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# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: George County BOE

Prepared By: Vernon Eugene Cooper MFC

Time Period Covered by This Plan: 2012 - 2021

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Plan Type: Stewardship / Stewardship

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

Property Name: S 16 1S 5W

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# LANDOWNER INFORMATION

George County BOE Name:

Mailing Address: 5152

Main St.

City, State, Zip: Lucedale, MS 39452 Country: United States of America

Contact Numbers: Home Number:

> Office Number: 601-947-6993

Fax Number:

E-mail Address:

Social Security Number (optional): 646000379

# FORESTER INFORMATION

Name: Vernon Eugene Cooper, Service Forester

Forester Number: 00960 **MFC** Organization: Street Address:

1165

Fig Farm Rd. Lucedale, MS 39452 City, State, Zip:

Contact Numbers: Office Number: 601-947-4961

Fax Number:

E-mail Address: ecooper@mfc.state.ms.us

# PROPERTY LOCATION

County: George Total Acres: 644 Latitude: -88.49 Longitude: 30.96

Section: 16 Township: 1S 5W Range:

### 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 section located in north-east portion of the George County. Lloyd Eubanks road provides access to the section along the southern property line. There is also access to the northeast corner of the section on Hancock road.

The section is comprised of multiply age stands with the majority being made up of mixed longleaf, shortleaf and slash pine. These stands comprised approximately 313 acres of this 82 is presently in the process of being regenerated. There are 46 acres in Loblolly and Slash pine plantations and 102 acres in Longleaf pine plantation that was natural regenerated. after harvesting in 2004.

There are 97 acres in bottomlands with a species composition of Slash pine, yellow-poplar, black gum, red maple, white bay and others. The remaining acreage is nonproductive being in roads easements. There are no utility easements located on the section.

This section contains a total of  $\pm$ -643 acres of this  $\pm$ -2 acres are non-forested with no management activities currently planned, and  $\pm$ -641 acres are in timber production.

Cogan grass will be controlled as neccessary on the section with harvest areas being priority during the life of the plan.

#### Water Resources

Scarbrough Creek flows through the section entering along the northern section line and exiting the on the eastern section line in the northeastern corner of the section. Scarbrough Creek is part of the Dog river water shed flowing which flows into the Pascagoula River at Moss Point. Other water resources found on section are small drains.

# Archeological and Cultural Resources

There are no known archeological or cultural sites on this section. These sites can include churches, old cemeteries, natural springs, Indian mounds, home sites or other historical sites.

Prescribed practices should be carried out in a manner that will minimize adverse impacts on archeological and or cultural resources. All laws, regulations, and guidelines will be followed if such areas are identified, and all management practices will be carried out in a manner to have positive effects on these resources.

#### 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:

# **SOIL TYPES**

#### Dorovan

The Dorovan component makes up 63 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions. The parent material consists of decomposed organic material. 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 very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 50 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 Johnston component makes up 22 percent of the map unit. Slopes are 0 to 1 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 very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 13 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

### Benndale

The Benndale component makes up 85 percent of the map unit. Slopes are 5 to 12 percent. This component is on coastal plains. The parent material consists of sandy loam alluvium 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 94. Longleaf Site Index = 79. Slash Site Index = 94.

### **McLaurin**

The McLaurin component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on coastal plains. 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 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 2s. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 72. Slash Site Index = 90.

# Alaga

The Alaga component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on coastal plains. The parent material consists of sandy alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. 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 2 percent. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. Loblolly Site Index = 80. Longleaf Site Index = 70. Slash Site Index = 80.

### McLaurin

The McLaurin component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on coastal plains. The parent material consists of loamy 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 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 2e. This soil does not meet hydric criteria. Loblolly Site Index = 90. Longleaf Site Index = 72. Slash Site Index = 90.

#### Lakeland

The Lakeland component makes up 85 percent of the map unit. Slopes are 5 to 17 percent. This component is on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. 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 6s. This soil does not meet hydric criteria. Loblolly Site Index = 75. Longleaf Site Index = 60. Slash Site Index = 75.

