THE TEXAS WATER SOURCE

UPDATING NACOGDOCHES, RUSK, SAN AUGUSTINE, & SHELBY CO. FOREST LANDOWNERS ON FORESTRY AND WATER ISSUES

Who Is Using Best Management Practices?

Forestry Best Management Practices (BMPs) are common-sense practices that help reduce soil erosion and protect water quality. Since 1991, Texas A&M Forest Service (TFS) has completed eight rounds of BMP implementation monitoring. The ninth round will soon be underway. This monitoring is done to see how well BMPs are being used.

Each round, TFS randomly selects a minimum of 150 tracts of forestland that have recently had some form of "normal forestry" operation – harvesting, thinning, site preparation and reforestation, etc. These randomly selected operations are evaluated, with the landowner's consent, for the presence and functionality of BMPs.

Overall BMP implementation on sites monitored during the last round (2011) was 94.1%, the highest rate since monitoring began. National Forest sites had an overall implementation rating of 98.3%, while industrial sites had a 97.7% rating. Corporate lands (commercial landowners that do not have wood processing facilities) scored 96.7% overall, while family forest owners like yourself scored 88.0%.

The Texas Forestry BMP program is non-regulatory; relying heavily upon voluntary cooperation from all individuals involved in forestry operations, including you as landowners. It is important to recognize that freedoms and flexibility in employing our forestry practices can be lost if these non-regulatory measures fail to achieve established water quality goals. If everyone involved in forest management implements these practices, water quality can be protected without strict government regulation.

For more information:

http:// tfsweb.tamu.edu/ water; look under *Publications* for the latest implementation report and earlier reports.



Local BMP Implementation

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Organization Spotlight

For more information:

 http:// twri.tamu.edu/

First established in 1952, Texas Water Resources Institute (TWRI) was designated as the water resources institute for the state of Texas in 1964 by the **Texas Legislature and Texas Governor** after Congress passed the Water Resources Research Act (WRRA) of 1964. The WRRA established water resources institutes in each state and provided funds for research on solving water issues. Today, TWRI is one of 54 institutes in the National Institute for Water Resources, which serves as the contact between individual institutes and the federal funding sponsor, U.S. Geological Survey.

Working with university faculty and water resources professionals, TWRI helps address priority water resources issues in the state. They collaborate through joint projects with universities; federal, state and local governmental organizations; and numerous others, including engineering firms, commodity groups and environmental organizations. TWRI programs:

 Best Management Practices evaluation - focus on research, demonstrations, and educational projects that determine the best methods, processes, or activities to improve and protect water quality.

Texas Water Resources Institute

- Watershed assessment, planning, and restoration - work with stakeholders to assess water quality throughout Texas and then develop plans to improve and protect water quality.
- Water sustainability and drought management - concentrate on increasing available water, meeting present and future water demands and creating new sources of water through agricultural and urban water research and educational outreach.
- Water resources training and education - market and administer short courses on diverse waterrelated topics; work with stakeholders to increase knowledge and understanding on critical water quality and water quantity issues in Texas; award funds to graduate students studying water resources.

Institute of Renewable Natural Resources

For more information:

http:// irnr.tamu.edu/ TWRI and the Texas A&M Institute of Renewable Natural Resources (IRNR) work together to foster and communicate research and educational outreach programs focused on water and natural resources science and management issues in Texas and beyond.

IRNR conducts interdisciplinary research and technology transfer, policy and economic analysis, and engagement with land managers and policy makers to improve the management of natural resources.

Their <u>land programs</u> include sciencebased programs and demonstration projects that promote sustainable land use through stewardship practices, land-use forecasting and policy, restoration ecology, and approaches to ecosystem services. Water programs encourage secure and sustainable water resources for humans and wildlife through watershed restoration, land conservation practices, and policy innovations. Wildlife programs promote sustainable wildlife populations, including game, nongame, and endangered species. Military programs support testing and training activities on U. S. Department of Defense lands through education, research, and policy innovations; land management; and regional planning.

