

**Guadalupe River Basin  
Clean Rivers Program  
Steering Committee  
Annual Meeting**

March 22, 2012

**Minutes**

(Changes to 2013 Coordinated Monitoring Schedules to follow)

The annual meeting of the Clean Rivers Program (CRP) Guadalupe River Basin Steering Committee was held Thursday, March 22, 2012 at 1:00 p.m. at the Guadalupe-Blanco River Authority (GBRA) River Annex, 905 Nolan St., Seguin. Attending were representatives from the Texas Commission on Environmental Quality (TCEQ) CRP; the Upper Guadalupe River Authority (UGRA); GBRA; TCEQ Region 14; TCEQ Region 13; TCEQ Region 11; the Wimberley Valley Watershed Association; Texas AgriLife Extension Service; the Texas Rivers System Institute; the Cypress Creek Watershed Planning project; and Texas Stream Team. Also attending were representatives from the Texas State Soil and Water Conservation Board; the Goliad County Groundwater Conservation District; the New Braunfels Utilities; the cities of Victoria, Luling and New Braunfels; the Gonzales County Soil and Water District; the San Marcos River Foundation; the Edwards Aquifer Research and Data Center; Texas Bass Federation; Master Naturalists from Comal and Hays County; the San Antonio River Authority; Hays County Environmental; Guadalupe County and Adkins.

After introductions, Debbie Magin gave the stakeholders an overview of the Watershed Action Planning (WAP) process being used by the TCEQ. The WAP process is a means to gather information from stakeholders concerning priority water bodies across the state. The water bodies can be those listed as “impaired”, or not meeting stream standards, or water bodies that are important to stakeholders. Stakeholders can help TCEQ determine the best strategy to address the impairments or concerns. Stakeholders can share their knowledge of the watershed and what may be potential causes or sources of the impairment. Those priority watersheds located in the Guadalupe River Basin that have been identified by TCEQ were reviewed with the stakeholders. The stakeholders were given an opportunity to learn about each watershed and share any information they had on these stream segments. Comments were made concerning the oil and gas activities in the Sandies and Elm Creek watersheds.

David Baker pointed out that spring flows from Trinity Aquifer springs, such as Jacobs Well, is the source of Cypress Creek and the historic Wimberley Blue Hole and these flows help maintain exceptional water quality in the creek and Blanco River. Mr. Baker pointed out that the Groundwater Management Area 9 recently adopted a Desired Future Condition for the Trinity Aquifer that authorizes an average thirty-foot decline in the aquifer over the next fifty years. He reported that the best available science indicates that a thirty-foot decline of the aquifer would threaten the springs. He requested that the stakeholder committee send a letter of support for the formation of a special groundwater management area for the Trinity Aquifer that would reconsider the drawdown. Hearing

no objections, Debbie Magin will work with Mr. Baker to draft a letter of support from the stakeholders.

**A copy of Ms. Magin's presentation, as well as all other presentations, can be found on the GBRA Clean River Page at <http://www.gbra.org/crp/default.aspx>.**

The discussion on priority watersheds and the WAP process was followed by a presentation by Allison Woodall with the TCEQ Clean Rivers Program. Ms. Woodall reviewed the status of the water quality standard revisions that were adopted by TCEQ in 2010. After adoption, the standards were sent to EPA for their review and approval. EPA approved the following standard revisions:

- Use of geometric mean to assess for use attainment for bacteria
- Recreational use categories – primary, secondary 1, secondary 2 and non-contact
- Human health criteria for 99 toxics
- Standard for Enterococci for designated saline water bodies

EPA is still reviewing the numeric nutrient criteria proposed for selected reservoirs, site specific aquatic life criteria and segment delineations in the Lavaca and Black Cypress Bayou. EPA disapproved the high flow exemptions for bacteria and the proposed standard for mercury in fish tissue. The standard revisions that are proposed for the Guadalupe River Basin are:

- Canyon Reservoir – Chlorophyll a at the dam set at 5 micrograms per liter
- Comal River and Upper San Marcos River– Temperature changed from 80oF to 78oF
- All streams retain primary contact recreation criteria of 126 organisms per 100 mL
- Lower San Marcos, Upper Blanco and North Fork Guadalupe – Critical low flows calculated based on 5<sup>th</sup> percentile of all flows
- Upper San Marcos and Comal Rivers – Critical low flows calculated using 0.1 percentile
- Camp Meeting Creek (lower 9 miles) – Addition of criteria from July to September:
  - Camp Meeting Creek (from confluence with Guadalupe River upstream to Rancho Road) - A minimum DO criterion of 2.0 mg/L and a 24-hour average of 4.0 mg/L apply from July 1st to September 30th.
  - Camp Meeting Creek (from Rancho Road upstream to Tree Lane) - A minimum DO criterion of 1.0 mg/L and a 24-hour average of 2.0 mg/L apply from July 1st to September 30th.

