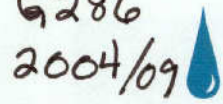


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EDWARDS AQUIFER AUTHORITY

GENERAL MANAGER'S REPORT

September 2004

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Editor: Margaret Garcia

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The General Manager's Report
is published monthly.

Our Mission:

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



Message from General Manager Gregory M. Ellis

Announcing my resignation as General Manager was very difficult, but saying good-bye is even harder. I know that I will miss the Board, the staff and the wonderful people of this region. I have great faith the agency will continue to advance and address the important water issues facing this region.

I am very proud of everything the agency has accomplished during my tenure. Since I joined the Authority in 1997, we have achieved many milestones, including final actions on 978 groundwater withdrawal permit applications, implementing a region-wide Demand Management/Critical Period Management program, and prohibiting installation of new petroleum storage tanks on the Edwards Aquifer Recharge Zone. I have also enjoyed my service on the South Central Texas Regional Water Planning Group.

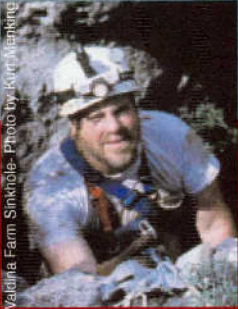
The staff at the Authority is a wonderful group of people. I have truly enjoyed my experience with the Authority both personally and professionally, and I appreciate the kind words and appreciation everyone has shown me over the years. I leave with the knowledge that this organization has a strong and dedicated professional staff capable of accomplishing any goal set for them.

Sincerely,

Greg Ellis

Government Canyon State Natural Area

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



The area surrounding Government Canyon is a wild and rugged landscape typical of the Balcones Escarpment in the San Antonio area. The land has a long history of use by American Indians, Spaniards, U.S. military, and ranchers. The main transportation route between Fort Sam Houston and military forts in the west passed through Government Canyon.

In the 1970's, the property was purchased for a projected community development of as many as 80,000. However, during the economic downturn in the early 1990's, the property was taken over by the Resolution Trust Corporation for disposal. A community effort composed of more than 45 civic and environmental groups came together to form the Government Canyon Coalition to encourage the purchase of the property. The Trust for Public Land was able to remove the property from the auction block.

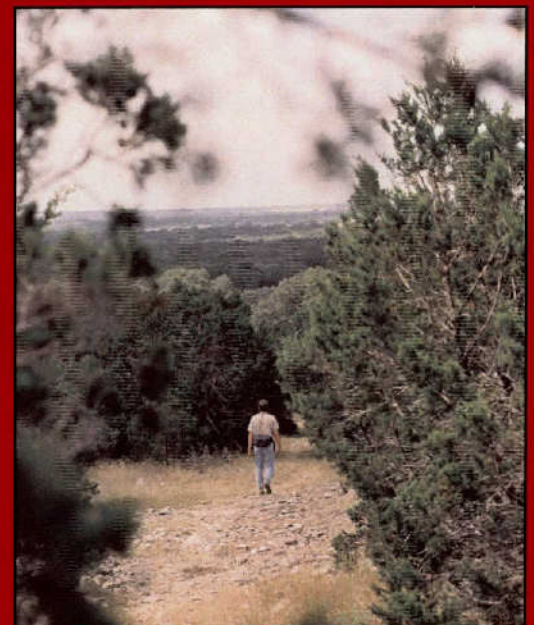
In 1993, Texas Parks and Wildlife, was able to purchase the property in association with the Edwards Aquifer Authority (formerly Edwards Underground Water District), and San Antonio Water System (SAWS). The Government Canyon State Natural began with the purchase of approximately 4,717 acres of land for \$2 million. This initial purchase was intended to set aside land over the Edwards Aquifer Recharge Zone and provide a recreational and educational opportunity to the public. Texas Parks and Wildlife acquired an additional 1,121 acres in 1996 through partnerships with the City of San Antonio and Bexar County and has been able to acquire additional land to expand the preserve to over 8,200 acres in 2004. The property is now managed by Texas Parks and Wildlife with the Authority, SAWS, and the City of San Antonio holding conservation easements.

