



# Elm and Sandies Creeks TMDL Implementation Strategy

Technical and Financial Assistance for  
Cattlemen and Poultry Growers

June 23, 2008  
Pilgrim, TX

# Texas Conservation Partnership



- Providing Conservation Assistance to Private Landowners for 70 Years
- LOCAL  
217 Soil and Water Conservation Districts (SWCDs)
- STATE  
Texas State Soil and Water Conservation Board (TSSWCB)
- FEDERAL  
U.S. Department of Agriculture  
Natural Resources  
Conservation Service (NRCS)

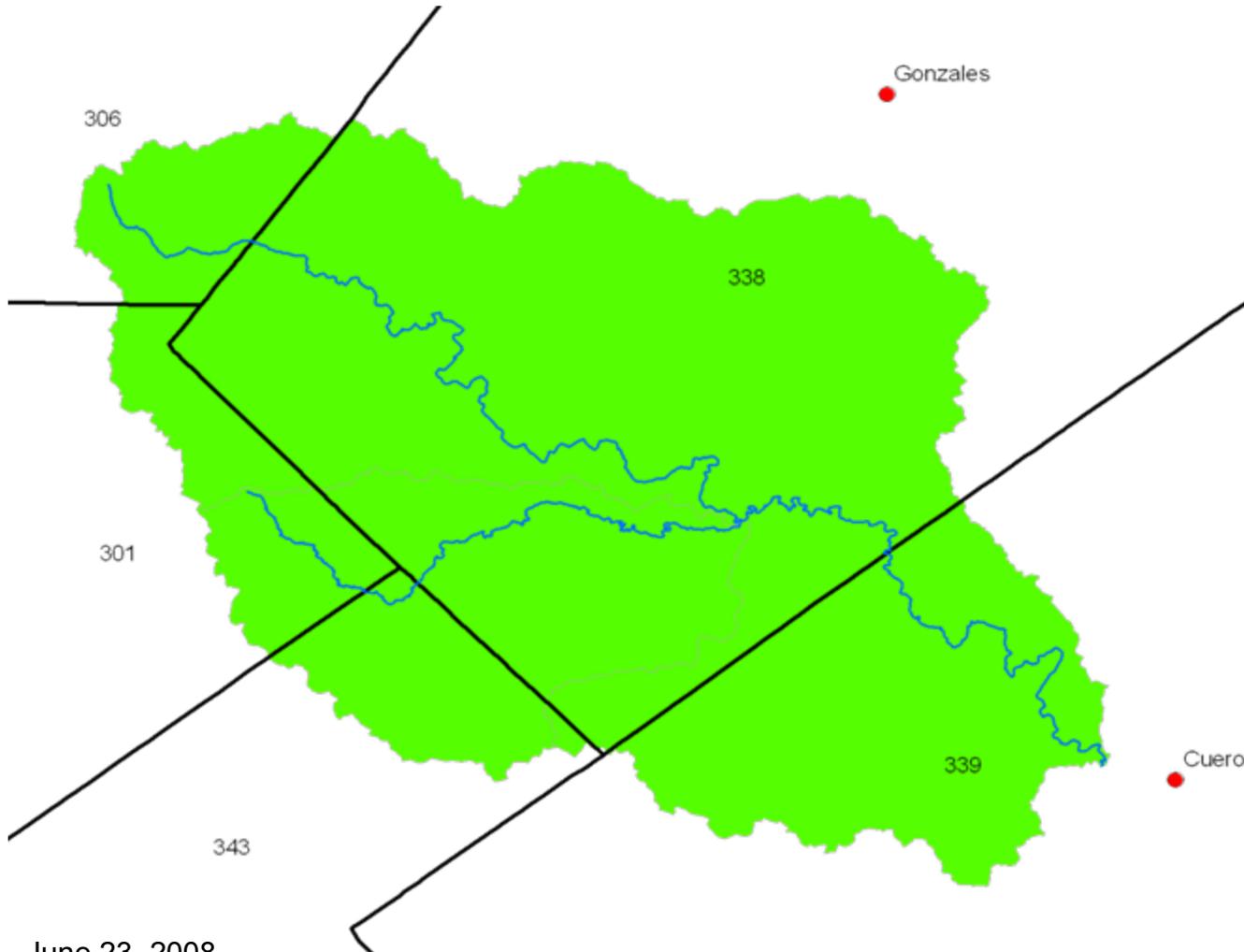


# Conservation Partnership SWCDs

- 217 SWCDs organized statewide
- Each is an independent political subdivision of state government, like a county or school district
- Governed by five-member board of directors elected by their fellow landowners (farmers and ranchers)
- Advocate a voluntary, incentive-based approach to natural resources conservation using economically feasible practices based on scientifically sound data



