



Vision • Commitment • Pride

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:  
Jefferson County Schools

Prepared By:  
J. Ted Ratcliff  
Miss. Forestry Comm.

Time Period Covered by This Plan:  
2012 - 2021

Date Plan Prepared:  
2012-01-04

Plan Type:  
Stewardship / Stewardship

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

**Property Name: 44-9N-2E**

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**MISSISSIPPI FORESTRY COMMISSION  
FOREST STEWARDSHIP MANAGEMENT PLAN**

**LANDOWNER INFORMATION**

Organization: Jefferson County Schools  
Name: Jefferson County Schools  
Mailing Address: P.O. Box 157  
City, State, Zip: Fayette, MS 39069  
Country: United States of America  
Contact Numbers: Home Number:  
Office Number: 601-786-3791  
Fax Number:  
E-mail Address:  
Social Security Number (optional): 640000000

**FORESTER INFORMATION**

Name: J. Ted Ratcliff, Service Forester  
Forester Number: 00717  
Organization: Miss. Forestry Comm.  
Street Address: P. O. Box 452  
City, State, Zip: Meadville, MS 39653  
Contact Numbers: Office Number: 601-754-9111  
Fax Number: 601-384-2437  
E-mail Address: [tratcliff@mfc.state.ms.us](mailto:tratcliff@mfc.state.ms.us)

**PROPERTY LOCATION**

County: Jefferson    Total Acres: 531    Latitude: -90.97    Longitude: 31.72  
Section: 44    Township: 9N    Range: 2E

**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.

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*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 five miles east of Fayette, and three miles north of Highway 28. Access is from the south off Pine Grove Road, a public gravel road, which is about 1/2 of a mile south of the section. There are two company gravel roads that access the section off Pine Grove Road. Both roads have locked gates of which we have access. This section is approximately 531 acres with all of the area being forested except for five acres, which are in small food plots and woods roads.

*Water Resources*

Coles Creek is the boundary of the north east corner of the section. Coles Creek and other 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

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adverse effects on the soil. The following soils are identified for this property: Lorman and Loring.

*Archeological or Cultural Resources*

These areas can range from churches, old cemeteries, or Indian mounds to old home sites or other areas of historical significance.

**No Archeological or Cultural Resources Were Identified:**

No Archeological or Cultural Resources Were Identified during the reconnaissance of the property. However, if Archeological or Cultural Resources are discovered anytime on the property special management measures will be applied immediately 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.

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*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**

*Lorman*

The Lorman soils are the predominate soil on this section. Slopes are 8 to 35 percent. 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 very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. 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 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The Loring component makes up 23 percent of the map unit. Slopes are 12 to 20 percent. The parent material consists of loess. Depth to a root restrictive layer, fragipan, is 14 to 35 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 low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. This soil does not meet hydric criteria.

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**STANDS**

*STRATA-1 (Stand 7)*

Stand Description

This stand consist of approximately 93 acres of pine plantation that was planted in 1999 following a harvest. This stand is well stocked and in good growing condition.

Stand Recommendations

This stand will be managed to grow to a 35 to 40 year rotation. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

Fire Protection

A prescribed fire is recommended for this site in order to reduce fuel loading and the potential for a wildfire to occur. A prescribed burning plan must be developed and followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission and other certified prescribed burning vendors are available to conduct prescribed burning.

Harvest

This stand should be ready to be thinned in 2014. This will be a first thin, pay as cut sale. The row integrity is not good so corridors will have to be cut by the logger. Corridors will be no wider than 20 feet. The distance between corridors will be no less than 30 feet.

Crop trees shall be left uncut and evenly distributed over the sale area at an average stocking rate of 70 square feet basal area. Areas where basal areas are below 70 square feet shall not be thinned.

Harvest

This will be followed by a 2nd thin in 2021 taking into consideration the growth of the stand and the local market. The stand should be thinned back to a 70-80 basal area. Only pulpwood size, lower quality form, overcrowded and suppressed, or diseased stems should be removed.