# Susquehanna

The Susquehanna component makes up 72 percent of the map unit. Slopes are 12 to 17 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 6e. This soil does not meet hydric criteria. The Benndale component makes up 13 percent of the map unit. Slopes are 8 to 12 percent. This component is on coastal plains. The parent material consists of sandy loam alluvium 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 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 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

# Cahaba(smithdale)

The Cahaba(smithdale) component makes up 85 percent of the map unit. Slopes are 12 to 17 percent. This component is on coastal plains. 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 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. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

### Eustis

The Eustis component makes up 85 percent of the map unit. Slopes are 12 to 20 percent. This component is on hillslopes. The parent material consists of Sandy Marine Deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is

somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. 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 7s. This soil does not meet hydric criteria. Loblolly Site Index = 80. Longleaf Site Index = 65. Slash Site Index = 80.

# 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.

# 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.

#### 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.

### **STANDS**

2-6-CC-U Stand acres 2.

# Stand Description

This stand is a clear cut with all merchantable timber being removed in the Winter of 2010. It is scheduled to be replanted this fiscal year.

The Agrae and McLaren soils found on this site are moderately highly productive and well drained which makes operable year round. Topography of this stand are level to rolling with slopes ranging from 3 to 8 percent.

Site index for this site is 85 for a base age of 50 years.

#### Stand Recommendations

This stand is a clear cut with all merchantable timber being removed in the Winter of 2010. It is scheduled to be replanted this fiscal year.

The Agrae and McLaren soils found on this site are moderately highly productive and well drained which makes operable year round. Topography of this stand are level to rolling with slopes ranging from 3 to 8 percent.

Site index for this site is 85 for a base age of 50 years.

# **Activity Recommendations**

# Stie Preparation

o The stand is recommended to have an aerial application of herbicides applied in the summer of 2011 prior to replanting. The application of herbicide will reduce the amount of competing vegetation on the stand, which will provide an establishment period for the pine seedling that will be planted the following winter.

### Site Preparation

o The stand should be burned six to eight weeks after the chemical application has been applied to reduce debris that may impede tree planting.

### Regeneration

o The site will be planted during January of 2012 with genetically improved loblolly or containerized longleaf pine seedlings on a 6 by 12 foot spacing with a target of 605 trees per acre.

# 4-2-P-RP-5-U Stand acres 7

# Stand Description

This is a 8 acre longleaf pine plantation that was planted in the winter 2006/07. McLauren soils is the dominant soil on this site with a site index of 80 for longleaf. The

topography is rolling hills with a slopes from 5 to 8 percent.

This stand was hand planted at 545 seedling per acre with a spacing of 8x10 feet between seedlings.

#### Stand Recommendations

The stand will be monitored for insect and disease damage while seedlings are in the grass and sapling stage. The stand revisited later to determine when stand has obtained sufficent size and volume to where a thin can be recommended.

#### 3-3-P-PW-18-U Stand acres 30

# Stand Description

This stand is a upland pine stand planted in 1993 in slash seedlings. This stand is approximatily 30 acres in size with a basal area of 78sq. ft. and average diameter of 7.3 and height of 40 ft.

This stand was to be thinned in 2010 but due to the amount of fusiform rust in stand it has actually thinned itself. The stand will be monitered until 2017 when it is scheduled for thinning.

McLaurin fine sandy loam is the dominant soil type for this stand with a site index of 85-95 for slash pine. The topography of this stand is flat with slopes less than 5 percent.

#### Stand Recommendations

This stand is a Slash pine plantation was planted in 1993. The stand is scheduled to be thinned in 2017. The residual basal after thinning should be 60-65 sq. ft./ acre of dominant and codominant stems.

# **Activity Recommendations**

#### Harvest

This stand will be thinned removing every fifth row while thinning the remaining four rows removing only the suppressed, forked, and intermeddiate stems. This should leave the stand with approximatily 180-200 stems/ acre and basal area of 65 sq. ft.

# 5-5-P-ST-63-B Stand acres 2

# Stand Description

This stand is comprised of bottomland hardwoods primarily white bay, yellow poplar, black gum along with large old growth slash pine timber. All harvesting operations was conducted in conjuction with harvesting operation on adjcent stands in 2004 where pine sawtimber was removed from the stand.

The soil type for this stand is primarily Dorvan Johnson which is highly productive but extremely wet. The site index for this site is 85-95 for slash pine.

The stand should be protected from any soil erosion and all Ms. Bmp's should be followed.

