

AQUIFER BULLETIN

www.bseacd.org

January - April 2008

2008, No. 1



District Celebrates 20 Years of Aquifer Protection

Twenty-one years ago, the Cities of Buda, Hays, San Leanna, Sunset Valley, and Austin realized a need for added protection of groundwater resources in the Barton Springs segment of the Edwards Aquifer.

These cities filed a petition to form a groundwater conservation district, which spurred the Texas Water Commission (now the Texas Commission on Environmental Quality) to create the Barton Springs/Edwards Aquifer Conservation District (the District) later that year. The District was validated in 1987 by the 70th Legislature of the State of Texas, was confirmed by approximately 80% of the popular vote in an election held on August 8, 1987, and established its first set of Rules & Bylaws in early 1988. Since then the District has been committed to managing and preventing the waste of the groundwater resources of the Barton Springs segment of the Edwards Aquifer, which provides the drinking water supplies for over 50,000 Central Texas residents living in parts of the four counties that comprise the District.



see **ANNIVERSARY** on page 2

Aquifer Update: Heading Toward Drought?

Water levels and spring discharge currently remain above average, but a steep decline in levels has begun. The past 4 months have seen unusually dry weather and below average rainfall, resulting in decreased recharge to the aquifer. For example, Onion Creek, the largest contributor of recharge to the aquifer, stopped flowing in September 2007.

The U.S. Drought Monitor reports that much of Texas is currently experiencing "abnormally dry" to "moderate drought" conditions. If no rainfall occurs in the next

see **UPDATE** on page 3

ALSO IN THIS ISSUE:

<i>FROM THE DESK OF THE GM</i>	<i>P. 4</i>
<i>BSEACD CALENDAR</i>	<i>P. 5</i>
<i>PRECINCT 1 DIRECTOR CHANGE</i>	<i>P. 6</i>
<i>BSEACD IN THE COMMUNITY</i>	<i>P. 7</i>
<i>NEW MONITOR WELL</i>	<i>P. 7</i>
<i>NEW AQUIFER REPORTS</i>	<i>P. 8</i>
<i>NEW BSEACD COMMUNICATIONS</i>	<i>P. 9</i>
<i>EZELL CAVE VIDEO</i>	<i>P. 9</i>
<i>BSEACD SCHOLARSHIPS</i>	<i>P. 10</i>
<i>TIPS FOR WINTER GARDENING</i>	<i>P. 11</i>
<i>BSEACD RULE CHANGES</i>	<i>P. 12</i>
<i>UPCOMING EVENTS</i>	<i>P. 13</i>
<i>HHW COLLECTION</i>	<i>P. 15</i>
<i>2007 STEWARDSHIP AWARDS</i>	<i>P. 16</i>
<i>AUSTIN CAVE FESTIVAL</i>	<i>P. 18</i>

BOARD OF DIRECTORS

Dr. Robert D. Larsen
Precinct 3 - President

Jack A. Goodman
Precinct 4 - Vice President

Craig Smith
Precinct 5 - Secretary

Gary Franklin
Precinct 2 - Director

Mary Stone
Precinct 1 - Director

DISTRICT STAFF

Kirk Holland, P.G.
General Manager

Dana Wilson
Administration Manager

Tammy Flow
Administrative Assistant - Personnel

Shannon DeLong
Administrative Assistant - Accounting

Jennee Galland
*Environmental Educator
Newsletter Editor*

Julie Jenkins
Environmental Educator

Dr. Brian A. Smith, P.G.
Senior Hydrogeologist

Brian Hunt, P.G.
Hydrogeologist

Joseph Beery
Hydrogeologist

John Dupnik, P.G.
Regulatory Compliance Specialist

Guy Rials
Regulatory Compliance Technician

Nathanael Banda
GIS Specialist

To commemorate the 20th anniversary, the District hosted a series of events designed to educate the community about groundwater and celebrate existing aquifer protection efforts. The celebration included the Austin Cave Festival in October, the Groundwater Stewardship Awards in November, and culminated with the District's 20th Anniversary Reception in December. (Note: more on the Cave Festival and Groundwater Stewardship Awards can be found later in this newsletter).

The 20th Anniversary Reception was held at the Zilker Clubhouse on December 4th and drew over 100 "Friends of the District" who reminisced about the District's inception and last 20 years. "This is the time to celebrate our many important accomplishments during the past two decades," said BSEACD Board Vice President Jack Goodman, who has been involved with the District since the Texas Legislature created it in 1987. "It's also the time to look ahead and educate the next generation of Central Texans about the importance of protecting and conserving the environment, especially our groundwater resources."

The District's General Manager, Kirk Holland, further notes, "Many of those attending our anniversary events, and now many of you reading this newsletter, have been a part of the District's heritage, contributing to the growth, maturation, and success that the District has enjoyed during the past 20 years. The District Board and staff look forward to continuing to work with all of our stakeholders and the larger community as the District addresses the challenges that the next 20 years will present."



Front Page: Tammy Raymond and Shannon DeLong display the celebration's cake.

