

E 1550.6
G 286
2004/10



EDWARDS AQUIFER AUTHORITY

GENERAL MANAGER'S REPORT

October 2004

inside



2005 Proposed Budget

by Brock Curry, Program Manager – Administration

- 2005 Proposed Budget
- 10th Conference on Hydrology and Engineering Geology of Sinkholes and Karst
- September 2004 Board Meeting
- Edwards Aquifer Optimization Program Update (EAOP)
- Initial Regular Permits
- Real-time Precipitation Gauging System
- September 2004 Rainfall Totals
- Groundwater Conservation Plan
- Habitat Conservation Plan
- Employee News
- Aquifer Management Fees
- Monthly Water Level & Springflow Report
- Calendar of Events

On September 21, the General Manager presented the Authority's 2005 Proposed Operating Budget to the Edwards Aquifer Authority Board of Directors. Of the \$15.4 million total budget, the General Fund represents the vast majority (\$14.8 million). To support the operation of the organization, the Authority projects assessing an aquifer management fee of \$43 per acre-foot for non-agricultural users. The aquifer management fee rate for agricultural users is legislatively limited to \$2 per acre-foot. The non-agricultural aquifer management fee rate of \$43 is significantly higher than the \$29 rate assessed in 2004. This increase is due to an increase in expenses, a decrease in other revenue sources, and a reduction in the amount of groundwater authorized to be used in 2005.

The board will hold a special meeting on October 12 at 1:00 p.m. prior to the regularly scheduled meeting at 3:00 p.m. to review the proposed budget and make any amendments necessary. The board will then recommend a budget to be presented at a series of public meetings scheduled in October.

The public meeting schedule is as follows:

- 6:00 p.m. Wednesday, October 13, 2004
Authority Conference Center, San Antonio
- 6:00 p.m. Monday, October 18, 2004
San Marcos Activity Center, San Marcos
- 6:00 p.m. Wednesday, October 20, 2004
Hondo Community Center, Hondo, TX

The General Manager's 2005 Proposed Operating Budget is available upon request from the Authority office and on the Authority website, www.edwardsaquifer.org.

Editor: Margaret Garcia
Graphic Design: Ileana R. Aleman

The General Manager's Report is published monthly.

Our Mission:

The Authority is committed to manage, enhance and protect the Edwards Aquifer system.

The 10th Conference on Hydrology and Engineering Geology of Sinkholes and Karst

Geary M. Schindel, P.G., Chief Technical Officer



Valdina Farm Sinkhole - Photo by: Kurt Merkle

In 2004, the Authority's board of directors requested staff work towards bringing a technical conference on geology and hydrology to the greater San Antonio region. This conference will provide an opportunity for local professionals to interact with other karst geologist, hydrologists, and engineers from around the country as well as showcase the work done in the San Antonio area.

I am pleased to announce that the Edwards Aquifer Authority will co-sponsor the 10th Conference on Hydrology and Engineering Geology of Sinkholes and Karst. The conference will be held in San Antonio in September 2005. Commonly called the Sinkhole Conference, it is the premiere conference on karst in the U.S. and is held every two years. The conference usually attracts between 200 and 300 people including a number of professionals from Europe, Canada, and Australia.

The American Society of Civil Engineers (ASCE) and P.E. LaMoreaux and Associates (PELA) will organize the 2005 conference. In addition to the Authority, local sponsorship includes Southwest Research Institute. Other organizations will also be contacted to help sponsor this premier event. Dr. Barry Beck originated the conference when he was the Director of the Florida Sinkhole Research Institute, upon his move to PELA, Dr. Beck has continued to organize and chair the conference with sponsorship from PELA.

The five day conference begins on Saturday, September 23 with a series of short courses on karst hydrology, karst geophysics, grouting in karst, and geologic assessment of karst terranes. On Sunday, September 24, the Authority will host an Edwards Aquifer field trip along with representatives from George Veni and Associates, Texas Bureau of Economic Geology, and LBG-Guyton. Both the short courses and field trip are an optional part of the conference.

Three days of presentations and posters related to all aspects of karst begin Monday, September 25. The 2005 conference will include special sessions on geology and origin of sinkholes and karst, karst and sinkholes in evaporites, karst hydrology and dye tracing, geoenvironmental engineering in karst, computer application and GIS, governmental regulations and programs in karst, engineering transportation infrastructure in karst, prevention and remediation of sinkholes and karstic settlement, and the karst hydrology of the Edwards Aquifer.

At the 2003 conference in Huntsville, Alabama, a short session was held in debate style, to discuss a special topic related to land use planning in the Mammoth Cave area. The session was so popular that conference hosts are looking to hold another debate, on an issue of regional interest at the 2005 conference. This session may also be open to the public.



I am also pleased to announce that, Dr. E. Calvin Alexander will deliver the Keynote Address for the conference. Dr. Alexander is internationally recognized in the karst field and has also served on the Authority's Groundwater Modeling Advisory Panel. Dr. Alexander will speak about his experiences in karst research in Minnesota. Dr. Stephen Worthington, another member of the Authority's modeling panel has also agreed to be the lunch time speaker and will discuss his work at Walkerton, Ontario, Canada.

