



THE LATEST DAM NEWS:

In response to Representative Andrew Murr's recent inquiry about the status of South Llano dam application No. 13524, the TCEQ has finally announced that **there WILL BE A PUBLIC HEARING:** *"The TCEQ is planning to hold a public meeting on this application. Due to the number of contested applications we currently have pending that are in line ahead of this application, we are anticipating that the public meeting will be held in Summer 2023. There will be notice of the public meeting and we will make sure to work with your office. Texas Commission on Environmental Quality."* You will note that we still don't know if this will be the only public meeting, versus one in each county directly affected by the dam as many of us have requested.



This is NOT bad news, because it both delays any progress on the dam on the part of the landowner and at the same time gives all of us plenty of time to prepare!

Meanwhile, in order to generate more awareness and participation, the LRWA has begun a change.org petition to OPPOSE the permit application by Waterstone LLC to build this private recreational dam. You can help by PLEASE signing the petition of opposition at <https://chnng.it/FDxzKcDZFO> and show your support by passing the petition on to as many people as you know who have a different email address than yours....individual family members, friends, etc.....the more signatures, the more attention it will receive!

**Watershed Weeks
In Review -**

Dam update/ Axis Deer/ Junction Mural/ Area Meeting Reports/ Meet folks!

Editor: Linda Fawcett

In honor of HUNTING SEASON, A PRIMER ON AXIS,

by Blake Leslie, TTU Field Station & LRWA Board (see his bio later in this newsletter):

Axis are a highly invasive deer native to central and southern India and Sri Lanka. They were introduced into Texas in 1932. Since then, they have been distributed and have escaped from various ranches and are now found in approximately 90 counties. It is unknown how many are in Texas. The most recent estimate of free ranging axis in Kimble County is around 60,000. They occupy a very similar ecological niche as white-tailed deer (WTD); their diet is very similar; and they will consume about 1.5x as much food as a WTD. Unlike WTD, axis can survive eating grass during times of drought. As a species, they are much more dominant than WTD. Axis regularly take control of an area with favorable vegetation and push out WTD. Axis need a warmer climate and an abundance of water to thrive. Their range is largely limited by winter temperatures. Waco is about as far north as they can survive without suffering from frostbite and gangrene. However, recent research suggests that extreme winter storms, such as Uri, may be selecting for ones more able to survive harsh winter conditions.

Axis don't have a defined breeding season like WTD. Their main rut runs from mid-May through August, but there is a smaller rut that takes place in the winter. Individual does will also go into estrus and be bred year-round. Females can reach sexual maturity at 4 months. The does are able to reproduce until they are 14-15



years old. Does rarely have more than one fawn at a time. That combined with their ability to digest a wider range of vegetation results in a fawn survival rate of around 80% compared to 20-50% survival of white-tailed fawns, thus giving axis a distinct advantage over WTD.

Axis deer are a highly social species. An older, dominant doe will lead a herd of 15-100 deer. It is not unusual for 200-300 to forage together in the evening and at night. They tend to prefer riparian areas or areas close by due to their need to drink daily. Unlike WTD, axis don't have a defined territory. They often travel in search of better foraging.



LEFT: Browse line caused by Axis deer.



RIGHT: Habitat damage from axis on a high-fence ranch.

In times of high rainfall, they follow rivers and creeks upstream. In times of drought, they follow them downstream looking for more water.

If they are not heavily hunted or trapped and euthanized, these behaviors can cause severe damage to riparian areas. They will forage in an area until there is no vegetation remaining below 6 feet above ground, leaving nothing but bare soil to be washed away in the next rain. The problem is compounded by the sheer numbers of axis using these areas

to travel. They tend to always use the same trails while walking single file. This can cut trails into the soil that are 3 to 12 inches deep, speeding up erosion even more. If landowners along these riparian areas are not educated on the negative impacts caused by axis and change their management practices, the rate of erosion, vegetation degradation, and habitat destruction will continue to rise while water quality and the health of aquatic ecosystems will decline.

DO YOU KNOW *this* CREATION STORY?

