

**Development of a Watershed Protection Plan  
for Geronimo Creek**

Guadalupe-Blanco River Authority  
FY09-11 CWA Section 319(h)  
Project No. 08-06

**Quarterly Report Number 5**

Covering work accomplished January through March, 2010

April 15, 2010

**I. Abstract**

Many administrative tasks, meetings and planning activities occurred during the reporting period. Initial public meetings were held in October in Seguin and New Braunfels for the start of the project. A Texas Watershed Steward Workshop was held in Seguin for the watershed and surrounding areas and was also very well attended. Monitoring of sites is ongoing and data gathering for watershed characterization continued.

**II. Overall Progress and Results by Task**

**TASK 1: Project Administration and Coordination**

**Subtask 1.1:** The GBRA will prepare electronic quarterly progress reports for submission to TSSWCB. Progress reports shall document all activities performed within a quarter and shall be submitted by the 15<sup>th</sup> of January, April, July and October. All progress reports will be posted to the project website and provided to all project partners.

- GBRA prepared the progress report for October 2009 through December 2009 and submitted the report on January 14, 2010.

40% 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 October 2009 through December 2009 on January 29, 2010.

30% complete – On-going

**Subtask 1.3:** GBRA will host coordination meetings or conference calls with TSSWCB and any subcontractors as appropriate, at least quarterly to discuss project activities, project schedule, communication needs, deliverables, and other

requirements.

- Several planning meetings and conference calls were held between January and March:
  - Calls between GBRA, TSSWCB and Texas AgriLife Extension to discuss formation of steering committee, meeting coordination, review of agendas, powerpoints and handouts.

20% complete – On-going

## TASK 2. Quality Assurance

**Subtask 2.1:** GBRA will develop a quality assurance project plan (QAPP) for activities in tasks 3 and 4, consistent with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* (May 2006) and the *TSSWCB Environmental Data and Quality Management Plan* (August 2007).

Consistency 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 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) December 2003) and *Volume 2: Methods for Collecting and Analyzing Biological Community and Habitat Data* (RG-416) (August 2005).

100% completed – On-going

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

- Lee Gudgell had submitted an amendment to the QAPP in December 2009 for the following changes but signature pages have not been received back from EPA:
  - Extend the monitoring period from 12 to 24 months in order to collect additional routine samples and targeted samples. Drought conditions, causing dry stream beds, prevented early samples from being collected.
  - Corrections to the list of GBRA employees-names and titles.
  - Update of SWQM reference from 2003 to 2008.

50% completed – On-going

### TASK 3. Water Quality Monitoring

**Subtask 3.1:** Technical consultant will compile historical and baseline data on the Geronimo Creek watershed, including water quality data, land use, topography, soil types and vegetation.

- TAMU Team began collecting existing and historical data on the watershed.
- TAMU Team continued collecting existing and historical data and began evaluating the historical data including the flow data, water quality data, Agricultural Statistics numbers for livestock, and numbers for wildlife.
- TAMU Team began accumulating existing GIS layers for the watershed including land use, soil types, vegetation, streams, urban areas, cities, counties, roads and topography.

75% completed – On-going

**Subtask 3.2:** GBRA, with consultation with the technical consultant, will produce a twelve-month water quality monitoring plan based on information identified in Subtask 3.1, including monthly routine and targeted monitoring of the stream and tributaries, quarterly monitoring of the springs (up to four locations), and the quarterly monitoring of wells (up to four locations) that are in close proximity to be contributing to the stream flow through springs.

100% completed – On-going

**Subtask 3.3:** GBRA will conduct water quality monitoring of the watershed as described in the plan developed in Subtask 3.2 and under the QAPP developed in Subtask 2.1.

- July through September 2009 – GBRA continued the monitoring portion of the project under the signed QAPP.
  - January 18, 2010 – Debbie Magin began process for applying for site identification numbers from TCEQ.
  - January 2010
    - All eight routine sites were monitored under wet weather conditions, including the routine site collected under the Clean Rivers Program.
    - Seven targeted sites were monitored under wet weather conditions.
  - February 2010
    - Seven routine monitoring sites were collected, including the routine site collected under the Clean Rivers Program.
    - No targeted monitoring was conducted.
    - Geronimo Creek WWTP sampled for the winter season.
    - Groundwater sites (3) sampled for the winter season.
    - Three sites were sampled for metals.