### Stand Recommendations

This stand will be harvested has part of other harvesting operations on adjoining stands removing timber that can be removed with minimiun soil and water disturbance. This will mean harvesting all merchantable pine and hardwood but leaving a average basal area of 55 to 65 square feet in the residual stand . All MS. BMP's should be followed has regards to this stand. Wildlife enhancement and protection of the water quaility should be maintained.

### 6-5-P-ST-63-B Stand acres 4

### Stand Description

This stand is comprised of bottomland hardwoods primarily white bay, yellow poplar, black gum along with large old growth slash pine timber.

The soil type for this stand is primarily Dorvan Johnson which is highly productive but extremely wet. The site index for this site is 85-95 for slash pine.

The stand should be protected from any soil erosion and all Ms. Bmp's should be followed.

### Stand Recommendations

This stand will be harvested has part of other harvesting operations on adjoining stands removing timber that can be removed with minimiun soil and water disturbance. This will mean harvesting all merchantable pine and hardwood but leaving a average basal area of 55 to 65 square feet in the residual stand . All MS. BMP's should be followed has regards to this stand. Wildlife enhancement and protection of the water quaility should be maintained.

### 7-2-P-RP-7-U Stand acres 94

# Stand Description

This is primarily a upland longleaf pine stand 94 acres in size. The stand was harvested of all merchantable timber in 2005 and naturally regenerated with longleaf regeneration. This stand has a site index for longleaf of 72 with well drained and highly productive soils making it operable year round.

The stand has been burned once in 2007 to release the pine from hardwood competition and for fuel reduction.

### Stand Recommendations

This stand will be monitored and burned for fuel reduction and hardwood control for the remainder to this plan. And should be ready for a first thinning in 2022.

# **Activity Recommendations**

# Fire Protection

A prescribed fire is recommended for this site in order to reduce fuel loading and the potential for a wildfire to occur. A prescribed burning plan must be developed and

followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission (on a limited basis) and other certified prescribed burning vendors are available to conduct prescribed burning.

This stand is scheduled for burning in 2014 and again in 2018.

#### 8-1-P-ST-63-U Stand acres 17

### Stand Description

This is primarily a upland pine stand approximatily seventeen acres in size. The average age of this stand is apprioximately 63 years old. This stand has a site index for longleaf of 85. The stand is composed of primarily slash pine sawtimber with mixed hardwoods. The soils on this stand is made of mostly well drained on the slopes with Dorvan Johnson soils in the drains.

Access to this stand is from Dickerson Sawmill Rd. then South on Hancock Rd which ends at northeast corner of the section.

### Stand Recommendations

This will be a final harvest cut removing all merchantable timber on the stand. The sale will be bid in fall of 2013 with a 12 month contract for removal of timber.

The stand will be chemically site prepped, burned and planted with Slash seedlings in the Winter of 2015. The stand will then be checked in the fall of 2016 for seedling survival.

### **Activity Recommendations**

#### Harvest

This will be a final harvest of all merchantable timber on the stand in 2013. The stand will be cruised prior to sale of timber to establish the value of the stand. The stand will then sold via bid to the highest bidder with a 12 month contract for removal of said timber.

# Site Preparation

Prior to planting the stand will chemically treated through arieal application of herbicide using a mixture of arsenel, glyphosate, garlon, and Arensal AC for removal of undesirable vegatation and woody stems. The stand then will burned 40-45 days after chemical spray to clear the site of logging slash and improve planting conditions.

### Regeneration

This stand will hand planted with combination of loblolly and slash pine seedlings in the Winter of 2015 at a rate 726 seedlings per acre. This will follow up with a survival check in the fall of 2016.

### 9-1-P-ST-63-U Stand acres 36

# Stand Description

This is primarily a upland longleaf pine stand fifty acres in size. The average age of this stand is apprioximately 63 years old. This stand has a site index for longleaf of 85 and is a well drained upland site. The stand is composed of old gowth longleaf timber and hardwoods. The soils on this stand is made of mostly well drained making it operable year round.

### Stand Recommendations

This stand is scheduled to be harvested all merchantable timber in 2013 and will be replanted in 2nd Gen Loblolly pine seedlings at a rate of 605 seedlings acre in the winter of 2015. Prior to planting the site will be chemically treated and burned 4 to 6 weeks after treatment to remove logging slash and for ease of planting.

