

GBRA River Run

A publication of the **GUADALUPE-BLANCO RIVER AUTHORITY** Spring/Summer 2009

flowing solutions

Whooping Crane
Research Presented



Boerne H.S. Recognized



Drought Continues



Lockhart Earns Award

From the GM

Drought Grips the Basin

September 2007 through June 2009 turned out to be the driest 22-month period on record, with less than 24 inches of rainfall recorded at San Antonio, about one-third of the historical norm.

The Guadalupe River Basin especially is experiencing the effects of this continuing drought. Releases from Canyon reservoir are limited to assure fulfillment of water commitments

downstream and in order to maintain environmental flows. This is what the reservoir was designed to do – store flood waters and then release them as needed for the beneficial use of cities, industry and the health of the estuaries and bay.

More information about this extraordinary drought is detailed in this issue of *River Run*. It also contains some tips about how our constituents can help conserve water.

Through the Guadalupe-Blanco River Trust, the GBRA also is working to acquire property along the river for conservation and working with partners to help preserve the groundwater contribution through runoff, tributary rivers and creeks to the Guadalupe River.

However, the current drought has severely affected the contributions of the Comal and San Marcos rivers. The flow out of Comal Springs has dropped by a third since March and San Marcos Springs is the lowest it has been for more than a decade. Since these springs are the source of the Comal and San Marcos rivers, which contribute to the Guadalupe River, the GBRA is concerned.

Both rivers become an increasingly high percentage of the water in the Guadalupe during drought, so the decrease in the spring flows are becoming more evident downstream. All citizens in the Guadalupe River Basin should comply with their respective city, county, or water district's conservation measures. The continued absence of significant precipitation likely means water limitations will increase accordingly with drought conditions.

On a positive note, this *River Run* also contains articles on the recognitions our employees and facilities have earned, as well as an introduction to our new board member from Kendall County.

Best of all, the National Weather Service has reported a warming trend in the Pacific, which may signify a return to "El Nino" — a periodic warming of the currents that historically tends to bring more rain to Texas.



A handwritten signature in dark ink, appearing to read "W. E. West, Jr.", written in a cursive style.

W. E. "Bill" West, Jr.
General Manager

Guadalupe-Blanco River Authority

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GBRA River Run

Spring/Summer 2009

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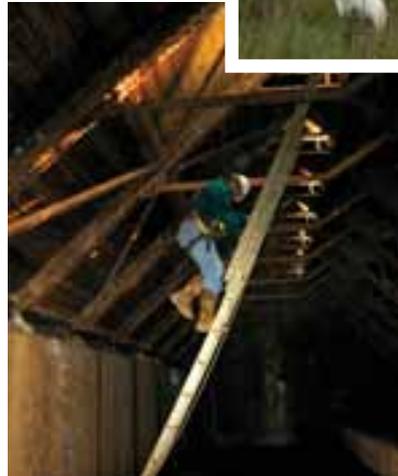


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Front Cover Photo: Randolph Femmer

Lockhart WWTP No. 2 Named Treatment Plant of the Year

Lockhart Wastewater Treatment Plant No. 2, operated by the Guadalupe Blanco River Authority (GBRA), was honored as the 2009 Wastewater Treatment Plant of the Year in Category 2 by the Water Environment Association of Texas (WEAT). The award recognizes a wastewater treatment facility for consistently exhibiting outstanding performance in daily activities beyond the normal call of duty.

The plant was built by GBRA in 1999 to aid the City of Lockhart with discharge permit requirements through diversion of a portion of the wastewater flow from the city's existing Larremore Street Plant, also operated by the GBRA. The plant has an excellent compliance history never failing bio-monitoring requirements, including the seven-day chronic and 24-hour acute tests.

The GBRA's outstanding health and safety programs have been recognized by Texas Safety Association, the Texas Water Conservation Association Risk Management Fund and the Texas Water Utility Association. The objective of every Authority employee is zero lost time; a goal that has been achieved every year the GBRA Lockhart Wastewater Treatment Plant System has been in operation. In addition to strict adherence to the GBRA Safety Manual and the GBRA Health and Safety Policy Manual, safety meetings are conducted monthly.

By blending technical expertise, a safe working environment, and facilities maintenance, the staff of the Lockhart Wastewater Treatment Plant No. 2 operates a facility that consistently produces high-quality effluent necessary to protect the sensitive waters of the Guadalupe



Photo by LaMarriol Smith

Joe Leal, Jr., Eric Mendez, Jason Eeds, Richard Gonzales, Angel Castillo, Eduardo Montaña, and Robert Delgado

River Basin. Operations Manager Eduardo Montana holds a TCEQ Class A wastewater license as does fellow operator Jason Eeds. Angel Castillo holds Class "B" wastewater license while Eric Mendez, Richard Gonzales and Joe Leal Jr. hold Class C licenses. Robert Delgado aids in operation and maintenance of the two plants, performing process control laboratory analyses and monitoring.

"WEAT is thrilled to recognize the City of Lockhart and the Guadalupe Blanco River Authority for their outstanding performance," said Carol Batterton, WEAT's executive director.

"We are honored to have received this recognition from WEAT. It validates the hard work that our team does on a daily basis and the support received from our customer, the City of Lockhart," said John Smith, GBRA Operations Manager Upper Basin.

The Water Environment Association of Texas is a member association of the Water Environment Federation (WEF). The association has more than 1,500 members representing diverse backgrounds and specialties, but all of whom are involved in protecting and enhancing Texas' precious water resources through sound science and good stewardship.

Texas Water 2009™, held in April 14 - 17 in Galveston, is the largest regional water conference in the United States. It is jointly sponsored by the Water Environment Association of Texas and the Texas Section of the American Water Works Association.

GBRA and Exelon Extend Water Agreement Another Year

In June, the Guadalupe-Blanco River Authority and Exelon Generation Company, LLC, reached an agreement on the terms of extending Exelon's request for reservation of 75,000 acre-feet of water for one more year.

The termination date of the new agreement will be June 30, 2010.

In the original agreement, which began in 2007, Exelon Generation Company, LLC, requested a reservation of a water supply of 75,000 acre-feet per year from the Guadalupe-Blanco River Authority through June 30, 2009, as part of its consideration in

developing a nuclear power plant in Texas and in evaluating specific sites within Victoria County.

Nuclear power plants, as do conventional power plants, use water to produce steam. The steam is used to propel turbines that spin a shaft inside an electricity generator. The turning shaft spins a coil of wire, producing a magnetic field, which creates electricity. The design of Exelon's proposed plant also includes a cooling reservoir that would store about 96,000 acre-feet of water.

Accolades Given for Design

The Guadalupe-Blanco River Authority's annual report, Guadalupe River Basin Road Trip, for the fiscal year ending Aug. 31, 2008, earned a 2009 Platinum Award from the Hermes Creative Awards competition.

"Judges of the Association of Marketing and Communication Professionals evaluate the thousands of entries received for Hermes Creative Award consideration and it is wonderful to have our publications get noticed," LaMarriol Smith, GBRA's manager of communications and education, said.

In addition to the annual report recognition, the GBRA River Run magazine landed a 2009 American Inhouse Design Award from the editors of Graphic Design USA.



GBRA Awards Four Academic Scholarships

The Guadalupe-Blanco River Authority awarded four \$2,000 academic scholarships to area students from GBRA's 10-county district. GBRA General Manager Bill West presented the scholarships at the Board of Directors regular meeting in May in Seguin.

Scholarship recipients were Devin VanBooven, Cynthia Gonzales, Corbin Hanzel, and Sydnee Nelson.

VanBooven is the daughter of GBRA employee Teresa and David VanBooven. She is a graduate of Lifegate Christian School and is a student at Texas Lutheran University.

Gonzales, daughter of Martha Garibay, graduated from Cuero High School in DeWitt County. She plans to attend the University of Texas at Austin and major in accounting.

Hanzel, son of David and Jennifer Hanzel, graduated from San Marcos High School in Hays County. He has been accepted to both Purdue University and Texas A&M University.



Photo by Connie Rothe
Left to Right: Devin VanBooven, Cynthia Gonzales, Corbin Hanzel and Sydnee Nelson

Nelson, granddaughter of Carol Franklin, graduated from Seguin High School in Guadalupe County. She has been accepted to Texas State University at San Marcos.

GBRA's Scholarship Program is a component of the GBRA Employee Volunteer Program. The Employee Volunteer Program was founded in December of 2000 and is led by a committee with a chairperson responsible for the overall program. The program's purpose is to improve the quality of life in area communities through the commitment of GBRA employees and the use of their time, energy, talents and skills. Employee volunteerism is strictly voluntary, unpaid work performed by employees for non-profit or government organizations engaged in civic, health, education, social services and other charitable pursuits.

Lab Director Earns Excellence Award

Josephine “Josie” Longoria, regional laboratory director at the Guadalupe-Blanco River Authority (GBRA), was honored with the 2008 Laboratory Analyst Excellence Award by the Water Environment Association of Texas (WEAT).