Of the 11 million Hispanics in Texas, 10 million have indigenous roots (the Huichol people of northern Mexico and Texas) whose heritage goes back to the beginning. Passed on by generations of storytellers, the ancestors, long ago living in a watery “Lower World,” were led by a deer through a portal at San Marcos, to our Middle Earth. This story also can be seen in rock art, especially a mural near Comstock, TX, the “White Shaman Miracle,” dated 2,500 years ago. With uncanny accuracy, the “Creation” mural also includes a glyph that identifies the relative locations to each other of four sacred springs. Their alignment matches up with Barton Springs (Austin area), San Marcos Springs, Comal Springs (New Braunfels) and San Pedro Spring of San Antonio.





have been scouted and we're wrapping up negotiations with store owners.

Our overall concept for this project depends as much as possible on local community participation. As soon as size and shape details have been confirmed, be alert in the near future for public announcements asking for citizen and Junction ISD student and teacher input of

JUNCTION RUNS ON WATER (TENTATIVE/working title/theme)

With the help of the Llano River Watershed Alliance, Hill Country Alliance and Big Seed, plans are in progress for one or more water-focused mural(s) to cover some empty walls in downtown Junction! *This mural project is part of a statewide campaign, Texas Runs on Water, that aims to address the state's growing water supply needs by inspiring all Texans to participate in a cultural movement that spurs action and conversations around water.* Locations

the way Junction is connected to water, to generate interest and gather potential designs. A local artist is also interested in working with the design concepts.

This project will receive technical support from [Big Seed](#), an organization in Kerrville that works to engage young artists in community activities through Public Art projects, and project support from Hill Country Alliance. If you are interested in getting involved with this project in Junction, or are interested in contributing funds for the project (we need to raise \$1,500 to get this off the ground!), please let [LRWA](#) know.

RELATIVELY NEW FUNDING SOURCE: Buffer Land Incentive Program (BLIP)

www.tpwf.org/blip For more details, contact: Zach Spector, TPWF Foundation, zspector@tpwf.org 210-413-6761

WHAT IS IT? \$500,000 is now available to LTA (Land Trust Alliance)-accredited land trusts to help fund Conservation Easements (CEs) on private lands located strategically to already protected property.

WHAT IT ADDRESSES: Some CEs suffer from encroachments (becoming just an *island* of conservation). **BLIP** can award up to **\$50,000 individual grants** to reimburse due diligence costs, such as species and riparian protection from encroachment, reducing fractalization, improving connectivity, and making the CE user-friendly. Eligibility "scoring" (judged by TPWF & TPWD staff) includes: 1) Vegetation diversity and soil health, 2) live watershed, 3) native wildlife quality, 4) scale - the bigger the easement, the better, 5) location - best - near other CEs, 6) the current threat to the area, and 7) your CE terms.

MEETINGS around the HILL COUNTRY ATTENDED BY LRWA REPRESENTATIVES

A GRASSROOTS GATHERING OF WATER ADVOCATES

On **October 13** the Hill Country Alliance hosted the second Grassroots Gathering of Water Advocates meeting in **Bandera, TX**. At least 25 water advocate groups, including both non-profits and governing authorities were invited and most attended. LRWA was represented by **Scott and Martha Richardson**.



The day started with a tour of the Bandera waste water treatment facility. The rest of the day included the following indoor presentations:

- **Drought updates** by **Marisa Bruno**, Water Program Manager, HCA and **Dave Mauk**, General Manager, Bandera County River Authority and Groundwater District.

- **Championing One Water in the Hill Country**

by **Nick Dornak**, Director of Watershed Services, Meadows Center for the Environment and Robin Gary, Managing Director, Watershed Association.

- **Goals and Strategies for the 2023 Legislative Session** by **Danielle Goshen**, Policy Specialist/Counsel, National Wildlife Federation
- **Engaging Our Communities Effectively**, a discussion of how grassroots groups can effect change and consider the actionable goals for each of our organizations, led by **Cliff Kaplan**, Program Director, HCA.

