

# Geronimo and Alligator Creeks Watershed Meetings

Seguin, October 6, 2009

New Braunfels, October 8, 2009

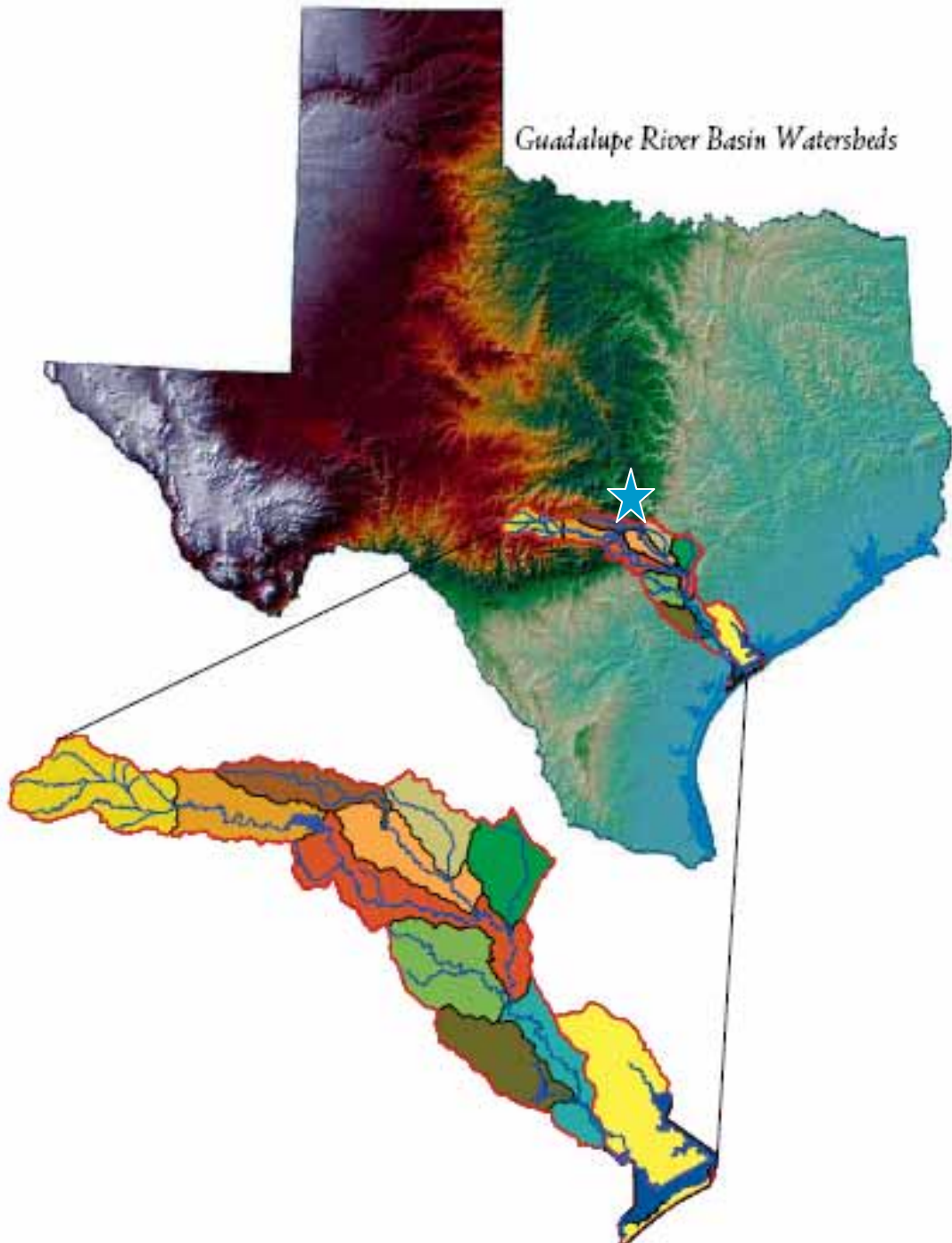


# Geronimo and Alligator Creeks Watershed Meeting Overview

**Nikki Dictson**

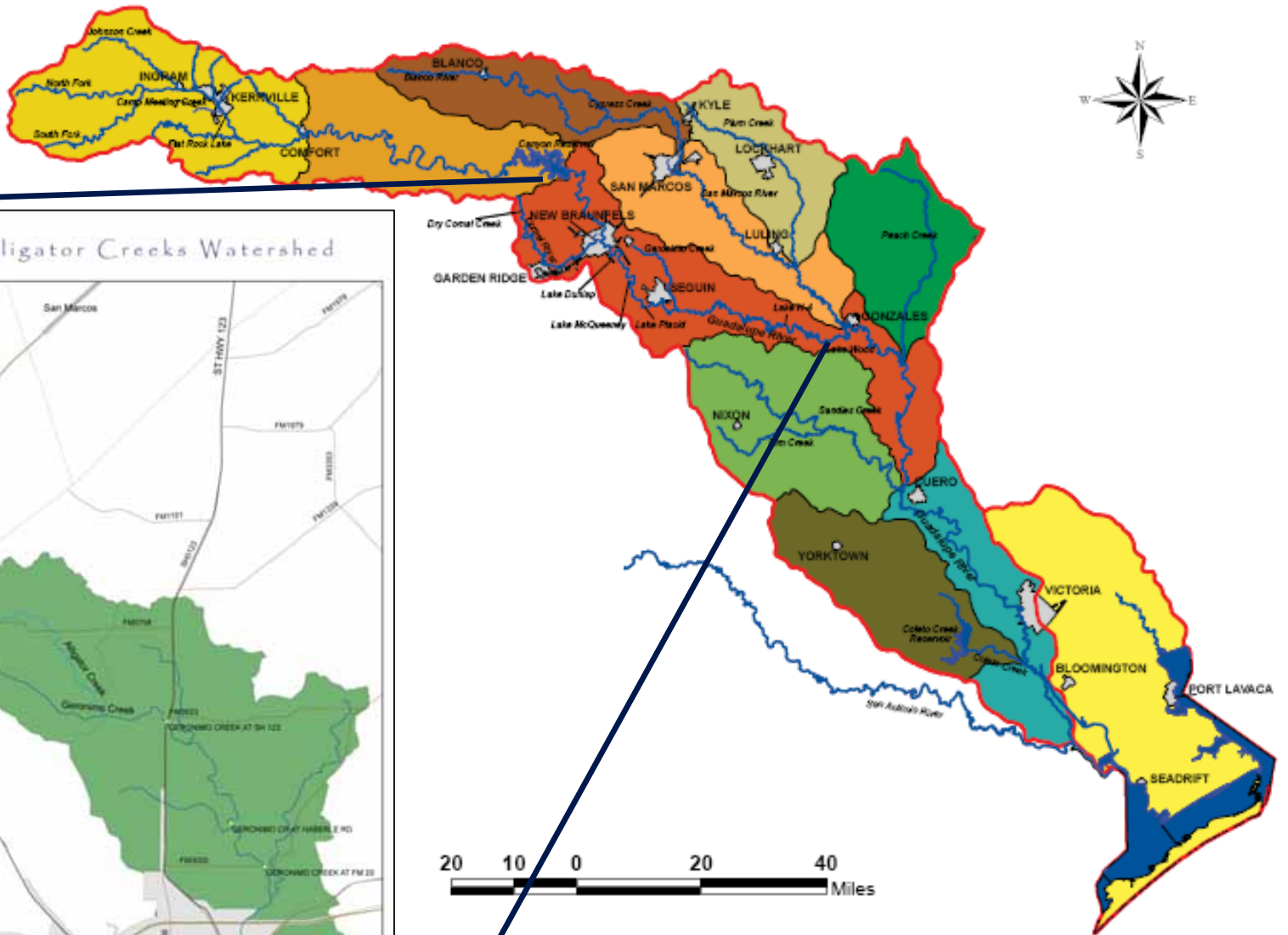
**Texas AgriLife Extension Service**



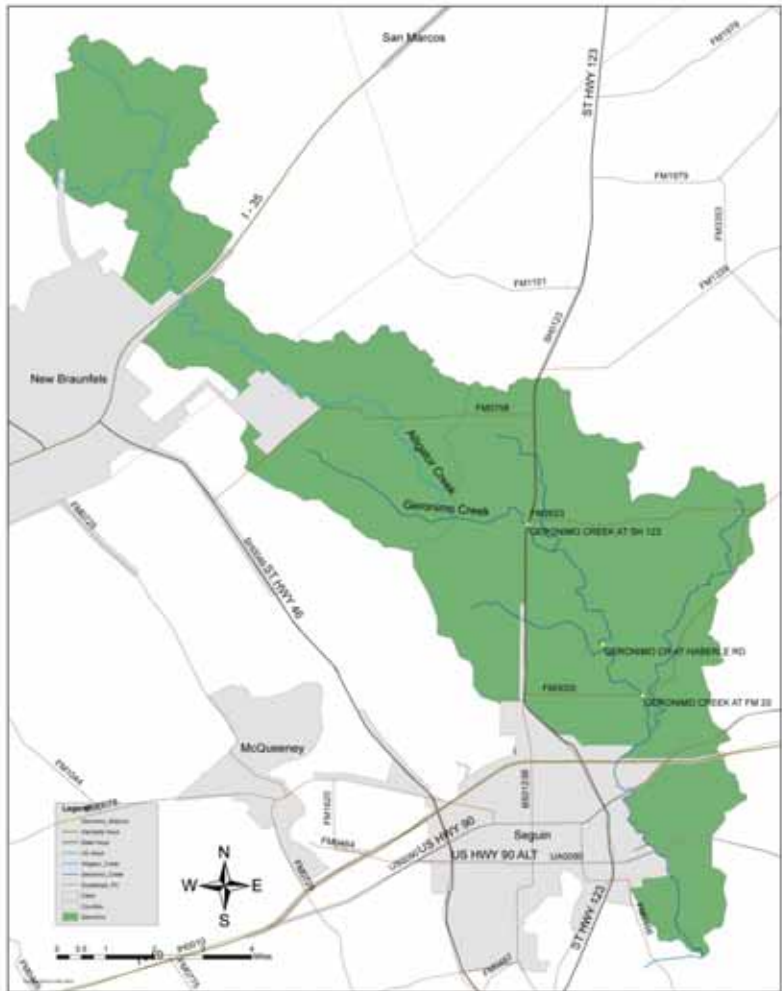


**Geronimo and  
Alligator  
Creeks are  
located in the  
Guadalupe-  
Blanco River  
Basin**

# GUADALUPE RIVER BASIN WATERSHEDS



## Geronimo and Alligator Creeks Watershed



# Meeting Purpose

- Geronimo Creek and its tributary Alligator Creek have elevated levels of bacteria and nutrients
- Develop a voluntary, locally driven Watershed Protection Plan to address these issues
- We are here to discuss the water quality issue, explain the planning process and ask for your active participation

# Meeting Overview

- Discuss the water quality issues in Geronimo and Alligator Creeks
- Explain the Watershed Protection Planning Process
- Discuss creation of the Geronimo and Alligator Creek Watershed Partnership
- Time for open discussion

