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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Natchez-Adams School District

> Prepared By: Charles Wellborn MFC

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-24

Plan Type: Stewardship / Stewardship

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

Property Name: 29-T5N-R3W

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LANDOWNER INFORMATION

Organization: Natchez-Adams School District
Name: Natchez-Adams School District

Mailing Address: P.O. Box 1185

City, State, Zip: Natchez, MS 39120 Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-445-2815

Fax Number:

E-mail Address:

Social Security Number (optional):

FORESTER INFORMATION

Name: Charles Wellborn, Adams-Wilk. Service Forester

Forester Number: 00446 Organization: MFC

Street Address: 75C Carthage Point Rd. City, State, Zip: Natchez, MS 39120

Contact Numbers: Office Number: 601-442-0472

Fax Number:

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

PROPERTY LOCATION

County: Adams Total Acres: 805 Latitude: -91.46 Longitude: 31.37

Section: 29 Township: 5N Range: 3W

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. 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

The Mississippi River is the western boundary of this section with most of the area lying within the floodplain of the river. At high river stages, the river flows through much of the section, which frequently floods all but the northeast corner of the section. The flood waters remain for long periods of time. There are approximately 805 acres in this section, but 101 acres are in the Mississippi River. Another 88 acres is in a large slough. Access is through St. Catherine Creek National Wildlife Refuge and the Mississippi Forestry Commission has keys to the gates. Most of this section is dry weather logging only. This section has had a considerable amount of forestry work done over the years. Records show timber sales in 1968, 1976, 1987, 1992 and 2006. The 2006 sale was a regeneration harvest on 9 acres of pine in the northeast corner which was planted in 1971. A large amount of oil well exploration has taken place on the section. The last timber sale was sold in 2010 and has already been harvested.

Archeological or Cultural Resources

No archeological or cultural resources were observed during our inspection of this property.

Water Resources

The Mississippi River is the western boundary of the section. Also, a large slough can be found in the eastern part of the section. Intermittent streams and drains identified 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:

SOIL TYPES

Water

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

Memphis

The Memphis component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on uplands. The parent material consists of loess 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 very 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 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 105.

Memphis

The Memphis component makes up 90 percent of the map unit. Slopes are 8 to 17 percent. This component is on uplands. The parent material consists of loess 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 very 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 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. Loblolly Site Index = 105.

Convent

The Convent component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of alluvium. 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 very high. Shrink-swell potential is low. This soil is

frequently flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The Adler component makes up 32 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium 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 high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

Memphis

The Memphis component makes up 90 percent of the map unit. Slopes are 8 to 17 percent. This component is on uplands. The parent material consists of loess 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 very 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 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. Loblolly Site Index = 105.

Convent

The Convent component makes up 41 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees, flood plains. The parent material consists of alluvium. 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 very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The Bruin component makes up 31 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium 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 high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently 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 5w. This soil meets hydric criteria.

Sharkey

The Sharkey component makes up 90 percent of the map unit. Slopes are 0 to 2 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 low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is frequently 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 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Bruin

The Bruin component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of silty alluvium 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 high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally 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 2w. This soil does not meet hydric criteria.

Tunica

The Tunica component makes up 42 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial plains. The parent material consists of clayey alluvium derived from sedimentary rock over loamy alluvium derived from sedimentary rock. 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 low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The Newellton component makes up 17 percent of the map unit. Slopes are 0 to 2 percent. The parent material consists of 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 low. 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 24 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

GxF

Generated brief soil descriptions are created for major soil components. The Gullied land is a miscellaneous area. The Natchez component makes up 27 percent of the map unit. Slopes are 17 to 60 percent. This component is on hillslopes. The parent material consists of loess 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 very 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 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

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.

Boundary lines were last painted in September 2011. Boundary lines are scheduled to be painted in 2015, 2018 and 2021.

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.

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.

STRATA

Strata 1
Strata Description
Strata 1: Stand 25

Acres: 90

Part of this strata is in the floodplain and part of it is on the extreme slopes that border the floodplain. Bottomland portion contains some fair quality ash and sweetgum. Part of the timber in the bottom is dying back because of frequent high water levels. On the slopes cherrybark oak, ash and water oak, along with hickory, box elder and elm are the major species. The part of this strata on the slopes is too steep to harvest.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Technical

This area should be inspected in 2013 for further management practices.

Strata 2
Strata Description
Strata 2: Stand 31

Acres: 121

The overstory of this stand is made up of sawtimber size ash, sycamore, willow, cottonwood and miscellaneous red oak. The midstory is predominately hackberry and box elder, mostly in the pulpwood size class. This strata was thinned in 1992 and is in good growing condition.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Technical

This area should be inspected in 2013 for further management practices.