# SWCDs in the Elm and Sandies Creeks Watershed



- Wilson County SWCD #301
- Comal-Guadalupe SWCD #306
- Gonzales County SWCD #338
- Dewitt County SWCD #339
- Karnes County SWCD #343

June 23, 2008



# Conservation Partnership TSSWCB

- Established in 1939 by the Texas Legislature to administer the State's soil and water conservation law and coordinate conservation and pollution abatement programs
- Works in partnership with the State's 217 local SWCDs to encourage the wise and productive use of the State's soil and water resources in a manner that promotes a clean, healthy environment and strong economic growth
- Governed by a seven-member State Board composed of five locally-elected members and two Governor-appointed members, all of whom must be landowners actively engaged in farming or ranching



# Conservation Partnership TSSWCB

- Lead agency in Texas responsible for planning, implementing and managing programs and practices for preventing and abating agricultural and silvicultural (forestry) nonpoint sources of water pollution (Texas Agriculture Code §201.026)
- Through federal Clean Water Act §319(h) grants and State appropriations, funds projects encompassing water quality monitoring, bacterial source tracking, computer modeling, watershed planning, education and best management practice demonstration and implementation



# Conservation Partnership NRCS

- Since 1935, NRCS has helped America's private land owners and managers conserve their soil, water, and other natural resources
- NRCS provides technical assistance based on sound science suited to a customer's specific needs
- NRCS provides financial assistance for many conservation activities
- NRCS has established standards and specifications for best management practices (BMPs)
- Supports the programs of the local SWCDs



# Implementation Strategy

- Proactively address agricultural sources of pollutants through voluntary implementation of BMPs by private landowners to bring waterbodies back into compliance with water quality standards



# Implementation Strategy

- Technical assistance for private landowners to develop Water Quality Management Plans (WQMPs) that implement BMPs
- Financial assistance for private landowners through traditional programs to implement WQMPs and BMPs
- Research on effectiveness of BMPs
- Education on and Demonstration of BMPs



# WQMPs

- Site-specific plan for land improvement measures developed through and approved by SWCDs for agricultural or silvicultural lands certified by TSSWCB
- Provides farmers and ranchers an opportunity to achieve a level of pollution prevention or abatement consistent with state water quality standards
- Includes appropriate and essential land treatment practices, production practices, management measures, technologies, or combinations thereof, applicable to the planned land use
- Best available management and technology as described in NRCS Field Office Technical Guide



# WQMPs

- Created by the 73<sup>rd</sup> Texas Legislature in 1993 through Senate Bill 503 (Texas Agriculture Code Chapter 201 and Texas Administrative Code Chapter 523)
- Texas Water Code §26.121 essentially grants TSSWCB-certified WQMPs the same legal status as TCEQ point source permits
- TSSWCB (not TCEQ) is responsible for investigating and resolving water quality complaints associated with agricultural operations that have a WQMP
- Voluntary enrollment in WQMP Program for farmers and ranchers, except that the 77<sup>th</sup> Texas Legislature in 2001 (Senate Bill 1339) said poultry operations must obtain a WQMP



# Technical Assistance

## For Cattlemen

- DeWitt County SWCD #339, Cuero
- Funded with a CWA §319(h) grant from TSSWCB
- Provide needed technical assistance to livestock producers
- Development and implementation of WQMPs
- Increased utilization of available financial assistance programs
- <http://www.tsswcb.state.tx.us/managementprogram/3EQIPTech>
- Tracie Kelley, (361) 275-5293



# Phased Implementation

- Assist producers over time based on geographic distribution of operations relative to Elm and Sandies Creeks
- Main stem →  
    perennial tributaries →  
        intermittent tributaries →  
            watershed



# Cattle BMPs

- Prescribed Grazing (528)
  - Managing the controlled harvest of vegetation with grazing animals
  - Grazing Management Plan
  - Cross-Fence (382)
- Alternative Water Sources
  - Pond (378), Water Well (642), Pipeline (516), Watering Facility (614)
  - Provide grazing animals access to water to protect and enhance vegetative cover through proper distribution of grazing and to protect streams from contamination
- Riparian Forest Buffer (391) and Riparian Herbaceous Buffer (390)
  - Area of grass, trees or shrubs adjacent to streams
  - Intercept sediment, nutrients, pesticides and other pollutants in surface runoff
  - Food, cover and connectivity for wildlife
  - Increase resistance of banks to erosion from stream flow and surface runoff