Government Canyon lays claim to being one of the largest areas in the country set aside as a karst preserve with the intent of protecting water quality and is one of the largest natural areas located within the city limits of a large urban area. Over the last several years, under the watchful eye of Deirdre Hisler, Natural Area Manager, the natural area has progressed with implementation of its master plan. The master plan limits new park facilities to the mostly 700-acre tract area located off the Edwards Aquifer Recharge Zone. The master plan calls for the development of an interpretive-visitor center including the park headquarters exhibit rooms and pavilion. There will also be 30 picnic sites, a camping area with 40 walk-in campsites and two group campsites. Primitive camping, accessible through backpacking will only be allowed in the Balcones Canyonlands, which includes a riparian corridor along Government Canyon Creek. There will be no recreational vehicle campsites planned.

Overall, more than 41 miles of trails will be developed in the preserve which will allow access to hikers, backpackers, and even mountain bikers. Equestrians will be allowed access to 9-miles of trails located off the recharge zone.

Texas Parks and Wildlife has done an excellent job in stretching limited state dollars to open the preserve by working with volunteer groups such as the Government Canyon Natural History Association, the Texas Speleological Association, the Bexar Grotto of the National Speleological Society, Sierra Club, Texas Master Naturalists, San Antonio Audubon Society, and various colleges and universities. These organizations, along with others, have helped to document natural and cultural resources, build trails, provide trail patrols, and give feedback to natural area staff.

The preserve is open on a limited basis and is expected to officially open in mid to late 2005. The preserve has hosted numerous educational workshops and programs including university level karst geology courses, art and ethnobotany classes, Leave No Trace camping training, rappelling and rope ascending classes for the caving community, volunteer research opportunities, etc.



(continue on next page)

Government Canyon State Natural Area (continue)

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

On October 16, Government Canyon will be the site of the 2004 Volksmarch, a trail walk through the canyon sponsored by the Texas Wanderers, Government Canyon State Natural Area, and Government Canyon National History Association. We encourage everyone who is interested in this remarkable urban natural area to participate and get a feel of great things to come. For information on the Volksmarch, contact Lyn Ward at 210.651.6536, (lward10km@aol.com or Gerald Kamicka at 210.658.2160 (geraldk726@aol.com).



Authority Directors Deny Permit Applications

by Margaret Garcia, Program Manager – Public Affairs

At their regular monthly meeting held Tuesday, August 10, 2004, the Edwards Aquifer Authority Board of Directors voted to deny the permit applications of Mr. Robert J. Schulte and Peavy Ranch.

The applications were denied based on a recommendation received from the State Office of Administrative Hearings. The permit application for Mr. Robert J. Schulte was denied because the well is exempt and does not require a permit. In addition it was determined that the Applicant 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) because the well was not drilled until November 1, 1996. The permit application for Peavy Ranch was denied because it was filed after the December 30, 1996 deadline set forth in the Authority's rules and statute. 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.

Authority directors also approved proposed rules to amend EDWARDS AQUIFER AUTHORITY RULES, including ch. 711 (Groundwater Withdrawals), subchapter C (Exempt Wells). This rule proposes to add another requirement for an existing, otherwise exempt, well in some cases when the ownership of the land on which the well is situated is being transferred. The general manager will now publish these proposed rules for public comment.

In addition, Authority directors approved a contract between the Authority and Southwest Research Institute to study the Edwards Aquifer flow system in Uvalde County. Authority directors also approved an Interlocal Cooperation Agreement between the Authority and the San Antonio Water System to fund the installation of new monitoring wells and to collect data from existing monitoring wells. The purpose of these wells is to evaluate and monitor the position of the Edwards Aquifer freshwater/saline water interface. Both studies are part of the Edwards Aquifer Optimization Program, a comprehensive program for the study and management of the Edwards Aquifer.

In other action, directors approved fourteen initial regular permits representing approximately 597 acre-feet of Edwards groundwater. Three 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. To date, the Authority has issued final decisions on 978 Initial Regular Permit applications representing, approximately 89% of all applications filed with the Authority. The Authority has granted 779 permits representing a total of 523,570 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights, and denied 199 permit applications. Approximately 115 permit applications representing approximately 47,075 acre-feet of proposed Edwards groundwater withdrawal rights remain pending final action.

