

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

March 26, 2009

**Minutes**

(Changes to 2010 Coordinated Monitoring Schedules follow)

The annual meeting of the Clean Rivers Program (CRP) Guadalupe River Basin Steering Committee was held Thursday, March 26, 2009 at 9:00 a.m. at the Guadalupe-Blanco River Authority (GBRA) River Annex, 905 Nolan St., Seguin. Committee members/representatives attending included Allison Woodall representing the Texas Commission on Environmental Quality (TCEQ) CRP; Tara Bushnoe and Travis Linscomb representing the Upper Guadalupe River Authority (UGRA); Debbie Magin, Lee Gudgell, Tommy Hill and Liz Sedlacek representing GBRA; Bill Harrison representing the TCEQ Surface Water Quality Monitoring team; Arthur Talley of the TCEQ Total Maximum Daily Load team; Corey Burke and Geraldo Arrambide of TCEQ Region 14; Lynn Lindsay of TCEQ Region 13; Ron Riggins of TCEQ Region 11; Jason Pinchback and David Baker representing the Wimberley Valley Watershed Association, the Texas Rivers Institute and the Texas Stream Team (formerly Texas Watch); and Adrian Vogl representing Texas State University and the Cypress Creek Watershed Planning project. Also attending were Abigail Lindsay and Brian Koch representing Texas State Soil and Water Conservation Board; Nathan Pence representing the City of New Braunfels; Angel Reynaert with the Comal County Water Oriented Recreation District; Barbara Smith, and John and Wanda Duke representing the Goliad County Groundwater Conservation District; Roger Biggers with the New Braunfels Utilities; and, Wain Fairchild with the Gonzales County Soil and Water Conservation District. Homeowner associations were represented by Rick Wallace (Citizens United for Lake Placid); Gary Spence (Friends of Lake McQueeney); Dan Laroe and Phil Vaughan (Lake Dunlap Homeowners Association); and, Bubba Ehrig (Lake Wood Homeowners). Also attending were Dr. Jack Fairchild with the San Marcos River Foundation; Dr. Glenn Longley with the Edwards Aquifer Research and Data Center; David Boylan with the Lindheimer Master Naturalists from Comal County; and Ginger and Loray Geist of the Hays County Master Naturalists and volunteer monitors from the Wimberley area; Victoria Harkins of Espey Consultants; and, Paul Jensen of PBS&J.

Debbie Magin and Lee Gudgell, with the GBRA Clean Rivers Program, briefed the committee on the 2008 program activities in the GBRA ten-county district. The CRP consists of seven tasks, covering project administration, quality assurance, water quality monitoring, data management, data analysis and reporting, stakeholder participation & public outreach, and special projects.

In addition to the existing routine monitoring conducted by the GBRA and the UGRA, special monitoring sites have been established on Peach Creek and Coletto Creek in Goliad County. The bimonthly monitoring on Peach Creek was established as follow up to the

recently completed total maximum daily load project on the creek. The site has been visited nine times but only sampled four times due to dry conditions. The monitoring on the site on Coletto Creek in Goliad County is being done to establish background concentrations of uranium and other radiologicals and will be collected quarterly through 2010. The 2008 sampling has not observed any concentrations of total uranium above the method detection limit. This systematic monitoring is in response to concerns that the proposed in-situ mining of uranium in Goliad County could impact water quality. The Uranium Energy Corporation has made application with the TCEQ to develop wells for in-situ mining of uranium.

GBRA, with help from UGRA, TCEQ and the Texas AgriLife Extension Service, conducted seven biological and habitat assessments. GBRA and TCEQ sampled eight sites for metals and organics in 2008. Two sites, Peach Creek at CR 353 and the Guadalupe River at the Salt Water Barrier were sampled for metals. All results were below the acute, chronic and human health criteria. Metals in sediment were analyzed at two locations in 2008, Geronimo Creek at Haberle Road and the Guadalupe River at Kerrville-Schreiner Park. Both sites had levels that were below the threshold effects concentrations developed as consensus-based sediment quality guidelines for freshwater systems by MacDonald et al. (2000). Organics in sediment (total petroleum hydrocarbons and BTEX-benzene, toluene, ethylene and xylene) were collected at four sites: San Marcos River at Luling, San Marcos River at IH 35, Guadalupe River at Kerrville-Schreiner Park in Kerrville, and Geronimo Creek at Haberle Road. No detectable concentrations were observed. The same organic compounds were measured in water at the Plum Creek at CR 135 site. Again, no observable concentrations were measured.

