

LRWA Watershed Report

LEGISLATIVE EDITION

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*Opinions expressed herein are not necessarily shared by LRWA

SB 1911: Pristine Streams 2025!

Adopting **Senate Bill 1911** will protect the state's last remaining pristine streams from pollution by wastewater discharge permits, while allowing development to continue with wastewater irrigation permits.

THE PROBLEM

Very few of Texas's rivers and creeks are still truly pristine. Water quality scientists define Pristine Streams as having extremely low levels of naturally occurring phosphorus. TCEQ records phosphorus measurements for Texas streams in its Surface Water Quality Monitoring Information System.

Even after treatment, domestic wastewater (sewage) has higher levels of phosphorus, which fertilizes plant growth. Discharging treated wastewater directly into Pristine Streams brings excessive algae growth.

Wastewater-related algae outbreaks have already happened on some Pristine Streams. The South San Gabriel River has been coated with miles of algae below the city of Liberty Hill's wastewater discharge outlet for more than a decade. Excess algae grew on the Blanco River in 2019, when the city of Blanco discharged

How Can I Make a Difference?

Contact the Representative and Senator for your District and urge him or her to VOTE YES for SB 1911 to protect the pristine streams that we have left in the Hill Country, such as the Llano River system and other Hill Country watersheds!

wastewater into it, but subsided the following year when the city resumed irrigating its wastewater onto land.

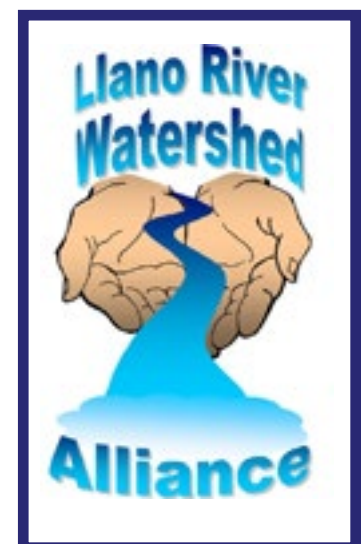
SOLUTION

The Texas Commission on Environmental Quality (TCEQ) issues two kinds of permits for the treatment and

dispersal of domestic wastewater. Under TPDES* permits, treated wastewater can be discharged directly into streams. Under TLAP** permits, wastewater can be irrigated onto land.

(*stands for Texas Pollutant Discharge Elimination System; **stands for Texas Land Application Permit)

Under SB 1911, TCEQ will continue issuing new TLAP *irrigation* permits on Pristine Streams, but discontinue issuing most new TPDES discharge permits. The bill **will not** apply to existing discharge permits, new discharge





permits for municipalities and river authorities, or permits for other forms of wastewater (including produced water and industrial wastewater) on Pristine Streams.

SB 1911 defines Pristine Streams as classified stream segments for which 75% of TCEQ-recorded phosphorus measurements over the past decade have been below 0.06 milligrams per liter. (TCEQ previously did not require water quality testing labs to detect phosphorus amounts below this level.) [Note: .06 mg equals 6 mcg.]

Fewer than 30 classified stream segments in Texas meet SB 1911's definition. They have already been identified and are **listed below**. Because the bill's definition is time-limited, no other streams can be added to this list later.

SB 1911 is based on HB 4146 from the Texas 87th Session (2021), which was authored by Rep. Tracy O. King and passed 82-61 by the House.

Barton Creek
Blanco River - Upper & Lower
Comal River
Concho River - Middle & S Forks
Cypress Creek
Devils River
Frio River, Upper
Guadalupe River - N & S Forks
Guadalupe River - Above Canyon Lake
Hondo Creek
Johnson Creek

Llano River
Medina River - Above Medina Lake
Nueces River - Upper
Onion Creek
Pecos River - Lower & Upper
Pedernales River
Red River - N & S Forks
Sabinal River - Upper
San Felipe Creek
San Gabriel River - N& S Forks
San Marcos River - Upper Seco Creek

BENEFITS OF SB 1911

SB 1911 will allow development to continue on Pristine Streams with TLAP wastewater irrigation permits. These permits have been used effectively for four decades around the **Highland Lakes**, where TCEQ stopped issuing new wastewater direct discharge permits in 1986. Development around the lakes has continued at a rapid clip since then. TCEQ has issued more than 30 irrigation permits around Lake Travis alone.