While I'm excited about having the Sinkhole Conference come to San Antonio, we have also been asked to join a team to bring the International Congress of Speleology (ICS) to San Antonio in 2009. This conference, held every 4 years, usually attracts over 2,000 people from all over the world. The next ICS will be held in Athens, Greece in 2005 where the National Speleological Society will present a bid to bring the 2009 conference to San Antonio. I will provide more information on this conference as it develops.

Authority Directors Appoint New District 14 Director; Declare Unopposed Candidates Elected to Office

by Margaret Garcia, Program Manager – Public Affairs

At their regular monthly meeting held Tuesday, September 21, 2004, the Edwards Aquifer Authority Board of Directors voted to appoint Mr. Joe Parker as Director District 14 - Uvalde County. The board appointed Mr. Parker to fill the position vacated by Mr. Rogelio Muñoz who resigned from the board in July. Muñoz was an original member of the board appointed by the Legislature in 1995, and elected in 1996 and 2000. Mr. Parker is a resident of Uvalde and is an active member of the community.

In addition, Authority directors adopted a resolution declaring unopposed candidates elected to office from five single-member districts within the boundaries of the Authority. They are District 2 Director (Bexar County) - Levi Jackson, III, District 4 Director (Bexar County) - Bonnie Conner, District 8 Director (Comal County) - Ramon Chapa, Jr., District 10 Director (Hays County) - Kenneth Barnes, and District 12 Director (Medina County) - Hunter Schuehle.

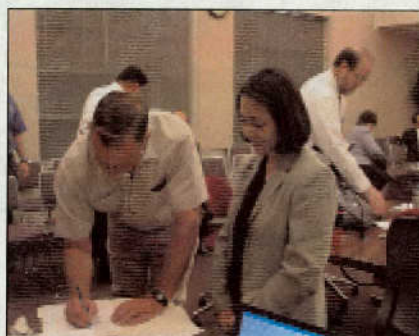
In other action, Authority directors appointed Ms. Velma R. Danielson, Interim General Manager of the Authority until the position of General Manager is filled. Ms. Danielson currently serves as Deputy General Manager and has worked at the Authority and its predecessor agency for 14 years. Gregory M. Ellis, General Manager submitted his resignation to the board effective October 4, 2004. At that time, Mr. Ellis will serve as a consultant to the Authority through December 31, 2004.

Authority directors also received a report from Mr. Gene Dawson, Pape-Dawson Engineers, on the recommendations of the Authority's Water Quality Advisory Task Force. Mr. Dawson served as a member of the water quality task force appointed by the Authority in November 2003. The recommendations encompass several broad categories to protect the water quality of the Edwards Aquifer and include research, education, and regulation. The board will study these recommendations and consider them as new studies are initiated and future rules are promulgated.

In other business, Authority directors approved twenty-one initial regular permits representing approximately 8,200 acre-feet of Edwards groundwater. Ten of these permits were for applicants who had previously filed protests on their proposed permits. After further review of the applicants' files, all parties agreed the applicants provided additional documentation to substantiate their claims for more Edwards groundwater than originally proposed by staff. The board also denied one permit application. To date, the Authority has issued 779 Initial Regular Permit applications representing 523,570 acre-feet of Edwards Aquifer groundwater withdrawal rights, and denied 199 permit applications. Approximately 116 permit applications remain pending final action.

Authority directors also voted to deny the permit application of Mr. Glenn & Mrs. JoLynn Bragg and grant the initial regular permit applications for Mr. Glen W. Morgan and Ms. Charlotte Woodley. Action on these applications was based on recommendations received from the State Office of Administrative Hearings. The Bragg's permit application was denied because it was determined that the applicants did not own a well that withdrew and beneficially used groundwater from the Edwards Aquifer during the historical period, (June 1, 1972 through May 31, 1993). The permit applications for Mr. Glenn W. Morgan and Ms. Charlotte Woodley were granted because the administrative law judge found their applications met all the requirements entitling them to an initial regular permit. This action by the board represents the judicial authority granted to it by the Texas Legislature. Each applicant may appeal the board's decision to state district court.

Lastly, the board approved a \$250,000 contract with the Witte Museum to fund the Edwards Aquifer Simulation Theatre. The theatre will provide a real-time 3-D immersive experience of a journey through the Edwards Aquifer. The theatre, part of the Witte Water Works exhibit, is scheduled to open in March 2005.



Edwards Aquifer Optimization Program Update

by John Hoyt, Program Manager – Aquifer Science

The basic description and purpose of the Edwards Aquifer Optimization Program (EAOP) is repeated in the following paragraph to provide background information for new readers and to provide a reference for the regular reader. Subsequent paragraphs provide information relevant to the specific report month.

The Edwards Aquifer Authority (the Authority) has undertaken the Edwards Aquifer Optimization Program (EAOP), a comprehensive program for the study and management of the Edwards Aquifer. The EAOP includes a series of seventeen interrelated, mission-directed biologic and hydrogeologic research studies known as the Optimization Technical Studies, (OTS). The OTS are designed to evaluate potential technical options for increasing the amount of water stored in the Edwards Aquifer and identify various methods for optimizing the amount of water available for withdrawal. Data and information obtained from the OTS will provide aquifer managers with the tools necessary to make scientifically-sound decisions to benefit aquifer users and preserve the environment supported by the aquifer, including the Comal and San Marcos Springs and downstream aquatic habitats.