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 August 2004, the Authority directors considered two OTS-related items and the Research and Technology (R&T) Committee considered one OTS-related item. In

- The board approved a contract between the Authority and Southwest Research Institute (SwRI®) to further characterize the Edwards Aquifer flow system in Uvalde County. The study is a focused flowpath project that will lead to a better understanding of the effect of the "Knippa Gap" on flow within the Edwards Aquifer. An improved conceptual model regarding the hydrologic budgets within Uvalde County including the contribution of the Uvalde Pool to the San Antonio Pool will be the main product of the study.
- The board approved an interlocal cooperation agreement between the Authority and San Antonio Water System (SAWS) to continue a long-term study of the freshwater/saline water interface of the freshwater Edwards Aquifer system. The purpose of the study is to evaluate and monitor the position of the interface utilizing several monitoring well transects.

(continue on next page)

Edwards Aquifer Optimization Program Update (continue)

by John Hoyt, Program Manager – Aquifer Science

In addition to the OTS-related items, the following 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.
- 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
- 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.

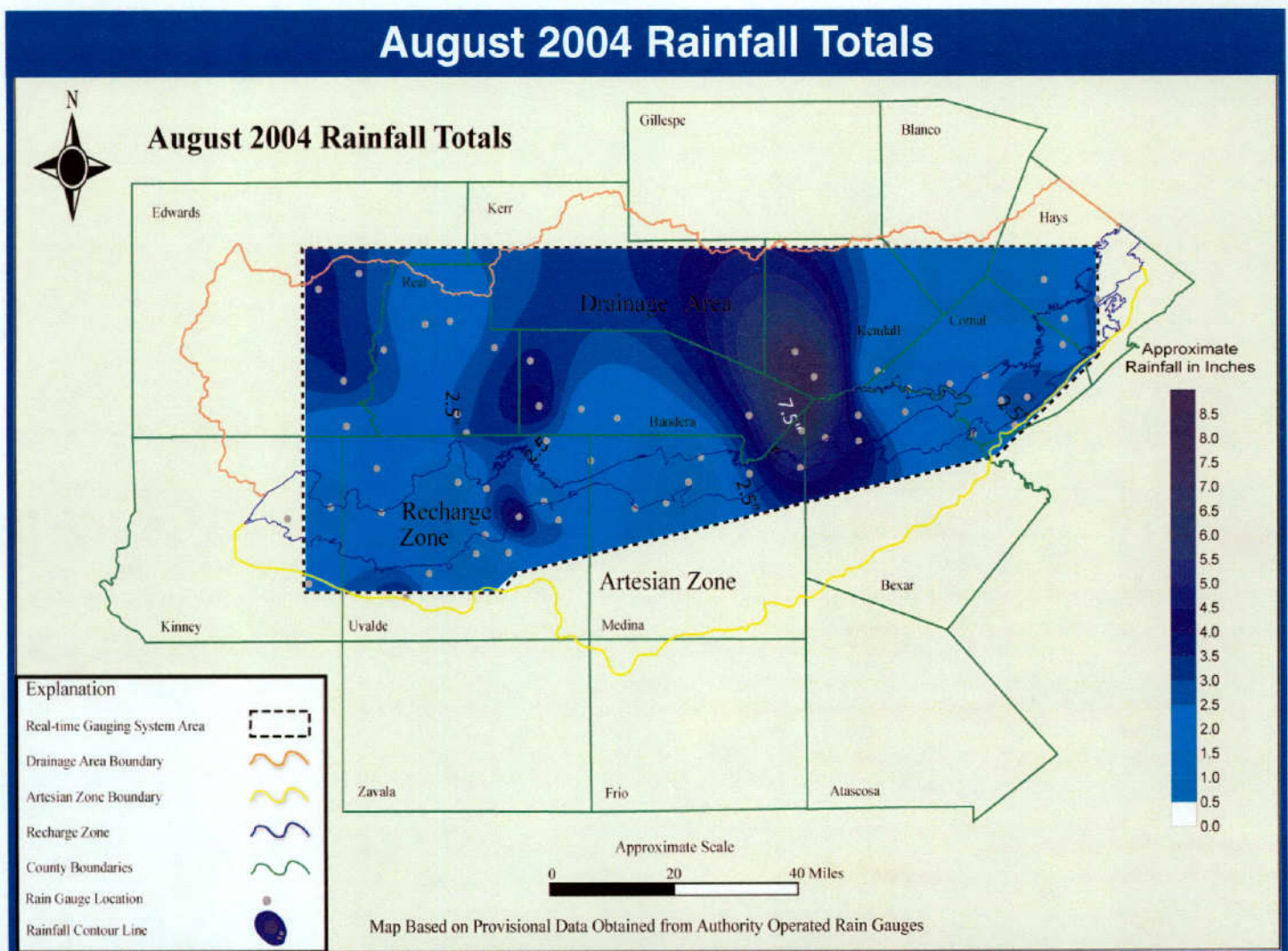
Real-time Precipitation Gauging System

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 August 2004 rainfall totals map, as recorded by the real-time gauging system, indicated moderate regional precipitation was recorded over the gauging system area with several specific locations recording significant amounts of rain. Rainfall measurements in August were once again below normal as recorded at the official National Weather Service stations at Uvalde, Hondo, San Antonio, and San Marcos; however, Authority gauging system data indicates more significant rain occurred in the central and northern portions of the gauging area. Average rainfall this month measured at 2.6 inches (as compared with 1.2 inches in July) with the highest measurements of over 8 inches recorded at two stations in southern Kendall County and one station in northeast Medina County. Rainfall totals exceeding 4 inches were recorded over parts of north-western Bexar and northeastern Medina counties, western Bandera County, and eastern Uvalde County. Several large areas reported less than 1 inch of precipitation in August; these areas include northwest Uvalde County, central Medina County, northern Comal County, and eastern Hays County.

