LRWA Watershed Report

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*Opinions expressed herein are not necessarily shared by LRWA

(ILLEGAL) DAMSTERS BEWARE

Notes From of a Hill Country Alliance-sponsored Webinar on Oct. 30: Demystifying the permitting process for PRIVATE DAMS on Texas waterways and help for those who have a concern about a proposed or unauthorized dam. And who to contact…

Impoundments on streams and rivers are problematic because there are potentially so many permitting authorities involved. But definitions first:

"A **dam** is a barrier preventing the flow of water or of loose solid materials (such as soil or snow)." Source: Merriam-Webster Dictionary.

Private Dams are those built for private benefit only.

Why are dams built?

- *Flood Control*
- *Public Water Supply Reservoir*
- *Hydropower*
- *Erosion control*
- *Agriculture (irrigation) and Livestock water*
- *Recreation*

But why can dams be of concern?
They can…

- *Impede aquatic organism passage*
- *Hold back water from downstream users*
- *Impair navigation up and down stream (such as kayakers)*
- *Destroy streambeds and release sediment during construction*
- *Disrupt natural stream flows*
- *Block sediment transport*
- *Cause stagnant water that can impact water quality*
- *Create a risk of dam breach*

PART 1 - TCEQ (Texas Commission on Environmental Quality): Exempt Reservoirs & Water Rights Permitting, by Law Office of Myron Hess, PLLC

- The **TCEQ** regulates the taking or storing of "state water" under Chapter 11 of the Texas Water Code (TWC). The general concept is that water in a surface watercourse is state water, that can include the underflow of a surface river.
- Also, there is a TCEQ Rule from Chapter 30 of the Texas Administrative Code (TAC) that stipulates: "State water does not include percolating groundwater; nor does it include diffuse surface rainfall runoff, groundwater seepage, or springwater before it reaches a watercourse."

A GENERAL RULE: A WATER RIGHT PERMIT FROM TCEQ IS REQUIRED TO STORE, TAKE, OR DIVERT STATE WATER:

TWC Sec. 11.121 Permit Required

Except **as otherwise provided in specific sections (such as 11.142*) of the Texas Water Code,** you must get a permit to appropriate any state water or begin construction for the storage, taking or diversion of state water.

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*TWC Sec. 11.142 Permit Exemption – THE 'SMALL RESERVOIR' EXEMPTION

Examples of the Small Reservoir Exemption: Without a permit, [you] may construct on your own property a dam or reservoir with normal storage of not more than 200 acre-feet for domestic and livestock purposes. Commercial operation not exempt.

Further considerations for exemption of private reservoirs:

1. Cannot be on a navigable stream.
2. "Normal storage" (as defined in TCEQ Rules) is the amount stored before uncontrolled release begins. Also, a person can temporarily store more than 200 acre-feet if the person can demonstrate no storage of more than 200 acre-feet on average in any 12-month period. This exemption applies for domestic and livestock use only. If storing over 200 acre-feet at any time, then reservoir capacity and water level data records must be kept to demonstrate compliance to TCEQ.
3. While we're at it, what qualifies as "domestic" or "livestock" use?

   Domestic use is use by individual or household for drinking, washing, or culinary purposes; for irrigation of lawns or family gardens and/or orchards, for watering of domestic animals, and for water recreation including aquatic and wildlife enjoyment, but generally: NO money-making activities.

   Livestock use is open-range watering of livestock, exotic livestock, game animals or fur-bearing animals. Land for livestock purposes is NOT considered a commercial operation, and leasing property for hunting or trapping is allowed.

A few more rules or versions of this exemption were added in 2001:

4. The dam and reservoir could be for fish and wildlife purposes.
5. The property where located qualifies as open-space land, as defined by Sec. 23.51, Tax Code.
6. Must be in an unincorporated area.
7. For commercial* or noncommercial wildlife management, including fishing, but not fish farming. (*specifically defines commercial operation in this context). Not eligible for the exemption is the use of land for industrial facilities, industrial parks, aquaculture facilities, fish farming facilities, or housing developments.
8. One more thing about this exemption (11.142): it allows Surface Coal Mining reservoirs not limited to 200 acre-feet; no stated size or ownership limit. Only applies for reservoirs used as part of a ***permitted*** surface coal mining operation (under Chapter 134, Natural Resources Code) and only if the water used is solely for: sediment control or fire or dust suppression.