SB 1911 will protect the property values of landowners living downstream from wastewater treatment plants on Pristine Streams. Residents living below Liberty Hill's wastewater outlet on the South San Gabriel River have had to endure almost constant excessive algae growth that has often coated the entire surface of the stream and prevented them from using and enjoying it. TCEQ's commissioners acknowledged that treated wastewater can cause excessive algae when they renewed Liberty Hill's permit last year. Summary: *the State should treat all property owners equally.*

SB 1911 will support economic development in the Hill Country, where more than 20 Pristine Streams are located. Many small businesses depend on the region's reputation for unpolluted rivers and creeks, including B&Bs, restaurants, game preserves, wineries, breweries, and outdoor recreation outfitters for tubing, paddling, and fishing. According to the Governor's Office, travelers spent \$22 billion in the Hill Country in 2023.

Statements on the 2021 Pristine Streams bill in the Legislature (HB 4146) and on the 2022 Pristine Streams petition to TCEQ:

Former Rep. Tracy O. King, author of HB 4146:

"[I]f you're going to develop or if you're going to build ...on a pristine stream that is an absolute Texas treasure, then you have to do it in a very responsible way. ... This is not an anti-development bill. This is a preservation of pristine streams bill."

Former TCEQ Chair Jon Niermann on the Pristine Streams petition:

"I'll state the obvious: The water segments at issue here are state treasures, and we all have an obligation to protect them."

Former TCEQ Commissioner Emily Lindley:

"I don't think any one of us loves the idea of the potential of what could happen to any of these rivers. ... We would all agree these are gems that our state has."

TCEQ Commissioner Bobby Janecka:

"I want to acknowledge the use-it-or-lose-it aspect of these pristine streams if the state of Texas doesn't act. ... We're going to find an opportunity lost. We will move down the road and look back and find that development has moved on, and we've sunk costs left and right, and we can't unravel from that point in time. We can't un-ring the bell."

Sky Marshal Jones-Lewey, creator of the Pristine Streams proposal:

"The population of Texas continues to boom; we hear about it daily. Most people don't think about the accompanying surge in the volume of wastewater that will come too and must be managed. Those of us who've been working to protect rivers for years most definitely think about that problem."



Liberty Hill: A Cautionary Tale

The montage below shows consecutive segments of the South San Gabriel River as seen in a 2020 drone video shot by Dr. Ryan King of Baylor University. The discharge outlet for Liberty Hill's wastewater plant is in the midpoint of the photo directly below. Algae growth continued downstream on the river for more than two miles (4 photos).



Effects of the City of Liberty Hill's wastewater plants on the South San Gabriel (more drone video stills)



AI image of a wastewater discharge pipe (not Liberty Hill's...)

LEGISLATIVE WATER BILLS IN PLAY (compliments of GEAA/ Greater Edwards Aquifer Alliance)



ENCOURAGING:

- Water conservation bills are really popular this year – **House Bills 517, 1245, 1256, 1370, 2269, and 2346** all put forward good ideas to encourage Texans to conserve water.
- Representative Goodwin has put forward **House Joint Resolution 27**, proposing a constitutional amendment guaranteeing Texans the right to a clean and healthy environment.
- Senator Menendez has proposed a study analyzing the impacts of PFAS and PFOAS (forever chemicals) on public health, including their impact on groundwater, rivers, lakes, and other water sources used to supply drinking water.
- **House Bills 2512, 1901, and 2024** all work to solve some of the issues we've highlighted from last session's Senate Bill 2038 regarding municipal regulations in the extraterritorial jurisdictions (ETJs).

CONCERNING:

- Meanwhile, **Senate Bill 1509** would eliminate municipal regulations in the ETJs altogether, something we'd hate to see and that could put water supplies at risk. **HB 2225** would require a super-majority vote by a city council in order to raise impact fees – a tool used to incentivize responsible development – rather than a simple majority vote and require three of the five advisory council committee members to be representatives of the real estate, development, or building industries.
- **HB 524** would require cities to submit proposed ballot measures to the Attorney General for approval, and **HB 587** would require the governor to approve proposed agency rules before the rules can proceed. These two bills all hand power previously held by local governments or state agencies (and the public) to the state.

