

Geronimo and Alligator Creeks Watershed Steering Committee Meeting

January 12, 2010
GBRA River Annex
Seguin, Texas



Welcome

Judge Mike Wiggins

Guadalupe County

and

Debbie Magin

Guadalupe Blanco River Authority



Introductions and Discussion of the Steering Committee Members

Nikki Dictson

Texas AgriLife Extension Service



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.



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

- n The Geronimo and Alligator Creeks Steering Committee is the decision making body for the Partnership and the watershed planning process and will guide the project to success.
- n The goal of the Steering Committee is to develop and implement a Watershed Protection Plan (WPP) for Geronimo and Alligator Creeks to improve and protect the water quality.



Geronimo and Alligator Creeks Steering Committee Composition

- 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
- Steering Committee members will also be members of one of the topical work groups and will represent their work group on the steering committee.



Steering Committee Selection

- Initial solicitation of members for equitable geographic and topical representation was conducted using three methods:
 - 1) consultation with the Agrilife Extension County Agents, Guadalupe-Blanco River Authority, Comal and Guadalupe County Soil and Water Conservation Districts and local and regional governments,
 - 2) meetings with the various stakeholder interest groups and individuals, and
 - 3) self-nomination or requests by the various stakeholder groups or individuals through surveys.

Types of Stakeholders

Stakeholders can belong to the following:

- n Landowners/Ag Producers (6)
- n County or regional representatives (3)
- n Local municipal representatives (3)
- n State and federal agencies (TAG)
- n Business and industry representatives (3)
- n Citizen groups (2)
- n Community service and Religious organizations
- n Universities, colleges, and schools (2)
- n Environmental and conservation groups (1)
- n Soil and water conservation districts (1)
- n Subdivisions – urban (2)

Affiliation	Name
Comal County	Commissioners Jan Kennady/Greg Parker
Guadalupe County	Jimmy Harless/Commissioner Baenziger
City of Seguin	Asst City Manager, Rick Cortes
City of New Braunfels	Nathan Pence
New Braunfels Utilities	Ian Taylor/Roger Biggers
Comal-Guadalupe SWCD	Russell Bading/Kathy Brady
Guadalupe-Blanco River Authority	Lee Gudgell/Cinde Thomas-Jimenez
Elmwood Subdivision	Cecil Schulze
Oakvillage North Subdivision	Gail Minton/Rex Reininger
Guadalupe County Farm Bureau	John Friesenhahn
Alamo Group/Industry	John Fisher/Lance Williams
Ag Producer	Gary Rainwater
Texas Lutheran University	Dr. Mark Gustafson/Dr. William Davis
Landowner	Frank Dietz
Landowner	Wayman Krueger
Educator	Susan Hartley/Rissa Springs
Navaro Ed Found	Kim Mueller
Outdoor Learning Center	Otto Kollaus
Walmart Distribution Center	Walmart Representative
Citizens' Alliance for Smart Expansion	Joyce Evans/Sue Cummings
Landowner/ Ag Producer	Clinton Dietert
Continental -Corporation	Rebecca Ehrig
Landowner/Ag Producer	Roger Bading

Geronimo and Alligator Creeks Watershed Partnership and Ground Rules

Nikki Dictson

Texas AgriLife Extension Service



Purpose and Goals

- n Geronimo Creek and its tributary Alligator Creek have elevated levels of bacteria and nutrients
- n Create the Geronimo and Alligator Creek Watershed Partnership
- n Develop a voluntary, locally driven Watershed Protection Plan to address these issues
- n Implement or put the plan into action

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 the steering committee is essential to assess water quality issues and develop the Watershed Protection Plan (WPP).

Funding and Facilitators

- 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
- Contract Period: Oct. 1, 2008-Sept. 30, 2011
- GBRA contracted with AgriLife Extension to help facilitate this stakeholder process, analyze the collected data, and assist in developing the WPP

Project Partners



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.

Steering Committee Ground Rules

The following are the Ground Rules for the Geronimo and Alligator Creeks Watershed Partnership (hereafter referred to as the Partnership) agreed to and signed by the members of the Geronimo and Alligator Creeks Watershed Partnership Steering Committee (hereafter referred to as the Steering Committee) in an effort to develop and implement a watershed protection plan.