In September 2004, the Research and Technology (R&T) Committee voted to approve one OTS-related contract item and received reports on two OTS-related items. In September, the board of directors voted to approve one OTS-related contract item. These OTS-related items are:

- In September, the R&T Committee received a presentation regarding the Phase I report for the analysis of recharge and recirculation (R&R). R&R is the concept of an integrated and coordinated approach to water management that combines groundwater and surface water sources and storage units. Todd Engineers of Emeryville, California is performing the analysis as part of a four-phase project. Phase I included six tasks conducted to define R&R alternatives. A draft computer model of the Edwards Aquifer that is under construction by the United States Geological Survey (USGS) using the MODFLOW program served as the primary analytical tool for Phase I. Using the draft MODFLOW model, the Contractor simulated artificial recharge events at two locations to demonstrate how water is stored in the aquifer. For Phase II, the contractor recommends simulating various recharge scenarios discussed in South Central Texas Regional Water Planning Group (SCTRWPG) documents to better understand the possible benefits of R&R.
- Also in September, the R&T Committee voted to recommend the board approve a Phase II scope of work and budget for the analysis of R&R. Contract terms indicate that the scope of work and budget for each Phase of the R&R analysis require board approval. Phase II, if approved by the board, will consist of modeling numerous recharge scenarios to determine scenarios that have the maximum benefit on aquifer water levels and springflows.
- Also in September, the R&T Committee received a presentation on a study titled: "Assessment of Factors Influencing Texas wild-rice (*Zizania texana*) Sexual and Asexual Reproduction." The study was performed by the U.S. Fish and Wildlife Service, San Marcos National Fish Hatchery and Technology Center in San Marcos. New information was developed regarding the reproductive biology of the species including information on pollen viability and dispersal, seed production and quality, ideal stand density, and asexual output.
- In September, the board approved a one-year renewal for a contract for tracer testing, stormwater monitoring, and water sampling. The contract is a component of the Edwards Aquifer focused flowpath studies. Under the contract renewal, George Veni and Associates will continue to perform tracer testing and related sampling for studies initiated during year-one of the contract at San Marcos, Hueco, and Comal springs and in northern Bexar County.

In addition to the OTS-related items discussed above, the following OTS studies are currently underway or have been completed:

Biologic Studies

- Texas wild-rice reproduction (**completed**)
- Comprehensive and Critical Period Monitoring Program to Evaluate the Effects of Variable Flow on Biological Resources in the Comal and San Marcos Springs Ecosystems.

(continue on next page)

Edwards Aquifer Optimization Program Update (continue)

by John Hoyt, Program Manager – Aquifer Science

- Cagle's Map Turtle instream flow and habitat requirements (**completed**)

Flowpath/Modeling Studies

- Edwards Aquifer computer model development - MODFLOW
- Estimation of hydraulic parameters for the Edwards Aquifer management model - MODFLOW (**completed**)
- Development of management modules for the Edwards Aquifer MODFLOW model
- Synoptic water level measurement events and well surveying to support the Edwards Aquifer MODFLOW model.
- Karst aquifer modeling research (AWWARF study)
- Edwards Aquifer freshwater/saline water interface studies
- North Medina County Flow Path Study - Hydrologic budget analysis of Medina Lake and Diversion Lake
- North Medina County Flow Path Study - Helicopter electromagnetic survey in the vicinity of Seco Sinkhole (**completed**)
- North Bexar County Flow Path Study - Analysis of structural controls on the Edwards and Trinity Aquifers interface in the Camp Bullis Quadrangle and surrounding area (**completed**)
- North Bexar County Flow Path Study - Analysis of structural controls on the Edwards and Trinity Aquifers interface in the Helotes Quadrangle.
- North Bexar County Flow Path Study - Helicopter electromagnetic survey in the vicinity of Camp Bullis
- Tracer testing of aquifer flowpaths at Comal and San Marcos springs.
- Leona Formation geophysical survey (**completed**)
- Development of updated methods for calculating recharge to the Edwards Aquifer (pilot models for the Blanco and Nueces river basins, recharge area, **completed**)
- Statistical Analysis of Hydrologic Data (**completed**)
- Edwards Aquifer fracture/conduit study (**completed**)

Recharge Enhancement Studies

- Range management - paired watershed study at Honey Creek and Government Canyon State Natural areas
- Range management - augmenting aquifer recharge through brush management
- Analysis of recharge and recirculation (**Phase I completed**)
- Evaluation of augmentation methodologies in support of in-situ refugia at Comal and San Marcos springs (**completed**)

If you have questions regarding the studies listed above, please call John Hoyt, P.G., Program Manager – Aquifer Science.

Initial Regular Permits

by Steven D. Walthour, Program Development

In September, Authority directors granted eleven groundwater withdrawal permits representing approximately 5603.216 acre-feet of Edwards Aquifer groundwater withdrawal rights and denied one permit application. The board also approved agreed final orders and permits for nine applicants representing approximately 2259.967 acre-feet of Edwards groundwater.

In addition, Authority directors concurred with the opinion of the State Office of Administrative Hearings, Administrative Law Judges' proposal for decisions, denied one-permit application, and granted two others. These Initial Regular Permits represent approximately 1182.400 acre-feet of Edwards groundwater.

To date the Authority has issued final decisions on 1003 Initial Regular Permit applications representing approximately 92% of all applications filed with the Authority. The Authority has granted 802 permits and denied 201 permit applications representing a total of 532,615 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights. Approximately 90 permit applications remain, representing approximately 39,247 acre-feet of proposed Edwards's groundwater withdrawal rights.

