MISSISSIPPI FORESTRY COMMISSION

COUNTY WIDE MANAGEMENT PLAN

FOR

JEFFERSON DAVIS COUNTY SCHOOLS

JEFFERSON DAVIS COUNTY, MISSISSIPPI

<u>INTRODUCTION:</u> JEFFERSON DAVIS County has 12 sixteenth sections with the Jefferson Davis School Board overseeing these sections. There is a total land area of 7697 acres. Of this amount 6136 acres is growing timber and 1561 acres are non-forested. Based on percentage, 80 percent is timberland and 20 percent is non-forested. The objective of the plan is to outline steps, which if followed, 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 to be used as a guide and it can be changed as conditions warrant.

At this point in time, the cut cannot be regulated by the growth completely. This is due to several factors that will be discussed in detail later. This plan provides a starting point to continuously bring this land into full production with regulated annual cut. 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 and the Jefferson Davis County School Board provides for the management of the timberland by the Forestry Commission. The Forestry Commission acts as the Board'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, firebreaks, tree planting, boundary line painting, and other work will be done on an actual cost 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. These efforts will continue to be noticeable in the near future as more sales are made and the volumes should increase.

MANAGEMENT OBJECTIVES: Management objectives consist of four (4) main points. The first being to have the forest managed for sustained yield for pine sawtimber. The second is to build up growing stock. The third objective is to get 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: There are four (4) main timber types which dominate the forest of this county. These are mixed pine hardwood natural stands, planted pine stands, natural pine stands, and natural hardwood stands. The planted pine, the natural pine and the mixed pine-hardwood stands primarily occupy the well drained upland sites. The hardwood stands are primarily located in the drains, where there is a higher moisture content in the soils. The hardwood species in the drains are primarily oaks, sweet gum, black gum, black cherry, elm, and yellow poplar. The mixed pine-hardwood stands are composed of loblolly pine, and low grade upland hardwoods composed mostly of post oak, white oak, hickory, southern red oak, sweet gum, and other assorted hardwood species. The upland sites are best suited for the production of pine. The site index on bottomland will range from 90 to 100, and the site index on the upland site ranges from 80 to 90 with the average being around 90. At present hardwoods account for 11% of the total forest acres, mixed pine-hardwood stands account for 9% of the total forest acreage, while pine stands are 80% of the total forest acres. The forest product classes are distributed such that the acreage in sawtimber size trees is 25% of the total acreage; pulpwood size trees are 29% of the total acreage; chipnsaw is 22% of the total acreage; and reproduction and submerchantable size trees are 24% of the total.

<u>PRODUCTION AIMS:</u> The primary production aim is to produce high quality sawlogs at the lowest possible cost. Pine-hardwood stands will be converted to stands that have 85%-95% pine and only 5%-15% hardwood. Attention will be given to leaving enough hardwood for game food. This will be done by leaving hardwood drains and selected areas in hardwood. Sales will be made to remove the low quality hardwoods. The hardwood on hardwood sites will continue to be managed for the production of high quality hardwood sawlogs.

No amount of volume can be set at this time to be removed from these lands each year. Attention needs to be given to removing low grade material with the ultimate objective of having the best species of trees growing the most volume possible. Sales need to be made as rapidly as possible. The available market will probably be the governing factor on the size and speed of the sales, as well as the land classification and type of lease, if any, involved.

MANAGEMENT RECOMMENDATIONS:

<u>Silvicultural general:</u> This plan was written with the idea of restocking using artificial regeneration. The overall plan for regeneration will be as follow: First, remove as much hardwood as possible by sales; second, aerial spray remaining hardwood and burn where needed to prepare seed beds; third allow for artificial planting. Some areas will need to be clear cut, site prepared by spraying, or machine, and planted with pine seedlings.

The hardwood stands in the drains are mature, but are in good to fair condition. They will be used primarily for water quality protection and to provide a diversity of habitat for the wildlife, which will enhance the quality of the habitat for the hunting leases. Harvesting in these streamside management zones will be limited to selection cutting only, and will

take place when harvesting is scheduled in adjacent stands. All management recommendations will take into account Mississippi's Best Management Practices guidelines.

<u>Fire control:</u> The Mississippi Forestry Commission has the responsibility of the fire control on all sections. The Commission operates two (_2__) suppression units in Jefferson Davis County. In the event of emergency, often units may be called in from adjoining counties.

Dispatching of fires is done by contacting the central dispatch located at this District Office in Brookhaven, Mississippi at 1-888-823-3473.

<u>Insects and disease:</u> 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.

<u>Utilization and marketing:</u> 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 to be sold will be designated by the Mississippi Forestry Commission. After marking or cruising, the forester in charge will compute the volume of all products. Volume will be computed using Doyle Scale and or Tons with appropriate form classes. The sale will be advertised by the Jefferson Davis County School Board of Education, Jefferson Davis 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 Jefferson Davis County School Board of Education, Prentiss, 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.

<u>Physical improvement:</u> Physical improvements are needed. Boundary lines need to be painted and/or maintained on a four (4) year cycle; permanent firebreaks 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 firebreaks, site preparation, and the tree planting can be cost shared under the Forest Resource Development Program.

<u>BEST MANAGEMENT PRACTICES:</u> The term "best management practice" refers to a practice or combination of practices, which is determined to 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 cutting according to the specific situation. These cutting 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: Any historical, cultural, or archaeological item that is found on public land will be identified, located, marked and preserved. No silvicultural practice that will damage or destroy these items will be conducted on the site. Sufficient area around the site may be excluded to insure that the site will not be damaged. There are no published lists of items to be preserved. Items would generally consist of old monuments, grave sites, Indian mounds, etc.