THEN THERE's the "BIG WATER BILL"—Senate Bill (SB) 7

Senate Bill (SB) 7 was heard in the Senate Committee on Water, Agriculture, and Rural Affairs on Monday, March 24. SB 7 is the enabling legislation for **Senate Joint Resolution (SJR) 66**, which would provide a \$1 billion dedicated revenue stream for Texas water each year. If SJR 66 passes, Texans will be able to vote to approve it this November. You can read more about this in this gift article from the San Antonio Express News [here](#).

Could be a good bill, but needs improvement:

SJR 66 requires 80% of the Texas Water Fund to be transferred to the New Water Supply for Texas Fund. NOTE: SB 7 **does not** list water loss mitigation efforts (fixing leaky water supply infrastructure) or wastewater recycling (water reuse) strategies – both of which would provide a significant amount of water for Texans – as supply

Water Bills continued:

strategies on which the New Water Supply for Texas Fund can be spent.

These two missing strategies would go a long way towards securing our water future, are highly cost-effective, would provide a firm supply, and can be implemented much more quickly than other supply strategies, such as building new reservoirs or piping water around the state.

Under SJR 66 and SB 7, the required transfer of 80% of the Texas Water Fund would mean that these very effective strategies are locked out of \$800 million of the funds, potentially leaving on the table hundreds of thousands of acre-feet of water that can be supplied relatively quickly and cheaply. Texas cannot afford to leave these strategies out of its major efforts to tackle our water crisis!



According to [Texas Living Waters](#), Texas utilities lose at least 572,000 acre-feet of water each year due to aging infrastructure - more than the total annual needs of Austin, Fort Worth, El Paso, Laredo, and Lubbock combined. Surface reservoirs in Texas lose around 7.4 million acre-feet of water combined each year to evaporation, according to the Texas Water Development Board. Annual reservoir evaporative losses can often exceed the state's total annual municipal water use.

The [2022 Texas State Water Plan](#) recommends that roughly 15% of the state's water supply come from some form of water reuse. To date, only about 4% of the state's water supply is recycled water. Why not provide more funding for projects such as [El Paso's Advanced Water Purification Facility](#)?

Texas may be facing a severe shortage of water by 2030. Water loss mitigation, wastewater recycling, and aquifer storage and recovery are projects that can provide and protect relatively large amounts of water supply in the short-term. These are strategies that should be made a priority now.

Contact your state representatives and senators today to ask them to support an investment in Texas water that includes water loss mitigation and water recycling.

We are grateful to Senator Perry for bringing water funding bills to the legislature. But to ensure their maximum potential, [SB 7 should be amended to add water loss mitigation efforts, like fixing our leaky water pipes, and non-potable and potable water reuse strategies to the New Water Supply Fund for Texas.](#) Contact your state

representatives and senators today to ask them to support an investment in Texas water that includes water loss mitigation and water recycling.

In related news, we're very happy to report that representatives Harris and Troxclair's House Bill 1400, which would create a fund for groundwater science, research, and innovation to be administered by the Texas Water Development Board (which GEAA supported during last week's House Natural Resources Committee hearing), has been approved without amendment out of committee to be sent to the House for a vote.

And lastly, we learned that House Concurrent Resolution 121 was filed March 20. This resolution recognizes that the Edwards Aquifer is an "irreplaceable state treasure" and calls for the Texas Commission on Environmental Quality "to take immediate and decisive action to protect the Edwards Aquifer and its recharge zones and contributing zones from irreversible contamination from treated effluents discharged by any wastewater systems or toxic substances released through construction or other activities." We're grateful to the Scenic Loop-Helotes Creek Alliance and to Representative Mark Dorazio for filing this resolution!

NOTE, you can refer to the [September 30, 2024 LRWA Watershed News](#), page 4, for an introduction on how to use the official Texas Legislative website (<https://capitol.texas.gov>) as an important informative tool.

