



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
HARRISON COUNTY BOE

Prepared By:
Randy Wilson
MS Forestry Commission

Time Period Covered by This Plan:
2011 - 2021

Date Plan Prepared:
2012-02-15

Plan Type:
Stewardship / Stewardship

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

Property Name: 16_5_10

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LANDOWNER INFORMATION

Name: HARRISON COUNTY BOE
Mailing Address: 11072 Highway 49
City, State, Zip: Gulfport, MS 39503
Country: United States of America
Contact Numbers: Home Number:
Office Number: 228-539-6503
Fax Number:
E-mail Address: jtrosclair@harrison.k12.ms.us
Social Security Number (optional): 646000430

FORESTER INFORMATION

Name: Randy Wilson , Service Forester
Forester Number: 00000
Organization: MS Forestry Commission
Street Address: 14601 County Farm Rd.
City, State, Zip: Gulfport, MS 39503
Contact Numbers: Office Number: 228-831-3359
Fax Number:
E-mail Address: rwilson@mfc.state.ms.us

PROPERTY LOCATION

County: Harrison Total Acres: 644 Latitude: -88.99 Longitude: 30.61
Section: 16 Township: 5S Range: 10W

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.

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OBJECTIVES

Timber Production

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

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information

Two hundred and eight-six (286) acres of this section are mature longleaf and slash pine sawtimber. One hundred and eighty-four (184) acres are in slash pine plantations. The 170 acres remaining are stocked with mixed pine and hardwood in the sawtimber class size along Choctaw Creek and the other drains of the section. These 170 acres will be maintained as streamside management zones in accordance with Mississippi's Best Management Practices.

This section has a 200 acre fence enclosed foxpen located in the center of the section.

This section can be accessed by USFS Road 425 off of South Carrbridge Road or USFS Road 419-C off of Blackwell Farm Road, east of Morris Hill Landmark Church.

Recommended Activities

During the period covered by this management plan, prescribed fire, thinnings, regeneration harvests, invasive species control and boundary line maintenance will be performed in accordance with the management objectives of this section.

Water Resources

Choctaw Creek has been identified as a perennial water resource and will be managed in accordance with Mississippi's Best Management practices as a streamside management zone (SMZ). Intermittent streams and drains identified will be also 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

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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. However the gopher tortoise is present on the surrounding USFS 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.

Archeological/Cultural Resources

These resources can include churches, cemeteries and old home sites.

No archeological or cultural resources were identified during the reconnaissance of this section. However if any such resources are discovered on this section, the appropriate procedures will be taken to protect these sensitive areas.

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.

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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

Boundary lines are scheduled to be maintained on this section in 2017.

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.

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

This section is currently under a hunting lease and is generating annual revenue. This section will continue to be managed in such a manner as to promote the leasing of the land for hunting, fishing and recreational opportunities. While consideration will be given to the current leaseholder, recreational usage will not outweigh the approved silvicultural practices scheduled on this section.

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SOIL TYPES

Harleston

The Harleston component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces. 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

Nahunta

The Nahunta component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of loamy and 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 not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria. Loblolly Site Index = 95.

Saucier

The Saucier component makes up 50 percent of the map unit. Slopes are 2 to 5 percent. This component is on coastal plains. The parent material consists of loamy over clayey marine deposits. 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 low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 39 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. The Susquehanna component makes up 25 percent of the map unit. Slopes are 2 to 5 percent. This component is on coastal plains. The parent material consists of clayey marine 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 very low. Available water to a depth of 60 inches is high. Shrink-swell potential is high. 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.

Poarch

The Poarch component makes up 85 percent of the map unit. Slopes are 5 to 12 percent. This component is on hillslopes. The parent material consists of sandy and 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.

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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 45 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 73. Slash Site Index = 90.

Smithton

The Smithton component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. 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, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. Loblolly Site Index = 86.

Poarch

The Poarch component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on ridges. The parent material consists of sandy and 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 moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 45 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 73. Slash Site Index = 90.

Ponzer

The Ponzer component makes up 59 percent of the map unit. Slopes are 0 to 1 percent. This component is on drainageways. The parent material consists of Decomposed Organic Material over Loamy Alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very 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, April, May, December. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface. The Smithton component makes up 18 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. 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 frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

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STRATA

Strata 1 (Stands 1, 5, 6, and 9)

Stand Description

This strata is composed of 184 acres of machine planted slash pine in the pulpwood size class. The strata is composed of two similar ages (21 and 24 years old) and will be treated the same from a silvicultural viewpoint. The strata currently has a basal area of 90 and 485 trees per acre.

