

**Water Quality Monitoring in the Geronimo Creek Watershed and Facilitation of the
Geronimo and Alligator Creeks Watershed Partnership**

Guadalupe-Blanco River Authority
FY2011 CWA Section 319(h)
Project No. 11-06

Quarterly Report Number 11

Covering work accomplished April through June, 2014

July 10, 2014

I. Abstract

Routine water quality monitoring was continued. Wet weather targeted monitoring for the spring quarter was conducted in May. The fifth newsletter, *The Geronimo Flow*, was distributed to stakeholders. A presentation on the 319(h) grant proposal was made to the Board of the Irma Lewis Seguin Outdoor Learning Center (ILSOLC). Multiple planning meetings were held for the purpose of planning the Second Annual Geronimo and Alligator Creek Clean Up. The cleanup event was held on Saturday, April 5, 2014. The quarterly partnership meeting was held on June 10, 2014. Workshops conducted during the quarter included a workshop on feral hogs, two workshops on operation and maintenance of on-site septic systems and the Lone Star Healthy Streams workshop.

II. Overall Progress and Results by Task

TASK 1: Project Administration

Subtask 1.1: GBRA will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July and October. QPRs shall be distributed to all project partners and posted to the project website.

- GBRA prepared the progress report for January through March 2014 and submitted the report on April 9, 2014.

85% complete – On-going

Subtask 1.2: GBRA will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.

- GBRA submitted the invoice for January through March 2014 on April 25, 2014.

85% complete – On-going

Subtask 1.3: GBRA will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. GBRA will develop lists of action items needed following each project coordination meeting and

distribute to project personnel.

- Many calls and emails were shared between GBRA, Extension, TSSWCB, and Partnership members, to coordinate workshops, planning for the 2014 Clean Up event held on April 5, review of newsletter and newspaper articles, quarterly partnership meeting, and to coordinate the workshops held in the quarter.

80% complete – On-going

Subtask 1.4: GBRA will continue to host and maintain a website (<http://geronimocreek.org/>) to serve as a public clearinghouse for all project- and watershed-related information. All presentations, documents and results will be posted to this website. The website will serve as a means to disseminate information to stakeholders and the general public. Extension shall contribute content matter for the website as appropriate.

- The Geronimo Creek Partnership webpage was updated with the Partnership meeting notice, workshop notices, and other project-related information and to post the fifth newsletter.
- Extension and GBRA updated the project web page with meeting materials.
- Web hits are monitored monthly. Generally, hits average between 600 and 800 hits a month. Web hits for April, May, and June were 1619, 1171, and 1290, respectively. Data tables updated through February 2014 were posted to the project website.

75% complete – On-going

TASK 2. Quality Assurance

Subtask 2.1: GBRA will develop a QAPP for activities in Task 4 consistent with the most recent versions of EPA Requirements for Quality Assurance Project Plans (QA/R-5) and the TSSWCB Environmental Data Quality Management Plan.

Consistent with Title 30, Chapter 25 of the Texas Administrative Code, Environmental Testing Laboratory Accreditation and Certification, which describes Texas' approach to implementing the National Environmental Laboratory Accreditation Conference (NELAC) Standards, shall be required.

All monitoring procedures and methods prescribed in the QAPP shall be consistent with the guidelines detailed in the TCEQ Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue (RG-415) and Volume 2: Methods for Collecting and Analyzing Biological Assemblage and Habitat Data (RG-416).

- No work was performed under this task in this quarter.

100% completed – On-going

Subtask 2.2: GBRA will implement the approved QAPP. GBRA will submit revisions and necessary amendments to the QAPP as needed.

- No work was performed under this task in this quarter.

60% completed – On-going

TASK 3. Support and Facilitation of WPP Implementation

Subtask 3.1: Extension will continue to employ a Geronimo Creek Watershed Coordinator to engage and facilitate the Geronimo Creek Watershed Partnership. In coordination with GBRA, the Watershed Coordinator will be responsible for the general oversight and coordination of all project activities, be responsible for reporting requirements and directing educational activities, and serve as the primary conduit for interaction with landowners, citizens, and entities to facilitate the implementation of the WPP. The Watershed Coordinator shall successfully complete (or have already completed) the Texas Watershed Planning Short Course. The Watershed Coordinator shall participate in Texas Watershed Coordinator Roundtables and the TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee meetings, as necessary.

- Major activities facilitated included the quarterly partnership meeting held June 10, 2014, assisting with coordination of the Feral Hog workshop, two On-site Septic System (OSSF) workshops and Lone Star Healthy Streams Workshops.
- Additional tasks completed this quarter include the drafting and production of a newspaper article advertising the Clean Up Event that ran twice in two local newspapers (included in QPR)
- The fifth quarterly newsletter was developed, reviewed, and distributed to stakeholders. Newsletter included in QPR.
- Two Homeowner Septic System Maintenance classes were conducted. One was the basic 2-hour class and one was the 6-hour class that focused on aerobic systems. Attendance roster included in QPR.
- Extension and GBRA conducted the first Feral Hog workshop conducted in the watershed on May 23, the OSSF workshops on April 28 and 29, and the Lone Star Healthy Streams Workshop on June 5, 2014. Numerous phone calls and emails were shared in preparing for these events. Fifty-two attended the Feral Hog workshop, forty-seven total attended the OSSF workshops, and thirty-eight attended the LSHS workshop. Attendance roster included in QPR.

80% completed – On-going

Subtask 3.2: Extension will facilitate public participation and stakeholder involvement in the watershed planning process, specifically by facilitating meetings of the Partnership Steering Committee (at least quarterly) and Work Groups (as needed) to provide regular updates on the status of monitoring efforts, progress in identifying implementation funding, and movement towards water quality restoration and seek input and recommendations on needed activities. Extension will coordinate meetings, secure meeting locations, prepare and disseminate meeting notices and agendas. Meeting

summaries will be prepared and posted to the project website. The WC will provide counties, cities and other partners with updates on progress of implementation of the WPP, if they are unable to regularly attend Partnership Steering Committee meetings.

- Extension produced the fifth newsletter, *The Geronimo Flow*, and distributed it to stakeholders. The newsletter was posted to the project website. Newsletter included in QPR.
- GBRA hosted the quarterly Partnership meeting on June 10, 2014. Extension facilitated the meeting. Extension prepared a press release to advertise the meeting, posted it to the project webpage, posted the meeting to the Seguin-Gazette and New Braunfels Herald-Zeitung community calendars, and emailed the notice and reminders to the Partnership. A representative from the Guadalupe County Master Gardeners and the new Comal-Guadalupe SWCD District Technician gave presentations. Ward Ling gave a project update, covering the success of the stream clean up and the workshops held in the quarter. Agenda and copies of the presentations are attached.

80% completed – On-going

Subtask 3.3: Extension will assist governmental and non-governmental organizations (i.e., responsible parties in the Geronimo Creek WPP) in identification and acquisition of resources (financial and technical) to enable WPP implementation. Extension will actively seek and pursue funding opportunities and work with partners to develop grant proposals. The WC will work with state and federal agencies, as appropriate, to bring technical and financial resources to the watershed.

- Extension met with the City of Seguin representative responsible for administering the TCEQ 319(h) grant on Wednesday, June 11. Discussed future grant funding opportunities and assisted the City with load reduction calculations for reporting purposes to TCEQ.
- Extension contacted City of New Braunfels representatives for the purpose of soliciting their involvement in a 319(h) grant application this fiscal year. The request for assistance was not accepted, but future possibilities exist and were discussed.

70% completed – On-going

Subtask 3.4: Extension will 1) evaluate and track progress toward achieving milestones established in the WPP; and, 2) work with GBRA to assess water quality data collected through the Clean Rivers Program, this project, and other data collection efforts in relation to achieving load reductions. Extension will develop, publish, print, and distribute to stakeholders, a biennial addendum to the Geronimo Creek WPP that describes modifications/updates to goals and milestones, explains new understandings of sources and cause of water quality issues, documents success in achieving goals and milestones, and success in achieving water quality improvement and load reductions. As the WPP will be published in fall 2012, this draft biennial addendum would most appropriately be published in fall 2014. This draft biennial addendum will function as the Final Report for this project.

- Extension continued development and updating the spreadsheets for the purpose of tracking implementation activities. All implementation activities listed in Tables 8.1 and 8.2 are carefully monitored and updated as implementation proceeds.

70% completed– On-going

Subtask 3.5: Extension will coordinate education and outreach activities as identified in the Geronimo Creek WPP. GBRA will make presentations on the Geronimo Creek Partnership and WPP and general NPS pollution information to local schools and community organizations. Extension will support, promote, and participate in, as appropriate, any field days, demonstrations, site tours, or education events sponsored by AgriLife Extension, USDA-NRCS, and/or SWCDs for the Geronimo Creek watershed.

