TEXAS FOREST SERVICE AUGUST 2010

THE TEXAS WATER SOURCE

UPDATING FRANKLIN, TITUS, MORRIS, & CAMP CO. FOREST LANDOWNERS ON FORESTRY AND WATER ISSUES

Guidelines to Protect Soil and Water

Forestry Best Management Practices (BMPs) are guidelines that involve the application of practices that effectively prevent or minimize soil erosion and protect water quality. Water that flows through our forests eventually makes it to the water supply we use every day.

BMPs can include such measures as leaving a buffer zone of trees next to a stream, installing a culvert to cross a stream, or planting grass on forest roads to prevent erosion.

In Texas, these practices are voluntary, except for some forest road BMPs that must be implemented in federally regulated wetlands. Voluntary implementation of these practices not only protects water and soil, but also helps to keep these practices from becoming mandatory in our state.

A guidebook is available to aid landowners, loggers, and other forestry professionals in effectively protecting water and soil before, during, and after forestry operations. *Texas Forestry Best Management Practices* covers all types of forestry practices, giving detailed specifications for the methods described. It also contains guidelines for working in forest wetlands and includes a glossary of forestry terms and sources of more information and assistance.

For more information:

- For BMP Guidelines: http://texasforestservice.tamu.edu/BMP; look under "Publications"
- http://www.epa.gov/watertrain/forestry/

New Updates to Texas BMPs

Over the years, Texas Best Management Practices (BMPs) to protect water quality during forestry operations have been updated to account for new research, technology, and operational methods. A task force, whose members are from state and federal agencies, academia, private industry, environmental organizations as well as landowners, meet periodically to discuss ways to make BMPs more efficient and effective at protecting water quality.

Major revisions occurred in 1992 and 1995 when Streamside Management Zones (SMZs) were recommended for intermittent streams and wetland BMPs were added to the handbook, respectively. In 2004, the guidelines were clarified, and information on stream classification and basal area calculations (a measure of forest density), two important factors when providing SMZ protection to streams, was added.

The most recent update to the handbook, August 2010, further clarifies the guidelines, and includes information on slope calculations, improved BMP design schematics, and wetland protection.

The new BMP handbook is currently at press and should be available soon. It can be viewed online at http://texasforestservice.tamu.edu/bmp.

Inside this issue:

Agency Spotlight

Texas Parks and Wildlife Department

For more information:

- http://www.tpwd.state.tx.us/
- http://www.tpwd.state.tx.us/business/about/

The mission of Texas Parks and Wildlife is: "To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations."

Texas Parks and Wildlife Department (TPWD) provides outdoor recreational opportunities by managing and protecting wildlife and wildlife habitat and acquiring and managing parklands and historic areas.

It has inherited the functions of many state entities created to protect Texas' natural resources. In 1895 the legislature created the Fish and Oyster Commission to regulate fishing. The Game Department was added to the commission in 1907. The State Parks Board was created as a separate entity in 1923. In the 1930s, projects of the federal Civilian Conservation Corps added substantially to the state's parklands. In 1951, the term oyster was dropped from the wildlife agency's name, and in 1963, the State Parks Board and the Game and Fish Commission were merged to form the Texas Parks and Wildlife Department. The legislature placed authority for managing fish and wildlife resources in all Texas counties with the Texas Parks and Wildlife Department when it passed the Wildlife Conservation Act in 1983. Previously, commissioners courts had set game and fish laws in many counties, and other counties had veto power over department regulations.

The department is governed by the Texas Parks and Wildlife Commission, members of which are appointed by the governor. The Commission is headed by a chairman, named by the governor of the state.

Texas Parks and Wildlife Department has 11 internal divisions: Wildlife, Coastal Fisheries, Inland Fisheries, Law Enforcement, State Parks, Infrastructure, Communications, Legal, Administrative Resources, Human Resources, and Information Technology. Intergovernmental Affairs and Internal Audit and Investigations are administered through the Executive Office. Texas Parks and Wildlife headquarters is located in Austin, Texas.

TPWD and Water Quality

For more information:

- http://www.tpwd.state.tx.us/publications/pwdpubs/pwd_pl_e0100_0867/tpwd_roles/water_for_rec/index.phtml
- http://www.tpwd.state.tx.us/landwater/water/environconcerns/water_quality/

Protecting fish and wildlife resources will become increasingly important as the demand for water increases and water availability decreases statewide.

TPWD has regulatory responsibility for recreational fishing in Texas' waters and regulates commercial fishing along the Gulf coast. It is also the state trustee for aquatic resources, but has no regulatory authority to ensure water quality and quantity for fish, wildlife and recreational resources. TPWD's key role in water is to provide accurate scientific data on the water needs of fish and wildlife.

