July 2002

Lake Livingston BMP Informer

Serving Grimes, Houston, Leon, Madison, Polk,
San Jacinto, Trinity, and Walker Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

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Welcome to the first issue of a quarterly newsletter designed especially for Lake Livingston area forest landowners.

We all want clean water for ourselves as well as for our children and grandchildren. In Texas, as a forest landowner, you have a special opportunity to protect water quality.

By using voluntary Best Management Practices (BMPs) on your forestland, you can continue to avoid unnecessary government regulations while providing clean water.

With a philosophy of protecting water quality in the forests of East Texas by non-regulatory means, the articles in this and future issues will provide you with information that you can use to make informed land management decisions based on your personal objectives. ✔

Did you know…
Forests produce the cleanest water of any agricultural land use.

Your Land is the Future!

by James B. Hull

State Forester

As a forest landowner in the Lake Livingston area, you have an excellent opportunity to be a major participant in the future of the East Texas forest resource. Landowners like you own over 60% of all the commercial timberland here in East Texas. The Texas Forest Service, a Member of the Texas A&M University System, exists to help you realize your land management objectives.

As you know, the forestry community is going to great lengths to continue to utilize its renewable resource while protecting the environment. In fact, forestry leaders here in Texas have developed a set of Best Management Practices (BMPs), which are voluntary standards that provide protection for the streams and creeks of East Texas during and after forestry activities. Use of these voluntary BMPs will not only protect the environment, but also avoid costly regulatory programs. Agriculture and forestry are the only land-use activities exempt from federal and state water quality regulations.

After all, who does not want to maintain the beauty and vitality of our streams? Using BMPs is easy. By simply leaving a strip of trees along streams and creeks, the quality of your water can be protected. By using proper stream crossings, you can ensure good road access while minimizing erosion.

In the near future, you will be hearing much more about the Best Management Practices program. As State Forester for Texas, I encourage you to take an active role in your forest management decisions. Your timberland offers tremendous personal opportunity and is the future of East Texas forestry.

Watch Word… TMDL

A Total Maximum Daily Load or TMDL is the total amount of pollution (load) that a stream can handle in any given day without harming its beneficial uses, such as swimming, drinking or fishing.

Land disturbing activities such as farming, mining, highway construction and forestry have the potential to cause erosion and stream sedimentation.

Sedimentation is only one kind of pollution that TMDLs address. Others include heavy metals, a lack of oxygen in the water and even bacteria. Basically, anything in the water that makes it unsuited for its intended use is a pollutant.

Best Management Practices, or BMPs, are specially designed practices that reduce and eliminate this type of water pollution. For example, we have all seen the silt fences along the roadway during highway construction. These help prevent soil erosion.

There is a set of voluntary guidelines designed specifically for forestry in Texas. These guidelines provide a common sense solution to reduce water pollution.

The most important BMP is the Streamside Management Zone, or SMZ, which is discussed in detail in the column to the right.

Other BMPs include properly constructed forest roads and stream crossings.

Improving My Land

Streamside Management Zones

A great way to improve and protect your forestland is by creating a Streamside Management Zone, or SMZ. An SMZ is a protective buffer of vegetation along a stream or creek. As a general rule of thumb a 50-foot buffer of trees on both sides of the stream is usually sufficient for protecting water quality.

Streamside Management Zones are easily visible in this photo.

SMZs help improve your land by:

- Reducing the amount of sediment or dirt that may get into a stream
- Providing shade to maintain a consistent water temperature for the fish and the insects that they eat
- Stabilizing stream banks and protecting them from erosion
- Providing habitat and travel corridors for wildlife.

Don't forget that you can harvest (thin) in an SMZ and still be within the voluntary guidelines. Just leave 50% of the shade for a distance of 50 feet from the bank on both sides.

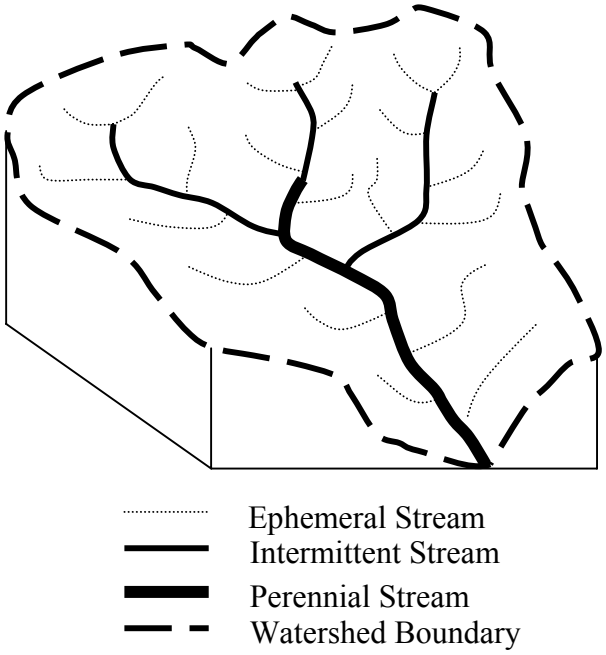
Ask your logging contractor or other forestry professional about SMZs. Your land will benefit in many ways and you can show your commitment to being a good "Land Steward."

What is a Watershed?

A watershed is an area of land that drains rainfall into a stream or lake. They are generally named for the water body that is at the end, or downhill, portion of the area being considered. Watersheds vary considerably in size. However a small stream on your property may drain only a hundred acres. Keep in mind that your small stream flows into a larger stream that would be part of an even larger watershed such as the Trinity River.

While forested watersheds provide the highest quality water, some forestry activities have the potential to lead to erosion. The use of Best Management Practices keeps the soil in place in the watershed, preventing siltation into streams.

The figure to the right depicts a three-dimensional watershed with its associated streams. An ***ephemeral*** stream, sometimes called a drain or swag, carries water only during and for a short time after a rain. An ephemeral stream may or may not have a well-defined channel. An ***intermittent*** stream carries water at least 30%, or about four months, of the year continuously, but not year-round. Intermittent streams have well-defined channels with scoured bottoms, a result of the flow. A ***perennial*** stream flows year-round, but may pool during drought conditions.



A watershed, depicted above, is an area of land that drains rainfall into a stream or lake.

These distinctions become important when deciding where Streamside Management Zones are recommended. As a general guideline, SMZs should be used along intermittent and perennial streams. These are the recommended minimum voluntary guidelines. Your common sense should guide your final determination.

Lake Livingston is located within **the Lower Trinity-Kickapoo watershed**. Also included within this watershed are the Trinity River, Kickapoo Creek, Menard Creek, Long King Creek, and Bedias Creek. This watershed drains 3,250 square total miles.

You can find much more information about your watershed by visiting the Environmental Protection Agency's (EPA) World Wide Web page at http://www.epa.gov/surf.

Another good source of information on the Lower Trinity-Kickapoo watershed is the Environmental Statistics Group site at http://www.esg.montana.edu/gl/huc/12030202.html

Distribution of the *Lake Livingston BMP Informer* is provided free of charge to forest landowners of Grimes, Houston, Leon, Madison, Polk, San Jacinto, Trinity, and Walker Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil & Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). PLEASE ADVISE US IF YOU WISH YOUR NAME REMOVED FROM OUR MAILING LIST.

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