- Extension submitted meeting materials and other project-related announcements and information to GBRA for posting to the project web page.
- Extension prepared and distributed press releases for the quarterly partnership meeting.
- Extension partnered with GBRA and John Fisher, a Steering Committee member, to record a Saturday Morning Topic Show at the Seguin area radio station, KWED. Extension traveled to Seguin February 26th to record the show. The show allowed Extension, GBRA, and the Steering Committee member to “tell the story” of how the WPP was needed, developed, and is now being implemented, and how the upcoming Clean Up event is part of that. The radio show was replayed several times during the current reporting period that led up to the Clean Up Event.
- Extension produced the fifth newsletter, *The Geronimo Flow*, and distributed it to stakeholders. The newsletter was posted to the project website. Newsletter included in QPR.
- Extension began purchasing space on a monthly basis in the Seguin and New Braunfels newspapers, for the purpose of publishing articles to raise awareness of the project, educate readers regarding BMPs that can have a direct impact on water quality, and to inform readers about project highlights. An advertisement for the Second Annual Clean Up Event was published twice, in preparation for the event. A copy of the advertisement is included in QPR.
- Planning continued for the Second Annual Geronimo and Alligator Creeks Clean Up event scheduled for Saturday, April 5, 2014. The Clean Up Event went forward as planned. Over 230 volunteers participated, resulting in cleaning 22 locations for a total of 17 miles of roadway and stream banks. Over 7,000 pounds of trash was removed from the watershed. Post press release is attached to QPR for a more detailed summary of event.
- The list of project partners participating in this year’s Clean Up event grew substantially. The list of financial donors was over a dozen, while the number of volunteers participating was over 230—well over twice the number that participated in last year’s event.
- April 28, 2014 – GBRA hosted a 2 hour Homeowner Septic System Maintenance Class at the River Annex conducted by Extension. Thirty eight homeowners were received information on how to maintain their systems. Attendance roster included in QPR.

- April 29, 2014 – New Braunfels Utilities hosted a 6 hour Homeowner Septic System Maintenance Class at their Service Center, conducted by Extension. Fourteen homeowners received information on how to maintain their aerobic systems. Attendance roster included in QPR.
- May 23, 2014 – Extension conducted the first Feral Hog Workshop held in the watershed at the Agricultural Heritage Center in Seguin. GBRA welcomed the participants and made introductions. Attendance roster included in QPR.
- Planning activities were underway for the upcoming Lone Star Healthy Streams Workshop scheduled for June 5.

80% completed – On-going

Subtask 3.6: GBRA will include information about this project in GBRA newsletters (e.g., *River Run*) and Clean Rivers Program publications regarding progress to implement the Geronimo Creek WPP. GBRA will solicit content matter for these publications from Project Partners as appropriate.

- GBRA included a section in the 2014 Basin Highlights Report (BHR) covering the status and activities of the Geronimo and Alligator Creeks Watershed Partnership. The BHR was distributed to all Clean Rivers Program steering committee members and the GBRA Board of Directors.

85% completed– On-going

Subtask 3.7: Extension will develop, publish, and distribute 4 semi-annual newsletters that are designed to keep landowners and entities informed of ongoing WPP implementation activities, including water quality data collection and progress toward achieving milestones in the WPP. The newsletter shall be distributed as most appropriate to individual landowners and entities in the watershed. Extension will solicit content matter for the newsletters from project partners as appropriate.

- Extension compiled the fifth newsletter, “*The Geronimo Flow*”. The newsletter was distributed via email to stakeholders and posted to a new tab created on the project webpage. Copy of newsletter included in QPR.

75% completed – On-going

Subtask 3.8: Extension will facilitate communication with stakeholders in order to engage the public and affected entities in WPP implementation. Extension will utilize all appropriate communication mechanisms including direct mail, e-mail, the project website, and mass media (print, radio, television). Extension will develop and disseminate general project informational materials, including, but not limited to, flyers, brochures, letters, factsheets, news releases, and other appropriate promotional publications. Extension will develop and utilize a listserv (e.g., <http://listserv.tamu.edu/>) to facilitate direct discussion between stakeholders. Extension will explore the appropriate use of social media (i.e., Facebook) as a stakeholder communication mechanism for this watershed. Extension will solicit content matter for educational materials from project partners as appropriate.

- Extension and GBRA worked diligently through all available outlets (press releases, radio, email, phone calls, announcing at other meetings, etc) to advertise and seek support for the Second Annual Clean Up Event. The resulting success of the event was largely due to the hard work and contacts made by GBRA, AgriLife and John Fisher. The planning committee was instrumental in securing many of the donations, as well as, GBRA staff preparing the tote containers of clean up materials and tools prior to the event, which made registration and clean up materials distribution go smoothly.
- The months of planning meetings prior to the event combined with the coordination between Extension and GBRA, really had a positive impact on the production of the event. Extension worked in close coordination with GBRA to solicit volunteers, develop an online registration form for volunteers, develop sign in sheets, lists of materials needed, assigning volunteers to work registration booths, develop maps identifying clean up locations, design and purchase of special event T-shirts, and coordinate purchase and distribution of breakfast tacos and water.
- Extension emailed the steering committee information about the Partnership meeting, the two Septic System classes, the Feral Hog Workshop, and the Lone Star Healthy Streams Workshop. Press releases were released, along with posting the meeting to the community calendars, and notifying local radio.
- The relationship with the Seguin newspaper has grown since Extension began purchasing newspaper space. The sales director ran (at no expense) two free ads for the Clean Up event. Traffic to the project webpage increased roughly 3 fold over average for the month of March, while April, May, and June experienced near double the average traffic (1619, 1171, and 1290 web hits, respectively).

70% completed – On-going

Subtask 3.9: Extension will make deliberate efforts to increase awareness of the WPP and secure implementation support thereof from county and municipal governments throughout the watershed.

- Extension continues to maintain communication with the City of Seguin as they move through the process of working with TCEQ on their first grant. Extension met with the representative responsible for administering the grant from TCEQ on June 11. As a result of that meeting, Extension will be assisting Seguin with reporting requirements and calculations due on their grant.
- Extension and GBRA have been in contact with Seguin and New Braunfels informing them of our assistance if needed to prepare any new grant proposals.

70% completed– On-going

Subtask 3.10: Extension will maintain a spreadsheet of watershed stakeholders and affected parties for use in engaging the public in the watershed planning process. The spreadsheet will be added to based upon previous efforts of Extension in TSSWCB project 08-06. The spreadsheet will represent a diverse cross section of Geronimo Creek landowners, citizens, local businesses, local and regional governmental entities and elected officials, state and federal agencies, and environmental and special interest groups.

- Extension updated the stakeholder email spreadsheet with participant emails obtained from the June Partnership meeting and from requests from the project page. Many of the participants in the Clean Up event have requested that they be added to the email list.
- Extension was contacted by the State Water Quality Specialist with the USDA-NRCS in Temple requesting he be added to the email list. He wants to be more involved.
- As a result of events this quarter, the email contact list for the project grew to over 300 contacts who now regularly receive project updates and notices.

70% completed – On-going

Subtask 3.11: Extension will attend and participate in other public meetings as appropriate in order to communicate project goals, activities and accomplishments to affected parties. Such meetings may include, but are not limited to, city councils, county commissioners' courts, Clean Rivers Program Basin Steering Committee and Coordinated Monitoring, local soil and water conservation districts (SWCDs), groundwater conservation districts and other appropriate meetings of critical watershed stakeholder groups.

- Extension submitted materials to be included in the Clean Rivers Program Basin Highlights report, and further proofed versions leading to the final copy. Extension participated in the 2014 Coordinated Monitoring Meeting for the Guadalupe River and Lavaca Coastal Basins the morning of March 20, 2014. Extension presented a project update to the Basin Steering Committee at their annual meeting that afternoon. A copy of the presentation made by Ward Ling is included in the QPR.
- Extension conference called in to a kickoff meeting with the new district technician on January 14. Extension has exchanged several calls with the technician since that time discussing watershed concerns.

70% completed – On-going

TASK 4. Water Quality Data Collection and Analysis

Subtask 4.1: GBRA will conduct routine ambient monitoring at seven sites once per month, collecting field, conventional, flow and bacteria parameter groups. The QAPP developed in Task 2 will precisely identify the sites. The sampling period extends over 21 months. The number of samples planned for collection through this subtask is 147. Currently, routine ambient monitoring is conducted monthly at one station by GBRA (12576) through the Clean Rivers Program. Sampling through this subtask will complement existing routine ambient monitoring regimes such that routine water quality monitoring is conducted monthly at eight sites in the Geronimo Creek watershed. GBRA's Regional Laboratory will conduct sample analyses. Field parameters are pH, temperature, dissolved oxygen and conductance. Conventional parameters are total suspended solids, turbidity, sulfate, chloride, nitrate nitrogen, ammonia nitrogen, total kjeldahl nitrogen, chlorophyll-a, pheophytin, total hardness, and total phosphorus. Flow parameters are flow collected by gage, electric, mechanical or Doppler, including severity. Bacteria parameter is *E. coli* enumerated using USEPA Method 1603.

- April 7, 2014 -
 - Routine monitoring at seven sites - CRP monitoring at one site. One site was dry
 - Geronimo Creek at Huber Road (20742).
- May 6, 2014 -
 - Routine monitoring at seven sites - CRP monitoring at one site. One site was dry
 - Geronimo Creek at Huber Road (20742).
- June 11, 2014 -
 - Routine monitoring at seven sites - CRP monitoring at one site. One site was dry
 - Geronimo Creek at Huber Road (20742).

