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# EDWARDS AQUIFER AUTHORITY GENERAL MANAGER'S REPORT

August 2003

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Editor: Margaret Garcia

The General Manager's Report  
is published monthly.

**Our Mission:**

*The Authority is committed to  
manage and protect the Edwards  
Aquifer system and work with  
others to ensure the entire region of  
a sustainable, adequate, high quality,  
and cost effective supply of water,  
now, and in the future.*



## 2003 Summer Teacher Workshop

by Margaret Garcia, Program Manager – Public Affairs

In July, the Authority was proud to host the 2003 Summer Teacher Workshop. Seventeen teachers representing school districts in Medina, Bexar, Comal, and Guadalupe counties participated in the two-day workshop which included presentations by Authority staff and a field trip. In addition, the teachers who participated received 12 hours of continuing education credit certified by the Texas State Board of Education.

As the first order of business, Becky Alvarez, Education Coordinator, administered a 20-question pretest to the teachers covering basic information regarding the Authority and the Edwards Aquifer. On the pretest, the teachers answered on average 10 of the 20 questions correctly. After a full day of presentations, videos, and classroom activities, the teachers

(continued on next page)



## 2003 Summer Teacher Workshop *(continued)*

by Margaret Garcia, Program Manager – Public Affairs



answered on average 17 of 20 questions correctly on an identical post test.

Presentations made by Authority staff included information regarding the Authority, the Edwards Aquifer, Authority data collection programs, and the Authority's planning efforts. The teachers also worked through several classroom activities and explored teaching opportunities they can now take back to the classroom. In addition to the presentations and hands on activities, each teacher also received copies of the Authority's educational videos, "A Journey through the Edwards Aquifer" and "The Edwards Aquifer: A Texas Treasure," and a bound booklet containing multi-disciplinary classroom activities spanning elementary, middle, and high school teaching levels.



The highlight of the workshop for the teachers was a 7-hour field trip led by Authority staff to Bear and Cub Cave, Natural Bridge Caverns, and Comal Springs. The Authority plans to host similar workshops on an annual basis.





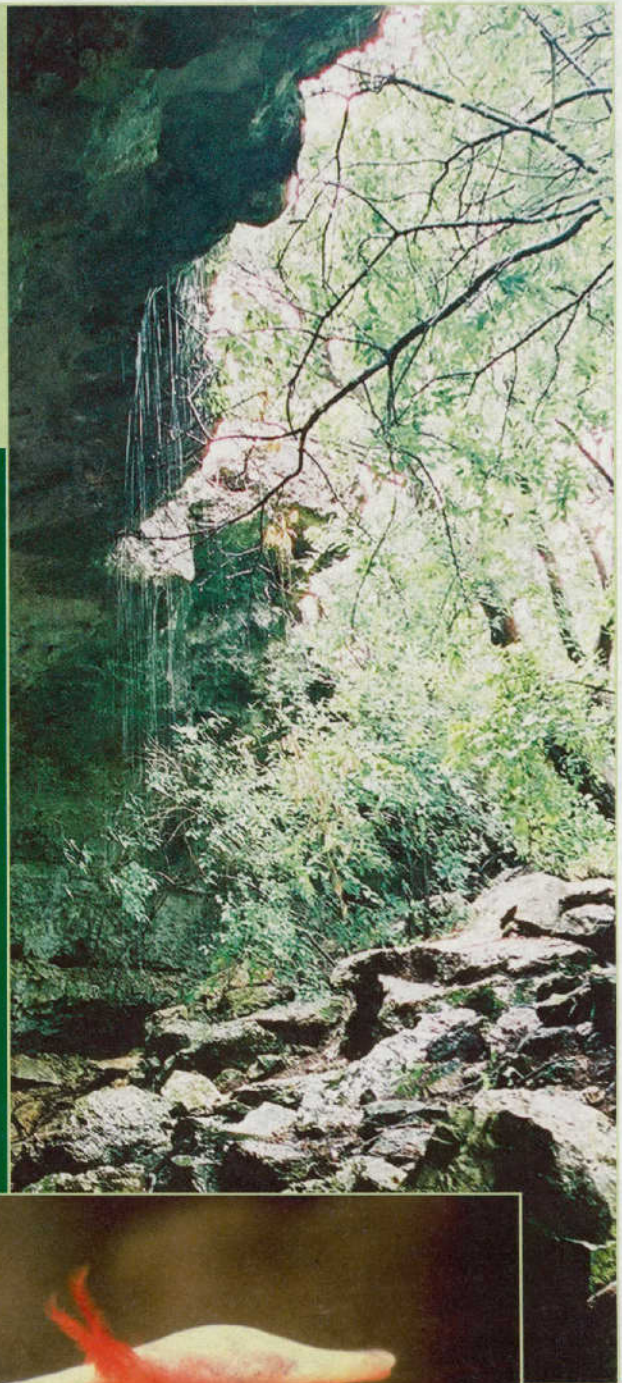
# Edwards Aquifer Optimization Program Update

by John Hoyt, Program Manager  
Aquifer Science

The basic description and purpose of the Edwards Aquifer Optimization Program (EAOP) are 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 July 2003, the board approved two OTS-related items and the Research and Technology (R&T) Committee voted to recommend the board approve one OTS-related item. On



(continued on next page)



## Edwards Aquifer Optimization Program Update *(continued)*

by John Hoyt, Program Manager – Aquifer Science

July 8, the board voted to approve an interlocal cooperation agreement between the Authority and San Antonio Water System (SAWS) for the continuation of work to better define the freshwater/saline water interface within the Edwards Aquifer. The Authority and SAWS have been cooperatively funding saline water studies since 1998. The 2003 agreement will result in the installation of three additional interface monitoring wells in south central San Antonio, continued data collection at existing monitoring wells, and the initiation of a computer model to better characterize the interface. The board also approved a contract with George Veni and Associates (GVA) for tracer testing and stormwater monitoring. The work by GVA will serve to define flowpaths in the aquifer in the area of major springs and will serve to characterize stormwater quality recharging the aquifer in northern Bexar County.