OK, so *how many* private "EXEMPT RESERVOIRS" ARE OUT THERE? The following is an excerpt from a LCRA staff presentation to the LCRA Board on June 18, 2024 (Agenda Item 4):

(next page...)

*"...In 2024, the LCRA (Lower Colorado River Authority) attempted a count for the Highland Lakes Subwatersheds, with a verdict of (over time) more than **40,000** reservoirs! Most are much smaller than 200 acre-feet, but regardless, WE DON'T REALLY KNOW. Needing a permit would likely result in many landowners finding alternate sources of water..."*

What if your OPEN-SPACE Land Use changes?

IF YOUR OPEN-SPACE LAND CHANGES to a subdivision or fracking or otherwise to the selling of water, THEN PUBLIC NOTICE IS REQURED, likely followed by a PUBLIC HEARING to find out any unintended consequences. A complex application is also required. In general, the new use of the land cannot impair someone else's water rights, must be recognized as beneficial use (but this is a low bar), must not be detrimental to the public, and the project's environmental impact must be accurately calculated.

PART 2: WHAT ABOUT TCEQ's DAM SAFETY Program?

TCEQ's Trina Lancaster addressed this topic.

The TCEQ's Office of Compliance and Enforcement first looks at the maximum height of each dam: dams that are 6' or less are not covered by TCEQ jurisdiction. Higher than 6', both dam height and the degree of hazard assigned to the dam determine whether the TCEQ regulates it. And of course, there are exceptions!

DID YOU KNOW...?

The TCEQ website has a Water Rights Viewer that can help you determine who owns water rights near you: go to the TCEQ homepage, click on **Water**, then click on **Surface Water Rights and Availability,** then click on **TCEQ Water Rights Viewer**.

ALSO, you can use the TCEQ website to submit a complaint about a potentially unauthorized Dam: go to the TCEQ homepage, click on **Reporting**, then click on **Make an Environmental Complaint**.

Exceptions (dams NOT regulated):

- *Dams designed/constructed/owned by federal agencies.*
- *Embankments constructed of roads and railroads unless also designed to function as a detention dam.*
- *Dikes/levees designed to prevent inundation by floodwater.*
- *Off-channel impoundments authorized by Texas Water Code Chap. 26.*
- *Above-ground water storage tanks.*

A dam is also EXEMPT from TCEQ's Safety Program if it meets ALL of the requirements below:

- *Located on private property.*
- *Has a maximum capacity of less than 500 acre-feet.*
- *Has a hazard classification of Low or Significant.*
- *Located in a county with a population of less than 350,000.*
- *Not located inside the corporate limits of a municipality.*

What to Know About DAM HAZARD CLASSIFICATION

Hazard classification is a description of the potential for the loss of downstream life or property in the event of a failure of the dam. It is NOT a description of the condition of the structure.

LOW HAZARD DAMS

- *No loss of life expected; minimal economic loss.*

SIGNIFICANT HAZARD DAMS

- *Loss of life possible, 1-2 homes.*
- *Appreciable economic loss, such as interruption of utilities, secondary highways, minor railroads.*

HIGH HAZARD DAMS

- *Loss of Life expected, 3+ homes.*
- *Excessive economic loss: public utilities, main highways, major railroads.*

DAM SAFETY and WATER RIGHTS

- *DAM SAFETY can be part of a WATER RIGHTS application (but not always).*
- *TCEQ will determine if the dam is jurisdictional, and add applicable requirements to the permit, such as a plan and specifications review, and specific design requirements.*

REPORTING A DAM SAFETY PROBLEM

When reporting on a dam you may be concerned about, please call your TCEQ Region Office, then give the specific location, the height of the dam, and approximate size of the reservoir.