80% completed – On-going

Subtask 4.2: GBRA will conduct routine ambient monitoring at six sites once per quarter year, collecting field, conventional, flow and bacteria parameter groups; specific parameters are defined in Subtask 4.1. The QAPP developed in Task 2 will precisely identify the sites. The sampling period extends over seven seasons. The number of samples planned for collection through this subtask is 42. Spatial and seasonal variation will be captured in these snapshots of watershed water quality. GBRA’s Regional Laboratory will conduct sample analyses.

- Dry weather targeted was conducted in previous quarter for the spring season.

60% completed – On-going

Subtask 4.3: GBRA will conduct biased flow monitoring at fourteen sites once per season under wet conditions, collecting field, conventional, flow and bacteria parameter groups; specific parameters are defined in Subtask 4.1. These sites shall be the same as the sites for routine ambient monitoring described in subtasks 4.1-4.2. If a storm event was captured under routine monitoring in subtasks 4.1-4.2, a separate biased flow sample will not be collected under this subtask. The QAPP developed in Task 2 will precisely identify the sites. The sampling period extends over seven seasons. The number of samples planned for collection through this subtask is 98. Spatial, seasonal and meteorological variation will be captured in these snapshots of watershed water quality. GBRA’s Regional Laboratory will conduct sample analyses.

- May 14, 2014
 - Wet weather targeted monitoring at fourteen sites. One site was dry (Unnamed tributary at Laubach Road (20753)). Routine sites (7) collected under wet conditions for spring quarter.

65% completed – On-going

Subtask 4.4: GBRA will conduct routine groundwater monitoring at up to four sites (e.g., two spring and two wells) once per quarter year, collecting field, conventional, flow and bacteria parameter groups; specific parameters are defined in Subtask 4.1. The QAPP

developed in Task 2 will precisely identify the sites. The sampling period extends over seven quarters. The number of samples planned for collection through this subtask is 28. GBRA's Regional Laboratory will conduct sample analyses.

- May 6, 2014 - Routine groundwater monitoring was conducted in this quarter. The Timmermann Springs and two wells were collected (Laubach well and Huber well).

70% completed – On-going

Subtask 4.5: GBRA will transfer monitoring data from activities in subtasks 4.1-4.4 to TSSWCB for inclusion in the TCEQ SWQMIS at least quarterly. Data will be transferred in the correct format using the TCEQ file structure along with a completed Data Summary, as described in the most recent version of the *TCEQ Surface Water Quality Monitoring Data Management Reference Guide*. GBRA will post data from monitoring activities collected in subtasks 4.1-4.4 to the project website in a timely manner. GBRA will submit Station Location Requests to TCEQ, as needed, to obtain TCEQ station numbers for new monitoring sites. Data Correction Request Forms will be submitted to TSSWCB whenever errors are discovered in data already reported. All monitoring data files, data summary reports and data correction request forms will also be provided to Extension. GBRA will input monitoring regime, as detailed in the QAPP, into the TCEQ CMS.

- Water quality data collected in February 2014 was submitted to the TCEQ SWQMIS on April 2, 2014.
- Water quality data collected in March and April 2014 was submitted to the TCEQ SWQMIS on June 2, 2014.
- Data tables were updated through February 2014 and posted to the Geronimo Creek webpage.

80% completed – On-going

Subtask 4.6: GBRA will develop a final Assessment Data Report summarizing water quality data collected through Task 4. The Report shall, at a minimum, provide an assessment of water quality with respect to effectiveness of BMPs implemented and a discussion of interim short-term progress in achieving the Geronimo Creek WPP water quality goals. GBRA will summarize the results from Task 4 in the GBRA's Clean Rivers Program Basin Highlights Report and Basin Summary Report. GBRA will provide updates on the results and activities of Task 4 to the Steering Committee.

- No work was performed under this task in this quarter.

0% completed– On-going

III. Related Issues/Current Problems and Favorable or Unusual Developments

- The Second Annual Clean Up event was a huge success.
- Two septic system workshops were held April.
- Wet weather monitoring was conducted in the quarter.

- A feral hog workshop and a Lone Star Healthy Streams Workshop were conducted in the quarter.

IV. Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

- a. Extension will continue publishing newspaper articles and production and distribution of the quarterly newsletter, *The Geronimo Flow*.
- b. Extension will continue to update the web page by coordinating with GBRA.
- c. Extension will continue to assist the Comal-Guadalupe SWCD and the new district technician provide assistance to watershed agricultural producers.
- d. Extension will conduct a rainwater harvesting program scheduled for August 12th.
- e. Extension will participate in the Comal County Land & Water Expo on July 23.
- f. Extension and GBRA will conduct the next Partnership meeting on September 9.
- g. Extension and GBRA will coordinate the scheduling of the next round of Homeowner Septic System Maintenance classes for November.
- h. GBRA will continue water quality monitoring.



Join us for the Second Annual Geronimo and Alligator Creeks Clean Up Day!

You have the opportunity to be part of this local voluntary effort by giving your time and energy as a worker, removing trash and debris from designated Seguin and surrounding area locations that drain to the creeks.

When: Saturday, April 5, 2014

9:00 a.m. to Noon

What: You can be part of this local voluntary effort by giving your time and energy as a worker, removing trash and debris from New Braunfels, Seguin, and surrounding area locations that drain to the creeks.

Where: 1) Parker Lumber Parking Lot, 1555 E. Court St., Seguin
2) Navarro High School Parking Lot, 6350 N. State Hwy 123, Seguin
3) New Braunfels Regional Airport, corner of Airport Rd. and Entrance Dr.

Register: Register online to help as an individual or as a team at www.Geronimocreek.org. All ages welcome. Sites will be assigned based on age appropriateness.

On Saturday April 5: Show up at 9:00am at any of the above three locations to receive free breakfast tacos, supplies, instructions, and maps to clean up locations.

OR: You may make a financial donation which will be used to provide advertising, food, and special event T shirts. All funding stays local.

If you would like to help financially, the following sponsorships are available:

Gold Level: \$150 and over Name & Logo on T shirt, gift bag, and certificate of appreciation

Silver Level: \$50 to \$149 Name on T shirt and certificate of appreciation

Bronze Level: \$49 and under Certificate of appreciation

Sponsors will also be recognized in the event press releases. Deadline to get your name/logo on the T shirt is March 21st. If you are interested in being a sponsor or want more information

go to www.Geronimocreek.org or contact

Ward Ling at 979-845-6980

Come out for a fun time and help clean up your creeks!

April 16, 2014

The Second Annual Geronimo and Alligator Creeks Clean Up event was a huge success and made a real impact by removing trash and debris from the creeks, as well as energizing and educating the community about these creeks. The event held Saturday, April 5, was coordinated by the Geronimo and Alligator Creeks Partnership, Texas AgriLife Extension and the Guadalupe-Blanco River Authority, as part of implementation efforts for the area's watershed protection plan.

This year's event had more than double the number of volunteers than last year's event. Over 230 volunteers met at Parker Lumber in Seguin, the Navarro High School parking lot in Geronimo, and at the New Braunfels Airport at 9 a.m. for breakfast tacos, safety briefings and clean up instructions. Event t-shirts, trash bags, gloves, pick-up tools, and other supplies were available to those who came out to help clean up the creeks. "The response from the community was even better than anything we could have hoped for!" said Debbie Magin, GBRA's Director of Water Quality Services. Both the Cities of Seguin and New Braunfels donated disposal services for trash collected during the event. Sponsors for the event included: the City of New Braunfels and the City of Seguin, Alamo Group, Continental Corporation, Geronimo Creek Retreat, Geronimo Lions Club, Guadalupe County Commissioner Seidenberger, Guadalupe-Blanco River Authority, HEB, Liz Sedlacek, New Braunfels Herald-Zeitung, Robin and Bill Walker, Seguin Daily News KWED, Seguin Gazette, Spirit of Joy Lutheran Church, Texas A&M AgriLife Extension, and Thrivent Financial for Lutherans.

"Where last year's event focused at 7 locations, this year we were able to cover a much larger area due to the larger number of volunteers—we sent crews to 22 locations where roadways crossed Geronimo and Alligator creeks and their contributing streams, and the large storm water detention pond behind the Town Center at Creekside," said Ward Ling, Geronimo and Alligator Creeks Watershed Coordinator with Texas A&M AgriLife Extension. Volunteers collected 7,020 pounds of trash along 17 miles of roadway and creek banks, that was made up of 387 bags of trash, 45 tires, 2 cubic yards of scrap metal, large items such as lumber and debris, and two toilets," said Ling. The City of New Braunfels will recycle the tires and the metal materials collected were sent to recycling centers, as well. "We are so grateful for the overwhelming support from the community—we are planning to grow the number of partnerships with the community and make next year's event even better!" said Ling.

Geronimo Creek, and its tributary Alligator Creek, flows through Comal and Guadalupe counties. Both were identified for watershed protection plan development due to elevated levels of bacteria and concerns about high levels of nitrogen, as reported in the Texas Water Quality Inventory published by the Texas Commission on Environmental Quality.

