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EDWARDS AQUIFER AUTHORITY GENERAL MANAGER'S REPORT

October 2003

inside

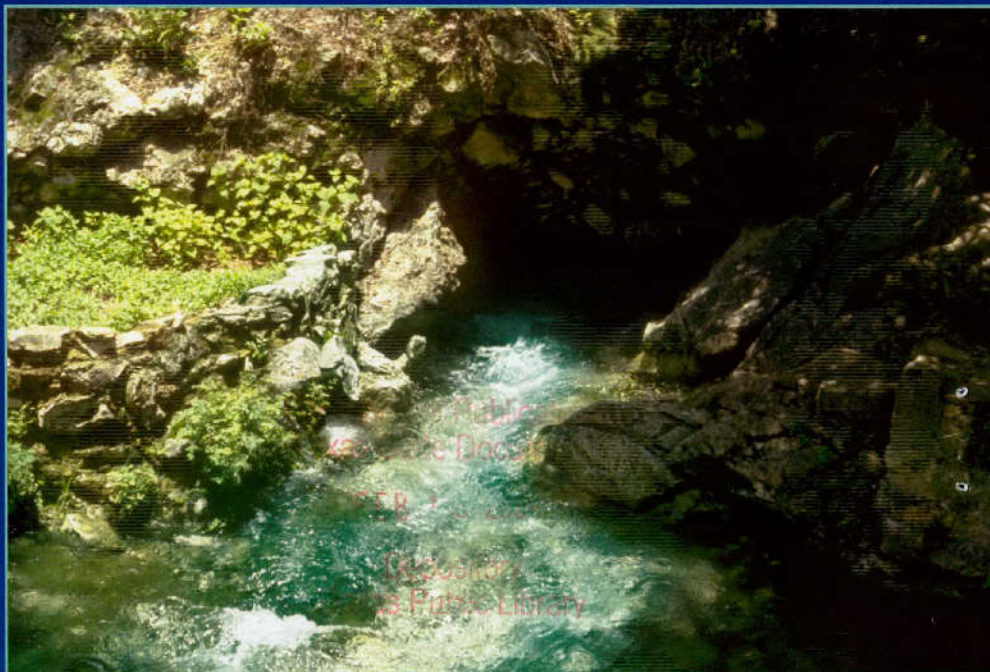
- 2004 Proposed Budget
- Edwards Aquifer Optimization Program Update
- Well Construction Workshop
- Real-time Precipitation Gauging System
- Precipitation Enhancement Program
- Demand Management/Critical Period Management
- Inside the Edwards Aquifer with Geary Schindel – Caves and Cavers
- September 2003 Board Meeting – Authority Directors Approve Final Rules for Recharge, Storage, and Recovery
- Initial Regular Permits
- Well Construction Program
- Groundwater Withdrawal Transfers
- Aquifer Management Fees
- Monthly Water Level & Springflow Report
- Calendar of Events

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.



2004 PROPOSED BUDGET

by Gregory M. Ellis, General Manager

On September 9, the General Manager's 2004 Proposed Budget was presented to the Authority board for their consideration. This budget reflects revenue and expenses anticipated for the calendar year 2004 for all funds.

The Finance/Administrative Committee of the board began deliberating the \$15.1 million proposed budget and associated aquifer management fee rate in September. The 2004 proposed aquifer management fee rate for non-agricultural groundwater permittees and applicants is \$36.75 per acre-foot. The aquifer management fee rate for agricultural groundwater used in 2003 is \$2.00 per acre-foot.

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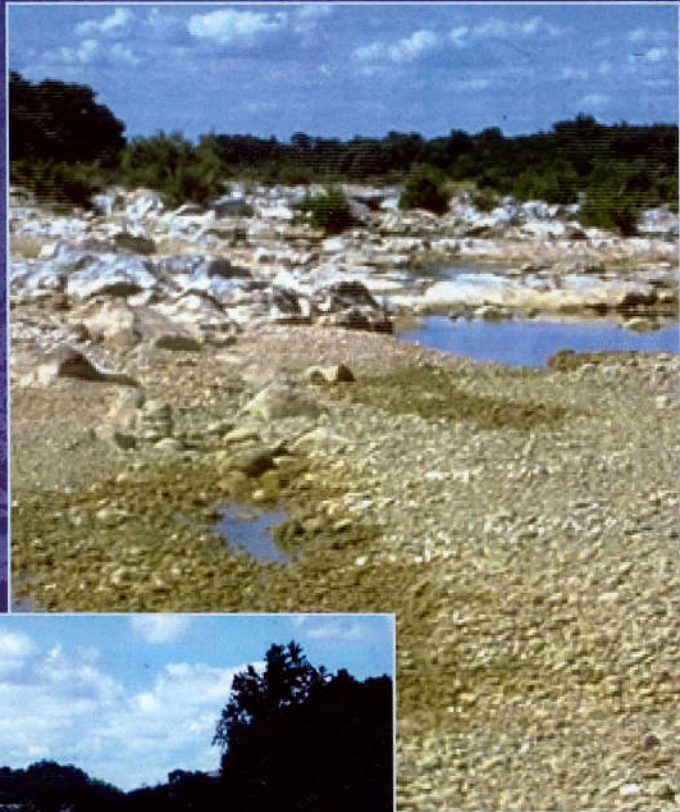
2004 PROPOSED BUDGET *(continued)* by Gregory M. Ellis, General Manager

The proposed budget will be presented at three public meetings to be held in the region. The schedule is listed below:

Wednesday, October 15, 2003 6:00 p.m.	Authority Conference Center 1615 N. St. Mary's San Antonio, Texas
Monday, October 20, 2003 6:00 p.m.	Willie DeLeon Civic Center 300 E. Main St. Uvalde, Texas
Wednesday, October 22, 2003 6:00 p.m.	New Braunfels Civic Center 380 S. Seguin Ave. New Braunfels, Texas

The Finance/Administrative Committee of the board will then make a final recommendation on the proposed budget and aquifer management fee rates at its October 29 meeting for consideration by the board at the November 18, 2003 meeting. All meetings are open to the public.