For information regarding this program, contact Robert Burns, Permits Coordinator.

Real-time Precipitation Gauging System

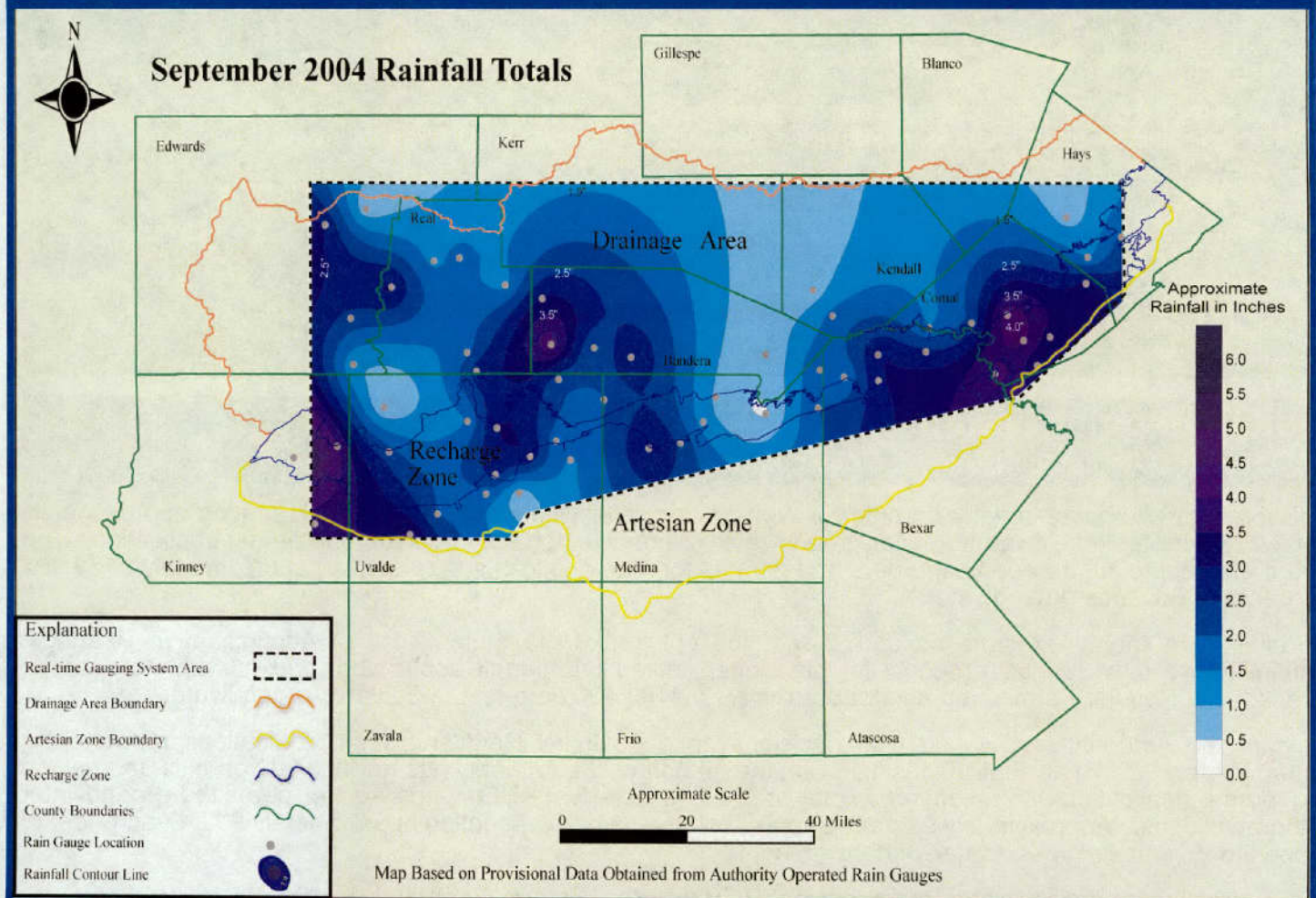
by Earl Parker, Program Manager – Investigations and Monitoring

The Authority operates 58 "real-time" precipitation gauges that transmit data to the Authority office every 6 minutes. The rain gauges are generally located over the Edwards Aquifer Recharge Zone and Drainage Area. Acquired data is used in aquifer recharge calculations, precipitation enhancement program evaluations, and a variety of research projects.

The September 2004 rainfall totals map, as recorded by the real-time gauging system, indicated moderate regional precipitation was recorded over the gauging system area. For generally the third month in a row, rainfall measurements were below normal as recorded at the official National Weather Service stations at Uvalde, Hondo, San Antonio, New Braunfels and San Marcos; however, Authority gauging system data indicates more significant rain occurred within and north of the Edwards Aquifer recharge zone. Average rainfall this month measured at 2.2 inches (as compared to 2.6 inches in August) with the highest measurement of 6.6 inches recorded in eastern Kinney County. Rainfall totals exceeding 3 inches were recorded over large parts of northeastern Bexar and central Comal counties, western Bandera County, and eastern Kinney County. Only a few small areas reported less than 1 inch of precipitation in September; these areas included north-western Uvalde County, northeastern Medina County and eastern Bandera County. None of the recording stations measured zero rainfall this month

If you have questions regarding the Authority's real-time precipitation gauging system, please contact Earl Parker, Program Manager – Investigations and Monitoring.