Above: Charles Laws and Mark Zeppa

Right: Sarah Baker and Jennifer Walker





Drought Status: **No Drought**



Barton Springs/Edwards Aquifer Conservation District

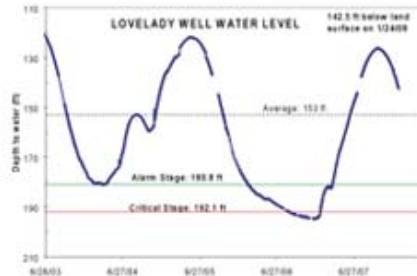
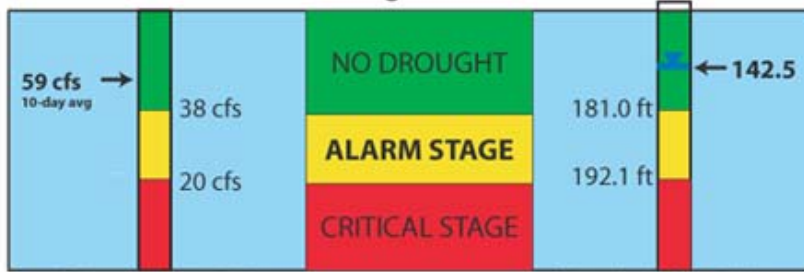
January 24, 2008



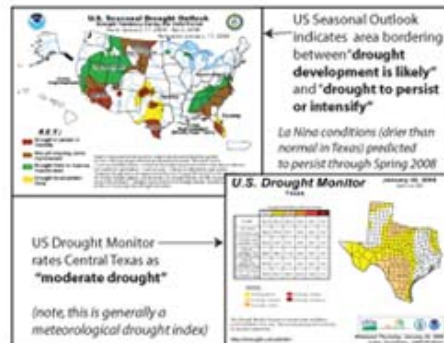
Barton Springs Discharge
(cubic feet per second)



Lovelady Monitor Well Depth to water level
(feet)



Note: Onion creek has stopped flowing on the Recharge Zone since about the end of September 2007.



few months, Barton Springs is on a trajectory to reach a discharge of 38 cubic feet per second (cfs), the trigger for Alarm Stage Drought, by mid-March 2008. If dry conditions persist, then subsequently Critical Stage Drought (triggered at 20 cfs) could come as soon as late Fall 2008.

Unfortunately, the outlook for wet conditions is not favorable. The U.S. Seasonal Outlook indicates that "drought development is likely" for our area and much of South Texas. This is primarily due to the development of "La Nina" conditions in the Pacific Ocean, which often results in decreased rainfall in Texas.

The District will continue to monitor conditions. Please visit our website for the current drought chart.

Brian Hunt, P.G. oversees the District's Monitor Well Network.

www.bseacd.org/graphics/current_drought_flyer.pdf

BSEACD

Barton Springs/ Edwards Aquifer
Conservation District



Twenty years! That's how long your groundwater conservation district has been conserving, preserving, and protecting the groundwater resources in our jurisdiction. In this edition of the newsletter, I am using this landmark anniversary as a good time to look back on some of the noteworthy aspects of those twenty years in a big-picture way, and then look forward to challenges and issues that we, both as a District and a groundwater-using community, face in the upcoming years.

In retrospect and from the vantage point of someone who is a relative newcomer to this business, I am impressed - maybe even awed - by the prescience and the good sense of those who conceived and formed the District possessed back in the mid-1980s. There were too many contributors to that effort to name individually here, but without the political savvy and commitment of former State Senator Gonzalo Barrientos, this District as we know it would probably not exist. The District's enabling legislation, which was passed, signed into law, and ratified by local voters in 1987, allowed the District to establish rules and bylaws in early 1988 to operate slightly differently than most groundwater conservation districts (GCDs) under a common statutory authority - in recognition of the burgeoning demand for Edwards groundwater as a public water supply in the area and the nature of the karst aquifer system. Hence, 1) our permitting threshold (i.e., the definition of who is exempt or not) is much lower than other GCDs and allows more effective regulation; 2) our water use fee is higher and its structure is based on a consistent right-to-use basis than actual, variable annual use, which is different than most other GCDs that have much larger, agriculturally-based demand, allowing for managing the groundwater as a scarce drinking-water resource; and 3) the City of Austin provides a strong financial commitment as a supplement to water use fees, at least in part to protect Barton Springs as a recreational, ecological, and aesthetic resource and as a municipal water-supply, allowing the District to offer more robust scientific, educational, and regulatory programs than might otherwise be possible.

While some GCDs had been in existence for several decades, particularly in the Panhandle and Trans-Pecos Texas, they were just becoming a force for local groundwater management in the late 1980s and early 1990s, and there were plenty of folks who didn't understand the mission and the benefits of a GCD - the BSEACD was mostly viewed (or portrayed) as another potential "layer of government intruding into people's lives." Much of early history of the District was plagued by this sentiment, and this conflict was reflected in some acrimonious situations, not just between the District and constituents but also within the early Boards! (I'm not kidding; reportedly there were fisticuffs between directors!) And truth be told, there are still some of the same sentiments in a few of the District's constituents and stakeholders today, but many more have come to appreciate the beneficial role that the District serves.

A watershed event, if you will pardon the terminology, occurred in 2003, when the District initiated its Sustainable Yield Study (SYS, for short). As the use of Edwards groundwater grew, it became clear that some limit to pumpage from the Edwards Aquifer would be required during drought periods, in order to avoid groundwater quantity and quality problems in some existing and future wells in part of the District and also to preserve some spring flow at Barton Springs. The SYS essentially defined the firm-yield of the Edwards, and it led to the establishment and implementation of the two-tiered regulatory program that we know today as historical-use and conditional-use. This allows the District to manage the groundwater resource in a prudent fashion, supporting its use as a relatively inexpensive, plentiful, and high-quality supply during non-drought times, and curtailing use by prescribed amounts during defined drought periods, up to complete curtailment for those with later, conditional-use permits, in order to preserve the shared resource as much as possible. It provides a

see **GM REPORT** on page 5

GM REPORT *Continued from page 4*

reasonable groundwater management policy and technical approach, founded on sound science. In that regard, the SYS and other types of technical studies have been helped considerably over the years by the input of local technical experts serving on technical advisory teams.