The Geronimo and Alligator Creeks Watershed Protection Plan was developed by local stakeholders and outlines strategies to restore and protect water quality. Quarterly meetings are held to discuss progress and plan activities, and all citizens are encouraged to attend and get involved in the effort. For more information, go to <http://www.geronimocreek.org/>.

A Clean Water Act grant was provided to the GBRA by the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency to enable development of the watershed protection plan.

For more information on the project, contact Ling at 979-845-6980 or wling@ag.tamu.edu or Magin at 830-379-5822 or dmagin@gbra.org.

The Geronimo Flow

May 2014



Your Newsletter

The Geronimo and Alligator Creeks Watershed Partnership was formed in 2010 to restore and protect water quality in the Geronimo and Alligator Creeks Watershed due to elevated levels of bacteria and nitrate-nitrogen. The Partnership completed a Watershed Protection Plan in 2012 and is now working toward full

implementation. The purpose of this newsletter is to inform and engage local stakeholders in helping to improve and protect the quality of water in Geronimo and Alligator Creeks. For more information about the project visit our website: www.geronimocreek.org

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Clean Up Event: It Just Keeps Getting Better

The Second Annual Geronimo and Alligator Creeks Clean Up event was a huge success and made a real impact by removing trash and debris from the creeks, as well as energizing and educating the community about these creeks. The event held Saturday, April 5, was coordinated by the Geronimo and Alligator Creeks Partnership, Texas AgriLife Extension and the Guadalupe-Blanco River Authority, as part of implementation efforts for the area's watershed protection plan. This year's event had more than double the number of volunteers compared to last year. Over 230 volunteers met at Parker Lumber in Seguin, the Navarro High School parking lot in Geronimo, and at the New Braunfels Airport at 9 a.m. for

breakfast tacos, safety briefings and clean up instructions. Event t-shirts, trash bags, gloves, pick-up tools, and other supplies were available to those who came out to help clean up the creeks. "The response from the community was even better than anything we could have hoped for!" said Debbie Magin, GBRA's Director of Water Quality Services. Both the Cities of Seguin and New Braunfels donated disposal services for trash collected during the event. Sponsors for the event included: the City of New Braunfels and the City of Seguin, Alamo Group, Continental Corporation, Geronimo Creek Retreat, Geronimo Lions Club, Guadalupe County Commissioner Seidenberger, Guadalupe-Blanco



The HEB employee team getting geared up to pick up trash.



The group from Texas Lutheran University did an excellent job, as usual.

River Authority, HEB, Liz Sedlacek, New Braunfels Herald-Zeitung, Robin and Bill Walker, Seguin Daily News KWED, Seguin Gazette, Spirit of Joy Lutheran Church, Texas A&M AgriLife Extension, and Thrivent Financial for Lutherans.

“Where last year’s event focused at 7 locations, this year we were able to cover a much larger area due to the larger number of volunteers—we sent crews to 22 locations where roadways crossed Geronimo and Alligator creeks and their contributing streams, and the large storm water detention pond behind the Town Center at Creekside,” said Ward Ling, Geronimo and

Alligator Creeks Watershed Coordinator with Texas A&M AgriLife Extension. Volunteers collected 7,020 pounds of trash along 17 miles of roadway and creek banks, 45 tires, 2 cubic yards of scrap metal, large items such as lumber and debris, and two toilets,” said Ling. The City of New Braunfels will recycle the tires, and the metal materials collected were sent to recycling centers, as well. “We are so grateful for the overwhelming support from the community—we are planning to grow the number of partnerships with the community and make next year’s event even better!” said Ling.

New SWCD District Technician

Joseph McIntosh is a newly hired District Technician for the Comal-Guadalupe Soil and Water Conservation District (SWCD). The SWCD was awarded a grant from the Texas State Soil and Water Conservation Board to hire a technician who can assist farmers and ranchers in developing Water Quality Management Plans (WQMP) for their individual operations. The grant also provides financial incentives to help producers implement approved practices.

Nutrient and bacteria loading from agricultural operations are identified in the Geronimo and Alligator Creeks WPP as potential sources of pollution in area creeks. A site specific WQMP is developed by working with a land owner to identify, design, and implement practices that will protect water resources. The plan includes appropriate land treatment practices,

production practices, management measures and technologies. Examples of key practices include prescribed grazing, fencing, watering facilities, pipelines, wells, grassed waterways, pasture/hayland/rangeland planting, riparian buffers, filter strips, and others.

“There is no cost to the landowner for development of the WQMP,” says McIntosh. However, there may be costs for implementing certain practices, but financial assistance is available in most cases.

If you need assistance or are interested in learning more, you can contact Mr. McIntosh at (830) 379-0930 x107, or stop by the office at 3251 N. Hwy 123 Bypass in Seguin.

Come to the Partnership meeting June 10th and meet Joseph. At the meeting, he will present an overview of how he is assisting area farmers and ranchers.

For more information about feral hogs go to:

<http://feralhogs.tamu.edu/>

<http://wildlife.tamu.edu/wildlifemanagement/feral-hog/>

Feral Hog Workshop

The first Feral Hog Workshop to ever be offered in the watershed is scheduled for Friday, May 23, 2014 from 8:30 a.m. – 3:00 p.m. at the Texas Agricultural Education and Heritage Center, also known as The Big Red Barn, 390 Cordova Road, Seguin. Check in begins at 8 a.m. the morning of the event.

Speakers will include representatives of AgriLife Extension, Texas Animal Health Commission, Texas Parks and Wildlife Department, Texas Wildlife Services and the Texas Department of Agriculture. Topics will include basic ecology and biology, feral hog effects on the Geronimo Creek watershed, regulations for transporting, disease concerns, population dynamics and control techniques, including traps, as well as hunting regulations. There also will be discussion of feral hog resources available to the landowner.

“Each year feral hogs do millions of dollars of damage to property, crops

and watersheds, as well as serving as potential vectors for disease,” said Jeff Hanselka, AgriLife Extension agent for agriculture and natural resources, Guadalupe County. “This program will give participants some useful information about feral hogs, especially their behavior and ways to control them.”

Hanselka said they have applied for five Texas Department of Agriculture continuing education units — two general, two integrated pest management, and one in laws and regulations — for commercial, non-commercial and private applicators attending the program.

The cost is \$25 and includes lunch. Preregistration is required by May 20 to ensure an accurate meal count.

Preregister by calling the AgriLife Extension office for Guadalupe County at 830-303-3889 or email Hanselka at j-Hanselka@tamu.edu.

Lone Star Healthy Streams Workshop

A Lone Star Healthy Streams workshop is planned for June 5 at the Texas Agricultural Education and Heritage Center, also known as the Big Red Barn, 390 Cordova Road, Seguin.

“The Lone Star Healthy Streams program aims to educate Texas livestock producers and land managers on how to best protect Texas waterways from bacterial contributions associated with livestock production and feral hogs,” said Jennifer Peterson, Texas A&M AgriLife Extension Service program specialist in College Station.

The workshop will begin at 10 a.m. and end by 3 p.m. A catered lunch will be provided.

The workshop is sponsored by the Texas Agricultural Education and Heritage Center and the Texas State Soil and Water Conservation Board and is free to all participants. Three Texas Department of Agriculture general continuing education credits will be provided for certified pesticide applicators.

Currently, about 300 Texas water bodies do not comply with state water quality standards established for *E. coli* bacteria. By participating

Do you have something you would like to contribute to the newsletter? Or, would you like to see us provide information on a particular topic? Suggestions can be sent to Ward Ling at wling@ag.tamu.edu or call 979-845-6980.

in this workshop, livestock producers and landowners can learn about specific conservation practices that can help improve and protect the quality of Texas' water bodies.

"The workshop will focus specifically on issues within the Geronimo and Alligator creeks watershed, which recently completed a watershed protection plan," Peterson said.

Workshop presentations will focus on specific best management practices to help minimize bacterial contamination originating

from beef cattle, horses and feral hogs.

The Lone Star Healthy Streams program is funded through a Clean Water Act nonpoint source grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency.

To RSVP for the workshop and to get more information about the Lone Star Healthy Streams program, go to <http://lshs.tamu.edu/workshops/> or call Peterson at 979-862-8072.

Smart Growth Workshop

Thirty people attended a Smart Growth Workshop offered by the Geronimo and Alligator Creeks Partnership held March 25th at the GBRA River Annex in Seguin.

The goal of the workshop was to better equip decision makers to evaluate the impacts of nonpoint source pollution in growing communities.

Topics addressed in the workshop included: linkages between land use types, water quality, community character, reducing storm water runoff volume, and improving water quality through use of Low Impact Development (LID) techniques such as use of permeable pavements, rain gardens, vegetated swales, "curbless" streets, and other practices to enhance flood control.

The workshop combined in-class presentations and outdoor

demonstrations. Dr. Fouad Jaber, Texas A&M AgriLife Extension Specialist in Integrated Water Resources Management, explained how different Smart Growth techniques can help mitigate the harmful effects of urbanization on stormwater volume and water quality. Attendees received 6 hours of Certification Maintenance credit from the American Planning Association.

The workshop was hosted by GBRA and AgriLife Extension as part of implementation of the Geronimo and Alligator Creeks Watershed Protection Plan.