Steering Committee Role

- § Identify the desired water quality conditions and measurable goals;
- § Prioritize programs and practices to achieve goals;
- § Help develop the WPP document;
- § Lead the effort to implement the WPP at the local level; and
- § Communicate implications of the WPP to other affected parties in the watershed.



Project Time Frame

- Development of the Geronimo and Alligator Creek WPP will require at least a 15-month period – target date of March 2011 to complete WPP development.
- The Steering Committee will continue to function to implement the WPP after it is developed.



Steering Committee

- Members will include both individuals and representatives of organizations and agencies.
- Members will identify and present insights, suggestions, and concerns from a community, environmental, or public interest perspective.
- Members are expected to work constructively and collaboratively with other members toward reaching consensus.
- The Committee will not elect a chair, but rather remain a facilitated group. Extension GBRA and/or TSSWCB will serve as the facilitators.



Steering Committee

- If the Committee becomes so large that it becomes impossible or impractical to function, the Committee will institute a consensus-based system for limiting membership.
- Committee members will serve on a work group and represent that work group at Steering Committee meetings.
- The Committee has discretion to form standing and ad hoc work groups to carry out specific assignments from the Committee.
- Steering Committee Members will sign and adopt the final Watershed Protection Plan.



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.
- Work groups will meet in alternating months from the Steering Committee Meetings.



Work Groups

- Work groups may elect a spokesperson.
- Will be composed of at least one steering committee member(s), technical advisory group members and any other interested partnership members.
- There is no limit to the number of members on the work groups.



Work Groups

- Proposed Work Groups include:
 - Urban Nonpoint Source
 - Agricultural Nonpoint Source
 - Wastewater (onsite and treatment facilities)
- Outreach and Education will be a component of each work group
- Most topics will fall underneath these headings, but if additional issues arise they can be handled by a special topics meeting.

Replacements and Additions

- § The Steering Committee may add new members if
- 1) a member is unable to continue serving and a vacancy is created or
 - 2) important stakeholder interests are identified that are not represented by the existing membership.
- § A new member must be approved by a majority of existing members. In either event, the Steering Committee will, when practical accept additional members.



Alternates

- Members unable to attend a meeting (an absentee) may send an alternate with advance notification to the facilitator.
- With prior notification, alternates have voting privileges. An alternate attending without advance notification cannot vote.
- Absentees may also provide input via another Committee member or send input via the facilitator.
- Three absences in a row without advance notification or without designation of an alternate can lead to removal from the Steering Committee.



Speaking in the Name of the Committee

- Individuals do not speak for the Steering Committee as a whole unless authorized by the Committee to do so.
- Members do not speak for the Extension, GBRA or TSSWCB unless authorized to do so.
- If Committee spokespersons are needed, they will be selected by the Steering Committee.



Decision Making Process

- § The Steering Committee will strive for consensus when making decisions and recommendations.
- § Consensus is defined as everyone being able to live with the decisions made. Consensus inherently requires compromise and negotiation.
- § If consensus cannot be achieved, the Steering Committee will make decisions by a simple majority vote.
- § If Steering Committee members develop formal recommendations, they will do so by two-thirds majority vote.



Quorum

- In order to conduct business, the Committee will have a quorum.
- Quorum is defined as at least 51% of the Steering Committee (and/or alternates) present and a representative of either Extension, GBRA or TSSWCB present.



GBRA and Extension Roles

- Provide technical assistance to the stakeholders in developing the WPP
- Draft text and prepare the WPP incorporating Committee recommendations
- Facilitate the development and implementation of the WPP through the meetings
- Assist the Steering Committee organize its work, facilitate meetings, and coordinate educational trainings
- Ensure the Geronimo and Alligator Creek WPP satisfies U.S. Environmental Protection Agency's nine elements.



TSSWCB and EPA Roles

- n Provide technical assistance to the stakeholders in developing the WPP
- n Provide Funding
- n Review to ensure meets 9 elements

Development and Revision of Ground Rules

- These ground rules were drafted by the Extension and TSSWCB and presented to the Steering Committee for review, possible revision, and adoption.
- Once adopted, ground rules may be changed by two-thirds majority vote provided a quorum is present.



Powers

- Decision-making body for the Partnership.
- Formulates recommendations to be used in drafting the WPP
- The Steering Committee is an independent group of watershed stakeholders with an interest in restoring and protecting the designated uses of the Geronimo Creek Watershed.



Steps in Watershed Protection Planning

Nikki Dictson

Texas AgriLife Extension Service



What is a Watershed Protection Plan?