The entire proposed budget is available on the Authority's internet web page: www.edwardsaquifer.org or by contacting the Authority at (210) 222-2204 or 1-800-292-1047.



Edwards Aquifer Optimization Program Update

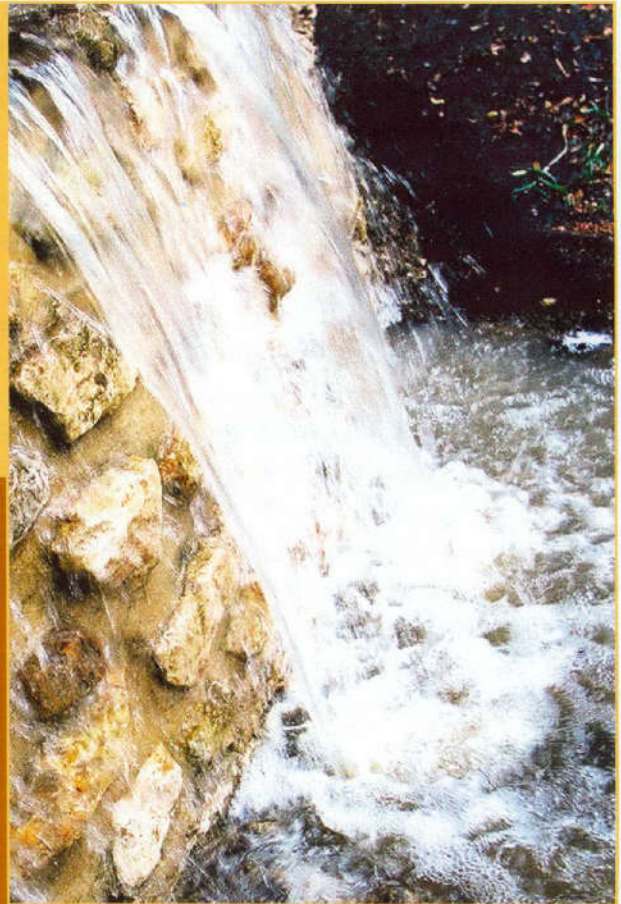
by John Hoyt, Program Manager –
Aquifer Science

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, the board approved one OTS-related item and the Research and Technology (R&T) Committee voted to recommend the board approve two OTS-related items. On September 9, the board voted to approve an interlocal cooperation agreement (ILA) between the Authority and Texas A&M University (TAMU) for a study titled "Augmenting Groundwater Recharge Through Brush Control: A Feasibility Study." Under the ILA, TAMU will determine if recharge to the Edwards Aquifer can be enhanced through the reduction of Ashe Juniper and other woody species (brush) and if so, to what extent. The study will examine the dynamics of precipitation and groundwater recharge by monitoring shallow caves before, during, and after brush removal.

(continued on next page)



Edwards Aquifer Optimization Program Update *(continued)*

by John Hoyt, Program Manager – Aquifer Science

On September 24, the R&T Committee voted to recommend the board approve the selection of HydroGeoLogic, Inc. to develop a water resources management module for MODFLOW. MODFLOW is the software package the United States Geological Survey (USGS) is using to develop a new Edwards Aquifer computer model to be finalized in June 2004. A water resources management module is needed for the new model to simulate aquifer management scenarios such as Demand Management/Critical Period Management Rules and any combination of recharge and pumping schedules. If the board approves the staff-recommended selection, staff will develop a contract for board consideration.



Also on September 24, the R&T Committee voted to recommend the board approve the purchase of water level and conductivity monitoring equipment. The equipment purchase is to support the focused flowpath group of studies of the OTS. The equipment to be purchased consists of 15 multi-parameter probes that can monitor and record the water level in a well and the electrical conductivity (conductivity) of the water. Conductivity monitoring can indicate when recently recharged water is moving in the vicinity of a monitoring well, therefore indicating flowpaths. The purchase requires board approval because of the total value of the equipment.

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.
- Karst aquifer modeling research (AWWARF study).
- Improved aquifer parameter estimation for computer model in-pur 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.

Well Construction Workshop

by Rick Illgner, Program Manager – Groundwater Management Strategies

On Saturday, October 11, 2003, Authority staff presented an informational workshop regarding well construction to approximately 50 water well drillers from throughout the region. This workshop included discussions on permit requirements, the new rules, and requirements for properly completed applications, inspections, and enforcement. Drillers who attended the workshop received four hours of continuing education units.

In August 2003, Authority Directors approved rules for well construction and plugging standards (Ch. 713 EDWARDS AQUIFER AUTHORITY RULES, subchs. A, C, and D). These rules became effective August 21, 2003.

If you would like more information regarding driller registration or workshop materials, please contact Jeff Robinson, Regulatory Programs Coordinator.

