

MISSISSIPPI FORESTRY COMMISSION

FOREST MANAGEMENT PLAN

FOR

Grenada County School District

GRENADA COUNTY, MISSISSIPPI

INTRODUCTION: Grenada County has 15 sixteenth sections held in trust by the Grenada County School District. There is a total land area of 9,249.91 acres. Of this amount 8,431.53 acres are managed forest and 818.38 acres are non-forested. Based on percentage, 91 percent is timberland and 9 percent is non-forest. The objective of the plan is to outline steps that will allow for full timber production on every acre of sixteen section land covered by this plan. This plan was written for a ten (10) year period. This plan will have to be revised in 2022. It should be understood that the plan was prepared as a guide and can be changed as conditions warrant.

This plan provides a starting point to continuously bring this land into full production with regulated annual cuts. At the present time, the average stand and stocking is well stocked. Through improvement cuts, tree planting, and timber stand improvement work, growth can be increased to the desired level over the coming years.

HISTORY OF THE FOREST: The forest management agreement between the Mississippi Forestry Commission (MFC) and the Grenada County School District provides for the management of the forestland by the MFC. The MFC acts as the District's technical advisor on all forestry matters. All work will be explained to and approved by the Board of Education prior to its execution. Work such as timber marking, burning, firelanes, tree planting, boundary line painting, and other work will be billed on a per acre basis.

In the past 30 years, a considerable amount of work has been done on these lands in an effort to get all forest acres into full production. The forest management practices performed in past years and those scheduled in this plan will continue to increase growth rates and volume per acre. Thus the Board of Education has a reasonable expectation to see increased revenues from their investment in their forestlands.

MANAGEMENT OBJECTIVES: Management objectives consist of four (4) main points. The first is to have the total forest acreage managed on a sustained yield basis. The second is to increase growing stock. The third objective is to have every acre producing to its full potential. The fourth objective is to continue to provide adequate game habitat while still producing good quality timber. The steps necessary to meet these objectives will be outlined in the remainder of this plan.

FOREST DESCRIPTION: The three (3) main timber types are bottomland hardwood, pine-hardwood, and pine plantation. The bottomland hardwood stands are composed of a variety of oaks, hickory, ash and other assorted hardwood species. The pine-hardwood stands occupy the upland dry sites. The pine-hardwood stands are composed of shortleaf pine, loblolly, and low grade upland hardwoods composed mostly of white oaks, hickory, red oak, and other assorted hardwood species. The upland sites are best suited for the production of pine. The site index on bottomland will range from 85 to 95, and the site index on the upland site ranges from 80 to 90 with the average being around 85. At present bottomland hardwoods account for 2,242.29 acres (28%), mixed pine-hardwood stands account for 347.17 acres (4%), while pine stands total 5,449.34 acres (68%). The forest product distribution is 5% reproduction 7 % is in pulpwood and 39% is sawtimber.

OBJECTIVES: The primary objective is to produce high quality sawlogs at the lowest possible cost on both upland and bottomland sites. Biologically mature stands are scheduled to be harvested first, followed by regeneration practices to establish the most suitable species for the site. Upland sites will be converted to stands that have 90-95% pine and only 5-10% hardwood. Attention will be given to leaving enough hardwood for game food. This will be done by leaving Streamside Management Zones and other selected areas in hardwood. The bottomland hardwood sites will be regenerated using two different silvicultural systems. A shelterwood system and regeneration clearcut's will be implemented. The stand condition at the time of harvest will determine which system to utilize.

Annual harvest volumes cannot be set at this time for the total land base. Attention needs to be give to removing low grade material and over mature stands with the ultimate objective of having the most suitable species matched to the site. This will insure meeting the objective of a sustained yield, well stocked stands, every acre reaching its full potential and providing for the needs of resident wildlife. Sales need to be made as rapidly as possible. However the market conditions at the time of the scheduled harvest will be the governing factor on the size and speed of the sales.

MANAGEMENT RECOMMENDATIONS:

Silvicultural general: Regeneration on upland sites will be accomplished through artificial regeneration. The steps for regeneration will be as follows: First, remove the timber through harvesting; second, aerial spray remaining hardwood and site prep burn where needed to prepare for hand plating; third the actual planting of seedlings.

