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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
North Bolivar 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: S16-T24N-R6W

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**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: North Bolivar School District
Mailing Address: Box 28
City, State, Zip: Shelby, MS 38774
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-398-7832
Fax Number: 662-398-7884
E-mail Address: rhumphrey@nbsd.K12.ms.us
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
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Fax Number:
E-mail Address: carnold@mfc.state.ms.us

PROPERTY LOCATION

County: Bolivar Total Acres: 641 Latitude: -90.82 Longitude: 33.93
Section: 16 Township: 24N Range: 6W

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

Section 16-24N-6W belongs to the North Bolivar School District, and is located on Highway 32 halfway between Gunnison and Shelby. Highway 32 actually runs west and east through the section. The only other road that borders the section would be Grant Road on the west side. Access to the section is difficult using public land because a lake runs through the wooded portion of the section from west to east with no places to cross. This section contains approximately 508.58 acres of open agricultural land and 132.92 acres of forest land.

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. Holmes lake runs east to west through the wooded portion of the section making access difficult as there is no place to cross. It holds water year round mostly.

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. The Mississippi Forestry Commission will continue to look for endangered or threatened plants and animals, and will manage accordingly if any are found in the future.

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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: Alligator Clay (Ac) and Dowling Clay (Dc).

Archeological and Cultural Resources

No Archeological or Cultural Resources were identified during a reconnaissance of the property. These areas can include churches, cemeteries, Indian mounds, old home sites, and other areas of historical importance. If any should ever be found on the section, special management measures will be implemented to preserve these sensitive areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy and vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

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Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

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

Environmental Education

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

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,

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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

Soil Description

The two main soils found on the property include Alligator Clay and Dowling Clay.

Alligator Clay is a light gray soil that occurs on slack-water flats in the eastern portion of Bolivar county in long narrow strips next to bayous and streams. The soil is medium to strongly acid, and has a 3 to 7 percent slope.

Dowling Clay is a dark colored, poorly drained soil consisting of firm clay throughout. It mostly occurs in depressions or abandoned channels of streams, and is generally found in association with other soils such as alligator clay. After each rain, it receives water from the surrounding slopes and remains wet longer than most other soils.

STANDS

Stand Sawtimber (S#1)

Stand Description

This is a bottomland hardwood stand containing 6.31 acres. Dominant species include Green Ash, Elm, Bitter Pecan, Sugarberry, Sweetgum and Willow Oak. Average age of stand is 61 years old. It has a basal area of 107 square feet per acre and 113 trees to the acre as well. This section contains about 67 tons of pulpwood and 60 tons of sawtimber per acre. The timber is very low quality. Access to the stand is by private land only through farm turn rows off of highway 32.

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Stand Recommendations

This stand will be monitored for fire, insect, and disease control during the 10 year life of the plan. Any harvesting will be closely monitored as well. This 6.31 acre stand will undergo a final harvest cut in the year 2018 in conjunction with stand 6 and 9.

Activity Recommendations

6.31 acres will be harvested in the year 2018 in conjunction with stands 6 and 9. The Mississippi Forestry Commission will replant in 2019 with Oak seedlings to improve the future stand. It will be planted on a 12x12 foot spacing at the rate of at least 302 trees per acre. The Mississippi Forestry Commission guidelines for seedling care and planting will be adhered to strictly. Any necessary site prep will be determined once harvesting is complete.

Stand Sawtimber (S#6)

Stand Description

This is a bottomland hardwood stand containing 14.34 acres. Dominant species include Green Ash, Elm, Bitter Pecan, Sugarberry, Sweetgum and Willow Oak. Average age of stand is 61 years old. It has a basal area of 107 square feet per acre and 113 trees to the acre as well. This section contains about 67 tons of pulpwood and 60 tons of sawtimber per acre. The timber is very low quality. Access to the stand is by private land only through farm turn rows off of highway 32.

Stand Recommendations

This stand will be monitored during the ten year life of the plan for fire, insect, and disease control. Any harvesting will be closely monitored. A final harvest is planned in the year 2018 for this 14.34 acre stand in conjunction with a harvest of stands 1 and 9. Artificial regeneration will occur the following year in 2019.

Activity Recommendations

This 14.34 acre stand will undergo a final harvest in 2018. It will be regenerated artificially the following year in 2019. The Mississippi Forestry Commission will plant at least 302 Oak seedlings per acre on a 12x12 foot spacing. Planting Oak will improve the future stand hopefully. All Mississippi Forestry Commission planting and seedling care guidelines will be strictly adhered to. Any necessary site prep will be determined after harvesting is complete.