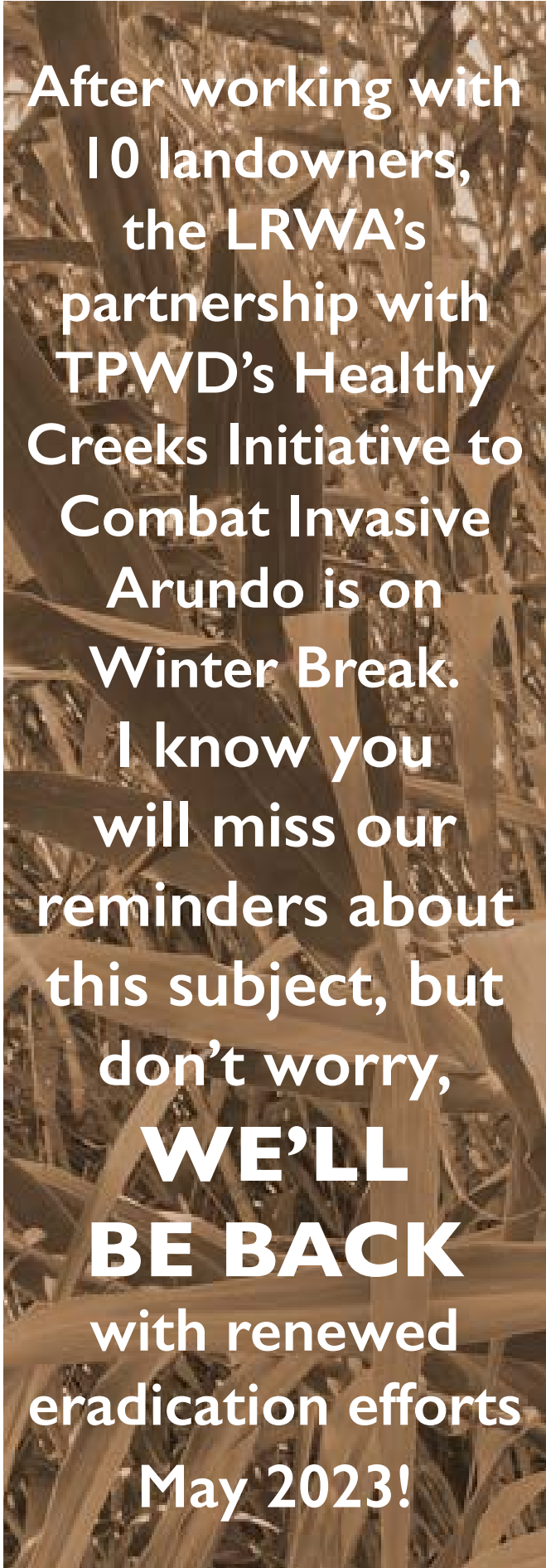
We learned that many of the Hill Country's water issues are very similar. For example, the City of Bandera is treating and discharging approximately 150,000 gallons of treated wastewater daily. Currently this discharge is going into an almost dry Medina River. The city is currently trying to locate land to build a

new more modern facility, but demand for and availability of suitable land is slowing the process. Meanwhile a new grassroots group, The **Hill Country Resources Rescue**, in Comal County was recently formed in response to an application for a proposed new wastewater treatment facility to serve over 700 new homes. The permit would allow up to 260,000 gallons of treated domestic wastewater to be deposited daily into Cypress Creek and then into the Guadalupe River, according to the Texas Commission of Environmental Quality documents.

The above examples show how existing communities are having to deal with water shortages, waste water, aging infrastructure, and new rapidly growing developments. Meanwhile new grassroots organizations are being formed to address the water and waste water issues, which are not being adequately addressed by existing regulations and governmental institutions. To understand and relate to the water issues and challenges facing the Texas Hill Country, below is a summary of the issues and challenges, shared by those in attendance.

Water issues:

- Water quality and quantity
- Unregulated growth and poorly regulated pumping of the rivers and aquifers.



After working with
10 landowners,
the LRWA's
partnership with
TPWD's Healthy
Creeks Initiative to
Combat Invasive
Arundo is on
Winter Break.
I know you
will miss our
reminders about
this subject, but
don't worry,
**WE'LL
BE BACK**
with renewed
eradication efforts
May 2023!

- Wastewater treatment plants dumping directly into our rivers and dry tributaries to these rivers.
- The effect of droughts on all of the above.

Ongoing Challenges:

- The pace of change is slow.
- Continuing to address the need for protecting our pristine streams.
- Getting both citizens, politicians, and government institutions more educated and involved in all of the water issues.
- Rapid development with lack of regulation.
- Rapidly growing population with decreasing availability of water.

