



*Sam Rayburn*

# BMP Informer

Serving Nacogdoches and San Augustine 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

## **Seedlings On-line!**

The Texas Forest Service is currently accepting on-line pine and hardwood seedling orders on the TFS website at <http://texasforestservicetamu.edu>. Look under *Forest Management*, then *Nurseries*. Special features of the on-line service include: volume discounts, flexible payment methods, flexible shipping methods, automatic e-mail notification, a secure website, and facilitated customer access.

The Texas Forest Service Indian Mound Nursery near Alto will produce pine, containerized longleaf, containerized loblolly and 28 species of hardwood seedlings this year. The planting season for northeast Texas runs December through March; southeast Texas planting season runs December through February because of the warmer climate. Seedlings may be purchased from the TFS website, through a local Texas Forest Service office, or by calling the Indian Mound Nursery at (936) 858-4202.

## **Remember BMPs When Planting**

Landowners and contractors should keep water and soils in mind when preparing to plant and preparing. There are Best Management Practices to guide you during these operations.

Remember these points when doing site preparation and planting:  
In general -

- Mark boundaries of all streamside management zones (SMZ) clearly before site preparation activities.
- Plan ahead to minimize disturbance by equipment in SMZs.
- Site preparation activities should skirt SMZs and stream channels. Any debris should be placed above the ordinary high water mark of any stream or body of open water.
- Any site preparation practices and planting should be done following the contour of the land.
- Avoid intensive site preparation on steep slopes and on slopes with thin or highly erodible soils.
- Hand plant excessively steep slopes and wet sites.

When using prescribed fire -

- Firebreaks should have water control structures (water bars, wing ditches, etc.) in order to minimize erosion.
- Burning in an SMZ reduces the filtering capacity of the ground covering. Plan burns to minimize impacts on the SMZ.
- Avoid, when possible, site prep burns on steep slopes or highly erodible soils.

When using chemicals -

- Carefully plan application to avoid direct and indirect entry of chemicals into streams and impoundments.
- Avoid applying chemicals to vegetation protecting eroded slopes, gullies, drainages, and other fragile areas subject to erosion.

### How Do I Know What Size Culvert I Should Use?

The most critical factor in installing a culvert is correct sizing. Purchasing and installing a poorly-sized culvert can be a waste of time, money, and effort. Three factors determine what size is correct – drainage area, soil type, and slope.

#### Step 1: *Figure drainage area.*

Most of you who know your property well and can estimate the number of acres of watershed or drainage area. If you need help, contact your local TFS or NRCS office.

#### Step 2: *Determine the soil type.*

Grab a few handfuls of soil to tell if it feels like clay, sand, or a mixture of both. Heavier clay soils require larger culverts.

#### Step 3: *Figure the slope.*

Estimate the average slope of the drainage area. Steeper slopes require larger culverts.

The following gives proper culvert size for moderate slopes (5-15%) and medium soils:

<i>Area Drained (ac.)</i>	<i>Culvert Diameter (in.)</i>
10	24
30	30
50	36
75	42
100	48

## Improving My Land

### Permanent Stream Crossings

Two types of stream crossings that minimize stream sedimentation and provide dependable access are culverts and geoweb. When sized to proper length and diameter for the stream drainage area, culverts can provide excellent access across streams (see left column). Different types and sizes are available for various needs, ranging from 18-inch diameter galvanized steel to 10-foot diameter tank cars.