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



Candidates File for EAA Election

by Margaret Garcia, Program Manager – Public Affairs

Ten candidates have applied for a place on the ballot for the Tuesday, November 2, 2004 election to the Edwards Aquifer Authority Board of Directors. Races in District 6 in Bexar County, District 10 in Hays County, and District 14 in Uvalde County are contested. Races in District 2 and District 4 in Bexar County, District 8 in Comal County and District 12 in Medina County are uncontested.

The candidates and the district offices they are seeking are:

District 2	Bexar County	Dr. Levi Jackson, III
District 4	Bexar County	Bonnie Conner
District 6	Bexar County	Gilbert Gallego, Susan K. Hughes
District 8	Comal County	Ramon Chapa, Jr.
District 10	Hays County	W. Kenneth Barnes,
District 12	Medina County	Hunter Schuehle
District 14	Uvalde County	Mario H. Cruz, Joe Parker

The period for filing an application for write-in candidacy closed at 5:00 PM, Wednesday, September 8, 2004. The Authority is contracting with county officials to conduct elections in districts where there are contested races.

Initial Regular Permits

by Steven D. Walthour, Program Development

In August, Authority directors granted eleven groundwater withdrawal permits representing approximately 97,776 acre-feet of Edwards Aquifer groundwater withdrawal rights. The board also approved agreed final orders and permits for three applicants who had previously filed protests on their proposed permits. After further review of the applicant's files, all parties to these contested permit proposals agreed on a proposed permit amount when the applicant provided additional documentation to substantiate their claims for more Edwards groundwater than originally proposed by staff. These agreed final orders represent approximately 499,299 acre-feet of Edwards groundwater. Authority directors also denied two permit applications.

To date the Authority has issued final decisions on 978 Initial Regular Permit applications representing approximately 89% of all applications filed with the Authority. The Authority has granted 779 permits and denied 199 permit applications. The Authority has granted a total of 523,570 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights. Approximately 115 permit applications remain, representing approximately 47,075 acre-feet of proposed Edwards's groundwater withdrawal rights.