On July 23, the R&T Committee voted to recommend the board approve a joint funding agreement (JFA) between the Authority and the American Water Works Association Research Foundation (AWWARF). The JFA, if approved by the board, is for work to develop a new generation computer model for the enhanced characterization and representation of flow through karst aquifers. The work will be funded jointly by the Authority, Southwest Florida Groundwater Management District, and AWWARF. Six universities and two groundwater management districts will also provide in-kind services for the project. Southwest Research Institute (SWRI) in San Antonio will serve as the primary model development contractor for AWWARF. SAWS will serve as the local American Water Works Association sponsor for the project.

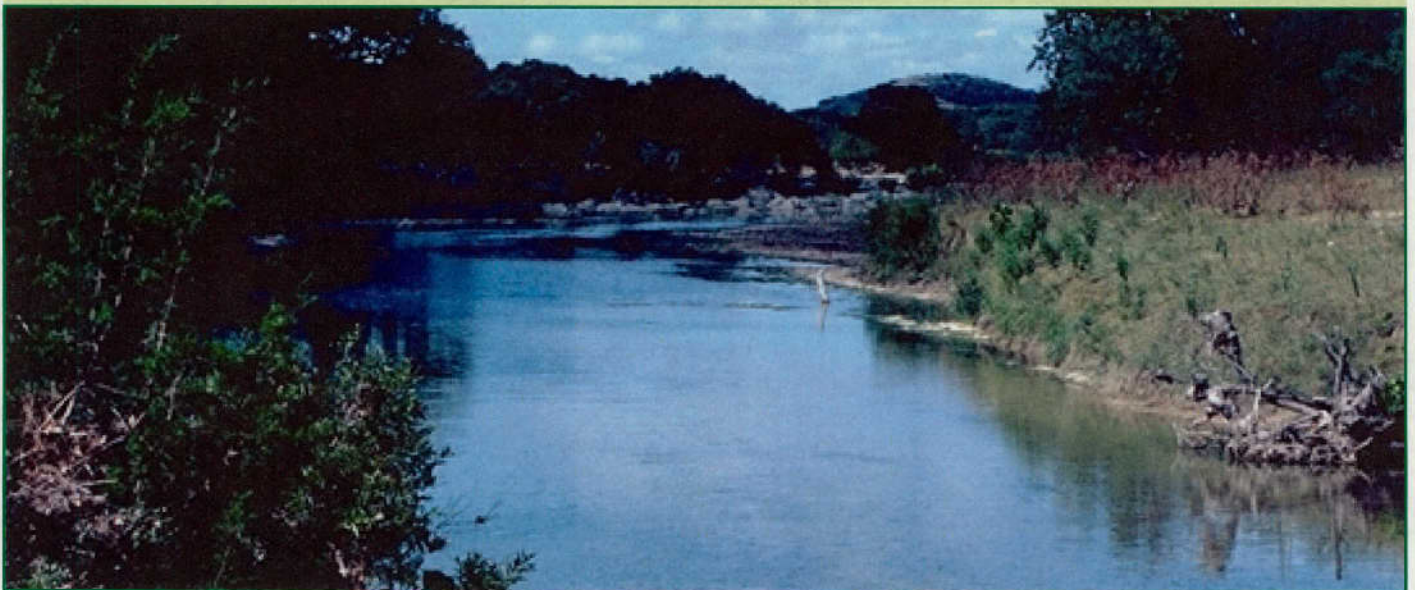
In addition to the OTS-related items discussed above, the following OTS-related studies are currently underway or have been completed:

- Texas wild-rice reproduction.
- 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).
- Edwards Aquifer computer model development.



- Improved aquifer parameter estimation for computer model in-put data sets (completed).
- Edwards Aquifer freshwater/saline water interface studies.
- Hydrologic budget analysis of Medina Lake and Diversion Lake for the North Medina County Flow Path Study.
- Electromagnetic survey in the vicinity of Seco Sinkhole (completed).
- Analysis of structural controls on the Edwards and Trinity Aquifers interface in the Camp Bullis Quadrangle and surrounding area.
- Analysis of structural controls on the Edwards and Trinity Aquifers interface in the Helotes Quadrangle.
- Tracer testing of aquifer flowpaths at Comal and San Marcos springs.
- Leona Formation geophysical survey.
- Development of updated methods for calculating recharge to the Edwards Aquifer (Blanco and Nueces River basins completed).
- Statistical Analysis of Hydrologic Data (completed).
- Edwards Aquifer fracture/conduit study.
- Evaluation of water quality and water quantity benefits of woody species best management practices on selected watersheds in the Edwards Aquifer region.
- Evaluation of augmentation methodologies in support of in-situ refugia at Comal and San Marcos springs

If you have questions regarding the EAOP or studies listed above, please call John Hoyt, Aquifer Science Program Manager.