Attoyac Bayou Watershed Protection Plan

The Attoyac Bayou runs through Rusk, Nacogdoches, San Augustine, and Shelby counties. With several rural communities in the area, the majority of the land in the watershed is used for cattle and poultry operations, forestry, or recreational and wildlife uses.

This bayou is one of many rural watersheds listed as an impaired water body by the Texas Commission on Environmental Quality (TCEQ) due to high levels of *E. coli*. This non-pathogenic indicator bacteria is found naturally in birds and mammals (including humans). It is used by the state to evaluate a water body's ability to support "contact recreation" – swimming, water skiing, diving, etc. – without causing public health concerns.

MONITORING AND PLANNING

Three monitoring stations managed by the Angelina & Neches River Authority, U.S. Geological Survey, and TCEQ have provided water quality data on the bayou for a number of years. Beginning in 2000, data collected for *E. coli* have consistently shown elevated *E. coli* levels that exceed the applicable Texas Water Quality Standards.

To better understand the Attoyac Bayou, a Watershed Protection Plan (WPP) is being developed. WPPs are developed through local stakeholder groups with funding and technical assistance from the TCEQ and/or the Texas State Soil and Water Conservation Board (TSSWCB).

These plans facilitate the restoration of impaired water bodies and/or the protection of threatened waters before they become impaired. These stakeholder-driven plans give the decisionmaking power to the local groups most vested in the goals of the plans.

PRELIMINARY WATER QUALITY RESULTS

In July 2010, Stephen F. Austin State University field personnel began collecting water samples and submitting them to the ANRA Environmental Laboratory for analysis of ammonia, different forms of nitrogen, phosphorus, total suspended solids (TSS; a measure of the suspended solids in water), and *E. coli.* A subset of samples was sent to Texas A&M University to determine the source of the bacteria.

Preliminary analysis indicates the 2011 drought had an impact on water quality in the Attoyac. The lack of precipitation and reduced stream flow may have lead to increased sediment, nutrient, and bacteria levels.

UPCOMING MEETING

The next meeting of the Attoyac Bayou Watershed Partnership will be held Thursday, March 7, 2013, at 6:00 p.m. in the Nacogdoches County Farm Bureau Conference Facility at 2302 NW Stallings Dr. in Nacogdoches. The public is welcome to attend. For questions regarding the meeting, contact Anthony Castilaw, Watershed Coordinator, at (936) 559-9991 or by e-mail: acastilaw@castilawenvironmental.com.

For more information:

http:// attoyac.tamu.edu Be sure and click on the "Meetings" and "Reports & Publications" tabs for much more information and updates

Did you know...

Attoyac Bayou is a sub-watershed within the Upper Neches River watershed, and extends approximately 82 miles before emptying into Sam Rayburn Reservoir.



The Attoyac Bayou watershed

Updating Nacogdoches, Rusk, San Augustine, & Shelby Co. Forest Landowners on Forestry and Water Issues

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

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

Welcome Landowners!

Texas A&M Forest Service (TFS) is the state forestry agency and works closely with private landowners and others in a wide variety of disciplines associated with forests and related natural resources. The Water Resources Program deals with water issues as they relate to forests and forestry practices.

Forestry Best Management Practices (BMPs) are commonsense practices that help reduce soil erosion and protect water quality. BMPs can include measures such as leaving a buffer zone of trees next to a stream, installing a culvert to cross a stream, or establishing grass on forest roads to prevent erosion.

This newsletter is the first in a series of four to be published over the next year for landowners owning forested property in the Attoyac Bayou watershed.

You can access past editions of *The Texas Water Source* on the TFS website. Go to http://tfsweb.tamu.edu/water, click on Publications, and look under Newsletters. There you'll find articles on water-related issues, agencies, organizations, and programs, as well as information that can help you in the management of your forestland. Check out the TFS Water Resources Blog as well - http:// tfswater.blogspot.com.

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