HILL COUNTRY ALLIANCE LEADERSHIP SUMMIT

On September 29, **Linda Fawcett** represented the LRWA at the 2nd annual Leadership Summit held in Dripping Springs at Jester King Event Hall. **Engaging presentations included the following:**

1. Panel: The Power of Storytelling.

It explained how renewed inclusion of ancient stories (*see inset, p. 3 for example*) handed down by the people indigenous to Texas has been used to connect across dividing lines, inspire beyond education, and drive change through meaningful calls to actions. Panelists discussed their work within the National Park system, independent film-making with biologists to explain as simply as possible ecosystem-related subjects, and new forms of children's education through story-telling and other holistic methods.

2. Real Perspectives from the Rural Hill Country: Judge **Bella Robio** of Real County told us about the real-world problems of her

jurisdiction covering 700 square miles with two rivers systems: the Frio and the Nueces. The biggest challenges are lack of broadband and poor cell phone service (even affecting police operations). Also, with four huge ranches still intact in Real County, there are ongoing, long-standing issues such as ranchers (who own both sides of the river) fencing across a public access river to control their livestock. The best solution Robio has found for these problems is simply personal and persistent networking.

One bright spot in the near future: the **SOLAR ECLIPSE** in two years will bring a great deal of tourism \$ for Real and surrounding counties!

There is much more, including the: 1) Keynote: Different Shades of Green, 2) a report on Water and Equity, 3) panel: What To Do When the Well Runs Dry, and 4) a Conversation with Regional Elected Officials (including **Hal Rose**, Kimble County Judge)... so if you want to continue reading, [please click HERE.](#)

MEET MEREDITH ALLEN

Meredith Earwood Allen

General Manager

*Sutton County UWCD / Menard UWD /
Kimble GCD*

Meredith Allen is the General Manager of the Sutton, Menard, and Kimble County Groundwater Districts. Growing up in Sonora, Meredith took part in the daily operations of the family ranch raising Angora goats and Rambouillet sheep. She learned the value of conservation from her father and grandfather at an early age and developed an interest in natural resource management.

Meredith attended Texas A&M University where she earned a Bachelor of Science. She worked as an intern for State Representative Four Price during the 83rd Legislative Session where she was charged with monitoring water policy. It was there that she cultivated her interest in water management and conservation.

Following her internship, she received her Master of Water Management and Hydrological Science from Texas A&M. After returning to Aggieland, Meredith interned at the Post Oak Savannah Groundwater Conservation District and participated in an assistantship with the Texas Well Owner Network.



Meredith joined Sutton County GWCD as the Operations Manager in 2016, becoming General Manager for Sutton, Menard, and Kimble in December 2019. While passionate about water management, Meredith's true joy is her husband Bill and their two children, Margo and Armer.



MEET BLAKE LESLIE, LRWA's newest BOARD MEMBER!



ABOVE: Blake holding an Ash-Throated Flycatcher while demonstrating Mist-Netting to his students at the TTU Field Station.

Blake grew up hunting, fishing, trapping, and helping with the sheep and cattle on his family's 135-year-old ranch outside of Comfort, TX. In that time, he developed a passion for conserving native wildlife and habitat. While working for Texas Parks & Wildlife, Bexar Audubon, and A&M NRI he researched golden-cheeked warblers, white-winged doves, white tailed-deer, urban predators, monitored chronic wasting disease, and captured

deer and black bears. He worked as a ranch manager and professional hunting guide in South Texas. Blake currently works for Texas Tech University as the Research Coordinator on the Llano River Field Station in Junction where he oversees graduate and undergraduate students and helps them conduct their field work. *"I enjoy a range of outdoor activities from camping and hiking to hunting and fishing, especially fishing on the Texas coast. I'm looking forward to learning more about the ecology and environmental history of the Texas Hill Country and becoming the best steward to our natural and cultural resources that I can be."*



ABOVE: Blake and nephew on vacation at Matagorda Bay.

TOP: LCRA Hydromet Rainfall for this year as of 11.12.22
BOTTOM: River stage as of 11.12.22 (the LLano River watershed in beige)



Lower Colorado River Authority’s Hydromet is a system of more than 275 automated river and weather gauges throughout the lower Colorado River basin in Texas. The website displays gauges maintained by the City of Austin and USGS. The Hydromet provides near-real-time data on stream-flow, river stage, rainfall totals, temperature and humidity. <https://hydromet.lcra.org>