Vision • Commitment • Pride

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Western Line  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: 16-13-9 West**

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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## LANDOWNER INFORMATION

| | | |
|---|---|---|
| Name: | Western Line School District | |
| Mailing Address: | Hwy 1 South | |
| | PO BOX 50 | |
| City, State, Zip: | Avon , MS 38723 | |
| Country: | United States of America | |
| Contact Numbers: | Home Number: | 662-335-7186 |
| | Office Number: | |
| | 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: | Issaquena | Total Acres: | 309 | Latitude: | -91.08 | Longitude: | 32.96 |
| Section: | 16 | Township: | 13N | Range: | 9W | | |

## 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 north Issaquena County 4 miles south of Glen Allen on the riverside of the Mississippi River main levee. It is bordered by private forest land on the North and South ends. The east side line includes the Mississippi River main levee and the west side line is a chute off the Mississippi river. Because this section is on the riverside of the levee, it is subject to a right of way that the Mississippi River Levee Board maintains that extends 1200 feet from the top of the levee outwards on both sides. However, in this section, the only land affected is a large nonforested area that begins at the base of the levee and includes mostly borrow pits. This section contains 109.21 acres of non forest that includes borrow pits and water areas. This section also contains 39.18 acre of pulpwood and 160.61 acres of sawtimber.

*Water Resources*

The Mississippi River is the major water resource located near this section. All water resources identified during a reconnaissance of the property 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. If any should be found in the future, special management considerations will be applied to protect the species and its habitat. All federal and state guidelines will be followed.

*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: Crevasse (Cv), Sharkey Clay (Se, Sk), Commerce (Ch) and Alluvial (Af).

*Archeological and Cultural Resources*
No archeological or cultural resources were identified during a reconnaissance of the property. If any should be identified in the future, special management measures will be implemented to protect these sensitive areas. These areas can include churches, old cemetaries, indian mounds, old home sites, and areas of historical interests.

## 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

*Cv*
The Crevasse component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood 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 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 occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. Loblolly Site Index = 93.

*Se*
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 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.

*Sk*
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 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.

*Ch*
The Commerce component makes up 90 percent of the map unit. Slopes are 0 to 2 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 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 moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.

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

*Bp*
Generated brief soil descriptions are created for major soil components. The Pits is a miscellaneous area.

*Af*
Generated brief soil descriptions are created for major soil components. The Alluvial land is a miscellaneous area. Loblolly Site Index = 93.

## STRATA

*Strata 1*

Strata Description

Strata one contains two mature hardwood bottomland stands. They are both located between a series of borrow pits at the base of the levee and the chute on the western border. Stand #1 contains 126.46 acres and stand #3 contains 34.15 acres. Both stands are 56 years old. Volume estimates include 75 tons of pulpwood per acre and 70 tons of sawtimber per acre. The average diameter of the trees in the stands is about 22 inches at breast height. Species include Ash, Honey Locust, Pecan and Elm.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will monitor it for general health, fire, insect, and disease activity. Due to the right of way held by the Mississippi River Levee Board, the harvesting method used could be afftected.