Real-time Precipitation Gauging System – September 2003

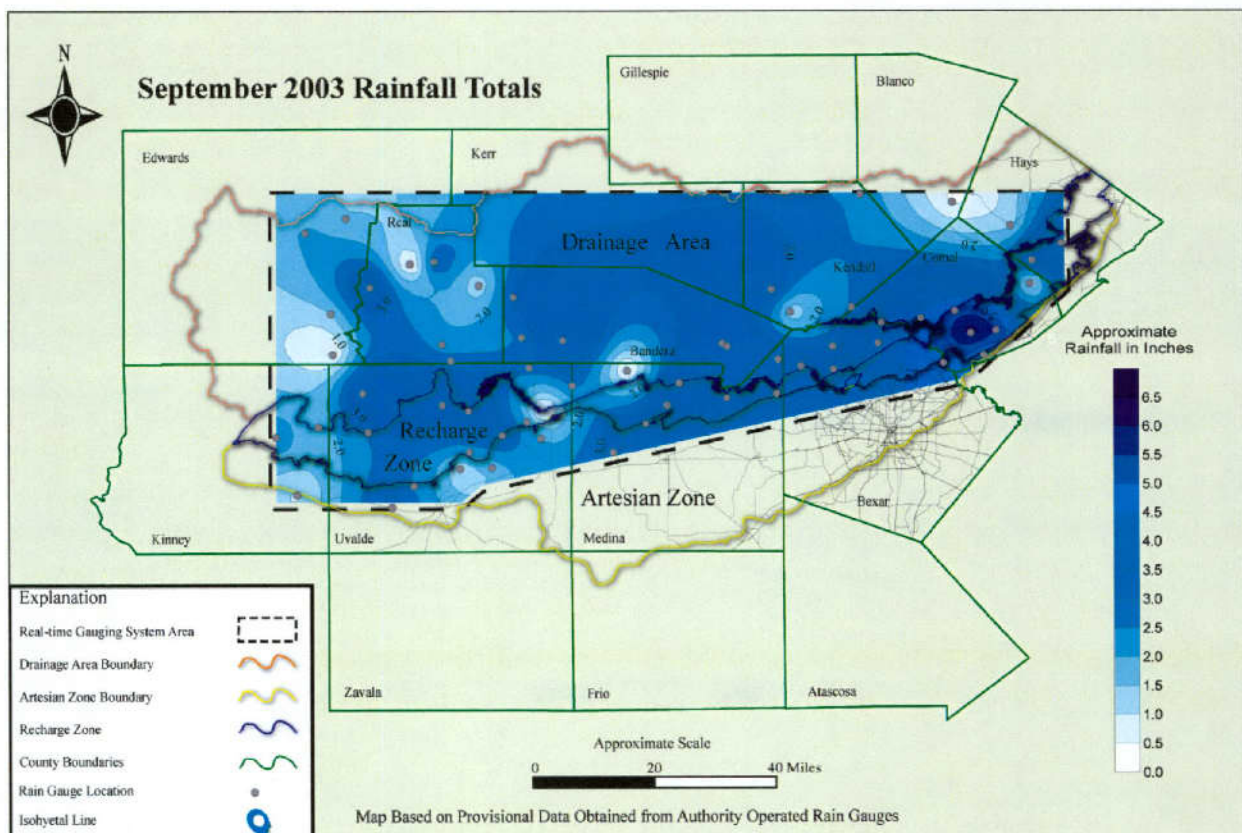
by John Hoyt, Program Manager – Aquifer Science

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 aquifer recharge calculations, precipitation enhancement program evaluations, and a variety of research projects.

The attached map of the September 2003 rainfall totals, as recorded by the real-time gauging system, indicates that the highest rainfall totals were in eastern Comal County where over six inches of rainfall was recorded. Over four inches of rainfall was recorded in several areas such as northern Uvalde County and northern Medina County. Above average rainfall was recorded over most of the Authority’s rain gauge network area in September.

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.

Figure 1: Map showing September 2003 Rainfall Totals



Precipitation Enhancement Program

by Rick Illgner, Program Manager – Groundwater Management Strategies

The Authority's Precipitation Enhancement Program was kicked off May 1, 2003. For the second year, the Authority has contracted with the South Texas Weather Modification Association (STWMA) and the Southwest Texas Rain Enhancement Association. The STWMA is contracted to fly cloud seeding missions over Bexar, Bandera, and Medina Counties; the Southwest Texas Rain Enhancement Association flies cloud seeding missions over Uvalde County. The precipitation enhancement program benefits the constituents of these counties and surrounding counties by increasing rainfall within the Edwards Aquifer Recharge region, thereby reducing demand on the Aquifer. The cost for the 2003 program is \$124,776. To date, the Authority has expended \$95,125 or 76 percent of the 2003 contracted amount.



For August, a total of 100 flares were burned over 4 counties within the Edwards Aquifer Authority study area, representing 4,320 grams of Silver Iodine. Eight days of cloud seeding occurred in August (8 - 13, 16, 23, and 24). The total number of flares burned over each county is: Uvalde (33), Bexar (20), Bandera (16), and Medina (31). In addition, the following monthly rainfall data recorded by the Edwards rain gauges network for each county this month are as follows: Uvalde Co. (0.0" – 3.23"), Medina Co. (0.0" – 1.52"), Bexar Co. (0.0" – 0.98"), and Bandera Co. (0.0" – 2.07").