Stand Recommendations

This strata is scheduled to receive a prescribed burn in 2012, 2015 and 2019.

A first thinning is scheduled for 2017. The forester in charge will perform a timber cruise to determine tree diameter, height, tons per acre and basal area. If the strata has sufficient basal area across all stands, then the forester will conduct a thinning to reduce the basal area to 65. This may be achieved by row thinning, corridor thinning or operator select thinning.

If the strata is found to be deficient in both diameter, and basal area and the growth is stagnant, the strata may require a regeneration harvest. If this is the case, the landowner will be notified and site preparation and regeneration costs discussed prior to scheduling the harvest.

Activity Recommendations

Harvest

This strata is scheduled to receive a first thinning in 2017. The basal area when cruised should exceed 90 to justify the thinning. If the basal area is found to exceed 90, the thinning will be conducted in such a manner as to reduce the basal area to between 65 and 70.

As discussed previously, this strata may require a regeneration harvest and subsequent site preparation and reforestation. Until this can be shown definitely, reforestation costs will not be associated with this strata. However, thinning revenue will be reflected.

Prescribed Fire

A prescribed fire is recommended in 2012, 2015, and 2019 to reduce vegetative competition as well as the fuel loading and which will in turn reduce the risk of a wildfire damaging this strata.

A prescribed burning plan must be developed and followed. A certified prescribed burn manager must be on site during the prescribed burn.

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Strata 2 (Stand 3 and 7)

Stand Description

This strata is 286 acres and is composed of uneven aged longleaf and slash pine sawtimber, with an understory of undesirable hardwoods and brush. Basal area is 60 with 275 trees per acre. Understory competition is medium to high throughout the strata with little to no natural regeneration in place.

Stand Recommendations

This strata will be prescribed burned in 2012, 2015 and 2019. The frequent use of prescribed fire may lead to natural regeneration prior to the scheduled harvests in this strata.

A harvest will be performed in 2017 (Stand # 7 - 158 acres) and 2020 (Stand #3 - 128 acres).

Activity Recommendations

Prescribed Fire

A prescribed fire is recommended in 2012, 2015, and 2019 to reduce vegetative competition as well as the fuel loading and which will in turn reduce the risk of a wildfire damaging this strata.

A prescribed burning plan must be developed and followed. A certified prescribed burn manager must be on site during the prescribed burn.

Harvest

Stand 7 is scheduled to receive a harvest in 2017. The forester in charge will determine volumes and values prior to the sale. The forester, or his designee, will also delineate the sale boundary, prepare the sale contract and oversee the harvesting operations.

In the event sufficient natural regeneration has been established, the sale contract will provide safeguards against damaging regeneration.

Harvest

Stand 3 is scheduled to receive a harvest in 2020. The forester in charge will determine volumes and values prior to the sale. The forester, or his designee, will also delineate the sale boundary, prepare the sale contract and oversee the harvesting operations.

In the event sufficient natural regeneration has been established, the sale contract will provide safeguards against damaging regeneration.

Site Preparation

Chemical site preparation may be required in Stand 7 (2018) and Stand 3 (2021). The forester in charge will determine site preparation needs following the harvests.

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Regeneration

Following the harvest in Stand 7 (2017) and Stand 3 (2020), the area will be machine planted with improved longleaf bare root seedlings in 2018 and 2021. The seedlings will be planted at a rate of 605 trees per acre.

The forester will determine the acreage to be planted, develop the tree planting contract and oversee the planting to ensure contract compliance.

Strata 5 (Stands 2, 4, 8, and 10)

Stand Description

This strata is 163 acres and is composed of mixed pine and hardwood in the sawtimber size class. In accordance with Mississippi's Best Management Practices, this strata will be managed as a streamside management zone (SMZ).

Strata Recommendations

This strata is scheduled to receive a prescribed burn in 2012, 2015 and 2019.

During extremely dry periods this strata may prove operable. If such conditions exist, the forester will evaluate these areas and possibly schedule a harvest at their discretion. Great care will be taken in this strata to ensure that harvest activities do not interfere with Mississippi's Best Management Practices.

