Agricultural and Watershed Best Management Practices

Dr. Balaji Narasimuthu
Spatial Sciences Laboratory
Texas A&M University

Issues of Concern

- Excess Nutrients
- Phosphorus
- Nitrogen
- Sedimentation
- Run-off

Agricultural Best Management Practices

- Implementation of structural or behavioral practices to reduce loadings of sediment or nutrients into watersheds
  - Cropland
  - Pasture and Rangeland
**North Central Texas Water Quality Project**

**Cropland BMP’s**
- Filter Strips
- Contour Farming
- Terracing
- Grassed Waterways
- Crop Residue Management
- Cropland Conversion to Pasture
- Fertilizer/Nutrient Management

**Filter Strips**
- Vegetation filter strips work to prevent erosion and absorb nutrients

**Contour Farming**
- Uses the natural landscape as a method of retaining nutrients and sediment

**Terracing**
- Allows crops to grow with the natural landscape with minimal soil disruption

**Grassed Waterway**
- Allow for the retention of sediment and nutrients within the crop area

**Crop Residue Management**
- Tillage is minimized to allow for retention of nutrients in soil
Cropland Conversion to Pasture
• Conversion of cropland to pasture decreases the need for nutrients and stabilizes top soil and ground cover

Nutrient Management
• Precision application of fertilizers prevent excess nutrients from entering watershed

Pasture and Rangeland BMP’s
• Prescribed Grazing
• Fencing
• Water Facility
• Fertilizer/ Nutrient Management
• Pasture Planting
• Range Planting
• Grassed Waterway
• Riparian Buffer strips

Prescribed Grazing
• Grazing rotation allows for retention of ground cover, nutrients, and soils

Fencing
• Fencing prevents livestock from entering sensitive riparian areas

Water Facility
• A water tank centered at the confluence of four pastures allows for rotational grazing
Pasture Planting
• Utilization of native grasses allow for a more hearty ground cover reducing run-off of sediment and nutrients

Range Planting
• Supplementing range cover prevents degradation of lands and soils

Grassed Waterway
• Allow for the retention of sediment and nutrients within the crop area

Riparian Buffer Strips
• Maintain vegetative cover near streambeds and drainages to reduce erosion and nutrient runoff into watershed

Watershed Best Management Practices
• Implementation of structural or behavioral practices to reduce loadings of sediment or nutrients within the watershed
  • Channel

Watershed BMP’s
• Sediment Basins
• Channel Stabilization
• Streambank Protection
• Wetlands
• Grade Stabilization
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**Sediment Basins**
- Sediment basins allow for the collection of sediments and prevent further flow into the watershed

**Channel Stabilization**
- Stabilization structures reduced erosion and sedimentation of streams and channels

**Streambank Protection**
- Vegetation or constructed mechanism to prevent streambanks from degradation

**Wetland Creation/Protection**
- Wetlands within the watershed serve as natural filters of sediment and nutrients

**Grade Stabilization Structures**
- Maintain structure of reservoir by preventing erosion of grades