The Partnership plans to conduct this workshop annually in order to expand the use of LID technologies as urbanization and development move forward.

Upcoming Events

Feral Hog Workshop

Friday, May 23

8:30a – 3p

The Big Red Barn

390 Cordova Road

Seguin

Lone Star Healthy Streams Workshop

Thursday, June 5

10a – 3p

The Big Red Barn

390 Cordova Road

Seguin

Partnership Meeting

Tuesday, June 10

6p – 7:30p

GBRA River Annex

905 Nolan Street

Seguin

This publication was developed with funding support from the U.S. Environmental Protection Agency through a Clean Water Act §319(h) Nonpoint Source grant administered by the Texas State Soil and Water Conservation Board

Septic Systems Classes

Fifty people attended the second round of Homeowner Septic System Maintenance classes on April 28th and 29th. One event was a 2-hour class providing basic training on the operation and maintenance of conventional and aerobic septic systems. The second event was a 6-hour class that provided more in-depth training on management of aerobic systems. Topics included treatment processes, health and safety considerations, how to inspect the system, and how activities in the home can impact system operation.

The classes were interactive and provided homeowners with answers to their questions.

Neither class certified homeowners to maintain their systems. Per county ordinance, homeowners in Guadalupe County have to be certified in order to maintain their system or must have a maintenance

provider contract. Comal County does not have this requirement.

The two classes will be offered again this fall. Watch for the announcement in the newspaper and on our website so you can register to attend.

One big difference in the 6 hour class this fall is that we anticipate being able to offer certification for homeowners that wish to maintain their own system. We will confirm our ability to do so when the class is announced.

For more information about septic systems, go to the [septic system tab](#) on the project webpage. There you will find free educational publications, online modules showing the working of conventional and aerobic systems, and the educational materials used for the 2-hour classes.

Next Partnership Meeting

The Geronimo and Alligator Creeks Watershed Partnership will meet Tuesday, June 10th at 6:00 p.m. at the GBRA River Annex, 905 Nolan Street, Seguin.

Presentations will cover past and upcoming workshops and a recap of the Clean Up Event (wear your event T-shirt). We will hear from a representative of the Guadalupe County Master Gardener Program about how to become involved with

their organization, and from Joseph McIntosh, the new District Technician with the Comal-Guadalupe SWCD. Mr. McIntosh will present an overview of how he is working with area farmers and ranchers to improve and protect water quality.

Come find out how you can get involved. We hope to see you there! For more information contact Ward Ling at 979-845-6980 or wling@ag.tamu.edu

Interested in learning how to keep your septic system functioning properly?



Attend the Homeowner Maintenance of Systems Course for Free!

The 2 hour course in Seguin provides a basic understanding of the operational and maintenance activities of conventional and aerobic septic systems, and explains how activities within the home impact septic systems. Presentations will cover the treatment processes, health and safety considerations, and an overview of how to inspect and maintain the system. This course also provides answers to the most frequently asked septic system questions, including when to pump out a tank and what can or cannot go down the drain. The 6 hour course in New Braunfels covers the same material as the 2 hour class, but goes more in depth on aerobic systems and their operation and maintenance.

Two different courses are being offered in two different locations. Attend the course offering that fits your needs.

Course Information:

MONDAY, APRIL 28, 2014, 6:00PM—8:00PM

**GBRA River Annex
905 Nolan Street
Seguin, Tx 78155**

TUESDAY, APRIL 29, 2014, 8:30AM - 3:30PM

**NBU Service Center
355 FM 306
New Braunfels, TX 78130**

Cost: Free!

**To register: Seating is limited, so contact Ward Ling at wling@ag.tamu.edu
979-845-6980**

Why Should You Attend?

Septic systems are not “flush and forget” systems! Therefore maintenance is essential to ensure proper function and longevity of your septic system. Attendees will gain a better understanding of how to maintain their septic system to



For More Information Contact:

Ward Ling, Extension Program Specialist
979-845-6980 or wling@ag.tamu.edu

This is made possible by funding through the Clean Water Act Section 319(h) dollars provided through the Texas State Soil and Water Conservation Board (TSSWCB).



LONE STAR HEALTHY STREAMS

<http://lsbs.tamu.edu>



BEEF CATTLE



FERAL HOGS



HORSES



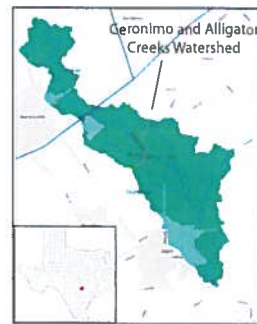
The Lone Star Healthy Streams program educates Texas livestock producers and landowners on how to best protect Texas waterways from bacterial contributions associated with livestock production and feral hogs. There is no cost to attend.

June 5, 2014: 10am-3pm

Texas Agricultural Education and Heritage Center
390 Cordova Road
Seguin, TX

****FREE lunch will be provided to all participants****

****3 General CEUs available for Pesticide Applicators****



Workshop presentations will focus on the Geronimo and Alligator Creeks Watershed and will discuss basic watershed function, water quality, and specific best management practices that can be implemented to help minimize bacterial contamination originating from beef cattle, horses, and feral hogs.

Pre-register for the workshop by going to:

<http://lsbs.tamu.edu/workshops>



TEXAS A&M
AGRI LIFE
RESEARCH EXTENSION



Geronimo and Alligator Creeks Watershed

Partnership Meeting

6 pm Tuesday, June 10, 2014
GBRA River Annex

Welcome and Introductions

- Debbie Magin, GBRA

Master Gardener Program Overview

- Cindy Martin, Guadalupe County Master Gardener

An Overview of Agricultural Water Quality Management Plans

- Joseph McIntosh, Comal-Guadalupe Soil and Water Conservation District

Overview of Past and Future Events

- Ward Ling, Texas A&M AgriLife Extension



Guadalupe County Master Gardeners



2014 Class 26

Master Gardener Programs

Master Gardener Programs (also known as Extension Master Gardener Programs) are **volunteer programs to advise and educate** the public on gardening and horticulture.

In the US, groups are affiliated with a land grant university and one of its offices.



Master Gardener Programs

Master Gardeners are active in all 50 states in the United States and four Canadian provinces.

According to the 2009 Extension Master Gardener Survey, there are nearly 95,000 active Extension Master Gardeners, who provide approximately 5,000,000 volunteer service hours of per year to their communities.



Guadalupe County Master Gardeners About our Organization

- ❖ 503 C Non profit organization
- ❖ Chartered under the Texas Master Gardeners through A&M university
- ❖ Guadalupe County Agrilife Extension Service
- ❖ Coordinator: Travis Franke
- ❖ Elected Governing Board

What do we do?

- ❖ Educate the public through a wide variety of venues (workshops, newsletter, information booths at fairs, etc.)
- ❖ Provide resource information and answer questions
- ❖ Maintain office hours and a lending library
- ❖ Support the activities and mission of the Guadalupe County Agrilife Extension Service

Guadalupe County Fair

We are responsible for the Horticulture Division of the annual Guadalupe County Fair

- ❖ Educational materials and demonstrations
- ❖ Children's activities
- ❖ Judging and Awards for Garden and Field Crops

We are one of the few remaining counties that still provide this opportunity for local gardeners and farmers





Located at 1101 Elbel, Schertz

In 2013, we harvested 5,703 lbs of fresh produce

Produce supplied to Randolph Area Christian Assistance Program Food Bank

Immaculate Conception Catholic Food Bank in Marion

7



In 2013 1,648 volunteer hours

Volunteer workdays every Tuesday and Friday mornings



8

Water Fairs



In the Spring, the Guadalupe County Agrilife Extension Agents conduct a Water Fair to 3rd grade students across the school districts in Guadalupe County

The Master Gardeners help prepare and conduct several presentations and demonstrations for the students and teachers regarding water conservation

9

Big Red Barn Agricultural Heritage Center



❖GCMG support the gardens at the Big Red Barn.

❖Students come for educational programs

❖Volunteer work days every Friday

10

Seguin Earth Day



GCMG support the efforts of the City of Seguin through participation in the Earth Day event.

This April we provided three booths

Children planted a flower in biodegradable pots

information booth with materials and consultation with Master Gardeners

10 Gallon Challenge to education about household water use and conservation

11

Junior Master Gardeners



12



Texas Master GardenerSM

Requirements of the certified members:

- Pay the annual dues of \$20
- Conduct a minimum of 12 hours of volunteer work on approved projects annually
- Attend a minimum of 6 hrs of continuing education annually
- Obtain a criminal background check every 2 years (through the organization)
- Sign a volunteer agreement with the state organization annually

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Texas Master GardenerSM

How do I get Certified as a GCMG?

Attend classes through Guadalupe County Master Gardeners (minimum of 50 hrs)

2014 class will meet Wednesdays, August 13-
December 10
Time: 10-2:30

First Presbyterian Church 305 King Street, Seguin, Tx

Application Deadline is July 31, 2014

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Texas Master GardenerSM

GCMG Class information

Cost: \$170 (10% discount if registered and paid by July 5, 2014)

Classes will be taught by professional practitioners, Agrilife Extension Agents and experienced Master Gardeners

Course content is comparable to college level classes

15



Texas Master GardenerSM

The Texas Master Gardener Handbook . . . is designed to be a problem-solving tool for Master Gardeners as they work to address public needs in the areas of horticulture and the environment.