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

Well Construction Program

by Rick Illgner, Program Manager – Groundwater Management Strategies

In August, Authority staff issued 15 well construction and well plugging permits. This total includes two Edwards Aquifer domestic well permits, one Edwards Aquifer municipal well permit, four Edwards Aquifer well plugging permits, and eight "drill through" the Edwards Aquifer permits.

For more information regarding the Authority's Well Construction Program contact Jeff Robinson, Regulatory Programs Coordinator.

Authority's Well Registration Campaign Now in Progress

by Rick Illgner, Program Manager –
Groundwater Management Strategies



The Edwards Aquifer Authority (the Authority) has kicked off its well registration campaign. The "Be Well Informed" campaign will assist well owners within the Authority's eight county region with registering all existing household and/or livestock wells completed in the Edwards Aquifer.

A well owner can register their well over the telephone by simply calling the toll-free number, 1-888-363-6037. A bilingual operator is available 24 hours per day, seven days a week, to assist in the process. Well owners may also register online at www.edwardsaquifer.org. As an added bonus, the Authority will waive the registration fee. In addition, the first 500 registrants will receive a voucher for a free bacteria test for their well water.

The Authority is also locating owners of unregistered, non-permitted Edwards Aquifer water wells with the help of both Geographic Information System (GIS) data and county appraisal rolls. Authority staff will contact anyone who owns land that is likely to have an unregistered Edwards Aquifer water well. If the landowner does not have an Edwards Aquifer well, we ask that the owner still contact the call center so Authority staff can remove their information from the database.

Registering wells is important for several reasons. First registering is essential to proper management of the Edwards Aquifer. Second, registering wells will provide protection for well owners and for the Edwards Aquifer system in the event of contamination. Finally, the Edwards Aquifer Authority Act requires registering wells.

For more information on the "Be Well Informed" campaign contact the Edwards Aquifer Authority's call center at 1-888-363-6037 or complete your registration on-line by visiting the Authority's web site at www.edwardsaquifer.org.

Groundwater Withdrawal Transfers

by Rick Illgner, Program Manager – Groundwater Management Strategies

In August 2004, Authority staff processed 13 partial sales and lease transfers representing 2,465.172 acre-feet in Edwards Aquifer groundwater withdrawal rights. Since the inception of the transfer program, Authority staff has processed 1,087 partial sales and lease transfers representing 199,075.111 acre-feet of groundwater withdrawal rights. Of the 71,087 partial sale and lease transfers completed, only 787 are currently active representing 142,399.175 acre-feet. Active transfers include 126 sub-leased transfers representing 27,978.452 acre-feet. In addition, Authority staff processed seven changes of ownership or miscellaneous transfers representing 3,091.124 acre-feet of Edwards Aquifer groundwater.

Transfer forms are located at the Authority's main office located at 1615 N. St. Mary's Street. For more information, contact Naomi Esquivel, Program Associate.

Aquifer Management Fees

by Brock Curry, Program Manager – Administrative

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 August 31, the Authority has collected \$6,499,308 or 69% 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 August 31, the Authority has received reports from 652 agricultural users totaling 82,801 acre-feet of groundwater used in 2003. To date, the Authority has collected \$165,625 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.