Demand Management/Critical Period Management

by Rick Illgner, Program Manager – Groundwater Management Strategies

The Authority will conduct a workshop regarding the 2004 Demand Management/Critical Period Quarterly Allocation Form for Municipal and Industrial users. The workshop will be held on October 23, from 1:00 p.m. to 3:00 p.m. at Woodfield Suites (in the San Antonio Room), 100 West Durango Boulevard, San Antonio, Texas.

Items of discussion will include specific changes to the 2004 Demand Management/Critical Period Quarterly Allocation Form and allocations as they relate to transfers. Authority staff will present key information regarding how to properly complete the allocation forms.

Any questions regarding the workshop should be directed to Ms. Brenda Davis, Program Associate.

Valdina Farm Sinkhole - Photo by Kurt Winkler



Inside the Edwards Aquifer

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

CAVES and Cavers

The National Speleological Society (NSS), based in Huntsville, Alabama, was founded in the 1940s for the purposes of advancing the study, conservation, exploration, and knowledge of caves. There are over 12,000 members of the NSS in more than 200 chapters (grottos) throughout United States. There is a long history of active cavers and grottos in south-central Texas – the University of Texas Grotto in Austin and Bexar Grotto in San Antonio are still very

active. The Southwest Texas State University Grotto (SWTSUG), the St. Mary's Grotto, and the Alamo Grotto have been very active in the past.

Over the last 50 years, these groups have made a significant contribution to the exploration, mapping, and recording of data about Texas' underground resources. The SWTSUG was also very active in the 1960s in the explorations of many of Mexico's great pits and deep caves. Members of the St. Mary's Grotto discovered the majority of Natural Bridge Caverns, one of the prettiest commercial caves in the United States. The Texas Cave Survey, located in Austin, has been the repository for caving information for more than 30 years and has proved an invaluable source for scientists, historians, and others. Cavers have helped land owners find new water sources, documented paleo Indian sites, protected bat caves from vandalism, and helped engineers avoid caves in road building and development activities. In Bexar County, more than 400 caves have been documented by cavers.

Why have you not heard a lot about caving as a sport? I could say that cavers are members of an underground organization, which by its very nature should be secretive. However, you'll find most cavers a fun loving bunch, generally happy to welcome new folks. However, they are generally low-key and guard their secrets closely. There are many thoughtless people who, by accident or on purpose, damage fragile formations that took thousands of years to form. Most caves are on private land and cavers are welcome guests by many. However, with that comes the responsibility of treating the landowner and property with great respect. One bad incident by an uncaring person can close access to a cave or caving area for years.

Some say that the age of exploration is over. That we have visited and documented the surface of the earth, sailed all the oceans, and climbed the highest mountains. If you go to any good book store, the travel section will have guides reporting the best hotels, restaurants, and attractions for almost any location on the planet. However, caves offer one of the last opportunities for original exploration right here in our own backyards. It is this lure of the unknown that drives some people to explore this often-hostile world.

When I first began exploring caves at the age of 14, I believed that everyone would want to go caving – if they only knew about it. As I gained more experience, I realized that it really requires a certain personality trait (or flaw). Most people are not interested in getting cold, wet, or muddy in the dark just for fun. However, cavers not only enjoy it, but many thrive in this environment and have produced beautiful photographs and maps of caves for others to enjoy.

Now, as a scientist, I rarely enter a cave for fun, but to study the cave, to unlock its secrets on how it formed, what role it has in the active hydrologic system, and how it relates to other geologic features. Caves offer the opportunity to directly view the fabric of the aquifer, one that hydrogeologists rarely get to see except remotely through testing of well bores, rock cores, and geophysical surveys.

Maps prepared by cavers have vastly improved our understanding of groundwater flow in our limestone aquifers. Most limestone caves are formed by the dissolution of calcium carbonate (limestone) in slightly acidic rainwater. Over tens of thousands of years, weaknesses in the rock are enlarged, some to the point of allowing entry by people. As volunteers, cavers have mapped many of these caves and have shed new light on water movement through the Glen Rose and Edwards limestones. For example, the Glen Rose limestone commonly only yields five to ten gallons of water to a typical well. However, cavers have mapped many caves with underground streams – some that flow at over 1,000 gallons a minute. With the assistance of cavers, some ranchers have been able to tap these caves as a new water source.

Our knowledge of groundwater movement in the Edwards Aquifer recharge zone has also been greatly enhanced by the work performed by cavers. Many of the caves in the recharge zone are vertical in nature and require ropes and special expertise to explore. Some of these caves extend over 250 feet below the surface in Bexar County, intersecting the Edwards Aquifer. We know that if these caves can't filter out something as large as a person, they certainly won't filter out bacteria or chemical contaminants. The vertical nature of the caves also confirms the aquifer's rapid response to rainfall events as water enters the many natural shafts in the area.

So if you're a landowner, and a caver asks for permission to visit your property in search of a cave, don't turn him away. Spend a few minutes to get to know them. You may find a rare and interesting person who may open up a new world under your feet.

ABOUT CAVES

Caves can be a hostile and dangerous environment without the proper training and equipment, and should not be entered by inexperienced people. You can contact your local grotto for more information on caves.

Rules for safe caving:

- Always have at least three sources of light, spare batteries, and bulbs. Two of these lights should mount on a helmet.
- Always wear a helmet with a chinstrap.