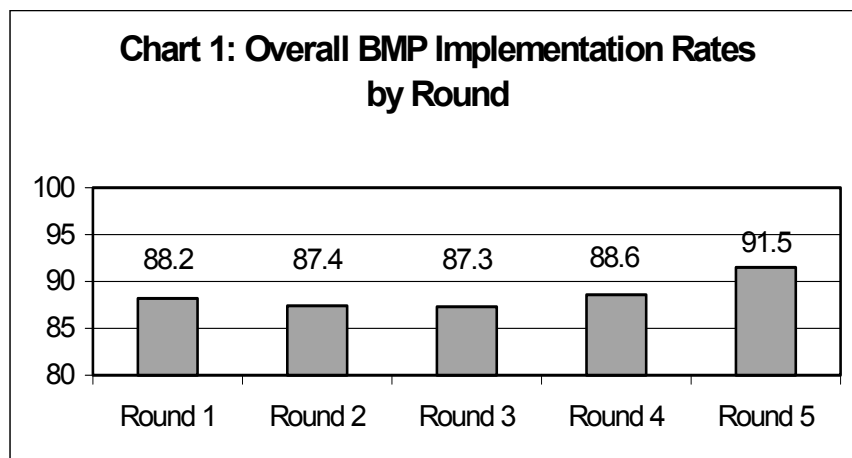
Geoweb can provide a permanent low-water crossing or ford that minimizes stream sedimentation. The plastic material forms a honeycomb-shaped mat that is filled with soil or gravel to form a solid road base. Best used in crossings with flat approaches to the stream, properly installed geoweb allows permanent access across a stream, even for a fully-loaded log truck.



## BMP Implementation Monitoring Program

The Best Management Practices (BMP) Implementation Program was started in 1991 in order to measure the degree of implementation with BMP guidelines by the forestry community, or, in other words, measure how well BMPs are being used in the field. Every two years, 150 sites are randomly chosen, and “normal silvicultural” operations are evaluated for the presence, where applicable, of BMPs and whether or not they are functioning properly. “Normal silviculture” refers to sites that are being managed on a sustainable basis for timber production and does not include sites that are being cleared without being replanted or converted to other uses. Operations that are selected for evaluation include public, private, and forest industry lands where landowner consent is obtained.

The BMP Implementation Monitoring Program has been a very successful voluntary, non-regulatory program. Since 1991 the Texas Forest Service has completed five rounds of evaluations and is currently working on the sixth round. Round five monitored the highest implementation rate to date at 91.5%. This means that any given time it is estimated that 9 out of every 10 forestry operations in East Texas are implementing BMPs properly. The implementation rates from all five rounds can be seen below in Chart 1 and reports for all previous rounds can be found on the Texas Forest Service website at <http://texasforests-service.tamu.edu/forest/water/default.asp>.



The Texas Forest Service is working on the sixth BMP implementation report, which will be completed in the fall of 2005. With 59 of the 150 site evaluations completed round six is showing an implementation rate of 90.1%. However, this is only an early look at the implementation rate and the final number may change slightly upon the completion of all 150 site evaluations.

Again these evaluations are voluntary and done only with the consent of the landowner. The BMP implementation reports are completed roughly every two years and are used to help keep the use of BMPs during silvicultural operations non-regulatory in the State of Texas. Remember that one way we can continue to improve is to recognize the importance of using BMPs to protect water quality by treating every site as if it will be evaluated. If you have any questions regarding the BMP Implementation Monitoring Program or BMPs in general please call the BMP Project Office at (936) 639-8180 or email Shane Harrington at [sharrington@tfs.tamu.edu](mailto:sharrington@tfs.tamu.edu).

Distribution of the *Sam Rayburn BMP Informer* is provided free of charge to forest landowners of Nacogdoches and San Augustine 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). **If you would like for your name to be removed from our mailing list please contact Shane Harrington at (936) 639-8180 or [sharrington@tfs.tamu.edu](mailto:sharrington@tfs.tamu.edu).**

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### Forestry Acronyms

BMP	Best Management Practices	TCEQ	Texas Commission on Environmental Quality
CFLOA	County Forest Landowner Association	TFA	Texas Forestry Association
FLEP	Forest Land Enhancement Program	TFS	Texas Forest Service
FSA	Farm Service Agency	TLC	Texas Logging Council
NIPF	Nonindustrial Private Forest (landowner)	TRe	Texas Reforestation Foundation
NPS	Nonpoint Source (pollution)	TSSWCB	Texas State Soil and Water Conservation Board
NRCS	Natural Resources Conservation Service	WHIP	Wildlife Habitat Incentives Program
SFI	Sustainable Forestry Initiative	WQMP	Water Quality Management Plan
SMZ	Streamside Management Zone	WRP	Wetlands Reserve Program
SPB	Southern Pine Beetle		
SWCD	Soil and Water Conservation District		



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