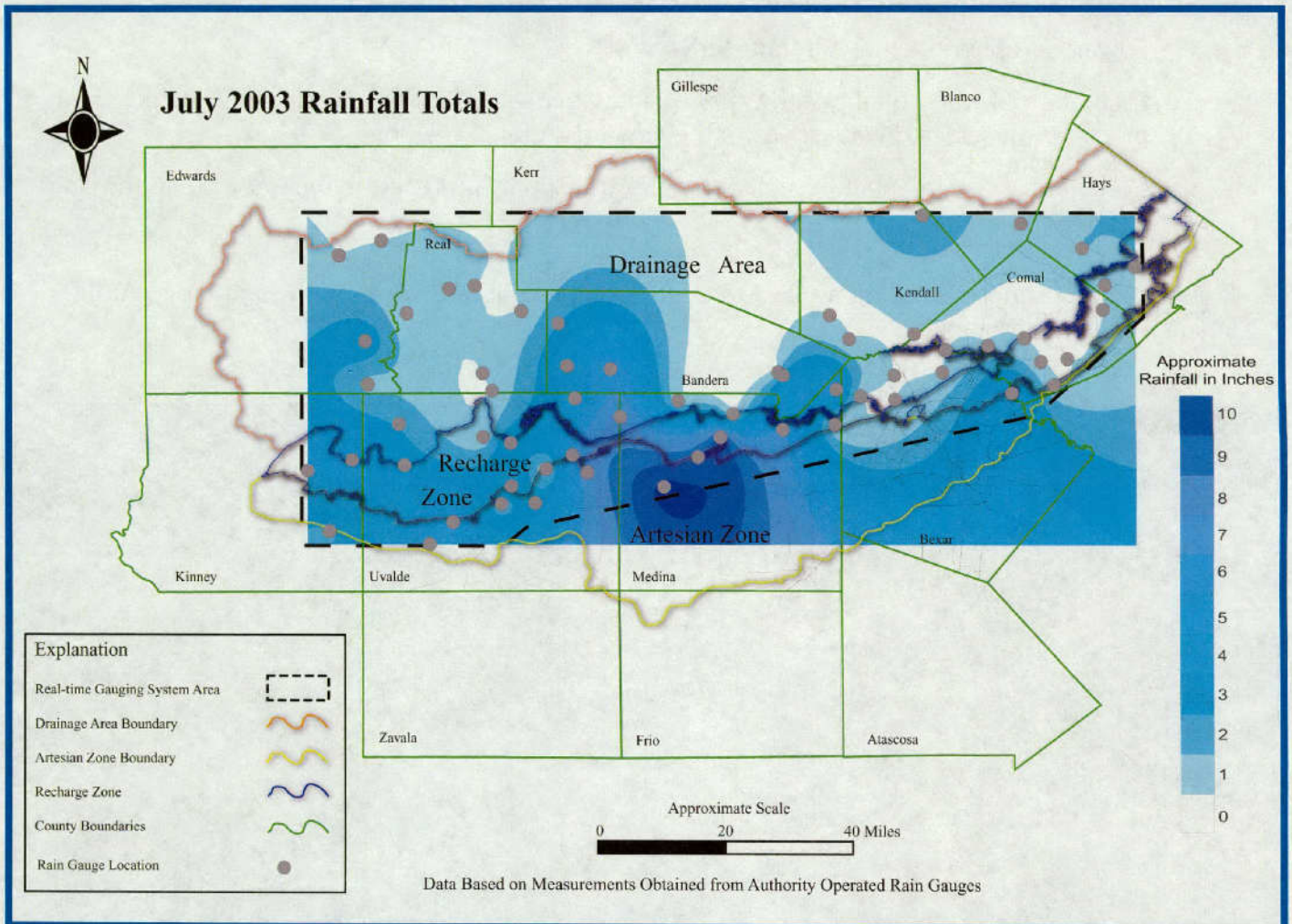
# Real-time Precipitation Gauging System – July 2003

The Authority operates 65 “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 are used in Edwards Aquifer recharge calculations, precipitation enhancement program evaluations, and a variety of research projects.

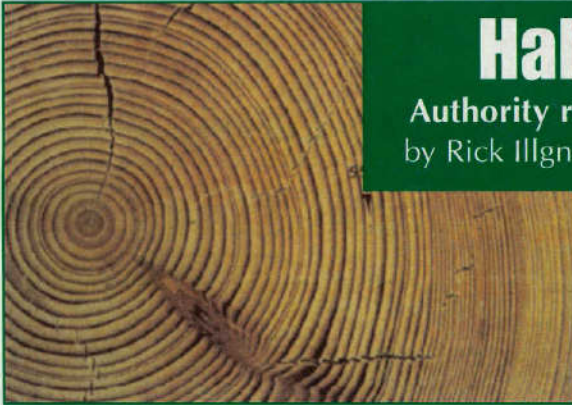
The attached map of the July 2003 rainfall totals, as recorded by the real-time gauging system, indicates that the highest rainfall totals were in the southwestern portion of the gauging system area. The maximum monthly rainfall total was in central Medina County where up to ten inches of rainfall was recorded. The northern portion of the gauging system area generally received one inch or less.

If you have questions regarding the attached map or the Authority’s real-time precipitation gauging system, please call Mr. John Hoyt, Program Manager – Aquifer Science.

## July 2003 Rainfall Totals







## Habitat Conservation Plan

Authority receives tree-ring study that examines historic droughts  
by Rick Illgner, Program Manager – Groundwater Management Strategies

The drought of the 1950s (drought of record) across the southwest United States (including Texas) is often used by the U.S. Fish & Wildlife Service, Texas Parks & Wildlife Department, and the Texas Commission on Environmental Quality as the defining event for water policy in central Texas. The agencies essentially require

that any water plan address the drought of record and how effective a plan would be during such a drought. There has been extensive speculation as to whether the drought of record was a “20, 50, 100, etc. yr. drought.” However, there is sparse information evaluating the drought of record and comparing it in severity and occurrence to other droughts.