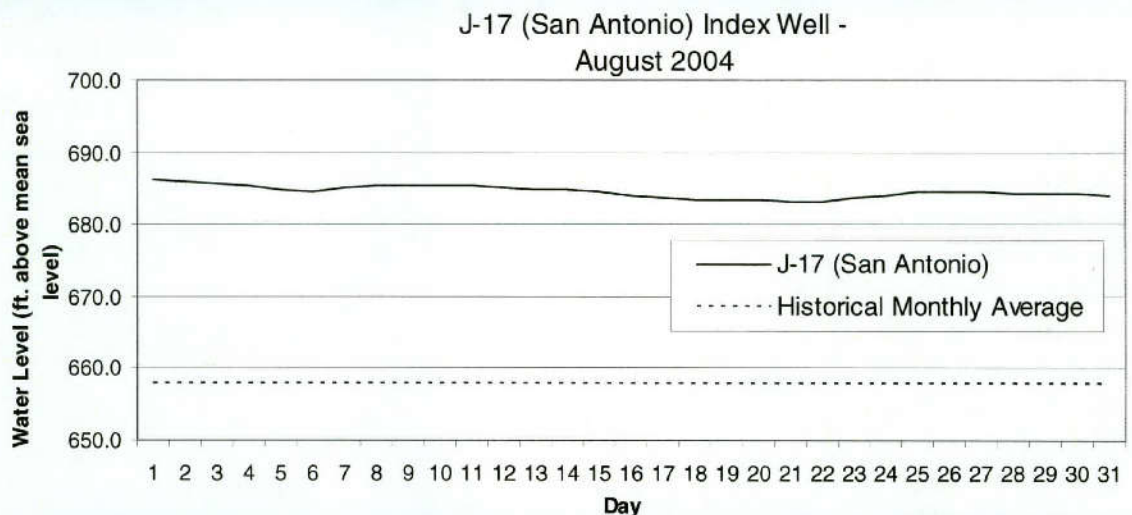
Monthly Water Level & Springflow Report

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

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

The J-17 index well level average in August 2004 was 684.5' above mean sea level (msl) - down 4.6 feet from last month's average of 689.1' msl. The August 2004 high was 686.4' (August 1) and the low was 683.1' (last occurring on August 22), a range of 3.3 feet.

The August 2004 average is 26.7 feet above the J-17 historical monthly average for August of 657.8' msl.



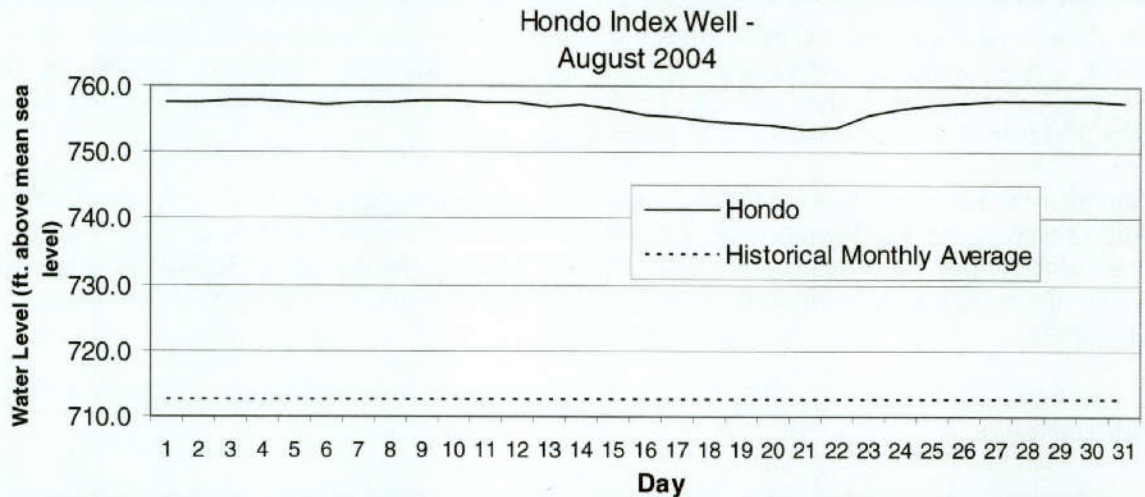
J-17 (San Antonio) Index Well – Combined Historic Record for Two Wells: 1932-2003

	August 2004	August 2003	Historical Record	
Maximum	686.4	681.6	June 14, 1992	703.3
Minimum	683.1	677.1	August 17, 1956	612.5
Average	684.5	679.2	August (1932-2003)	657.8

Hondo Index Well – August 2004

The Hondo index well level average in August 2004 was 756.8' above mean sea level (msl) - down 2.2 feet from last month's average of 759.0' msl. The August 2004 high was 757.9' (last occurring on August 29) and the low was 753.5' (August 21), a range of 4.4 feet.

The August 2004 average is 44.2 feet above the Hondo Well historical monthly average for August of 712.6' msl.