# Welcome

Mike Wiggins, Guadalupe County Judge

Betty Ann Matthies, Mayor of Seguin

Russell Bading, Chairman of Comal-Guadalupe  
SWCD

W.E. West, Jr., General Manager GBRA

# Introductions

- Name
- Entity/Group Representing/citizen/landowner
- Interests



# Water Quality in the Geronimo and Alligator Creeks Watershed

**Debbie Magin**

**Director of Water Quality Services**

**Guadalupe-Blanco River Authority**



# Watershed Protection Planning

**Brian Koch**

**Wharton Regional Watershed Coordinator  
Texas State Soil and Water Conservation  
Service**



# **Role of Texas State Soil and Water Conservation Board**

## **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 preventing and abating agricultural and silvicultural nonpoint source water pollution

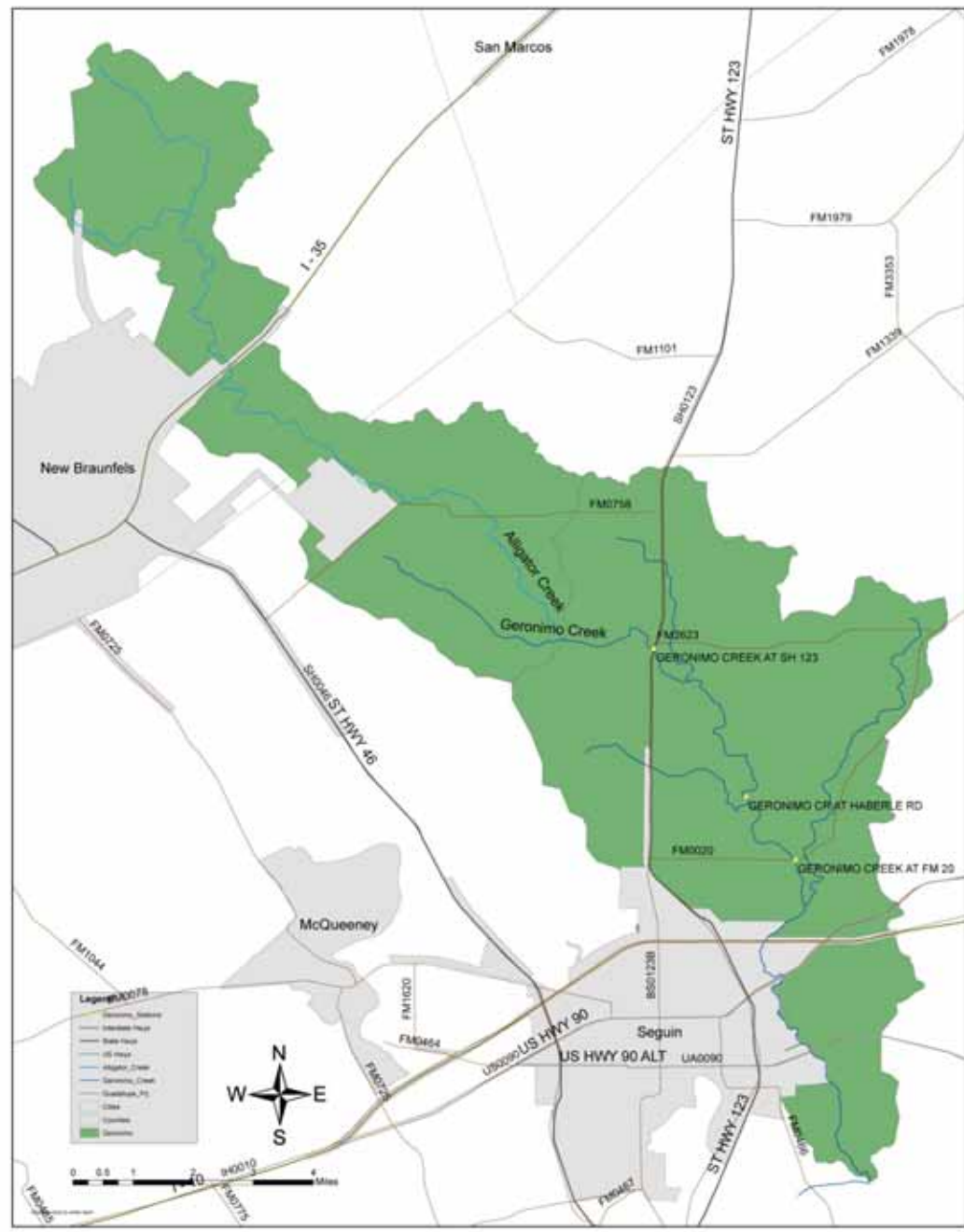
# How is this done?

- TSSWCB works with the 216 Soil and Water Conservation Districts (SWCDs) across Texas, by using local knowledge to achieve conservation goals that are based on the needs of each specific SWCD
- TSSWCB applies the “Watershed Approach” to restore and protect water quality by providing technical and financial assistance to SWCDs, and other entities like GBRA or AgriLife Extension, to achieve these goals

# Watershed Approach

- Geographic focus based on hydrology rather than political boundaries
- Water quality objectives based on scientific data
- Coordinated priorities and integrated solutions
- Diverse, well-integrated partnerships

# Geronimo and Alligator Creeks Watershed



# How did Geronimo & Alligator Creeks get Selected?

- GBRA submitted a proposal to TSSWCB for a Clean Water Act §319(h) grant from the U.S. Environmental Protection Agency to develop a WPP for Geronimo Creek
- TSSWCB and USEPA funded the WPP and GBRA began engaging potential stakeholders and collecting additional water quality data to be used in this watershed planning process
- GBRA contracted with AgriLife Extension to help facilitate this stakeholder process, analyze the collected data, and assist in developing the WPP

