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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Holmes County Schools BOE

Prepared By:
Mac Ables
Miss. Forestry Comm.

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: Thornton Hillside Section

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	8
STRATA	8
OTHER PLAN ACTIVITIES	10
PLAN MAP	11
PLAN MAP	12
PLAN MAP	13
PLAN MAP	14
PLAN MAP	15
PLAN MAP	16
STRATA ACTIVITY SCHEDULE	17

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Holmes County Schools BOE
Mailing Address: P. O. Box 630
City, State, Zip: Lexington, MS 39095
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-834-2175
Fax Number:
E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: Mac Ables , Servicer Forester
Forester Number: 02368
Organization: Miss. Forestry Comm.
Street Address: P.O. Box 483
City, State, Zip: Lexington, MS 39095
Contact Numbers: Office Number: 662-834-3467
Fax Number:
E-mail Address: mables@mfc.state.ms.us

PROPERTY LOCATION

County: Holmes Total Acres: 632 Latitude: -90.3 Longitude: 33.06
Section: 16 Township: 14N Range: 1W

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.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

OBJECTIVES

Fire Protection

The goal is to protect the resource from wildfires, by establishing and maintaining firebreaks around the property; annually inspect possible signs of insect infestations and disease; and prohibit grazing until terminal bud is beyond reach of livestock.

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.

PROPERTY DESCRIPTION

General Property Information

This section is located one mile southeast of Thornton. Access is good from the west from Highway 49 on to Dulaney Road. Located in the Delta it is all bottomland hardwood and a full 640 acres of timber. Several sloughs and drainages hold water most of the year.

Water Resources

No 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.

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 this property. This property was evaluated on October 4, 2011 for endangered species. For more information on endangered species in your area, you may visit: museum.mdwfp.com/science/ms_endangered_species.html

Archeological and Special Sites

This property was evaluated for Archeological and special sites on October 04, 2011. During the evaluation, there were no sites located throughout the property. For more information on historic preservations, contact the Mississippi Department of Archives and History or visit <http://mdah.state.ms.us/hpres>.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

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: The Alligator component.

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. Practices such as thinning in pine stands or marked timber sales in hardwoods are often recommended. Once a stand has reached its maximum density, the growth rate begins to decline. Once the growth rate declines, the overall health of the stand begins to decline. Thinning or marked timber sales reduce the stand density, allowing the growth rate to increase thus increasing the overall vigor of the stand. Prescribed burning is often recommended to reduce hardwood competition within pine stands. A reduction in competition will assist in a faster growth rate thus creating a healthy vigorous stand.

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

MISSISSIPPI FORESTRY COMMISSION FOREST STEWARDSHIP MANAGEMENT PLAN

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 any natural or artificial regeneration areas.

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 should be painted in 2013 and 2018.

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.

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,

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

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.

Several practices can be carried out throughout this property to help increase wildlife habitat. Early successional plants made up of native grasses are beneficial to wildlife. These early successional habitats provide forbs, and shrubs that are low to the ground and extremely beneficial to smaller wildlife species. A balance of grasses, forbs and shrubs should be maintained along road sides, fire breaks and open areas throughout the property. Recommended practices to maintain a well balanced plant community are disking and burning.

ACCESS ROADS : Access roads and fire breaks often give opportunity for vegetation management. Areas that exceed in width along access roads throughout this property should be disked on a 3 year rotation and managed for native grasses. Disking down existing water bars and water turnouts should be avoided.

FIRE BREAKS: Fire breaks can be managed in many ways. Selected areas where fire breaks are long and narrow can serve as annual food plots or areas to disk and manage for natural warm season grasses. Areas that are not used as annual food plots should be disked on a 3 year rotation to help maintain the early stages of succession. Disking down water bars and water turn outs should be avoided on permanent fire breaks.

OPEN AREAS: Open areas throughout this property should be used for annual seasonal planting or placed on a prescribed burning regime.