- WPPs are a way to address complex water quality problems through voluntary measures
- WPPs holistically address all of the sources and causes of impairments and threats to both surface and ground water resources
- WPPs are frameworks for implementing prioritized strategies for protection and restoration
- WPPs are tools to better leverage the resources
- WPPs integrate activities and prioritize implementation projects based upon technical merit and benefits to the community

6 Steps of Watershed Planning

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

Steps in Watershed Plan and Implementation

1. Build Partnerships

- Identify key stakeholders
- Identify Issues of concern
- Set preliminary goals
- Develop indicators

Steps in Watershed Plan and Implementation

2. Characterize the Watershed

- Gather existing data and create a watershed inventory
- Identify data gaps and collect additional data if needed
- Analyze data
- Identify causes and sources of pollution that need to be controlled
- Estimate pollution loads

Steps in Watershed Plan and Implementation

3. Finalize Goals and Identify Solutions
 - Set overall goals and management objectives
 - Develop indicators/targets
 - Determine load reductions needed
 - Identify critical areas
 - Develop management measures to achieve goals

Steps in Watershed Plan and Implementation

4. Design an Implementation Plan
 - Develop implementation schedule
 - Develop interim milestones to track implementation and management measures
 - Develop criteria to measure progress toward meeting watershed goals
 - Develop monitoring component
 - Develop information/education component
 - Develop evaluation process
 - Identify technical and financial assistance needed to implement plan
 - Assign responsibility for reviewing and revising the plan

Steps in Watershed Plan and Implementation

5. Implement Watershed Plan
 - Implement management strategies
 - Conduct monitoring
 - Conduct information/education activities

Steps in Watershed Plan and Implementation

6. Measure Progress and Make Adjustments
 - Review and evaluate information
 - Share results
 - Prepare annual work plans
 - Report back to stakeholders and others
 - Make adjustments to program



Potential Point and Nonpoint Sources of Pollution

Ward Ling

AgriLife Extension



Pollutants of Concern in Geronimo and Alligator Creeks

- Bacteria (*E. coli*)
- Nutrients (Nitrate-nitrogen)



Bacteria Impacts on Waterbody Uses

- § Primarily human health risks
 - § Risk of illness of ingestion or through contact with contaminated water through recreation
 - § Increased cost of treatment of drinking water supplies
- § Possible impact to quality of life, due to less than full use of the waterbody
- § Possible negative public opinion

Nitrogen Impacts on Waterbody Uses

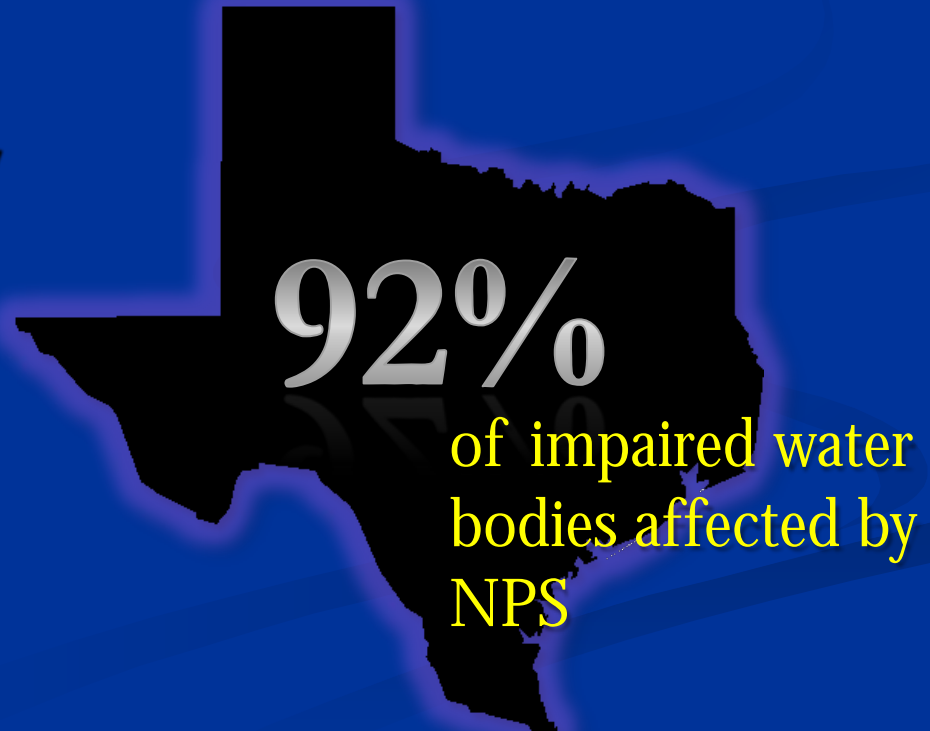
- § Indirect impacts on aquatic life
- § Low dissolved oxygen due to excessive aquatic plant growth
- § Increased treatment costs for drinking water supplies
- § Groundwater contamination
- § Limits recreational use