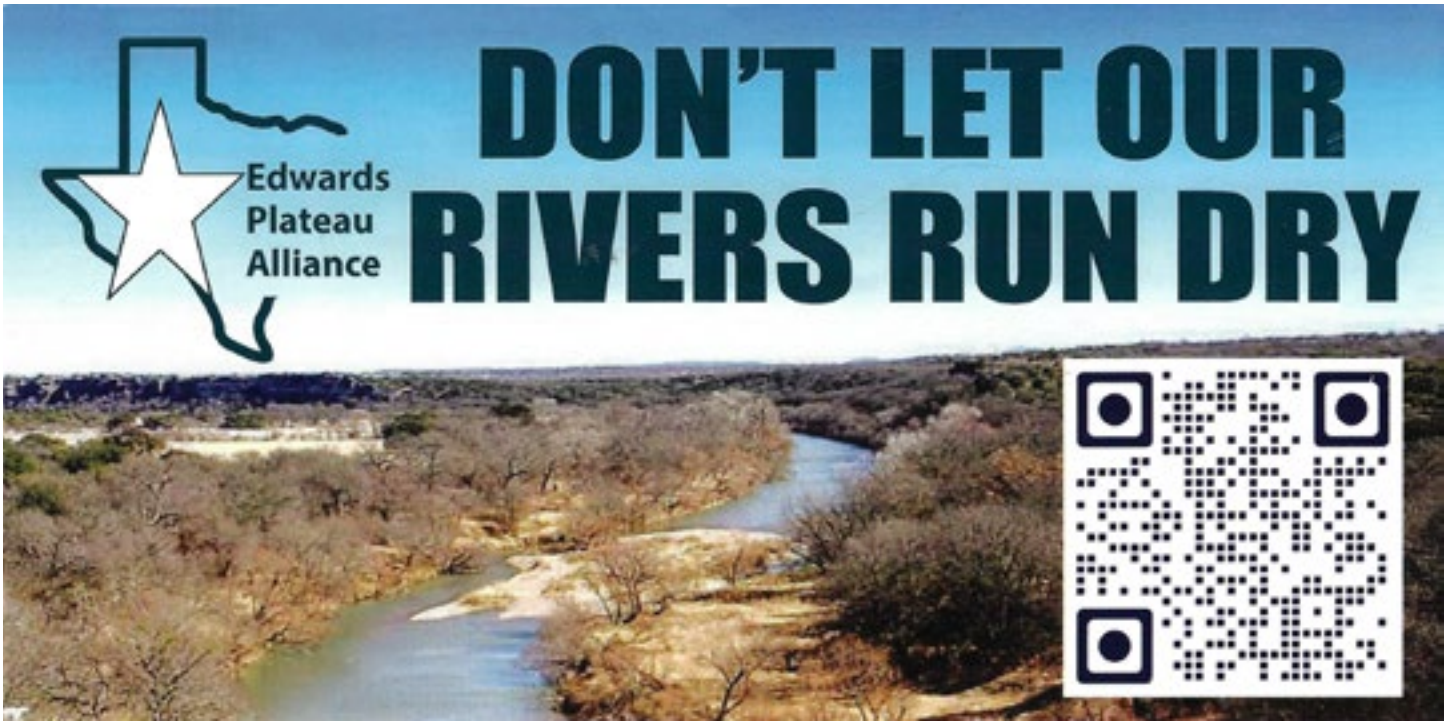
FOR PARTS 3 and 4 explaining the jurisdictions of TPWD & the US Army Corp of Engineers concerning private dams, CLICK HERE and choose "PRIVATE DAMS and PERMITTING," (includes all: Parts 1-4)

Also, CLICK HERE 2 - for a PDF of the webinar's slides/illustrations: "Private Dams Permitting SLIDES" (also see CHART BELOW.)

There will first be a "desktop" review, and then a field inspection if jurisdictional. But the Dam Safety Program has limited enforcement, often having to wait until a dam collapse is imminent to be able to take action. They try to work with the dam's owner first, but if all else fails, the Texas Attorney General can be involved.

