

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

March 25, 2010

Minutes

(Changes to 2011 Coordinated Monitoring Schedules follow)

The annual meeting of the Clean Rivers Program (CRP) Guadalupe River Basin Steering Committee was held Thursday, March 25, 2010 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, Cinde Thomas-Jimenez and Liz Sedlacek representing GBRA; Bill Harrison representing the TCEQ Surface Water Quality Monitoring team; Amanda Ross of the TCEQ Total Maximum Daily Load team; Keith Ladner 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 System Institute, and the Cypress Creek Watershed Planning project; Josh Oyer and Neal Denton representing Texas Stream Team; Stephen Twidwell with the Texas Parks and Wildlife Department; Gene Reed with the Texas Railroad Commission; and Rebecca Lambert with the U.S. Geological Survey. Also attending were Brian Koch representing Texas State Soil and Water Conservation Board; Nathan Pence representing the City of New Braunfels; Michelle Shelton representing the Goliad County Groundwater Conservation District; Roger Biggers, with the New Braunfels Utilities; Jim Cantrell, with the City of Victoria; Jon Clack, with the City of San Marcos; and, Ward Ling, Texas AgriLife Extension Service. Homeowner associations were represented by Rick Wallace (Citizens United for Lake Placid); Gary Spence (Friends of Lake McQueeney); and, Dan Laroe and Tony Sellers (Lake Dunlap Homeowners Association). Also attending were Dianne Wassenich, Executive Director of the San Marcos River Foundation; Dr. Glenn Longley with the Edwards Aquifer Research and Data Center; Coco Brennan, David Boylan, Dan Madden, and Earl Dittman with Master Naturalists from Comal and Hays County; Rebecca Reeves, with the San Antonio River Authority; and, Paul Jensen of PBS&J.

After introductions, Lee Gudgell, with the GBRA Clean Rivers Program, briefed the committee on the 2009 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, a special monitoring site has been established on Coletto Creek in Goliad County in order to establish background concentrations of uranium and other radiologicals and will be

collected quarterly through 2010. The 2009 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.

GBRA, with help from UGRA, conducted five biological and habitat assessments in 2009. Cypress Creek was scheduled for biological assessment as well but because of the drought Cypress Creek went dry for a period of time in 2009. The results of the assessments are being determined and will be submitted to TCEQ within the next two months. Of the 2009 sites, two have been dropped for biological/habitat assessments (Dry Comal Creek and Peach Creek in Gonzales County) in 2010 because the data goals have been met. Geronimo Creek was added for 2010 in support of the watershed protection plan being conducted by GBRA, Texas AgriLife Extension and the Texas State Soil and Water Conservation Board. 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 2009, 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 sediments will be analyzed at Cypress Creek at the confluence with the Blanco River and at the Dry Comal Street monitoring station in New Braunfels in 2010. The same organic compounds were measured in water at the Plum Creek at CR 135 site. 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, participation in the Cypress Creek Project and classroom water quality monitoring projects. Funding for the Guadalupe River Basin Clean Rivers Program in 2010 is \$160,341 and for 2011 is \$143,341, the difference being money that was provided by CRP to purchase a flow meter for UGRA and a new spectrophotometer for chlorophyll a analyses for GBRA. No special studies are planned for 2010-11. 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 and the implementation project being conducted by the UGRA. A copy of the GBRA presentation is available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

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 24, 2010) and a volunteer summer study. A copy of her presentation is available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