Additional activities that are an extension of the Clean Rivers Program include participation on the Plum Creek Watershed Partnership, the Texas State Soil and Water Conservation Board's Watershed Advisory Group and classroom water quality monitoring projects. The GBRA received the National Environmental Laboratory Accreditation (NELAP) in the spring of 2008. The UGRA lab has interim NELAP accreditation and will be audited in two weeks. Ms. Magin pointed out that the funding for the Guadalupe River Basin Clean Rivers Program has not changed in the last five biennium, staying at \$286,682 for the two year period, but with the cost of laboratory analyses and labor rising, special studies and monitoring activities are becoming limited. The good news is that the work being done through the Clean Rivers Program in the basin is being leveraged to provide match for other watershed related projects such as the TSSWCB grant to complete a watershed protection plan for Geronimo Creek. A copy of the GBRA presentation is available on the GBRA Clean Rivers Program webpage, [www.gbra.org](http://www.gbra.org).

Tara Bushnoe, Natural Resources Coordinator with the UGRA, discussed the CRP activities in Kerr County. Ms. Bushnoe described the UGRA monitoring activities for CRP that included quarterly monitoring of 10 sites in Kerr County. She described the outreach programs sponsored by UGRA that include an annual river cleanup (July 25, 2009) and a volunteer summer study. A copy of her presentation is available on the GBRA Clean Rivers Program webpage.

Jason Pinchback, representing the Texas Stream Team, gave an overview of the program goals and the resources they offer to volunteer monitoring groups. He introduced the

volunteers that came to the meeting, David Boylan of the Lindheimer Master Naturalists that monitor around and downstream of Canyon Reservoir in the New Braunfels area and Loray and Ginger Geist that are members of the Hays County Master Naturalists that monitor the Blanco River and Lone Man Creek near Wimberley. Mr. Pinchback discussed the Texas Stream Team activities in the Guadalupe River Basin. He is the director of the Texas Stream Team, formerly Texas Watch, established in 1991. The goals of the Texas Stream Team are watershed education and community action through hands-on water quality monitoring. The data that active Texas Stream Team groups collect include field data, nutrients and bacteria. The data is non-regulatory and is used to establish screening and baseline information and for problem identification. A copy of his presentation is available on the GBRA Clean Rivers Program webpage.

David Baker with the Wimberley Valley Watershed Association (WVWA) gave an overview of their monitoring program. Volunteers have been monitoring Jacob's Well, the Cypress Creek and the Blanco River in Wimberley for a number of years with funding provided by the Village of Wimberley. The Village cut their funding in 2008. WVWA is making every attempt to maintain their program as is but if other funding is not found, the monitoring may be reduced.

Allison Woodall directed the committee members to the TCEQ website, [www.texascleanrivers.org](http://www.texascleanrivers.org). It is at this website that committee members can obtain information on the 2008 Water Quality Inventory and access historical data. Rick Wallace requested that a map be provided that shows where all monitoring is being conducted and by whom. Ms. Woodall demonstrated the coordinated monitoring schedule available through a link on the CRP page.

Ms. Magin's presentation continued with a discussion on the 2009 draft Basin Highlights Report. The document will cover activities of the Guadalupe River Basin Clean Rivers Program in 2008. Basin steering committee members were sent the draft report but it was learned that some did not receive the document. Ms. Magin will be sending the draft out again for their review and comment. The committee members were shown a copy of the proposed layout and content. Some comments have been received by email. The comments received at the meeting included adding a section that listed handy web addresses and links to the coordinated monitoring schedule, historical data and information on the Clean Rivers Program. It was also suggested that we rethink the layout of the report as a trifold because of the printing costs and instead, going to standard page size.