The WEAT Laboratory Analyst Excellence Award recognizes an individual for outstanding performance, professionalism, and contributions to the water quality analysis profession. Longoria earned recognition because of her extensive involvement in the education of her peers in the science and water resources community while taking on leadership roles with enthusiasm and dedication. Formal recognition for WEAT awards occurred at Texas Water 2009.

“WEAT is pleased to recognize Ms. Longoria for her accomplishments and service to the water utility laboratory profession,” said Carol Batterton, WEAT’s executive director. “Our organization is fortunate to have such a dedicated professional in this important area.”

Longoria began her career after graduating from West Texas A&M University with a degree in Biology and Chemistry. Her 16 years in the lab have included working for the Texas A&M Extension Lab, the A&L Agricultural Lab, as well as the South East Water Reclamation Plant Laboratory in Lubbock, Texas.

After joining the GBRA in 2002 as a laboratory analyst, Longoria eventually was promoted to regional laboratory director in 2003. She was instrumental in organizing the GBRA Regional Lab’s first attempt in acquiring its NELAC accreditation for both drinking water and wastewater. Longoria described the task as a monumental undertaking, requiring her to act as a quality assurance officer and lab director.

“Ms. Longoria is a dedicated professional working every day to protect the natural resources of our basin and promote the laboratory analyst profession,” said Debbie Magin, GBRA director of water quality.

Longoria has also assisted with addressing the NELAC Institute requirements in Texas. She has been involved in the Texas Water Operations Challenge, a team style competition that addresses challenges requiring immediate action in water resources. She serves as chair of Texas Water’s Operations Challenge and recently became this year’s chair elect for the Lab Analyst Section (LAS).



Photo by Tammy Beutnagel

Longoria is an active member in the water resources community as a member of the Water Environment Association of Texas (WEAT), Water Environment Federation (WEF), American Water Works Association (AWWA), Texas American Water Works Association (TAWWA) The NELAC Institute (TNI), and as President of the LAS Alamo chapter of Texas Water Utilities Association (TWUA).

The Water Environment Association of Texas is a member association of the Water Environment Federation (WEF) and has more than 1,500 members.

SMWTP Gets Third TOP Ops Recognition



Photo by Tammy Beutnagel

The San Marcos Water Treatment Plant operators earned their third TOP Ops Award from the Texas Commission on Environmental Quality (TCEQ).

The Guadalupe-Blanco River Authority is the contract operator for the City of San Marcos’ water treatment plant. The facility uses surface water from Canyon Reservoir to reduce the city’s pumping from the Edwards Aquifer by an average of 75 percent.

TOPS Ops, an award given when the TCEQ’s technical review and oversight team determines that the water plant operators have successfully met all rigorous criteria for a comprehensive performance evaluation in a specific period of time.

“Three consecutive awards speaks volumes about the level of excellence our operators bring to this service,” said Bill West, GBRA general manager. “We are also fortunate to work with a city and staff that is as forward-thinking about its utility operations as San Marcos.”

Left to Right: Darel Ball, Trey Sibert, Richard Clinton, Joe Long and Jerry Sharp.

GBRA Helps Guadalupe County 4-H Exchange Program Raise Funds

Of Texas' 254 counties, only about a dozen, including Guadalupe County, have a 4-H exchange program. This program allows 4-H groups throughout various states to visit sister counties in neighboring states.

Recently, Guadalupe County 4-H Exchange Group, consisting of 4-H members in five different school districts, traveled from neighboring businesses and individuals for donations, while offering a chance to care for a live baby goat.

Congratulations from GBRA to the 4-H program celebrating its 100th year in Texas!

Photo by Melanie Kappelmann



GBRA employee Cricket Dietert poses with 4-H members Kaitlyn Kappelmann, Kori Kappelmann, and Shay Caddell. Dietert received this goat pledge-matching from her sister.



Teresa VanBooven and Bill West, general manager, welcome the baby goat to the river authority. The fundraiser helped the 4-H group with traveling expenses to Gratiot County, Michigan in July.

Photos by Mary Rhode



GBRA employees Sandra Terry, Bill West, Janet Thome, Teresa VanBooven, Gynna Hernandez, Cricket Dietert and Josie Longoria pose with the GBRA pledged goat. For a minimum donation to the 4-H Group the recipient can send the goat to a person or business of their choice in the Seguin/Guadalupe County area.

GBRA Helps Organize Kyle Citizens to Clean Up Park and Plum Creek

A productive volunteer effort in the City of Kyle led to more than 4.5 miles of Plum Creek and its watershed being cleaned up by hundreds of citizens. GBRA joined the City of Kyle Parks and Recreation Department to lead the tremendous cleanup effort.

Sponsored by Keep Texas Beautiful, the Steeplechase Park clean-up is an annual event in the city. However, 2009 was different from previous years, when typically less than 50 volunteers participated. This year, about 485 volunteers worked on both Friday and Saturday to clean up Steeplechase Park and surrounding areas, including the walking trail of Plum Creek Subdivision in Kyle.

Because of the large number of volunteers that showed up, cleanup efforts were expanded beyond the municipal park boundaries, including a few high traffic and new construction areas in Kyle.

Planning efforts between the Kyle Parks and Recreation Department, GBRA, community clubs and environmental organizations started months in advance to organize the event. "GBRA was interested in taking on a leadership role in the cleanup this year as a part of its continued public communications emphasis on the Plum Creek Watershed," said Debbie Magin, GBRA's director of water quality.

Kyle Parks and Recreation Director Kerry Urbanowicz estimated that about 380 of the volunteers were under age 18. Many of the youngest volunteers were students of Negley and Fuentes elementary schools. Fourth grade students at both of these schools participated in a year-long monitoring project that focused on the Plum Creek watershed, led by GBRA Education Coordinator Cinde Thomas-Jimenez.

The students' knowledge of the importance of nonpoint source pollution to water quality in the creek was demonstrated by the Negley teacher and student-generated idea to flag pet waste in the parks. The day before the cleanup, more than 200 students from the two schools ventured out into the parks with landscape flags to identify the location of illegally deposited pet waste (pet waste that was not removed and disposed of by pet owners). The flagged waste was removed by adult volunteers the following day. To address this growing problem, the work detail included installation of new pet waste stations.

On cleanup day, volunteers that included Lehman High School students, boy and girl scouts, local businessmen and women, were provided all necessary supplies and separated into various work areas. They removed trash, bottles, debris and brush that had accumulated in the creek. The effort yielded about 2,000 pounds of trash from the park, including pet waste. Another 1,560 pounds of recyclable items, such as glass, dry plastic, tires and paper were delivered to the local recycling center.

After the event, volunteers were treated to pizza, music and an environmental fair, where they had an opportunity to learn more about protecting their local environment. Organizations presenting information during the Environmental Fair included GBRA, the Plum Creek Watershed Partnership, Texas Agri-Life Extension Service, Texas Stream Team, Texas Disposal Systems and Texas Parks and Wildlife.



Photos by Liz Sedlacek

Volunteers from all areas of Kyle, including students in Hays Consolidated Independent School District, help clean up Plum Creek and Steeplechase park in Kyle.

Cow Creek GCD Gets Real-time Monitoring

After months of planning, a real-time monitoring system was implemented for the Cow Creek Groundwater Conservation District through a pilot project with the Texas Commission on Environmental Quality (TCEQ).

Six well sites have been equipped with monitors for water depth, conductivity and temperature. The sites, selected primarily because of

their proximity to the pumping centers in the Cow Creek GCD service area, provide data that will allow Cow Creek GCD to determine what, if any, measures need to be taken to address the influence of surface water on groundwater quality and if non-point source pollution is occurring. This data set will help them make management decisions related to desired

future conditions of the aquifer, drought management issues, and groundwater availability issues.

The TCEQ got involved in the continuous water quality monitoring to address local water quality issues, which might include managing water resources, assessing water quality, and tracking implementation of Total Maximum Daily Loads (TMDLs) and watershed protection plans," Richard Garcia, TCEQ's Region 13 director, said.

"The data will help the District implement more accurate drought triggers and also determine water quality and quantity changes during rainfall events,"

explained Micah Voulgaris, Cow Creek GCD general manager. "The program," he added, "should also provide data that can be used to calibrate some of the existing models of the aquifer. The more data the District can collect on what is actually happening in the aquifer, the more informed decisions it will be able to make about the management of the groundwater resources."

TCEQ staff members Garcia and Chuck Dvorsky, continuous water quality monitoring network (CWQMN) coordinator, worked with the staffs of Cow Creek GCD, the Guadalupe-Blanco River Authority

(GBRA), and the Texas Water Development Board (TWDB) to identify the data needs and the ways to collect the data for Cow Creek GCD to manage its underground water.

"It was important to initiate this kind of project because of the significance of the Trinity Aquifer, and this type of monitoring system is needed for aquifers throughout the state," said Bill West, GBRA general manager, who led the push for Cow Creek GCD to obtain the new monitoring system.

"With the exception of the Edwards Aquifer, there are not many aquifers that have electronic monitoring."