Wrapping up our retrospective, I think the District has exhibited, not surprisingly, the same growing pains and evolving personality that a parent sees in a child. The early years are a period of rapid learning: deciding how to deal with ourselves and with others, and finding out what is important. There were plenty of missteps, as one might expect, but each provided an opportunity for growth. We are now a relatively mature, yet still learning organization, with a self-actualized staff that works as a team, a Board that understands what its role is and isn't and that respects differences of opinion among themselves and between different constituencies, and a program that is aligned with our tactical needs and strategic direction.

So, what does the future hold? Speaking personally, I look forward to the District's continuing to serve our stakeholders as issues arise. Over time, the composition of the Board will change and the composition of the staff will change, but we have established a good working model for the future. The Board sets the policies that we will follow consistent with our statutory authorities; the staff executes the program in an effective and efficient fashion; and the GM is the chief operating officer, the staff's advocate with the Board and the Board's advocate with the staff.

Gazing into my crystal ball, here are some of the events and challenges that we will be addressing in the future:

- Customizing our regulatory approach to better accommodate differences among aquifers and different geographic areas of the District;
- Completing the final Habitat Conservation Plan (and its associated federal environmental documentation) and acquiring a Section 10(a) permit from the US Fish and Wildlife Service, on behalf of all of the groundwater users, whether from wells or at Barton Springs;
- Supporting actively the development of alternative groundwater resources, especially desalination of the very large and untapped resource that is the saline zone of the Edwards;
- Promoting effective groundwater management for a larger geographic area; and

- Participating more effectively and directly in joint regional planning, both with other GCDs and with regional water planning groups, in order to promote effective utilization of all the groundwater resources under our jurisdiction for all Central Texans and to protect the resource from those with only a short-run view of the resource.

To accomplish those things, we in the District will need the support of a lot of different people and institutions, but our history suggests that we can count on that!



Kirk Holland, P.G. is the District's General Manager.

District Calendar

The Board of Directors usually meets on the 2nd and 4th Thursdays of the month beginning at 6 p.m. **However, the meeting schedule is subject to change.** Please contact the District office at 512-282-8441 or the website at www.bseacd.org for more information about upcoming meetings of the Board as well as advisory committee meetings. The agenda for posted meetings can be found on the District website. Most Board Meetings and Work Sessions are held at the District's office at 1124 Regal Row, Austin, TX 78748.

February 14 & 28	6:00 p.m.	Board Meeting
February 18		Office Closed for Presidents' Day
March 7		Scholarship Essays Due
March 13 & 27	6:00 p.m.	Board Meeting
April 4		Camp Scholarship Apps. Due
April 10 & 24	6:00 p.m.	Board Meeting

Precinct 1 Director Change

Since our last newsletter, the District Director for Precinct 1, which encompasses most of Hays County that is in the District west of I-35, has changed.

Chuck Murphy surprised all of us in mid-November by announcing that he was immediately resigning from the Board because had taken a new job in Greensboro, North Carolina, and would be relocating there within a couple of weeks, with his family to follow over the holiday school break. We were pleased for Chuck to be able to take advantage of this important career-advancement opportunity, but at the same time very saddened to see him leave the Board, as he was a very engaged and engaging director. The other directors and staff had an impromptu going-away party for him at lunch the following week, providing him a few mementos and lots of best wishes along the way (see above). Good luck, Chuck, in all your future endeavors!



The Precinct 1 Director term ends in May 2008. At that time during BSEACD's regular election, voters in Precinct 1 will elect a director for the next four years. Under the District Bylaws, the Board had the option to leave the seat vacant until the next regular election, or appoint someone to serve out the six-month unexpired term of that precinct's director. Because District Precinct 1 is a very groundwater-dependent area and has a number of important matters that the Board will consider this year, the Board believed that it would be important to appoint a new director for this precinct to serve its constituents, if a qualified and willing person could be located. A public solicitation of interest produced four very qualified candidates, one of which subsequently withdrew. After a round of interviews between each of the remaining interested parties and Board members, on January 24, 2008, the District Board appointed Buda resident Ms. Mary Stone as the Precinct 1 Director. She will serve in the position until late May 2008 when the elected director for that precinct is sworn into the position.

Mary Stone lives in Buda with her husband, Joel; her children, Abbie and Walker; and their dog, Jess. Mary was born and raised in a small town in Ontario, Canada, and immigrated to America in 1993. She became an American citizen in 1996.



Mary graduated from Lakehead University in 1987 with a Bachelors of Science in Nursing. She has worked in intensive care and community healthcare, but currently runs a successful photography studio in downtown Buda. Mary is a member of the PTA and the Buda Chamber of Commerce. Also, she is a founding member of Buy Local and serves as a board member of the Hays Education Foundation.

Welcome, Mary, to the District Board!

Above: Board President, Dr. Bob Larsen, presents Chuck Murphy with a plaque commemorating his service to the District and its constituents.

Left: Mary Stone, Precinct 1 Director

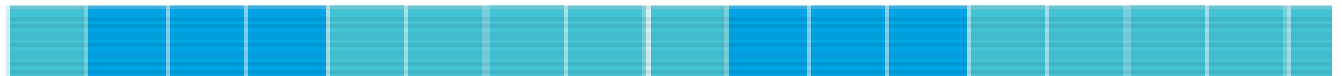


BSEACD Staff and Board Members: In the Community

in each issue of the newsletter we will be featuring one of the District staff or Board member's leadership roles in other community organizations and the work of that organization. This issue we are spotlighting BSEACD hydrogeologist Brian Hunt. Brian graduated from UT Austin with a B.S. (1996) and M.Sc. (2000) in geological sciences. He is a registered professional geologist with the State of Texas and has been a hydrogeologist with the District for 7 years. He was elected as President of the Austin Geological Society and is halfway through his August 2007-2008 term.