September 2004 Rainfall Totals



Groundwater Conservation Plan

by Rick Illgner, Program Manager – Groundwater Management Strategies

In 2004, the Edwards Aquifer Authority (the Authority) amended the Groundwater Conservation Plans (GCP) to reflect changes in EDWARDS AQUIFER AUTHORITY RULES ch. 715 (Comprehensive Water Management Plan Implementation), subch C (relating to Groundwater Conservation and Reuse Rules, and the Groundwater Conservation Plan requirements) adopted in 2003.

The Authority has been receiving GCPs since March (for municipal users). One of the changes in the 2003 rules was excluding irrigators that have an on-farm application efficiency of 60% from submitting a GCP. Irrigation Assessments Forms were distributed to irrigation applicants in order to assist the user in determining their current irrigation application efficiency and also to determine if a groundwater conservation plan is necessary. Irrigators that do not meet a minimum of 60% "on farm" irrigation efficiency will be required to submit a groundwater conservation plan.

On September 9, Authority staff conducted two conservation workshops for irrigators at the Uvalde Civic Center and the Braden Keller Community Center in Castroville. At the workshops, irrigation users received instructions on how to determine "on-farm" irrigation efficiency using the Agricultural Irrigation Assessment Form and instructions on completing and submitting a Groundwater Conservation Plan. Authority staff is currently receiving both Agricultural Irrigation Assessment Forms and Conservation Plans for irrigation users. The deadline for applicants to submit an Irrigation Assessment form and/or a Groundwater Conservation Plan was Thursday, September 30, 2004.

For more information contact Javier Hernandez, Conservation Coordinator.

Habitat Conservation Plan

by Rick Illgner, Program Manager – Groundwater Management Strategies

In 1999, the Authority began developing a Habitat Conservation Plan (HCP) to provide for "Take" of endangered or threatened species at Comal and San Marcos springs and associated ecosystems incidental to otherwise lawful activities. The HCP will also include measures to adequately minimize and mitigate the effects of any incidental "Take." The HCP is divided into two phases. Phase 1, data collection and analysis and Phase 2, development of a draft HCP.

In September 2004, Authority directors accepted the revised Draft Habitat Conservation Plan (HCP) and released it for public comment. The preferred management alternative in the revised HCP includes:

- Withdrawal limit through December 31, 2007 set at 450,000 acre/ft per annum.
- Additional withdrawals will be allowed for interruptible and uninterruptible groundwater rights and for term permits according to rules adopted by the Authority and instructions specified in the Act.
- Demand management/critical period pumping will not exceed 350,000 acre-feet per year if the worst drought conditions (Stage IV) are in effect for an entire calendar year.
- The alternative includes a high number of mitigation measures.

The HCP is available for public comment through December 3, 2004 and four public hearings are scheduled throughout the region, including Victoria for members of the public to come learn more about the HCP. Meeting dates are included in the calendar section of this report. The Authority will provide a written response to all written comments received and submit them to the board for consideration at their January 2005 board meeting. Once approved by the board the revised draft HCP, will be submitted to the U.S. Fish & Wildlife Service for formal review and consideration.

For more information on the Authority's draft HCP please contact Bob Hall, Research Coordinator.

Employee News

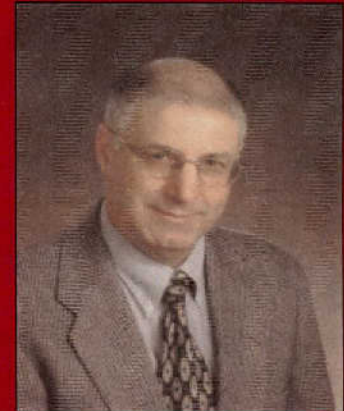
by Margaret Garcia, Program Manager – Public Affairs

In September, three employees celebrated anniversaries, Yolanda Sanchez, John Hoyt and Margaret Garcia:

Yolanda Sanchez celebrated her 20-year anniversary at the Authority. She joined the Authority on September 10, 1984. Yolie came to the Authority from the non-profit organization, Any Baby Can, where she served as the Executive Assistant to the President. Yolie currently serves as Secretary to the Investigations and Monitoring Team and performs various duties including managing the initial regular permit database and working closely with the Authority's field representatives.



John Hoyt celebrated 5 years of service to the Authority on September 7, 2004. John previously worked for the Edwards Underground Water District for 6 ½ years. Currently, John serves as Program Manager - Aquifer Science and is responsible for management of the Aquifer Science Team, the optimization technical studies, hydrologic data reporting, land acquisition projects, administering the above ground and underground storage tank rules, and hydrologic data reporting.



John also serves as the liaison to the Research and Technology Committee. John holds a Bachelor of Science degree in geology from the University of Texas at San Antonio and has also performed graduate studies in hydrogeology at UTSA. He is a registered professional geologist in Texas and in Tennessee and is a member of the National Groundwater Association.

Margaret Garcia also joined the Authority on September 7, 1999 and celebrated her 5 year anniversary at the Authority. She came to the Authority from KRIV TV in Houston where she served as the Community Affairs Director for 12 years. Prior to moving to Houston Margaret worked as a producer for KMOL TV now WOAI TV for two years.