The Department focuses on maintaining and restoring sustainable aquatic life and maintaining fishable and swimmable designations in the state's waterways. An important component of this work is integration of data on aquatic communities, on physical, chemical and habitat parameters and on adjacent land uses. TPWD works with regional and state water planning stakeholders and works closely with regulatory agencies in an advisory capacity to protect and enhance water quality and to assure adequate instream flows for rivers and freshwater inflows for bays and estuaries.

Texas Surface Water Quality Standards

In June 2010, the swimming beaches at Lake O' the Pines were closed to swimmers because of high levels of *E. coli* bacteria. Routine sampling revealed bacteria levels beyond limits set by the state, and, for the first time ever for Lake O' the Pines, the beaches were closed. This did not affect recreational use of the rest of the lake. The beaches were later re-opened after testing showed acceptable levels of bacteria.

What could cause this to happen, and what is being done about it?

The Big Cypress Creek Modeling and Bacterial Source Tracking (BST) project was developed to address excessive bacterial levels in Big Cypress Creek and its tributaries (Tankersley Creek, Hart Creek) between Lake Bob Sandlin and Lake O' the Pines. This two-year project runs from June 2009 to 2011. A total of 250 water samples will be collected and analyzed from these three creeks during the study period.

One component of this study is to track the sources of bacteria in these waterways. The BST method compares DNA from the bacteria collected in water samples with the DNA from known bacteria sources - humans, livestock, etc. Once the sources of bacteria are determined, then conservation practices can be implemented to help improve the water quality.

How are state standards for water quality set?

The Texas Surface Water Quality Standards establish explicit goals for the quality of streams, lakes, and bays throughout the state. The Standards are written and implemented by the Texas Commission on Environmental Quality (TCEQ) under authority of the Clean Water Act and the Texas Water Code.

Water quality standards identify appropriate uses for the state's surface waters, including aquatic life, contact or non-contact recreation, and source of public water supply (or drinking water). Upper and lower limits are set for common indicators (criteria) of water quality, such as dissolved oxygen, temperature, pH, dissolved minerals, toxic substances, and bacteria.

In July 2010, TCEQ approved some revisions in the Texas Surface Water Quality Standards in defining recreational uses and the criteria involving bacteria. The previous Standards only considered two recreational use categories - contact and non-contact.

The old Standards applied contact recreation to all water bodies uniformly across the state (with very few exceptions like the Houston Ship Channel). All these waterbodies had the same bacteria threshold criteria - 126 *E. coli* colonies per100 ml of water.

The new revisions to the Standards established more categories of recreational uses by breaking down the contact recreation category into more subcategories (primary contact recreation and two levels of secondary contact recreation). Also, bacterial concentration maximums became a tiered set of criteria for the four categories, calling for a higher maximum allowance of bacteria in the waters with little or no direct contact with the water, and a lower threshold for waters with primary contact recreation designations.

Primary contact recreation areas are held to a higher standard since activities such as swimming, wading by children, water skiing, diving, and surfing involve a significant possibility of ingesting water. Secondary contact recreation activities have limited body contact with the water and are not as likely to involve ingestion of the water.

To put these water quality standards in place, assessments will be performed to determine what level of recreation is actually occurring on each waterbody.

For more information:

- http://bcc.tamu.edu/
- http://www.tceq.state.tx.us/nav/eq/eq_swqs.html

Did you know…

This is the last issue of *The Texas Water Source* newsletter for the Lake O' the Pines area; we are moving on to a different watershed. Keep in touch with the BMP Project and future newsletters by visiting the website on the back page of this newsletter. Thanks Franklin, Titus, Morris, and Camp County forest landowners!

TEXAS FOREST SERVICE THE TEXAS WATER SOURCE

Updating Franklin, Titus, Morris, & Camp Co. Forest Landowners on Forestry and Water Issues

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

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BMP Fact Sheets On-line

You can find some simple, one-page fact sheets on different forestry Best Management Practices (BMPs) on the Texas Forest Service website. Just go to http://texasforestservice.tamu.edu/BMP. Click on "Publications" and look under "Best Management Practices - Fact Sheets."

The fact sheet topics are:

- **BMP Guidelines Overview** - a look at basic forestry BMPs and their purpose.
- **Forest Roads** - focuses on guidelines for planning and constructing roads during forestry operations.
- **Reasonable BMP Expectations** - what to expect in properly implemented BMPs and what you could have stipulated in your timber sale contract.
- **BMPs for Reforestation and Site Preparation** - guidelines pertaining to reforestation and site preparation operations.
- **Stream Crossings** - focuses on how to properly cross streams.

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