Point and Nonpoint Source Pollution

n ALL of Texas' river and coastal basins, estuaries, coastal wetlands, and bays have been impacted by point and/or nonpoint source pollution.

– Nonpoint source pollution is the primary cause of water quality problems in Texas

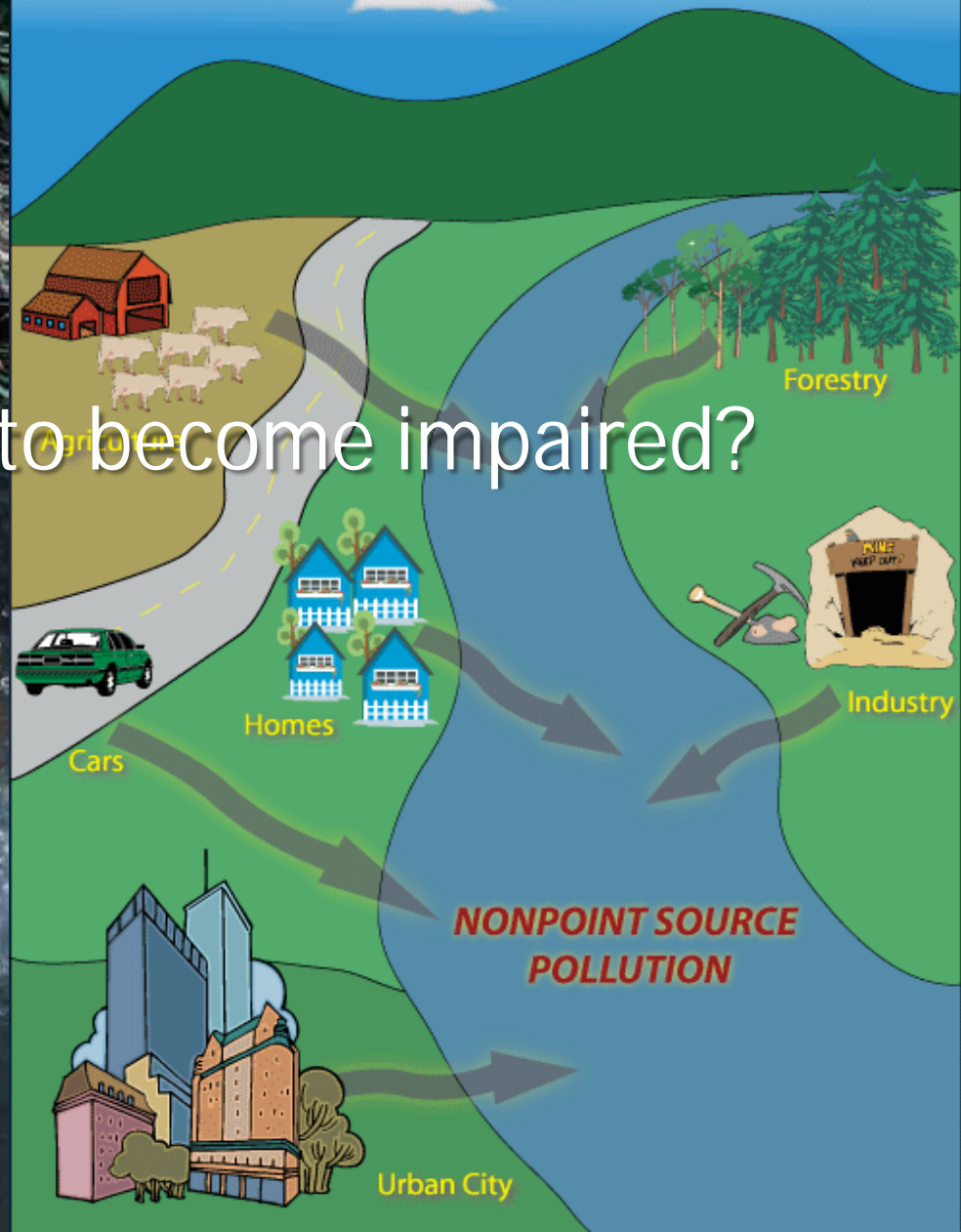


Point Source



What causes water to become impaired?