# Grazing Management Plan

- Resource Inventory that identifies resource condition and concerns, existing structures, facilities
- Forage Inventory of the expected forage quality, quantity and species of forage in each management unit
- Forage-Animal Balance which analyzes forage produced versus forage demand of livestock
- Grazing Plan that schedules the periods of grazing, rest, and other treatment activities for each management unit
- Contingency Plan that identifies potential problems such as severe drought, wildfires, or flooding to serve as a guide for adjusting the grazing schedule
- Monitoring Plan to measure and evaluate the success of the grazing strategy in order to make grazing management decisions



# Implementation To Date - Cattle

- 4 WQMPs
- 1,108 total acres under WQMP
- 101 head of cattle managed
- 1,081 acres under Grazing Management Plan
- 21 acres of riparian buffers



# Technical Assistance

## For Poultry Growers

- TSSWCB Poultry Program, Satellite Office, Gonzales
- Funded with state general revenue
- Provide needed technical assistance to poultry growers
- Development and implementation of WQMPs
- <http://www.tsswcb.state.tx.us/poultry>
- Shari Johnson, (830) 672-6541



# Poultry BMPs

- Waste Utilization (633)
  - Application of agricultural waste (poultry litter) on the land in an environmentally acceptable manner while maintaining or improving natural resources to aid in meeting crop nutrient demand
  - Annual soil and litter tests
- Filter Strip (393) and Field Border (386)
  - Strips of permanent vegetation established near streams (393) or the perimeter of a field (386) to remove sediment, organic material and other pollutants from runoff
- Riparian Forest Buffer (391) and Riparian Herbaceous Buffer (390)
  - Area of grass, trees or shrubs adjacent to streams
  - Intercept sediment, nutrients, pesticides and other pollutants in surface runoff
  - Food, cover and connectivity for wildlife
  - Increase resistance of banks to erosion from stream flow and surface runoff



# Implementation To Date - Poultry

- 60 WQMPs
- $\approx$ 18,000 total acres under WQMP
- $\approx$ 6.3 million chickens managed
- 7,800 acres under litter application
- 1,300 acres of riparian buffers



# Financial Assistance

- Environmental Quality Incentives Program (EQIP) is a voluntary conservation program that supports production agriculture and environmental quality as compatible goals
- Federal Farm Bill program administered by NRCS
- Farmers and ranchers receive financial assistance with structural and management conservation practices on their land
- Program is designed to address both locally identified resource concerns and state priorities



# Financial Assistance

- EQIP State Resource Concern for Water Quality in South Central Texas
- Directed toward protection of streams impacted by bacterial contamination from livestock
- Good grazing management and alternative water sources will be promoted
- Targeted to watersheds of Elm and Sandies Creeks, Peach Creek, Lower San Antonio River and Atascosa River
- EQIP financial assistance available for BMPs such as cross fencing, water wells, riparian buffers, watering facilities and prescribed grazing



# Financial Assistance

- Applications are ranked for funding
- Higher rank if:
  - livestock operations located in close proximity to impacted streams
  - Livestock operations develop and implement a WQMP
- Allocation in FY2006 + FY2007 + FY2008
- [http://www.tx.nrcs.usda.gov/programs/EQIP/08/stconcrns08/so\\_central\\_tx.html](http://www.tx.nrcs.usda.gov/programs/EQIP/08/stconcrns08/so_central_tx.html)
- Implications from recently passed new federal Farm Bill are not certain at this time



# Lone Star Healthy Streams

- Texas AgriLife Extension Service and Texas Water Resources Institute
- Funded through a CWA §319(h) grant from TSSWCB
- Evaluate and demonstrate effectiveness of BMPs in reducing bacteria loading to streams from grazing lands
- GPS collars on cattle
- Collecting water quality data
- <http://grazinglands-wq.tamu.edu/>
- Develop educational curriculum that delivers current knowledge training in production and environmental management of grazing lands and their watersheds





# Poultry Litter Application

- Texas AgriLife Extension Service and USDA Agricultural Research Service
- Funded through a CWA §319(h) grant from TSSWCB
- Evaluate and demonstrate effectiveness of BMPs in reducing bacteria loading to streams from poultry litter application
- Collecting water quality data
- <http://www.tsswcb.state.tx.us/managementprogram/plan>
- Develop educational curriculum focused on benefits of proper application of poultry litter





# Summary

- Conservation Partnership – SWCDs, TSSWCB and NRCS
- Technical Assistance for cattlemen and poultry growers available
- Develop and Implement WQMPs
- Financial Assistance through EQIP available
- Education programs being developed by AgriLife Extension