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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Hollandale School District

Prepared By:
Cheryl Arnold
Ms. Forestry Commission

Time Period Covered by This Plan:
2012 - 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: 16-16-7 West

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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LANDOWNER INFORMATION

Name:	Hollandale School District	
Mailing Address:	115 North Street	
City, State, Zip:	Hollandale, MS 38756	
Country:	United States of America	
Contact Numbers:	Home Number:	
	Office Number:	662-827-2276
	Fax Number:	
E-mail Address:		
Social Security Number (optional):		

FORESTER INFORMATION

Name:	Cheryl Arnold , Service Forester	
Forester Number:	01662	
Organization:	Ms. Forestry Commission	
Street Address:	P.O. Box 1646	
	148 N. Edison St.	
City, State, Zip:	Greenville, MS 38702	
Contact Numbers:	Office Number:	662-332-3358
	Fax Number:	
E-mail Address:	carnold@mfc.state.ms.us	

PROPERTY LOCATION

County:	Washington	Total Acres:	640	Latitude:	-90.93	Longitude:	33.23
Section:	16	Township:	16N	Range:	7W		

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 is located in south Washington County 4 miles northwest of Hollandale. Myers Road runs along the east property boundary. On the north, south, and west, agricultural land borders the property. Black Bayou runs through the section on the northwest side. It has about 48.05 acres of nonforest land that includes open areas, a hunting camp site, and the bayou. The forested acres include 417.66 acres of mature sawtimber, 94.63 acres of reproduction, and 76.62 acres of pulpwood.

Water Resources

Perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices. Black Bayou runs through the section on the western side.

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. However, if any should be identified in the future, special management considerations will be applied to protect the species and its habitat. All federal and state regulations will be strictly enforced with regard to endangered and threatened species.

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: Sharkey Clay (Sa, Sb) and Dowling Clay (Da).

Archeological and Cultural resources
No archeological or cultural resources were identified during a reconnaissance of the property. However, if archeological or cultural resources are found in the future on the property, special management considerations will be applied immediately to preserve these sensitive areas. These areas can include churches, old cemetaries, indian mounds, old home sites, and areas of historical interest.

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.*

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 Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining

access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management
Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation
According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

Sa
The Sharkey component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on backswamps. The parent material consists of clayey 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 very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

W
Generated brief soil descriptions are created for major soil components. The Water area is a miscellaneous area.

Sb
The Sharkey component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on backswamps, flood plains. The parent material consists of clayey 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 very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Da
The Dowling component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions. The parent material consists of clayey 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 very low. Available water to a depth of 60 inches is low. Shrink-swell potential is very high. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

STRATA

Strata 1

Strata Description

This is a strata of sawtimber stands containing stand #9 with 320.89 acres and stand #21 with 96.77 acres. The mature bottomland hardwood timber is 71 years old and has approximately 121 trees per acre. Volume estimates include 65 tons of pulpwood per acre and 55 tons of sawtimber per acre. Dominant species include Willow Oak, Overcup Oak, Nuttall Oak, Green Ash, Elm and Pecan.

Strata Recommendations

The Mississippi Forestry Commission recommends a final harvest on stand #21 containing 96.77 acres in the year 2012 with replanting to occur the following year in 2013. This is a mature bottomland hardwood stand that is 71 years old.

The Mississippi Forestry Commission also recommends an additional final harvest to occur in the year 2016 on in stand #9. Only 148 acres of this stand will be included in the final harvest. Replanting will occur the following year in 2017. This sawtimber is old and is declining in quality.

Activity Recommendations

This strata will have two timber sales consisting of final harvests during the life of this plan. Stand #21 with 96.77 acres will undergo a final harvest in the year 2012. Stand #9 will undergo a final harvest in the year 2016, but only 148 acres will be harvested leaving 172.89 acres of sawtimber in the stand. Replanting will occur in the year following harvest in both stands. Any needed site prep will be determined after harvesting.

Harvest

Stand #21 with 96.77 acres will be harvested in the year 2012.

Stand #9 containing 320.89 acres will undergo a final harvest in 2016, but only 148 acres will be removed. The portion of the stand involved in the harvest will be determined at a later date.

Regeneration

Artificial regeneration will occur in stand #21 with 96.77 acres and in stand #9 with 148 acres. The minimum number of seedlings planted will be 302 trees per acre on a

12x12 foot spacing. We will plant Oak seedlings to help ensure a quality stand in the future. All Mississippi Forestry Commission seedling guidelines will be followed regarding regeneration and seedlings.