Bills in the 89th Legislature affecting Groundwater Conservation Districts

HB 1400 (Harris, Troxclair) - Creating a fund for groundwater science, research, and innovation. Approved by House Natural Resources; sent to Calendars. Very good.

HB 2812 (Troxclair) - Prohibiting the Hays-Trinity GCD from regulating, permitting, or metering a public water supply well. Assigned to House Natural Resources. **Not good.**

SB 1855 (Perry) - Cities and counties can require subdivision plats to show they have adequate groundwater supply. Assigned to Senate Water. Good.

SB 1914 (Eckhardt) - Requiring county consent for creation of conservation and reclamation districts in the unincorporated area of the county. Assigned to Senate Water. Good.

SB 1954 (Campbell) - Allowing counties to adopt zoning and building regulations in water quality protection areas (defined as an aquifer recharge zone, karst topographic area, floodplain, riparian area, or other watershed) in unincorporated parts of the county. A commissioners court may regulate:

- (1) the height, number of stories, or size of buildings;
- (2) the percentage of a lot that may be occupied;
- (3) the size of yards and other spaces;
- (4) population density;
- (5) the location and use of buildings and land for commercial, industrial, residential, or other purposes; and
- (6) building construction standards. (*Assigned to Senate Water.*) Good.

TWO LENGTHY FIGHTS IN A GOOD PLACE RIGHT NOW

1) From Annalisa Peace, Director at GEAA (Greater Edwards Aquifer Alliance): TCEQ's **Office of Public Interest Counsel** (OPIC) has recommended denial of the draft TPDES discharge permit for the proposed **Guajolote Ranch** subdivision in northwestern Bexar County. Discharge would be into Helotes Creek. OPIC made its recommendation in the contested case hearing on the Guajolote application. ***YEA FOR OUR TEAM!*** GEAA was an affected party in the hearing. You can read more about the case in the [attached San Antonio Express article](#).

2) OPIC has also recommended denial of the Municipal Utility District (MUD) application for the proposed **Hays Commons** subdivision in northeastern Hays County. The MUD is necessary for the developer's application for a TLAP wastewater irrigation permit. SOS (Save Our Springs), SBCA (Save Barton Creek Association), and GEAA are opposing these applications since the irrigation facility would be over the **Edwards Aquifer Recharge Zone**; this area being too sensitive to receive even treated wastewater effluent over land, contaminating the karstic aquifer below and more immediately, likely to pollute Barton Springs and hundreds of nearby private wells in Northern Hays County and South Austin. During the Public Comment period, the LRWA Board approved sending a Public Comment opposing the Hays Commons permit largely because of its dangerous precedent (its location over the Edwards Aquifer Recharge Zone).

REVIEW OF PHOSPHORUS LEVELS & LIMITS IN PRISTINE STREAMS

5 mcg/Liter	Average level of naturally occurring phosphorus in pristine streams.
20 mcg/Liter Liberty	New Phosphorus limit approved by TCEQ in 2024 for Hill's permit renewal - the lowest limit in Texas at this time.
150 mcg/Liter	Previous lowest phosphorus limit in a discharge permit on a pristine stream.
500 mcg/Liter	Lowest phosphorus limit listed in TCEQ's Implementation Standards (Note: NEEDS UPDATING!)