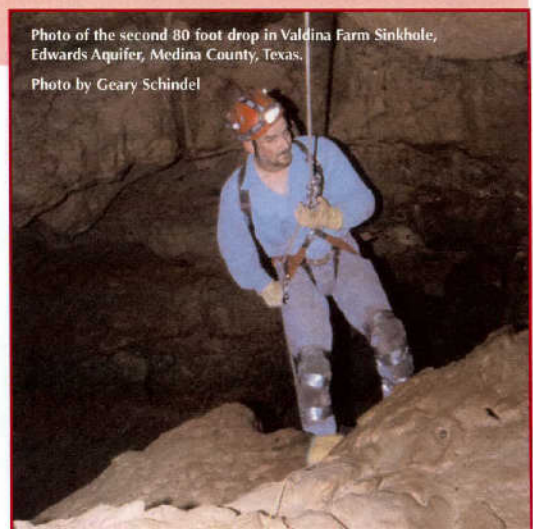
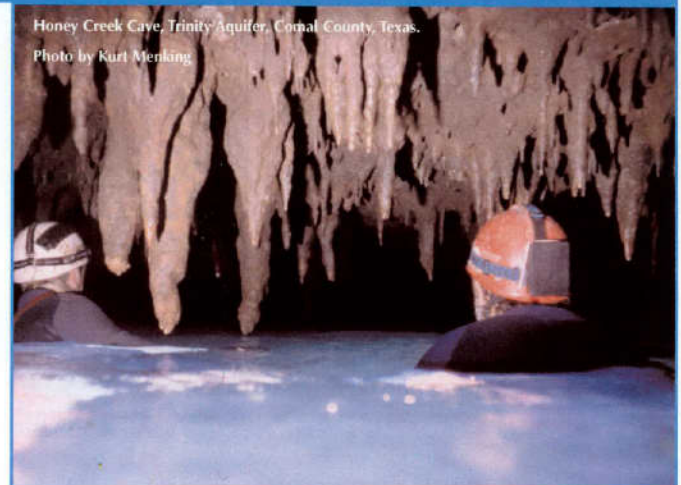


Photo of the second 80 foot drop in Valdina Farm Sinkhole, Edwards Aquifer, Medina County, Texas.

Photo by Geary Schindel

ABOUT CAVES (continued)

- Good lug soled boots can ensure safe footing.
- Never cave alone; four is considered the minimum group size.
- Always tell a responsible person where you are going and when you will be back.
- Never attempt climbing a pit without proper training.
- Never cave while under the influence of drugs or alcohol.
- Always ask permission before entering private property.
- Always leave all gates as you found them.



Honey Creek Cave, Trinity Aquifer, Comal County, Texas.
Photo by Kurt Menking

For more information on caves and grottos near you, visit the National Speleological Society web page at www.caves.org or write them at 2813 Cave Avenue, Huntsville, Alabama 35810. The Texas Speleological Association also has a web page which can be visited at www.cavetexas.org

September 2003 Board Meeting

by Margaret Garcia, Program Manager – Public Affairs

Authority Directors Approve Final Rules for Aquifer Recharge, Storage, & Recovery

At their regular monthly meeting held Tuesday, September 9, 2003, Edwards Aquifer Authority Board of Directors approved final rules for aquifer recharge, storage, and recovery. These rules outline the requirements for obtaining a permit to add more water to the aquifer, and how that water can be recaptured for later use. Directors also approved Proposed Rules to amend existing groundwater withdrawal permit rules. These amendments consist of minor changes and one major change that exempt federal

facilities from the requirement to obtain a groundwater withdrawal permit. These proposed rules, along with others, will now be submitted for public comment. Public hearings have been set for October 2003.

In addition, the 2004 Proposed Operating Budget was presented to the board by Authority General Manager Gregory M. Ellis. This proposed budget will also be submitted for public comment in addition to the proposed rules.

In other business, the creation of a task force regarding water quality was referred to the Research and Technology Committee of the board. The goal is to create a task force with membership made up of stakeholders throughout the region. This task force will then make a proposal to the board on the role the Authority should play regarding water quality within the Edwards Aquifer.

In addition, Authority directors received a technical briefing from Mr. Steve Raabe, Director of Planning and Development – San Antonio River Authority. Mr. Raabe's report focused on the current status of the Region L water resources planning. Mr. Raabe also gave Authority directors background regarding the

passage of the Brown-Lewis State Water Plan in 1997 that initiated state water planning by designating 16 planning regions and establishing a rigorous and consistent set of planning criteria to follow.

Authority directors also approved a joint funding agreement between the Authority and the United States Geological Survey (USGS) for data collection projects. These projects include surface water gauging, Edwards Aquifer recharge calculations, springflow discharge calculations, and surface water runoff monitoring in Comal and Hays counties. The Authority and its predecessor agency have cooperated with the USGS to jointly fund hydrologic data collection projects for more than 40 years. The board also approved an interlocal agreement between the Authority and Texas A&M University to determine if recharge in the Edwards Aquifer Recharge Zone can be enhanced through brush control and to what extent.

In addition, Authority directors referred protest of sixty-two permit proposals to the State Office of Administrative Hearings (SAOH). These protests will be heard by SOAH to propose a final permit to the board. Authority directors also authorized the general manager to present compromise and settlement agreements to permittees who either did not file or were late in filing their 2003 Demand Management/Critical Period Management Quarterly Withdrawal schedules.