# What is a Watershed Protection Plan?

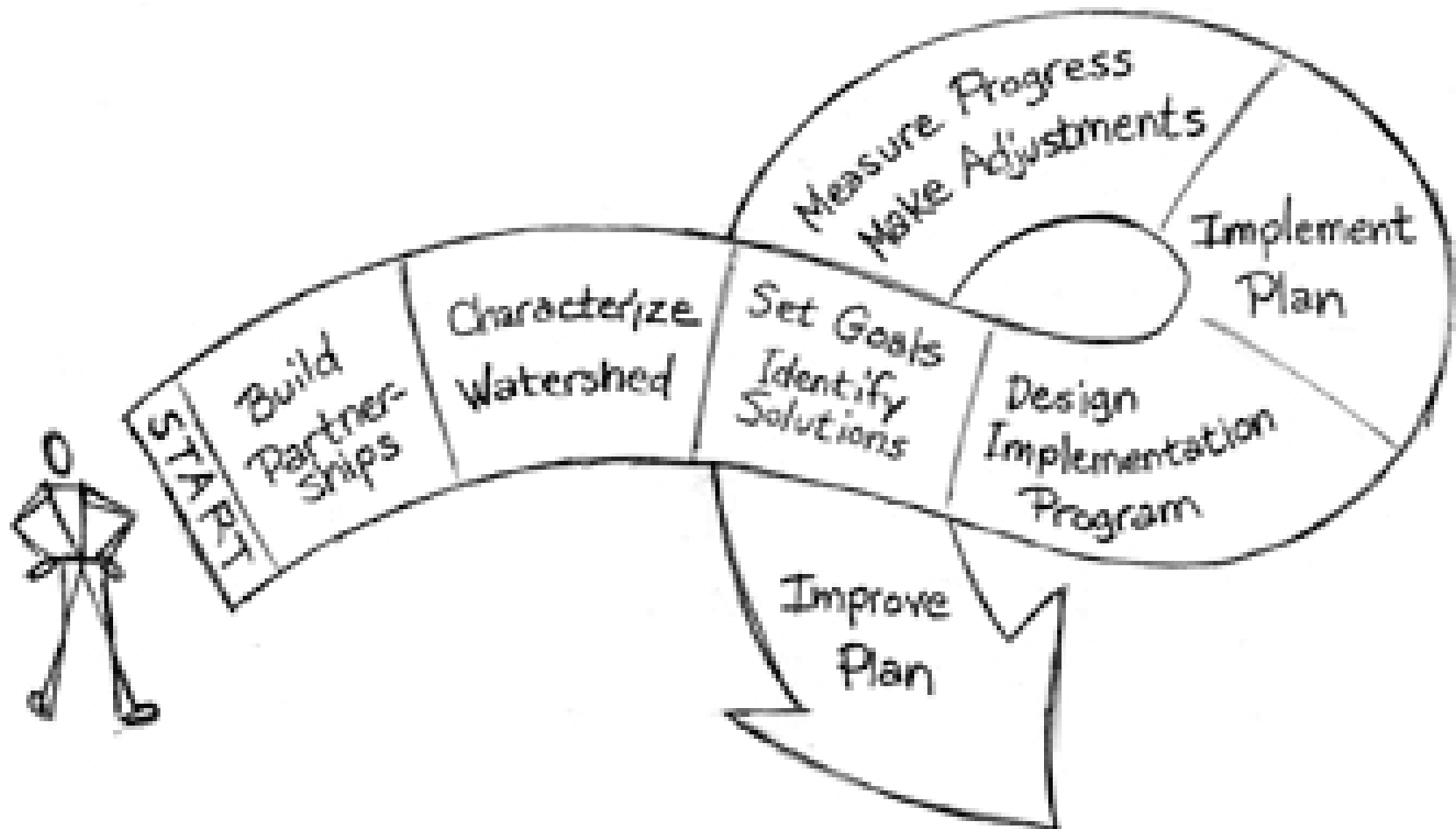
- WPPs are mechanisms for voluntarily addressing complex water quality problems that cross multiple jurisdictions
- WPPs holistically address all of the sources and causes of impairments and threats to both surface and ground water resources within a watershed
- WPPs are coordinated frameworks for implementing prioritized and integrated protection and restoration strategies driven by environmental objectives
- WPPs integrate activities and prioritize implementation projects based upon technical merit and benefits to the community



# What is a Watershed Protection Plan?

- WPPs are tools to better leverage the resources of individual landowners and citizens, local governments, state and federal agencies, and non-governmental organizations
- WPPs are developed and implemented through diverse, well integrated partnerships with decision-making founded at the local level
- WPPs use adaptive management to modify the plan based on an ongoing science-based process involving monitoring and evaluating strategies and incorporating new knowledge into decision-making

# 6 Steps of Watershed Planning



# 9 Elements of a WPP

- a) Identification of the causes and sources of water quality problems
- b) Estimate of the load reductions expected to be achieved
- c) Description of management measures that will need to be implemented

# 9 Elements of a WPP

- d) Estimate of technical and financial assistance needed to implement the plan
- e) Information/education component that will be used to enhance public understanding of the plan
- f) Schedule for implementing management measures