SUMMARY SHEET: WHAT TO DO IF... goes with CLICK HERE 2 above

TCEQ – Water Rights Division	TCEQ – Dam Safety	TPWD – Sand & Gravel Permit	USACE
Does the dam hold more than 200 acre-feet a year? **If yes,** you probably need a water rights permit Is the dam on a navigable stream? **If yes,** then regardless of size, you almost certainly need a water rights permit (with some exceptions).	Does the dam fall within Dam Safety's jurisdiction (slide 27)? And does it break any of the criteria for exemption (slide 29)? **If yes,** then your engineer should submit plans to Dam Safety for review. Dam Safety division may also get involved during the water rights permitting process.	Does construction of the private dam require disturbance of the streambed of a state "navigable" creek? **If yes,** then the owner probably needs a Sand and Gravel permit. **Note:** In addition to navigable creeks, this would also apply to perennial streams of any width in **Spanish or Mexican land grants**.	Is the private dam being built on a "waters of the U.S." and does it adversely impact more than 0.5 acres? **If yes,** then the owner probably needs to talk to the USACE about a permit. **Note:** There are other pre-construction triggers that could require an applicant to report to USACE, not just the 0.5 acre limit.



IMPENDING WATER CRISIS FOR LANDOWNERS IN SCHLEICHER COUNTY

The Llano River Watershed Alliance has recently been alerted to potentially existential landowner problems in Schleicher County (county seat: Eldorado), caused by what seems to be a targeted resurgence of proposed renewable energy projects, such as wind turbines, solar farms, and hydrogen plants.

Why is this happening now? Overall answer: climate change, a world-wide phenomenon that in Texas seems to manifest itself in overall higher temperatures and less rain (except for infrequent rain deluge, often hurricane-related). More specifically, because of recent government mandates and incentives to speed up the battle against climate change.

Most scientists attribute the earth's steady heating to the amount of carbon and greenhouse gases released into the atmosphere, largely by historical dependence on oil and natural gas technology. A secondary cause is the destruction of carbon-absorbing forests world-wide. CARBON release into the atmosphere is a real problem. Viable solutions are badly needed.

We all know that oil and gas are historically important to the Texas economy, already having a delivery infrastructure in place to provide fuel for our vehicles and electricity to power the grid. Supplies seem plentiful now, but they are finite.

AT ANOTHER TIME PERHAPS, IN ANOTHER PLACE

This has in turn given importance to renewable energy for electric power, specifically solar and wind, and more recently hydrogen as a carbon-free fuel. However, they can all be far from perfect solutions if placed in the wrong place for the wrong reasons. Hence the problem for Schleicher County.

Why should hydrogen be a fuel of the future? It is carbon-free. Hydrogen for fuel is made, not found, so it would seem infinite. But read on… hydrogen may or may not be one of the right answers. It's not yet widely used as a fuel, and there are still significant storage and delivery problems to work out, but if so, it has potential for greater use in the future.

One drawback to current utilization of hydrogen as a fuel source is the uniqueness of the element itself. Hydrogen is the lightest chemical element, a gas at normal temperature that typically occurs in

a compound with other elements, such as H_20. Hydrogen can be produced—or separated—from a variety of sources including water, fossil fuels, or biomass, and then used as a source of energy or fuel. However, hydrogen currently takes more energy to be produced than hydrogen provides when it is converted to useful energy. One solution is to make hydrogen using renewable energy like wind or solar, but acres and acres of purchased or leased land are required.

Another problem is WATER. We all know how critically finite that is! Current methods of making hydrogen require a lot of water, in most areas unsustainable except perhaps when using desalinated sea water. (So why not locate hydrogen production plants near the coast?)

The Edwards-Trinity Aquifer underneath drought stricken Schleicher County simply cannot sustain hydrogen production's water needs, and area ranchers will lose their livelihoods when there is not enough water for their crops or their livestock. They are also not fond of converting agricultural acreage to wind/solar farms.

The Goliath(s)

Schleicher County landowners, many of them with strong generational ties to their land, have been beset with a proposed project called Tierra Alta with international financial backing by **ET Fuels,** an Irish corporation tied to private equity firms in Zurich and Paris. The proposed project is categorized as "green" hydrogen-to-methanol production that also requires carbon dioxide that will have to trucked in. Another plant (**Apex Clean Energy**) will make hydrogen using the hydrolysis method, that uses electricity to separate water molecules to isolate the hydrogen atoms. The tremendous amount of water required to do this is not recoverable. A third hydrogen plant is also being planned by **NextEra Energy**. There is currently an enormous amount of government incentive in the form of subsidies for green energy solutions (part of the Inflation Reduction Act) which to be "green" require renewable energy. Therefore, "dozens, or even hundreds, of square miles of ranchland from San Angelo to Fort Stockton" will need to be paved and outfitted "with wind turbines and solar panels." [from a must-read recent article by journalist **Robert Bryce**: "Invasion of the Water Snatchers." And don't forget the miles of required access roads and powerlines.