- March 2010
  - All eight routine sites were monitored under dry weather conditions, including the routine site collected under the Clean Rivers Program.
  - No targeted wet weather monitoring was conducted.
- Data was reviewed for December, January and February for representativeness and quality assurance. Data will be transmitted to TSSWCB in SWQM-IS format after the stations are assigned permanent station location numbers. Those numbers have been assigned temporary numbers. The process will be completed in the next quarter. In the interim the data has been put into excel spreadsheets and made available on the project website and through email to the steering committee members.

40% completed – On-going

#### **TASK 4. Water Quality Modeling and Data Analysis**

**Subtask 4.1:** The Technical Consultant will perform services that include the selection of a model(s) that facilitate development of the watershed protection plan; produce geographical information including digitizing of land use data to the sub-watershed level; data analysis to rank sources of the impairments; estimation of the fate and transport of bacteria, nutrients and other constituents; and production tools that can be used to evaluate the effectiveness of best management practices.

- January - March – emails, calls made by Extension, GBRA, SSL, BAEN and TWRI to discuss and amend modeling QAPP with more detail on land use classification and Espey Consultants role in the project.
- On multiple dates in January – March - discussions between Extension, TAMU and GBRA were held about historical data availability including pollution source population estimates. On March 11, 2010 Extension (Dr. Mark McFarland, Nikki Dictson, Ward Ling, and Matt Berg) held a meeting with the modelers at TAMU to discuss the project, modeling QAPP, exchange historical data and determine what other data was still needed.
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20% completed – On-going

**Subtask 4.2:** The Technical Consultant will perform all necessary phases of modeling that facilitate development of the watershed protection plan as described in Task 5.

- Gathering historical data to characterize the watershed.
- Multiple communications by email and phone have occurred with Extension and the modelers on the data for SELECT modeling.

- March 11, 2010 Extension met with Modelers about the population estimates for preliminary SELECT data and presentation materials for April meetings.

40% completed – On-going

## **TASK 5.** Watershed Partnership and Plan Development

**Subtask 5.1:** GBRA will subcontract with the Texas AgriLife Extension Service (Extension) to facilitate the development of the Geronimo Creek Watershed Partnership Steering Committee and associated subcommittees for the purpose of plan development, including Texas Watershed Steward training for stakeholders.

- January 12, 2010 – held first steering committee meeting at the GBRA River Annex. 83 attended. Sign in sheet attached.
- January 13, 2010 GBRA and Extension had a conference call to discuss and complete information for the QPR for Geronimo Project.
- January 15, 2010 Extension had multiple phone calls confirming with Partnership and Steering Committee Members including: John Fisher and Lance Williams of Alamo Group, Ian Taylor of NBU, Joyce Evans and Robert Worley.
- January 20, 2010 GBRA and Extension attended the Geronimo Creek Flood Protection Study Advisory Group Meeting in Spring, from 11:00 – 2:00 PM. Debbie Magin and Nikki Dictson provided an update to the group on the progress of the WPP project and discussed data that could be shared between the two projects.
- GBRA and Extension attended the Watershed Coordinators Roundtable Meeting held in Georgetown, on January 27, 2010.
- GBRA attended the Seguin Long-Range Planning Committee and presented a project status update to the committee on the Geronimo and Alligator Creek WPP project.
- January 19-21, 2010 GBRA and Extension worked on website modifications and updates for the project website.
- On both January 21, and February 1, 2010 GBRA updated data tables for monitoring locations as well as Clean Rivers Program monitoring site.
- February 1, 2010 GBRA, Extension and TSSWCB held a conference call to discuss the project.
- February 9, 2010 held second steering committee meeting at the GBRA River Annex. 40 attended. Sign in sheet attached.
- Extension developed materials that were reviewed and edited by GBRA and TSSWCB for the partnership meetings including a press release, presentations, a basic WPP outline for the project and meeting materials.
- Project information is and will continue to be updated on the website: [geronimocreek.org](http://geronimocreek.org) including meeting times and dates, press releases and any publications, and general project materials. Screen Shots Attached.
- During the month of February 2010 Debbie Magin included a status report in multiple sections of the Clean Rivers Program Basin Highlights report.

