TEXAS A&M FOREST SERVICE

THE TEXAS WATER SOURCE

UPDATING EDWARDS, KIMBLE, AND SUTTON COUNTY LANDOWNERS ON LAND MANAGEMENT AND WATER ISSUES

October 2016

PROTECTING SOIL AND WATER

Texas has more than 60 million acres of forests and woodlands (about the size of Louisiana and Mississippi combined) that are both economically and environmentally significant. Land operations designed to enhance grazing, property access, wildlife, aesthetics, wildfire mitiga-

tion, or other management activities have the potential to negatively impact soil and water resources if poorly planned or implemented. Best Management Practices (BMPs) are the principal means of protecting soil and water resources during these management activities.

In Texas, BMPs are

voluntary conservation practices that protect soil and water resources - two key elements necessary for maintaining healthy, sustainable, and productive woodlands and rangelands. BMPs can include methods such as leaving a buffer zone of trees and/or other vegetation next to a stream, installing a culvert or low-water crossing to cross a waterway, or conducting mechanical operations along the contour of your property. Texas A&M Forest Service, in cooperation with Texas State Soil and Water Conservation Board and numerous natural resource partners, develops and periodically updates BMP guidelines, and provides education, outreach, and training on their application.



Riparian area buffer zones reduce the amount of sediment that enters streams. They also benefit wildlife by providing food, cover, travel corridors, and nesting sites.

The Texas Forestry Best Management Practices Handbook and Best Management Practices Pictorial Di*rectory* are geared towards East Texas operations, but the principles and methods also apply to Central and West Texas land management operations as well. Go to tfsweb.tamu.edu/

BMP to find these documents and other resources. The BMP guidebook also comes as a free app for your phone or tablet in Android and iOS versions.

Private land stewardship, through the implementation of BMPs, is one of the principle means of protecting water resources. Treating water at its origin, and not just its destination, is an efficient, cost -effective, and sustainable way to provide clean water for Texas.

For more information:

- http://tfsweb.tamu.edu/ BMP
- http:// texasforestinfo.tamu. edu/mobileapps
- http://tfsweb.tamu.edu/ water

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Organization Spotlight

The Llano River Watershed Alliance is an organization of landowners and interested stakeholders whose mission statement is to preserve and enhance the South Llano River and adjoining watersheds by encouraging land and water stewardship through collaboration, education, and community participation.

The South Llano Watershed Alliance, now the Llano River Watershed Alliance, grew out of the South Llano River Project. The South Llano River Project was initiated in early 2008 to begin discussions with local and regional stakeholders on the interest and feasibility of developing a plan of action to ensure the long-term protection of this rich and unique resource.

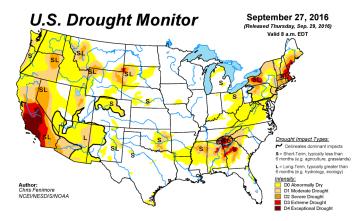


As part of this Project, the "Land of the Living Waters" report was prepared. This report gives an overview of the state of the South Llano River and outlines the pressing water resource issues facing the general area. It also characterizes the importance of the river to both the local community and the Central Texas region as a whole.

In late 2008, more than 76 people came from communities up and down the Llano River to attend the South Llano River Workshop. Attendees included landowners, community leaders, and resource agency representatives interested in discussing shared concerns for the flows of the South Llano River and its springs. The South

INFORMATION YOU CAN USE

Click through the different pages of The Llano River Watershed Alliance website (www.llanoriver.org); it is rich



LLANO RIVER WATERSHED Alliance

Llano River Project Action Plan was developed based on stakeholder input at the November 2008 Workshop. The Plan is meant to serve only as a guide for Llano River stakeholders; the stakeholder group itself should determine any future course of action undertaken by the group, or specific tasks to be completed.

The following January (2009), Llano River stakeholders met again to discuss next steps for forming a local coalition focused on protecting the flows of the South Llano River and it's associated springs. The organization's name – South Llano Watershed Alliance – was chosen and their mission statement was developed.

On May 30th, 2009, Alliance members met again to discuss the Alliance's proposed bylaws, budget, and nominations for the Board of Directors. During June and July of 2009, the newly elected Board of Directors met to finalize the Alliance's Non-profit application (501c3) to the IRS, formalize an Action Plan, initiate a website, and identify projects and topics for upcoming activities and workshops.

Since then, a Watershed Conservation Plan and a Watershed Protection Plan have been written.

For more information:

- http://www.llanoriver.org
- Llano River Watershed Alliance Facebook
 page

with a variety of information you may found interesting and useful. For instance - click on the <u>Resources</u> tab. There, you'll find Llano River stream flow data from various gages along the river; rainfall amounts within the last 2 weeks; the latest drought map; a glossary of river terminology; a spring owners guide; and much more.