Ms. Woodall went on to explain that the next revision to the standards has begun. This revision will include an update to the development of nutrient criteria for flowing streams, tissue-based human health criteria and other site-specific criteria.

Tara Bushnoe with the Upper Guadalupe River Authority gave a status report on the Bacteria Reduction Plan being implemented by the UGRA. The plan is a result of the Total Maximum Daily Load (TMDL) adopted on the 3.5 mile reach of the upper Guadalupe River that flows through Kerrville. This segment was designated as impaired due to exceedence of the water quality standard for recreation. Implementation of the plan

that is being funded by a Clean Water Act (CWA) Section 319(h) grant from TCEQ includes Best Management Practices (BMPs) that will reduce the bacteria load from sources identified in the TMDL. Those BMPs include bird deterrents at bridge crossings, pet waste stations and waterfowl management in the Kerrville city park, education and inspections of on-site sewage facilities and BMPs directed at storm water runoff such as street sweeping and river cleanups. UGRA is partnering with the City of Kerrville, Kerr County, TxDOT and the Clean Rivers Program to provide the matching funds for the grant.

Nikki Dictson followed with a presentation on the status of the Plum Creek Watershed Protection Plan and Partnership. Plum Creek was designated as impaired for bacteria with concerns for nutrients in 2006. Since that time the Plum Creek Watershed Protection Plan has been accepted by EPA and implementation of the plan has been underway since 2008. Recognizing that CWA grants are limited and state funding is not available for implementation the Plum Creek Watershed Partnership began investigating ways to sustain the efforts to improve the water quality of the creek. In 2011, twelve members of the Partnership signed an interlocal agreement that developed a match structure based on the size of each service area and their population served. These matching funds were then used to obtain a CWA Section 319(h) grant from the Texas State Soil and Water Conservation Board (TSSWCB) to hire a local watershed coordinator, replacing the Texas AgriLife Extension Service who has been the coordinator since 2006. Nick Dornak has been hired and will office in Lockhart through 2014. Ms. Dictson went on to brief the stakeholders on the efforts of the PCWP, the city of Buda and Hays County to obtain funding from the Texas Water Development Board. The project would take the Hillside Terrace subdivision in the Plum Creek watershed off of failing septic systems and onto a municipal wastewater collection system and treat the wastewater at the city's wastewater treatment plant.

Debbie Magin briefed the stakeholders on the status of the development of a watershed protection plan for Geronimo and Alligator Creeks. The creeks had been designated as impaired for bacteria and a concern for nitrate nitrogen. The modeling performed on the creek has shown that in order to bring the stream into compliance with stream standards, there needs to be a reduction of 26% of the bacterial load at mid-range flows and an 85% reduction in nitrate nitrogen at mid- and low range flows. The plan that has been developed identifies BMPs that if implemented, will reduce the pollutant load from urban, agricultural and wastewater sources. The public comment period will run through April. After the plan has gone through public review and the Geronimo Creek Watershed Partnership has adopted the plan, the TSSWCB will send the plan to EPA for their review and acceptance.

Chris Clary, with the River Systems Institute, briefed the stakeholders on the status of the watershed protection efforts being conducted in the Cypress Creek watershed. Phase I was concluded in 2010 and resulted in the development of a Decision Support System to help model impacts from different levels of growth in the watershed. Also, Phase I included a characterization report on the watershed, describing land use and land patterns, and identified sources of pollutants in the watershed. By 2013, Phase II will complete the development of a watershed protection plan for Cypress Creek.