- February 10, 2010 Debbie Magin conducted a presentation to the New Braunfels Chamber of Commerce Natural Resources Committee on the Geronimo Creek Project.
- Nikki Dictson and Debbie Magin attended on the Southeast and South Central Texas WSCS meeting on March 4, 2010 in Columbus to provide any updates on the Geronimo and Alligator Creek WPP project.
- Project materials were developed for the Partnership Meetings in January and February and March meetings including agendas, presentations, handouts, etc. These materials were reviewed and edited and these edits were incorporated for a final review.
- March 2010, Extension developed and sent for review a press release for the March Work Group Meetings.
- March 9<sup>th</sup>, 2010 Extension and GBRA met with the Facilities Manager and the Distribution Center Manager for the Walmart Distribution Center to discuss the project and answer questions to try and get their participation in the project.
- March 9<sup>th</sup>, 2010 held the Geronimo Work Group Meetings for both the Agricultural Nonpoint Source and the Urban Nonpoint Source Work Groups. 21 attended the Urban NPS Work Group meeting and 22 attended the Agricultural NPS Work Group meeting. Sign-in sheets attached.
- March 9<sup>th</sup>, GBRA updated the data tables for the samples collected in February and posted data tables to the web.
- March 11, 2010 Debbie Magin contacted the local veterinarians to discuss the pet populations in the watershed. Both Dr. Scott Bugai and Dr. Randall Sullivan felt that one pet per household is more representative of the pet population in the Geronimo Creek watershed.
- Email reminders were sent out to the Steering Committee and to the public to publicize the January, February and March meetings in the watershed.
- March 24, 2010 GBRA and Extension (by teleconference) attended the Geronimo Creek Flood Protection Study Advisory Group Meeting in Spring, from 11:00 – 2:00 PM. Debbie Magin and Nikki Dictson provided an update to the group on the progress of the WPP project and discussed providing an update of the flood study at one of the next partnership meetings.
- March 25, 2010 Ward Ling conducted a presentation on the status of the Geronimo Creek WPP project to the Annual 2010 Clean Rivers Program Steering Committee for the Guadalupe-Blanco River Basin.
- March 25, 2010 Nikki Dictson called the Animal Control Offices for Guadalupe and Comal Counties and Cities of Seguin and New Braunfels to discuss pet population estimates.

20% completed – On-going

**Subtask 5.2:** Extension, in collaboration with GBRA, will develop the Geronimo Creek Watershed Protection Plan.

- Extension and GBRA are gathering historical data and information that will be needed for the plan and to characterize the watershed.
- Extension and GBRA developed an outline for the Geronimo Creek WPP and provided it for review and comment at the February 9<sup>th</sup>, 2010 meeting.
- Extension and GBRA are drafting background materials for the WPP.

10% completed – On-going

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

The Quality Assurance Project Plan was amended to reflect additional information on the land use classification and update procedure and including more detail on the involvement with Espey Consultants in the SELECT modeling.

### **IV. Projected Work for Next Quarter**

The following will be accomplished during the coming quarter:

- a. Hold the third and fourth steering committee meetings in May and June.
- b. Hold the second set of work group meetings in April.
- c. Continue to monitor the routine and targeted sites.
- d. Continue to update the website with water quality data.
- e. Continue process to establish TCEQ permanent station location numbers for monitoring sites.
- f. Work will continue on watershed characterization and data gathering efforts in the Geronimo Creek Watershed.
- g. Project materials will be developed for the Partnership and Work Group Meetings in April, May, and June including agendas, presentations, handouts, etc.
- h. Invitations/Reminders will go out to publicize the meetings.
- i. Modeling and data assessment will continue over the next quarter.
- j. GBRA and Extension will develop draft WPP background information to be provided for review and comment.