*STRATA-2 (Stand 12)*

Stand Description

Consist of approximately 45 acres of pine pulpwood that was planted in 1993. Stand development is behind because of a large amount of hardwood encroachment in the understory and main canopy. Some areas have been completely encroached by hardwood saplings and pulpwood.



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Stand Recommendations

This stand will be managed to grow to a 35 to 40 year rotation. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

Fire Protection

A prescribed fire is recommended for this site in order to reduce fuel loading and the potential for a wildfire to occur. A prescribed burning plan must be developed and followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission and other certified prescribed burning vendors are available to conduct prescribed burning.

Harvest

This stand is scheduled to be first thinned in 2014. Since row integrity is poor, corridors that are a maximum 20 foot wide and at least 30 feet apart will be cut by the Buyer. Crop trees will be left to a 70 square foot basal area. Crop trees are considered to be trees that are sawlog size or have the potential to be sawlog quality trees.

Harvest

This will be followed by a 2nd thin in 2020 taking into consideration the growth of the stand and the local market. The stand should be thinned back to a 70-80 basal area. Only pulpwood size, lower quality form, overcrowded and suppressed, or diseased stems should be removed.

*STRATA-3 (Stand 15)*

Stand Description

Consist of approximately 34 acres of pine pulpwood that was planted in 1991. Stand development is behind because of a large amount of hardwood encroachment in the understory and main canopy. Some areas have been completely encroached by hardwood saplings and pulpwood.

Stand Recommendations

This stand will be managed to grow to a 35 to 40 year rotation. At maturity it will be regenerated back into Loblolly Pine.

Activity Recommendations

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Harvest

This stand is scheduled to be first thinned in 2014. Since row integrity is poor, corridors that are a maximum 20 foot wide and at least 30 feet apart will be cut by the Buyer. Crop trees will be left to a 70 square foot basal area. Crop trees are considered to be trees that are sawlog size or have the potential to be sawlog quality trees.

Fire Protection

A prescribed fire is recommended for this site in 2017 and 2021 in order to reduce fuel loading and the potential for a wildfire to occur. A prescribed burning plan must be developed and followed in the application of the burn. Because of equipment, personnel and weather requirements, the application of a prescribed fire is limited to only those days that meet requirements of the burning plan. A certified prescribed burning manager should be employed to conduct the burn. The Mississippi Forestry Commission and other certified prescribed burning vendors are available to conduct prescribed burning.

*STRATA-4 (Stand 10)*

Stand Description

The stand consist of 99 acres of mature pine sawtimber. There is also a large amount of hardwood in the midstory and understory.

Stand Recommendations

This stand is mature and will be regenerated back into Loblolly Pine after the final harvest.

Activity Recommendations

Harvest

This stand will be harvested with a clear cut in 2012. Volumes to be advertised for sale will be determined with a minimum of 10 % cruise.

Site Preparation

This area will be site prepared by aerial herbicide application in 2013. Chemical and rates will be determined following the harvest.

Regeneration

The area will be planted in genetically improved, containerized loblolly seedlings in the 2013-2014 planting season. Seedlings will be planted on a 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

*STRATA-5 (Stand 8)*

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Stand Description

The stand consist of 98 acres of mature pine sawtimber. There is a small amount of mixed hardwood scattered through the midstory, with a moderate amount of hardwood brush in the understory.

Stand Recommendations

This stand is mature and will be regenerated back into Loblolly Pine after the scheduled harvest.

Activity Recommendations

Harvest

This stand will be harvested with a clear cut in 2016. Volumes to be advertised for sale will be determined with a minimum of a 10 % cruise.

Site Preparation

This area will be site prepared by aerial herbicide application in 2016 or 2017. Chemical and rates will be determined following the harvest.