Cow Creek staff wrote and submitted a proposal to TCEQ, which prompted TCEQ to request a project plan from Cow Creek. Upon approval, TCEQ

purchased and installed the instrumentation at six wells at a total cost of about \$45,000. TWDB monitored the installation and checked the system. The system became operational by the end of March, and all six Cow Creek GCD CWQMN well monitors are online and reporting data to the LEADS database.

Prior to the implementation of this electronic monitoring system, Cow Creek conducted manual monitoring.

Tommy Hill, GBRA's chief engineer, explained, "Every district needs monitoring for an accurate assessment of water availability, so the electronic monitoring can provide data in its most current form."

One of the goals of this system is to monitor water quality, West said, adding, "This project is important for GBRA in that it provides a

real-time look at potential impacts on the river level and how it might affect some of GBRA's customer's within Kendall County."

As an indication of just how committed GBRA is to this project and its success, GBRA's Water Quality Department is providing the water data quality control component of the project, West said.

The table below contains hourly averages for all the pollutants and meteorological conditions measured at Cordillera Ranch Well C775 for Monday, July 27, 2009.

Parameter Measured	Morning												Parameter Measured	POC
	Mid	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00		
Surface Water Temperature	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	LST	NA	NA	Surface Water Temperature	1
Water Level	103.55	103.55	103.54	103.54	103.54	103.55	103.56	103.55	103.54	LST	NA	NA	Water Level	1
Surface Specific Conductance	580	580	580	580	580	580	580	580	580	LST	NA	NA	Surface Specific Conductance	1
Total Dissolved Solids	377	377	377	377	377	377	377	377	377	LST	NA	NA	Total Dissolved Solids	1
Parameter Measured	Mid	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Parameter Measured	POC
Morning														
Maximum values for each parameter are bold within the table. Minimum values are bold italic .														

The CAM sites may be viewed directly at the following links:

- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=775
- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=776
- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=777
- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=778
- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=779
- http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_site_photo.pl?cams=780

Governor Appoints Fair Oaks Ranch Businessman to GBRA Board



Photo by Ansen Seale Photography

Michael Schultz of Fair Oaks Ranch became the newest member of the Guadalupe-Blanco River Authority (GBRA) Board of Directors, through an appointment from Governor Rick Perry. Representing Kendall County, Schultz's term will run from 2009 to 2015.

Schultz is the Director of Business Development for The Trust Company of San Antonio, a wealth management business with \$1.6 billion worth of assets and serves on the board of directors for the

Greater Boerne Chamber of Commerce. He is a member of the Boerne Chamber Leadership Program class of 2007-2008 and a co-founder of LeaderSteps, a program for seniors at Boerne I.S.D.

Through his work in the real estate business, Schultz became involved in many water and developmental issues. From 1988 to 2003, he was engaged in the financial services business and created the Business Financial Group.

Schultz also served five years on the Boerne Independent School District Board, two years on the Texas Association of School Boards (TASB), and past president of the San Antonio YMCA which included it's 13 branches.

Additionally, Schultz has served on church committees and boards leading to three different master planning and building projects accounting for multi-million dollar construction projects.

Schultz and his wife Carol have been married for 27 years and have two sons and a daughter.

GBRA is governed by nine directors, appointed by the Governor of the State of Texas and confirmed by the Senate. The 10 counties in GBRA's statutory district are represented on a rotating basis. Each director serves a six-year term with three directors appointed or re-appointed every two years.

State Recognizes Boerne H.S. Conservation

The rainwater harvesting program at Boerne-Samuel V. Champion High School received the state's first honors for excellence pertaining to water conservation from the Governor of Texas and the Texas Commission on Environmental Quality.

Under the Waste Reduction Policy Act of 1991, the TCEQ initiated the Texas Environmental Excellence Awards in 1993. Presented every spring, the awards spotlight the state's highest achievements in environmental preservation and protection.

Selected by a committee, the awards recognize outstanding, innovative, environmental programs in 11 diverse categories across the public and private sectors including the newly created water conservation category.

Applications came from across the state, but only 10 out of 250 were awarded top honors.

Held in Austin as part of the Environmental Trade Fair and Conference, this celebration of environmental achievements was hosted by the Commissioners of the TCEQ with special recognition from Gov. Rick Perry.

Jeff Haberstroh, construction bond administrator for the BISD and other award honorees accepted introduction and resolutions from both the Texas House of Representatives and Texas Senate as they officially named May 13, 2009 as Texas Environmental Excellence Awards day followed by a special reception in the governor's office.

The rainwater harvesting program at Champion High School is the first of its kind in Texas school systems.

Developed by Haberstroh and architects for the project Kent Neimann, Mark Oppelt, and landscape designer Alex Garza, the innovative water harvesting network at Champion High School combines two elevated storage tanks and heating, ventilating and air conditioning condensate with an 800-foot long underground pipe that's 5-feet in diameter.

The system can hold 224,000 gallons of water with the potential of saving the school district an estimated \$48,000 per year. Officials estimate that the project should pay for itself in fewer than five years.

"In our community, everything is about water," Haberstroh said. "We're proud to have created an innovative program that protects those natural resources for our future generations. We have been very proactive in sharing our expertise and experiences with other entities across the state. This award endorses our efforts and helps us encourage others to develop creative approaches to environmental stewardship."

Champion High School also uses the collection system as part of its outdoor classroom curriculum for the science department giving students valuable hands-on training of environmental stewardship.

For more information and to view the award video, visit the Texas Environmental Excellence Awards Web site at www.teea.org/winners or to see the governor's address to the winners recognizing Boerne Independent School District's achievements go to <http://governor.state.tx.us/multimedia/greetings/2009-05-12-TCEQGreeting.mov> or call the BISD at 830-357-2066.

(Reprinted with permission of the Boerne Star. Published: May 27, 2009)

GBRA Crews Service Dam at Lake McQueeney

Lake McQueeney level was lowered approximately 12 to 18 inches below normal in April so that Guadalupe-Blanco River Authority (GBRA) hydroelectric crews can perform routine maintenance to the dam.

While lowering the lake level may have inconvenienced some lake recreational users, the minimal rainfall and drought created conditions that were optimal for conducting the maintenance on the dam, explained Allen Ognosky, GBRA's hydro system manager.

Maintenance crews completed the work and began returning the lake to its normal level on May 22.

Photos by David Welsch



Safety is the top priority for GBRA crew members who perform maintenance in sensitive interior segments of the hydroelectric dam at Lake McQueeney.



Research Gives New Insights into the Needs of Whooping

by Joel Williams

An extensive study of the habitat, behavior and diet of whooping cranes at their wintering grounds on the Texas Gulf Coast found, among other data, that the endangered birds can obtain nutrition from a variety of food sources available, and are not dependent on any one type of food for survival.

Researchers from Texas A&M University initially reported the findings on April 29 in Seguin at a joint meeting of the boards of directors of the Guadalupe-Blanco River Authority (GBRA) and the San Antonio River Authority (SARA).

“The goal was to evaluate the relationship between freshwater inflows and the health of the whooping crane population,” said R. Douglas Slack, regents professor of the Texas A&M Department of

“The goal was to evaluate the relationship between freshwater inflows and the health of the whooping crane population.”

Wildlife and Fisheries Sciences, one of the lead authors of the study titled the “San Antonio Guadalupe Estuarine System” (SAGES) study, and a report based on it, “Linking Freshwater Inflows and Marsh Community Dynamics in San Antonio Bay to Whooping Cranes.”

Other authors of the report included two other principal investigators, Dr. William E. Grant and Dr. Stephen E. Davis III, along with Dr. Todd M. Swannack, Dr. Jeffrey Wozniak, Danielle M. Greer, and Amy G. Snelgrove.

Whooping cranes winter at the Aransas National Wildlife Refuge on San Antonio Bay, which is affected by the Guadalupe and San Antonio Rivers.

The research team found in the seven-year, \$2 million study that the impact of inflows and other stimuli on the whooping crane and its diet is complex, and that additional study would provide a more comprehensive evaluation of the effects of altered freshwater inflows.

Among other findings, the study concluded that the blue crab is the optimum food source for whooping cranes, but that “cranes are very adaptable and they can switch to other types of food,” Slack said.

Clams and wolfberries, among other foods, provided important sources of biomass for the cranes, the study found.

The SAGES study was primarily funded by the GBRA and SARA. The sponsors were interested in assessing impacts from the Lower Guadalupe Water Supply Project (LGWSP) in which GBRA water rights would have been leased to San Antonio Water System (SAWS) and SARA, and water would have been diverted from near GBRA’s Salt Water Barrier in the lower basin, which is about 11 miles from San Antonio Bay. In considering whether the water diversion could affect the bay, the entities involved in the LGWSP initiated the SAGES study through Texas A&M

University’s Department of Wildlife and Fisheries Sciences.

When the LGWSP was canceled in 2006, SAWS discontinued its funding of the SAGES study. SARA and GBRA continued to fund the study, recognizing its importance and the potential for other water supply projects and future growth, economic development needs as well as the lack of basic research on the cranes needs on their wintering grounds. Other monetary funding and in-kind support for the SAGES study was provided by

S ping Cranes



the Texas Water Development Board, the U.S. Fish and Wildlife Service, and the U.S. Geological Survey.

