



Water Works

A monthly newsletter for friends of Jacob's Well Natural Area

September 2011

A Water Ethic for Texas

Adrian L. Vogl
River Systems Institute, Texas State University-San Marcos and WWA

The incredibly severe drought affecting most parts of Texas this year has led to widespread shortages in water, numerous wells going dry, and springs that once fed clear flowing rivers and favorite swimming holes disappearing into the dust. We as Texans know that these kinds of droughts can happen any time, and have happened many times throughout our history. And yet, a single year of intense drought like this one has caused such concern over water supplies that it leads one to wonder about our collective approach to valuing and managing water as a society. Reflecting on such issues brings up some very fundamental questions: Why has so much of modern water management gone awry? Why is it that ever greater amounts of money and ever more sophisticated engineering have not solved the state's water problems? Why, even in "normal" times, are rivers drying up, lakes shrinking, and water tables falling?

The answer, in part, is simple: We have been trying to meet ever-growing demands by continuously expanding a finite water supply. In the long run, of course, that is a losing proposition. It is impossible to expand a finite supply indefinitely, and in some parts of Texas the "long run" has already arrived. Scientific reports, legal opinions, newspaper articles and books have also provided answers to these questions that can often be boiled down to two big water mistakes: The first, taking too much from our

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We forget that the water cycle and the life cycle are one.

- Jacques Yves Cousteau

Fall Festival Plans

The event is looking very good – we have a group of 51 phenomenal volunteers lined up to produce the event. Press has not only been going out locally as posters and website ads, but to the entirety of Hays County.

We still need help with 3 areas – clean up from 8 – 9pm, help at the shuttle site for 2 hours, and "spring sitters" who will ensure safety down at the well in hour-long shifts. We are also in need of several red and yellow Igloo water coolers. Please contact either: Linda Lang, lelang1@verizon.net or Jeri Porter, jeripster@gmail.com.

Thanks to you who have signed up - the level of commitment from the volunteers, the board, and county staff will go far in this opportunity to let the people of Hays County learn how to become stewards of the spring.

**JACOB'S WELL
FALL FESTIVAL**
September 17 4 - 8pm

Music by
Hal Ketchum • Mike Bond
and
The Sun-Dried Texans

Meet Mother Nature • Find your water footprint
Join a Nature Scavenger Hunt • Make
mucky seed balls • Know your grasses • Talk to a
Scuba Diver • Schmooze with a Bat • Create
a great work of EcoArt • Win a raffle • and much more

Tickets at the Door \$5 ADULTS \$3 KIDS 13 AND UNDER • Bike Riders Free

Water - Inspired Costumes Encouraged

www.jacobswellspring.org
www.co.hays.tx.us

Water Ethic, *cont'd from page 1*

natural systems by draining, dredging and groundwater pumping; and the second, over-relying on large infrastructure fixes.

The conventional wisdom maintains that the answer to our water woes is to continue raising water prices and tapping state funding to fortify communities with new water-supply projects. Pricing water right is part of the answer. But businesses and individuals both want to figure out how to use a lot less water, rather than have to pay for more.

We could keep to the current road of extracting too much, and using too much, which has led to both scarcity and conflict. Or, we could find a new way to value water, expressed as a water ethic. At its most basic, the water ethic means we come together as Texans to use less, avoid the mistakes of the past, and build a future of water sustainability so that the way we use water today will not jeopardize our children's and grandchildren's ability to use and enjoy water in the future. The Water Ethic for Texas can be summed up as a series of guiding principles to secure our water resources for the long-term future:

- Texans value water, from appreciating local streams to being willing to pay an appropriate price for water.
- We work together to use less and less – rather than fight each other to grab more and more.
- We try to keep water local in order to avoid the financial, environmental and energy costs of long-distance transfers.
- We avoid the two big mistakes of our history: over-tapping our natural supplies and over-relying on the costliest fixes that bring unintended consequences to future generations.
- We leave as much as prudently possible in nature – aquifers, wetlands and rivers – so that our children and grandchildren, with benefit of time and evolving knowledge, can make their own decisions about water.

Overall, we have been quick to assume rights to use water but slow to recognize obligations to preserve and protect it. Better pricing and more open markets will assign water a higher value in its economic functions, and breed healthy competition that weeds out wasteful and unproductive uses. But this will not solve the deeper problem. What is needed is a set of guidelines and principles that stops us from chipping away at natural systems until nothing is left of

their life-sustaining functions. Right now, "good" water governance means different things to different people. A water ethic that is shared by all the people of Texas can provide a guide to right conduct and better governance in the face of complex decisions about natural systems that we do not and cannot fully understand.

This article was adapted from "Our Water, Our Florida," written by Cynthia Barnett for the Collins Center: http://www.collinscenter.org/page/water_report

Adrian L. Vogl is a Water Resources Scientist specializing in watershed dynamics, sustainability, and conservation planning in the Texas Hill Country.