Reliable weather data for the early 1900s is difficult to find. It is virtually nonexistent for dates older than that. However, one overlooked source of historical data that is available is tree-ring data. Basically, a tree adds one layer of wood each year beneath its bark and trees are known to live for long periods of time. The “new wood” layer is thin during dry years, thick during wet years. The age of the tree can be determined by counting from the center ring back to the outer ring.

Living trees are “cored” to allow scientists to evaluate the ring data. In addition, trees that were cut down many years ago are still found in old log structures and may be utilized as well. By correlating the thickness of the layers with known climatic conditions, the relationship of the climate to tree ring thickness can be determined. Forestry scientists from across the United States have pooled their databases to form a comprehensive database with numerous datasets to facilitate such studies. The database for the San Antonio area currently covers the years from 1700 through 1979.

The Authority contracted with Drs. Steve Tomka and Ray Mauldin (University of Texas at San Antonio, Center for Archaeological Research) to conduct a dendrochronology study of the existing data to help classify the drought of record for the Authority’s habitat conservation plan. Their study utilized the comprehensive tree ring database, the Palmer Drought Severity Index (PDSI), and known rainfall and recharge. They found that statistically significant relationships existed between the tree-ring data, local climatic conditions and the PDSI. This is important because it allows the use of the tree-ring database to examine droughts that occurred between 1700 and 1979, evaluating them with current drought standards.

The study found that a drought the magnitude (intensity and duration) of the 1950’s drought of record occurred only once in the 279 years of data. Prior to 1979, there were droughts that were more intense (1925) but none had a longer duration (the drought of record lasted about six years). Using the PDSI calculations for the San Antonio area, 72 of the 279 years were drought years ( $\approx 26\%$ ); however, multiple year droughts were not common. Only twelve 2-yr. droughts, three 3-yr. droughts, and four droughts of greater than three years occurred during the 279 years. Based on the data, the drought of record was a unique, extreme event and not a predictable event.



Valdina Farm Sinkhole – Photo by Kurt Menking



# Inside the Edwards Aquifer

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

## Current research by the Authority measures the influx of rainfall into the Edwards Aquifer

Over the last two years, the Authority has experimented with the placement of monitoring equipment in selected wells in the Edwards Aquifer Recharge Zone. This equipment was installed to help develop a conceptual understanding of where and how quickly water enters the aquifer. Understanding the occurrence, movement, and response to recharge events is important for managing water quality in the Edwards Aquifer.

The improvement in monitoring technology and the decrease in cost over the last ten years have allowed the cost effective collection of data from short lived and transient events such as rain storms. In 2002, the Authority began a research program to determine the utility of the new technology's suitability for monitoring the Edwards Aquifer. The Authority acquired monitoring equipment which included a pressure transducer, conductivity probe, and data logger. The pressure transducer detects changes in water levels and the conductivity probe indirectly measures the amount of dissolved minerals in water. Data from the two sensors are recorded on a data logger for later retrieval and analysis.

Before installation of the monitoring equipment, wells in the recharge zone were only measured for water levels three times a year and a water quality sample collected only once every three years. The installation of the new monitoring equipment now allows the collection of data on a more continuous basis. Authority staff has programmed the probes on the recharge zone to collect water level and conductivity data every 15 minutes, thereby improving the Authority's ability to monitor short term events such as rainfall.

Rainfall generally has fewer dissolved minerals than groundwater. When water comes into contact with soil and rock, it absorbs minerals such as sodium, calcium, and chloride, increasing its ability to conduct electricity. This parameter, called conductivity, is measured by the conductivity probe. However, the dissolution of minerals requires some time for the water to come into equilibrium with the rock. The lower conductivity rainfall can be detected with the conductivity probe as it enters the aquifer.

Continuous monitoring equipment placed in sand and gravel aquifers usually shows little change on daily or weekly intervals. However, karst aquifers are noted for their rapid response to storm events because water rapidly passes through caves and conduits. The installation of this monitoring



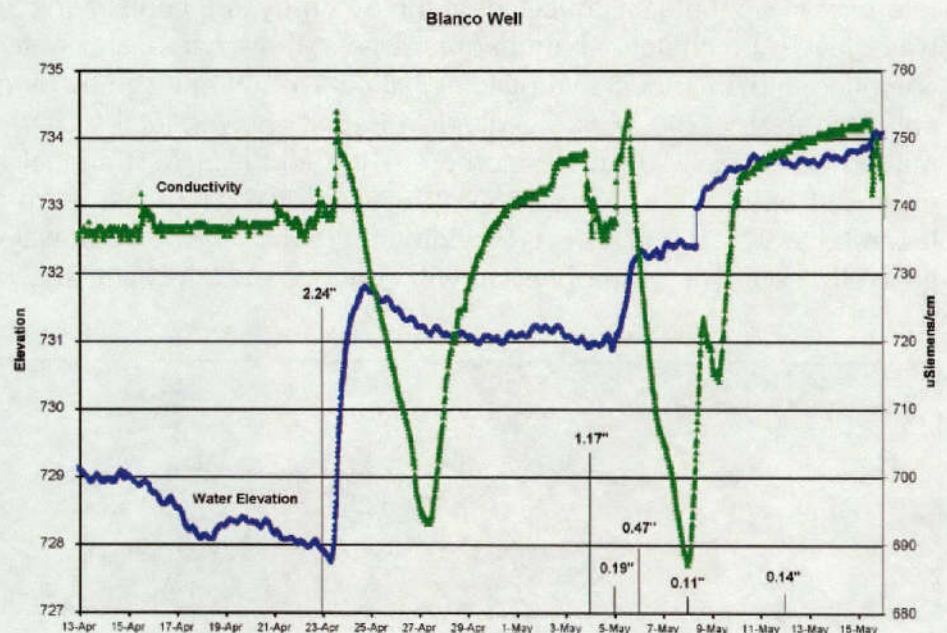
equipment has indicated the Edwards Aquifer behaves like a typical karst aquifer – we see rapid changes in water levels and conductivity in response to rainfall events.