In other business, Authority directors approved an agreed final order for one initial regular permit for an applicant who had previously filed a protest on their proposed permit. After further review of the applicant's file, all parties agreed the applicant provided additional documentation to substantiate their claim for more Edwards Aquifer groundwater than originally proposed by staff. This agreed final order represents approximately 75 acre-feet of Edwards Aquifer groundwater. In addition, Authority directors adopted an omnibus final order approving four initial regular permits representing approximately 527 acre-feet of Edwards Aquifer groundwater withdrawal rights. The board also denied two applications representing a total of 484 acre-feet of Edwards Aquifer groundwater.

Initial Regular Permits

by Steven D. Walthour, Program Development Liaison

In September, Authority staff recommended to the Authority's board of directors one Agreed Final Order (AFO) representing 75.457 acre-feet of Edwards's groundwater withdrawal rights per annum. The Authority's board of directors also adopted an Omnibus Final Order approving four initial regular permits representing 526.84 acre-feet of Edwards Aquifer groundwater withdrawal rights per annum. The Authority's board of directors accepted the staff's recommendation to adopt an Omnibus Final Order denying applications for two initial regular permits. The Authority's board of directors considered an interim order granting sixty requests for contested case hearings, and referred those matters to the State Office of Administrative Hearings.

This month, the Authority's board of directors granted 602.297 acre-feet of Edwards' groundwater withdrawal rights and denied 484.000 acre-feet of Edwards' groundwater withdrawal rights.

To date, the Authority has issued final decisions on 892 Initial Regular Permit applications representing approximately 81 percent of all applications filed with the Authority. The Authority has issued 707 permits and denied 185 permit applications. The Authority has issued a total of 501,263 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights. Approximately 205 protested permit applications remain, representing approximately 66,113 acre-feet of Edwards' groundwater withdrawal rights.

Well Construction Program

by Rick Illgner, Program Manager – Groundwater Management Strategies

In August, Authority staff issued 28 well construction permits. This total includes 6 Edwards Aquifer domestic well permits, 2 capping permits for 2 industrial Edwards Aquifer wells, and 1 Edwards Aquifer well plugging permit. In addition, 19 permits were issued to drill through the Edwards Aquifer.

For more information regarding the Authority's well construction program, contact Jeff Robinson, Regulatory Programs Coordinator.

Groundwater Withdrawal Transfers

by Rick Illgner, Program Manager – Groundwater Management Strategies

In September, Authority staff processed 8 partial sales and lease transfers representing 849.750 acre-feet in groundwater withdrawal rights. Since the inception of the transfer program, Authority staff processed 872 partial sales and lease transfers representing 171,749.610 acre-feet of groundwater withdrawal rights. Of the 872 partial sale and lease transfers completed, only 622 are currently active representing 117,319.748 acre-feet. Active transfers include 99 sub-leased transfers representing 20,506.432 acre-feet. In addition, Authority staff processed 12 change of ownership or miscellaneous transfers representing 2,245.754 acre-feet.

Transfer Description	Number of Transfers	Acre-Feet
September (9/1/03 - 9/31/03) Transfers (Partial Sales, Leases, Sub-leases and Re-sales)	8	849.750
September (9/1/03 - 9/31/03) 100% Change of Ownership (Sale of Place of Use) or Miscellaneous Transfers	12	2,245.754
Total Number of Transfers (Partial Sales, Leases, and Sub-leases and Re-sales) Completed as of 9/31/03	872	171,749.610
Total Number of Active Transfers (Partial Sales, Leases, Sub-leases, and Re-sales) as of 9/31/03	622	117,319.748
Total Number of Active Sub-leased Transfers as of 9/31/03	99	20,506.432
Total Number of Active Re-sale Transfers as of 9/31/03	93	3,325.892

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 September 30, the Authority has collected a total of \$7,377,581 in non-agricultural aquifer management fees, or 79.5 percent 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.

Also 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 September 30, the Authority has collected \$198,137 from agricultural users based on 99,068 acre-feet of groundwater used in 2002. The amount of revenue collected represents 99 percent 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.

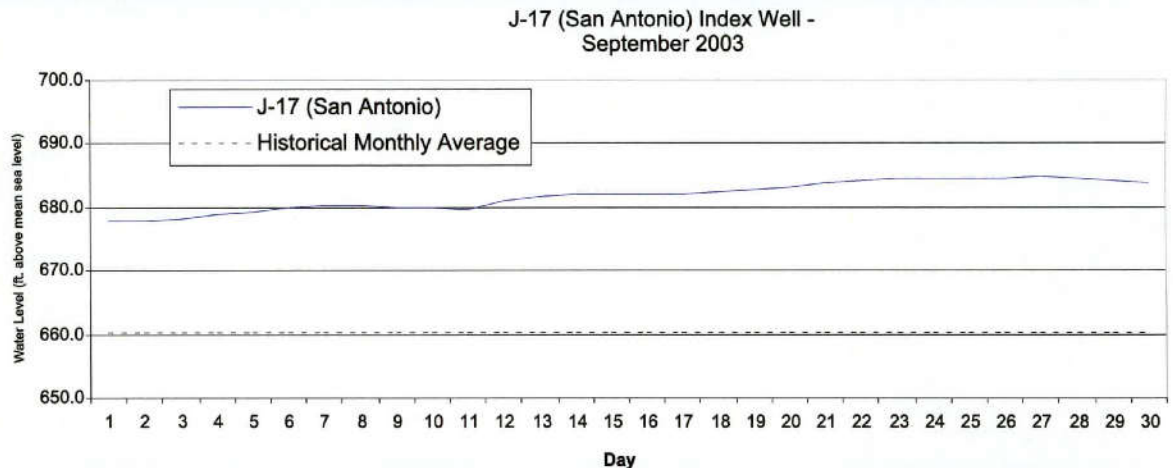
MONTHLY WATER LEVEL & SPRINGFLOW REPORT

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

J-17 (San Antonio) Index Well – September 2003

The J-17 index well level average rose 2.6 feet from 679.2' above mean sea level (msl) in August, to 681.8' msl in September. The September 2003 high of 684.7' is 4.7 feet below the September 2002 high of 689.4' msl.