David Baker, representing the Wimberley Valley Watershed Association, gave an overview of the program goals of their Cypress Creek and Blanco River Monitoring Project. Mr. Baker discussed the activities of the Association and identified land that has been purchased by the Association and put in conservation. Jason Pinchback discussed the water quality conditions that were observed and monitored in 2009. He mentioned that the project has reduced the monitoring frequency due to the loss of funding that was previously provided by the City of Wimberley. Jason explained that Cypress Creek shows many characteristics of a karst-fed stream in the Texas Hill Country. The data collected in 2009 showed lower dissolved oxygen concentrations than in years previous, with the lowest occurring at the Blue Hole and Ranch Road 12 sites. The *E. coli* concentrations have come down as compared to previous years, with the highest concentrations seen at the Blue Hole Campground site. Jason also related the results of a 24-hour *E. coli* monitoring project conducted at the campground location in June 2009. The results showed an increase in *E. coli* concentrations at the downstream location, as compared to the upstream site. A copy of Jason Pinchback's presentation is available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Debbie Magin discussed the 2009 Basin Highlights Report. She reported that because of the size of the electronic document, people had trouble downloading the very large file. The document has been condensed which should make it easier to download. The draft report on the webpage will be available in the condensed format for a few more weeks so that the steering committee can still review and comment.

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 received funding for a three-year implementation project that followed 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 included evaluation and prioritization of best management practices (BMPs) that could be installed to remove or lessen the impairment. Stream monitoring was 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. With the help of a stakeholder group comprised of local governmental entities, state agencies, businesses, homeowners association and conservation groups, BMPs have been recommended. The list of BMPs includes:

- Reduction of bird feeding at public parks,
- Installation of exclusion/deterrent devices on SH 16 and Loop 534 bridges over water,
- Management of waterfowl population at public parks,
- Reduction of human contributions through ongoing lateral sewage line replacement, sewage inspection and rehabilitation, and ongoing septic system plan review and registration,
- Implementation of education programs for pet owners and installation of pet waste stations at public parks,
- Education programs for local livestock owners, and
- Reduction of nonpoint source pollution from storm water runoff.

UGRA has made an application to the TCEQ Non-Point Source Division for a grant to implement these BMPS. Matching for the grant will come from the CRP monitoring component in Kerr County, and labor provided by UGRA, Kerr County, City of Kerrville and TXDOT. A copy of Ms. Bushnoe's presentation is available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Jason Pinchback discussed the watershed planning efforts in the Cypress Creek watershed near Wimberley. The mission of the Cypress Creek Project is to ensure that the long-term integrity and sustainability of the Cypress Creek watershed is preserved and that water quality standards are maintained for present and future generations; in other terms, to "*Keep the Cypress Creek clean, clear and flowing*". The project has completed the characterization and delineation of subwatersheds and the gathering of historical data. The Decision Support System is nearing completion and training for the city and others on the use of the DSS will be scheduled this summer. The DSS will help decision-makers and stakeholders understand how land use changes may impact water quality and quantity conditions and assist in the formulation of a plan for land use and growth that will minimize impacts to water quality. Stormwater monitoring is being conducted at two locations and will continue through July. A copy of Mr. Pinchback's presentation is available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Josh Oyer, volunteer coordinator with the Texas Stream Team, presented information on the Stream Team monitors in the Guadalupe River Basin. Those groups include the San Marcos River Rangers, the Lindheimer Master Naturalists in the New Braunfels area, the Luling River Pals, monitoring in the Plum Creek watershed around Luling and the Lone Man Creek Group monitoring the Lone Man Creek and Blanco River. The Texas Stream Team offers resources and training to volunteer monitoring groups. 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 at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

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 third 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. A copy of his presentation is at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Ward Ling briefed the group on the status of the Plum Creek Watershed Protection Plan. The plan has been written, accepted by EPA and is now in the implementation phase. The Texas AgriLife Extension Service received a grant to continue to work in the watershed 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 has been completed. The project helped sponsor community clean-ups, two in Lockhart and two in Kyle and funded a watershed protection brochure directed to homeowners and their activities. Four online modules were developed that explain 1) wastewater treatment, 2) management and operation of onsite septic systems, 3) correct disposal of fats, oils and greases, and 4) stormwater management at municipal operations. Visit the Plum Creek page on the GBRA website to view the modules. 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 municipal officials and homeowners in the watershed, including operation and maintenance of on-site septic systems.