# **Activity Recommendations**

#### Harvest

The stand will be harvested of all merchanable timber in the Winter of 2013 under a 12 month contract. Following completions to stand will be regenerated.

# Site Preparation

o The stand is recommended to have an aerial application of herbicides applied in the summer prior to replanting. The application of herbicide will reduce the amount of competing vegetation on the stand, which will provide an establishment period for the pine seedling that will be planted the following winter.

### Site Preparation

The site will need to burned with a site prep burn following the areial application of herbicides. This will need to be done 4 to 6 weeks after the chemical application. The purpose of this is to remove any fuels and to provide for a clean planting site.

### Regeneration

This stand will be planted after site prep operations with 2nd gen loblolly seedlings at a rate of 622 seedlings per acre on a 7x 10 foot spacing. Following planting the seedlings will be checked for compliance by MFC crews. The following fall survival checks will be done to see if there as been mortality in the stand. Following the survivial check there are further inspections required to the stand during the life of the plan.

11-4-P-PW-29-U Stand acres 15

# Stand Description

This stand was planted in 1983 Loblolly pine with a 78 basel area and 63 tons per acre in pulpwood and chip-n- saw. The site index for this stand for loblolly pine is 75-85. The soils are mostly well drained upland soils which are moderately productive sandy loam making it operable year round. Access is from Loyld Eubanks Rd which runs parrallel to the stand.

### Stand Recommendations

The stand will be thinned as part of thinning operations on the other to pine plantations on the section. This will be a operator select sale with the removal of every fifth row while thinning the remaining four leaving a residual basal area of 65 sq ft per acre of dominant and co-dominant stems.

## **Activity Recommendations**

### Harvest

The stand will be thinned by removing every 5th row and thinning the remaining four rows remove only damaged, diseased, forked, intermeddiate and suppressed stems from the stand. The stand should be left with a residual basal area of 65 to 70 feet and 200 stems per acre.

### 13-5-P-ST-63-B Stand acres 3

# Stand Description

This stand is comprised of bottomland hardwoods primarily white bay, yellow poplar, black gum along with large old growth slash pine timber. The stand is part of Scarbrough Creek watershed which flows through the northeastern portion of the section. All harvesting operations should be in conjuction with harvesting operation on adjoining stands. The stand should be protected from any soil erosion and all Ms. Bmp's should be followed.

### Stand Recommendations

This stand will be harvested has part of other harvesting operations on adjoining stands removing timber that can be removed with minimiun soil and water disturbance. This will mean harvesting all merchantable pine and hardwood but leaving a average basal area of 55 to 65 square feet in the residual stand . All MS. BMP's should be followed has regards to this stand. Wildlife enhancement and protection of the water quaility should be maintained.

# 14-6-CC-U Stand acres 80

# Stand Description

This stand is a clear cut with all merchantable timber being removed in the Winter of 2010. It is scheduled to be replanted this fiscal year.

The Agrae and Mclauren soils found on this site are moderately highly productive and well drained which makes operable year round. Topography of this stand are level to rolling with slopes ranging from 3 to 8 percent.

Site index for this site is 85 for a base age of 50 years.

### Stand Recommendations

This stand was final harvested and has been chemically sprayed for regeneration of the stand. The stand will be planted in the Winter of 2011 with 2nd Gen. Loblolly seedling @ 622 seedlings per acre. There are no further recommendations for this stand except for monitoring for insect and diease in the stand.

# **Activity Recommendations**

# Site Preparation

This stand will be chemically treated to the summer of 2011 for control of unwanted hardwood regeneration by using a combination of herbicides to achieve control for 3 to 5 years of the hardwood competition.

### Regeneration

o The site will be planted during January of 2012 with genetically improved loblolly pine seedlings on a 6 by 12 foot spacing with a target of 622 trees per acre.

# 16-5-M-ST-64-B Stand Acres 72 Acres

# Stand Description

This stand is comprised of bottomland hardwoods primarily white bay, yellow poplar, black gum along with large old growth slash pine timber. The stand is part of Scarborough Creek watershed which flows through the northeastern portion of the section. All harvesting operations should be in conjunction with harvesting operation on adjacent stands. The stand should be protected from any soil erosion and all Ms. Bmp's should be followed.