Conductivity only measures the dissolved minerals in water and does not detect other constituents of concern such as oil and grease, solvents, herbicides, and pesticides. If rainfall is mobilizing these constituents into the aquifer, conductivity can be used to indicate when sampling should occur to detect these compounds.

Figure 1 shows groundwater elevation and conductivity data collected from a well located near the intersection of Route 1604 and Blanco Road in northern Bexar County. The figure clearly shows the relationship between rainfall, recorded in inches at the bottom of the graph, and groundwater elevation and conductivity. Over a two week period, water levels in the well rose approximately six feet. In addition, conductivity decreases as a result of the influx of rain water into the aquifer. Note that conductivity began to increase after responding to the rainfall event as the rain water came into equilibrium with groundwater and the rock.

In July 2002, the Authority collected a series of water quality samples from the Blanco Well based on changes in groundwater elevation and conductivity during the July flood. (We had been waiting for some months for a substantial event; little did we know this would be a 100+ year storm event.) The samples were analyzed for a broad range of parameters. A comparison of the results between sampling events indicated that some parameters increased, others decreased, and others remained the same. It should be noted that none of the parameters exceeded the maximum contaminant levels for drinking water. The July 2002 flood was a very extreme event; therefore, making data interpretation difficult and uncertain until additional storm events can be sampled and compared. Therefore, the Authority is scheduled to perform additional research on the impacts of storm water runoff to aquifer water quality over the next six months to determine the relationship between storm water runoff and changes in water quality in the aquifer.

**Figure 1.** Blanco Well at Route 1604 and Blanco Road showing well elevations in blue, conductivity in green, and rainfall in black.





## July 2003 Board Meeting

by Margaret Garcia, Program Manager – Public Affairs

# Authority Directors meet in San Marcos; Authority Releases 2002 Hydro Report

The regular monthly meeting of the Edwards Aquifer Authority Board of Directors was held on Tuesday, July 8, 2003, on the campus of Southwest Texas State University. The meeting in San Marcos fulfills a commitment made by the board of directors to the region to hold at least two monthly meetings each year outside of the Authority office in San Antonio.

In addition to their regular agenda, Authority directors presented a Memorial Resolution to the family of Jerri W. Martin. Mrs. Martin,

a Hays County resident, served as a member of the board of the Edwards Underground Water District and was Chairman from December 1994 to December 1995. Mrs. Martin was taken from her family and friends on May 13, 2003. During her tenure as Chairman, Mrs. Martin worked hard to ensure a smooth transition from the Edwards Underground Water District to the Edwards Aquifer Authority.

In other business, Authority directors approved a compromise and settlement agreement with St. Mary's University in San Antonio. The University violated EDWARDS AQUIFER AUTHORITY RULES in 2001 by over-pumping their Edwards Aquifer groundwater withdrawal permit. In lieu of paying a fine, the University has agreed to spend approximately \$75,000 on water conservation improvements to its physical plant and facilities.

In addition, Authority Chief Technical Officer, Geary Schindel, presented the directors with a technical briefing on the Authority's 2002 Hydrogeological Report. Mr. Schindel provided directors with general information on the data collected by the Authority and cooperating agencies regarding Edwards Aquifer water levels, precipitation, aquifer recharge and discharge, and water quality. Each year, these data are compiled into an annual hydrogeological data report and can be found on the Authority's website. Data collected for the 2002 Hydrogeological Report showed total recharge for 2002 was approximately 1.6 million acre-feet. 2002 was recorded as the fourth highest annual recharge for the period of record, exceeded only by the years 1958, 1987, and 1992. Discharge from wells and springs for 2002 was recorded at 977,100 acre-feet. In addition, the data showed that water quality in the Edwards Aquifer is generally excellent. Authority staff will continue to collect and analyze area water quality data.

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The board also approved an interlocal agreement between the Authority and the San Antonio Water System (SAWS) to jointly fund the construction, operation, maintenance, and use of Edwards Aquifer freshwater/saline water interface monitoring wells and aquifer modeling. The Authority and SAWS have been cooperatively funding the Edwards Aquifer freshwater/saline water interface studies since September 1998. The purpose of the study is to assess whether saline water could encroach into the freshwater portion of the Edwards Aquifer during extended drought periods. In addition, the board also approved a contract between the Authority and George Veni and Associates for tracer testing, stormwater monitoring, and water sampling. Tracer testing and water sampling are planned to identify aquifer flowpaths to Comal, San Marcos, and Hueco springs. The stormwater monitoring and water sampling are planned to evaluate the potential for aquifer water quality impacts from stormwater in northern Bexar County. Both of these studies will be conducted as part of the board-approved Edwards Aquifer Optimization Technical Studies (OTS) in support of the Edwards Aquifer Optimization Program (EAOP).



In addition, Authority directors approved an agreed final order for two initial regular permits 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. This agreed final order represents approximately 290 acre-feet of Edwards groundwater. In addition, Authority directors adopted an omnibus final order approving one initial regular permit representing 50 acre-feet of Edwards Aquifer groundwater withdrawal rights.