The David

Has Schleicher County been targeted by these companies because of its low population, money needs and/or a perceived isolation of its citizens? Little did these companies know how quickly the informed populace would unite and fight! (They have.) Their "slingshot" is an organization called **EDWARDS PLATEAU ALLIANCE** with an informative website: www.edwardsplateaualliance.org. Explore all of the website, but make sure to check out the ongoing census on their splash page (and participate if you oppose wind turbines on your land).

(The very brief primer about hydrogen comes from the following recommended introductory reading: https://www.eia.gov/energyexplained/hydrogen/use-of-hydrogen.php) and https://www.eia.gov/energyexplained/hydrogen/)

DID YOU KNOW this about hydrogen?

Safe storage and transport, plus dedicated infrastructure, are among some significant problems with hydrogen (as a fuel source) that have yet to be completely solved. However, in some applications, hydrogen is useful today as a fuel because it has a high energy content per unit of weight. That is why it's used as a rocket fuel and in fuel cells to produce electricity on some spacecraft. NASA has the two largest liquid hydrogen storage tanks in the world. Liquid hydrogen is easier to store than its gaseous form, but hydrogen gas must be substantially cooled to become liquid – oops, more energy required to liquify it and keep it that way. Hence, renewables. https://www.eia.gov/energyexplained/hydrogen/use-of-hydrogen.php

WATERSHED ASSOCIATION ACHIEVES MILESTONE IN PROTECTING RATEPAYERS AS STATE AGENCY RECOMMENDS DENIAL OF AQUA TEXAS' $8.8 MILLION RATE INCREASE

YEA FOR OUR TEAM!

Nov. 16, WIMBERLEY, TX - The Watershed Association (WA), along with the Woodcreek Property Owners Association and Trinity Edwards Springs Protection Association, achieved a major victory this week for ratepayers as **Administrative Law Judges (ALJs)** recommended that the Public Utility Commission deny Aqua Texas' request for an $8.8 million annual rate increase through its system improvement charge (SIC) amendment.

The investor-owned utility is seeking to recover $86 million in claimed infrastructure improvements by increasing water rates by $4.7 million and sewer rates by $4.1 million annually. **However, the ALJs found that Aqua Texas failed to properly document and justify its expenditures, could not demonstrate which expenses were legitimate capital improvements versus routine maintenance, and did not comply with regulatory requirements that would allow the Commission to reliably calculate an appropriate SIC.** Thus, the ALJs recommended that the application be denied.

> *"This recommendation would protect ratepayers from unjustified rate increases by requiring Investor Owned Utilities to clearly prove their infrastructure investments benefit customers before passing on costs," said **David Baker**, the Executive Director of the Watershed Association. "Aqua Texas wanted customers to pay millions more without properly documenting how these charges would improve service."*

Lauren Ice, an attorney with Perales, Allmon & Ice, PC, represented the protesting associations in this matter.

> "The ALJs' analysis was extremely thorough and fair," Ice said. "Despite numerous opportunities, Aqua failed to justify the expenditures it would like to pass onto its ratepayers. Simply put, the legal standard demands denial."

Key findings by the ALJs included:

- Aqua failed to adequately describe eligible projects and explain how they improved service.
- The utility could not distinguish between capital improvements and routine maintenance costs, failing to prove the eligibility for raising rates.
- Documentation was disorganized and difficult to verify, violating a prior Commission order requiring assets to be well-organized by project.
- Many work orders and invoices were either missing or impossible to match to claimed expenses, failing to sufficiently support eligible costs.

The recommendation from the ALJs would require Aqua Texas to:

- Refund or credit any overcharges collected through interim rates since August 8, 2024 with interest.
- File a comprehensive rate case by September 26, 2025 and thoroughly justify its capitalization policy in that proceeding.

This recommendation sets an important precedent from the ALJs, signaling that private investor owned utilities must provide transparent documentation and clear customer benefits before receiving approval for SIC rate increases. **Ratepayers who believe they were overcharged should monitor their bills for refund credits in coming months and the Commission's docket for the final order.**

The North Fork, Guadalupe

UN-NEIGHBORLY AND ANTI-ENVIRONMENTAL ACTIONS CONTINUE...