The Austin Geological Society is a professional society made up of about 150 geologists and earth scientists in the Austin area. The goal of the society is to promote the interest and advancement of geology, facilitate discussion and dissemination of geologic information, encourage professional cooperation among scientists, and to enhance the public understanding of geology. The society meets monthly, conducts fieldtrips, and its members are involved in a variety of professional and public activities. Visit the society website for more information at: www.austingeosoc.org



Westbay® Multiport Monitor Well Installation



Drilling of a Westbay® multiport monitor well started on January 21 with the goal of installing 12 monitor zones in a single borehole to a depth of about 1,100 ft. This well will be used for sample collection, aquifer testing, and pressure measurements of discrete hydrogeologic zones. Monitor zones will be established in the Edwards, Upper Trinity, Middle Trinity, and if possible, the Lower Trinity Aquifers. Data collected from this well will give us considerable insight into flow within each sub-unit within the aquifers, potential for vertical flow between zones, and will provide detailed data on the geochemistry of the groundwater in each zone. As of February 4 the borehole had been drilled to a depth of 980 ft. Installation should be completed by February 9 with testing and sampling to be conducted the following week.

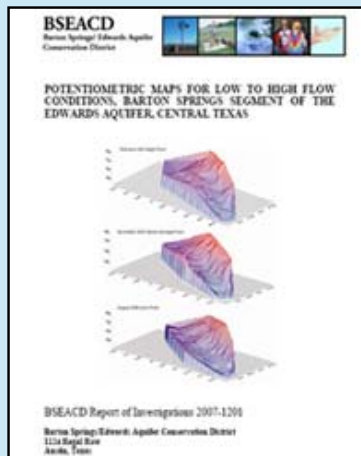
Dr. Brian Smith, P.G. is the District's senior hydrogeologist and aquifer science team leader.

New District and U.S. Geological Survey Reports Released

The District routinely collects data and conducts scientific studies of the aquifer, which are later documented and distributed in published reports. These "Reports of Investigations" summarize studies that are narrow in scope with a significant scientific interest and contain data, results, discussions, and interpretations.

The U.S. Geological Survey recently published a "Scientific Investigations Report" on a study delineating the saline-water zone boundary near Buda and Kyle. The study was done in cooperation with the District.

Brief descriptions and links to these recent reports are provided below:



Potentiometric Maps for Low to High Flow Conditions, Barton Springs Segment of the Edwards Aquifer, Central Texas

This report presents water level maps (potentiometric maps) for a variety of hydrologic conditions. The detailed maps presented in the report reveal many interesting hydrologic features about the aquifer.

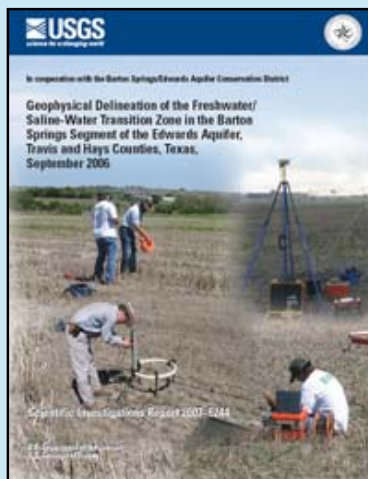
The report is currently available in digital form upon request, and will soon be available on our website.

Geophysical Delineation of the Freshwater/Saline-Water Transition Zone in the Barton Springs Segment of the Edwards Aquifer, Travis and Hays Counties, Texas, September 2006

The U.S. Geological Survey, in cooperation with the District, conducted a geophysical study along the freshwater/saline-water transition zone in the Barton Springs segment of the Edwards aquifer in Travis and Hays Counties, Texas. A few highlights of the study include:

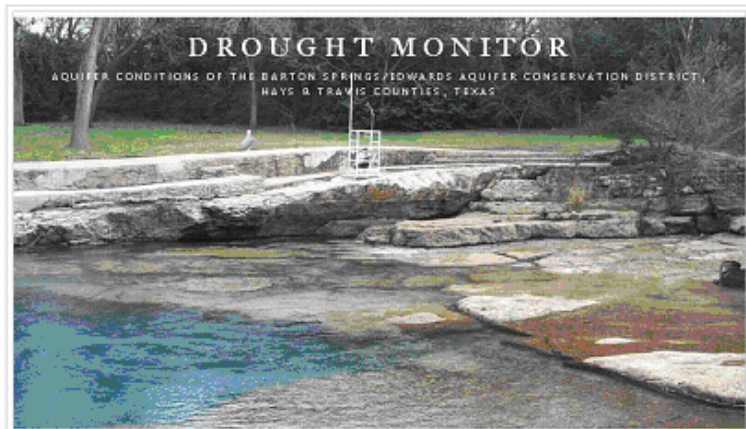
1. The geophysical method used in the study appears to be a good tool for delineating saline water in the Edwards Aquifer;
2. In map view, the boundary between the fresh- and saline-water zone is generally sharp, along the eastern side of IH-35 and agrees with published boundaries;
3. However, at depth the boundary between the fresh- and saline-water zone appears to locally extend below the fresh water to the west of IH-35.

The study can be found on the web at:
<http://pubs.usgs.gov/sir/2007/5244/>



BSEACD Adds New Communication Tools

SEARCH BLOG FLAG BLOG Next Blog



THURSDAY, JANUARY 24, 2008

Current Conditions 1/24/2008

Drought Status: **NO DROUGHT**

Barton Springs = 58 cfs (10-day avg is 59 cfs)

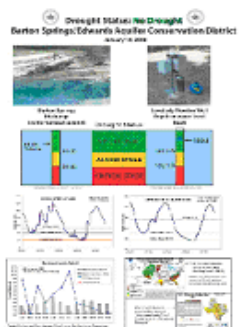
Lovelady Well = 142.5 feet

Manchaca Rainfall (year to date) = 0.71 inches

U.S. Drought Monitor indicates "moderate drought" conditions (note, this is a meteorological drought index).

