



# Plum Creek Watershed Protection Plan

Guadalupe-Blanco River Authority  
Clean Rivers Program  
March 23, 2006  
Seguin, TX



# Water Quality Mandate

Texas Agriculture Code §201.026

TSSWCB is the lead agency in Texas responsible for planning, implementing and managing programs and practices for abating agricultural and silvicultural nonpoint source pollution



# Agency Program Areas

1. Soil and Water Conservation Assistance
  - Technical Assistance Grants
  - Matching Funds
  - Field Representatives
2. Water Supply Enhancement
  - Water Conservation Planning
  - Water Conservation Grants
  - Brush Control Program
3. Nonpoint Source Pollution Abatement
  - Water Quality Management Plan Program
  - Poultry Initiative
  - TMDL Program
  - WPP Program
  - CWA §319(h) Grants
  - Coastal Zone Management



# What is a WPP?

- Watershed Protection Plans (WPP) address complex water quality problems that cross multiple jurisdictions
- The goal is to improve, restore or maintain good water quality within a particular watershed
- WPPs are tools to better leverage the resources of local governments, state and federal agencies, and non-governmental organizations
- WPPs are a voluntary, proactive approach to integrating activities and prioritizing BMP implementation



# USEPA Nine Elements

- a. Identification of the causes that will need to be controlled to achieve the load reductions (b)
- b. Estimate of the load reductions expected for the management measures (c)
- c. Description of management measures that will need to be implemented to achieve the load reductions (b)
- d. Estimate of technical and financial assistance needed to implement this plan
- e. Information/education component that will be used to enhance public understanding of this plan
- f. Schedule for implementing management measures (c)
- g. Description of interim, measurable milestones for determining whether management measures (c) are being implemented
- h. Set of criteria that can be used to determine whether load reductions (b) are being achieved
- i. Monitoring component to evaluate effectiveness of implementation measured against the criteria (h) established



# Agency WPP Program

TSSWCB provides guidance and technical assistance to local stakeholder groups in developing and implementing WPPs through one of three mechanisms:

- A TSSWCB Regional Watershed Coordinator facilitates the WPP process in watersheds throughout their service area. Currently, the Wharton Regional Office is piloting this method
- Through the TSSWCB CWA §319(h) Grant Program, other entities are granted funds necessary to facilitate the WPP process in a specific watershed
- TSSWCB staff participate in and provide technical assistance to WPP projects funded and facilitated by other entities



# TSSWCB Funded WPPs

- Concho River – Upper Colorado River Authority
- Lake Granger – Brazos River Authority
- North Bosque River – Brazos River Authority
- Pecan Bayou – Texas Institute for Applied Environmental Research
- Pecos River – Texas Cooperative Extension
- Plum Creek – TSSWCB Wharton Regional Office



# Other WPPs

- Arroyo Colorado - Texas Sea Grant
- Caddo Lake - Northeast Texas Municipal Water District
- Dickinson Bayou - Texas Sea Grant
- Hickory Creek - City of Denton
- Lake Granbury - Brazos River Authority
- Upper San Antonio River - San Antonio River Authority
  
- Armand Bayou - Texas Sea Grant and Trust for Public Land
- Bastrop Bayou - Houston-Galveston Area Council
- Lower and Middle Brazos River - Brazos River Authority
- North Central Texas - Texas Water Resources Institute
- Upper Colorado River - Colorado River Municipal Water District