Regeneration

The area will be planted in genetically improved, containerized loblolly seedlings in the 2016-2017 planting season. Seedlings will be planted on a 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

*STRATA-6 (Stands 4 and 21)*

Stand Description

This strata is a recently clear cut harvested area of approximately 85 acres. All merchantable timber has been removed and now is ready for site prep and planting.

Stand Recommendations

This stand is currently clear cut and will need to be site prepared with an aerial application of herbicides, site prep. burned and hand planted with loblolly pine seedlings. Planted pine stands that are established in site prepared cutovers are generally ready for a 1st thin at approximately age 15. Subsequent thins should be done on 6 to 8 year intervals until the the stand approaches rotation age which is estimated to approximately age 35, at which time the stand could be clearcut and reforested.

After the 1st thinning it is recommended that some form of understory control be practiced. This can be done with herbicides or with fire. If fire is the preferred method, the control burns should be done every 3 to 5 years. Herbicides will control understory vegetation for longer periods of time than fire and can therefore be used at less frequent intervals than fire . Without understory control one can expect the understory vegetation

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to take away water and nutrients from the pine stand and degrade the quality of the wildlife habitat.

**Activity Recommendations**

**Site Preparation**

The heavy site preparation needed will be an aerial application of herbicides to be completed prior to October 24, 2012. The objective of the herbicide application will be to kill the competing vegetation currently on the site. The herbicides to use and the rate of application will be prescribed by a herbicide specialist.

**Regeneration**

The area will be planted in genetically improved, containerized loblolly seedlings in the 2013 planting season. Seedlings will be planted on a 8 foot by 10 foot spacing, yielding 544 seedlings per acre.

*STRATA-7 (Stand 19)*

**Stand Description**

This area consist of approximately 71 acres of a mixed stand of hardwood sawtimber. There are some large mature pine saw timber scattered throughout the stand. Some of this area is steep, making it difficult for harvesting operations. Other parts of this area is along the banks of Cole Creek, and will be treated as an SMZ.

**Stand Recommendations**

This stand will be managed as a mixed stand, with harvest leaning to a natural hardwood regeneration.

*STRATA-8 (Stand 2)*

**Stand Description**

Strata is a Streamside Management Zone (SMZ) consisting of large mature trees that were left to protect the integrity of bank. There is no proposed activity within the scope of this plan to enter into these areas but it is possible with adjoining timber sales that some of the more mature timber could possibly be removed.

**Strata Recommendations**

Since this strata will be managed as a permanent SMZ, only selective cutting will occur in these areas. Selective cutting will occur as adjoining sales are performed. The harvesting will focus on removing the mature timber and will not remove more than 50 percent of the existing stand.

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**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.

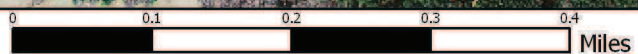


# JEFFERSON COUNTY SCHOOLS

IP ACCESS RD.  
2012 to 2021  
531.03 Acres



(01/04/2012)



# LEGEND



## Property



Property

## Category 1: Stands



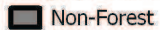
Clear Cut  
Non-Stocked  
Reproduction  
Sub-Merchantable  
Pulpwood  
Chip-n-Saw  
Sawtimber  
Poles

## Category 2: Stands



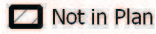
Clear Cut  
Non-Stocked  
Reproduction  
Sub-Merchantable  
Pulpwood  
Chip-n-Saw  
Sawtimber  
Poles

## Category 3: Non-Forest Stands



Non-Forest

## Category 4: Not in Plan Stands



Not in Plan

## Category 5: Features Only Plan Stand



Features Only Plan

## Property Roads/Trails



Drive Ways  
Access Road  
Logging Road  
Skid Trail  
Farm Road  
Hiking Trail  
Horseback Riding Trail