### Stand Recommendations

This stand will be harvested has part of other harvesting operations on adjoining stands removing timber that can be removed with minimum soil and water disturbance. This will mean harvesting all merchantable pine and hardwood but leaving a average basal area of 55 to 65 square feet in the residual stand. All MS. BMP's should be followed has regards to this stand. Wildlife enhancement and protection of the water quality should be maintained.

# **Activity Recommendations**

#### Harvest

All harvesting activities will be in conjuction with harvesting on adjacent upland stands. All pine sawtimber will be harvested unless basal area of the stand fall below 50 square feet.

## 22-1-P-ST-64-U Stand acres 158

# Stand Description

This is primarily a upland longleaf pine stand 158 acres in size. The average age of this stand is approximately 64 years old. This stand has a site index for longleaf of 85 and is a well drained upland site. The stand is composed of old growth longleaf timber with some hardwoods composition. The soils on this stand are made of mostly well drained making it operable year round.

#### Stand Recommendation

The stand is recommended to have a final harvest conducted on it in 2019. Once, all of the merchantable timber has been removed the stand needs to have a chemical site preparation and planted with either longleaf or loblolly pine seedlings in 2021.

# **Activity Recommendations**

#### Harvest

o The stand should have a final harvest conducted on it in 2019 and remove all merchantable timber.

# Site Preparation

o The stand is recommended to have an aerial application of herbicides applied in the summer prior to replanting. The application of herbicide will reduce the amount of competing vegetation on the stand, which will provide an establishment period for the pine seedling that will be planted the following winter.

# Site Preparation

o The stand should be burned six to eight weeks after the chemical application has been applied to reduce debris that may impede tree planting.

### Regeneration

o The site will be planted during January of 2021 with genetically improved loblolly or containerized longleaf pine seedlings on a 6 by 12 foot spacing with a target of 605 trees per acre.

#### 18-1-P-ST-64-U

# Stand Description

This is primarily a upland longleaf pine stand 43 acres in size. The average age of this stand is approximately 64 years old. This stand has a site index for longleaf of 85 and is

a well drained upland site. The stand is composed of old growth longleaf timber with some hardwoods composition. The soils on this stand are made of mostly well drained making it operable year round.

#### Stand Recommendations

The stand is recommended to have a final harvest conducted on it in 2013. Once, all of the merchantable timber has been removed the stand needs to have a chemical site preparation, then be burned to remove all debris from the site, and planted with loblolly pine seedlings in 2015.

# **Activity Recommendations**

#### Harvest

o The stand should have a final harvest conducted on it in 2013 and remove all merchantable timber.

# Site Preparation

o The stand is recommended to have an aerial application of herbicides applied in the summer prior to replanting. The application of herbicide will reduce the amount of competing vegetation on the stand, which will provide an establishment period for the pine seedling that will be planted the following winter.

# Site Preparation

o The stand should be burned six to eight weeks after the chemical application has been applied to reduce debris that may impede tree planting.

### Regeneration

o The site will be planted during January of 2015 with genetically improved loblolly or containerized longleaf pine seedlings on a 6 by 12 foot spacing with a target of 605 trees per acre.

#### 21-1-P-ST-64-U Stand Acres 115

# Stand Description

This is primarily a upland longleaf pine stand 115 acres in size. The average age of this stand is approximately 64 years old. This stand has a site index for longleaf of 85 and is a well drained upland site. The stand is composed of old growth longleaf timber with some hardwoods composition. The soils on this stand are made of mostly well drained making it operable year round.

### Stand Recommendations

The stand is recommended to have a final harvest conducted on it in 2015. Once, all of the merchantable timber has been removed the stand needs to have a chemical site preparation and planted with either longleaf or loblolly pine seedlings in 2017.

# **Activity Recommendations**

# Harvest

The stand should have a final harvest conducted on it in 2015 and remove all merchantable timber.

# Site Preparation

o The stand is recommended to have an aerial application of herbicides applied in the summer prior to replanting. The application of herbicide will reduce the amount of competing vegetation on the stand, which will provide an establishment period for the pine seedling that will be planted the following winter.