The next part of the meeting consisted of presentations from various speakers, covering projects or issues that could impact water quality in the river basin. Copies of the presentations are posted at <http://www.gbra.org/CRP/PublicParticipation.aspx>. Tara Bushnoe with UGRA lead off the presentations. UGRA has received funding for a three-year implementation project that follows the Total Maximum Daily Load (TMDL) for the Upper Guadalupe River adopted in 2007. The 3.5 mile stretch of the Guadalupe River in Kerrville was listed as impaired due to elevated bacterial concentrations. The project includes evaluation and prioritization of best management practices (BMPs) that could be installed to remove or lessen the impairment. Stream monitoring is being conducted in the part of the watershed that was the focus of the TMDL. Sampling results have shown

elevated bacteria concentrations in Louise Hays Park during the summer months of July through September. A stakeholder group has been established and is comprised of local governmental entities, state agencies, businesses, homeowners association and conservation groups. The steering committee is helping to prioritize proposed BMPs. Members have offered other possible sources of the bacterial contamination, an example of which is the contributions of bacteria from bird droppings power-washed off of new automobiles at a local car dealership located near the river. Arthur Talley of TCEQ contributed to the presentation on the implementation project by describing possible best management practices that include bird roosting deterrents such as netting under bridges that would not hurt the bird populations and relocating some of the duck population from the city park. He also mentioned that TCEQ has funding for BMPs. A copy of Ms. Bushnoe's presentation is available on the GBRA CRP webpage.

Tommy Hill presented information on historical droughts in the region as well as the outlook for the coming year. He described the results of the tree ring study that GBRA has funded. The study looks at the widths of the rings produced by a tree which reflect the growing conditions of each year. Mr. Hill also pointed out that the state uses the Palmer Drought Severity Index. Using this index, the current drought is in the range of other severe droughts, i.e. 2005-07, 1969-1971 and 1999-2000, among others. The US Drought Monitor released in mid-March predicts that our basin is in for more severe dry conditions. There is some indication that the La Niña conditions that are the cooler than normal water in the Pacific Ocean that typically result in drier than normal weather conditions in south Texas are breaking up. Based on the correlation of weather and oceanic conditions since 1950, Mr. Hill showed that the use of La Niña/El Niño conditions in the Pacific Ocean can be used to predict the weather that we will experience in our area.

Victoria Harkins with Espey Consultants, Inc., gave an overview of the results from the New Braunfels Utilities (NBU) Comprehensive Field Study. The purpose of the study was to determine whether nutrient limitations on point source discharges from the NBU wastewater treatment plants would prevent growth of excessive aquatic vegetation. The study covered two summer periods and one winter. Based on the results from the sampling events and the bioassay investigations, the river system upstream of the NBU Kuehler plants and downstream of the Comal River is nitrogen-limited and orthophosphate does not dictate the algal growth in the river. Hence, there does not appear to be an orthophosphate limit that is appropriate when imposed on any or all of the NBU wastewater treatment plants that would prevent excessive growth of aquatic vegetation.

Jason Pinchback discussed the watershed planning efforts in the Cypress Creek watershed near Wimberley. The project has completed the characterization and delineation of subwatersheds and the gathering of historical data. A stakeholder committee has been identified. As the project continues, a critical outcome will be the development and utilization of a Decision Support System. The Decision Support System will act similar to a watershed protection plan in that it will give the steering committee a formulated plan to use as land use and growth occur in the area.

Nathan Pence with the city of New Braunfels briefed the group on the Recovery Implementation Project (RIP) being conducted on the Edwards Aquifer. The stakeholder-driven process is looking at how the aquifer should be managed including minimum flows from the Comal and San Marcos Springs that will balance water use and development with the recovery of federally-listed endangered or threatened species. The process will use a long-term interdisciplinary approach of policy formation, scientific research, habitat restoration and education. The project is in the second year and by 2012, the Edwards Aquifer Authority, state agencies and the US Fish and Wildlife Service are required to approve and execute the RIP agreement.