*Strata 2*

Strata Description

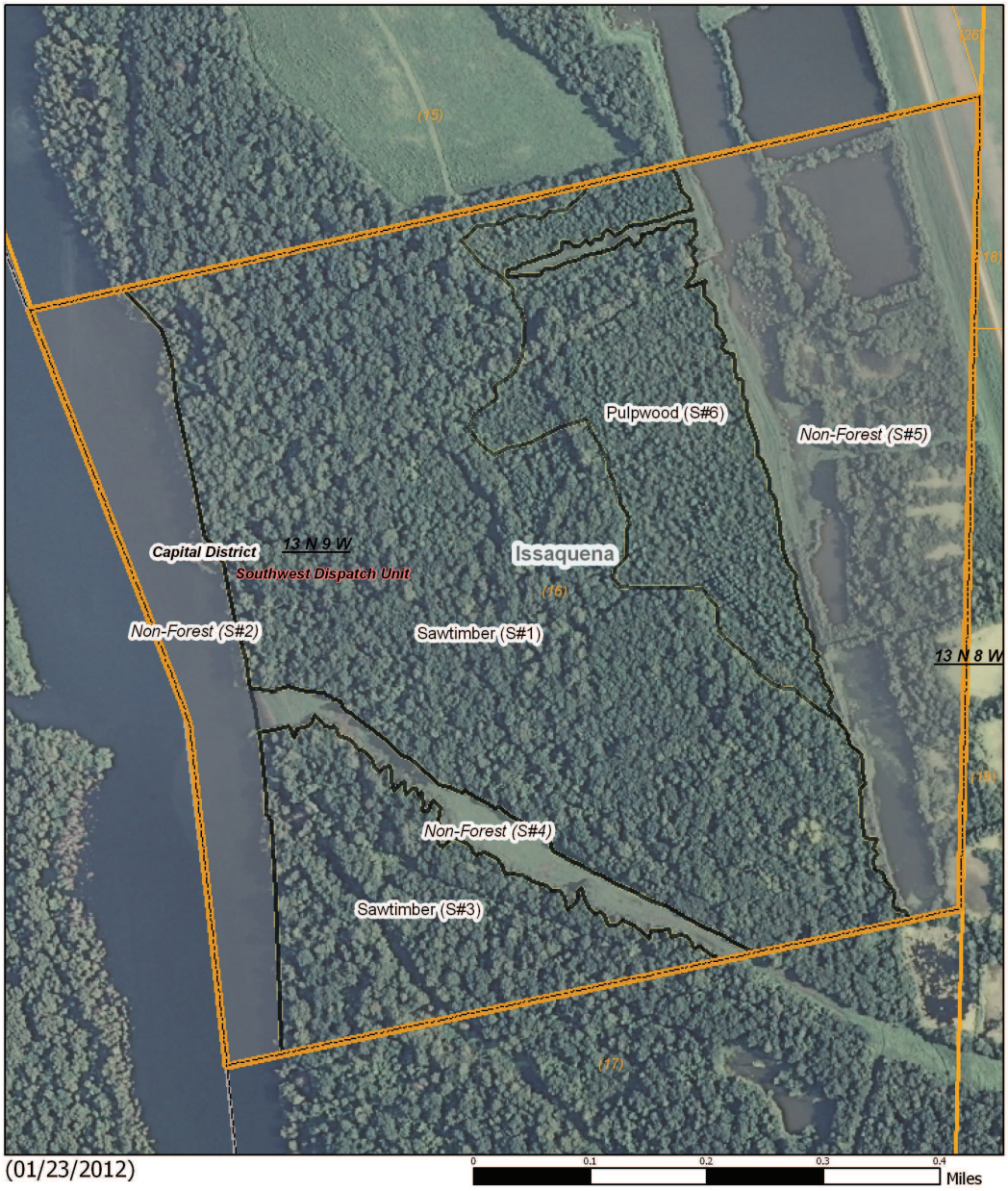
Strata 2 is a 20 year old pulpwood stand (#6) containing 39.18 acres. It has a estimated volume of 20 tons of pulpwood per acre and a basal area of 46 square feet per acre. Dominant species include Cottonwood, Pecan, Sugarberry, and Sycamore. The average diameter of the stand is about 8 inches at breast height.

Stand Recommendations

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

# 16-13-9

Western line School District (Issaquena County)
2012-2021
309.01 Acres



# S16-T13N-R9W Western Line BOE

Property
Property (1)

Category 1: Stands
Sawtimber (2)
Non-Stocked (1)
Pulpwood (1)

Category 3: Non-Forest Stands
Non-Forest (4)

## 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) (1)

Block (Census 2000)
Block (Census 2000) (3)

Tract/BNA (Census 2000)
Tract/BNA (Census 2000) (1)

County Roads
County Roads (1)

School Sections
School Sections (1)

Public School Districts
WESTERN LINE SCHOOL DISTRICT (1)

US Congressional District
US Cong Dist #2 (1)

MS Senate
23 (1)

MS House
54 (1)

Intermittent Streams
Intermittent Streams (1)

Hydrologic Units (Basins)
MS RIVER ABOVE VICKSBURG (1)

Water Bodies
Water Bodies (2)

Historic Forest Boundary
Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (1)

MS Forest Habitat
YAZOO BASIN DRYLANDS (1)

Physiographic Region
Delta (1)

Soil Associations
commerce-robinsonville-crevasse (1)

Surface Geology
ALLUVIUM (1)

MFC Districts
MFC Districts (1)

MFC Areas
MFC Areas (1)

MS Outline
MS Outline (1)

Stand Activity Schedule for
Western Line School District
16 13N 9W

| Strata | Stand | Activity | Acre | Est. Cost | Est. Revenue |
|---|---|---|---|---|---|
| | | | | | |
| | | Yearly Totals | 0 | $0.00 | $0.00 |
| | | **Grand Totals** | **0** | **$0.00** | **$0.00** |