Currently, Margaret serves as Program Manager - Public Affairs and is responsible for the management of the Public Affairs Team, as well as the Authority's, public information, customer service and school education programs. She also serves as the liaison to the Legislative Committee.

Margaret holds a Bachelor of Journalism from the University of Texas at Austin and is a member of the Public Relations Society of America and the San Antonio Association of Hispanic Journalists.



Aquifer Management Fees

by Brock Curry, Program Manager – Administration

On January 13, staff issued 294 non-agricultural aquifer management fee invoices based on authorized use for 2004. These invoices were based on an aquifer management fee rate of \$29.00 per acre-foot. As of September 30, the Authority has collected \$7,164,395 or 76% of the budgeted amount. Aquifer management fees totaling \$25,000 from 15 pumpers are considered delinquent.

Aquifer management fees for 2003 agricultural use were due January 31. As set forth in the Edwards Aquifer Authority Act, the aquifer management fee rate for agricultural users is \$2.00 per acre-foot. As of September 30, the Authority has received reports from 657 agricultural users totaling 82,862 acre-feet of groundwater used in 2003. To date, the Authority has collected \$165,711 in aquifer management fee revenue or 83% of the amount budgeted.

If you have questions regarding the aquifer management fees, please call Brock Curry, Program Manager – Administration.

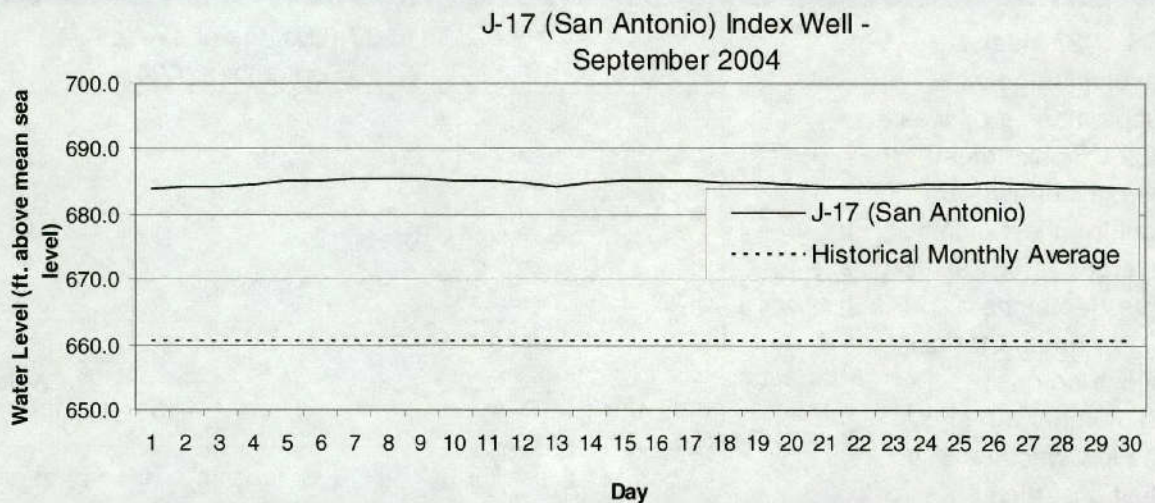
Monthly Water Level & Springflow Report

Aquifer levels can be viewed on the Authority's web site at www.edwardsaquifer.org

J-17 (San Antonio) Index Well – September 2004

The J-17 index well level average in September 2004 was 684.7' above mean sea level (msl) - up 0.2 feet from last month's average of 684.5' msl. The September 2004 high was 685.5' (September 8) and the low was 684.0' (September 1), a range of 1.5 feet.

The September 2004 average is 24.3 feet above the J-17 historical monthly average for September of 660.4' msl.

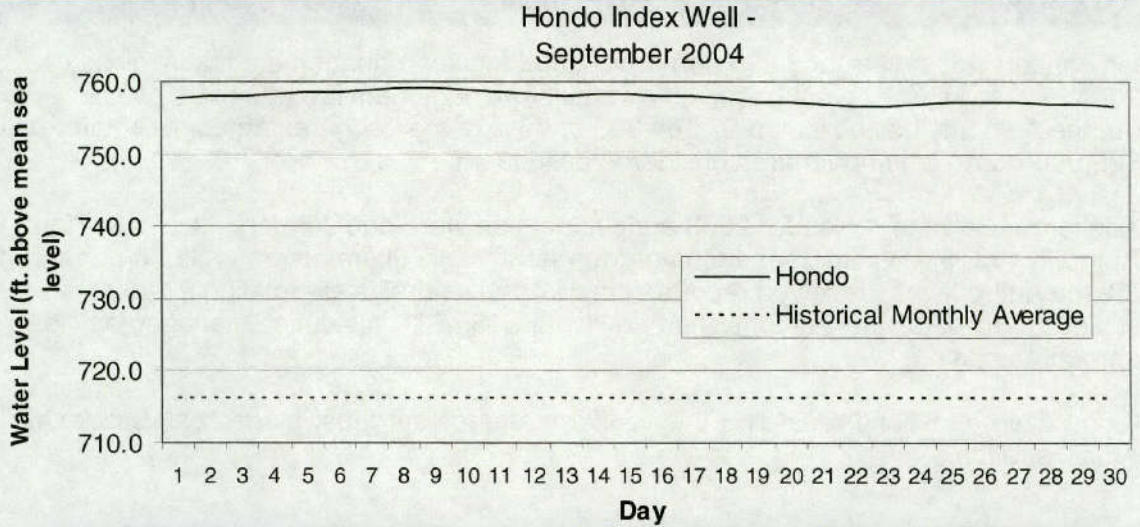


J-17 (San Antonio) Index Well – Combined Historic Record for Two Wells: 1932-2003