The J-17 historical monthly average for September is 660.1' msl.



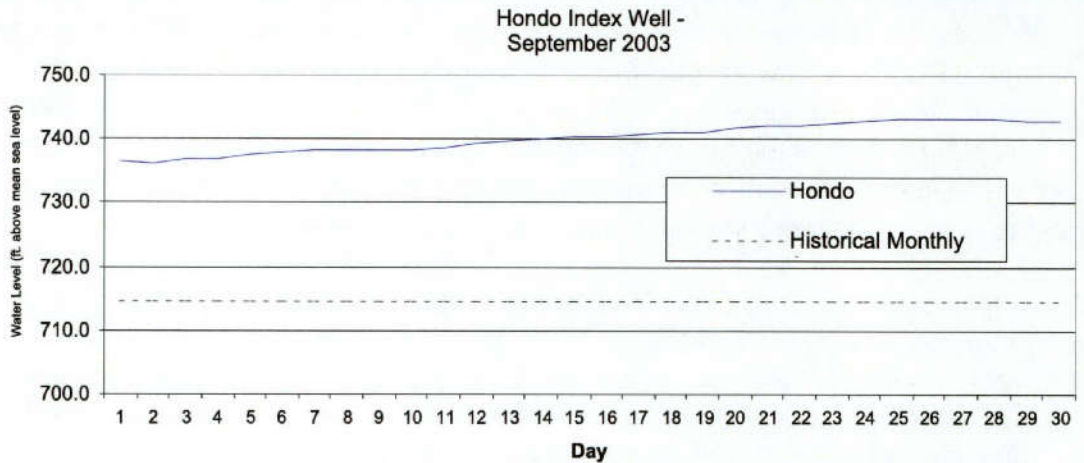
J-17 (San Antonio) Index Well – Combined Historic Record for Two Wells: 1932-2002

	September 2003	September 2002	Historical Record	
Maximum	684.7	689.4	June 14, 1992	703.3
Minimum	677.8	680.8	August 17, 1956	612.5
Average	681.8	686.1	Sept. (1932-2002)	660.1

Hondo Index Well – September 2003

The Hondo index well level average rose 2.7 feet from 737.5' msl in August, to 740.2' msl in September. The September 2003 high of 743.3' msl is 2.6 feet below the September 2002 high of 745.9' msl.

The Hondo Well historical monthly average for September is 714.6' msl.

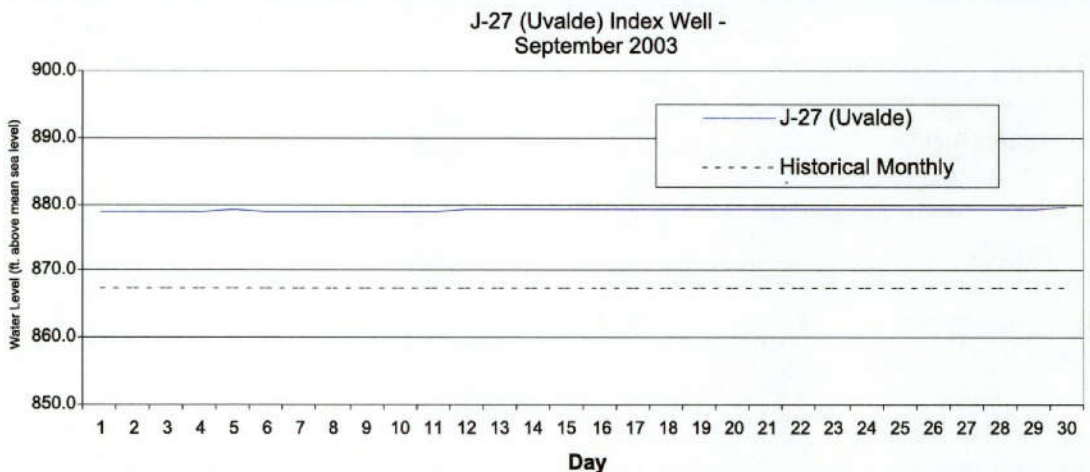


Hondo Index Well – Historic Record: 1986-2002				
	September 2003	September 2002	Historical Record	
Maximum	743.2	745.9	June 14, 1992	779.0
Minimum	736.2	734.5	June 29, 1990	651.0
Average	740.2	742.0	Sept. (1986-2002)	714.6

J-27 (Uvalde) Index Well – September 2003

The J-27 index well level average rose 0.1 feet from 879.0' msl in August to 879.1' msl in September. The September 2003 high of 879.4' msl is 0.3 feet below the September 2002 high of 879.7' msl.

The Uvalde Well historical monthly average for September is 867.4' msl.

