

Watershed Management

Central Texas is known for cool, clear, tree-lined streams as well as hilly terrain which seems to cascade to the horizon. Tourists and landowners alike appreciate this setting. Conditions, however, are not always as they appear on a postcard. Landowners can take steps to help their land live up to its potential, as well as, the rivers flowing downstream.

Management for Soil and Water often go hand in hand. As soil is stabilized on the land, water runoff is clearer. If vegetation is healthy on the land, nutrients and chemicals can't reach a stream as easily. Also, as trees and grasses grow along streams, stream banks resist erosion.

Water Catchments also known as Watersheds

Every acre of land in Texas leads to a stream, river, and ocean. The area of land leading to a stream or river is called a watershed. This word implies that function of water is to runoff. This couldn't be further from the truth. Water Catchment best describes the proper function of dry land. When water is infiltrated in to the plants and soil, movement becomes slow, sustained, and deliberate. This benefits plants and animals over a longer period of time while water slowly journeys to a stream or aquifer. Visual cues can help you determine if you have Water Catchment or runoff.

- Rutting of soil leading downhill. This can be small 1" wide or several feet wide. The result is soil running off your land.
- "Waves" of debris leftover after a rain. These can be grass litter or logs, but they show sheet erosion.
- "Pedestalling" grass clumps or stones. If a clump of grass or a rock is sitting on top of a soil column, you have lost that much soil *recently*.

Prevent this by:

- Proper stocking rate of livestock.
- Controlling deer populations to encourage native forbs, shrubs, and trees.
- Thinning or clearing "cedar" trees as appropriate to encourage grass growth and native hardwoods trees.
- Contacting professionals in your area for advice on these and other topics.

Grow Your Riparian Zone

The riparian zone is the band of vegetation that should occur on either side of the water in a stream or river. Streams are meant to be sponges rather than channels. As stabilizing vegetation grows along the water's edge, water is slowed down and absorbed into the banks. This water is released over a longer period of time increasing the chance of having water flow between rains. The riparian area extends up into the bottomlands with older more long-term trees and grasses. This region's of the riparian area plays a critical role in floods absorbing and slowing down flood waters. This function benefits your land as well as those facing flood waters downstream. A few tips to achieving Proper Functioning Condition are:

- View the streambank as a sponge. Overtime the vegetated area will become wider while the water channel becomes narrower. This is good.
- Fence off riparian. This includes the upper riparian trees and tall grasses. This becomes a filter and flood control for downstream users.
- Don't mind the woody debris. Even large debris is beneficial to slowing down and storing flood water.
- Trees and shrubs are good of various sizes. Grasses alone have mediocre stabilizing ability. The combination of trees and grasses forms a stable rooting complex which reduces bank erosion.
- Contact the river authorities in your area and the NRCS Stream Team to assess your stream's Proper Functioning Condition.