Mr. Ling followed the presentation on Plum Creek with news of the watershed planning efforts being conducted on the Geronimo and Alligator Creeks. This watershed extends from slightly north of New Braunfels, through rural, agricultural lands, to the city of Seguin, where it confluences with the Guadalupe River. GBRA, Texas AgriLife Extension and the Texas State Soil and Water Conservation Board are funding the development of the watershed protection plan, due out in summer 2011. A project steering committee made up of 23 stakeholders and three topical work groups covering agricultural, urban and wastewater nonpoint pollution sources are meeting to review modeling data and the distribution of pollution sources. The flow, water quality and land use data are being evaluated using two stream models, SWAT and SELECT, in order to produce load duration curves (LDCs). LDCs will then identify the amount of pollution load reductions needed to bring the Geronimo Creek back into compliance with stream standards. A project that is being conducted parallel to this project is one being conducted by Guadalupe County to identify and evaluate flood mitigation structures in the Geronimo/Alligator Creek watersheds. Mr. Ling's presentations on Plum Creek and Geronimo Creek projects are found at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Becky Lambert with the U.S. Geological Survey discussed the Surface Water/ Groundwater Characterization Study being conducted on Coletto Creek in Goliad County. The first synoptic sampling event was done in August 2009 during the extended drought. All surface water sites with exception of Audilet Springs were dry. Sampling was conducted in order to characterize extremely low flow conditions. The second synoptic sampling event was conducted in January 2010 after fall rains recharged the system. The third synoptic event is planned for April-June 2010. Constituents analyzed include major ions, trace elements, nutrients, and isotopes. The isotopes are used to develop the ratio of groundwater to surface water in the samples. The final report is due in 2011. A copy of Ms. Lambert's presentation is at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Presentations were given by representatives of different divisions at the TCEQ. Bill Harrison with TCEQ's Surface Water Quality Monitoring Team, discussed the results of the draft 2010 stream assessments. Four new, unclassified stream segments were assessed as impaired or with concerns in 2010 (Shady Fork and Denton Creek – tributaries of Peach Creek; Quinlan and Town Creeks, tributaries in the Upper Guadalupe River

watershed in Kerr County). The four streams were monitored as part of TMDL studies conducted on these segments. Additionally, the Upper San Marcos was listed with concerns for total dissolved solids. A copy of Mr. Harrison's presentation is at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Amanda Ross, with the TCEQ TMDL team, provided a handout, giving updates on the TMDL projects being conducted in the Guadalupe River Basin. These projects have been or are being conducted on Elm and Sandies Creeks in Dewitt and Gonzales Counties, the Guadalupe River above Canyon Lake, Peach Creek in Gonzales County and the Middle Texas Coast Oyster Waters project looking at bacteria. A copy of the handout is at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Allison Woodall, the newly appointed Program Manager for the TCEQ Clean Rivers Program, updated the group on the proposed changes to the water quality stream standards and those specific changes impacting the Guadalupe River Basin. Proposed revisions include numerical nutrient criteria for lakes and reservoirs, and revising or adding site-specific standards for individual water bodies. The numeric nutrient criteria for reservoirs will use chlorophyll *a* concentrations in the main pool and will be site-specific, based on historical data of each reservoir. Nutrient criteria proposed for Canyon Lake (Segment 1805) are a chlorophyll *a* concentration of 3.6 micrograms per liter, a total phosphorus concentration of 0.03 milligrams per liter and a secchi transparency depth of 2.17 meters. The standards would apply to the main pool of the reservoir. Coletto Creek Reservoir does not have enough historical data on the main pool to have proposed criteria at this time.

One of the most controversial areas proposed for modification are the standards for contact recreation. TCEQ is proposing to expand the categories for contact recreation to primary, secondary one, secondary two and non-contact, raising the geometric mean for primary contact from 126 colony-forming units per 100 milliliters (CFUs) to 206 CFUs. The agency has also proposed new procedures to be used to determine the level of contact recreation use.

