



Golden Triangle

BMP Informer

Serving Hardin, Jefferson and Orange Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

TEXAS FOREST SERVICE Best Management Practices Project P.O. Box 310 Lufkin, TX 75902 sharrington@tfs.tamu.edu

Are You a Tree Farmer?

The American Tree Farm System (ATFS) is the oldest and largest forest certification program in the United States. Today, 60,000 Certified Tree Farmers are managing 86 million acres nationwide (26 million acres are managed by private landowners). In Texas there are 2,000 Certified Tree Farmers managing over 4.2 million acres.

By enrolling into the ATFS you are ensuring that your forestland will be managed in a sustainable way while protecting water quality, providing wildlife habitat, and promoting healthy forest management. There is no charge to enroll your forestland into the ATFS. If you own at least 10 acres and have a written forest management plan you may qualify to become a Certified Tree Farmer.

If you qualify and are enrolled into the ATFS you will be presented with a certificate and a Certified Tree Farm sign. This sign can be displayed on your property to show that you are managing your forestland in a sustainable and environmentally friendly manner.

To become a Certified Tree Farmer you can contact your local Texas Forest Service office or the Texas Forestry Association at (936) 632-TREE or 8733.

Jones State Forest BMP Demonstration Area

Many people hear the term BMPs and may have an idea of what they are but have never really seen them applied or applied correctly. The Texas Forest Service established BMP demonstration areas during the mid 1990's on the W. Goodrich Jones State Forest located in Conroe and the Kirby State Forest located between Kountze and Woodville. The purpose of these BMP demonstration areas was to give loggers, landowners, and general public a chance to see properly implemented BMPs. Original demonstrations included a streamside management zone (SMZ), various types of stream crossings, and water control structures (i.e. wing ditches, open top box culverts, etc.).

During 2005, the Texas Forest Service decided to remodel and update the BMP demonstration area on the Jones State Forest in Conroe. Many of the original BMPs that were installed in the 90's had deteriorated and were no longer visible. Many of the original BMP demonstrations were renovated and new BMP demonstrations were added. Renovation work consisted of remarking the SMZ, clearing brush away from culvert crossings making the culverts visible again, and replacing the existing signs with new ones which explain what BMP is being used and its purpose.

A highway entrance using large rocks and timber mats was added showing how mud can be removed from tires before entering the highway. Tracking mud onto the highway can cause the roadway to become slick, making it hazardous for other motorists. Also, a flat rail car was placed across a stream demonstrating how it can be used as a bridge. Sometimes a stream is too large for a culvert or other type of crossing and a bridge must be used. While there are several options, a flat rail car can provide a sturdy and safe crossing alternative. Another new demonstration is road stabilization using crushed concrete which will allow a road to be used during wetter months. Also, grass was planted along other roadways showing how seeding roads can prevent or minimize any erosion that may occur.

You can visit the Jones State Forest anytime Monday through Friday and view the BMP demonstration area as well as other management activities that are used to enhance wildlife habitat for endangered species and to reduce the threat of wildfires and the destruction of property. For information regarding the Jones State Forest call (936) 273-2263.

Where Can I Find?

Do you often wonder where you can purchase materials such as culverts, geofabrics, timber mats, etc? Materials such as these are often used by landowners to enhance their property while maintaining and protecting water quality.

The Texas Forest Service BMP office has created a Product/Vendor Guide which lists various products along with the contact information for the vendors who sell these products. This list is currently being updated to include new products and vendors. The list can be viewed by visiting <http://tfsweb.tamu.edu/sustainable/article.aspx?id=74>.

Also, all of the guidelines and recommendations for properly installing these products can be found in the Texas Best Management Practices Handbook. The handbook can be viewed at the web address listed above.

For more information regarding the BMP Product/Vendor Guide or the Texas Best Management Practices Handbook please call the Texas Forest Service BMP Office at (936) 639-8180.

Did you know . . .

Removing some of the shade alongside your woods roads will allow them to dry out more quickly after a rain and help keep them in great shape?

Improving My Land

Forest Roads and BMPs

Forest roads are an important part of proper forest management. These roads allow for easy access and for management activities to be carried out efficiently and easily. The problem with some roads are that they are located in areas which may stay wet for extended periods of time. Wet roads can limit access and traveling these roads while wet can increase the potential for erosion and the chance of sediment entering nearby streams.

Excessive driving on wet roads can cause rutting which can alter the natural drainage of the roadway. Altering the natural drainage of the road can cause water to pool and remain in the roadway for long periods of time. Also, rutting channels water and this channeling of water can increase the potential for erosion occurring and washing out the road, making it impassable.

Planning the location of your road is one way to avoid this problem. When constructing new forest roads, plan to avoid areas that are prone to being wet and use water control structures such as waterbars and wing ditches to help divert water off of the road and minimize the potential for erosion. If your road is already in place and wet areas are present, rock can be put down to create a stable road allowing you to use the road without causing excessive rutting.



Crushed concrete was used to stabilize this road providing access during wet months.