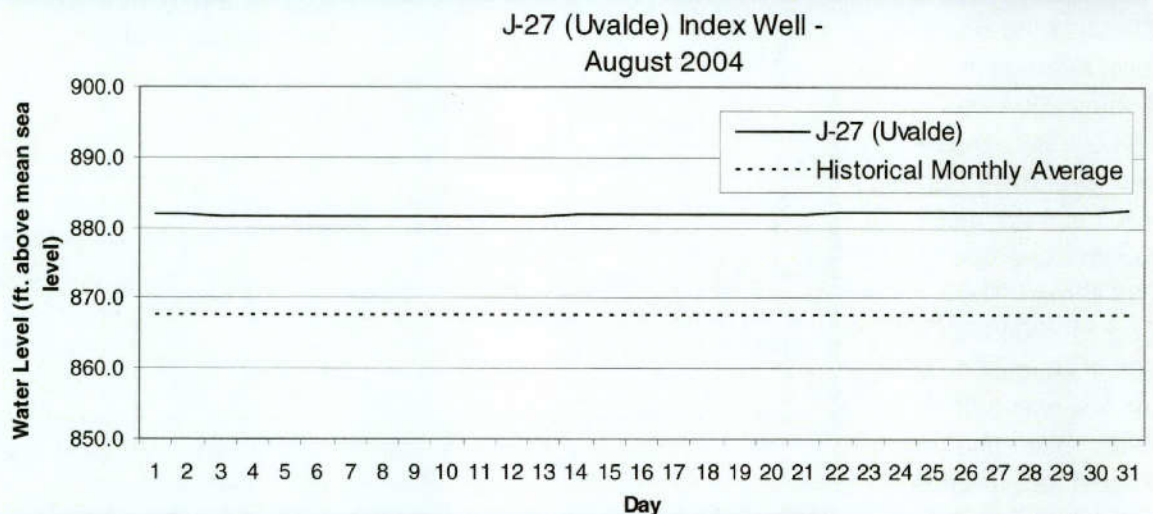
Hondo Index Well – Historic Record: 1986-2003

	August 2004	August 2003	Historical Record	
Maximum	757.9	740.4	June 14, 1992	779.0
Minimum	753.5	735.9	June 29, 1990	651.0
Average	756.8	737.5	August (1986-2003)	712.6

J-27 (Uvalde) Index Well – August 2004

The J-27 index well level average in August 2004 was 881.9' above mean sea level (msl) - up 0.5 feet from last month's average of 881.4' msl. The August 2004 high was 882.4' (last occurring on August 31) and the low was 881.6' (last occurring on August 9), a range of 0.8 feet.

The August 2004 average is 14.5 feet above the J-27 historical monthly average for August of 867.4' msl.



J-27 (Uvalde) Index Well – Historic Record: 1940-2003

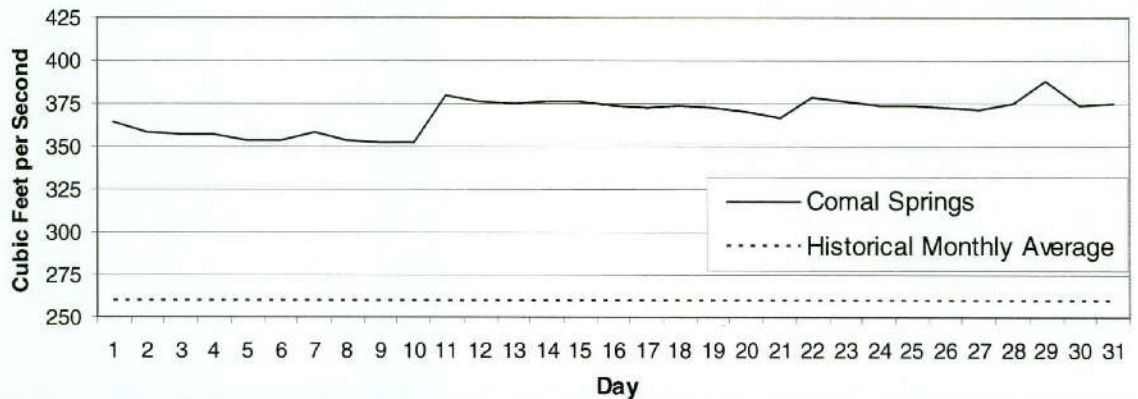
	August 2004	August 2003	Historical Record	
Maximum	882.4	879.1	June 15, 1987	889.0
Minimum	881.6	878.9	April 13, 1957	811.0
Average	881.9	879.0	August (1940-2003)	867.4

