



What is a Recreational Use Attainability Analysis?

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Texas State Soil and Water Conservation Board

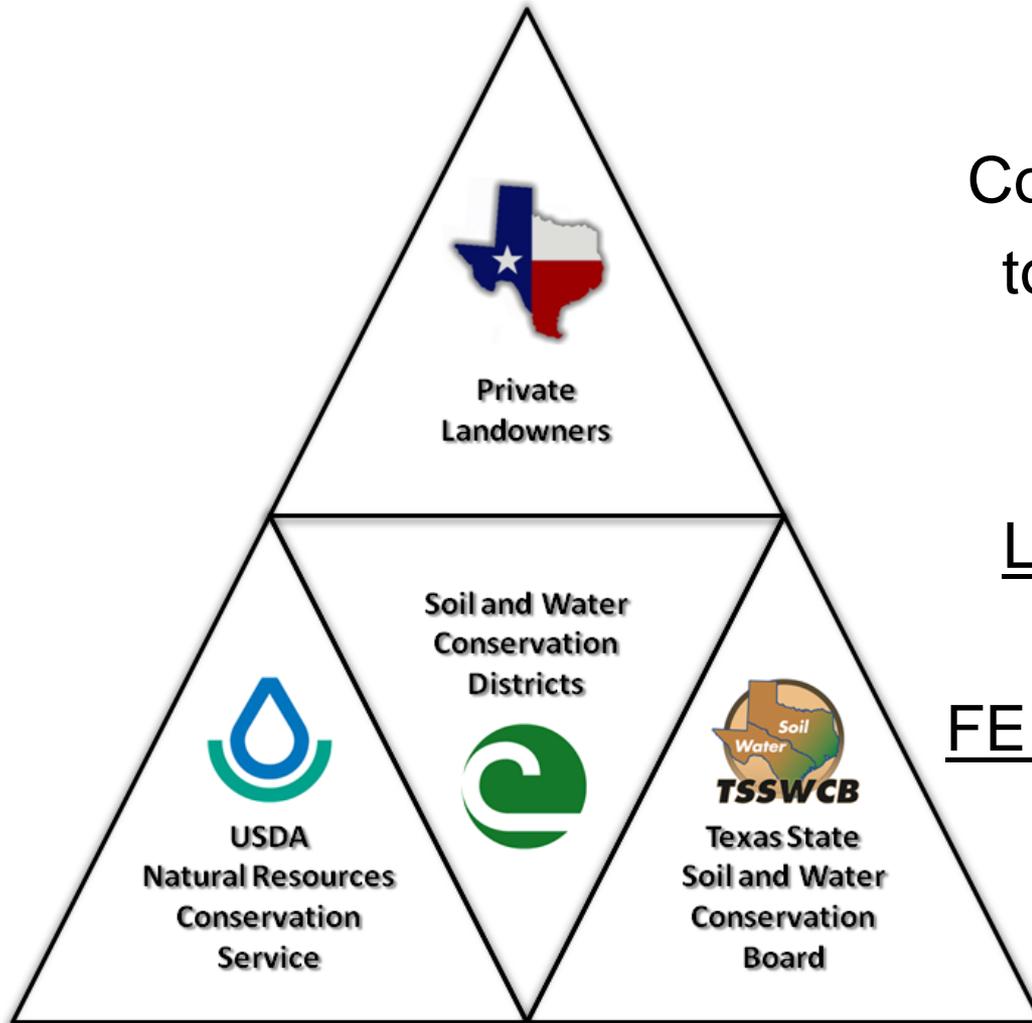
Aransas Creek RUAA Public Meeting
May 29, 2012
Skidmore, TX



Outline

- Who I am and why am I up here talking with you
- Frame context of why we are here in your backyard
- What are we trying to accomplish

Texas Conservation Partnership



Providing Conservation Assistance to Private Landowners for 70+ Years

LOCAL = 216 SWCDs
STATE = TSSWCB
FEDERAL = USDA-NRCS



Water Quality in Texas

Texas State Soil and Water Conservation Board (TSSWCB)

- Lead agency in Texas responsible for planning, implementing and managing programs and practices for preventing and abating agricultural and silvicultural (forestry-related) nonpoint sources of water pollution (Texas Agriculture Code §201.026)
- Provides technical assistance and financial incentives to landowners to develop and implement farm-level conservation plans on agricultural lands (Water Quality Management Plans)



Water Quality in Texas

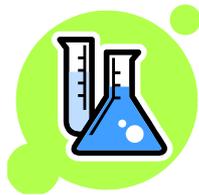
Texas Commission on Environmental Quality (TCEQ)