Stand Sawtimber (S#8)

Stand Description

This is a bottomland hardwood stand containing 75.21 acres. Dominant species include Green Ash, Elm, Bitter Pecan, Sugarberry, Sweetgum and Willow Oak. Average age of stand is 61 years old. It has a basal area of 107 square feet per acre and 113 trees to the acre as well. This section contains about 67 tons of pulpwood and 60 tons of sawtimber per acre. The timber is very low quality. Access to the stand is by private land only through farm turn rows off of highway 32.

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Stand Recommendations

75.21 acres will undergo a final harvest in the year 2012. Artificial regeneration will occur the following year in 2013. The Mississippi Forestry Commission will replant Oak seedlings at a rate of at least 302 seedlings per acre on a 12x12 foot spacing. Mississippi Forestry Commission planting and seedling care guidelines will be strictly adhered to.

Activity Recommendations

The Mississippi Forestry Commission recommends a final harvest on this stand of 75.21 acres in the year 2012 with replanting to occur the following year in 2013. Any necessary site prep will be determined after harvesting is complete.

Stand Sawtimber (S#9)

Stand Description

This is a bottomland hardwood stand containing 36.96 acres. Dominant species include Green Ash, Elm, Bitter Pecan, Sugarberry, Sweetgum and Willow Oak. Average age of stand is 61 years old. It has a basal area of 107 square feet per acre and 113 trees to the acre as well. This section contains about 67 tons of pulpwood and 60 tons of sawtimber per acre. The timber is very low quality. Access to the stand is by private land only through farm turn rows off of highway 32.

Stand Recommendations

Stand #9 containing 36.96 acres will be harvested in the year 2018. Artificial regeneration will occur the following year in 2019.

Activity Recommendations

36.96 acres will undergo a final harvest in the year 2018. It will be replanted the following year in 2019 with Oak seedlings at a rate of at least 302 seedlings per acre on a 12x12 foot spacing. All Mississippi Forestry Commission planting and seedling care guidelines will be strictly adhered to during planting. Any necessary site prep will be determined after harvesting is complete.



16-24-6
North Bolivar School District
2012 to 2021
641.40 Acres





16-24-6 North Bolivar School District

Property

Property (1)

Category 1: Stands

Sawtimber (4)

Category 3: Non-Forest Stands

Non-Forest (6)

MFC Basemap

County Boundary

County Boundary (1)

Quadrangle Grid

USGS Quad (1)

PLS Townships

PLS Townships (1)

Survey Districts

District 2 (1)

Blockgroup (Census 2000)

Blockgroup (Census 2000) (2)

Block (Census 2000)

Block (Census 2000) (5)

Tract/BNA (Census 2000)

Tract/BNA (Census 2000) (2)

County Roads

County Roads (2)

US/State Highways

State Highway (1)

School Sections

School Sections (1)

Public School Districts

NORTH BOLIVAR SCHOOL DISTRICT (1)

US Congressional District

US Cong Dist #2 (1)

MS Senate

12 (1)

MS House

29 (1)

Intermittent Streams

Intermittent Streams (2)

Hydrologic Units (Basins)

BOGUE PHALIA RIVER (1)

Historic Forest Boundary

Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (1)

MS Forest Habitat

YAZOO BASIN WETLANDS (1)

Physiographic Region

Delta (1)

Soil Associations

forestdale-dundee-sharkey (1)

Surface Geology

ALLUVIUM (1)

MFC Districts

MFC Districts (1)

MFC Dispatch Units

MFC Dispatch Units (1)

MS Outline

MS Outline (1)

Stand Activity Schedule for
North Bolivar School District
16 24N 6W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
2	8	Harvest, Mechanical, Final, Machine, Misc Hardwood	75	\$3,000.00	\$70,125.00
Yearly Totals			75	\$3,000.00	\$70,125.00
2013					
2	8	Regeneration, Artificial, Plant, Hand, Misc Red Oak	75	\$9,375.00	\$0.00
Yearly Totals			75	\$9,375.00	\$0.00
2018					
2	1	Harvest, Mechanical, Final, Machine, Misc Hardwood	6	\$210.00	\$5,610.00
2	6	Harvest, Mechanical, Final, Machine, Misc Hardwood	14	\$490.00	\$13,090.00
2	9	Harvest, Mechanical, Final, Machine, Misc Hardwood	37	\$1,295.00	\$34,595.00
Yearly Totals			57	\$1,995.00	\$53,295.00
2019					
2	1	Regeneration, Artificial, Plant, Hand, Misc Red Oak	6	\$750.00	\$0.00
2	6	Regeneration, Artificial, Seed, Hand, Misc Red Oak	14	\$1,750.00	\$0.00
2	9	Regeneration, Artificial, Plant, Hand, Misc Red Oak	37	\$4,625.00	\$0.00
Yearly Totals			57	\$7,125.00	\$0.00
Grand Totals			264	\$21,495.00	\$123,420.00