Strata 3

Strata Description

Strata 3: Stands 35, 36 and 37

Acres: 240

Most of the sawtimber sized trees in the overstory are ash and cottonwood, with most of the trees in the 16-inch to 20-inch DBH class. However, there are a lot of pulpwood size trees also. These stands are well stocked and could use thinnings to improve growth and species composition.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in Stand 36 in FY 2016 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Harvest

An intermediate cut or thinning should be conducted in Stand 37 in FY 2014 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 4
Strata Description
Strata 4: Stand 2

Acres: 8

This is the highest point in the section and is located on top of the bluffs above the river bottom. The pine plantation that was located here was clearcut and replanted with loblolly pine seedlings in February 2008.

Stand Recommendations

This stand will be managed for loblolly pine on a 35-year rotation. Following the final harvest this area will be regenerated with loblolly pine artificially.

Activity Recommendations

Harvest

Add Text For Harvest, Mechanical, 1st Thin, Machine, Loblolly

Strata 5
Strata Description
Strata 5: Stand 13

Acres: 60

This strata is located on the very steep slopes that go from the river bottom to the top of the bluffs. There are a wide variety of species growing in this area. There are some valuable species such as cherrybark oak and ash, but there is also a lot of magnolia, beech, hickory and other low value species. It would not be feasible to harvest this area unless new harvesting methods are developed that will not cause erosion.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 70-year rotation.

Activity Recommendations

Technical

This area should be inspected in 2013 for further management practices.

Strata 6

Strata Description
Strata 6: Stand 27

Acres: 96

This is an area in which the Mississippi River deposits silt and sand when the river is high and is causing trees in the area to die. A clearcut sale was cut in the fall of 2011 for the purpose of salvaging these trees. This sale brought \$224,471.00 for the schools. There is a lot of ash in the area and the buyer had a special market for those trees. It was discovered that he was selling the wood to buyers in Indonesia for the purpose of manufacturing mandolins.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Technical

This area should be inspected in 2013 for further management practices. The main purpose of this inspection would be to see if the river had deposited cottonwood and other seeds in large enough amounts to restock the area. If not, the area would need to be site prepared and replanted.

OTHER PLAN ACTIVITIES

Boundary Lines
Line Description

Line Recommendations

Activity Recommendations

Property Activities

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

Property Activities

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

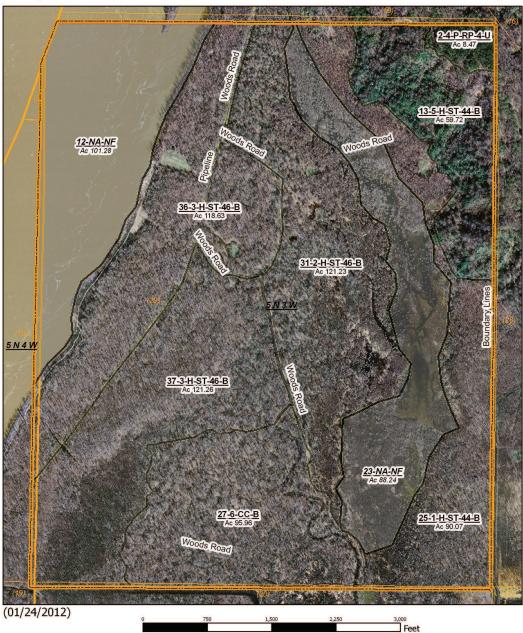
Property Activities

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



NATCHEZ-ADAMS SCHOOL DISTRICT
S29, T5N, R3W, ADAMS COUNTY, MS
2012 to 2021
805 +/- ACRES





S29, T5N, R3W, ADAMS COUNTY- LEGEND





Stand Activity Summary for Natchez-Adams School District 29 5N 3W

Filters Applied: County: Adams

Client Class: District:

Client: Natchez-Adams School Dis

STR: 29 5N 3W

Activity:

Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue		
2013								
29 5N 3W	1	25	Technical, Maintain, Update, Hand, Management Plan	90	\$180.14	\$0.00		
29 5N 3W	2	31	Technical, Maintain, Update, Hand, Management Plan	121	\$242.46	\$0.00		
29 5N 3W	5	13	Technical, Maintain, Update, Hand, Management Plan	60	\$120.00	\$0.00		
29 5N 3W	6	27	Technical, Maintain, Update, Hand, Management Plan	96	\$192.00	\$0.00		
			Yearly Totals	367	\$734.60	\$0.00		
2014								
29 5N 3W	3	37	Harvest, Mechanical, Thin, Machine, Misc Hardwood	121	\$3,025.00	\$43,166.75		
			Yearly Totals	121	\$3,025.00	\$43.166.75		
2016								
29 5N 3W	3	36	Harvest, Mechanical, Thin, Machine, Misc Hardwood	119	\$2,975.00	\$25,704.00		
			Yearly Totals	119	\$2,975.00	\$25,704.00		
2021								
29 5N 3W	4	2	Harvest, Mechanical, 1st Thin, Machine, Loblolly	8	\$200.00	\$1,464.00		
			Yearly Totals	8	\$200.00	\$1,464.00		
			Grand Totals	615	\$6.934.60	\$70,334.75		