A high percentage of the bottomland hardwood stands are over-mature but are in fair condition. Due to their condition, most of these stands will need to be either clear cut followed by site preparation and hand planted or marked for a shelterwood harvest to allow for natural regeneration. Site preparation practices and handplanting can be expensive, but they are necessary to achieve the desired results. All site preparation, release, burning, and sales are scheduled in the individual plan activities. All management recommendations will take into account Mississippi's Best Management Practices guidelines.

Fire control: The Mississippi Forestry Commission has the responsibility of the fire control on all sections. The Commission operates a Transport Truck and Dozer (1) suppression unit in Grenada County. In the event of emergency, additional units may be called in from adjoining counties.

Dispatching of fires is done by contacting the central dispatch located at this District Office in Elliott, Mississippi at 1-(662)-226-5414.

Insects and disease: At the present time there are no real problems in the area. The best prevention of insects and disease is a healthy vigorous stand. A close watch must be kept to detect an outbreak of insects and disease. If an outbreak occurs, the area will be treated by the use of emergency timber sale, cutting, piling, burning, spraying with chemicals, and/or a combination of these measures.

Utilization and marketing: All products removed from the lands covered by this plan will be utilized if at all possible.

All marketing will be in accordance with the schedule in the appendix. All timber will be marked at stump and eye level. In some cases of clear cuts, timber may be cruised by a professional forester employed by the Commission. After marking or cruising, the forester in charge will compute the volume of all products. Volume will be computed using Doyle Scale with appropriate form classes. The sale will be advertised by the Grenada County School District, Grenada County. The period of advertisement will be 21 days. Sample contracts will be sent to all buyers in the area of the sale by the Forestry Commission. All bids must be marked "bid" and sent to the Grenada County School District, Grenada, Mississippi. The successful bidder will be governed by terms of contract. The forester in charge will make periodic checks of the cutting operation to insure compliance with the terms of the contract.

The Board of Education will be invoiced for the work at the completion of the sale. A minimum of 15% percent of the sale will be placed in an escrow fund for forestry work of any approved type. When more funds are needed, the Forestry Commission may request the Board of Education to place additional funds in the escrow account. This may be from timber sales, or from the general fund money.

Physical improvement: Physical improvements are needed. Boundary lines need to be painted and/or maintained on a five (5) year cycle; permanent firelanes need to be plowed on some sections. These will be left to the forester in charge. All work must be approved by the Board of Education.

The work may be done by the Forestry Commission employees or by contracting. Contract work should be limited to injecting, machine site preparation, herbicide

application, and tree planting. All other can usually be best handled by Forestry Commission employees. Funding of firelanes, site preparation, and the tree planting can be cost shared under the Forest Resource Development Program.

BEST MANAGEMENT PRACTICES: The term “best management practice” refers to a practice or combination of practices, which is determined to be the most effective, practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with the water quality goals.

Public land management can generally be divided into three categories as follows:

- (1) General forest management which consists of prescribed burning, hardwood brush control with chemicals and other general maintenance work.
- (2) Timber harvesting – this is the cutting and removing of forest products. These cutting operations will vary in size, shape and type of cutting according to the specific situation. These cuttings will include but not be limited to insect removal, thinning of stands or clear cutting of stands.
- (3) Post harvesting – this is any activity carried out as a result of harvesting and conducted after the harvesting has been completed. These activities will include but not be limited to hardwood brush control, regeneration work and road construction/maintenance.

All work on public lands will address pollution matters on upland, bottomland and wetland sites. All work will be planned and carried out according to Mississippi’s Best Management Practices Handbook.

THREATENED AND ENDANGERED SPECIES: All public lands will be managed in accordance with the current laws and regulations governing both plants and animals that are considered threatened and/or endangered. Prior to any management activity the tract(s) in question will be surveyed for any known threatened or endangered species. If any species is found on tract, then the tract will be managed in accordance with the guidelines published for that particular species.

HISTORICAL, CULTURAL, OR ARCHAEOLOGICAL ITEMS; HISTORICAL, CULTURAL OR ARCHAEOLOGICAL SITES: Any historical, cultural, or archaeological site that is found on public land will be identified, located, marked and preserved. No silvicultural practice that will damage or destroy these sites will be conducted. Sufficient area around the site may be excluded to insure that the site will not be damaged. There are no published lists of sites to be preserved. Sites would generally consist of old monuments, grave sites, Indian mounds, etc.