Additionally, SARA and GBRA entered into an agreement with researchers with the University of Texas at Austin to study the San Antonio Bay estuary system, known as the Estuarine Responses Project

“This research will be very valuable in the future as we look at state water planning and environmental flows.”

(ERP), headed by George Ward, research scientist and associate director of the Center for Research in Water Resources.

The Texas A&M team investigated the diet, behavior and habitat of whooping cranes at their wintering grounds and evaluated the relationship between freshwater inflows feeding San Antonio Bay and the health of its endangered whooping crane population.

This research will be very valuable in the future as we look at state water planning and environmental flows,” said GBRA General Manager “Bill West. “We understand that it is important to complete additional research to accompany the SAGES results, but there is no doubt that Dr. Slack and his team have provided significant insights into the feeding habits and needs of the whooping crane.

“GBRA gets its fair share of both praise and criticism for its role in managing the Guadalupe River Basin,” West said, “but I hope GBRA’s participation and leadership in seeing this study through fruition shows just how important protecting the environment is to us as we go about managing our water resources.”

Steve Raabe, director of Technical Services for SARA, added, “The significance of this study is it is the first time that a full ecosystem model has been developed for an ecosystem as complex as we have on the Gulf Coast. It’s a very good leap forward, but it’s still just the first step.”

Lee Wilson, president of Lee Wilson and Associates, an environmental consulting firm retained to ensure the study’s independence, said that the team operated from the premise that low fresh water inflows, such as water coming from the river, would increase the salinity of the bay, have an adverse impact on blue crabs and lead to increased crane mortality.

The SAGES research, however, did not find that salinity adversely affected the crabs or the cranes.

The study found that while in the salt marsh, the whooping crane diet consisted of wolfberry fruit, blue crabs, clams, snails, insects, fiddler crabs, snakes and fish.

Wolfberry plants tend to reach their peak fruit bearing season about the time the whooping cranes begin arriving in October.

“Wolfberry fruit and snails and insects were consumed in the highest quantities and required the least effort during foraging, and generally were associated with the most efficient foraging behavior,” according to the *Executive Summary of the SAGES Report*. “Blue crabs were the most optimal food in relation to protein, and clams were a significant source of biomass. Whooping cranes foraged most efficiently during the winter of 2005-2006 when water levels were lowest.”

The population of whooping cranes at ANWR increased from 133 in 1994 to 270 before 23 of them died over the winter.

Only a few bodies were found, including one with a broken leg, one with a parasitic infection, and one that appeared to have been eaten by a predator.

Fieldwork for the SAGES study was completed before the winter 2008-09.

There was speculation that the drought, low freshwater inflows, and an increase in salinity in the marsh may have led to the high mortality

“We understand that it is important to complete additional research to accompany the SAGES results.”

rate by reducing the number of blue crabs available. Slack said he had not seen any evidence that a lack of nutrition caused the deaths.

However, critics of the SAGES study contend that it ignores previously conducted research, and is incomplete because it did not cover this winter, when so many cranes died in the midst of a drought, when the marsh would tend to be salty due to lack of fresh water.

“There was the largest die-off of the population that we’ve ever seen, and in our opinion it’s directly linked to the absence of blue crabs,” said Jim Blackburn, an attorney for Texans for a Sound Energy Policy Alliance, which opposes the nuclear plant proposed near Victoria, which would require river water for cooling.

“Our belief is that lower salinity is necessary for blue crabs,” Blackburn said.

Slack disagrees, but does acknowledge that scientists need more information, based on empirical field evidence.

“I think there ought to be further study, but the study should start with the premise of the availability of all the food items in the marsh,” Slack said. “It would be nice if fresh water inflow was a magic bullet, but we found that the marsh is far more complex than that.”

Other factors include wind direction, wind speed, precipitation and water level, he added.

Reports out of Wood Buffalo National Park in Canada this spring and summer brought a hopeful sign for the whooping crane flock after the flight from Texas. The birds were having a highly productive nesting season, said Brian Johns, a wildlife biologist with the Canadian Wildlife Service.

Biologists recorded 62 nests this year, one of the best nesting seasons recorded, according to records dating back to the 1960s, Johns said.

“If they build a nest, they are likely to lay eggs,” he said.

Todd Votteler, GBRA program manager for the study, said the strong nesting season in Canada appeared to support the results of the Texas A&M study.

“We had a low flow year this year, and they’ve gone up to Canada and they’re having a near-record nesting season,” Votteler said.



In an effort to secure the study’s objectivity and provide peer review support to the research team, Lee Wilson recruited a diverse group of professionals to serve on the SAGES Scientific Advisory Panel. Members and their affiliations in 2003 and 2004 included:

- Dr. Kenneth Rose and Dr. Robert Twiley, Louisiana State University;
- Dr. Fred Sklar, South Florida Management District;
- Dr. Edward Rykiel, Washington State University;
- Tom Stehn, U.S. Fish and Wildlife Service;
- Dr. Felipe Chavez-Ramirez, Platte River Maintenance Trust, Inc.;
- Dr. Thomas Minello, National Marine Fisheries Service;
- Vince Guillory, Louisiana Department of Wildlife and Fisheries;
- Dr. Daniel Childers, Florida International University;
- Dr. Denise Reed, University of New Orleans;
- Brian Johns, International Whooping Crane Recovery Team, Canadian Wildlife Service;
- Tom Wagner, Texas Parks and Wildlife Department

DROUGHT GRIPS REGION

by Joel Williams

June normally is the second-rainiest month in the Guadalupe River Basin, but by the end of June 2009, the countryside was wilting and rivers and lakes were shrinking under the relentless sunny days.

As this brutal drought continued, South Central Texas looked like it could catch on fire any minute. Burn bans were in effect and fireworks fell under severe restrictions for the July 4th holiday in some parts of the region with the dubious distinction of being included among the worst of the current droughts in the United States.

September 2007 through June 2009 turned out to be the driest 22-month period on record, with less than 24 inches of rainfall recorded at San Antonio, about one-third of the historical norm.

Canyon Reservoir continued to drop to its lowest levels ever recorded since 1968, when the then-new lake formed by the construction of Canyon Dam on the Guadalupe River first reached conservation pool level. Every day without rain, the lake managed by the Guadalupe-Blanco River Authority (GBRA) reached a new record low.

Flow on the river at Spring Branch, just above Canyon Reservoir, had slowed to less than 4 cubic feet per second (cfs) by the beginning of July, or less than one-seventieth of the normal flow going into the reservoir.

The reservoir briefly experienced an increased drop from June 30 to July 5 when the GBRA raised the release rate at Canyon Reservoir from 60 cfs to 125 cfs to fulfill downstream commitments. Those commitments included providing adequate water for the City of Victoria, which was required to stop pumping from the shrinking Guadalupe until it received some of its allotment from Canyon Reservoir.

The release also proved to be a welcome development for recreational users just downstream from the reservoir, such as river tubers and the businesses that serve them.

"Canyon is fulfilling its role of storing flood waters and releasing them to provide beneficial uses to cities, industry and others," GBRA General Manager Bill West said.

Comal County Judge Danny Scheel said his area's recreational water industries still were doing well, but that residents were having to do some things differently. That includes the inability to water grass when they wanted, and the need for some area ranchers to haul water. One Comal County developer was voluntarily delaying the filling of an important "River Walk" feature, he said. However, Scheel said he did have a talk with another developer who was pumping large amounts of water into a decorative pond, who stopped the pumping soon after that conversation.

"Overall, I think people here are doing a really good job conserving water and doing their part," Scheel said. "With one or two exceptions, I am very pleased that people have a good awareness of how they can do their part."

Roland Ruiz, a spokesman for the Edwards Aquifer Authority, said the public's awareness of the need to conserve is high.

"It seems that generally awareness is higher than it's ever been," Ruiz said. "The folks across the region are aware that the resource, the aquifer, is not something to be dismissed."

During the drought of record, which lasted from 1947 to 1957, Comal Springs in New Braunfels stopped flowing for 144 days in 1956. On Aug. 17, 1956, the Edwards Aquifer dropped to its lowest recorded level, 612.5 feet, mean sea level (msl).

Although the region's water conservation practices are among the nation's best, the population putting demands on the aquifer has steadily increased. More than 2 million people depend on the Edwards today as a primary source of drinking water, and for other domestic, agricultural, industrial, and recreational uses. That translated to an estimated 35 billion more gallons pumped from the aquifer in 2008 than the amount pumped in 1956.



Photo by LaMarriol Smith

In July, Canyon Reservoir had fallen to 895 msl, a full 14 feet below its normal 909 msl.

DROUGHT, continued



This year, the aquifer level dropped more than 30 feet from the 670 feet msl recorded Jan. 8, the high point for the year, to 641 in early July at the J-17 test well in San Antonio. A drop below 640 will trigger “Stage 3” drought restrictions for San Antonio Water System (SAWS) customers and other pumpers. That meant that watering with irrigation systems, sprinklers and soaker hoses was only allowed once every two weeks, among other restrictions already in place for stages 1 and 2, triggered when the aquifer level fell below 660, then 650.

