

**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 1**

Covering work accomplished October through March, 2009

April 15, 2009

**I. Abstract**

Many administrative tasks, meetings and planning activities occurred during the reporting period.

**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 2008 through February 2009 on October 15, 2008. Because of the limited amount of work done in the months of October through December, the two quarters have been combined into one quarterly report. Subcontractors, after subcontracts and scopes of work have been finalized, will submit quarterly progress reports that will be attached and referenced in the GBRA quarterly report. The subcontracts with Texas AgriLife Extension (Extension) and TAMU Biological and Agricultural Engineering (BAEN) Department and Spatial Sciences Laboratory (SSL) are still in negotiation.

5% 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 will be submitting the next invoice for October 2008 through February 2009 on or before April 30, 2009

5% 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.

- Debbie Magin and Liz Sedlacek made a presentation to the Guadalupe County Commissioners Court, notifying the court that the TSSWCB had selected the Geronimo Creek WPP for funding (October 28, 2008).
- Debbie Magin met with GBRA staff to discuss the GC WPP contract, project timeline and deliverables.
- Debbie Magin and Nikki Dictson (Extension) made a presentation to the Comal County Commissioners Court, notifying the court that the TSSWCB had selected the Geronimo Creek WPP for funding (December 4, 2008).
- Several planning meetings and conference calls were held between October and March:
  - December 4, 2008 – met with Nikki Dictson to develop project timeline, training events and stakeholder development.
  - December 8, 2008 – conference call with Extension to discuss timeline, subcontract and modeling consultant.
  - December 9, 2008 – briefed internal staff on project.
  - December 19, 2009 – met with Extension (Dr. Mark McFarland, Nikki Dictson and Matt Berg) and TSSWCB (Aaron Wendt, Loren Henley and Brian Koch) to discuss project, timeline, planning and watershed tour.
  - January 8, 2009 – further discussions with Extension about the subcontracting of the modeling. Decision made to select BAEN and TAMU SSL as technical consultant for modeling. Contract negotiations with Extension and TAMU BAEN and SSL are on-going.
  - January 12-16, 2009 – Debbie Magin and Lee Gudgell attended the Watershed Planning Course put on by Extension, EPA, TSSWCB and TCEQ, held in Bandera, Texas.
  - Debbie Magin will be attending the monthly City of Seguin Long Range Planning Advisory Committee meetings, in order to keep a link between the city’s master planning efforts for that portion of their city limits and extraterritorial jurisdictions that lie in the watershed and the WPP development process.
  - Debbie Magin, Nikki Dictson and Lee Gudgell met to plan watershed tour for project participants and governmental entities in Geronimo Creek Watershed. Maps with highlights were produced for tour participants.
  - January 27, 2009 – Debbie Magin and Nikki Dictson met with project participants and stakeholders at individual meetings to discuss project, timeline and tour:
    - Guadalupe County – County Judge Mike Wiggins; Road and Bridge Administrator and Environmental Health Officer Larry Timmermann; Environmental Health Officer Jimmy Harless;

Guadalupe County Extension Agents Travis Franke and Jeff Hanselka.

- City of Seguin – Assistant City Manager Rick Cortes, City Councilman Bob Pees.
  - GBRA Board Members T.L. Walker (Comal County) and Grace Kunde (Guadalupe County).
  - City of New Braunfels – Nathan Pence, Rivers Project Manager.
  - Comal County Commissioners Jan Kennady and Greg Parker.
  - New Braunfels Utilities – Roger Biggers.
- January 30, 2009 - Tour of watershed was conducted. List of attendees attached.
  - March 12, 2009 – Debbie Magin assisted by Nikki Dictson (Extension) gave a brief presentation on the new Geronimo Creek WPP Project to the TSSWCB Watershed Coordination Steering Committee.

5% 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).

- Debbie Magin and Lee Gudgell began development of quality assurance project plan.
- Draft QAPP was submitted on January 23, 2009.
- Routed QAPP for signatures.
- Final QAPP was submitted on February 12, 2009. Awaiting signatures by TSSWCB and US EPA.

50% completed – On-going

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

0% 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.

0% 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.

- Lee Gudgell, GBRA Water Quality Technician, has been working with Emeka Hawkins, a doctorate student at UTSA, to do preliminary data collection in order to select the appropriate monitoring locations for the quality assurance project plan. Their investigations looked at locations of routine and targeted monitoring sites, possible groundwater monitoring locations, monitoring locations at springs and unnamed tributaries. Mr. Hawkins is doing his graduate work on Geronimo and Alligator Creeks and has offered his time, expertise and water quality monitoring data as in-kind match for the project. They have monitored sites on Geronimo and Alligator Creeks monthly. The data collected is only being used as screening for site selection and will not be used for modeling because his monitoring project is not under this quality assurance project plan. After the TAMU SSL and BAEN are under contract with the project, the locations will be reviewed and if necessary, relocated. The QAPP will be amended to reflect their suggested changes.

50% 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.

0% 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.

- GBRA and Extension discussed on numerous conference calls the selection of a technical consultant for modeling. Several factors came into play when making the decision to select TAMU BAEN and SSL as the modeling team. One being their experience with the PC WPP and other TSSWCB projects. The subcontract with TAMU SSL BAEN is in negotiation. After the subcontract and scope of work has been finalized, TAMU SSL and BAEN will submit quarterly progress reports that will be attached and referenced in the GBRA quarterly report.
- Extension (Nikki Dictson and Mark McFarland) and Dr. Karthi with TAMU BAEN met on 2/16/2009 to discuss the Geronimo Creek Watershed Project Modeling scope of work and budget to incorporate with the Extension Subcontract.
- On February 25, 2009 Extension (Mark McFarland, Nikki Dictson, Matt Berg, and Diane Wassenich) met with Dr. Srinii, Director of SSL and Dr. Karthi, BAEN Department to finalize development of the budget and scope of work for the technical consultant portion of the project.
- GBRA and Extension had preliminary discussions on the lack of available flow data and challenges that will present challenges for modeling efforts. Discussed possible sources such as GBRA Hydroelectric Plants located on the Guadalupe River, upstream and downstream of confluence with Geronimo Creek; near by watersheds that have flow data available; GBRA stage height on Geronimo Creek at SH 123, and the CRP data collected monthly since 1996.

10% 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.

0% 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.

- The subcontract and scope of work with Extension are still in negotiation. After the subcontract and scope of work have been finalized, Extension will submit quarterly progress reports that will be attached and referenced in the GBRA quarterly report.
- Watershed Steward training has been scheduled for November 2009.
- Discussion with Extension, GBRA and TSSWCB, and learning from the Plum Creek watershed planning efforts, have led to the decision to structure the timeline so that the monitoring and modeling will be more than 50% complete before the first stakeholder meetings are held. Public meetings will be held in December. Stakeholders that are identified at the public meetings, by project partners and during the Watershed Stewards training in November will be invited to the first stakeholder meeting in January 2010.

10% completed – On-going

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

0% completed – On-going

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

The subcontract and scope of work with Texas AgriLife Extension are still in negotiation since it was decided to include TAMU BAEN and SSL in that same subcontract and scope of work with Extension.

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

The following will be accomplished during the coming quarter:

- a. Work will occur on watershed characterization and data gathering efforts in the Geronimo Creek Watershed.
- b. Subcontract with Extension and TAMU BAEN and SSL will be completed, signed and started.
- c. Project outreach materials will start to be developed including 2 page fact sheet and press releases, and web materials.
- d. Contact lists of stakeholders in the watershed will be developed.