Before putting down any rock it may be necessary to smooth out the road and some type of geofabric should be put down. This geofabric will prevent the rock from sinking into the ground and will distribute the weight of passing vehicles preventing ruts from occurring. It is important to extend the rock well past the wet area to ensure a well stabilized road. Guidelines for constructing and maintaining forest roads can be found in the Texas Best Management Practices Handbook which can be viewed online at <http://texasforests-service.tamu.edu>.

Repairing Storm Damaged Streamside Management Zones

Streamside management zones (SMZs) are important in protecting water quality and providing excellent wild-life habitat. The purpose of an SMZ is to reduce the potential quantity of sediment and logging debris reaching the stream and to prevent increased water temperatures. Caution should be taken when conducting any forest management activity within the area immediately adjacent to stream channels to ensure the protection of both instream and down-stream water quality. Under proper management, timber production, wildlife enhancement and water quality may all be achieved.

Hurricane Rita passed over East Texas in September 2005, damaging a total of 435,131 acres of forestland. General stand type patterns show SMZs make up, on average, 15% of the total forested area in this damage zone (65,269 acres). Of this amount, over 90% of the SMZs were damaged severely enough to warrant restoration at some level. Family Forest Owners (FFO) accounted for almost 40% of the total SMZ area damaged by Hurricane Rita.

An initial assessment should be made of any damaged SMZ to determine the severity, current stocking level, and ability to regenerate. The best option for restoring the SMZ may be to allow it to naturally regenerate if there are adequate sources for regeneration of desirable species. It may be necessary to establish several plots within the SMZ to determine if any advanced regeneration (stems 2 – 5 feet tall), sprout regrowth, or viable seed source exists. Sprouting is a viable regeneration source for hardwood species and is dependent upon stump size. Most species sprout vigorously on stumps twelve inches and smaller. Observing abundant advanced regeneration (≥ 300 stems/acre), numerous stumps capable of producing sprouts (50 stumps/acre), and mature seed producing trees, little or no effort should be needed for the SMZ to naturally regenerate.

Damage to the SMZ may be severe enough that natural regeneration is not an option and the area must be artificially regenerated. The SMZ should encompass 50 feet on both sides of all perennial and intermittent streams and carry a minimum basal area of 50 square feet per acre. When replanting, every effort should be made to ensure that the number of seedlings planted will meet the minimum basal area of 50 square feet in ten years.

Preferred species for planting are Water Oak, Willow Oak, Cherrybark Oak, Swamp Chestnut Oak, Nutall Oak, Green Ash, Sweetgum, Cottonwood, and Loblolly Pine. These seedlings should be hand planted. Intensive site preparation and machine planting should be avoided in these areas in order to minimize the potential for sediment and debris from entering the stream.

Upon deciding on a regeneration method, it may be necessary to remove debris and/or vegetation that may be covering existing seedlings or to create an opening to plant the new seedlings. When removing the debris, caution should be taken to prevent damaging existing seedlings, damaging residual trees, and creating areas with high erosion potential. Herbaceous weed control may be needed to control competing vegetation and to increase seedling survival. The application of herbicides within the SMZ should be done through spot treatment or individual stem injection. Aerial or ground broadcast of herbicides should be avoided within the SMZ to prevent any chemicals from entering the stream. If the area where the herbicides are to be applied is prone to flooding extra caution should be taken when applying the treatment or the treatment should be avoided. Always follow all manufacturing labels on containers when applying herbicides and always dispose of empty bottles and trash appropriately.

Whether the SMZ is naturally or artificially regenerated, Texas Best Management Practices (BMPs) Guidelines should be followed. These guidelines are designed to protect water quality during any forest management activity. For a copy of the BMP handbook visit your local Texas Forest Service office or view online at <http://texasforests.tamu.edu>. For questions regarding repairing damaged SMZs or BMPs please contact the Texas Forest Service BMP Office in Lufkin by calling (936) 639-8180.

Distribution of the *Golden Triangle BMP Informer* is provided free of charge to forest landowners of Hardin, Jefferson and Orange Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil and Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). PLEASE ADVISE US IF YOU WISH FOR YOUR NAME TO BE REMOVED FROM OUR MAILING LIST.

The Texas Forest Service is an Affirmative Action/Equal Opportunity Employer committed to Excellence Through Diversity.



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Forestry Acronyms

BMP	Best Management Practices	TFA	Texas Forestry Association
CFLOA	County Forest Landowner Association	TFS	Texas Forest Service
FIP	Forestry Incentives Program	TLC	Texas Logging Council
FSA	Farm Services Agency	TMDL	Total Maximum Daily Load
NIPF	Nonindustrial Private Forest (landowner)	TNRCC	Texas Natural Resource Conservation Commission
NPS	Nonpoint Source (pollution)	TRe	Texas Reforestation Foundation
NRCS	Natural Resources Conservation Service	TSSWCB	Texas State Soil and Water Conservation Board
SFI	Sustainable Forestry Initiative	WHIP	Wildlife Habitat Incentives Program
SIP	Stewardship Incentives Program	WQMP	Water Quality Management Plan
SMZ	Streamside Management Zone	WRP	Wetlands Reserve Program
SPB	Southern Pine Beetle		
SWCD	Soil and Water Conservation District		