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## Initial Regular Permits

by Steven D. Walthour, Program Development Liaison

In July, Authority directors approved two Agreed Final Orders (AFO's) and granted applications for two Initial Regular Permits representing 280 acre-feet of Edwards Aquifer groundwater withdrawal rights. In addition, Authority directors also adopted one omnibus final order approving one initial regular permit representing approximately 50 acre-feet. In other action, the board accepted Authority staff's recommendation to adopt final orders amending four initial regular permits. These amendments were granted in order to reflect the conversion from base irrigation to unrestricted irrigation. In total the Authority's board of directors granted a total of 430 acre-feet of Edwards Aquifer groundwater withdrawal rights.

To date the Authority has issued final decisions on 876 Initial Regular Permit applications representing approximately 80% of all applications filed with the Authority. The Authority has issued 696 permits and denied 181 permit applications representing 498,985 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights.



## Well Construction Program

by Rick Illgner, Program Manager – Groundwater Management Strategies

In June, Authority staff issued 28 well construction permits. This total includes 9 Edwards Aquifer domestic well permits, 1 Edwards Aquifer domestic / livestock well permit, 1 Edwards Aquifer livestock well permit, and 2 Edwards Aquifer well plugging permits. In addition, 15 permits were issued to drill through the Edwards Aquifer. For more information, contact Jeff Robinson – Regulatory Coordinator.



## Groundwater Withdrawal Transfers

by Rick Illgner, Program Manager – Groundwater Management Strategies

In May, Authority staff processed 2 partial sales and lease transfers representing 806 acre-feet of Edwards Aquifer groundwater withdrawal rights. Since the inception of the transfer program, Authority staff has processed 844 partial sales and lease transfers representing 159,093.760 acre-feet of groundwater withdrawal rights. Of the 844 partial sale and lease transfers completed, only 602 are currently active representing 106,081.398 acre-feet. Active transfers include 98 sub-leased transfers representing 20,321.832 acre-feet. In addition, Authority staff processed 4 change of ownership or miscellaneous transfers representing 3,465.045 acre-feet of Edwards Aquifer groundwater.

Transfer Description	Number of Transfers	Acre-Feet
July (7/1/03 - 7/31/03) Transfers (Partial Sales, Leases, Sub-leases, and Re-sales)	2	806.000
July (7/1/03 - 7/31/03) 100% Change of Ownership (Sale of Place of Use) or Miscellaneous Transfers	4	3,465.045
Total Number of Transfers (Partial Sales, Leases and Sub-leases and Re-sales) Completed as of 7/31/03	844	159,093.760
Total Number of <b>Active</b> Transfers (Partial Sales, Leases, Sub-leases, and Re-sales) as of 7/31/03	602	106,081.398
Total Number of <b>Active Sub-leased</b> Transfers as of 7/31/03	98	20,324.832
Total Number of <b>Active Re-sale</b> Transfers as of 7/31/03	90	2,960.392

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



## Aquifer Management Fees

by Brock Curry, Program Manager – Administrative

Staff issued 235 invoices for non-agricultural aquifer management fees in December 2002. These invoices, totaling \$9,371,461, were due in full by March 1 unless the permittee elected to pay monthly. As of July 31, the Authority has collected a total of \$6,041,522 in non-agricultural aquifer management fees or 65% of the amount budgeted for 2003. Seven (7) users with fees totaling \$12,491 did not meet the March 1 payment deadline and are now considered delinquent. Staff will be working with the board to proceed with enforcement action against those users.

In December, the Authority also issued the 2002 annual use report form for all aquifer users to report their groundwater use. For agricultural users, this report form also serves as an invoice for aquifer management fees – both of which were due by January 31. As of July 31, the Authority has collected \$197,741 from agricultural users based on 98,871 acre-feet of groundwater used in 2002. The amount of revenue collected represents 99% of the 2003 budgeted revenue for agricultural aquifer management fees. Staff will also begin enforcement action against those agricultural users that have not reported their 2002 use or paid the fees due on that use.

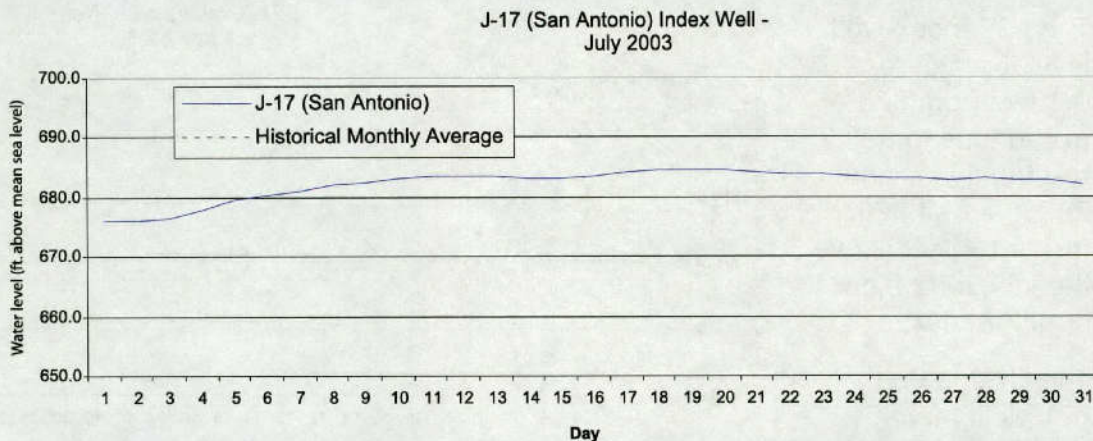
# MONTHLY WATER LEVEL & SPRINGFLOW REPORT

Aquifer levels can be viewed on the Authority's web site at [www.edwardsaquifer.org](http://www.edwardsaquifer.org)

## J-17 (San Antonio) Index Well – July 2003

The J-17 index well level average rose 4.0 feet from 678.2' above mean sea level (msl) in June to 682.2' msl in July. The July 2003 high of 684.5' is 6.0 feet below the July 2002 high of 690.5' msl.