THE THREE WAYS TO GET RID OF WASTEWATER

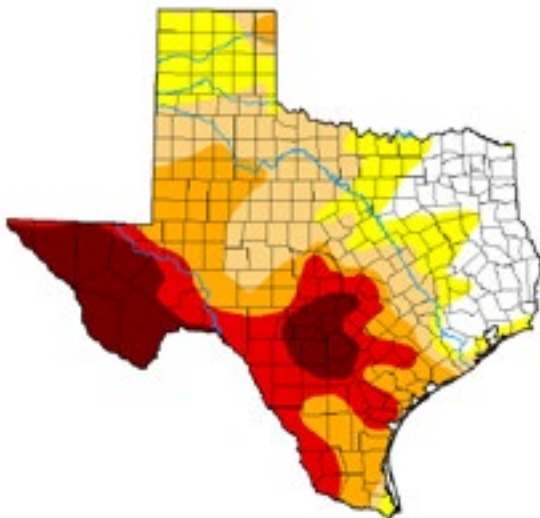
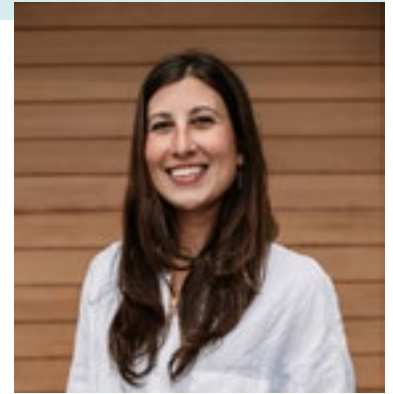
1) Discharge into water (TPDES permit), 2) Irrigate onto land (TLAP permit), and 3) Beneficial reuse (Chapter 210 authorization).

TCEQ banned new wastewater discharge permits in a 10-mile buffer around the Highland Lakes in 1986, and over the Edwards Aquifer Recharge Zone in 1996. TLAP wastewater permits are now widely used around the Highland Lakes. TCEQ also imposed limited restrictions on discharge permits in part of the Edwards Aquifer Contributing Zone.

Linda's Notes from Water Wonks Online Lecture*, March 26, by Marisa Bruno, Water Specialist for the Hill Country Alliance: OPPORTUNITIES IN LOCAL POLICY: What GCDs, Counties, Cities, and HOA Boards Can Do To Protect Groundwater

* Hosted by GEAA (Greater Edwards Aquifer Alliance)

Needless to say, there is a lot of attention right now on water policy, from local to state-wide. Because of strong growth of development in the Hill Country and along the I-35 corridor, that has increased the “straws” draining water resources, there have also been an enormous increase in impervious cover and contaminated stormwater runoff, also negatively affecting water resources. On top of that, it is more and more looking like we are in a new “drought of record” (replacing the previous ‘drought of record’ from the 1950s)! Many areas in the Hill Country are running at a 24” rainfall deficit! And yes, it’s also projected that our climate will get drier and hotter. Flow records from feeder rivers into the Highland Lakes (near Austin) now regularly show almost no flow in July/August, a condition that never existed even during the drought of 2011. Most aquifer wells in our region are getting lower and lower.



overall water availability with landowner rights to the “water under their feet.” GCDs regulate water well drilling, consisting of exempt and non-exempt wells. Exempt wells are only for domestic use, no permit required, but may be regulated by rules controlling minimum lot size and spacing. Non-exempt wells are commercial use, require permits and have pumping limits, based on reasonable usage and/or acreage,

How can counties and cities respond to this growing crisis? Currently, there are four options, by 1) Groundwater Conservation Districts (GCDs), 2) County rules, 3) City ordinances, and 4) by HOA rules (many multiple unit housing developments now are controlled by Homeowners Associations).

GCDs - countywide or multiple counties, enabled by local legislation and run by groundwater managers. Rules vary, but the overall goal is to keep track of and balance



and site-specific hydrogeologic conditions. In some areas, groundwater conditions call for another designation, a GMZ (Groundwater Management Zone) that adds another layer of rules. For more information, [click here](#) for a Hill Country Alliance publication on groundwater.

COUNTY TOOLS - 1) minimum lot size and/or maximum well density. 2) Conservation Subdivision (monetary) Incentives, awarding “points” for development conservation practices, like interspersed green zones. Hays County is an example of this practice. 3) Passage of Bonds for open space and other conservation practices. One example is [Sentinel Peak Preserve](#) in Hays County (photo below).



CITY TOOLS - examples: 1) Water-wise landscaping ordinances for new developments, 2) Encouraging water reuse, 3) Leverage - Leveraging developer agreements to achieve conservation wins. For more information, consult another HCA publication: [Leading By Example](#).

