42	\$1,250.40	\$0.00
2021							
16 8N 4E	1	3	Harvest, Mechanical, Thin, Machine, Loblolly	23	\$805.00	\$14,625.01	
16 8N 4E	1	11	Harvest, Mechanical, Thin, Machine, Loblolly	19	\$665.00	\$8,699.91	
				Yearly Totals	42	\$1,470.00	\$23,324.92
				Grand Totals	2,096	\$119,725.95	\$650,781.78