	September 2004	September 2003	Historical Record	
Maximum	685.5	684.7	June 14, 1992	703.3
Minimum	684.0	677.8	August 17, 1956	612.5
Average	684.7	681.8	September (1932-2003)	660.4

Hondo Index Well – September 2004

The Hondo index well level average in September 2004 was 757.8' above mean sea level (msl) - up 1.0 foot from last month's average of 756.8' msl. The September 2004 high was 759.1' (September 8) and the low was 756.5' (September 23), a range of 2.6 feet.

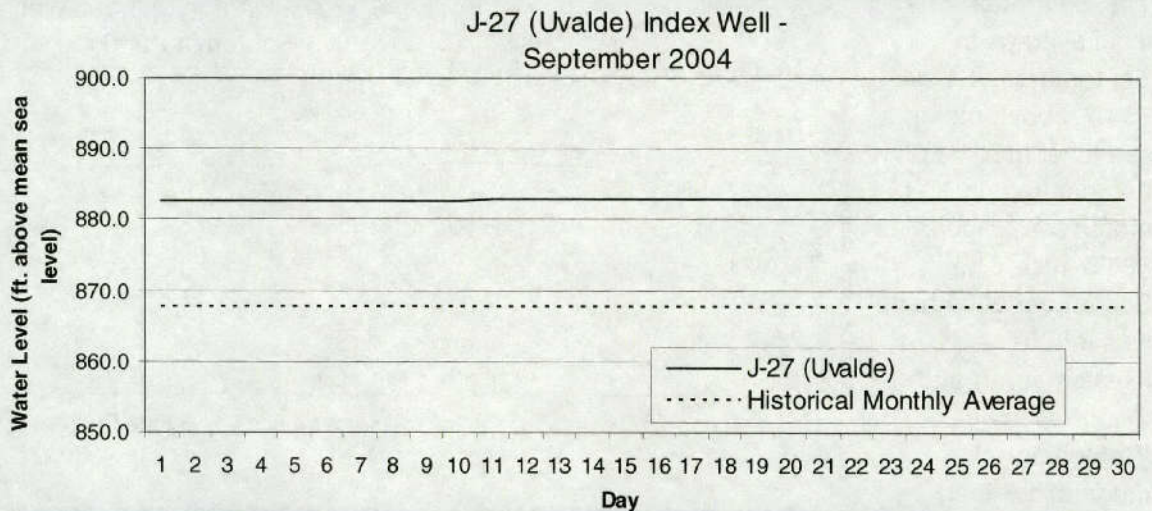


The September 2004 average is 41.7 feet above the Hondo Well historical monthly average for September of 716.1' msl.

Hondo Index Well – Historic Record: 1986-2003				
	September 2004	September 2003	Historical Record	
Maximum	759.1	743.3	June 14, 1992	779.0
Minimum	756.5	736.2	June 29, 1990	651.0
Average	757.8	740.2	September (1986-2003)	712.6

J-27 (Uvalde) Index Well – September 2004

The J-27 index well level average in September 2004 was 882.9' above mean sea level (msl) - up 1.0 foot from last month's average of 881.9' msl. The September 2004 high was 883.1' (last occurring on September 30) and the low was 882.6' (last occurring on September 4), a range of 0.5 feet.



The September 2004 average is 15.3 feet above the J-27 historical monthly average for September of 867.6' msl.

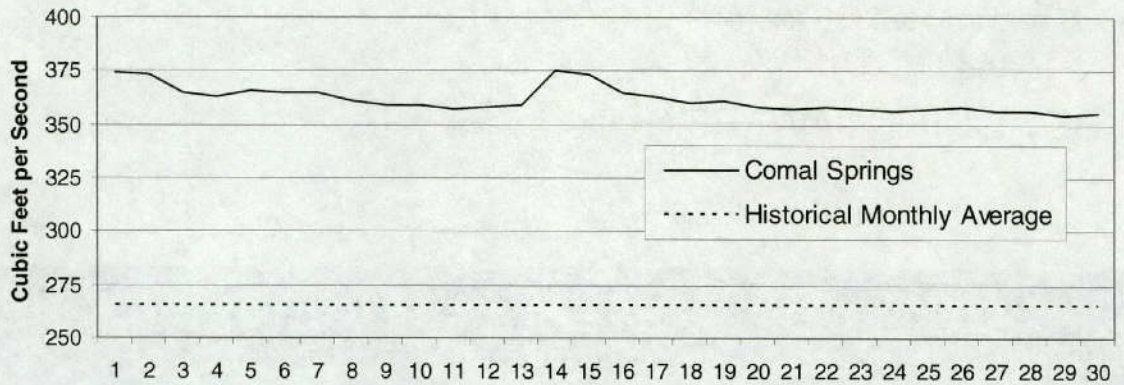
J-27 (Uvalde) Index Well – Historic Record: 1940-2003				
	September 2004	September 2003	Historical Record	
Maximum	883.1	879.4	June 15, 1987	889.0
Minimum	882.6	878.9	April 13, 1957	811.0
Average	882.9	879.1	September (1940-2003)	867.6

Comal Springs – September 2004

Comal springflow averaged 361 cubic feet per second (cfs) in September 2004 - down 15 cfs from last month's average of 376 cfs. Comal springflow ranged from a maximum of 375 cfs (September 14) to a minimum of 354 cfs (September 29), a range of 21 cfs.