The J-17 historical monthly average for July is 659.7' msl.



### J-17 (San Antonio) Index Well – Combined Historic Record for Two Wells: 1932-2002

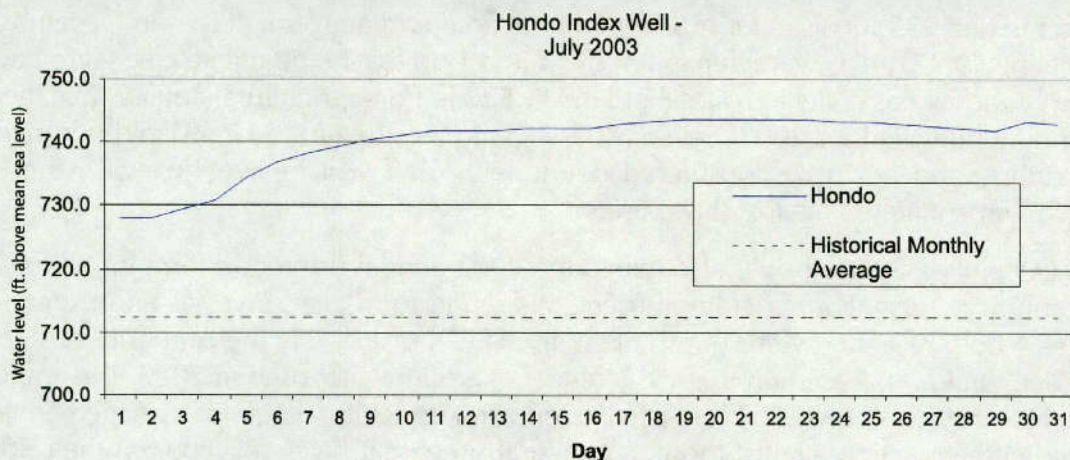
	July 2003	July 2002	Historical Record	
<b>Maximum</b>	684.5	690.5	June 14, 1992	703.3
<b>Minimum</b>	676.1	661.5	August 17, 1956	612.5
<b>Average</b>	682.2	685.4	June (1932-2002)	659.7



## Hondo Index Well – July 2003

The Hondo index well level average rose 8.2 feet from 732.0' msl in June to 740.2' msl in July. The July 2003 high of 743.6' msl is 0.4 feet above the July 2002 high of 743.2' msl.

The Hondo Well historical monthly average for July is 712.3' msl.

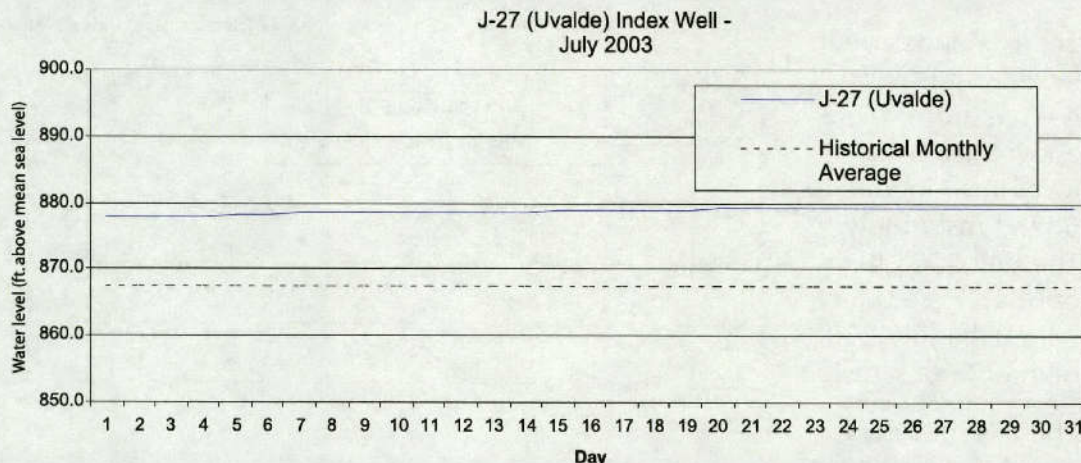


Hondo Index Well – Historic Record: 1986-2002				
	July 2003	July 2002	Historical Record	
<b>Maximum</b>	743.6	743.2	June 14, 1992	779.0
<b>Minimum</b>	728.1	700.4	June 29, 1990	651.0
<b>Average</b>	740.2	735.1	June (1986-2002)	712.3

## J-27 (Uvalde) Index Well – July 2003

The J-27 index well level average rose 0.3 feet from 878.4' msl in June to 878.7' msl in July. The July 2003 high of 879.2' msl is 1.4 feet above the July 2002 high of 877.8' msl.

The Uvalde Well historical monthly average for July is 867.3' msl.