U.S. Seasonal Outlook indicates our area is bordering on "drought development is likely" and "drought to persist or intensify."

POSTED BY BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT AT 10:40 AM



The District's staff has designed a new tool to help communicate aquifer levels. The drought monitor blog gives a one-glance look at current aquifer conditions and will be updated on a regular basis. It will also contain a link to the most up-to-date drought chart.

In addition, several of the District's outreach events can be found at www.lconmedia.org and on Channel 10's Austin News Real: Texas Water 101. Currently, these video clips include the Austin Cave Festival and the Groundwater Stewardship Awards. Austin News Real is produced by Pam Thompson and Stefan Wray.

<http://droughtmonitor.blogspot.com/>

The Search For The Blind Monster

Join documentarian Joe Furman as he guides viewers through Ezell's Cave (the first cave preserve in Texas) and the seldom seen depths of the Edwards Aquifer. The Search for the Blind Monster contains rare footage of this wild cave and the many inhabitants that call it home. For the first time on video, the Texas blind salamander (the first animal placed on the federal endangered species list and the most advanced cave salamander in the world) is recorded swimming in its natural environment. Brian Smith, senior hydrogeologist with BSEACD, remarks, "I think the DVD can be a great tool for showing the public, from school children to adults, what the aquifer looks like and why we need to protect it."

The video costs \$20 and may be purchased online at: <http://texasblindsalamandermovie.com>



Aquifer District Expands Its Scholarship Program

For over ten years, the Barton Springs/Edwards Aquifer Conservation District has held an annual groundwater essay contest for Austin-area high school students. Winners of the contest each receive a \$1500 scholarship to the institution of his/her choice. The District is pleased to announce it has extended its scholarship program to include four scholarships to the Edwards Aquifer Research and Data Center's Aquatic Science Adventure Camp at Texas State University in San Marcos.

Groundwater Essay Contest: Scholarship for Junior or Senior High School Students

The District is now soliciting applications and essays for its 2008 Groundwater Essay Contest. One essay will be selected as the winning entry by an independent evaluation panel, and the author will receive a \$1,500 scholarship to the college, community college, or training institution of his/her choice.

Essays must generally discuss groundwater issues, which may include but are not limited to non-point source pollution and pollution prevention, water conservation, or hydrogeology. While essays must focus on groundwater issues, applicants do not have to be planning a career path in a water-related field.

Applicants must be high school juniors or seniors currently enrolled in one of the seven school districts overlapping District boundaries (Austin, Eanes, Dripping Springs, Hays Consolidated, Del Valle, Bastrop, and Lockhart), or an accredited private school located within the boundaries of those school districts. Those individuals who have acquired a GED within the last six months are also eligible. In addition, essay contest winners must plan to use the scholarship money for the 2008-2009 school year; funds will be provided directly to the selected institution.

For contest rules and applications, please visit the District's web page at: www.bseacd.org/scholarship_program.htm or call (512) 282-8441. Essays and applications must be received by Friday, March 7, 2008 at 5 p.m.

Edwards Aquifer Research and Data Center's Aquatic Science Adventure Camp: Scholarships for Ages 9 to 15

The District is now soliciting applications and essays for its 2008 Camp Scholarship program. This year's program will provide:

- Two \$495 scholarships to the Edwards Aquifer Research and Data Center's Week-Long Aquatic Science Adventure Camp (Note: Parent will be responsible for providing the other \$100 of the camp fee, which will be the deposit needed to hold the child's spot.)
- Two \$120 scholarships to the Edwards Aquifer Research and Data Center's 2-Day Aquatic Science Adventure Camp (Note: All \$120 will be paid by BSEACD.)

The scholarship contest is open to children ages 9 through 15 who reside in one of the seven school districts overlapping District boundaries (Austin, Eanes, Dripping Springs, Hays Consolidated, Del Valle, Bastrop, and Lockhart). Interested students must submit an application and a 1-page essay/artwork entitled "Why I want to attend the Aquatic Science Adventure Camp!" Scholarship winners will be chosen in a random drawing; only completed applications with essays will be eligible. Deadline for submissions: Friday, April 4, 2008. For more information, rules, and an application form, please visit: www.bseacd.org/scholarship_program.htm.

The District would like to thank our permittee, St. Andrew's Episcopal School, for donating their Conservation Credits this year to the scholarship fund. Their donation will provide two scholarships to the 2-Day Aquatic Science Adventure Camp.

Tips for Winter Gardening

Colder temperatures have finally set in here in Central Texas, bringing an end to our gardens for the year. Until warmer weather returns, here are a few dos and don'ts to consider for our landscapes from Elizabeth Drozda-Freeman, the conservation landscape specialist for the Lower Colorado River Authority.



DO improve your soil by adding compost to vegetable, perennial and shrub beds.

DON'T overdo it with fertilizer on your lawns. Fertilizer applied to dormant grass is more likely to run off and pollute our waterways than to feed the turf. Instead try top-dressing with compost in the spring for a glorious lawn.

DO add two to four inches of mulch to perennial and shrub beds to improve moisture retention and help prevent roots from freezing.

DON'T prune evergreen perennials and shrubs now. Pruning stimulates new growth, which can be damaged when we get those hard freezes.

DO turn OFF your irrigation system November through February. Native and adapted plants need little or no supplemental water during the winter.

DO remember to water landscape plants before a hard freeze to reduce plant stress.