Other changes to the standards include toxic criteria which will take in to consideration exposure by children and increases in fish consumption and a new category for aquatic life use. A "minimal" category will be added to the existing aquatic life use categories of limited, intermediate, high, and exceptional aquatic life and oyster waters. A corresponding dissolved oxygen criteria for the minimal category will apply to intermittent streams without perennial pools.

Specific standards revisions in the Guadalupe River Basin include the critical low-flows for spring-fed segments (1808, 1811, 1813, 1814, 1817) that will provide additional protection to segments with federally listed endangered or threatened aquatic or aquatic-dependent species and temperature criteria proposed to be lowered for specified portions of the Comal River (1811) and Upper San Marcos River (1814) to provide additional protection to listed federally endangered species. Camp Meeting Creek (1806) is proposed to have a minimum dissolved oxygen (DO) criterion of 2.0 mg/L and a 24-hour average of 4.0 mg/L that would apply from July 1st to September 30th. The portion of the segment upstream of Ranchero Road is proposed to have a minimum DO criterion of 1.0 mg/L and a 24-hour average of 2.0 mg/L to apply from July 1st to September 30th.

Ms. Woodall briefed the group on TCEQ's newly created *Office of Water*. The reorganization combines the Water Quality, Water Supply and Water Quality Planning Divisions. The Water Quality Division is the division that deals with wastewater permits and technical reviews. Water Supply is the division that contains Districts, Utilities, Water Rights Permitting, Instream/Environmental Flows, and Public Drinking Water. The Water Quality Planning Division is the division in which all the activities to characterize, evaluate, and take action on water quality take place. Previously, these three areas of water quality and water supply management were distributed throughout the agency under three or more different offices. Now they are all together under the Office of Water. In addition, the different activities that now are included in the Water Quality Planning Division, were previously located in different offices, making it difficult to coordinate activities that are highly dependent upon each other. A copy of Ms. Woodall's presentations can be found at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

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. Those comments included 1) protecting spring flow and groundwater; 2) illegal dumping and hazardous waste collection events, including disposal of pharmaceuticals; 3) impacts of oilfield operations and increase need for monitoring; and, 4) septic tanks along rivers and streams. An additional concern about the impacts of construction and the lack of enforcement of construction stormwater controls was voiced during the meeting.

Copies of the minutes are available at <http://www.gbra.org/CRP/PublicParticipation.aspx>.

Coordinated Monitoring Meeting for 2010 followed:

1. Segment 1801, the Guadalupe River Tidal, was listed in the 2010 assessment with a concern for dissolved oxygen rather than as an impairment. The Assessor, Bill Harrison, used best professional judgment because the exceedences were very close to the criteria.
2. The TCEQ Region 15 office is considering dropping the 24-hour dissolved oxygen events in 2011 because there is enough historical data available for assessment.
3. GBRA will continue metals in water at the Salt Water Barrier site one more year because of the concern with using questionable filters for dissolved in years passed.
4. GBRA has requested the addition of 24-hour dissolved oxygen monitoring at the Guadalupe River at Nursery. Lee Gudgell will estimate the cost of the sampling in order to make the determination to add the events in 2010 and 2011.
5. No one at the meeting was aware of the status of the USGS study on Peach Creek. An email will be sent to the USGS to ask about status.