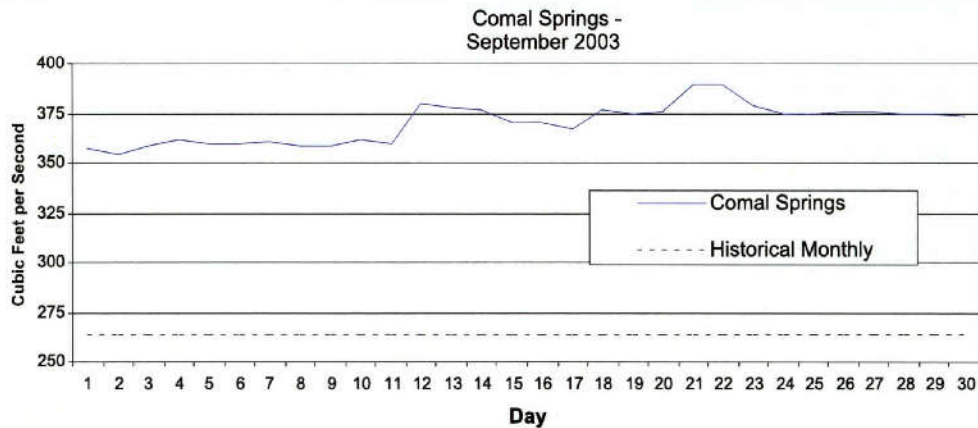


J-27 (Uvalde) Index Well – Historic Record: 1940-2002				
	September 2003	September 2002	Historical Record	
Maximum	879.4	879.7	June 15, 1987	889.0
Minimum	878.9	878.7	April 13, 1957	811.0
Average	879.1	879.3	Sept. (1940-2002)	867.4

Comal Springs – September 2003

Comal springflow reached a maximum flow of 389 cubic feet per second (cfs) on September 21. The minimum flow occurred on September 2 at 354 cfs.

The September 2003 average was 370 cfs, which was 106.1 cfs above the historical monthly average of 263.9 cfs.



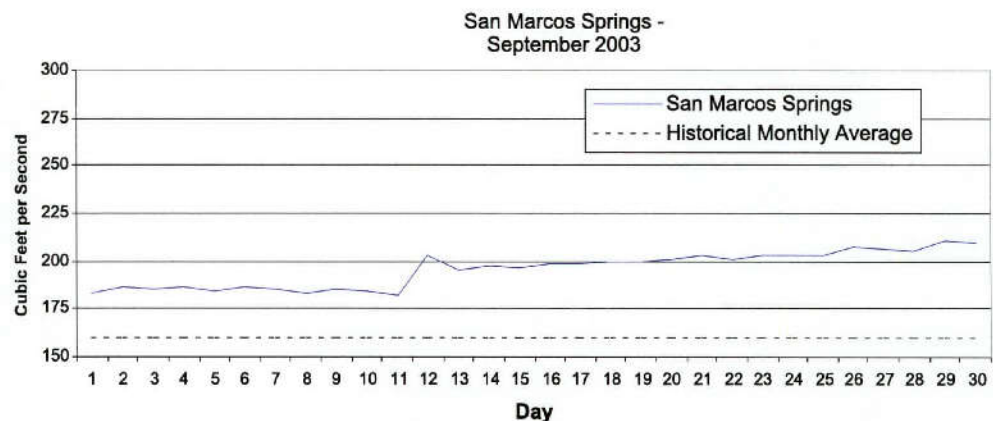
Comal Springs Historic Record: 1927-2002

	September 2003	September 2002	Historical Record	-
Maximum	389	409	October 14, 1973	534.0
Minimum	354	363	August 8, 1956	0.0
Average	370	385	Sept. (1927-2002)	263.9

San Marcos Springs – September 2003

San Marcos springflow reached a maximum flow of 211 cfs on September 29. The minimum flow occurred on September 11 at 182 cfs.

The September 2003 average was 196 cfs, which was 35.9 cfs above the historical monthly average of 160.1 cfs.



San Marcos Springs Historic Record: 1956-2002

	September 2003	September 2002	Historical Record	-
Maximum	211	300	March 12, 1992	451.0
Minimum	182	283	August 15, 1956	46.0
Average	196	292	Sept. (1956-2002)	160.1



**EDWARDS AQUIFER
AUTHORITY**

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

210.222.2204 or 1.800.292.1047
www.edwardsaquifer.org

BE AQUIFER AWARE

CALENDAR OF EVENTS FOR OCTOBER & NOVEMBER

OCTOBER

Wed 10/15	6 pm	Public Hearing on 2004 Proposed Budget and Proposed Rules, Edwards Aquifer Authority Conference Center, San Antonio
Mon 10/20	6 pm	Public Hearing on 2004 Proposed Budget and Proposed Rules, Willie DeLeon Civic Center, Uvalde
Wed 10/22	6 pm	Public Hearing on 2004 Proposed Budget and Proposed Rules, New Braunfels Civic Center, New Braunfels
Tues 10/28	10 am 11 am 1 pm	Habitat Conservation Plan Work Group Aquifer Management Planning Committee Permits Committee
Wed 10/29	11 am 1:30 pm	Finance/Administrative Committee R&T Committee

NOVEMBER

Mon 11/10	12 pm	Executive Committee
Tues 11/11		Veterans Day Holiday, EAA Offices Closed
Tues 11/18	3 pm	Board Meeting, Edwards Aquifer Authority Conference Center, 1615 N. St. Mary's Street, San Antonio, Texas
Thus-Fri 11/27-11/28		Thanksgiving Day Holiday, EAA Offices Closed

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.