Both the Comal and San Marcos Rivers merge with the Guadalupe and become an increasingly high percentage of the water in the river during drought.

With sparse rain, the springs that feed the river from the Edwards Aquifer amounted to an increasing percentage of the stream flow. But with the aquifer level dropping daily, the springs continued to wane, because when the water level drops in the Edwards Aquifer, the flow of water from its springs decreases.

“This is one of the most intense periods of lack of rainfall that we’ve ever gone through,” said Thomas Hill, chief engineer for GBRA. “When you start losing the springs, it has a significant impact on the flow of the river.”

Flow in the Comal River in New Braunfels, fed by Comal Springs, dropped by more than one-third since mid-March. The flow from San Marcos Springs was the lowest it had been since the drought of 1996, and that was taking a toll on the San Marcos River, home of an endangered plant, Texas wild rice.

Wildlife officials in late June began taking emergency measures in the San Marcos River to rescue Texas wild

rice plants by transplanting them from areas of the river with water levels inadequate for their survival, to nearby areas in the river where the water was deeper.

“We hate to do it, and the only reason we are doing it is because these plants are high and dry, and we need to move them to deeper water,” said Mara Alexander, a botanist with the U.S. Fish and Wildlife Service’s San Marcos Fish Hatchery and Technology Center.

The Blanco River, which also flows into the Guadalupe, also continued to diminish. It had dropped to 5 cfs at Wimberley in early July, a fraction of its median flow of 65 cfs.

The low flows downstream were causing some fish to die, after being trapped in oxygen-depleted pools cut off from the stream. Some people mistakenly assumed that some type of pollution killed the fish, said Debbie Magin, director of Water Quality Services for GBRA.



Photo by Bill West

This segment of the Guadalupe River above Canyon Reservoir was down to a trickle in July, with the flow measuring 2.5 cfs.



Photos by LaMarriol Smith

“As the flow in the river goes down, more and more areas of the river are cut off from the main flows,” Magin said. “Fish get trapped in these isolated pools and die. It’s not because of anything toxic. It’s because of no oxygen being added.”

The low flows combined with high temperatures also can promote the growth of blue-green algae, which has an odor. Those areas of water also tend to have high levels of bacteria, which swimmers should avoid, and especially avoid diving and other activities that force water into the nasal passages, she said.

“If there is a color to the water that’s not what they normally see, or if there is an odor, I would avoid that area,” Magin said. “They’ve got to use their understanding of how the water is supposed to be.”

When the June rains didn’t come, the string of 100-degree days was making its mark throughout the region.

“One thing that has us concerned is that these are the kinds of conditions you will typically encounter in August or September,” said Todd Votteler, GBRA’s executive manager of intergovernmental relations and policy. “We encountered this in June, usually a heavier rain period. It foreshadows that we could have a really bad summer.”

“Droughts are normal,” said Norman Boyd, San Antonio Bay ecosystem leader for the Texas Parks and Wildlife Department. “They are part of the territory. The concern is how long it’s going to be here and how long the salinity is going to be high.”

Most things return to normal after a drought ends, but some of the seafood populations may take a while to bounce back, Boyd explained, adding, “And that has an impact on the communities that depend on those resources”

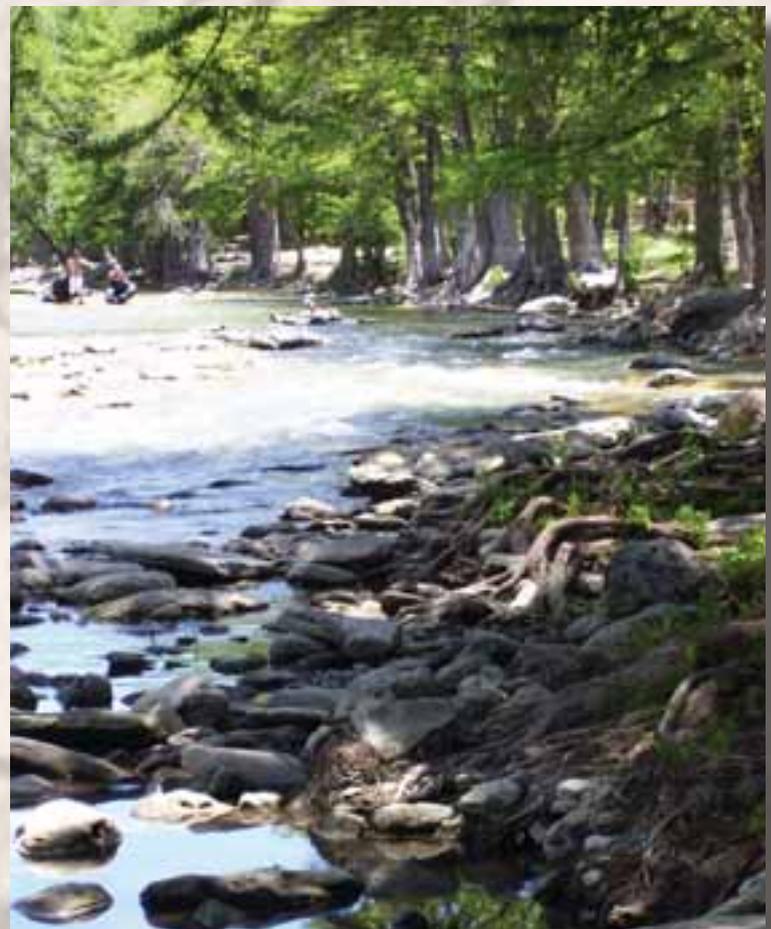
Meteorologists generally attribute the drought to “La Nina,” a periodic cooling of the currents in the Pacific, which leads to dry periods in

Texas. According to the National Weather Service, the Pacific appeared to be warming in June and early July, returning to “El Nino,” a periodic warming of the currents, which tends to bring more rain to Texas.

So it is possible to see increased chances for precipitation as fall approaches.

Meanwhile, one positive aspect of the drought is that scientists this time were prepared to gather data for understanding its effects and the effects of future droughts.

“That will prove useful for the development of the Edwards Aquifer Recovery Implementation Program (EARIP), which is charged with developing a long-term environmental plan for the aquifer”, said Robert Gulley, EARIP program manager.



Recreational tubers try to navigate down the Guadalupe River near Sattler where the release rate from Canyon Reservoir was 61 cfs in mid-July.

Tree-ring Study *to Shed Light on Major Droughts*

by Joel Williams

The Drought of Record, as the decade-long 1947-1957 Texas drought is known, appears to be a regularly occurring event, according to a study of tree rings commissioned by the Guadalupe-Blanco River Authority.

The goal of the study is to reconstruct the historic climate of Central and South Central Texas using the tree-ring chronologies, said Todd Votteler, who is overseeing the study for GBRA.

“The broad purpose is to tell us whether we are planning for the right kind of droughts in the future,” he said.

The fieldwork is being conducted by Dr. Malcolm Cleaveland with the University of Arkansas Tree-Ring Lab, with help from members of the University of Texas Jackson School of Geosciences.

Trees produce annual growth rings that generally grow wide during wet years and thin during dry years. This pattern can be read, and once that is done the tree-ring record can be compared to Weather Service climatic data to find out the seasonal response of the trees. That yields valuable information about past climatic conditions.

The data would be useful for water conservation and water planning in the region.

The 1947-1957 Drought of Record is the basis for all Texas water supply planning.

“We hope to extend our knowledge of past climatic conditions to 1,600 A.D., or if we are lucky, even earlier,” Votteler said.

The target species is baldcypress, which can live to be well over 1,000 years old under some conditions. Previous research has indicated that the region has experienced droughts over the last several hundred years that are much more severe than anything experienced since officials started keeping rainfall records more than 100 years ago.

Living trees are sampled with a forestry tool called an increment borer. The sampling process removes a core from the living trees about the width of a pencil. This does not harm baldcypress trees because their wood is naturally resistant to rot and the trees grow over the small hole within a short time.

“This type of sampling has been conducted for decades and the landowners can be reassured by the researchers that their trees will not be harmed,” Votteler said.