- Disking will reduce plant density and releases the natural seedbed to sunlight. This will allow desired natural vegetation to germinate from the seedbed and create and diversity of desired native plants. Disking should be done in the fall or winter on a 3 year rotation. Disking should be done between October-February on a 2-3 year rotation.
- Prescribed Fire Prescribed burning will create a balanced diversity of native warm season grasses that are desired by wildlife. Prescribed fire will also help control undesired hardwoods from regenerating within the open areas. Fire helps to increase food availability by letting more sunlight reach the forest floor, encouraging new growth of native plants. Burning should be done in the spring season on a 2-3 year rotation. March is the recommended month for prescribed fire. For more information on prescribed burning, you may contact your local Mississippi Forestry Commission county office.
- Seasonal Planting- Long and narrow food plots are recommended. Food plots should be established in areas where sunlight is not excluded. Once food plots are established, soil testing is highly recommended. A soil test will give the exact prescription for proper fertilization. The abundance and condition of wildlife are related directly to the soil. Proper fertilization will dramatically increase forage production in return providing an abundance of habitat for native wildlife. Open areas can be planted in either/or warm or cool season plants. Warm season plantings can include but not limited to plants such as cowpeas, American jointvetch, alyce clover, or white clover. Cool season plantings can include but not limited to wheat, clovers and oats. Rye grass is not recommended because of its density at ground level after the growing season. Other plants such as Honeysuckle and Common Ragweed are excellent sources of protein and should be fertilized throughout the growing season.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

- Bush Hogging : Clipping is not recommended. Clipping increases plant density at ground level and is not effective in controlling undesired hardwood species. If clipping is necessary, it should be avoided during the nesting seasons (April 1-August 15th). Clipping is the least desired practice for wildlife management.

Additional publications for wildlife management are attached at the back of this plan. These publications will give additional information on open field management, stem injection, quality vegetation management and controlling non native grasses. You can also visit www.mdwfp.com/privatelands for more information.

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

Ag

The Alligator component makes up 90 percent of the map unit. Slopes are 3 to 5 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.

STRATA

Strata 1

Strata Description

Strata # 1: Consist of Stand # 14,16, and 17

This strata is made up of 66.68 acres of bottomland pulpwood that was established in 1990. This strata consists of Water Oak, Willow Oak, Sugarberry, Cherrybark Oak, Swamp Chestnut Oak, Sweetgum, Boxelder, Shumard Oak, Overcup Oak, Persimmon and Pecan.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Stand Recommendations

At this time no activities are planned. This strata is a young pulpwood stand. This strata should be allowed to grow over the life of this plan. It should be managed on a 70 year rotation using sound forestry management practices.

Strata 2

Strata Description

Strata # 2: Consist of Stand # 5, 7,11,12, 15 and 25.

This strata is made up of 428 acres of natural pine sawtimber that was established in 1938. This strata consists of Ash, Bitter Pecan, Cherrybark Oak, Maple, Nuttall Oak, Overcup Oak, Sweetgum, Water Oak and Willow Oak. This strata has an average DBH of 16 inches and an average tree height of 60 feet.

Stand # 25 was marked and sold as a shelterwood harvest in 2008. All over mature and undesired trees were marked for sale and harvested. This stand is still considered fully stocked with Cherrybark Oak, Willow Oak, Water Oak, Sweetgum, Hickory, Pecan, Elm and Overcup Oak. The average DBH for this stand is 18 inches with an average tree height of 60 feet. This strata will be evaluated in 2012 to determine the amount of desired regeneration present.

Strata Recommendations

Harvesting activities will be limited in this section due to access. It is recommended for harvest to be conducted in management blocks by access points diversified in different locations over the years as market and weather conditions permit.