DON'T use plastic sheeting to wrap plants during a freeze. Instead use cloth sheets or blankets, which do a better job of protecting plants from freezing winds.

DON'T over-seed with rye grass. Over-seeding stresses lawns, requires lawn maintenance and uses valuable water resources.

DO plant a tree this winter. October through February is ideal tree planting season in Central Texas. If you don't have a spot in your yard, join efforts with a local tree planting group and support shady, green neighborhoods.

Elizabeth Drozda-Freeman is the conservation landscape specialist for the Lower Colorado River Authority. She can be reached at (512) 473-3200 Ext.2230 or elizabeth.drozda-freeman@lcra.org if you have comments, questions or suggestions for future gardening topics.

Implementing SB 747 and Other Rule Changes

In September 2007, the District adopted amendments and revisions to the District Rules and Bylaws. The District Board of Directors (Board) conducted a public hearing at their regular meeting on September 13, 2007 to consider public input on some proposed rule changes. The hearing continued until the next meeting on September 27, 2007, at which time they adopted the proposed revisions, effective immediately.

The primary objective of this round of revisions was to incorporate the new authority associated with the passing of Senate Bill (SB) 747 in the 80th Texas Legislative Session. In essence, SB 747 codified conditional permitting and provided the District with authority to increase certain groundwater production fees and implement measures to limit groundwater production from certain wells to protect the existing uses and the historic users of Edwards Aquifer groundwater during extreme drought. This authority is critical to effective aquifer management when our groundwater resources are stressed as they are during extended drought.

In addition to incorporating SB 747 related changes, the Board also instructed District staff to perform a rule review and address other rule areas that needed attention. The areas identified by District staff, among other things, were components of the rules that needed revision in a continuing effort to incorporate the District's evolving drought management strategies. These other changes are related generally to:

- new and revised definitions;
- additional well use classifications;
- additional and revised application information requirements;
- decision to hold public hearings;
- Hydrogeological Report requirements;
- "historical use" designation;
- permit conditions and requirements;
- well aggregation;
- metering and meter reading reports;
- Class A Conditional Production Permit designation;
- User Conservation Plan requirements; and
- User Drought Contingency Plan requirements and approval.

Further, on September 27, 2007, the Board also modified, after a separate public hearing, the bylaws governing public comment procedures, to ensure opportunity for effective and efficient input to Board decisions is available to all.

A more detailed summary of the substantive rule revisions and a complete copy of the District Rules and Bylaws may be obtained through our website at www.bseacd.org or by contacting our office. Please feel free to contact our office at 282-8441 with questions or for further information on any these changes.



Spring Educational Events

UPCOMING EVENTS AT THE LADY BIRD JOHNSON WILDFLOWER CENTER



Wildflower Center Spring Break Camp:

March 10 through March 14
Abrakadoodle Art Education, in partnership with the Lady Bird Johnson Wildflower Center, is pleased to announce a special camp for Spring Break week for elementary-aged students, grades K-5. Registration and pricing is available online at: www.abrakadoodle.com/tx03.html. Look under LBJ Wildflower Spring Break Camp. Or, call 512/380-7555 for more information.

Nature Nights:

March 21; April 18; May 23
Join us for family fun once a month on Friday evenings throughout the Spring. Nature Nights are fun, interactive explorations of animals, plants, and ecology in Central Texas. Learn about animals, wild plants, and more! \$1 admission; 6 p.m. to 9 p.m..

Spring Plant Sale & Garden Festival:

April 11 - 13;
Members-Only Preview Sale, Friday, April 11
Choose from more than 300 species of your favorite or hard-to-find native plants at our annual Spring Festival and Plant Sale. Get some of the best advice from experts on landscape design and horticultural techniques to help them flourish. A list of available plants will be featured online at www.wildflower.org prior to the sale.

National Wildflower Week:

May 5 - May 11, 2008
Celebrate the natural beauty and vital role of native plants during National Wildflower Week. Participate with tours of the gardens, and celebrate the beauty of the Hill Country with on-site interpretation.



2008 ENVISION CENTRAL TEXAS COMMUNITY STEWARDSHIP AWARDS

The Envision Central Texas (ECT) Community Stewardship Awards program has been created to recognize and honor the innovative people, projects and processes that are addressing the growth challenges facing our region in ways that will move us closer to a vision for our future that preserves and enhances our natural resources, economic vitality, social equity, and overall quality of living.

Local non-profit and community organizations, businesses, cities, counties, developers, builders, designers, media, neighborhood groups and others based in the five-county Central Texas region (Bastrop, Caldwell, Hays, Travis and Williamson counties) are encouraged to submit applications for the third annual ECT Community Stewardship Awards. Self-nominations or nominations by others are welcome. The award categories are New Development, Redevelopment, Pioneer, Public Planning & Policy, Raising Public Awareness and the W. Neal Kocurek Legacy Award. Award recipients will be selected by a jury made up of recognized experts from around the country.

Visit <http://envisioncentraltexas.org> to download an application. The deadline for applications is noon on February 22, 2008.



see **EVENTS** continued on page 14

EVENTS Continued from page 13

AQUATIC SCIENCES ADVENTURE CAMP

Presented by the Edwards Aquifer Research and Data Center at Texas State University-San Marcos

A co-ed camp for students; sessions are available for ages 9-11, 11-13, 13-15.

Teachers are also needed to assist with the camp.

Let your student learn about water resources in the beautiful Central Texas Hill Country. The camp features a variety of educational and recreational activities. Educational activities include collecting aquatic organisms from ponds and streams, microscope labs, water chemistry labs (pH, temperature, dissolved oxygen, turbidity testing) and viewing aquatic wildlife and spring systems from a glass-bottom boat. Recreational activities include tubing, swimming, river rafting, a scuba/snorkeling lesson and a trip to Sea World.