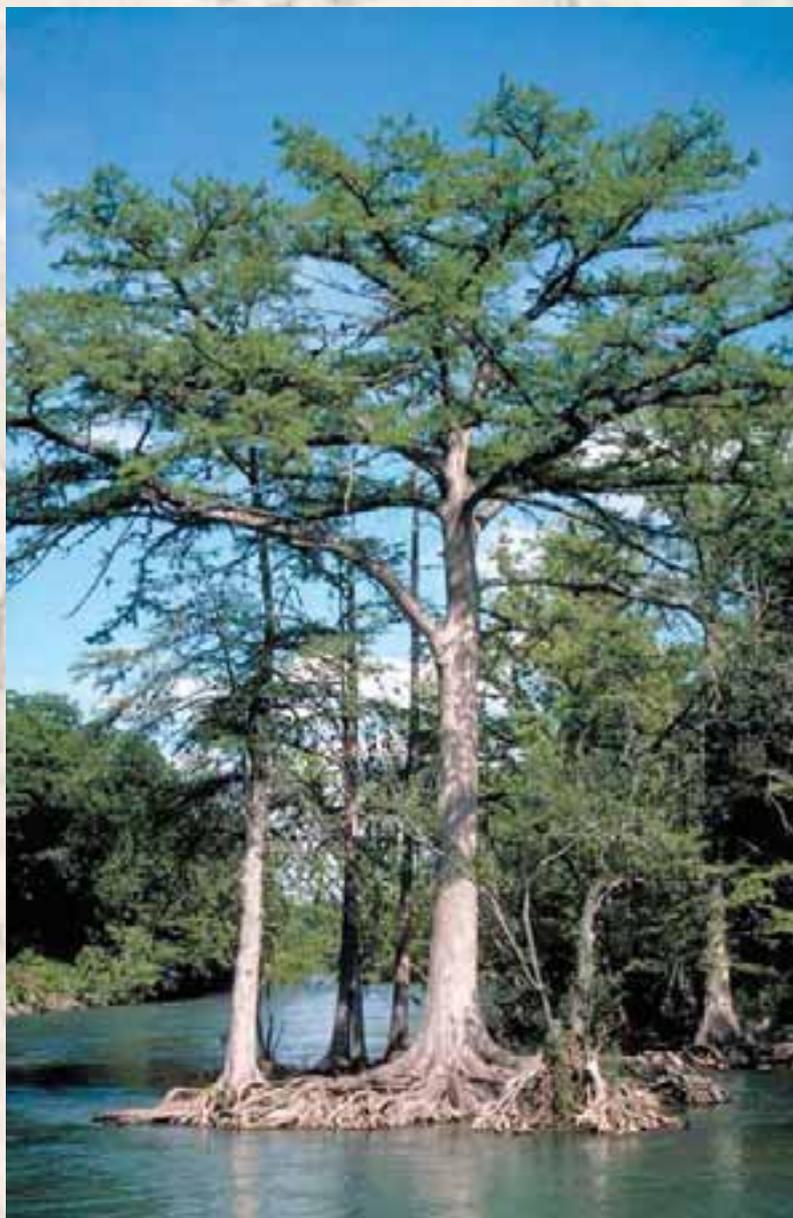
So far, they have been sampled sites on the San Bernard, Nueces, and Guadalupe rivers. In June, the team conducted sampling at Krause Springs near Spicewood.

The study has found indications of droughts in the early 1700s and late 1800s that exceeded the Drought of Record in South

Central Texas, and a 1571-1580 drought exceeded the Drought of Record for the Edwards Plateau.

Droughts similar to the Drought of Record appear to occur every 80 to 100 years, on average.

“That tells you what you’ve got to be prepared for,” said Votteler, adding that the study should be complete by spring of 2010.



Baldcypress trees along the Guadalupe River.

GBRA Photo Archives

THE TRUST

Guadalupe-Blanco River Trust and Local Community Form Partnership to Conserve Park Land

- *Riverfront Land Will Extend Allen Bates Park*
- *Fundraising To Secure Purchase Has Begun*

Officials of the Guadalupe-Blanco River Trust and the City of Martindale recently signed an agreement to preserve nearly two acres of land with river frontage along the San Marcos River in Martindale. Fundraising for \$50,000 to buy this prime 1.59 acre tract will begin immediately.

City of Martindale officials have been considering the tract for new parkland - doubling the size of the existing Allen Bates Park. The larger park would provide an opportunity for Martindale residents to experience longer trails, more river front, as well as relax and play spaces.

The partnership between the two entities provides several advantages for the community. As funds are raised for the land



Photo by John Schmidt III

purchase, the Trust would oversee the funds, explained Janaé Reneaud, the Trust's interim executive director. "When the fundraising goal is reached, the funds would be redirected to Martindale officials to complete the purchase of the land."

Martindale City Administrator Jeff Caldwell said, "This arrangement works out well for us because donors can take advantage of tax deductions available through the Trust." More importantly, he added, "Contributors will know that their gift is part of a project that will exist in perpetuity for future generations to enjoy."

Anyone interested in supporting the park project and the river is encouraged to contact Janaé Reneaud to make a donation, at (830) 379-5822 or email jreneaud@gbtrust.org.

Trust Preserves 646 Acres in Guadalupe Delta

The Guadalupe-Blanco River Trust (Trust) recently completed a new acquisition of more than 640 acres of wetlands that will be managed for key breeding areas, stop-over and wintering habitats for migratory birds in the Guadalupe River Delta. This section of property will be called the Guadalupe-Blanco River Trust Hog and Schwing Bayous Preserve (Preserve).

The Preserve permanently protects 4.35 miles of riparian streams and is located in a key region where 147,377 acres of land are conserved. The addition of the Preserve will help create a corridor of conserved lands, benefit existing projects and promote future environmental partnerships. The surrounding preserved lands are held by the Texas Parks and Wildlife Department (TPWD), the U.S. Fish and Wildlife Service (USFWS), private landowners, and a conservation easement held by the Trust.

The land acquisition was made possible through the efforts of many partners, including Union Carbide Corporation (a fully-owned subsidiary of The Dow Chemical Company), the assistance of a USFWS grant through the Coastal Wetlands Planning, Protection and Restoration Act, and the Guadalupe-Blanco River Authority (GBRA).

"This is a wonderful success for the region and the Trust," said Janaé Reneaud, interim executive director of the Trust. "We now have a lot of work to do, including developing partners to restore the land for benefit of the waterfowl and other wildlife that depend on the wetland," she added.

Trust Chair Robert Thornton explained, "I watched this project from its start with Todd Votteler and as it was handed over to Reneaud - it has now come to fruition.

"This is just another one of the many projects of the Trust with which GBRA is proud to be associated," said Bill West, Jr., GBRA general manager. "The partners felt this was a significant land acquisition in a sensitive area of wetlands that needed to be protected."

The Trust is a charitable, non-profit 501(c)3 organization that was developed to conserve the land and water of the Guadalupe River watershed for its natural, recreational, scenic, historic and productive value.



INSIDE GBRA

GBRA Volunteers Make Improvements to Victoria Boys and Girls Club

GBRA employees met in Victoria, Texas on April 4, 2009 to improve facilities at the Boys and Girls Club of Victoria. The club has been providing services to Victoria youth since 1968, and serves more than 550 members.

Programs offered at the Boys and Girls Club promote character and leadership development in a safe and nurturing environment. In general, the "Club" offers youth safe refuge while their parents are still at work.

The GBRA Volunteer Program was implemented in 2000, and its purpose is to improve the quality of life in our communities through the commitment of our employees and the use of their time, energy, talents and skills.



Photo by Jim Wyatt



Photos by Connie Rothe



"Volunteers don't have time to spare...they have heart to spare".



GBRA *Training & Licenses*

Darel Ball of Water Resources completed trainings for Consolidated Water Quality Fee, Public Health Service Fee, and Water Use Assessment Fee Rule, DEM Hazardous Materials Refresher training, Risk Management Plans, TX Warn "Boot Camp" - Preparation for the Next Hurricane, Water ISAC webcast "Lessons Learned" following hurricane Katrina, WEF webcast Sewer Cleaning and Managing Grease Blockages.

Angela Baxley of General training for Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure (6421).

Ryan Boedeker of Canal RWSS Pipeline Awareness training and attended the TWUA Golden Crescent Day School.

Edwin Boettner of Shadow Creek attended the Risk Management Program and Internal Auditing for Water Facilities.

Clarissa Castellanos of the Lab completed trainings and seminars for Chromeleon Level 1, Chromeleon Level 2, Dionex ICS-2000 w/ Autosampler, Dionex, Ethics and Data Integrity training, Las Alamo Ch.- Lachat Metrohm IC training, Samples 2009 LIM's, and Varian, Inc. - Saturn GCMS.

Angel Castillo, Jr., of Lockhart WWTP completed trainings for DEM Hazardous Materials Refresher, and Water Well Performance: The Economic Basis for Water Well Operation, Rehabilitation and Maintenance Decisions.

Ross Chapman of Victoria WWTP completed refresher training for Confined Space.

Felix Cortinas of Luling WTP completed the Hazardous Materials Emergency Response Technician Refresher training.

Jason Davidson of RUD completed the Confined Space Refresher training.

Curtis Davis of Victoria WWTP completed the Confined Space Refresher training.

Robert Delgado of Lockhart WTP Hazardous Materials Emergency Response Technician Refresher training.

David Dodd of Calhoun Canal attended the Pipeline Awareness Prescribed Burn Winter Workshop and the TX Department of Insurance - 2009 Texas Safety Summit.

Joseph Downey of Luling WTP completed the Hazardous Materials Emergency Response Technician Refresher training.

Jason Eeds of Lockhart WWTP completed the DEM Hazardous Materials Refresher training.