Activity Recommendations

Harvest

Stand # 7 should be evaluated for a timber sale in 2016. This stand is fully stocked and should be scheduled for a shelterwood cut. This stand should be marked in the way stand # 25 was marked. All over mature and undesired trees should be clearly marked on both sides for harvesting operations. Over mature trees should be marked to release the desired intermediate and suppressed trees in the stand. A shelterwood cut will also help promote oak regeneration by opening up the forest canopy allowing adequate sunlight to reach to forest floor. Harvesting should not be done during wet conditions. Mississippi Best Management Practices must be followed during all harvesting operations on this section.

Strata 3

Strata Description

Strata # 3: Consist of Stand # 2,3,4,8, and 18.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

This strata is made up of 65.94 acres of Tupelo Gum and Cypress breaks. This strata is in low areas at the north end of the section. Any harvesting in this strata will be difficult due to access. This strata stays wet most of the year where harvesting operations would be prohibited.

Strata Recommendations

This strata is still young and growing. This strata should be allowed to grow over the life of this plan. It should be evaluated at the end of this plan for a possible thinning during the next plan period.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

It is the responsibility of the School Board to assure all boundary lines are correctly established. Each corner should be adequately identified with significant corner markers. It is the responsibility of the School Board to assure all boundary lines are correctly established. Each corner should be adequately identified with significant corner markers. Boundary lines should be maintained to prevent future disputes of trespassing and prevent future cost of surveying.

Line Recommendations

It is recommended for each boundary line to maintained by the Mississippi Forestry Commission on a 4 year rotation. Boundary lines should be clearly marked in orange boundary line paint in well defined marks. Where applicable, firelanes should be installed on property lines to add access benefits for management activities. Boundary lines for this section should be remarked in 2013 and 2017.

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.

Soils Map



Soils Map
S16 T14N R1W
2011-2021
631.78 Acres



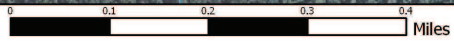
Plan Map



Plan Map
S16 T14N R1W
2011-2021
631.78 Acres



(12/20/2011)