AFTER (Oct. 23)

Breaking News from Ron Duke of Guadalupe Riverkeepers, Nov. 16, 2024:

[Note: a story about this violation was first reported in the March 31, 2024 LRWA Newsletter]

Ron: "Yesterday TCEQ sent me a new report on their ongoing investigation of NorthFork development here in Hunt. This one was last month, dated Oct. 23, 2024. The report was signed by TCEQ Supervisors on Nov. 1, 2024.

So they have continued this since their 1st investigation on March 18, 2024. Their updated list of multiple violations/repeat violations is long...it reads like the whole left side of the menu.

Among them, for the first time, TCEQ invoked the Federal Endangered Species Act and Endangered Species Habitat Conservation. TCEQ has found that the rain runoff from the mountains of sediment/fill...

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...bulldozed onto the floodplain by the Houston Developer is entering the river, ... increasing the turbidity of the river which harms the Endangered Species listed Mussels in the river nearby...

That's a giant leap for TCEQ and this is the very 1st time TCEQ has ever invoked the ESA in Kerr County. All Developers coming to Kerr County, Kerr County Commissioners, and Kerrville City Council should take note. We now have an on the record precedent for Kerr County. Every person who proudly wears the badge of Environmentalist above all else could not be happier."

The full PDF with TCEQ photos, dated Oct. 23, is on the Riverkeeper website that includes two previous TCEQ investigations March 18 and June 28.

https://guadaluperiverkeeper.org/northfork-tceq-violations

FEMA says Floodplain Fill Can Make Things Worse

Floodplains are supposed to store floodwater. If storage space is filled with dirt and other material, future flooding may be worsened. Your community may require an engineering analysis ("no rise" certificate) to show how floodplain fill will alter flooding. Floodplain fill can alter other valuable floodplain functions, including wildlife habitat and wetlands.

THE BENEFITS OF NATURAL FLOODPLAINS

Natural floodplains provide flood risk reduction benefits by slowing runoff and storing floodwater. They also provide other benefits of considerable economic, social, and environmental value that are often overlooked when local land-use decisions are made.

Floodplains frequently contain wetlands and other important ecological areas which directly affect the quality of the local environment. Some of the benefits of floodplains to a functioning natural system include:

- Fish and wildlife protection
- Natural flood and erosion control
- Surface water quality maintenance
- Groundwater recharge
- Biological productivity
- Higher quality recreational opportunities (fishing, bird watching, boating, etc.)

GEAA* ALERT, Annalisa Peace, Executive Director Says: Continuing to Protect the Golden-Cheeked Warbler Will Also Protect the Edwards Aquifer (our water supply!)

*Greater Edwards Aquifer Alliance

In 2004 the General Land Office (GLO) began investing in Hill Country real estate to fund Texas' Permanent School Fund. I worried that these state investments would put a thumb on the scale of policy and agency decisions in order to open these properties to intensive development to maximize their value.

My concerns were realized in 2009, when TxDOT began aggressively pushing for a New Braunfels Outer Loop and, it was learned that this roadway would provide access to an otherwise landlocked property owned by the GLO. It was clear in that instance that GLO's investment in Hill Country land would, indeed, drive decisions to maximize the development value of those properties. GEAA worked with local activists for three years before finally defeating this ill-advised roadway.

Fast forward to 2017: **the GLO joined the Texas Public Policy Foundation in petitioning to have the Golden Cheeked Warbler delisted as an endangered species** because it limits the development of land in the Hill Country. You can learn more from Lindsey Carnett's excellent report, Golden-cheeked warblers are blocking development. Some keep trying to boot the songbird from the endangered species list.

This past September, Senior U.S. District Judge David Alan Ezra issued an order for the U.S. Fish and Wildlife Service to re-evaluate the 2017 petition, stating that a review of the warbler's status "may be warranted." Fish and Wildlife is currently reevaluating conflicting studies on the numbers of warblers and will publish new findings that determine whether the warbler should be delisted as an endangered species, or whether Endangered Species Act protections should remain to protect the warblers.