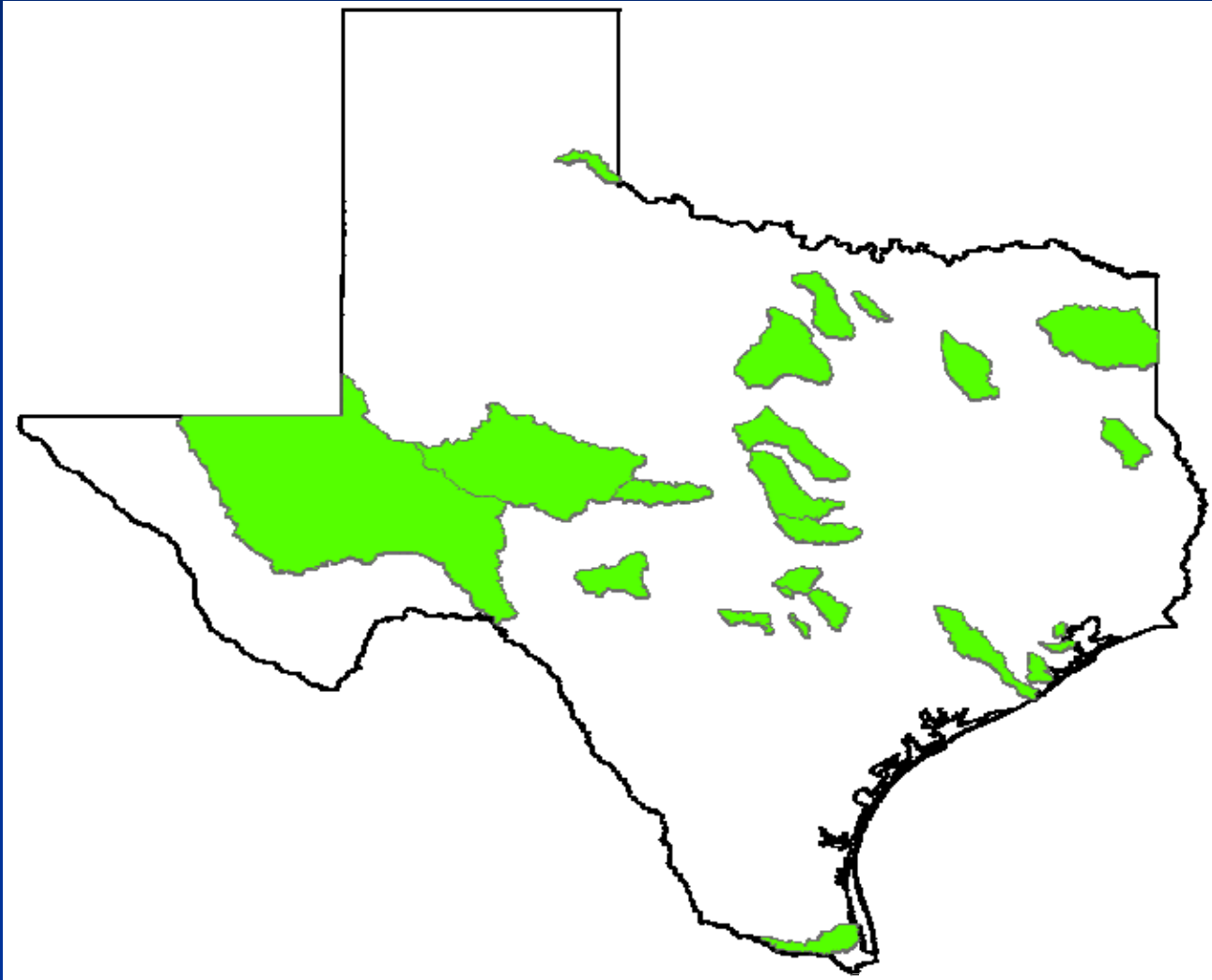
# 9 Elements of a WPP

- g) Interim, measurable milestones for determining whether management measures are being implemented
- h) Set of criteria used to determine whether load reductions are being achieved
- i) Water quality monitoring component to evaluate effectiveness of implementation

