# Upper Llano Watershed Protection Plan August 14, 2012 Meeting Summary

**Welcome**

Honorable Andrew Murr, Kimble County Judge

* Judge Murr welcomed all interested stakeholders to the meeting.

--He shared his personal interest in the watershed and explained that we are all naturalists.

**Meeting Overview and Introductions**

Kevin Wagner, Texas Water Resources Institute

* The purpose of the meeting is to discuss a new effort that’s getting underway to develop a long-term strategy to preserve flows and quality of the North and South Llano Rivers.
* Local stakeholders will guide this effort. Scientific studies and educational programs will provide stakeholders the information needed to develop the strategy.
* Support for the effort will be provided by the Texas State Soil and Water Conservation Board, Texas A&M University(Texas Water Resources Institute, Texas AgriLife Extension Service, and Spatial Sciences Laboratory), Texas Tech University (Llano River Field Station and Water Resources Center), and the South Llano Watershed Alliance.
* This project originated from existing local watershed group efforts and studies.
* Involvement in the project and any resulting implementation is 100% voluntary. Expectations are that funding for implementing strategies may be provided for recommended practices upon completion of the plan.

**Watershed Planning for the South and North Llano Rivers**

Aaron Wendt, Texas State Soil and Water Conservation Board

* Abating pollution is costly; it is more costly to restore an impaired, polluted water body than to preserve a pristine water body. The Healthy Watersheds Initiative aims to keep the Upper Llanos healthy through the development of a watershed protection plan.
* A *watershed* is defined as the area of land that catches precipitation and drains it into a marsh, stream, river, lake or groundwater. Watersheds cross county, state, and national boundaries.
* A *watershed protection plan* (WPP) is a voluntary, stakeholder-driven, holistic approach to addressing the sources and causes of impairments or threats to surface and ground water resources within a watershed.

**Water Quality in the Upper Llano Watershed**

Tyson Broad, South Llano Watershed Alliance

Emily Seldomridge, TTU Llano River Field Station

* Historically, the Upper Llanos have had excellent water quality (More information can be found in Tyson’s characterization report *Headwaters of the Llano*: <http://southllano.org/blog/wp-content/files/Headwaters%20of%20the%20Llano%20final.pdf>). Water quality is monitored to gauge the health of an ecosystem.
* Threats to water quality in the Upper Llano Watershed are numerous and include: land fragmentation and development, feral hogs, axis deer, goats, herbicides/pesticides, failing septic systems, wastewater treatment plants, hydraulic fracturing waste, sand and gravel mining, etc.
* The WPP will address water quality threats by monitoring water quality and biologics (fish and macro-invertebrate populations) at 20 sites throughout the watershed, identifying land use, and mapping the distribution and abundance of invasive emergent and aquatic plants and cut banks.

**Upper Llano River Watershed Studies and Watershed Protection Plan**

Tom Arsuffi, TTU Llano River Field Station

* The Upper Llanos are receiving increasing attention because of their ecological significance; water quality and quantity remain key issues. The Upper Llanos are spring-fed rivers and contribute large volumes to the Colorado River and Highland Lakes.
* There are a number of problems in the Upper Llano Watershed that are likely to become large problems in the future if not addressed:
  + Axis deer: Axis overgraze the riparian buffers along the river banks and can outcompete white tail deer
  + Brush control and encroachment: Ashe juniper, Live Oak, and Mesquite use tremendous amounts of water compared to native vegetation
  + Invasive plants: Eradication of Elephant Ear and Giant Cane
  + Cutbanks and erosion: The loss of riparian buffers along rivers add to erosion
* The goals of the WPP are to 1) evaluate and understand the Upper Llano Watershed; 2) engage local stakeholders and facilitate development of WPP; 3) maintain and improve water flows and quality.
* The WPP will be used to as a guide to make informed decisions about ecological restoration and used to leverage programs and resources across state agencies.

**Watershed Partnership Structure and Getting Involved**

Kevin Wagner, Texas Water Resources Institute

* The WPP is a stakeholder driven process---this is your plan!
* The planning process will include involvement of a diversity of interests, collaborative decision-making based on sound science and accurate information, strong communication and outreach, and short-term doable action items and long-term objectives/goals.
* Stakeholders are responsible for coming up with recommended implementation strategies to include in the WPP.
* At the next meeting, stakeholders will decide the structure of the group (steering committee alone; steering committee with workgroups; overall consensus building) , ground rules or bylaws, and determine needed work groups for the decision making process.