16



Texas Master GardenerSM

How do I get Certified as a GCMG?


- Complete an internship within 1 year of finishing your class
 - 50 hrs of approved activities
- Pay your annual dues when certified

17

How can you help?

- ❖ Volunteer
- ❖ Become a certified Master Gardener
- ❖ Make a donation, it is tax deductible


18




Comal-Guadalupe
SWCD

Texas State Soil and Water
Conservation Board Programs for
Agriculture Producers in the
Geronimo-Alligator Creeks
Watershed


Geronimo-Alligator Creeks Watershed
Partnership
Seguin, TX
June 10, 2014



Water Quality Management Plans (WQMPs)




- Site-specific plan for land improvement measures developed through SWCD for agricultural lands
- Provides farmers and ranchers a voluntary 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, or technologies applicable to the planned land use
- Best available management and technology as described in NRCS Field Office Technical Guide


WQMP statutory authority

- Created by the 73rd Texas Legislature in 1993 through Senate Bill 503 (often referred to as 503 Program, or 503 plans, or 503 cost-share)
- Voluntary enrollment in WQMP Program for farmers and ranchers,
 - Exception- The 77th Texas Legislature in 2001 (Senate Bill 1339) said poultry operations **MUST** obtain a WQMP




WQMPs

- Site specific plans with a combination of best management practices (BMPs) for the treatment of identified resource concerns
- Based on:
 - Soil types
 - Planned land use/production goals
 - Known/potential water quality/natural resource problems (SWAPA)
 - Other site specific factors (topography, etc.)



WQMPs

- Cover the entire farm or ranch
- Specifically designed to achieve pollution prevention/abatement
- Texas Water Code §26.121



Technical Criteria for WQMPs

NRCS Field Office Technical Guide (FOTG)


To view all approved practices for selected county:

- http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=TX
- Select region
- Select county
- Select Section IV
- Select A. Conservation Practices





FOTG “essential practices” for each land use:

<ul style="list-style-type: none"> ➤ <u>Cropland</u> <ul style="list-style-type: none"> ➤ Grassed Waterways ➤ Field Borders ➤ <u>Pastureland</u> <ul style="list-style-type: none"> ➤ Prescribed grazing ➤ Livestock water 	<ul style="list-style-type: none"> ➤ <u>Rangeland</u> <ul style="list-style-type: none"> ➤ Prescribed grazing ➤ Livestock water ➤ <u>Wildlife</u> <ul style="list-style-type: none"> ➤ Wildlife mgmt. ➤ <u>Forestland</u> <ul style="list-style-type: none"> ➤ Forest mgmt.
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WQMPs also include:

- Nutrient management
- Pest management
- Animal waste management system
- Waste utilization
- Irrigation water management


WQMPs also include:

- Erosion control measures to bring soil loss to acceptable levels (T)
- Erosion control to treat other forms of erosion (i.e. gullies) according to FOTG quality criteria
- Other practices to meet site specific concerns



Why have a WQMP?

- Abate/prevent erosion and promote conservation
- A strategic "management" plan for your operation
- "Assurance" policy – state-certified proof that you aren't just sitting around doing nothing
- Demonstrate that voluntary conservation programs promote agricultural production and environmental quality as compatible goals
- Demonstrate that agriculture is doing our part to protect water quality
- Resolve water quality complaints through voluntary process with SWCD and TSSWCB



WQMPs

What Does A Plan Contain?

- District-Cooperator Agreement
- Request for Planning Assistance
- Soils Map & Interpretations
- Conservation Plan Map
- Narrative Record of decisions (practices) needed to implement WQMP
- Implementation schedule indicating years practices are to be applied
- Worksheets used during the inventory and planning process of developing WQMP
- NRCS Practice Standards and engineering designs
- Signature sheet to verify individual's privacy

How to get a WQMP?


- An individual requests planning assistance through their local SWCD
- The WQMP is usually developed by the SWCD Technician with NRCS and TSSWCB assistance
- The WQMP is approved by the landowner, the SWCD and NRCS and then certified by the TSSWCB
- Producer implements the WQMP on their land
- Annual status reviews are conducted to ensure that the landowner implements BMPs as agreed to in the implementation schedule

Financial Assistance

State (TSSWCB) or Federal (NRCS) assistance is obtainable for certain conservation practices

- TSSWCB
 - SB503 WQMP Financial Assistance
- NRCS
 - Farm Bill Programs
 - EPA 319 Funding

Fencing (382)

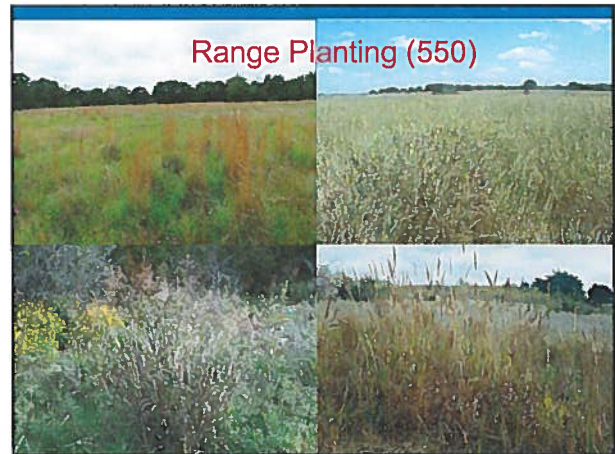
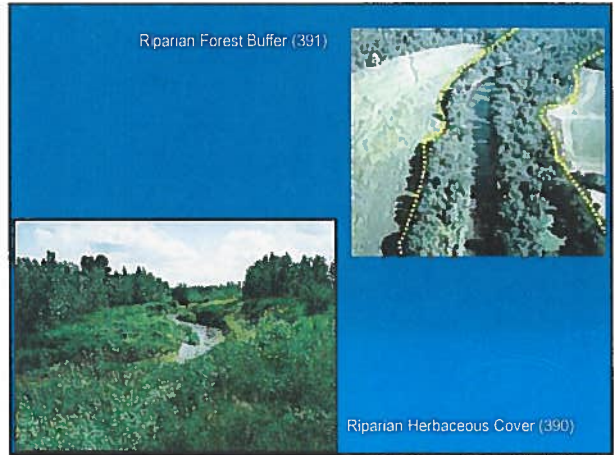


Pumping Plant (533)

Well (642)

Watering Facility (614)

Pipeline (516)





Joseph McIntosh
District Technician

Comal-Guadalupe Soil Water Conservation District #306

Seguin Service Center
3251 N Hwy 123 Bypass
Seguin, TX 78155

830-379-0930v
830-401-0176 f


joe.mcintosh@tx.nacdnet.net
<http://www.tsswcb.texas.gov/>
<http://www.tsswcb.texas.gov/cwp>

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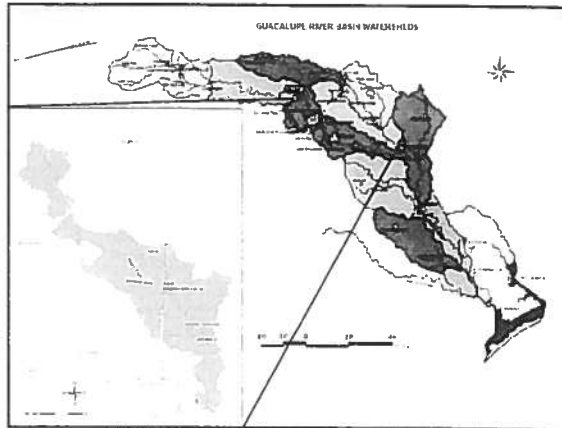
<u>Code</u>	<u>Practice Name</u>	<u>Avg. Cost</u>	<u>Practice Life Span (YEARS)</u>
342	<u>Fence</u>		
	4 Wire Standard	\$4.00 ft.	10
	Electric (Permanent)	\$2.00 ft.	
<p>Note: A property boundary fence is not eligible. Only cross fences for rotational grazing are allowable.</p>			
386	<u>Field Boarders</u>	\$400.00 ac.	5
390	<u>Riparian Herbaceous Cover</u>	\$275.00 ac.	10
	For Establishment Only		
391	<u>Riparian Forest Buffer</u>	\$500.00 ac.	10
	For Establishment Only		
393	<u>Filter Strips</u>	\$300.00 ac.	5
412	<u>Grassed Waterways</u>	\$915.00 ac.	10
512	<u>Forage and Biomass Planting</u>		5
	Seedbed Prep, Seeded Species,		
	Nutrient Management and Weed Control	\$200.00 ac.	
	Seedbed Prep, Sprigged Species,		
	Nutrient Management and Weed Control	\$300.00 ac.	
516	<u>Pipeline</u>		10
	Livestock Pipeline	\$2.50 ft.	
	Note: Pipeline cannot be utilized for domestic use. It is for livestock only.		
533	<u>Pumping Plant</u>		10
	Electric Submersible	\$4000.00	
	Solar Pump	\$7000.00	

550	<u>Range Planting</u>		5
	Seedbed Prep, Seed and Seeding		
	Operation and Nutrient Management		
	(If required by soils test)	\$175.00 ac.	
614	<u>Watering Facility</u>		10
	Tank Installed, 3000 gallons	\$3000.00	
	Tank Installed, 6000 gallons	\$4000.00	
	Trough, Concrete 400 gallons	\$1500.00	
	4' x 10' rectangle installed;		
	(Including float and pad)		
	Trough Concrete 700 gallons	\$2000.00	
	5.5' diameter round installed		
	(Including float and pad)		
	Trough, Concrete 1600 gallons	\$3000.00	
	8' x 20' rectangle installed;		
	(Including float and pad)		
642	<u>Well</u>	\$25.00 ft.	20
	Well, Drilling, Casing,		
	Materials and Development		
Note: Well cannot be utilized for domestic use. It is for livestock use only.			
590	<u>Nutrient Management</u>	\$10.00	
	Note: Soils Test Only		
528	<u>Prescribed Grazing</u>	\$8.00 ac.	