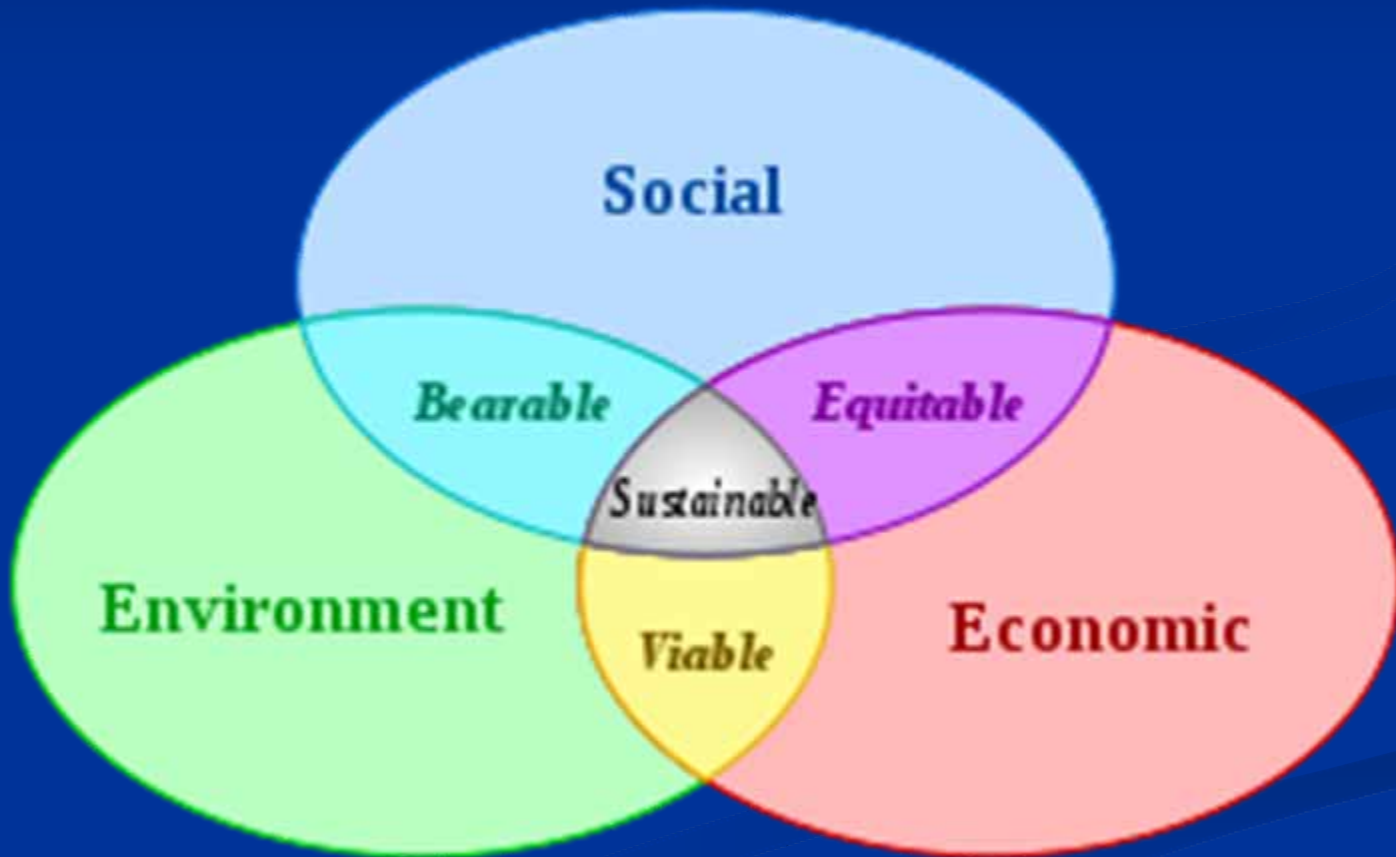
# TSSWCB WPP Program

- TSSWCB provides technical and financial assistance to local stakeholder groups to develop and implement WPPs consistent with EPA's nine elements
  - TSSWCB provides grants to entities to facilitate the WPP development process in specific watersheds with significant agricultural or silvicultural NPS pollution
  - TSSWCB staff participate in the watershed planning process and provide technical assistance to local stakeholders in developing WPPs, including those funded by other entities

# WPPs Across Texas



# Components of a WPP





*responsibility for decision-making  
regarding the management of  
water resources is founded at the  
local level*

Brian Koch  
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<http://www.tsswcb.state.tx.us/cwp>

# The Geronimo and Alligator Creeks Watershed Partnership

**Nikki Dictson**

**Extension Program Specialist II,  
Texas AgriLife Extension Service**



# Geronimo and Alligator Creek Watershed Partnership

## **First steps in building the partnership and beginning the planning process.**

- Build a collaboration between local citizens, city and county governments and agencies.
- Goal is for the community to develop and implement a proactive strategy for protecting and improving water quality.
- Inviting public to series of meetings to make them aware of the issues and planning process. Encourage their involvement.
- Encourage participation in the partnership through work groups and/or a member of the steering committee is essential to assess water quality issues and develop the Watershed Protection Plan (WPP).

# Information Sheet

## Geronimo and Alligator Creeks Watershed Partnership

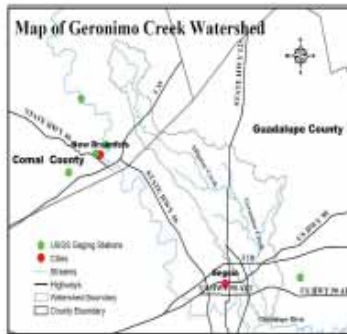
### Geronimo and Alligator Creeks

Geronimo Creek and its tributary Alligator Creek are located in Comal and Guadalupe Counties. The almost 70-square-mile Geronimo Creek watershed lies within the larger Guadalupe River Basin. The lower portion of the Geronimo Creek watershed is in the extra-territorial jurisdiction (ETJ) of Seguin. The upper portion of the Alligator Creek watershed lies in the ETJ of New Braunfels. Alligator Creek begins on the west side of IH-35 and flows southeast, travelling through a rapidly developing area of the Austin-San Antonio corridor. As development and population growth continue, the percentage of urban land use will rise and play an increasingly important role in the hydrology and water quality of Geronimo Creek and its tributaries.

Based on routine water quality sampling of Geronimo Creek, the stream is impaired by elevated bacteria concentrations and has nutrient enrichment concerns for nitrate-nitrogen. High bacteria concentrations do not support contact recreation use and high levels of nitrogen can cause algal blooms and excessive growth of aquatic vegetation.

### The Geronimo and Alligator Creeks Watershed Partnership

To address these concerns, the Geronimo and Alligator Creeks Watershed Partnership (Partnership), a collaboration between local citizens, cities, counties, and state and federal agencies, is being formed. The purpose of the Partnership is to develop and implement a Watershed Protection Plan (WPP). Anyone can be a member of the Partnership and participate on work groups. A Steering Committee will be formed as the decision-making body for the Partnership. Work groups will be created by the Steering Committee to address specific issues, identify and make recommendations on implementation strategies, and support development of the WPP. A Technical



Advisory Group composed of personnel from key state and federal water quality agencies will provide support and guidance.

Through a federal Clean Water Act §319(h) grant from the Texas State Soil and Water Conservation Board, the Guadalupe-Blanco River Authority (GBRA) and the Texas AgriLife Extension Service are facilitating the stakeholder process for development of the Watershed Protection Plan.



Watershed Planning is driven by local stakeholders and includes the following key tasks: 1) identify desired water quality conditions and measurable goals, 2) prioritize appropriate management practices and needed education and awareness programs to achieve those goals, 3) assist in the development of the WPP document, 4) lead implementation of the plan at the local level, and 5) communicate implications of the WPP to other interested constituents within the watershed.

### Please Join the Partnership

Participation by stakeholders from throughout the watershed is essential for the planning process to be successful. Public meetings will be held in the watershed during October 2009, with the planning process getting started in January 2010. Please plan to participate in this important effort to improve and protect your water resources and encourage others to do so as well.