From the San Antonio Water System online "Watersaver" newsletter, July 11, 2011

Keep the Peace Between Soil and Water

Mark A. Peterson

You might gather from the title that there's a chance soil and water don't always get along, and you would be correct.

Water-loving soils retain more water, thus reducing the need for frequent irrigation.

Dry soils or dry potting soil mixes will actually repel water, as they've become hydrophobic. We want them to be hydrophilic, aka water loving.

Products known as wetting agents will help bring back that loving feeling to dry soils, allowing water to enter the soil easily and reducing runoff. More importantly, water-loving soils retain more water, thus reducing the need for frequent irrigation.

You can see the rest of this article, and subscribe to the weekly online newsletter, at <http://www.saws.org/conservation/newsletter/enews/issue.cfm?id=177>

SAWS is a permitted water system with overall regional limits to pumping from its water source, the Edwards Aquifer. It produces educational materials on how to practice water conservation. In addition to its online section on Conservation, It produces a weekly online newsletter to which you can subscribe.

Volunteering at Jacob's Well

Don Wallace: My path from military officer to water conservation educator



I was born and raised in the north-central Texas town of Cisco, about 45 miles east of Abilene. We had ranch property north of town and I would go with my dad to tend to the cattle, plow and haul the hay.

Growing up on a small ranch in

North-Central Texas during the 1950's, I recall my dad's concern about not enough surface water for our small herd of cattle. We only relied upon surface water and the drought of the 50's had no real meaning to me other than we were constantly shifting the herd from one pasture to the next. It was only within the past five years that I truly began to understand what my dad must have gone through during those terrible 50's. I had a 400-foot well dug on the ranch but it only produced brine and would have killed every animal and all the vegetation it came in contact with. Unfortunately, most of the ground water in the surrounding counties is affected due to the perforation of the salt domes during the oil boom days of the early 20th Century.

I think the military always had a special beckoning for me. It was in my junior year of high school that my best high school buddy and I joined the National Guard. After my six-month training, I attended Cisco Junior College until my dad was transferred to Abilene and I started classes at McMurry University. During my junior year of college, I joined the R.O.T.C. program at Hardin Simmons University and was the first McMurry student to be commissioned as an Officer during graduation ceremonies, and I received my BBA degree in accounting.

My first assignment was in Germany. I started as a Section Leader of an Honest John Battery and eventually XO for the battery. A lot of time was spent in Grafenwohr, Germany along the Czechoslovakian border.

After two years in the artillery, I transferred to the U.S. Army Finance Corps (career specialties in finance and comptrollership). I spent one more year in Germany and then was reassigned to Vietnam. I had two assignments in D.C., one with the Criminal Investigation Command, and the other as an Assistant to the Director of the Army Staff, Office of the Chief of Staff, Army. I also served as the Comptroller at two Department of Defense installations and commanded a Finance Support Unit in Hawaii. I retired with the rank of Lieutenant Colonel.

After the military, I spent fifteen years at the University of Texas at Austin. I started in the General Libraries in the Business Office and eventually advanced to Assistant Director level in budget and fiscal matters. I later became dean for administration at the LBJ School of Public Affairs, where I advised the Dean on the application of UT policies and procedures. I became director of West Texas operations at the McDonald Observatory, where I oversaw the day-to-day operations of a \$100M world-class observatory.

After retiring from UT, I wanted to start volunteering and the idea of something with water conservation interested me. I chose to volunteer at the Jacob's Well Natural Area as I saw it as an opportunity to be involved with issues related to groundwater. My initial choices were to serve as a docent for tours of the well and with projects related to grounds management.

However, that all changed with being asked to help with the 5th grade class of near-by Jacobs Well Elementary School. I never saw myself as a teacher, but that one day of teaching the subject of "How Much Water Do You Use" was one of the most enjoyable experiences for me. After that day, I volunteered to help with the Austin Nature summer camps (ages 8-14) that visit Jacob's Well. I introduce myself as Paw Paw, and say that I am a grandfather with grandkids their same age. It really seems like a good ice-breaker. These kids are so bright and energetic, and have some great ideas how we can conserve water and protect the well, as well as some of the funniest and "off-the-wall" perspectives that leave you laughing all day. It is just such a fun day and gives me such a sense of accomplishment.

Restoration Rangers continue their work during hot August days

It was a hot dry, August day... OK, so all days in August have been hot and dry.

Seven Restoration Rangers got dirty, sweaty and sore at Jacob's Well. The trail to the well is really shaping up.

- Deborah and Janette did an awesome job of cleaning up the flat section of the path which was overgrown (I know... hard to believe) with grass. Now it is again a clear, nicely mulched, log lined path gently guiding visitors from Camp Jacob past barber-y bushes and into a mixed juniper-oak forest.

- Andrew, Jeff's handsome and strong son, carried on the family tradition of chain-saw mastery as he felled the perfect sized trees for more logs for the steps.