Nonpoint Source



Point Sources

- Source of loading of a particular pollutant that enters a waterbody at a defined point, through a conveyance system such as a pipe, ditch, canal, etc
- Also known as a regulated or permitted source

Potential Point Sources of Bacteria and Nitrogen

- n Sanitary Sewer Overflows
- n Waste Water Treatment Plants
- n Permitted CAFOs
- n Discharges from meat processing facilities
- n Landfills



Point Sources



Nonpoint Source

- Source of loading of a particular constituent that enters a waterbody at diffused locations that are typically widespread
- Can enter a waterbody by overland flow during runoff conditions

Potential Nonpoint Sources of Bacteria

▫ Humans

- Malfunctioning septic systems
- Illegal dumping

▫ Animals

- Pets
- Feral hogs
- Wildlife
- Livestock

Sources of Bacteria



HUMANS



Sources of Bacteria

ILLEGAL DUMPING



Sources of Bacteria



**DOMESTIC
ANIMALS**



Sources of Bacteria

A black feral hog is shown standing in a field of tall, dry grass. The hog's body is covered in a thick layer of dark mud, particularly on its back and head. The hog is facing right. The background consists of dense, tall grasses in shades of green and yellow.

FERAL HOGS

Sources of Bacteria

**WILDLIFE AND OTHER
NON-DOMESTIC
ANIMALS**



Sources of Bacteria



LIVESTOCK

Potential Nonpoint Sources of Nitrogen

- Landscaped spaces in developed areas (such as lawns, parks, athletic fields, and golf courses)
- Animals (domestic, wildlife, feral hogs, livestock)
- Cropland, pasture, and hay (fertilizer application)
- Malfunctioning septic systems
- Land application of manure or wastewater



Sources of Nitrogen





Questions?

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Next Steps

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Next Steps

February 9, 2010



Meeting Dates and Times

Steering Committee Meetings are proposed for

Work Group Meetings

- Work Group Meetings
 - Location, Time, and Date will be determined by the work group members.



Geronimo and Alligator Creeks Watershed Partnership



Website

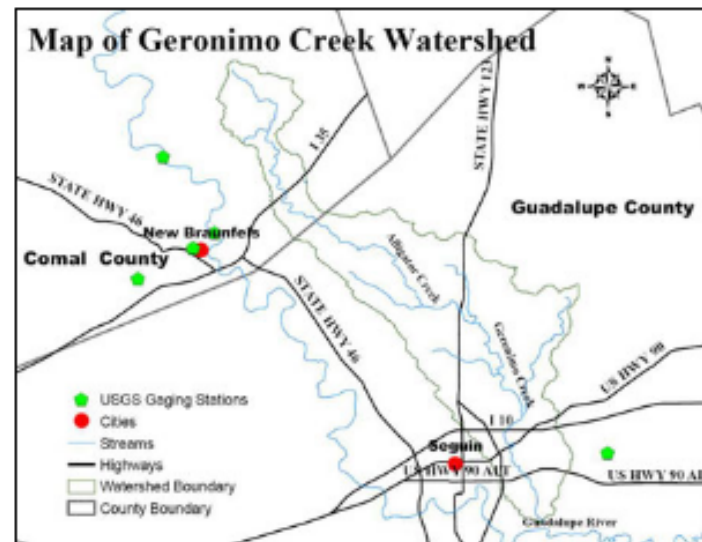
- Home
- Contact Us
- Project Overview
- Meetings
- Water Quality
- Publications
- Partners

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.



Websites

Geronimo and Alligator Creeks Watershed Partnership

- <http://geronimocreek.org/>

Guadalupe-Blanco River Authority

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

TSSWCB Geronimo Creek Watershed

- <http://www.tsswcb.state.tx.us/watersheds#geronimocreek>

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SAVE THE DATE!

Geronimo and Alligator Creek Watershed Steering Committee Meeting

February 9, 2010

Here at the River Annex 6-9 pm