### Stream Water Quality Issues

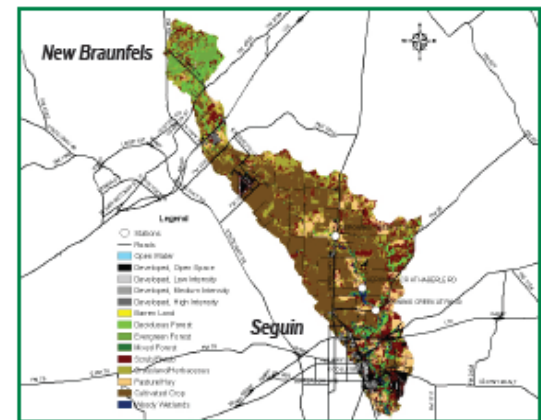
Geronimo Creek has been monitored by GBRA as part of the Clean Rivers Program since late 1986. The creek was monitored at the SH-123 crossing until August 2003, at which time the routine monitoring site was moved to the Haberle Road crossing. The new site was a past TCEQ monitoring site and an ecoregion reference site.

### Six Steps of the Watershed Planning & Implementation Process

- 1) Build Partnerships
- 2) Characterize the Watershed
- 3) Finalize Goals and Identify Solutions
- 4) Design an Implementation Plan
- 5) Implement Watershed Plan
- 6) Measure Progress and Make Adjustments

The 2008 Texas Water Quality Inventory has Geronimo Creek, Segment 1804A, listed with a concern due to elevated nitrate-nitrogen concentrations because all 80 measurements exceeded the screening level of 1.95 mg/L. In addition, the stream is listed as impaired because the geometric mean for *E. coli* bacteria (182 organisms per 100 milliliters) exceeded the contact recreation stream standard of 126 organisms per 100 milliliters. GBRA is currently monitoring and collecting additional data at 19 sites throughout the watershed. There are three historical monitoring sites that are identified on the map below.

### Geronimo Creek Watershed Land Use and Stations Map



For more information visit <http://geronimocreek.org>

### Contact Information

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AgriLIFE EXTENSION



## Geronimo and Alligator Creeks Watershed Partnership



[Home](#)

[Contact Us](#)

[Project Overview](#)

[Meetings](#)

[Water Quality](#)

[Publications](#)

[Partners](#)

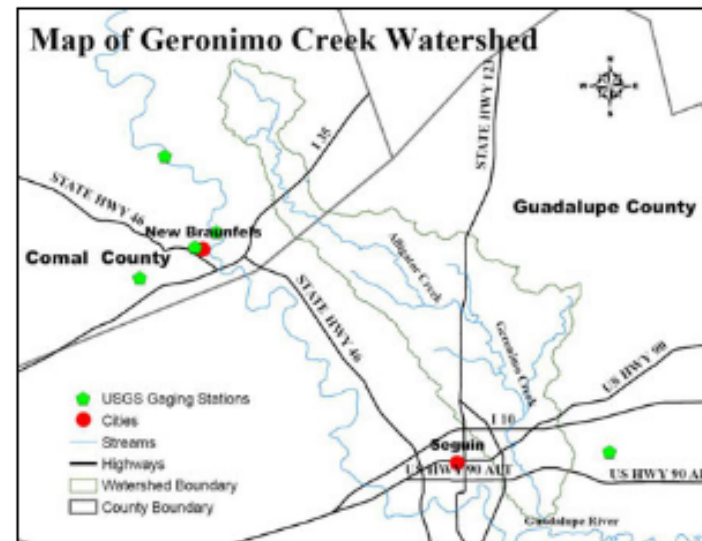
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# Website



# Stakeholders

Stakeholders are defined as those who make and implement decisions, those who are affected by the decisions made, and those who have the ability to assist with implementation of the decisions.



# Types of Stakeholders

Stakeholders can belong to the following entities:

- Landowners
- County or regional representatives
- Local municipal representatives
- State and federal agencies
- Business and industry representatives
- Citizen groups
- Community service and Religious organizations
- Universities, colleges, and schools
- Environmental and conservation groups
- Soil and water conservation districts

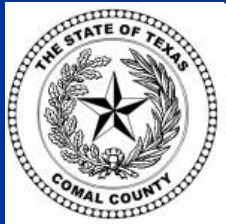


# Stakeholders: We need you!

- Successful development and implementation of the watershed plan will depend primarily on the commitment and involvement of community members.
- Therefore, it is critical to build partnerships with key interested parties at the outset of the watershed planning effort and have all of the right individuals involved in the partnership.



# Project Partners





# Partnership Structure

# Watershed Partnership Structure

- Partnership – Any person or entity that has a stake in the watershed is a part of the partnership.
- Steering Committee – decision-making or voting body of the partnership
- Work Groups – address specific topics for the partnership.
- Technical Advisory Group – State and Federal Agencies that can assist with technical expertise, data, and funding.

# Stakeholder Participation

The general public is encouraged to attend all of the meetings and there are three levels of potential participation that include:

- Serve as a Steering Committee Member
- Serve as a Work Group Member
- Attend and participate in any meetings



# Geronimo and Alligator Creeks Steering Committee

- The Geronimo and Alligator Creeks Steering Committee is the decision making body for the Watershed Protection Plan Process and will guide the project to success.
- The goal of the Steering Committee is to develop and implement a Watershed Protection Plan (WPP) for Geronimo and Alligator Creeks, segment 1804A to improve and protect the water quality.



# Geronimo and Alligator Creeks Steering Committee Composition

- Steering Committee members will also be members of one of the topical work groups and will represent their work group on the steering committee.
- The Steering Committee will be composed of approximately 25 members.
- The Steering Committee will be representative of all of the types of stakeholders in Geronimo and Alligator Creeks



# Geronimo and Alligator Creeks Steering Committee Membership Selection

- Steering Committee Members will include both individuals and representatives of organizations and agencies.
- We need a variety of members to serve on the steering committee to reflect the diversity of interests within the Geronimo Creek Watershed to incorporate the viewpoints of those who will be affected by the WPP.





# Geronimo and Alligator Creeks Steering Committee Membership Selection Continued

- Steering committee members can be invited and nominated to represent the geographic and topical spectrum of stakeholders in the watershed.
- Members may also be self nominated through the survey to be on the steering committee.