Mary VanZant, also with the River Systems Institute, gave an overview of the watershed projects being conducted on the Upper San Marcos River. These projects include the San Marcos Observing System (SMOS) conducted in 2009 – 2011; the Spring Lake Watershed Characterization and Management Recommendations Report being conducted in 2010 – 2012; and the Upper San Marcos Watershed Protection Plan which will begin in the fall of 2012. The SMOS project investigated aquatic resource responses to variations in flow regimes, anthropogenic impacts and interactions between native and introduced flora/fauna. The characterization project hopes to obtain data in order to target nutrient inputs to Spring Lake and determine the influence of various sources of water on the algae and turbidity of Spring Lake. The upper segment of the San Marcos River has been listed as an impaired water body because of elevated total dissolved solids, so the watershed protection plan will build on the information gathered in the first two projects and explore management projects that will help reduce pollutant loading to surface and groundwater resources.

After the project updates were given, Doyle Mosier, a retired biologist from Texas Parks and Wildlife Department, gave an overview of the conservation status of mussels in the Guadalupe River Basin. Mussels are one of the most endangered group of organisms in North America. Approximately 20 species are known to occur in the Guadalupe River Basin. Threats to mussel species include loss of habitat, degradation of water quality, commercial exploitation and competition with other exotic species, such as Asian clams. In 2006, TPWD designated eighteen mussel sanctuaries in Texas, three being in the Guadalupe River. Those areas include the Guadalupe River in Kerr County (UGRA Dam – Lake Ingram), the San Marcos River and Guadalupe River between Lake Wood and the city of Gonzales. The five species that TPWD have identified as threatened and are known to be found in the Guadalupe River Basin include the Texas Fawnsfoot, the Golden Orb, the Texas Pimpleback, the Smooth Pimpleback and the Texas Fatmucket.

Nathan Pence with the City of New Braunfels gave an overview of the Habitat Conservation Plan (HCP) developed by the Edwards Aquifer Recovery Implementation Program (EARIP). In an effort to balance the use of water from the Edwards Aquifer, the United States Fish and Wildlife Service (USFWS) brought together 26 stakeholders from throughout the region, representing diverse and sometimes conflicting interests spanning from the Hill Country to the Gulf Coast, to participate in a collaborative process to develop a plan that would aid in the recovery of federally listed species dependent on the aquifer. Stakeholders of the EARIP have compromised on a scientifically-developed HCP. The minimization and mitigation measures included within the HCP are designed to ensure that incidental take resulting from the covered activities will be minimized and mitigated to the maximum extent practicable and will not appreciably reduce the likelihood of the survival and recovery of covered species associated with the Aquifer and Comal and San Marcos springs and rivers ecosystems.

Following Mr. Pence's presentation, representatives from the contributing partners in the Guadalupe River Clean Rivers Program gave overviews of their programs. David Baker with the Wimberley Valley Watershed Association reported about the monitoring that his organization has been doing as a partner of the Clean Rivers Program. Over the years, the data collected by the WVWA has shown that differences in data from the Cypress Creek to the Blanco River is a reflection of their different sizes, flow patterns, and catchment

areas. Also, the water quality at Jacob's Well and Blue Hole is strongly influenced by groundwater interactions. Other sites on the Cypress Creek and Blanco River show broader range of values and greater influence from surface conditions (runoff, weather, NPS pollution). He pointed out that the droughts of 2008-2009 and 2010-2011 had significant impact on water quality in the Wimberley Valley. Dissolved oxygen remains a critical issue when flow is reduced; record low levels were observed in summer 2011. E. coli levels measured very high concentrations occasionally, but in general observations have been lower in 2009-11 than in 2005-08. Data show that nitrogen is built up during extended dry periods and spikes after rainfall. Ammonia peaks during extended dry periods, suggesting a source close to the river (wildlife or septic systems). At all sites (Blanco and Cypress), ammonia readings have been much higher in 2009-11 (avg 0.09 mg/L) versus 2005-08 (0.03 mg/L).

Eric Vangaasbeek, with the Hays County Development Department, deferred his update until next year because they have just gotten started with their monitoring program. His program is monitoring five sites on the Blanco River in Hays County and one site on the lower San Marcos River near the county line. The program collects field data and flow monthly and nutrients quarterly.

Jennifer Buratti, with the River Systems Institute, representing the Texas Stream Team reported on the groups monitoring in the Guadalupe River Basin. There are 178 total sites, 66 which are active. These sites are located on the Blanco River and its tributaries, Cypress Creek, Plum Creek, the Guadalupe River above Canyon Lake, the Comal River, the San Marcos River, the Upper Guadalupe in Kerrville, and the Walnut Creek in Seguin. New aspects of the Stream Team program include a paperless newsletter, email marketing, an online self-assessment testing module and data viewer.

The meeting closed at 4:45 pm.