The Geronimo and Alligator Creeks Watershed Protection Plan




Ward Ling
Texas A&M AgriLife Extension

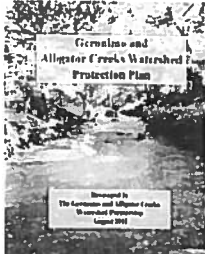
Water Quality

- Geronimo Creek was listed on the 2006 303(d) list for not supporting its contact recreation use
- Geronimo Creek was first listed in 2000 for concern for nutrient enrichment




What is the Geronimo and Alligator Creeks Watershed Protection Plan?

- A community-driven, voluntary management plan developed to solve complex water quality problems
- The purpose is to restore and protect the creeks
- It relies heavily on stakeholder involvement at the local level




Where is it coming from?

- The impairment is the result of loading from nonpoint sources:
 - Urban: dog waste, urban runoff
 - Agricultural: livestock, feral hogs, wildlife
 - Wastewater: septic systems



Recap of Recent Events

- Smart Growth Workshop
- Homeowner Septic System Maintenance Classes
- Second Annual Creek Clean Up Event
- Feral Hog Workshop
- Lone Star Healthy Streams Workshop

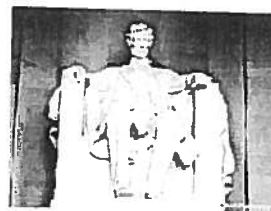


Why do a Smart Growth Workshop?

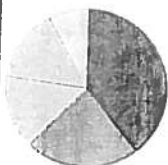
- We thought we wouldn't get many people attend if we called it a "Dumb Growth Workshop" or "Let's Keep Doing it the Same Way We Have Been Doing it Workshop"
- The concentration of contaminants in urban runoff is oftentimes higher than from any other land use
- The population in Texas is set to nearly double in the next 50 years

The problem with quotes on the internet is you can never trust their validity.

--Abraham Lincoln



Land Use



Range land
Crops
Pasture
Forest
Urban

E. coli Loading

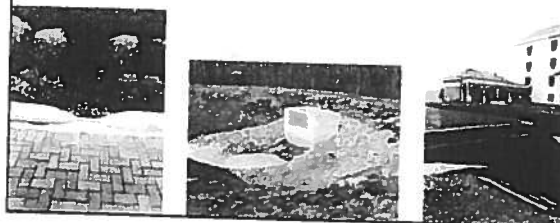
	1.E+14
Range land	1.E+12
Crops	1.E+10
Pasture	1.E+08
Forest	1.E+06
Urban	1.E+04
	1.E+02
	1.E+00

Goat Cattle Deer Septics Urban

- In terms of loading, urban runoff was higher than all the other sources.

Smart Growth Workshop

- Low Impact Development techniques – better than conventional structures and management of stormwater which has an improved impact on surface water, both quality and quantity



Homeowner Septic System Maintenance Classes

- Classes conducted Nov 2013 and April 2014
- Two types of classes conducted
 - 2 hr basic overview class (materials on project website)
 - 6 hr in-depth class on aerobic systems
- Comal and Guadalupe County homeowners with aerobic systems are required to have a maintenance contract for first 2 years
 - After that time, Guadalupe County homeowners can be certified or must have a maintenance contract

Fall Classes

- Scheduling classes for the second week of November
- Plan to offer both the 2 hr and 6 hr classes
 - Potentially those taking the 6 hr class will receive certification to maintain their own aerobic systems (Guadalupe County requirement)



First Creek Clean Up Event

- Established the first event in 2013 on the first weekend in April
- Over 100 volunteers removed almost 3,000 pounds
- This year's event was bigger and better

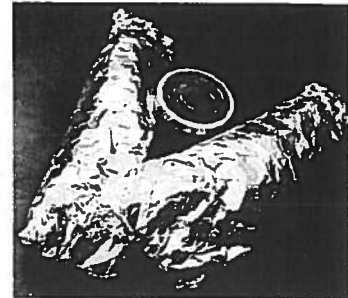
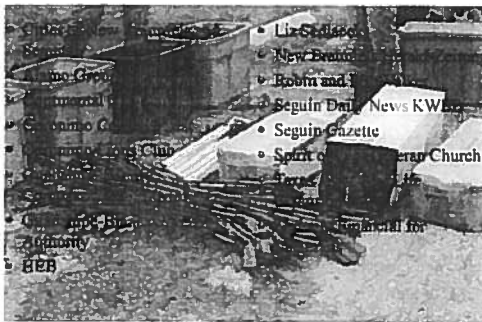


Second Annual Event

- Prior to the event, volunteers used the online sign up form
- Day of the event, all necessary equipment was provided
- Water bottles, breakfast tacos, and T-shirts were distributed
- Guadalupe County Master Naturalists presented educational presentations to many of the clean up crews -- took "an educational fair to the crews"



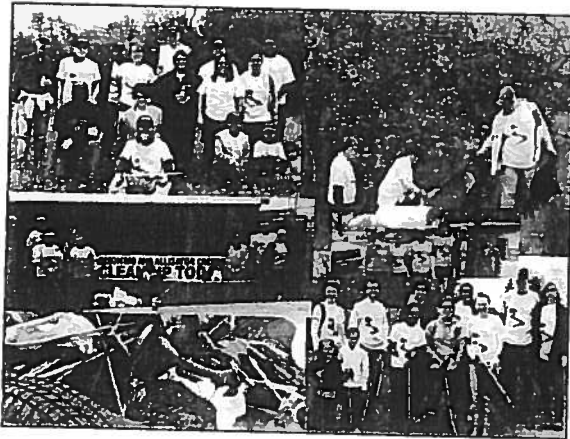
Sponsors



Coverage


- 22 locations covering 17 miles of roadways and creek banks
- Over 230 volunteers
- Volunteers could choose to meet at one of three locations






Results

- Volunteers collected over 7,000 pounds of trash
- Cities of New Braunfels and Seguin donated disposal and recycling of all materials collected
- Residents have a greater awareness of area creeks
- Great response from area businesses and groups




Feral Hog Control

- We are focusing on feral hog management (reduction) in the Geronimo and Alligator Creeks watershed
- Extension is working directly with landowners to reduce hog populations in the watershed




Feral Hog Workshop

- Extension conducted the first Feral Hog Workshop in the watershed last month—over 50 attended
- Feral hog biology, populations, laws and regulations, safety and disease concerns, control measures, and trap demonstrations
- 4 TDA CEUs for commercial, non-commercial & private applicators
- This will become an annual event



Lone Star Healthy Streams Workshop

- June 5 at The Texas Agricultural Education and Heritage Center
- Over 30 attendees heard about how to protect Texas' surface water from bacterial contamination from livestock, horses, and feral hogs
- 3 TDA CEUs for pesticide applicators




Ongoing Projects

- Septic system decommissioning project
- Irma Lewis Seguin Outdoor Learning Center
- Isotope Study


Decommissioning Project

- Fund decommissioning costs that the homeowners would be responsible for
- Estimated average cost of \$1,500 to decommission a septic system
 - Pump contents of septic tank
 - Remove the tank cover
 - Fill tank with sand/gravel
- Decommissioning is a state requirement




City of Seguin

- Seguin has a website
http://www.seguintexas.gov/public_works/detail/capital_projects/
- City of Seguin produces a newsletter every 2 weeks
- FAQ page and online form for submitting questions and construction maps of the project




Irma Lewis Seguin Outdoor Learning Center Project

- "An aggressive outreach and education program will be vital to successful engagement of watershed stakeholders"
- Collaboration between GBRA, Texas A&M AgriLife, and the Irma Lewis Seguin Outdoor Learning Center
- Combines technology with on-the-ground demonstrations and outdoor education on LID techniques



Isotope Study

- GBRA and USGS will conduct targeted surface water quality monitoring
- Identify the source of nitrates in the groundwater and surface water in the Geronimo and Alligator Creeks Watershed and Plum Creek Watershed
- Possible sources:
 - Fertilizers
 - Septic systems
 - Animal waste
 - Nitrifying plants
 - Atmospheric deposition



Upcoming Opportunities

- Rainwater Harvesting August 12th
- Homeowner Septic System Maintenance Workshops
- Fall soil and water testing campaign
- Turf grass management workshop this fall
- Quarterly newsletter
- Quarterly Partnership meetings



Thank You! Questions and comments

Ward Ling
Geronimo and Alligator Creeks Watershed Coordinator
Phone: 979-845-6980
wling@ag.tamu.edu



Howdy!