Debbie Magin briefed the group on the status of the Plum Creek Watershed Protection Plan. The plan has been written and is now in the implementation phase. The Texas AgriLife Extension Service received a grant to continue to work in the watershed to find ways to implement BMPs identified in the plan that will reduce the bacterial and nutrient load to the stream. The Texas State Soil and Water Conservation Board received a grant for agricultural practices and feral hog management. With assistance from AgriLife, the city of Kyle was able to secure a 319 Implementation grant that includes the retrofit of stormwater detention facilities, marking of storm drains, installation of pet waste stations and water quality monitoring. The Outreach and Education grant received before the plan was finished is in the second year of the 2-year program. There have been two community clean-ups sponsored, one in Lockhart in 2008 and one in Kyle in 2009. A watershed protection brochure and online modules that explain wastewater treatment and management and operation of onsite septic systems have been developed. The program also funded the removal of over 9 tons of illegally dumped waste from Plum Creek. Training covering different types and controls of nonpoint source pollution has been offered to homeowners and municipal officials in the watershed.

Lee Gudgell described the proposed Guadalupe River Monitoring Network that is being developed along the same lines as the network on the San Antonio River. The Guadalupe River Trust, a 501(c)(3) organization, is being used to accept tax-deductible donations from individuals, businesses and industries that wish to sponsor a real-time monitoring station. Each station will collect pH, temperature, dissolved oxygen and conductivity and will make the data available to stakeholders via the internet.

Allison Woodall with TCEQ updated the group on the proposed rule change to increase the water-related fees assessed by TCEQ. In 2001, the legislature created Account 153 that would fund activities associated with ensuring the protection of the state's water resources, including the Clean Rivers Program. Because general revenue appropriations have declined Fund 153 has been used to make up the shortfall. Current estimates for 2010 reveal that there are insufficient funds for the agency to cover the costs of its water program activities. Ms. Woodall also covered the status of the changes to the Texas Surface Water Quality Standards. TCEQ is currently completing proposed revisions to the standards. Major proposed revisions include numerical nutrient criteria for 100 large reservoirs, revising standards for contact recreation and revising or adding site-specific standards for individual water bodies. She briefed the group on the 2010 water quality assessments which will include data collected between December 1, 2001 through November 30, 2008. Topics for consideration in the 2010 assessment include the evaluation of methods for metals in water and potential inconsistencies in East Texas

water bodies. Water bodies will not be assessed for public drinking water quality since there are other means by which public drinking water is evaluated. The assessment team will also discuss when and how fish and benthic macroinvertebrates are used to determine the support of aquatic life.

The meeting concluded with an open discussion on the issues that were of concern by the stakeholders present and those that were sent in on the survey distributed to committee members in February. Debbie Magin read the comments that were sent in by email. Those comments included 1) effects of urbanization on the Plum Creek watershed, especially the tiny tributaries in the upper portion that simply don't have the capacity to carry channelized storm drainage and added wastewater inputs; 2) water supplies for the future; 3) impacts of recreation on water quality; and, 4) amenity lakes and their effect on river water quality. No other concerns were voiced during the meeting.

Copies of the minutes, handouts and presentations are available on the GBRA website, <http://www.gbra.org/CRP/PublicParticipation.aspx>.

#### **Coordinated Monitoring Meeting for 2010 followed:**

1. The CMS will be updated with newly assigned site location number for the Guadalupe River near Hochheim (SH183) monitoring site.
2. GBRA will discontinue monitoring at Peach Creek at CR 397 (Segment 1803C; site no. 17935) since the site has been visited for 2 years and the majority of the time the site has had zero flow with pools or dry. Additionally, USGS is monitoring another site on Peach Creek. GBRA will continue to monitor their historical site at CR 353 (site no. 14937).
3. USGS is including Peach Creek at FM 1680 (Segment 1803C; site no. 17934) in their 5C study in which they will perform use attainability assessments (UAAs). The UAA will include 24-hour dissolved oxygen, fish, benthic macroinvertebrates, conventional parameters, bacteria, field and flow. USGS will monitor the site 10 times between 2008 and 2010.
4. Because of the sufficient amount of data showing consistent results, GBRA will discontinue the biological assessment on Peach Creek at CR 353 (Segment 1803C; site no. 14937) and add the biological assessment to Geronimo Creek at Haberle Road (Segment 1804A; site no. 12576) which will be in support of the watershed protection plan being conducted on Geronimo Creek. Metals in water will still be collected at the Peach Creek site once per year.
5. During the steering committee the president of the Lake Placid Homeowners Association requested that TCEQ Region 13 consider moving the monitoring location at Lake Placid at IH 10 (Segment 1804; site no. 12595) because of the potential for birds roosting under the bridge to skew the actual bacterial concentrations in the river. Lynn Lindsay of Region 13 will determine the

feasibility of launching a boat at IH 10 and moving upstream or downstream of the current location under the bridge.