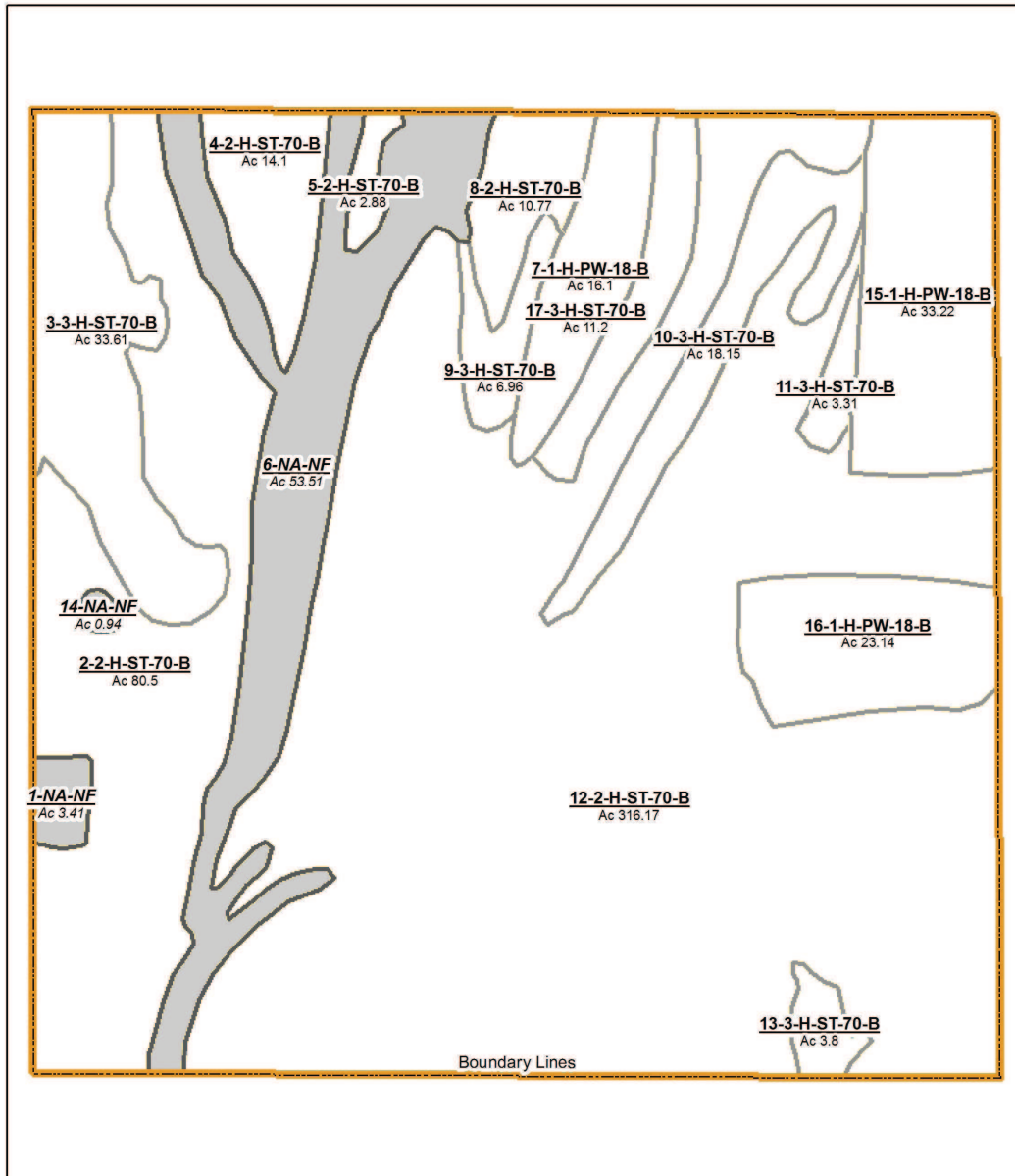


Holmes Co. BOE - Thornton Hillside Section

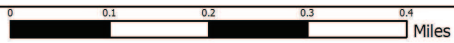


Holmes Co. BOE - Thornton Hillside Section

S16 T14N R1W
2009 to 2018
631.78 Acres



(05/20/2008)