HOMEOWNER ASSOCIATIONS (HOAs) - HOAs have been increasing exponentially for some time, with an estimated number of over 22,000 in Texas! HOAs are perhaps best known for strict rules about what homeowners can build and plant and to maintain attractive lawns that inevitably use too much water. But note that after 2013, HOAs were forbidden to prohibit **Xeroscaping** in their contracts (although for some, covert discouragement of xeroscaping continued). Another good conservation tool is to require HOAs to include open “common areas” that could double as “show and tell” educational examples of water conservation practices. Some cities have landscaping rebates for water conservation-minded HOAs. For more information, the Hill Country Alliance has a new guide: [“Model Language for HOAs.”](#)



Accessible version: [CLICK HERE](#)

Cleaning and Disinfecting Water Cisterns After Floods and Heavy Rains

Floods and heavy rains can wash large amounts of debris and contaminants into cisterns and rain catchment systems and make water unsafe to drink. When cisterns come in contact with floodwater, you should assume that your drinking water is contaminated.

Once water is restored or you have the ability to refill your cistern, clean and disinfect it.

Cleaning

When you can replace the cistern water with safe water, follow these instructions to clean your cistern.

1. Clean the catchment area (for example, rooftop and gutters) and remove all debris.
2. Remove all debris and water from the cistern.
3. Scrub the inside with a stiff brush and a solution of 1 cup (about 0.25 liter) of unscented liquid household bleach (5%-6%) mixed with 10 gallons (about 38 liters) of water.
4. Rinse cistern with clean, safe water, then drain.
5. Refill the cistern with clean, safe water.



Disinfecting

After cleaning your cistern, follow these instructions to thoroughly disinfect your cistern and household plumbing.

1. If the cistern is connected to any water treatment systems (e.g., water filter or softener), close valves to those units and follow manufacturer recommendations to disinfect those systems separately.
2. Add 3 cups (about 0.75 liters) of 5%-6% unscented liquid household bleach for every 100 gallons (about 380 liters) of water in the holding cistern.
3. If the cistern is connected to interior plumbing, open each faucet and run the water until you smell chlorine (bleach).
4. Turn off all faucets and allow the solution to remain in the cistern and plumbing for at least 12 hours. Do NOT drink, bathe, or cook with this water.
5. Drain all water from the cistern.
6. Refill the cistern with safe drinking water.
7. Open each faucet and run the water until you do not smell chlorine (bleach).
8. Add 1 tablespoon of 5%-6% unscented liquid household bleach for every 100 gallons of water in your cistern to prevent microbial growth.

Amount of Bleach (5%-6%) to Add for Cistern Disinfection

Cistern Size	¼ Tank	½ Tank	¾ Tank	Full Tank
200 gallons	1.5 cups	3 cups	4.5 cups	6 cups
450 gallons	3.5 cups	7 cups	10.5 cups	13.5 cups
600 gallons	4.5 cups	9 cups	13.5 cups	18 cups
1,000 gallons	7.5 cups	15 cups	22.5 cups	30 cups

For more information on maintaining your cistern, contact your local health department or a water treatment specialist or visit:

www.cdc.gov/healthywater/emergency/drinking/disinfection-cisterns.html.



CS 283563

INVASIVE SPECIES IN TEXAS

ARUNDO DONAX IMPAIRS CREEK HEALTH.

Invasive species like Arundo (giant cane), privet and others can harm Texas creeks and rivers. They devastate habitat and keep our waterways from providing essential ecosystem services, such as recreation, fresh water supply, and drought and flood protection.

DOCUMENTED IN
136+
Texas counties,
most problematic in several
Hill Country rivers and along
the Rio Grande.

Arundo can grow up to
2 INCHES PER DAY,
crowding out and replacing
native plants.

**FISHING & BOATING
IMPACTS**

Arundo and other invasive plants degrade habitat for fish such as Guadalupe bass, the official state fish of Texas.

Blocks access for bank, wade, and kayak fishing, a **\$14-32 million industry** in the Hill Country.

**DAMAGE TO
RIVER BANKS**

Arundo roots are very weak below the surface, causing river bank erosion.

They crowd out native grasses whose roots reach more than **6 times** deeper, stabilizing banks. An unmowed native buffer acts as a sponge and helps absorb water.

**DROUGHT & FLOOD
RISK**

Arundo's high wax content makes it a wildfire hazard—particularly during drought.