## Boundary Lines



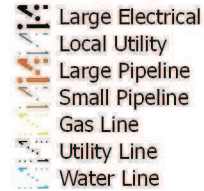
Archeology  
Cemetery  
Drilling Sites  
Education  
Forest Health  
Invasive Species  
Management Compartment  
Military Area  
Natural Area

## Boundary Lines (cont)



Property  
Recreation  
Rights of Way  
SMZ  
Special Use  
Stand  
Surface Mining  
Threatened/Endangered Species  
Visual Buffer

## Utilities (Lines)



Large Electrical  
Local Utility  
Large Pipeline  
Small Pipeline  
Gas Line  
Utility Line  
Water Line

Stand Activity Schedule for  
Jefferson County Schools  
44 9N 2E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
<b>2012</b>					
4	10	Harvest, Mechanical, Regeneration, Machine, Loblolly	100	\$3,500.00	\$120,300.00
Yearly Totals			100	\$3,500.00	\$120,300.00
<b>2013</b>					
2	12	Fire Protection, Other, Burn, Hand, Fuel Reduction	45	\$891.60	\$0.00
6	4	Site Preparation, Other, Burn, Hand, Debris	54	\$1,614.00	\$0.00
6	4	Regeneration, Artificial, Plant, Hand, Loblolly	54	\$5,940.00	\$0.00
6	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	54	\$5,940.00	\$0.00
Yearly Totals			206	\$14,385.60	\$0.00
<b>2014</b>					
1	7	Harvest, Mechanical, 1st Thin, Machine, Loblolly	93	\$3,255.00	\$26,999.76
2	12	Harvest, Mechanical, Thin, Machine, Loblolly	45	\$900.00	\$6,944.40
3	15	Harvest, Mechanical, Thin, Machine, Loblolly	33	\$1,155.00	\$9,900.00
4	10	Regeneration, Artificial, Plant, Hand, Loblolly	100	\$11,000.00	\$0.00
4	10	Site Preparation, Other, Burn, Hand, Debris	100	\$3,000.00	\$0.00
4	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	100	\$11,000.00	\$0.00
Yearly Totals			471	\$30,310.00	\$43,844.16
<b>2016</b>					
1	7	Fire Protection, Other, Burn, Hand, Fuel Reduction	93	\$2,790.00	\$0.00
5	8	Harvest, Mechanical, Regeneration, Machine, Loblolly	98	\$6,370.00	\$123,711.28
Yearly Totals			191	\$9,160.00	\$123,711.28
<b>2017</b>					



Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
3	15	Fire Protection, Other, Burn, Hand, Hazard Mitigation	33	\$990.00	\$0.00
5	8	Site Preparation, Other, Burn, Hand, Debris	98	\$2,940.00	\$0.00
5	8	Regeneration, Artificial, Plant, Hand, Loblolly	98	\$12,250.00	\$0.00
5	8	Site Preparation, Chemical, Broadcast, Aerial, Combination	98	\$12,250.00	\$0.00
Yearly Totals			327	\$28,430.00	\$0.00
<b>2018</b>					
2	12	Fire Protection, Other, Burn, Hand, Hazard Mitigation	45	\$1,350.00	\$0.00
Yearly Totals			45	\$1,350.00	\$0.00
<b>2020</b>					
1	7	Fire Protection, Other, Burn, Hand, Hazard Mitigation	93	\$2,790.00	\$0.00
2	12	Harvest, Mechanical, Thin, Machine, Loblolly	45	\$1,575.00	\$24,100.20
Yearly Totals			138	\$4,365.00	\$24,100.20
<b>2021</b>					
1	7	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	93	\$3,255.00	\$59,000.13
3	15	Fire Protection, Other, Burn, Hand, Hazard Mitigation	33	\$990.00	\$0.00
Yearly Totals			126	\$4,245.00	\$59,000.13
<b>Grand Totals</b>			<b>1,604</b>	<b>\$95,745.60</b>	<b>\$370,955.77</b>