The Endangered Species Act has been a powerful, though sometimes flawed tool that has **enabled protection of land that provides vital ecosystem services. Behind the Act was the rationale that it would be incredibly burdensome to monitor threats to the environment nationwide but, threats to indigenous species could serve as a metric. They figured that actions that would cause a species to go extinct were likely to disrupt ecosystems and harm humans, as well.**

In this case of the Texas Public Policy Foundation and the GLO vs endangered status for the warblers, **the habitat of the Golden Cheeked Warbler comprises much of the Edwards Aquifer Recharge and Contributing zones. Endangered species protection of the songbird has resulted in the permanent protection of thousands of acres on the Recharge Zone – thus enabling us humans to protect a critical water supply.**

That the GLO is complicit in torpedoing these protections is cause for grave concern. Runaway development in the Hill Country is elevating threats to water availability and the quality of water in the Edwards and Trinity aquifers, threatening also a vibrant tourism economy and the property values and quality of life of long time Hill Country residents.

The bottom line is that the lands that recharge our uniquely prolific Edwards Aquifer deserve protection. If the status of a tiny songbird is critical to protecting these lands, the state should either withdraw its support for delisting the Golden Cheeked Warbler or get serious about directing the TCEQ and local governments to adopt measures adequate to sustaining the Edwards and Trinity aquifers.

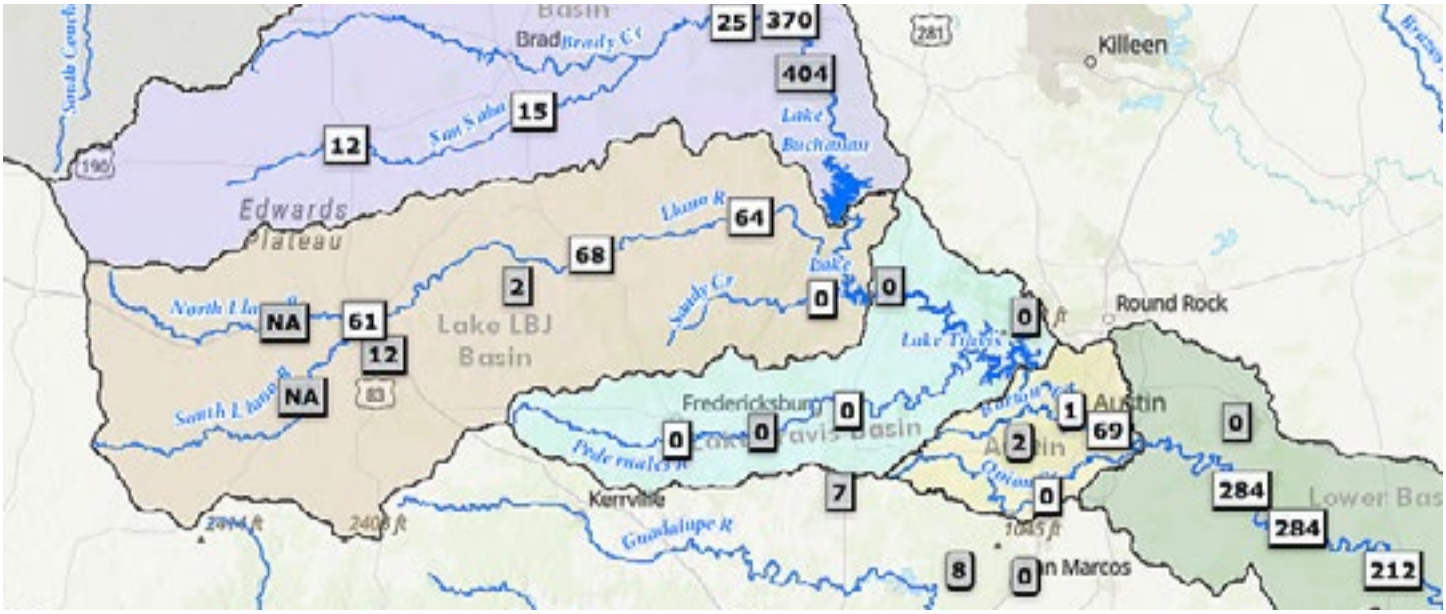
Further, perhaps an examination of the disposition of GLO lands in the Texas Hill Country is warranted. The legislature could certainly have a voice in how these lands are managed and developed. We would hope that state senators and representatives who represent our region would support this. Stay tuned for more on this important issue.