Dianne Fly of Coledo Reservoir attended the TWCA trainings for Bloodborne Pathogens, Laboratory Safety, Light Trucks - Backing Safety, Driving Hazards, Ergonomics, Extreme Conditions, and Trailing, and Lockout/Tagout training.

Richard Gaona of Calhoun Canal attended Pipeline Awareness and the TWUA Golden Crescent Day School.

David Garcia of Port Lavaca WTP completed trainings for Electrician 1 and Pipeline Awareness, and attended the Hurricane Conference of the American Red Cross.

Leroy Garza of San Marcos WTP attended a Hazmat Refresher.

Lorenzo Gonzales, Jr., of Victoria WWTP completed Water Utilities Management (01070550) and a Confined Space Refresher training.

Richard Gonzales of Lockhart WTP attended DEM Hazardous Materials Refresher training.

Curtis Gosnell of Calhoun Canal attended Pipeline Awareness training.

Ronald Gosnell of Canal RWSS attended Pipeline Awareness training and TWUA Golden Crescent Day School.

Dustin Greenwood of Western Canyon WTP attended Technology-Based training: Chlorinator Systems and Chemical Handling, and the TRWA - Surface Water I.

Lee Gudgeff of Water Resources attended Ethics and Data Integrity Seminar.

E. Ray Harp of the Lab attended Ethics and Data Integrity Seminar and trainings for Excel 2003 - Level 2, Las Alamo Ch. - Thermo Fisher Titrimetric, ISE Electrodes and Optical DO Electrode, and Samples 2009 LIM's.

Timothy Hill of Western Canyon WTP attended TCEQ course codes 1301 and 1300.

Don Koble of Canal RWSS attended the Hurricane Conference of the American Red Cross, Pipeline Awareness training, and WUA Golden Crescent Day School.

Carl Korth of Coledo Reservoir attended Hazcom training.

Wilfred Korth, Jr., of Coledo Recreation attended Hazcom training, the Midcoast Hurricane Conference, Water Utilities Day School, and a Workshop on Marketing of Corpus Christi Nature Tourism Business.

Jose Leal, Jr., of Lockhart WTP attended Hazardous Materials Emergency Response Technician Refresher training.

Jason Lewis of Coledo Recreation attended Water Utilities Day School.

Joe Long of San Marcos WTP attended a Hazmat Refresher.

Josephine Longoria of the Lab completed the Dionex Seminar, Ethics and Data Integrity Seminar, Las Alamo Ch. - Thermo Fisher Titrimetric, ISE Electrodes and Optical DO Electrode, Samples 2009 LIM's training, Special Topics for Laboratory Analyst (010700686) and Varian, Inc. - Saturn GCMS.

Brian Lyssy of the Lab attended the Ethics and Data Integrity Seminar, Las Alamo Ch. - Thermo Fisher Titrimetric, ISE Electrodes and Optical DO Electrode, as well as Samples 2009 LIM's and Varian, Inc. - Saturn GCMS.

Debbie Magin of Water Resources attended the Texas Watershed Planning Short Course.

John Manchack, Jr., of Hydro completed IS-00100 Introduction to the Incident Command System, and IS-00700 National Incident Management System (NIMS) and Introduction.

Richard Matheaus of RUD attended Confined Space Refresher.

Marlon McAdams of Coledo Reservoir completed Hazcom training.

Shane McAdams of Coledo Reservoir completed Hazcom training.

Kylie McNabb of the Lab attended Ethics and Data Integrity Seminar, and Samples 2009 LIM's training.

James Medrano of Hydro attended the Confined Space Refresher.

Eric Mendez of Lockhart WWTP completed the Hazardous Materials Emergency Response Technician Refresher.

Eduardo Montana of Lockhart WWTP attended DEM Hazardous Materials Refresher training, and Water Well Performance: The Economic Basis for Water Well Operation, Rehabilitation and Maintenance Decisions.

John Moryl of Canyon Hydro attended Confined Space Refresher training.

Yolanda Pierce of General completed Access - Level 1.

Terry Ramey of Victoria WWTP attended Confined Space Refresher training.

Emmylou Roberts of the Lab attended Ethics and Data Integrity Seminar, Samples 2009 LIM's, and Teledyne - TOC Fusion training.

Tony Saenz III of Victoria WWTP attended Confined Space Refresher training.

Alan Schneider of Coledo Reservoir completed Hazcom training.

Michael Schultze of Hydro completed Dam Safety.

Elizabeth Sedlacek of Water Resources completed Introduction to PowerPoint.

Curtis Seiler of Coledo Recreation attended Hazcom training.

Larry Shahan of San Marcos WTP attended a Hazmat Refresher.

Jerry Sharp of San Marcos WTP attended a Hazmat Refresher.

Stephanie Shelly of Port Lavaca WTP attended RMP Auditing, Texas Water 2009, and TWUA Golden Crescent Day School.

Trey Sibert of San Marcos WTP attended a Hazmat Refresher.

Allan Smith of Shadow Creek completed Home Study Wastewater Treatment, and attended TRWA - Technology Based training: Water Utility Safety.

Frank Tompkins of Victoria WWTP attended Confined Space Refresher training.

Michael Tompkins of Calhoun Canal attended Pipeline Awareness and TWUA Golden Crescent Day School.

John Urban of Coledo Reservoir attended Hazcom training.

Rodney Voss of Hydro completed Dam Safety.

Steve Wallendorf of San Marcos WTP completed a Hazmat Refresher.

David Weaver of Victoria WWTP completed Confined Space Refresher training.

David Welsch of Water Resources attended Creative Leadership Workshop for Managers, Supervisors and Team Leaders.

Herbert Wittliff of Calhoun Canal attended Pipeline Awareness, TWUA Golden Crescent Day School, TX Dept of Insurance - 2009 Texas Safety Summit, Texas Coastal Watershed Program and trainings for Utilities Management TWUA, RMP Auditing, Prescribed Burns and a Port Lavaca Chamber of Commerce workshop on Hot Checks.

Jim Wyatt of Hydro attended Confined Space Refresher training, and Hazardous Materials Emergency Response Technician Refresher training

Alan Zolnosky of Coledo Recreation completed Hazcom training, Home Study Groundwater Production, Texas Water Utilities Assoc. - Pump and Pumping.

The information for the trainings and licenses section was compiled by Daphne Harder, Human Resources Department of the Office of Finance and Administration.

employee anniversaries

GBRA recognizes the following employees for their dedication of service. (These employees started with GBRA between the months of January and June.)

January

1/2/2008 Edwin Boettner, Shadow Creek — 1 yr
1/21/2008 James Murphy, Water Resources — 1 yr
1/2/2007 Sheryll Kisiah, Canal RWSS — 2 yrs
1/24/2005 Susan Hubbert, General — 4 yrs
1/27/2004 Steve Wallendorf, San Marcos WTP — 5 yrs
1/11/2002 Nita Krahn, Port Lavaca WTP — 7 yrs
1/6/1995 Sandra Terry, General 14 — yrs
1/27/1988 Sara Vazquez, Victoria WWTP — 21 yrs
1/5/1987 Samuel Widmer, Coledo Recreation — 22 yrs
1/4/1983 Alan Schneider, Coledo Reservoir — 26 yrs
1/31/1981 David Lundin, Port Lavaca WTP — 28 yrs
1/16/1981 Curtis Seiler, Coledo Recreation — 28 yrs
1/14/1980 Darel Ball, Water Resources — 29 yrs
1/14/1980 Mark Henneke, Water Resources — 29 yrs
1/11/1977 Rodney Voss, Hydro — 32 yrs
1/28/1976 Bryan Serold, Water Resources — 33 yrs

February

2/5/2009 Trey Sibert, San Marcos WTP — New Hire
2/19/2007 Tony Saenz, Victoria WWTP — 2 yrs
2/1/2007 LaMarriol Smith, General — 2 yrs
2/18/2003 Richard Gonzales, Lockhart WTP — 6 yrs
2/4/1999 Cheryl Gorden, General — 10 yrs
2/7/1994 Curtis Davis, Victoria WWTP — 15 yrs
2/1/1994 William West, General — 15 yrs
2/1/1991 Richard Gaona, Calhoun Canal — 18 yrs
2/27/1984 Linda McPherson, Port Lavaca WTP — 25 yrs
2/18/1980 Charles Fennell, Hydro — 29 yrs
2/29/1980 Jimmy Wyatt, Hydro — 29 yrs
2/27/1975 Frank Ceballos, Victoria WWTP — 34 yrs

March

3/28/2008 Janae Reneaud, General — 1 yr
3/21/2006 Leigh Crettenden, General — 3 yrs
3/29/2005 Christopher Lewis, General — 4 yrs
3/15/2004 Michael Helmke, Hydro — 5 yrs
3/10/1995 Guadalupe Aguillon, Calhoun Canal — 14 yrs
3/27/1992 William Young, Victoria WWTP — 17 yrs
3/11/1991 Robert Foley, Victoria WWTP — 18 yrs
3/21/1988 Richard Matheaus, RUD — 21 yrs
3/31/1986 Marlon McAdams, Coledo Reservoir — 23 yrs
3/26/1984 Michael Tompkins, Calhoun Canal — 25 yrs