The September 2004 average was 95.7 cfs above the historical monthly average of 265.3 cfs.

Comal Springs -
September 2004



Comal Springs Historic Record: 1927-2003

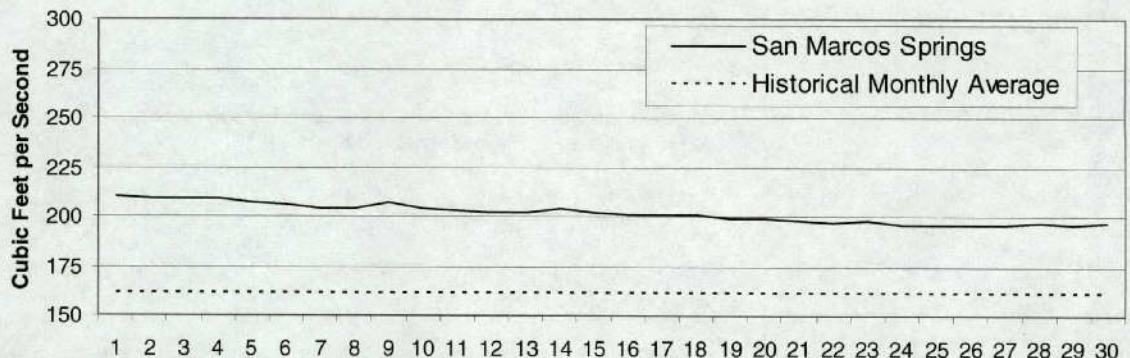
	September 2004	September 2003	Historical Record	
Maximum	375	389	October 14, 1973	534.0
Minimum	354	354	August 8, 1956	0.0
Average	361	375	September (1927-2003)	265.3

San Marcos Springs – September 2004

San Marcos springflow averaged 202 cfs in September 2004 - down 25 cfs from last month's average of 227 cfs. San Marcos springflow ranged from a maximum of 210 cfs (September 1) to a minimum of 196 cfs (last occurring on September 29), a range of 14.0 cfs.

The September 2004 average was 41.2 cfs above the historical monthly average of 160.8 cfs.

San Marcos Springs -
September 2004



San Marcos Springs Historic Record: 1956-2003

	September 2004	September 2003	Historical Record	
Maximum	210	203	March 12, 1992	451.0
Minimum	196	182	August 15, 1956	46.0
Average	202	192	September (1956-2003)	160.8



**EDWARDS AQUIFER
AUTHORITY**

1615 N. St. Mary's Street
San Antonio, Texas 78215

210.222.2204 or 1.800.292.1047
www.edwardsaquifer.org

BE AQUIFER AWARE

CALENDAR OF EVENTS FOR OCTOBER & NOVEMBER

OCTOBER

Tues. 10/12	3 PM	Board Meeting, Edwards Aquifer Authority, Conference Center, 1615 N. St. Mary's St., San Antonio, TX
Wed. 10/13	6 PM	2005 Proposed Budget Public Hearing, EAA Conference Center, 1615 N. St. Mary's St., San Antonio, TX
Mon. 10/18	6 PM	2005 Proposed Budget Public Hearing, San Marcos Activity Center, 501 E. Hopkins, San Marcos, TX
Wed. 10/20	6 PM	2005 Proposed Budget Public Hearing, Hondo Community Center, 1014 18th St., Hondo, TX
Tues. 10/26	11 AM 1 PM 2 PM	Aquifer Management Planning Committee Legislative Committee Permits Committee
Wed. 10/27	11AM 2 PM	Finance/Administrative Committee R&T Committee

NOVEMBER

Mon. 11/1	6 PM	Draft Habitat Conservation Plan Public Hearing, 700 Main, Rm 204, Victoria, TX
Mon. 11/8	12 PM	Executive Committee
Mon. 11/8	6 PM	Draft Habitat Conservation Plan Public Hearing, Commissioner's Court, 199 Main Plaza, New Braunfels, TX
Tues. 11/9	3 PM	Board Meeting, Edwards Aquifer Authority, Conference Center, 1615 N. St. Mary's St., San Antonio, TX
Tues. 11/16	6 PM	Draft Habitat Conservation Plan Public Hearing, Uvalde Civic Center, 300 E. Main St., Uvalde, TX
Wed. 11/17	6 PM	Draft Habitat Conservation Plan Public Hearing, Edwards Aquifer Authority, 1615 N. St. Mary's St., San Antonio, TX
Tues. 11/23	11 AM 1 PM 2 PM	Aquifer Management Planning Committee Legislative Committee Permits Committee
Wed. 11/24	11 AM 2 PM	Finance/Administrative Committee R&T Committee

Authority meeting times & dates are subject to change.

Visit our website at www.edwardsaquifer.org for up-to-the minute information on meeting times and dates.