Water Quality as a Function of Land Use



Committed to Safe, Clean, Enjoyable Creeks and Rivers.



What we do on the land impacts what we see in the river...

Pollution can come

from...

- Direct deposition to the stream
- Washoff from the uplands
- Erosion from the stream Itself

Wastewater treatment plant

Convright @ 2005 Pearson Prentice Hall Inc.

Rural homes

Nonpoint

E a Ba

Sources

POINT

SOURCES

Cropland

Animal feedlo

1.0

The amazing riparian sponge





A healthy riparian sponge absorbs and slows flood flows and provides healthy habitat.





Erosion incises the stream, drawing down groundwater. The reduced baseflow will lead to a loss of vegetation and stream quality.





Loss of riparian vegetation results in erosion widening the stream. The loss of a functioning stream leads to increased erosion, degraded water quality, loss of water quality, and instability.



Best Management Practices

- Give the Stream Some Room
- Vegetation Matters
- Large Woody Debris is your friend
- Build Healthy Soils
- Dispose Wastes Properly



Give the stream some room...



Keep stock out of the stream

- Alternative Watering
- Fencing of Riparian Areas



Allow riparian vegetation to build the riparian sponge



Vegetation is the Key to Healthy Creeks and Rivers



- Vegetation
 - Dissipates Energy
 - Reduces Erosion
 - Trap Sediments
 - Help Create/Enlarge Riparian Sponge



Vegetation Matters

Work with native riparian species which grow deep roots and will stabilize stream banks.



Vegetation Matters

Species and age diversity is key to the sustainability and stability of the stream.

Best Practices for Riparian Vegetation

- Avoid mowing, farming close to the bank
- Avoid overgrazing in the riparian area
- Create a riparian protection zone.



Large Woody Debris Protects Stream Banks and Reduces Erosion



Large Woody Debris helps trap sediment





Sediments and organic matter trapped by woody debris are soon colonized by vegetation. This improves water quality by trapping pollutants.

Woody Debris helps build strong streams.





Trapped sediment will bury woody debris and help build a strong stable stream.



Indercut Ranks

When possible, let woody debris do it's job.

After the flood, where safe, leave down trees and woody debris. Woody debris will help reduce erosion, protect banks, and help rebuild the streams.



Healthy soil in the uplands can reduce erosion, improve water retention, and increase nutrient retention.

Upland Soils Impact the River

- Nutrient Management
- Rotational Grazing
- Crop Rotation
- Cover Cropping
- Mulching
- No-Till



https://www.agclimate.net/2019/05/18/check-it-out-new-resource-for-healthy-soils-and-climate-resilience/



WILSON COUNTY COLLECTION EVENT Household Hazardous Waste, Used Tires, Used Electronics & Pharmaceutical Waste

Saturday, March 17, 2018 - 8 a.m. to Noon Wilson County Precinct 2 Yard, 1005 Railroad St., Poth, TX Residents of Wilson County only. proof of address required - No businesses.

WHAT TO BRING FROM HOME The following items will be accepted in household quantities, at no charge:

We are unable to Collect the following items:

HOUSEHOLD HAZARDOUS USED ELECTRONICS:

WASTE:

Antifreeze

Automobile Tires with no

Light Truck Tires with no

Used Motor Oil & Filters

Transmission & Brake Fluid

Cleaning Products (polish,

drain openers)

oven cleaner, stain remover,

Household Products Labeled

Acids

Rims

Rims

Batteries

Electronics-Microwaves,

Blenders, Toasters

Monitors Computer

PHARMACEUTICAL

Components & Parts

liquids, creams, patches)

liquids, creams, patches)

Non-Prescription (pills,

Pet Medications

consoles)

WASTE:*

· Televisions (no wooden

- Dioxins
 - Large Appliances or A/C Units
 - Containers Larger Than 5 Gallons

Tractor Tires, Tires with Rims
 Agricultural Chemicals

- Explosives
- Large Propane Cylinders
- Radioactive Materials
- Industrial or Commercial/
- Business Waste
- Prescription Meds (pills,
 Compressed Gas Cylinders
 - Ammunition
 - Items with Asbestos
 - Construction & Demolition Debris
 - Scrap Metals
 - Household/Office Furniture or

Dispose Properly

- Household hazardous waste
- Agricultural Chemicals
- E-waste
- Tires
- Animal Carcasses

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