6. Allison Woodall will check on how to list the Geronimo Creek and Plum Creek monitoring projects on the Coordinated Monitoring Schedule. Debbie Magin will send the list of monitoring locations for both projects to Allison.
7. Several locations have site names that have been identified in the past as being erroneous or misleading. GBRA and TCEQ Region 11 will provide Allison with proposed site name changes for consideration for the following:
 - 12598 - Canyon Lake South of Jacobs Creek Park 500 Yards East of Peninsula – GBRA
 - 12623 - Coletto Creek at US 59 on Victoria-Goliad County Line - GBRA
 - 12628 - Lower San Marcos River at County Road Immediately Below Confluence of San Marcos and Blanco Rivers - TCEQ
 - 12626 - Lower San Marcos River at SH 80 South of Luling
8. Segment 1807, Coletto Creek –
 - Allison noted that a segment needs to be created for the reservoir, separate from the creek. GBRA needs to request that that segment be created.
 - It was noted that Region 14 has removed monitoring the reservoir from the 2011 schedule. It was requested that they reconsider that decision and reinstate the monitoring on Coletto Creek Reservoir in order to collect enough historical data to establish nutrient criteria for the reservoir.
 - It was requested that GBRA consider moving their historical site on the reservoir which was established in 1987 as a recreational index site, to begin monitoring at the dam quarterly to include depth profiles. Lee Gudgell will look at the possibility of monitoring off of the dam since GBRA does not have a boat to launch for sampling.
 - GBRA will delete the Arnold Road site for uranium in 2011.
9. Segment 1805 – Canyon Reservoir: Lynn Lindsay, Region 13, will check to see if metals in sediment can be discontinued in Canyon Reservoir.
10. Segment 1806 –
 - Tara Bushnoe removed the nine TMDL sites from the 2011 schedule because the monitoring plan and QAPP only extend through August 31, 2010.
 - UGRA has applied for funding through 319 that would include continued monitoring of the nine sites within the impaired reach as well as in Town, Camp Meeting, and Quinlan Creeks, but it will be quite awhile before that funding is approved. Tara is going to check to see if UGRA can afford to use CRP funding to continue monitoring at the nine sites on a monthly basis until the time that 319 funds can assume that cost. TCEQ, GBRA, and UGRA all agreed on the importance of continuing the routine monitoring especially considering the new listings of Quinlan and Town Creeks for bacteria in the 2010 Surface Water Quality Assessment.
 - If the biological and habitat assessments conducted in 2009 confirm that the two sites in Kerr County are still “exceptional”, then the site at Riverview will be dropped or moved.

11. Segment 1808 – site descriptions at 12626 (Lower San Marcos River at SH 80 South of Luling) and at 12628 (Lower San Marcos River at County Road Immediately Below Confluence of San Marcos and Blanco Rivers) needed to be changed.
12. Segment 1814 – Organics in water analyses will remain in 2011 at site no. 12672 (Upper San Marcos River at IH 35) but will be expanded from TPH and BTEX to the full suite of organics.
13. Segment 1809 – Lee Gudgell was asked to confirm that the dissolved oxygen 24 hour DO measurements conducted under severe drought conditions in 2009 were meeting the aquatic life use standard assigned to the Upper Blanco River.
14. Segment 1810 – Plum Creek
 - Organics in water will be removed from Plum Creek at CR135
 - Organics in sediment will be added to Plum Creek at CR 202
 - Biological/Habitat assessment will be removed from Plum Creek at Plum Creek Road and will remain at CR 202
15. Segment 1811 – Comal River
 - Jason Pinchback is going to ask if the Lindheimer Master Naturalists Texas Stream Team could add a site at Gruene. The region 13 site is above the NBU Gruene outfall that is discharging into the Guadalupe River. In years passed, the outfall was reused on a local golf course. The golf course has since closed and the effluent is being discharged to the river per their existing permit.
16. Segments 1813 and 1815 – Lower Blanco River and Cypress Creek
 - Wimberley Valley Watershed is planning a stormwater project for the Cypress Creek that will include BOD, TSS, total phosphorus and other constituents. There will be a meeting scheduled with TCEQ CRP to discuss if an appendix can be added to the GBRA QAPP to cover the project.
 - Biological/Habitat assessment will remain on the schedule in 2011.
17. No changes to Segments 1816, 1817 and 1818 in Kerr County.