The <u>Llano Watershed</u> tab has links to the South Llano River Project Action Plan, Watershed Conservation Plan, and Watershed Protection Plan, along with other information on activities and projects within the watershed.

Under the <u>Issues</u> tab are topics such as drought and wildfire, fracking on the Edwards Plateau, groundwater management, regional water planning, and sand and gravel mining in streambeds.

UPPER LLANO RIVER WATERSHED PROTECTION PLAN

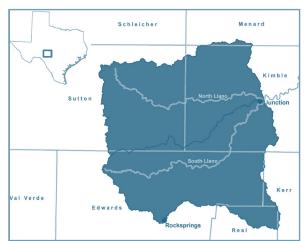
The Llano River, a clear spring-fed perennial river and major tributary of the Colorado River, is a true gem of

the Texas Hill Country. The Upper Llano River, which includes the North and South Llano Rivers, along with the springs that feed it, supports several unique plant and animal communities and provides constant critical flowing water downstream to the Llano and Colorado rivers, Lake LBJ, and other Highland Lakes, especially during times of drought. Due to the pristine nature and relatively constant flow of the springs, the Upper Llano River is currently a healthy ecosystem supporting a variety of aquatic and terrestrial ecosystems and numerous recreational opportunities.

However, loss of spring flow due to aquifer withdrawals, subtle changes

from land fragmentation, loss of riparian habitat, spread of invasive species, and encroachment of juniper species on upland habitats threaten this system, potentially decreasing water quality and streamflows.

Because the protection and preservation of the Upper Llano River and its springs is a natural resource, economic, and cultural concern, the Texas Tech University Llano River Field Station (TTU-LRFS) and Texas Water Resources Institute (TWRI) are working with the Texas State Soil and Water Conservation Board (TSSWCB), South Llano Watershed Alliance (SLWA), and others to develop and implement a watershed protection plan (WPP). The SLWA is an organization of landowners and



interested stakeholders whose mission is to preserve and enhance the South Llano River and adjoining water-

sheds by encouraging land and water stewardship through collaboration, education, and community participation.

Watershed planning is driven by local stakeholders and includes the following key tasks: 1) identify desired watershed conditions and measurable goals, 2) prioritize appropriate management practices and needed education and awareness programs to achieve those goals, 3) assist in the development of the

Upper Llano River Watershed

WPP document, 4) lead implementation of the plan at the local level, and 5) communicate implications of the WPP to other interested constituents within the watershed. The plan and its components address potential threats arising from land fragmentation, noxious woody vegetation, aquatic invasive species, groundwater availability, and the potential for groundwater exports and aquifer contamination.

For more information:

 http://www.llanoriver.org/watershed-protectionplan

UPPER LLANO RIVER WPP ACCEPTED BY EPA

From a press release dated September 30, 2016: The U.S. Environmental Protection Agency (EPA) has reviewed and accepted the Upper Llano River Watershed Protection Plan (WPP) as meeting the agency's guidelines for watershed-based plans. This WPP outlines a strategy implement management measures that will reduce nonpoint source pollution in the watershed.

The plan and its components provide solutions to potential issues arising from land fragmentation, woody vegetation, aquatic invasive species, groundwater availability,

Did you know . . . The Upper Llano River

watershed is 1,890 square miles, or 1.2 million acres.

and aquifer contamination. This effort was funded through a Clean Water Act Section 319(h) grant provided by the Texas State Soil and Water Conservation Board (TSSWCB) and the EPA.

This WPP is a proactive approach by TSS-WCB to protect water quality and quantity of both surface and ground waters in the

basin through voluntary, non-regulatory watershed management strategies. The WPP will play an integral role for ensuring an abundance of clean and healthy water for the future. Texas A&M Forest Service Water Resources 2127 S. First St. Lufkin, TX 75901



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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, woodlands, and forestry/land management practices.

Forestry Best Management Practices (BMPs) are common-sense practices that help reduce soil erosion and protect water quality. BMPs can include measures such as leaving trees and other vegetation next to a stream or other waterbody; installing a culvert to cross a stream; or installing water diversion structures on dirt roads to prevent erosion.

This newsletter is the first in a series of four to be published over the next several months for landowners owning forested property in the Upper Llano River watershed.

You can access past editions of *The Texas Water Source* on the TFS website. Go to http://tfsweb.tamu.edu/BMP, click on Newsletters: Texas Water Source, and choose the newsletter date of your choice. 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 property. Check out the TFS Water Resources Blog as well - http://tfswater.blogspot.com.