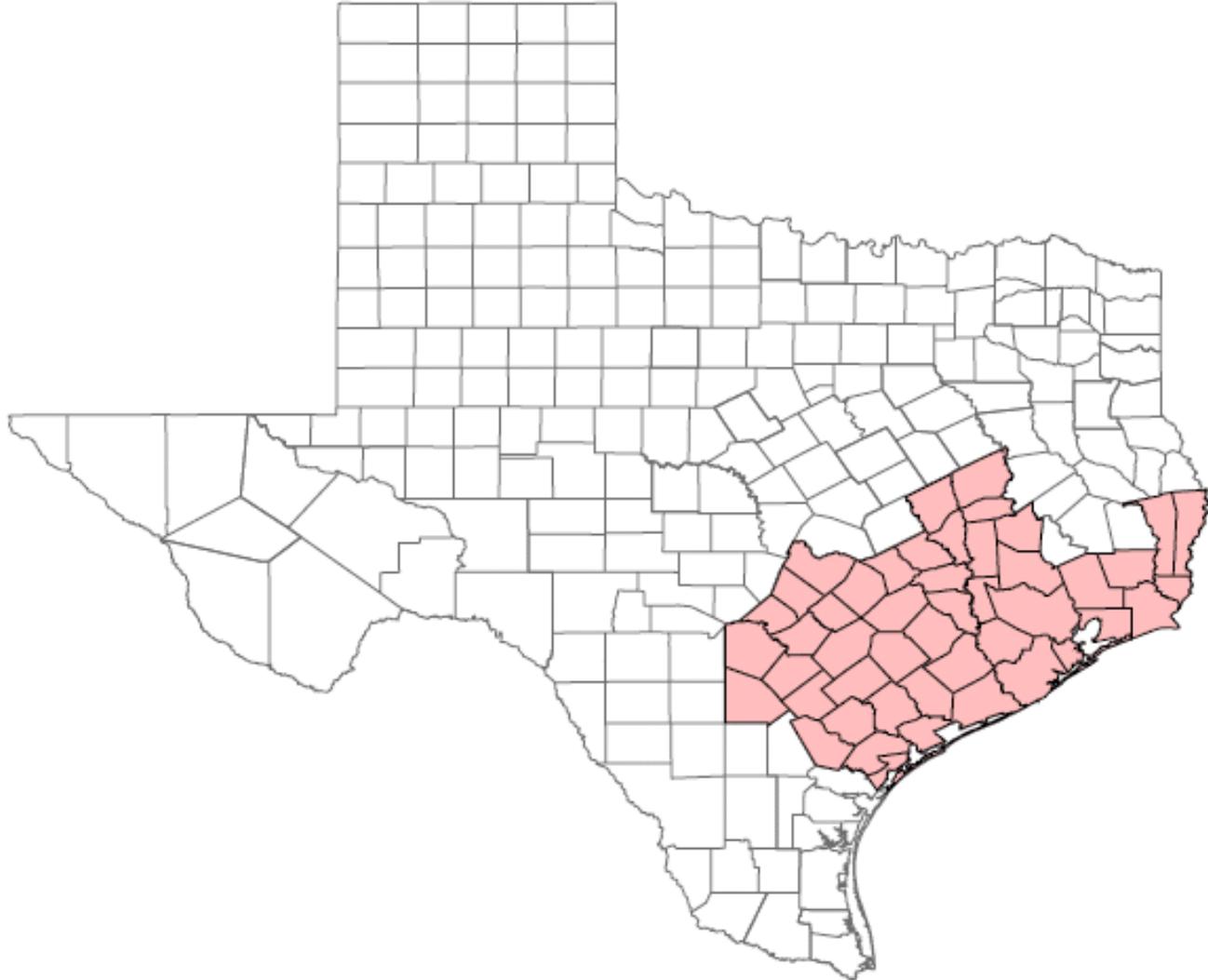


# How was Plum Creek Selected?

- A Regional Watershed Coordination Steering Committee (WCSC), composed of water quality monitoring and improvement partners from across the Wharton Regional Office (WRO) service area, was assembled
- WCSC includes other state agencies, federal agencies, river authorities, national estuary programs, and councils of governments
- WCSC developed a set of criteria to identify those watersheds that would most benefit from WPP development and implementation