Activity Recommendations

Prescribed Fire

A prescribed fire is recommended in 2012, 2015, and 2019 to reduce vegetative competition as well as the fuel loading and which will in turn reduce the risk of a wildfire damaging this strata.

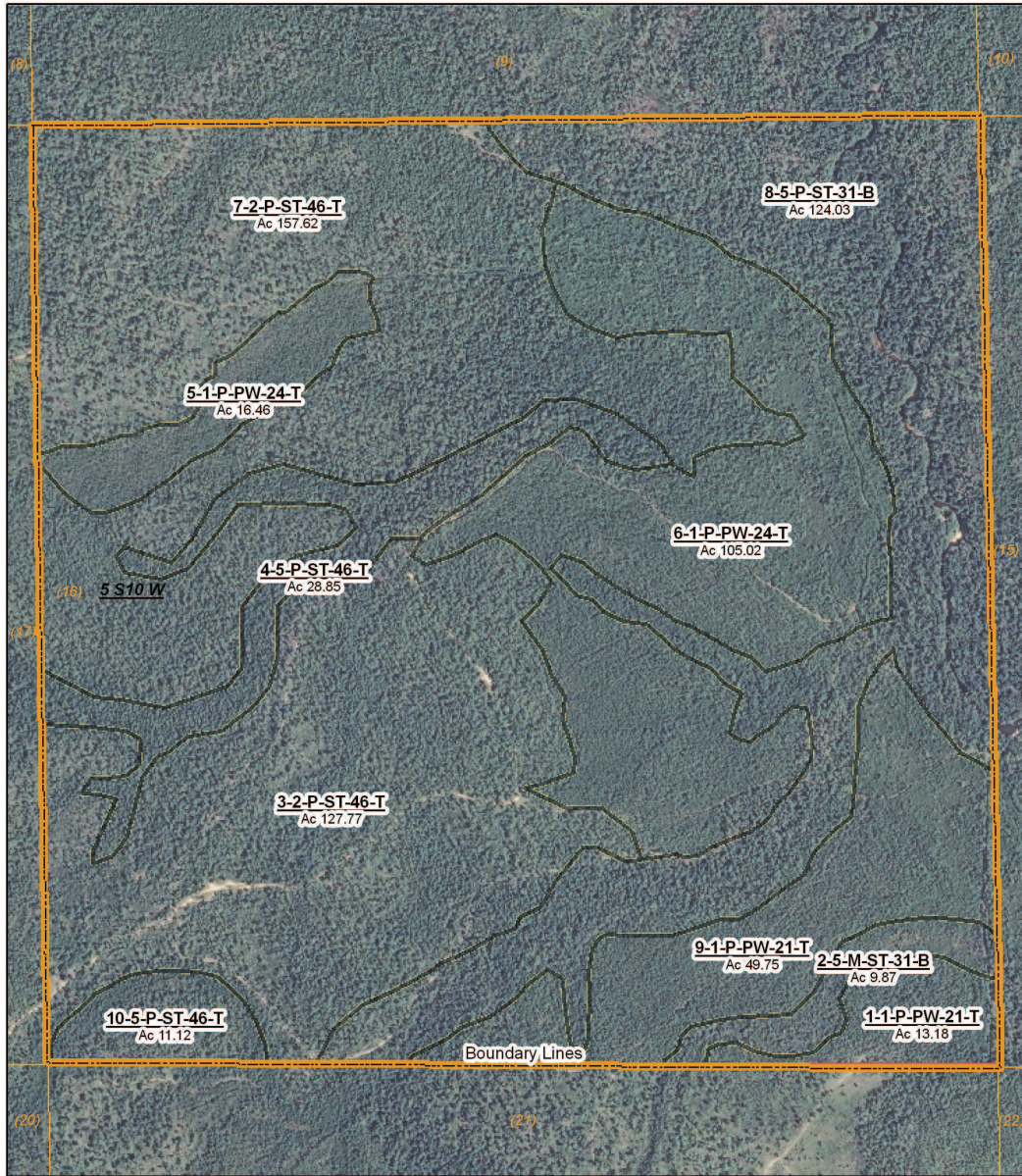
A prescribed burning plan must be developed and followed. A certified prescribed burn manager must be on site during the prescribed burn.

