

We Are What We Drink

A Bobcat's Guide to Campus Water Resources



People and Water in San Marcos

Supported by the year-round flow of fresh water, humans have lived around the headwaters of the San Marcos River for almost **13,000 years**. Archaeological evidence indicates that the springs may be one of the oldest continually inhabited places in North America.

Living History

Today, our unique aquifer and spring fed river continue to make life possible in San Marcos and at Texas State University.

Becoming a **steward of campus water resources** is an important part of TXST culture and student life. Ensuring that future Bobcats have a clean, flowing river and drinkable water is our **collective responsibility**.



Where does our water come from?

Introducing the Edwards Aquifer

What is an aquifer?

An aquifer is a natural **underground reservoir** of water made up of porous rock, sand, or gravel. Aquifers store usable groundwater in significant quantities, all unseen just below our feet.

How does water get into the aquifer?

Aquifers are refilled when rain and runoff percolates back into the ground in certain permeable areas called **recharge zones**. An aquifer's recharge rate varies depending on a region's geology and how much water regularly exits the aquifer through wells and springs.



Map by Edwards Aquifer Authority

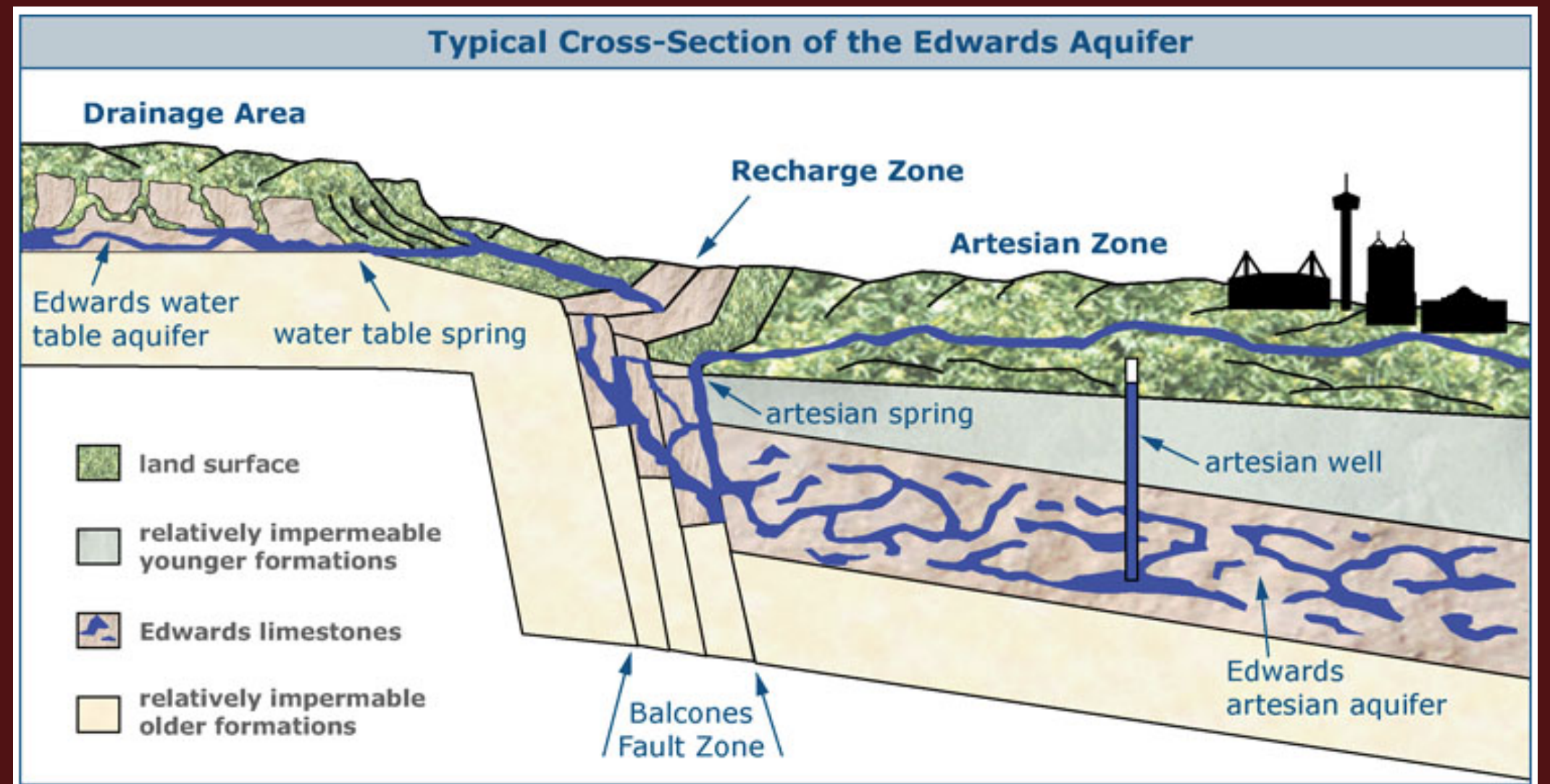
What makes our aquifer special?

The Edwards Aquifer is a **karstic aquifer** that stretches over 3,600 square miles, encompassing parts of 10 Texas counties. It is made of porous, honeycomb-like limestone formations that store water like a sponge and allow it to travel underground. It is one of the most productive aquifers in the United States and is the primary source of water for San Antonio, Austin, and the I-35 corridor.

All Water is Connected

Groundwater and surface water may seem separate, but they are both parts of the same **hydrologic cycle**.