# Site Preparation

o The stand should be burned six to eight weeks after the chemical application has been applied to reduce debris that may impede tree planting.

# Regeneration

o The site will be planted during January of 2018 with genetically improved loblolly or containerized longleaf pine seedlings on a 6 by 12 foot spacing with a target of 605 trees per acre.

# OTHER PLAN ACTIVITIES

# Boundary Lines

· The section's boundary lines are well established and recommended to be maintained on a five year rotation. The section lines were painted in 2012 and are scheduled to be painted again in 2017.

# Line Description

• The section's boundary lines are well established and recommended to be maintained on a five year rotation. They will be repainted in 2012 and again in 2017.

# Line Recommendations

· The section's woods roads will be maintained on a 5 year rotation in conjunction with the boundary line maintenance unless there are erosion issues that need to be addressed.



# Section 16-1S-5W

Rocky Creek 2012 to 2021 640 Acres

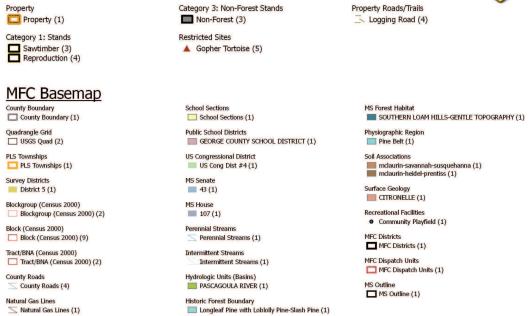




# Legend

# Legend





# Stand Activity Schedule for George County Boe 16 1S 5W

		10 13 344			
Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013					
1	8	Harvest, Mechanical, Final, Machine, Slash	17	\$595.00	\$38,811.00
1	18	Harvest, Mechanical, Final, Machine, Loblolly	40	\$1,414.00	\$35,713.60
		Yearly Totals	57	\$2.009.00	\$74.524.60
2014					
2	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	94	\$2,350.00	\$0.00
		Yearly Totals	94	\$2,350.00	\$0.00
2015					
1	8	Regeneration, Artificial, Plant, Hand, Slash	17	\$1,275.00	\$0.00
1	8	Site Preparation, Chemical, Broadcast, Aerial, Woody	17	\$1,785.00	\$0.00
1	18	Regeneration, Artificial, Plant, Hand, Loblolly	40	\$4,040.00	\$0.00
1	18	Site Preparation, Other, Burn, Hand, Cut-Over	40	\$1,010.00	\$0.00
1	18	Site Preparation, Chemical, Broadcast, Aerial, Woody	40	\$3,636.00	\$0.00
1	21	Harvest, Mechanical, Final, Machine, Longleaf	116	\$4,060.00	\$106,889.36
		Yearly Totals	271	\$15.806.00	\$106,889.36
2017					
1	21	Site Preparation, Chemical, Band, Hand, Woody	116	\$2,900.00	\$0.00
1	21	Site Preparation, Chemical, Broadcast, Aerial, Combination	116	\$11,600.00	\$0.00
1	21	Regeneration, Artificial, Plant, Hand, Longleaf	116	\$18,560.00	\$0.00
3	3	Harvest, Mechanical, Thin, Machine, Slash	30	\$1,050.00	\$11,460.00
4	11	Harvest, Mechanical, Thin, Machine, Longleaf	15	\$525.00	\$12,000.00

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue		
		Yearly Totals	393	\$34,635.00	\$23,460.00		
2018							
2	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	94	\$2,350.00	\$0.00		
		Yearly Totals	94	\$2,350.00	\$0.00		
2019							
1	22	Harvest, Mechanical, Final, Machine, Longleaf	158	\$5,530.00	\$138,458.56		
		Yearly Totals	158	\$5,530.00	\$138.458.56		
2021							
1	22	Regeneration, Artificial, Plant, Hand, Longleaf	158	\$25,280.00	\$0.00		
1	22	Site Preparation, Chemical, Broadcast, Aerial, Combination	158	\$15,800.00	\$0.00		
1	22	Regeneration, Artificial, Re-Seed, Machine, Loblolly	158	\$3,950.00	\$0.00		
		Yearly Totals	474	\$45.030.00	\$0.00		
		Grand Totals	1,542	\$107,710.00	\$343,332.52		