- General jurisdiction and responsibility for water quality in Texas
- Establish water quality standards
- Collect and assess data, report on water quality conditions [Integrated Report including 303(d) List]
- Issue permits for point sources (wastewater treatment facilities, concentrated animal feeding operations, urban stormwater)
- Prevent and abate urban, and other, nonpoint sources of pollution
- Regulatory enforcement of water quality standards and permits



Federal Clean Water Act

- “restore & maintain the chemical, physical & biological integrity of the Nation’s waters”
 - “water quality which provides for the protection of fish, shellfish, & wildlife & provides for recreation in & on the water”
- also, federal Safe Drinking Water Act





Federal Clean Water Act

- requires States to establish Water Quality Standards to achieve objective & goals
- requires States to identify waterbodies failing to meet water quality standards & not supporting their designated uses
 - this list of impaired waterbodies is known as the *Texas 303(d) List*
 - must be submitted to USEPA for review & approval every two years



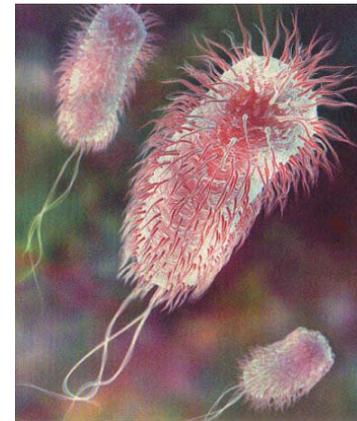
Uses and Parameters

- Recreation Use
 - Bacteria (E. coli or enterococci)
- Aquatic Life Use
 - Dissolved Oxygen
 - Nutrients (large reservoirs)
 - Habitat and Aquatic Community
- Oyster Waters
 - Bacteria (Fecal Coliform)
- Domestic Water Supply
 - Nutrients, pH
 - Chlorides, Sulfates, Total Dissolved Solids
 - Toxics
- Fish Consumption
 - Bioaccumulation of metals and organics



Why Bacteria?

- Elevated levels of bacteria (E. coli, Enterococcus, fecal coliform) indicate possible fecal contamination and the potential presence of disease-causing pathogens
- These bacteria are present in the intestinal tracts and feces of warm-blooded animals
- Pathogens cause gastrointestinal (GI) illness
 - Symptoms include chills, nausea, diarrhea, and fever





Recreation Use Tiers

- Primary Contact Recreation
 - Geometric mean = 126 cfu/100 mL
 - Involves a significant risk of water ingestion
 - Wading children
 - Swimming
 - Whitewater kayaking/Canoeing/Rafting
 - Waterskiing, diving, tubing, surfing
- Secondary Contact Recreation 1
 - Geometric mean = 630 cfu/100 mL
 - Commonly occur but have limited body contact incidental to shoreline activities that pose a less significant risk of water ingestion
 - Fishing
 - Motor boating/Canoeing/Rafting
 - Incidental body contact from shoreline



Recreation Use Tiers

- Secondary Contact Recreation 2
 - Geometric mean = 1,030 cfu/100 mL
 - Activities that occur less frequently than SCR1 due to physical characteristics of the waterbody and limited public access
- Noncontact Recreation
 - Geometric mean = 2,060 cfu/100 mL
 - Activities that do not involve a significant risk of water ingestion such as those with limited body contact incidental to shoreline activity
 - Birding
 - Hiking/Biking
 - Where PCR and SCR should not occur due to unsafe conditions such as ship and barge traffic.



2010 Texas 303(d) List

- Data from Dec 2001 to Nov 2008 was assessed
- 621 segment-pollutant combinations (impairments)
 - 51% for bacteria
- Need to deal with magnitude of listings through any & all means



Restore Water Quality

(tools to remove from 303(d) List)

- additional monitoring demonstrates now achieving water quality standards
- conduct a Use Attainability Analysis to change water quality standards
- develop Total Maximum Daily Load & Implementation Plan for adoption/approval
- develop a Watershed Protection Plan



What is a UAA?

- Use Attainability Analysis
- Evaluation of waterbody and its ability to achieve a specific level of use
- Assess physical, chemical, biological, and economic factors affecting the use of a waterbody
- Can result in site-specific water quality standard that may lead to delisting
- Recreational UAA
 - ascertain the types and degree of recreation actually occurring
 - examines the hydrologic and physical conditions of a stream which limit or support contact recreation

Differences between projects

- Copano Bay & Mission/Aransas Rivers TMDL
 - May 30 in Refugio
 - TCEQ funding, TWRI lead
 - Establish pollution reduction goal and identify implementation strategies to reduce bacteria
 - <http://www.tceq.texas.gov/waterquality/tmdl/42-copano.html>
- Aransas Creek RUAA
 - May 29 in Skidmore
 - TSSWCB funding, NRA lead
 - Assess factors affecting recreation use and recommend most appropriate standard
 - <http://www.tsswcb.texas.gov/managementprogram/aransaruaa>





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