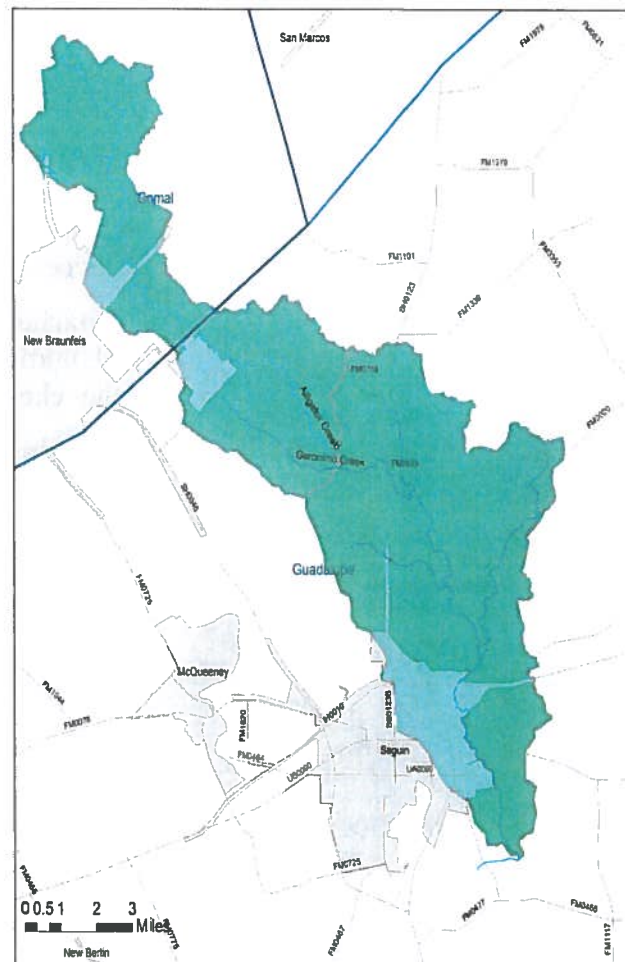
My name is Joseph McIntosh; I was recently hired by the Comal-Guadalupe Soil Water Conservation District (SWCD) as a district technician for the Geronimo & Alligator Creeks Watershed. As you may know the Geronimo creek is listed as impaired on the 303(d) list due to elevated levels of bacteria. A watershed protection plan has been developed with the assistance of the Geronimo & Alligator Creeks Watershed Partnership and approval from the Environmental Protection Agency (EPA) in 2012. Thanks to the help and support from the Guadalupe Blanco River Authority (GBRA) and the Texas State Soil Water Conservation Board (TSSWCB), a Clean Water Act 319 grant has been obtained through the EPA to help support this project. The purpose of this newsletter is to explain the opportunities available to you as a landowner to help improve the water quality in the watershed to insure efficient future use. Assistance from the Natural Resources Conservation Service (NRCS), TSSWCB, and the SWCD will assist all landowners in applying for and obtaining the technical assistance and financial incentives to implement certain prescribed practices. Landowners within the watershed will be eligible to receive a maximum financial incentive amount of \$15,000 through the 319 grant program.

The maximum financial incentive shall not exceed 60% of the total cost to implement the listed practices. The landowner will be responsible for the remainder of the costs. If a landowner applies and completes the steps to obtain funding for the best management practices, the 60% of total costs is reimbursed back to the landowner after completion of work and certification by the TSSWCB technician. Thank you for your time. I look forward to working with and helping each one of you. If you have any questions or would like to see how we can help, feel free to call or come in the USDA Service Center located at 3251 N. Hwy 123 Bypass in Seguin or call me at 830-379-0930x207.

Approved Practices:

- Prescribed Grazing
- Fencing
- Watering Facilities (livestock only)
- Pipelines
- Wells (livestock only)
- Forage & Biomass Planting
- Rangeland Planting
- Riparian Herbaceous Buffer
- Riparian Forest Buffer
- Pumping Plants
- Grassed Waterways
- Field Borders
- Filter Strips
- Nutrient Management (soil testing)

See back for description of each practice.





“The maximum financial incentive shall not exceed 60% of the total cost to implement the listed practices. The landowner will be responsible for the remainder of the costs.”

Joseph McIntosh,

District Technician

3251 N. Hwy 123 Bypass

Seguin, TX 78155

(830)379-0930x107

Email me at:

joseph.mcintosh@

tx.nacdnet.net

- **Prescribed grazing:** Application of this practice will prescribe the rest period, intensity, frequency, duration and season of grazing to promote ecologically and economically stable plant communities that meet both the land manager’s objectives and the resource needs.
- **Fencing (Cross fencing only):** This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles. A fence may be applied as part of a conservation management system to facilitate the application of conservation practices that treat the soil, water, air, plant, animal, and human resource concerns.
- **Watering facilities (livestock only):** To provide access to drinking water for livestock in order to meet daily water requirements, improve animal distribution, protect water quality of streams, ponds, and water supplies by providing alternative access to water.
- **Pipelines:** To convey water from a source of supply to points of use for livestock.
- **Wells (livestock only)**
- **Forage & Biomass planting:** Establishing adapted and/or compatible species, varieties, or cultivars of herbaceous species suitable for pasture, hay, or biomass production.
- **Range planting:** This practice serves to restore a plant community similar to the Ecological Site Description reference state for the site or the desired plant community, provide or improve forages for livestock, provide or improve forage, browse or cover for wildlife, reduce erosion by wind and/or water, and improve water quality and quantity.
- **Riparian Herbaceous buffer:** Grasses, sedges, rushes, ferns, legumes, and forbs that are adapted and tolerant of intermittent flooding or saturated soils, established and/or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats.
- **Riparian Forest buffer:** Reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.
- **Pumping plants:** A facility that delivers water at a designed pressure and flow rate.
- **Grassed waterways:** A shaped or graded channel that is established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet.
- **Field borders:** A strip of permanent vegetation established at the edge of or around the perimeter of a field.
- **Filter strips:** A strip or area of herbaceous vegetation that removes contaminants from overland flow.
- **Nutrient management (soil testing):** To maintain or improve the physical, chemical, and biological condition of soil.



Guadalupe County Master Gardeners Training Class 26



Become a Certified
Master Gardener

Master Gardeners is an education sharing horticultural program.
Students commit to continuous learning and volunteer service.

Schedule

Wednesdays,
August 13 to December 10, 2014

Registration Deadline

July 31, 2014
(10% discount if paid by July 15)

Time

10:00 a.m. to 2:30 p.m.

Cost

\$190

Location

First Presbyterian Church
305 North King Street
Seguin, Texas

Class Size

Limited

For more information contact:

Cindy Waechter
Assistant Class Coordinator
cindy.waechter@gmail.com
830-624-1114

GCMG Website:

www.guadalupecountymastergardeners.org/



TEXAS A&M
AGRILIFE
EXTENSION



Geronimo Creek Sewer Project Phase V Oak Village North Subdivision

Volume 3, Issue 18 - May 30, 2014

Staff Contacts

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Pam Herrera 830.401.2776 pherrera@seguintexas.gov	Wade Bolton 830.401.2493 wbolton@seguintexas.gov

The newsletter and/or to submit a questions can be found at:

http://www.seguintexas.gov/public_works/detail/capital_projects

PROJECT UPDATE

SATURDAY, MAY 31st

WORK SCHEDULED

Crews will be grading the drainage swale behind the back of curb and installing the concrete diamonds at the manhole covers.

WEEK OF JUNE 2nd - JUNE 6th

Grade and spread topsoil behind the curb to prepare for sod placement.

Raise manhole covers to pour concrete diamonds.

Grade the entrance at Martindale Road and continue clean-up of the staging yards.

IMPORTANT

CONTACT NATE GARZA at
ngarza@seguintexas.gov

TO DISCUSS
SPRINKLER SYSTEM
and/or
BRICK MAILBOX
REPAIRS

*Remedies will be handled on
a case-by-case basis*

319(h) GRANT

**For more information contact:
Planning/Codes (830) 401-2305**

REMINDERS

For the safety of the neighborhood and workers, please drive with caution and adhere to all detours and barricades.

To ensure regularly scheduled garbage and/or re-cycle pick up, containers should be placed out the night before or prior to 6:00 a.m. the morning of collection. Progressive has adjusted their route schedule due to the construction and times may vary week to week. If your trash or recyclables is missed, please call (830) 401-2776 or (830) 401-2445, as soon as possible. *Be advised, a work order to return for a missed pickup may take up to 24 hours to complete.*

**To file a claim: contact:
Capital Projects (830) 401-2776**

If you receive this newsletter by regular mail and would prefer to receive via email, please provide your email to: pherrera@seguintexas.gov

All emails will remain confidential