Can increase the area impacted by flooding up to **10%**

Keep our creeks healthy. Prevent invasives:

- 1 Don't mow, let it grow**
- 2 Let woody debris be**
- 3 Plant natives**

Join the Healthy Creeks Initiative: tpwd.texas.gov/HealthyCreeks

TEXAS
PARKS &
WILDLIFE

Healthy Creeks Initiative to Combat Invasive Arundo

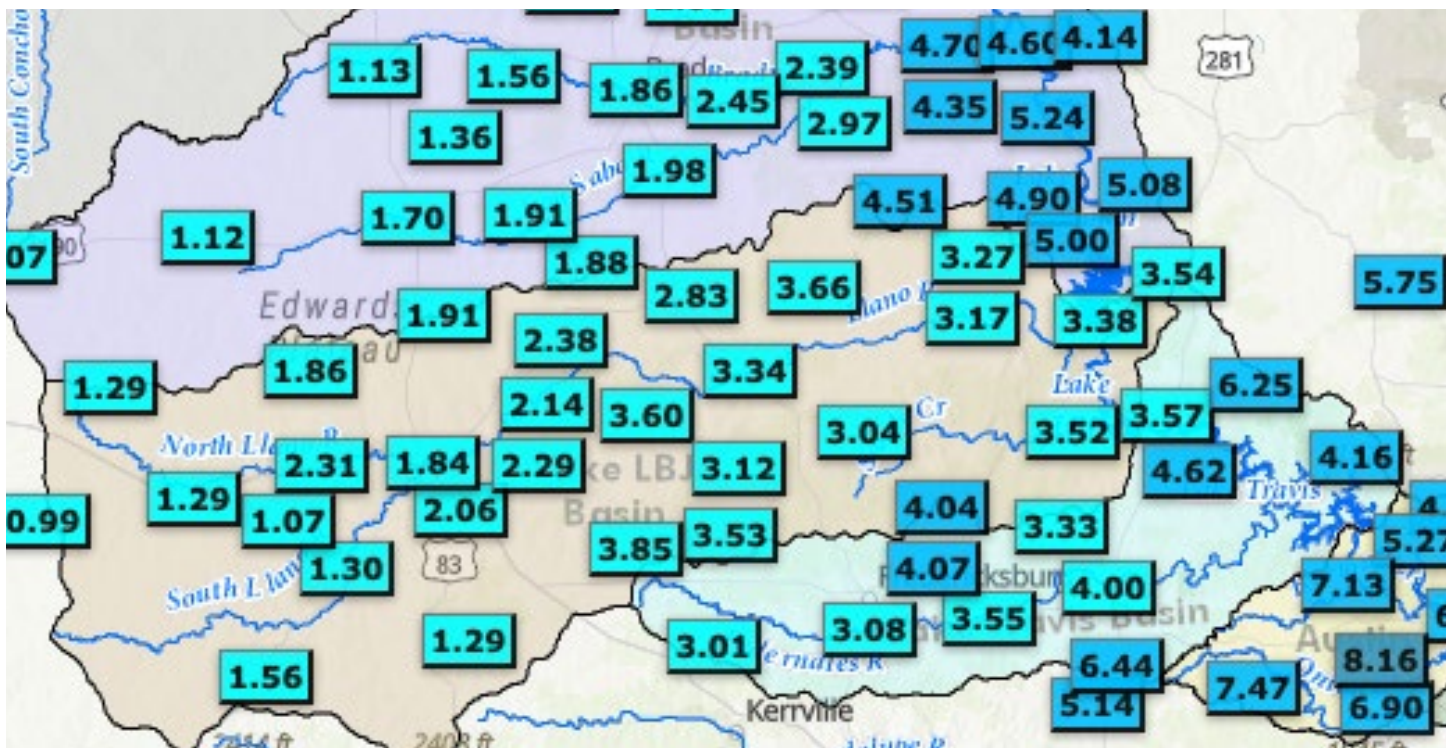
FOR COMPLETE INFORMATION, Please go to <https://www.llanoriver.org> and

then click on the link that reads: **Healthy Creeks Initiative to Combat Arundo**

LCRA Hydromet Stream Flow as of 3.30.25



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 this year as of 3.30.25