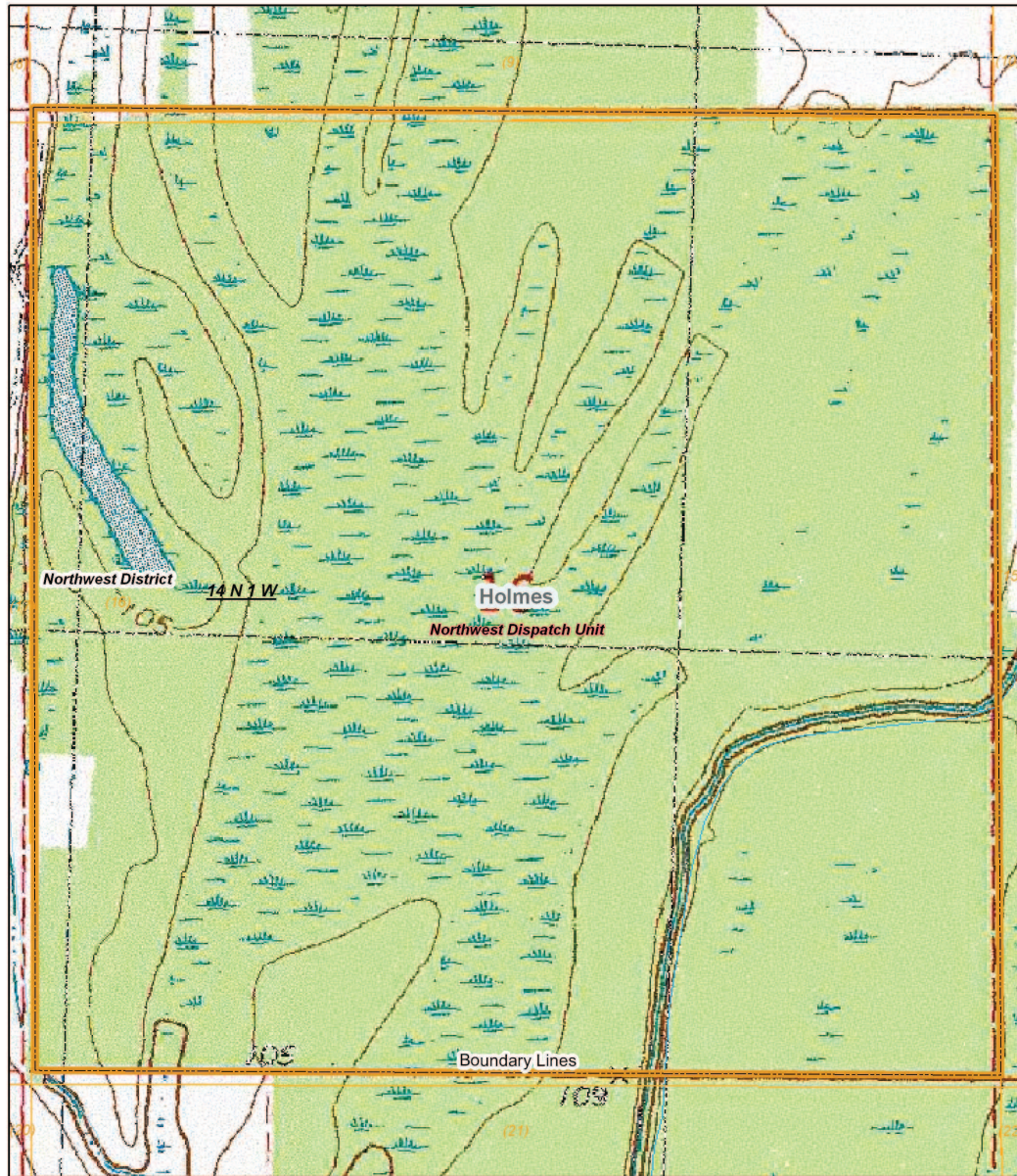


Topo Map

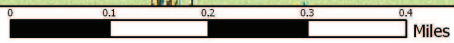


Topographic Map

S16 T14N R1W
2011-2021
631.78 Acres



(12/20/2011)