# Role of Work Groups

- Work groups are an extension of the steering committee and partnership that discuss and work on specific topical areas.
- Work groups make recommendations and develop components of the WPP for their topic.
- Work group members will provide leadership in implementation of practices and thus, are the most appropriate forum for decisions on topics in their area.



# 6 Steps of Watershed Planning

- 1) Build Partnerships
- 2) Characterize the Watershed
- 3) Finalize Goals and Identify Solutions
- 4) Design an Implementation Plan
- 5) Implement the Watershed Plan
- 6) Measure Progress and Make Adjustments

# Proposed Timeline

**November 2008** – Selected Geronimo Creek Watershed

**October 2009** – Two Public Meetings to seek participation in steering committee and work groups

**November – December** – Determine and confirm Steering Committee Members to represent watershed

**January 12, 2010** – First Steering Committee Meeting

**February 2010 – April 2011** Approximately Monthly meetings of either the Steering Committee on 2<sup>nd</sup> Tuesdays or Work group meetings to develop the plan

Once the plan is complete, start implementation of the plan and move to quarterly meetings to track progress



# Geronimo Creek Monitoring Project

**Lee Gudgell**  
**Water Quality Technician**  
**Guadalupe-Blanco River Authority**



# Next Steps

**Ward Ling**  
**Extension Program Specialist**  
**Texas AgriLife Extension**  
**Service**



# October Kick-Off Meetings

Two public meetings announcing this project:

- October 8, New Braunfels, Landa Haus in Landa Park, from 6-8:30 pm

Same agenda, different locations, so if you know someone who would be interested that was not here tonight, let them know



# Steering Committee Selection

- Following the kickoff meeting in New Braunfels, the Steering Committee will be identified and asked to participate
- Please fill out your survey, front and back, and turn it in tonight to indicate your desired level of participation
- Surveys will be due by Nov. 20<sup>th</sup>, 2009
- First Steering Committee Meeting - Jan. 12, 2010







# Texas Watershed Steward Program

The Texas Watershed Steward Program will educate stakeholders about the nature and function of watersheds, potential impairments and strategies for watershed protection.

This one day educational training is scheduled for November 10, 2009 at the GBRA River Annex in Seguin. It is free and open to the public.



All watersheds in Texas are threatened by nonpoint sources (NPS) of pollution which are detrimental to the valuable water resources of the state. To help combat this threat, federal and state water resource management agencies have adopted a watershed-scale approach for managing water quality. One vital component of this approach involves engaging local stakeholders to become actively involved in planning and implementing water resource management and protection programs in their watershed.



To support this need for stakeholder involvement, the Texas Watershed Steward (TWS) program was initiated to provide science-based, watershed education to help citizens identify and take action to address local water quality impairments. Texas Watershed Stewards learn about the nature and function of

watersheds, potential impairments, and strategies for watershed protection.

The TWS program is implemented through a partnership between The Texas AgriLife Extension Service and the Texas State Soil and Water Conservation Board (TSSWCB).

Public participation is the focus of the Texas Watershed Steward program. Active public participation in local watershed management efforts is critical in addressing local water quality problems and concerns. The program is open to all watershed residents including homeowners, business owners, agricultural producers, decision-makers, community leaders, and other citizens.



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Workshops

Curriculum Handbook

Watershed Protection Planning

Publications

Partners

MWS in Other States



# Texas Watershed Steward Website

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## Training Registration

Please submit your registration at least 2 weeks prior to the training date.  
Please submit a separate registration form for each person attending the training.

There is NO cost to attend a Texas Watershed Steward workshop.

Select a training:

Tuesday, August 25th: Kaufman, TX (Cedar Creek Watershed) 

First name:	<input type="text"/>
Last name:	<input type="text"/>
Affiliation/Occupation:	<input type="text"/>
Phone:	<input type="text"/>
Email address:	<input type="text"/>
T-Shirt size:	<input type="button" value="Small"/> <input type="button" value="v"/>

Address (1):	<input type="text"/>
Address (2):	<input type="text"/>
City:	<input type="text"/>
State:	<input type="text"/>
Zip Code:	<input type="text"/>

Mailing/email addresses and phone numbers are needed so that we can effectively provide you information about the Texas Watershed Steward workshop. All contact information provided by you will be kept private and will not be shared with anyone else or used for purposes other than the Texas Watershed Steward program.

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# Workshop Information

All workshop participants will receive:

- A day of beneficial and applicable watershed education
- A copy of the Texas Watershed Steward Curriculum Handbook
- Tote bag, water bottle, and other goodies
- There is no cost to attend.

# Continuing Education Credits

- 7 AICP (American Institute of Certified Planners) CM hours for certified planners (5.5 CM credits, 1.5 CM Law)
- 7 CCA (Certified Crop Advisor) CEUs in Soil & Water Management
- 7 TBPE (Texas Board of Professional Engineers) CEPs for professional engineers
- 7 SBEC (State Board for Educator Certification) CPEs in Science
- 3 TDA (Texas Department of Agriculture) CEUs for pesticide license holders
- 3 TFMA (Texas Floodplain Management Association) CECs for Certified Floodplain Managers

# TWS Registration Form

- A registration form is included in the folder.
- Please fill it out and let us know your interest in attending.

# Websites

Geronimo and Alligator Creeks Watershed Partnership

- <http://geronimocreek.org/>

Guadalupe-Blanco River Authority

- <http://www.gbra.org/>

Texas Watershed Steward Program

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

TSSWCB Watershed Protection Plan Program

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

TSSWCB Geronimo Creek Watershed Project

- <http://www.tsswcb.state.tx.us/managementprogram/geronimocreekwpp>

Coordination Watershed Planning in Southeast and South Central Texas

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

# Contact Information

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# Discussion and Questions

**Nikki Dictson**

**Texas AgriLife Extension Service**

**And**

**Debbie Magin**

**Guadalupe-Blanco River Authority**