Meanwhile, you can contact the head of the General Land Office, **Texas Land Commissioner, Dawn Buckingham,** to express your opinion on developing the GLO owned lands in the Texas Hill Country at https://dawnbuckingham.com/ or post on her Facebook page at https://www.facebook.com/DrBuckinghamTX.

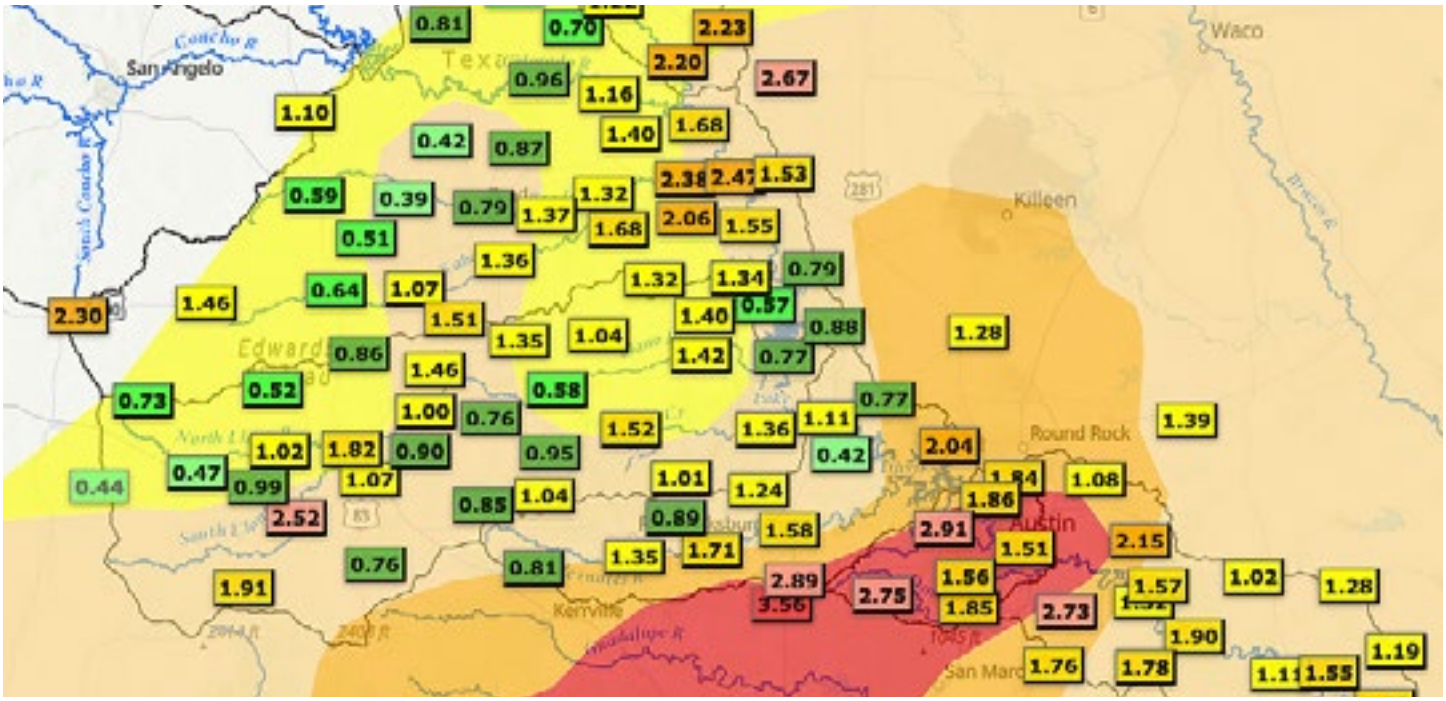
Healthy Creeks Initiative to Combat Invasive Arundo

FOR COMPLETE INFORMATION, Please go to https://www.llanoriver.org and then click on the link that reads: **Healthy Creeks Iniative to Combat Arundo**

LCRA Hydromet Stream Flow as of 11.24.24



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



LCRA Hydromet Rainfall & Drought Meter last 30 Days as of 11.24.24