Week-long and 2-day sessions are available for Summer 2008.

For information call 512-245-2329, e-mail LG16@txstate.edu or visit our website: www.eardc.txstate.edu/camp.html



**CLEAN SWEEP 2008
KEEP AUSTIN BEAUTIFUL**

Saturday, April 5, 2008

Cleanup: 9 a.m. to 11 a.m.

Volunteer Party: 11:30 a.m. to 1:30 p.m.

Be a part of Austin's BIGGEST citywide cleanup! Volunteer for a group cleanup site or organize your own cleanup. KAB will provide all of the cleanup supplies.

All volunteers are invited to a family friendly party after the cleanup at Waterloo Park with free lunch, a free t-shirt, a climbing wall, live music, and kid's activities.

www.keeptaustinbeautiful.org



**AUSTIN NATURE DAYS
APRIL 2008**

Celebrate the 4th annual Austin Nature Day Event. This event is patterned after the successful Austin Museum Day, and brings over twenty Austin area environmental and cultural organizations together to celebrate the city's beauty, vitality, and diversity of natural landscapes and resources. Throughout April, organizations will offer over two dozen programs and events. For more information on all Nature Day activities, visit: www.austinnatureday.org.

Household Hazardous Waste Collections for Residents of Hays County



Protect your home and the environment by properly disposing of toxic chemicals you no longer need at one of these collections.



When?

Saturday,
March 8, 2008
8 a.m. to noon

Where?

City of San Marcos
City Hall
630 E. Hopkins
San Marcos, TX

Cost:

Event free to all residents of Hays County and the City of San Marcos. Must provide proof of residency.

Safety Tips:

- Transport chemicals in trunk of car
- Keep products in original containers
- If broken or leaking, place in container of like material
- Do not combine chemicals

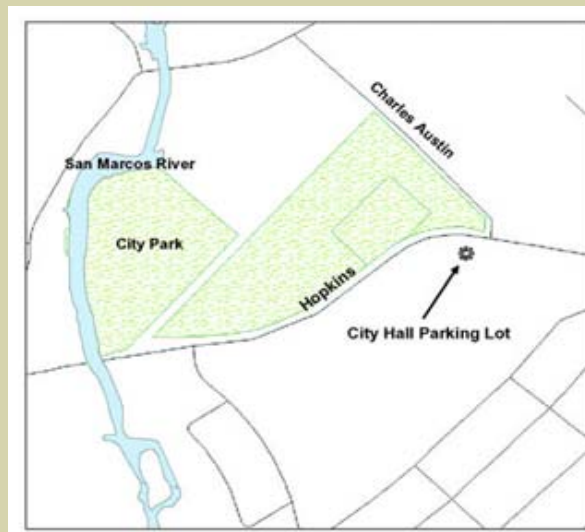
We will accept:

Cleaning Products:
Drain cleaners, concentrates, degreasers, oven cleaners, solvents, polishers, pool chemicals, household batteries, etc.

Paint Products:
Latex & oil-based paints, spray paints, thinners, strippers, preservatives, brush cleaners, etc.

Gardening Products:
Pesticides, sprays/dusts, weed killers, rat poisons, insecticides, etc.

Automotive Products:
Antifreeze, batteries, motor oil & oil filters, brake fluids, transmission fluid, etc.



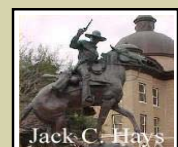
Rain or Shine!

We will not accept:

Tires, containers larger than 5 gallons, medical wastes, empty containers, compressed gas cylinders or wastes generated by businesses.



This is a drive-through event. You will not need to exit your car. Contact the City of San Marcos at 512-393-8036 with any questions.



Leaders in Groundwater Protection Recognized

On November 9, 2007, the Barton Springs/Edwards Aquifer Conservation District hosted its 2007 Groundwater Stewardship Awards at a luncheon prepared and served by the Bowie High School Culinary Arts program. Each year, the District presents these awards to deserving individuals, organizations, companies or agencies that have excelled in efforts to protect and conserve water resources in the District. In addition to the District's regular annual recognitions, this year's luncheon included a new award, Permittee of the Year. This award honors the District permittee that the staff and Board feel most demonstrates a continued commitment to education, water quality protection, and water conservation.

BSEACD congratulates the following recipients who were chosen from a record number of submissions:



Venkappa Gani

Water Conservation by an Aquifer End-User: Venkappa Gani

Venkappa Gani moved to the Manchaca area in 2002 and quickly became involved with the Travis County Master Gardener Association. He installed his own native, water-wise landscape and a rainwater harvesting system. This experience gave him the confidence and enthusiasm to share rainwater harvesting with other interested residents. He was instrumental in designing and installing a demonstration rainwater harvesting system at the Zilker Park Clubhouse and gives water-wise landscaping workshops at garden club meetings and home and garden shows. He has won several awards for his efforts and has been featured on KLRU's Central Texas Gardener program.

Water Conservation by a Water Supplier or Permittee:

The City of Sunset Valley

The City of Sunset Valley provides a variety of conservation programs and incentives for its citizens, which include hose-end timers; mulch delivered upon request; individualized watering schedules; water conservation literature; and water conservation kits for retrofitting toilets, sinks, and showers. They also offer a \$550 rebate for purchasing a high efficiency washing machine and \$325 rebate for purchasing a high efficiency toilet (1.28 gallons or less). To date, over 10% of households in Sunset Valley take advantage of one of these programs, and over the next 10 years if each household takes advantage of one of the replacement programs, it is estimated that the City of Sunset Valley can reduce water consumption by more than 10%, saving over 3 million gallons of water a year. In addition, to reduce demand on the aquifer during drought, the City is installing an emergency water bypass to connect with the City of Austin.