3/23/1981 John Smith, Water Resources — 28 yrs

3/4/1976 Michael Schultze, Hydro — 33 yrs

April

4/13/2006 Paulette Cowey, General — 3 yrs
4/5/2006 David Garcia, Port Lavaca WTP — 3 yrs
4/5/2004 Shane McAdams, Coledo Reservoir — 5 yrs
4/22/2002 Curtis Gosnell, Calhoun Canal — 7 yrs
4/8/2002 Judith Robisheaux, Coledo Recreation — 7 yrs
4/11/1995 David Maltony, Hydro — 14 yrs
4/17/1995 John Manchack, Hydro — 14 yrs
4/8/1991 Robert Delgado, Lockhart WTP — 18 yrs
4/24/1987 Roland Henry, Hydro — 22 yrs
4/7/1987 Reagan Ploetz, Hydro — 22 yrs
4/16/1982 Darryl Jandt, Hydro — 27 yrs
4/26/1982 Jim Lumley, Calhoun Canal — 27 yrs

May

5/4/2009 Clint Retzloff, Coledo Recreation — New Hire
5/19/2008 Joey Kisiah, Port Lavaca WTP — 1 yr
5/19/2008 Jaynellen Ladd, Water Resources — 1 yr
5/19/2008 Bruce Wasinger, General — 1 yr
5/11/2007 Denise Aleman, General — 2 yrs
5/18/2007 Hunter Duncan, Western Canyon WTP — 2 yrs
5/2/2005 Norma Harvey, General — 4 yrs
5/12/2003 Cynthia Thomas-Jimenez, General — 6 yrs
5/1/2001 Yolanda Pierce, General — 8 yrs
5/7/1993 Dennis Gunter, Victoria WWTP — 16 yrs
5/1/1989 Leroy Garza, San Marcos WTP — 20 yrs
5/19/1987 Michael Urrutia, Water Resources — 22 yrs
5/31/1983 Alan Zolnosky, Coledo Recreation — 26 yrs
5/4/1981 Alvin Schuerg, General — 28 yrs
5/5/1980 James King, Hydro — 29 yrs
5/2/1978 Joseph Downey, Luling WTP — 31 yrs
5/10/1976 Thomas Hill, Water Resources — 33 yrs
5/17/1976 Juan Juarez, Hydro — 33 yrs

June

6/10/2009 Frank Lucas, Port Lavaca WTP — New Hire
6/15/2009 Allen Lawson, Western Canyon WTP — New Hire
6/29/2009 Stacy Frentzen, Lab — New Hire
6/20/2008 Roy Wilkey, Western Canyon WTP — 1 yr
6/30/2004 Daphne Harder, General — 5 yrs

6/21/2004 Joe Long, San Marcos WTP — 5 yrs

6/2/2003 Tommie Rhoad, Water Resources — 6 yrs

6/23/2003 Teresa Van Booven, Water Resources — 6 yrs

6/21/2001 Janet Thome, General — 8 yrs

6/1/2000 Todd Votteler, General — 9 yrs

6/7/1999 Tamra Beutnagel, General — 10 yrs

6/10/1986 Sammy Sala, Luling WTP — 23 yrs

6/1/1983 Carl Korth, Coledo Reservoir — 26 yrs

6/24/1980 Cornelio, Molina Hydro — 29 yrs

6/27/1977 Jeffrey McKee, Hydro — 32 yrs

6/1/1976 David Weaver, Victoria WWTP — 33 yrs

6/25/1973 David Welsch, Water Resources — 36 yrs

The information for the employee anniversary list was compiled by Daphne Harder, Human Resources Department of the Office of Finance and Administration.

Did You Know

Canyon Reservoir impoundment began in 1963 and the reservoir reached its full elevation of 909 mean sea level in 1968.

Where *are they now?*

Stayton Finch

by Tammy Beutnagel

If one sees Stayton Finch these days, it is very likely he will be wearing his “Korea Veteran” cap given to him by his grandson, Brandon. Finch, who served in the U.S. Navy during the Korean War, now talks of his grandson, who is serving in the Navy as an electronic technician. But Finch’s grandson is not the only thing he is proud of. The 81 year-old former GBRA hydro operator is displaying his works of wood art.

Ornamental wood art has become Finch’s passion these days, and angels, stars, crosses, or scrolled designs are just a few of the patterns he creates from wood, mirror and acrylic. Finch said he acquired his patience for wood carving from his love of fishing, especially while living and fishing on Lake Gonzales.

In 1957, Finch was offered the position of hydro operator by Texas Power Corporation and Texas Hydroelectric Corporation. The position also included a small but rent-free house. Lake Gonzales at the H-4 dam. He accepted the position and the company’s requirement that he would be on call 24/7.

Finch did not mind the continuous on-call hours because when he was not on the clock, he enjoyed fishing as a commercial fisherman. “Every minute I wasn’t working, I was on the river setting trot lines,” said Finch. He taught his daughters to fish on Lake Gonzales, reminding them not to cast their shadows on the water for fish to see.

Trained by chief operator, Henry “Dolly” Mikesh, Finch speaks highly of his now 97-year-old mentor. “Mikesh was my boss and crew chief, and everything I learned he taught me,” said Finch. “He was a good boss, but tough.” As a hydro operator and part of a three-man maintenance crew, Finch’s responsibilities included monitoring, recording lake levels, and maintaining the spill gates on the H-4 dam.

When Texas Power Corporation and Texas Hydroelectric Corporation changed to GBRA, Finch was offered the position of hydro crew chief and moved with his wife, Ella Mae, and their two daughters, Deborah and Robin, to Seguin.

One memorable day in April 1966, Finch attended the U.S. Army Corps of Engineers and GBRA dedication of Canyon Dam. Finch remembers the ceremony was held on the emergency spillway at Canyon Reservoir and many military officials, dignitaries, and an aide to President Lyndon Johnson attended the historical dedication.

In 1995, Finch retired from GBRA. A week later he traveled to the Seiko Company in Dallas to buy an Excalibur saw and started creating designs. After converting his garage into a shop with three saws, piles of wood, and wood shavings, it resembled Santa’s work shop. Finch’s work quickly became admired by others, and his hobby started to become an acquired skill.

Choosing the right blade for the right piece of wood, Finch admits, is the secret to creating highly crafted pieces. This was one of many lessons he learned from 14 years of trial and error. Finch’s designs range from mini-sized Christmas ornaments to poster-sized carvings of the Lord’s Prayer and Ten Commandments. A 16” x 20” carving of the Lord’s Prayer is proudly displayed in his home—it is a replica of one he carved to win a grand championship at the Guadalupe County Fair.

Finch does not describe himself as a very religious man, but said, “The good Lord is looking after me.” Finch donated carvings of the Lord’s Prayer to two local churches. Friends started requesting individual orders and he politely filled them. Finch has since then decided he would work on less time-consuming pieces.

Finch refuses to charge more than \$25 for his newest carvings of wooden crosses. “For the amount of time I put into each one, they would be too expensive. Besides, I like to carve them mostly for fun,” he said.

When asked how long he would continue, Finch said, “I will keep doing this if people want it. I have enjoyed every minute of it and I am just as happy as a lark!”



Photos by Connie Rothe

Started at GBRA: 1957

Retired at GBRA: 1994

Stayton Finch can be contacted at (830) 372-3404.





Guadalupe-Blanco River Authority
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Mark Your Calendar

Aug. 10, 2009 (6:30 – 8 p.m.)

TPWD's 2009 Land and Water Resources Conservation
and Recreation Plan – Public Meeting
Central Library Auditorium
600 Soledad, San Antonio, TX

Aug. 19, 2009

GBRA Board Meeting
River Annex Bldg., Seguin, TX

Aug. 30-Sept. 2, 2009

Emergency Management Association of Texas
"Make It Happen" Third Annual Symposium
(<http://www.emat-tx.org/cde.cfm?event=262172>)
Omni Hotel, Corpus Christi, TX

Sept. 14-15, 2009

Water for Power Conference
Electric Utility Consultants, Inc. (303) 770-8800
Westin Bonaventure Hotel, Los Angeles, CA

Sept. 16, 2009

GBRA Board Meeting
River Annex Bldg., Seguin, TX

Oct. 21, 2009

GBRA Board Meeting
River Annex Bldg., Seguin, TX

Oct. 21-23, 2009

Texas Water Conservation Association
Fall Meeting (512) 472-7216
Crown Plaza Riverwalk, San Antonio, TX

Nov. 9-12, 2009

American Water Resources Association
Annual Water Conference
(www.awra.org/meetings/Seattle2009/)
Red Lion Hotel, Seattle, WA

Nov. 18, 2009

GBRA Board Meeting
River Annex Bldg., Seguin, TX

Nov. 18-20, 2009

National Water Resources Association
Annual Conference
(www.nwra.org/upcoming.php)
Hilton Palacio Del Rio, San Antonio, TX

Photo Courtesy: Texas Parks & Wildlife © 2005, Earl Nottingham