Comal Springs – August 2004

Comal springflow averaged 369 cubic feet per second (cfs) in August 2004 - down 12 cfs from last month's average of 381 cfs. Comal springflow ranged from a maximum of 388 cfs (August 29) to a minimum of 352 cfs (last occurring on August 10), a range of 36 cfs.

The August 2004 average was 109.5 cfs above the historical monthly average of 259.5 cfs.

Comal Springs -
August 2004



Comal Springs Historic Record: 1927-2003

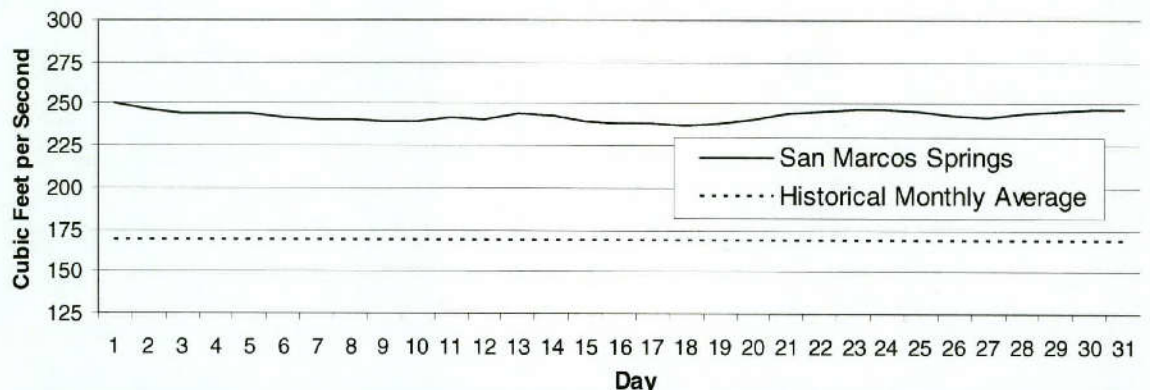
	August 2004	August 2003	Historical Record	
Maximum	388	372	October 14, 1973	534.0
Minimum	352	351	August 8, 1956	0.0
Average	369	362	August (1927-2003)	259.5

San Marcos Springs – August 2004

San Marcos springflow averaged 243 cfs in August 2004 - down 26 cfs from last month's average of 269 cfs. San Marcos springflow ranged from a maximum of 250 cfs (August 1) to a minimum of 237 cfs (August 18), a range of 13.0 cfs.

The August 2004 average was 74.3 cfs above the historical monthly average of 168.7 cfs.

San Marcos Springs -
August 2004



San Marcos Springs Historic Record: 1956-2003

	August 2004	August 2003	Historical Record	
Maximum	250	204	March 12, 1992	451.0
Minimum	237	186	August 15, 1956	46.0
Average	243	194	August (1956-2003)	168.7



EDWARDS AQUIFER
AUTHORITY

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BE AQUIFER AWARE

CALENDAR OF EVENTS FOR SEPTEMBER & OCTOBER

SEPTEMBER

Tues. 9/21	3 PM	Board Meeting, Edwards Aquifer Authority, Conference Center, 1615 N. St. Mary's St., San Antonio, Texas
Tues. 9/28	11 AM 1 PM 2 PM	Aquifer Management Planning Committee Legislative Committee Permits Committee
Wed. 9/29	11 AM 2 PM	Finance/Administrative Committee R&T Committee

OCTOBER

Mon. 10/4	12 PM	Executive Committee
Tues. 10/12	3 PM	Board Meeting, Edwards Aquifer Authority, Conference Center, 1615 N. St. Mary's St., San Antonio, Texas
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

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.