# Counties in WRO





# Why was Plum Creek Selected?

- Water quality impairment for bacteria
- Manageable size (388 mi<sup>2</sup>) and entire stream affected
- County Extension Agents have high involvement in water and land use change issues
- Water quality concerns nitrate+nitrite nitrogen, ammonia, total phosphorus
- Oil and Gas production is high in the area, potential concern
- Population is rapidly increasing in this area
- Location gives it “Good Marketing Value”



# Project Partners





# Program Goals

- Provides science-based, watershed education to help citizens identify and take action to address local water quality impairments
- Enhances stakeholder involvement in the WPP development process by organizing and educating the local stakeholder group
- Educate stakeholders about the nature and function of watersheds, potential impairments and strategies for watershed protection
- Leads to increased knowledge and understanding by individuals within the watershed including homeowners, agricultural producers, decision-makers, and community leaders regarding watershed principles and appropriate best management practices to prevent and correct impairments caused by nonpoint source pollution



# Curriculum

Curriculum will be tailored to address the potential impairments of each watershed and include the following topics:

- Principles of Watershed Hydrology
- Primary Nonpoint Source Pollution Types
- Regulatory Structure, Laws and Policy Impacting Water
- Establishing and Working Through a Watershed Action Group and Conflict Resolution
- Stream and Wetland Evaluation, Clean-Up and Restoration
- Water Quality Testing and Monitoring
- Riparian Area Management for Protecting and Improving Water Quality
- Agricultural BMPs for Protecting Water Quality and Quantity
- Residential BMPs for Protecting Water Quality and Quantity
- Well-head Identification and Protection
- Small Acreage Water Quality Stewardship
- Obtaining Funds at the Local Level to Engage Water Quality Activities