Sunset Valley



Alex S. Broun

Research: Alex S. Broun

Al Broun's research on the Trinity Aquifer has contributed significantly to a better understanding of the geology and hydrogeology of Central Texas groundwater resources. As projected additional demands on the Trinity grow within the District boundaries, Mr. Broun's research will be a crucial component in better understanding relationships between the Edwards and Trinity aquifers and how they should be managed.

Education: Laura Merino and Daniel Dietz

Laura Merino teaches aquatic science at Bowie High School and is recognized for her exceptional efforts to educate her classes on the Edwards Aquifer. Within one year of starting at Bowie, Laura has doubled the aquatic science classes from two to four and now reaches a total of 120 students a year. She takes her students to monitor Slaughter Creek regularly and provides the data online for the community. In addition to teaching seven classes at Bowie (she also teaches chemistry), she leads the school's Earth Conservation Club and seeks out and regularly attends professional development opportunities like the Groundwater to the Gulf conference. Laura is a shining example of a teacher who goes above and beyond, utilizing local resources to educate and inspire students to protect their environment.



Daniel Dietz serves as the Manager of the Wildland Conservation Volunteer Program with the City of Austin's Wildlands Conservation Division and is recognized for his tireless efforts to engage and educate volunteers who work on the City's 15,000 acres of water quality protection lands. Volunteers participate in activities that promote water quality protection for the aquifer (like salamander and deer counts, cave digs to enhance recharge, trash pickups along creeks, native grass seed plantings, juniper removal, and trail building) and walk away with valuable knowledge and skills they can use in their own backyards and communities.



Water Quality Protection: HaysCAN, Charles O'Dell, Ph.D

Dr. Charles O'Dell, a board member of HaysCAN, works tirelessly to monitor water quality protection issues in Hays County and the Barton Springs aquifer. He serves on several stakeholder committees (including the ongoing Gilleland Creek Total Maximum Daily Load Study, the Regional Water Quality Protection Plan, and the LCRA/SAWS Feasibility Study), works with local authorities to improve monitoring of on-site septic systems, and faithfully collects water samples from Bear Creek (immediately downstream of Belterra) on a monthly basis. He is also responsible for organizing a large, diverse group of local stakeholders to oppose TCEQ's draft direct discharge permit for Hays County WCID #1 (Belterra).



Permittee of the Year: The City of Buda

The City of Buda consistently takes progressive steps to monitor and manage their water use from the aquifer. The City has been proactive to diversify their water resources and practice conjunctive use. Specifically, they have recently completed and are utilizing a supplemental water supply connection with surface water provided by the Guadalupe-Blanco River Authority (GBRA). They were the first permittee to modify their User Drought Contingency Plan (UDCP) to reflect achieving compliance with drought limits through supplemental surface water, and adopted this UDCP as a City ordinance. In addition, they were 1 of only 4 permittees to have perfect compliance with monthly pumpage limits during critical stage drought and the water conservation period, and were diligent in policing and enforcing UDCP provisions under the adopted City ordinance during drought.

The Austin Cave Festival Celebrates Austin's Caves and Karst

Each year, the Barton Springs/Edwards Aquifer Conservation District (BSEACD) and the Texas Cave Management Association (TCMA) hold the Austin Cave Festival at the Village of Western Oaks Karst Preserve to educate local residents about the importance and sensitivity of the Edwards Aquifer and its recharge features. This year's festival attracted over 1200 visitors from all over Austin and included short cave trips in Get Down and Live Oak Caves, vertical ropes courses, flintknapping demonstrations, hands-on activities for children, and two Halloween storytimes. Booth presenters from the following organizations provided the public with valuable information and resources:

Austin Science and Nature Center
The Barton Springs/Edwards Aquifer Conservation District
Bill Rader with Holt, Rinehart, and Winston
City of Austin Water Utility Department's Wildlands Conservation Division
City of Austin Watershed Protection and Development Review Department
Flintknapping with J.C. Pollard, Jim Overcash, and Kenneth Winkler
Halloween Storytimes with Peggy Murphy, Capital Area Master Naturalist
Hill Country Alliance
The Lady Bird Johnson Wildflower Center
Lower Colorado River Authority
National Wildlife Federation
Republicans for Environmental Protection
"Spider Joe", Joe Lapp, Capital Area Master Naturalist
Splash! Into the Edwards Aquifer Exhibit at the Sheffield Education Center
Texas Cave Management Association
Travis County Balcones Canyonlands Preserve
Tree Information from Guy LeBlanc with Arbor Vitae Tree Care

The Festival also included a drawing for prizes donated by the Hill Country Alliance, the Barton Springs/Edwards Aquifer Conservation District, and the Splash! Into the Edwards Aquifer Exhibit at Barton Springs Pool. BSEACD purchased a 75-gallon rainbarrel from the City of Austin's Water Conservation Department and were pleased to present it to drawing winner Kathryn Jager and her family.

BSEACD and TCMA would like to thank all the organizations that helped make this year's Cave Festival Event possible. We would also like to thank Maudie's Hacienda on Brodie Lane for donating lunch for the Festival's presenters and volunteers for the fourth straight year (www.maudies.com) and the Magellan Pipeline Company for their donation of 700 LED cap lights.

Village of Western Oaks Karst Preserve is located in South Austin just west of MoPac at Davis Lane. It encompasses approximately nine acres in the recharge zone of the Barton Springs aquifer. Despite its small size, the preserve contains six karst features including one that is habitat for cave-dwelling species of concern and one that recharges, or contributes water to, the Aquifer. The preserve is open year round and is handicap accessible.