SECTION 16, TOWNSHIP 05S, RANGE 10W

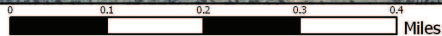


SECTION 16, TOWNSHIP 05S, RANGE 10W

HARRISON COUNTY BOARD OF EDUCATION
2011 to 2021
640 ACRES



(10/25/2011)



Stand Activity Schedule for
HARRISON COUNTY BOE
16 5S 10W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
1	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	13	\$195.00	\$0.00
1	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	16	\$246.90	\$0.00
1	6	Fire Protection, Other, Burn, Hand, Fuel Reduction	105	\$1,575.30	\$0.00
1	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	50	\$746.25	\$0.00
2	3	Fire Protection, Other, Burn, Hand, Fuel Reduction	128	\$2,555.40	\$0.00
2	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	158	\$3,152.40	\$0.00
5	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	10	\$150.00	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	29	\$580.00	\$0.00
5	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	10	\$200.00	\$0.00
5	10	Fire Protection, Other, Burn, Hand, Fuel Reduction	5	\$100.00	\$0.00
Yearly Totals			524	\$9,501.25	\$0.00
2015					
1	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	13	\$329.50	\$0.00
1	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	16	\$411.50	\$0.00
1	6	Fire Protection, Other, Burn, Hand, Fuel Reduction	105	\$2,625.00	\$0.00
1	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	50	\$1,243.75	\$0.00
2	3	Fire Protection, Other, Burn, Hand, Fuel Reduction	128	\$3,200.00	\$0.00
2	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	158	\$3,950.00	\$0.00
5	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	10	\$250.00	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	29	\$725.00	\$0.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
5	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	10	\$250.00	\$0.00
5	10	Fire Protection, Other, Burn, Hand, Fuel Reduction	5	\$125.00	\$0.00
Yearly Totals			524	\$13,109.75	\$0.00
2017					
1	1	Harvest, Mechanical, Thin, Machine, Slash	13	\$455.00	\$72.41
1	5	Harvest, Mechanical, Thin, Machine, Slash	16	\$560.00	\$1,856.00
1	6	Harvest, Mechanical, Thin, Machine, Slash	116	\$4,060.00	\$17,803.68
1	9	Harvest, Mechanical, Thin, Machine, Slash	50	\$1,750.00	\$72.50
2	7	Harvest, Mechanical, Regeneration, Machine, Loblolly	158	\$5,530.00	\$184,632.48
Yearly Totals			353	\$12,355.00	\$204,437.07
2018					
2	7	Regeneration, Artificial, Plant, Machine, Loblolly	158	\$15,010.00	\$0.00
2	7	Site Preparation, Chemical, Broadcast, Aerial, Woody	158	\$13,430.00	\$0.00
Yearly Totals			316	\$28,440.00	\$0.00
2019					
1	1	Fire Protection, Other, Burn, Hand, Fuel Reduction	13	\$329.50	\$0.00
1	5	Fire Protection, Other, Burn, Hand, Fuel Reduction	16	\$411.50	\$0.00
1	6	Fire Protection, Other, Burn, Hand, Fuel Reduction	105	\$2,625.00	\$0.00
1	9	Fire Protection, Other, Burn, Hand, Fuel Reduction	50	\$1,243.75	\$0.00
2	3	Fire Protection, Other, Burn, Hand, Fuel Reduction	128	\$3,200.00	\$0.00
2	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	158	\$3,950.00	\$0.00
5	2	Fire Protection, Other, Burn, Hand, Fuel Reduction	10	\$250.00	\$0.00
5	4	Fire Protection, Other, Burn, Hand, Fuel Reduction	29	\$725.00	\$0.00
5	8	Fire Protection, Other, Burn, Hand, Fuel Reduction	124	\$3,100.00	\$0.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
5	10	Fire Protection, Other, Burn, Hand, Hazard Mitigation	11	\$275.00	\$0.00
Yearly Totals			644	\$16,109.75	\$0.00
2020					
2	3	Harvest, Mechanical, Regeneration, Machine, Loblolly	128	\$4,480.00	\$149,575.68
Yearly Totals			128	\$4,480.00	\$149,575.68
2021					
2	3	Regeneration, Artificial, Plant, Machine, Loblolly	128	\$12,160.00	\$0.00
2	3	Site Preparation, Chemical, Broadcast, Aerial, Woody	128	\$10,880.00	\$0.00
Yearly Totals			256	\$23,040.00	\$0.00
Grand Totals			2,745	\$107,035.75	\$354,012.75