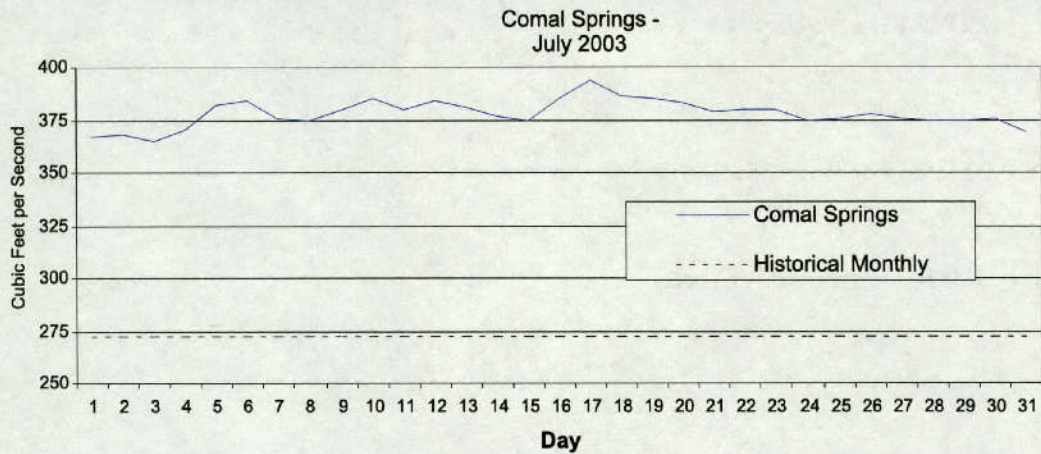
J-27 (Uvalde) Index Well – Historic Record: 1940-2002				
	July 2003	July 2002	Historical Record	
<b>Maximum</b>	879.2	877.8	June 15, 1987	889.0
<b>Minimum</b>	877.9	871.1	April 13, 1957	811.0
<b>Average</b>	878.7	876.0	June (1940-2002)	867.3



## Comal Springs – July 2003

Comal springflow reached a maximum flow of 394 cubic feet per second (cfs) on July 17th. The minimum flow occurred on July 3rd at 365 cfs.

The July 2003 average was 378 cfs, which was 105.4 cfs above the historical monthly average of 272.6 cfs.



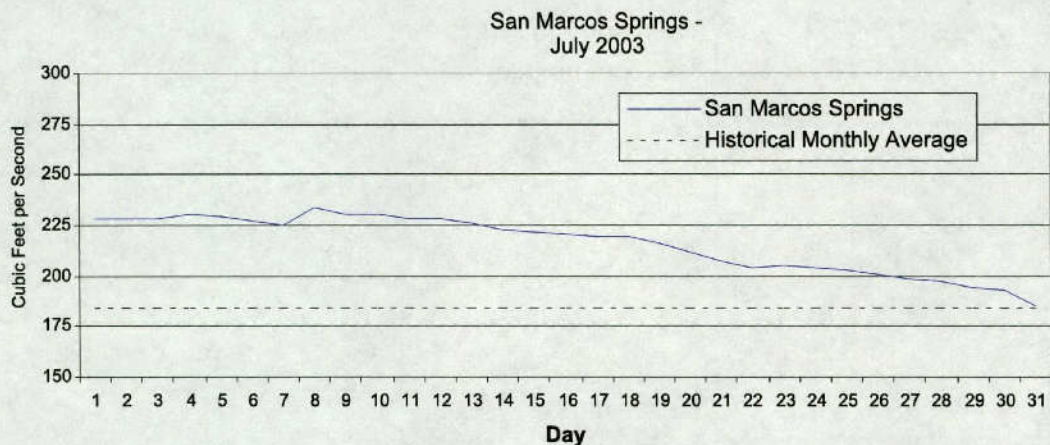
### Comal Springs Historic Record: 1927-2002

	July 2003	July 2002	Historical Record	
<b>Maximum</b>	394	400	October 14, 1973	534.0
<b>Minimum</b>	365	313	August 8, 1956	0.0
<b>Average</b>	378	387	June (1927-2002)	272.6

## San Marcos Springs – July 2003

San Marcos springflow reached a maximum flow of 234 cfs on July 8th. The minimum flow occurred on July 31st at 185 cfs.

The July 2003 average was 216 cfs, which was 31.9 cfs above the historical monthly average of 184.1 cfs.



### San Marcos Springs Historic Record: 1956-2002

	July 2003	July 2002	Historical Record	
<b>Maximum</b>	234	319	March 12, 1992	451.0
<b>Minimum</b>	185	195	August 15, 1956	46.0
<b>Average</b>	216	296	June (1956-2002)	184.1





**EDWARDS AQUIFER  
AUTHORITY**

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

210.222.2204 or 1.800.292.1047  
[www.edwardsaquifer.org](http://www.edwardsaquifer.org)

BE AQUIFER AWARE

## CALENDAR OF EVENTS FOR AUGUST & SEPTEMBER

AUGUST

Mon. 8/11	3 PM	Board Meeting, Edwards Aquifer Authority Conference Center, 1615 N. St. Mary's Street, San Antonio, Texas
Tues. 8/26	10 AM 11 AM 1 PM	Habitat Conservation Plan Work Group Aquifer Management Planning Committee Permits Committee
Wed. 8/27	11 AM 1 PM	Finance/Administrative Committee R&T Committee

SEPTEMBER

Mon. 9/1		Labor Day Holiday – EAA Offices Closed
Tues. 9/2	9:30 AM 12 PM	Committee Liaison Meeting Executive Committee
Tues. 9/9	3 PM	Board Meeting, Edwards Aquifer Authority Conference Center, 1615 N. St. Mary's Street, San Antonio, Texas
Tues. 9/23	10 AM 11 AM 1 PM	Habitat Conservation Plan Work Group Aquifer Management Planning Committee Permits Committee
Wed. 9/24	11 AM 1 PM	Finance/Administrative Committee R&T Committee

**Authority meeting times & dates are subject to change.**

Visit our website at [www.edwardsaquifer.org](http://www.edwardsaquifer.org) for up-to-the minute information on meeting times and dates.