- Jeff, not to be outdone by the younger generation, wielded the jackhammer to create deep holes for posts and craft the perfect slope for rock steps.

- Tom and Garry teamed up to fasten as many steps as possible to the unyielding limestone outcropping.

Actually we all shared in multiple tasks... finding logs, dragging and stacking brush, drilling and digging holes, pounding re-bar, mixing concrete, setting posts, shoveling and raking crushed granite, and making sure the generator kept running. It was teamwork.

Anne Child



Restoration Rangers Jeff, Andrew, Tom and Garry rest on their laurels -- well, on their steps -- during Work Day August 19.

Ready or not – **BRING ON THE SNAKES!**

As if drought and an onslaught of insects crawling into homes to seek moisture and cool weren't enough for the Hill Country summer, a snake invasion has been predicted.

San Antonio news station WOAI reports, "...September will see an explosion of snakes in back yards, as the critters start slithering out looking for something to eat." Central Texas snake expert Jerry Cates told WOAI news, "They're very hungry right now. The hungrier they get, the more they start ranging the fields looking for food."

Cates says that is why we can expect snakes to show up in places where they are seldom seen. They could well start showing up more frequently in back yards.

Cates goes on to explain that the three most common types of poisonous snakes in Texas are the common rattlesnake, the Texas coral snake and the cottonmouth, which is relatively rare. The rattlesnake has the distinctive rattle at the end of the snake, but Cates cautions that the snake actually seldom rattles the rattle, so if you do not hear the telltale sound, do not think it is not a dangerous rattlesnake. If it is a colorful, banded snake, Cates says the Boy Scout nursery rhyme really does tell you whether the snake is dangerous or not. "Red touch yellow, kill a fellow. Red touch black, venom lack. That is probably the best way to remember that."



This Hill Country snake is not venomous -- red touches black.

Cates says as we get into September, we should be aware of the fact that snakes are likely to pop up in all sorts of places. He says you should put the flip-flops aside, and wear leather shoes or boots whenever you are walking in or around tall grass, brush, or while you are doing gardening work or lawn mowing.

He warns that even if rains do come to the region, the snake infestation is inevitable. The snakes are ranging looking for their favorite prey, which is rodents, and a couple of rains will not suddenly produce a crop of rodents for the snakes to eat.

Adapted from WOAI Local News, Aug. 9, 2011

How would you like to save 27,412 gallons of water in one year?

Earth911.com, a sustainability web site, featured an online article about water conservation in March this year. Amanda Willis wrote, "A glass of water in the morning, washing your hands before dinner, throwing in a load of laundry after work – these things are daily routine for your household. But your water-consuming habits add up to 80-100 gallons of per day, requiring the withdrawal of more than 43 billion gallons per day from public supply systems. That's the highest usage rate of any other country in the world.

"Saving thousands of gallons of water in your home isn't far from reach with simple upgrades and changes to daily behavior."

She suggested four interventions you can make to save large amounts of water in your home:



1. Upgrade the highest water-user in the home. (That's right, your toilet – it slurps up more water than your clothes washer.)
2. Plug the leaks.
3. Wash full loads only.
4. Invest in a low-flow shower-head.

To see Amanda's entire story, go to:
<http://earth911.com/news/2011/03/14/save-27412-gallons-of-water-this-year/>

And check out <http://www.earth111.com> for other helpful resources!

Leading Jacob's Well tours is fun!

(a thank you to Barbara Attwell)

I just wanted to thank you and the rest of the Jacob's Well crew for setting up the tour training and script. It seemed like a daunting task to remember so many facts, but as I rehearsed in my living room, I remembered your emphasis on sharing feelings rather than just endless facts.

I got over my "stage fright" with the first tour, thanks to your support and the friendly questions and comments of participants.

Please tell anyone who took the training that it really is fun. Also, I would be happy to "shadow" anyone doing it for the first time as I enjoy seeing how others interpret and add their own creativity to these tours.

Nancy Russell (member of 2011 HCMN class)

Blooming at Jacob's Well

RETAMA -- it's more than a racetrack!

And it has many interesting nicknames: Paloverde, Mexican Palo Verde, Jerusalem Thorn, Lluvia de Oro and Horse Bean. It's latin name is Fabaceae, and it is party of the pea family.



Retama is a spiny shrub with long, drooping branches that bear sprays of 5-petaled yellow flowers. Its seedpods are 3-5 inches in length. Central Texas is the northern end of its territory, and it survives summers like this one because it is drought- and heat-resistant.

JWNA Current Calendar - September 2011

To volunteer at these events, e-mail Barbara Attwell, battwell@earthlink.net.

Volunteer Opportunities

Sept. 3, 10, 24 Saturday tours, 10:00 a.m.
Sept. 17 Jacob's Well Festival, featuring Hal Ketchum, Mike Bond and the Sun Dried Texans

Coming up:

October 8 Rainwater Revival Festival, Dripping Springs