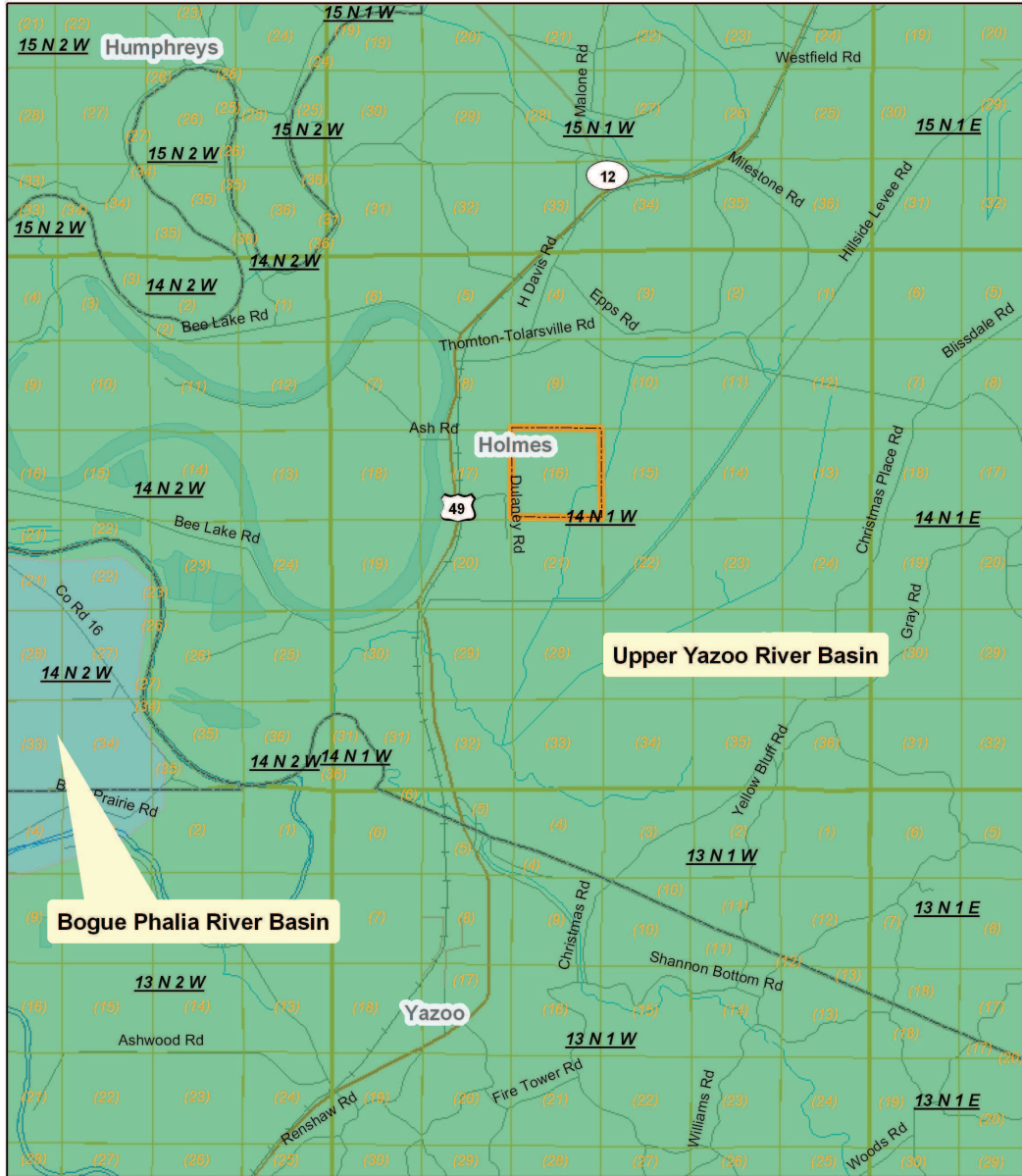


Hydrology Units



Hydrologic Units (Basins)

S16 T14N R1W
2011-2021
631.78 Acres




(12/20/2011)

Legend


Plan::0045 00017 28051 05022008111520 - Thornton Hillside Section




Property


 Property (1)

Category 1: Stands

 Sawtimber (11)


 Pulpwood (3)

Category 3: Non-Forest Stands


 Non-Forest (3)

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) (2)


Tract/BNA (Census 2000)

 Tract/BNA (Census 2000) (1)


School Sections

 School Sections (1)

Public School Districts

 HOLMES COUNTY SCHOOL DISTRICT (1)

US Congressional District

 US Cong Dist #2 (1)


MS Senate

 24 (1)


MS House

 47 (1)


Perennial Streams

 Perennial Streams (1)


Intermittent Streams

 Intermittent Streams (1)


Hydrologic Units (Basins)

 UPPER YAZOO RIVER (1)

Historic Forest Boundary

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


MS Forest Habitat

 YAZOO BASIN DRYLANDS (1)


Physiographic Region

 Delta (1)

Soil Associations

 sharkey-forestdale-dundee (1)


Surface Geology

 ALLUVIUM (1)


MFC Districts

 MFC Districts (1)

MFC Areas

 MFC Areas (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for
Holmes County Schools BOE
16 14N 1W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2016					
2	7	Harvest, Mechanical, Regeneration, Machine, Misc Hardwood	80	\$2,800.00	\$64,200.00
Yearly Totals			80	\$2,800.00	\$64,200.00
Grand Totals			80	\$2,800.00	\$64,200.00