Strata 2

Strata Description

Strata two contains reproduction and includes stand #22 with 62.29 acres and stand #8 with 32.34 acres. These stands were harvested in 2003. They were replanted by hand with Oak seedlings at a rate of 302 trees per acre in 2004. They are 11 years old.

Stand Recommendations

Since this stand is much younger than the surrounding sawtimber stands, we recommend that it continue to grow for the next 10 years. The Mississippi Forestry Commission will monitor it for general health, insect, disease, and fire activity during this 10 year period.

Strata 3

Strata Description

This strata contains the following pulpwood stands: #1 with 10.06 acres, #3 with 0.36 acres, #5 with 10.37 acres, #7 with 0.79 acres, #16 with 34.54 acres, #18 with 14.72 acres and #20 with 5.78 acres for a total of 94.63 acres. These stands are 16 years old with a basal area of 13 square feet per acre. Volume estimates include 5 tons of pulpwood per acre. Species include Willow Oak, Green Ash, Pecan, and Elm with average diameter of 8 inches.

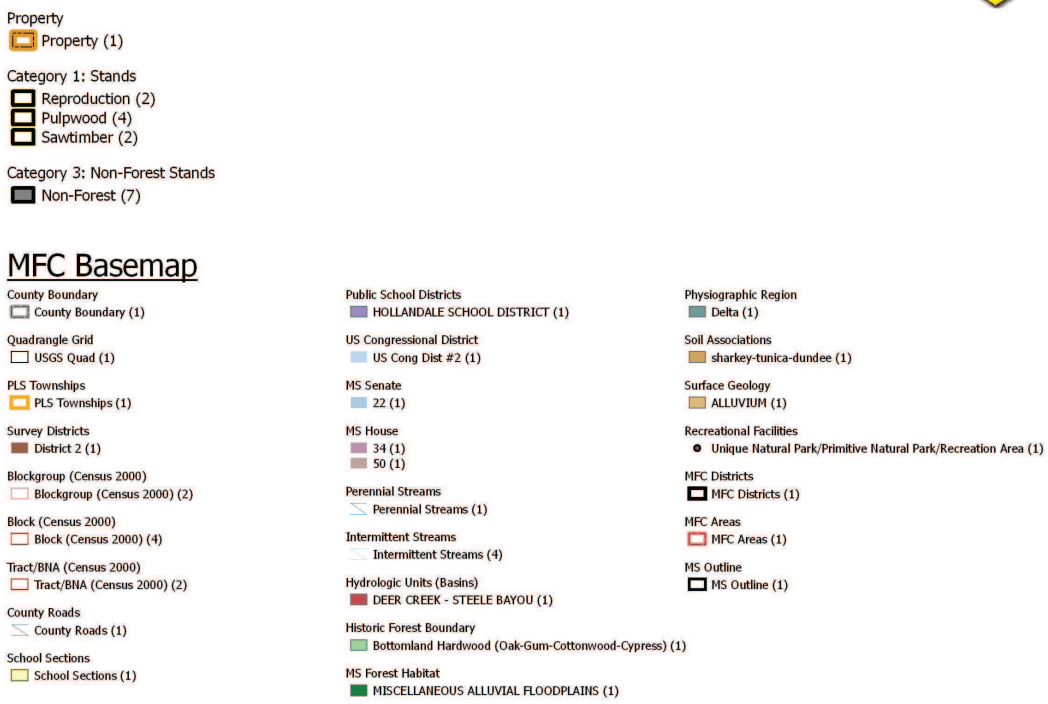
Stand Recommendations

Since these stands are much younger than the surrounding sawtimber stands, we recommend that they continue to grow for the next 10 years. The Mississippi Forestry Commission will monitor it for general health, insect, disease, and fire activity during this 10 year period.

16-16-7

16-16-7 arcola just off hwy 438
2012 to 2021
639.66 Acres

S16-T16N-R7W_Hollandale BOE



Stand Activity Schedule for
Hollandale School District
16 16N 7W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
1	21	Harvest, Mechanical, Final, Machine, Misc Hardwood	97	$3,880.00	$84,875.00
		Yearly Totals	97	$3,880.00	$84,875.00
2013					
1	21	Regeneration, Artificial, Plant, Hand, Misc Red Oak	97	$12,125.00	$0.00
		Yearly Totals	97	$12,125.00	$0.00
2016					
1	9	Harvest, Mechanical, Final, Machine, Misc Hardwood	148	$5,180.00	$114,700.00
		Yearly Totals	148	$5,180.00	$114,700.00
2017					
1	9	Regeneration, Artificial, Plant, Hand, Misc Red Oak	148	$18,500.00	$0.00
		Yearly Totals	148	$18,500.00	$0.00
		Grand Totals	**490**	**$39,685.00**	**$199,575.00**