# Plum Creek Watershed



March 23, 2006



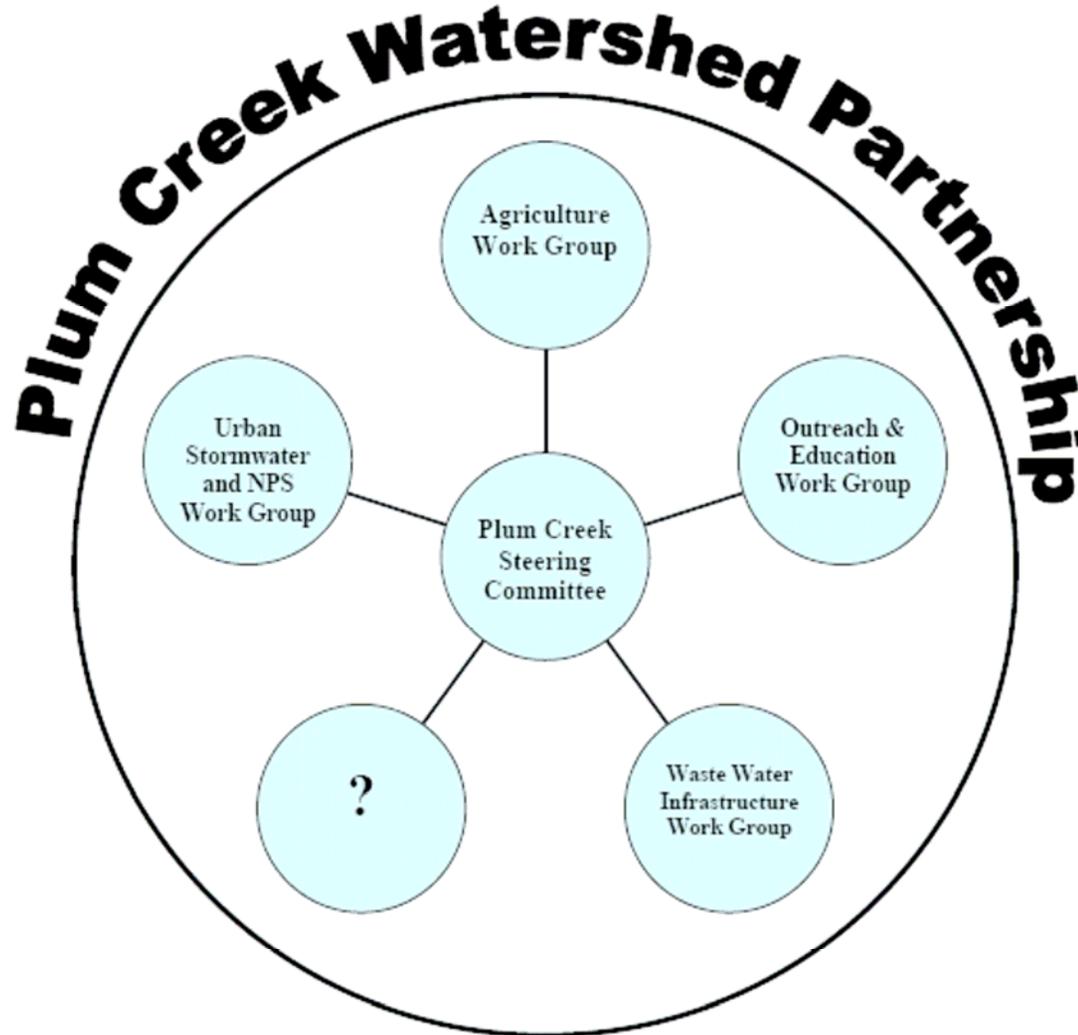
# Plum Creek Water Quality

## Draft 2004 TWQI & 303(d) List (Segment 1810)

- Contact Recreation Use Impairment
  - Bacteria
- Nutrient Enrichment Concern
  - Ammonia
  - Nitrate+nitrite nitrogen
  - Total phosphorus



# PCWP Structure





# Timeline

- December 2005 – WRO WCSC selected Plum Creek
- April 2006 – Plum Creek Watershed Partnership
- May 2006 – Steering Committee
- June 2006 – Steering Committee
- July 2006 – Work Groups
- August 2006 – Work Groups
- September 2006 – Steering Committee
- October 2006 – Work Groups
- November 2006 – Work Groups
- December 2006 – Steering Committee
- January 2007 – Work Groups
- February 2007 – Work Groups
- March 2007 – Steering Committee
- April 2007 – Plum Creek Watershed Partnership (comment on draft plan)
- May 2007 – Work Groups (address comments)
- June 2007 – Steering Committee (approve plan)
- June 2007 – WRO WCSC (endorse plan)
- June 2007 – TSSWCB (endorse plan)
- July 2007 – USEPA (endorse plan)
- July 2007 – begin implementation



# April Kick-Off Meetings

## PCWP Public Meetings Announcing the project

- April 10, Lockhart, Caldwell County Courthouse Annex
- April 25, Kyle, Tobias Elementary School
- April 26, Luling, Luling Primary School
- All Meeting times are 6-8:30 pm
- Same agenda, different locations, so if you cannot make it to one, make it to the other



# Websites

## TSSWCB Watershed Protection Plan Program

- <http://www.tsswcb.state.tx.us/programs/watershed.html>

## WRO Watershed Coordination Steering Committee

- [http://www.tsswcb.state.tx.us/programs/wharton\\_wcsc.html](http://www.tsswcb.state.tx.us/programs/wharton_wcsc.html)

## Texas Watershed Steward Program

- <http://mws.tamu.edu/>

## Plum Creek Watershed Partnership

- <http://pcwp.tamu.edu/>



Brian Koch  
Watershed Coordinator

Texas State Soil and Water Conservation Board  
Wharton Regional Office

1120 Hodges Ln  
Wharton, TX 77488

979-532-9496 v  
979-532-8765 f

[bkoch@tsswcb.state.tx.us](mailto:bkoch@tsswcb.state.tx.us)

<http://www.tsswcb.state.tx.us/>

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