6. TCEQ Region 13 will add metals and organics in water and sediment to the Guadalupe River at FM 1117 site downstream of Seguin (Segment 1804; site no. 17134). At past coordinated monitoring meetings it was decided, when funding allows, to rotate organics in water and sediment (TPH and BTEX only) to locations downstream of urbanized areas within the river basin or locations where the impacts of oil production could be observed.
7. UGRA added the TMDL Implementation Project sites to the coordinated monitoring schedule and put "TMDL Implementation Project" in the comments section of each site.
8. TCEQ is proposing site specific dissolved oxygen (DO) standards for Camp Meeting Creek (Segment 1806A) in Kerr County. The recommended 4.0 mg/L DO average and 2.0 mg/L minimum for the lower portion of the creek is from the Guadalupe River upstream 2.89 miles to a point just upstream of Ranchero Road. These criteria will only be applied during the summer months of June, July August and September. For the upstream portion with even smaller flows, the TCEQ staff recommends a 3.0 mg/L DO average and a 1.0 mg/L DO minimum during these months. This portion of Camp Meeting Creek is described as "from a point 2.89 miles upstream of the Guadalupe River upstream to the headwaters." For the rest of the year, the presumed 5.0 mg/L average and 3.0 mg/L minimum criteria would apply.
9. Jason Pinchback pointed out that the Texas Stream Team had several years of data for the area around and in Guadalupe River State Park from a group of volunteer monitors. The Stream Team is in the process of helping the volunteers assess the data and compile it in a graphic format.
10. Corey Burke with TCEQ Region 14 will investigate the possibility of adding total uranium in water and sediment to the two sites in Coletto Creek Reservoir, the main pool and the creek arm (Segment 1807; site nos. 17942 and 18694 respectively). Corey will make the additions to the monitoring schedule.
11. Ron Riggins with TCEQ Region 11 will investigate the possibility of adding a site just upstream of 5 mile dam on the Blanco River in Segment 1809, while continuing to monitor the Blanco River just upstream of the confluence (site no. 12631).
12. GBRA will collect conventional, bacteria, field and flow at the Plum Creek at CR 202 (Segment 1810; site no. 12647) monthly, allowing TCEQ Region 11 to drop the quarterly site and pick up the additional monitoring location on the Blanco River in Segment 1809. GBRA will continue to do biological assessments at the CR 202 site.

13. GBRA will collect organics in water and sediment on the Dry Comal (Segment 1811A; site no. 12570) and the Cypress Creek at the confluence with the Blanco River near Wimberley (Segment 1815; site no. 12674).
14. GBRA will discontinue biological assessments at the Dry Comal location (Segment 1811A; site no. 12570).
15. On the upper Guadalupe River in Kerr County, GBRA may remove the biological assessment from the site at Ingram (site no. 15111). The Split Rock Road site (site no. 15113) in Segment 1806 near Kerrville may be moved to the North Fork Guadalupe (Segment no. 1817; site no. 12682). Before confirming the changes, Lee Gudgell with GBRA will look at the coefficient of variation (CV) of the assessment results from both sites. If the CVs show variability, these changes will be reassessed. The coordinated monitoring schedule will be updated after the reviews have completed.
16. GBRA will not collect organics in water and sediment at the Kerrville Park site (Segment 1806; site no. 12615) but will continue to collect metals in sediment. Samples collected in 2008 did not show any detects for TPH and BTEX. In exchange, GBRA will collect organics in water and sediment at the Cypress Creek site (Segment 1815; site no. 12673).