In San Marcos, groundwater stored in the Edwards Aquifer emerges through a collection of natural **artesian springs** found right on campus at Spring Lake. These springs form the headwaters of the **San Marcos River**, which eventually joins the Guadalupe River before flowing all the way to the Gulf of Mexico.



Water Scarcity in the Edwards Aquifer

Edwards Aquifer Authority Drought Stages

Stage	J-17 Index Well Level: (ft.amsl)	San Marcos Springflow: (cfs)	Water Reduction %
Stable	660 or above	96 or above	0%
Stage 1	Less than 660	Less than 96	20%
Stage 2	Less than 650	Less than 80	30%
Stage 3	Less than 640	N/A	35%
Stage 4	Less than 630	N/A	40%
Stage 5	Less than 625	N/A	44%

Droughts occur when the rate of aquifer recharge falls below the level necessary to maintain regular springflow. The regulatory entity in charge of measuring and designating regional drought stages is the **Edwards Aquifer Authority**, which determines how and when water use should be reduced by permit holders like TXST.

Droughts are caused by extended periods of reduced rainfall and higher-than-average temperatures, but they can be worsened by human behavior. Poor water management and overpumping are examples of **anthropogenic**, or human-induced, factors that can exacerbate drought conditions.

Where is TXST water going?

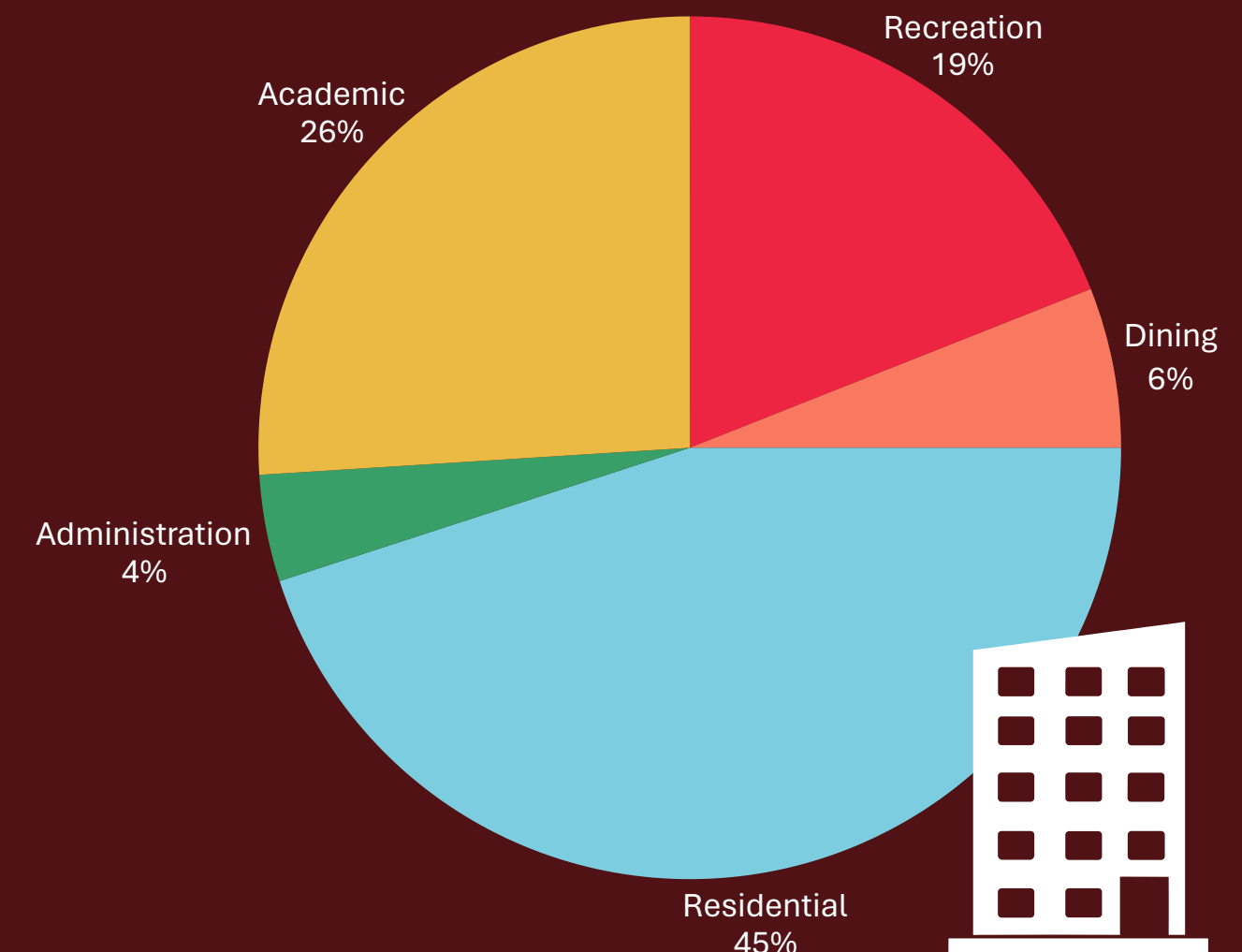
Roughly 60% of water use from main campus wells is utilized domestically, and nearly half of this domestic use occurs in residence halls.

Every time we turn on the tap, we draw water directly from the Edwards Aquifer. To help meet restrictions during times of drought, Bobcats living on campus can adopt certain practices to help **conserve** water on an individual and community wide scale.

Did you know?

10,000 residents each taking a 15-minute shower would use approximately **375,000 gallons** of water in total. That's enough to cover the Bobcat football field in **10.5 inches of water!**

**Estimated Domestic
Campus Water Use from
Jackson Well**



How You Can Help

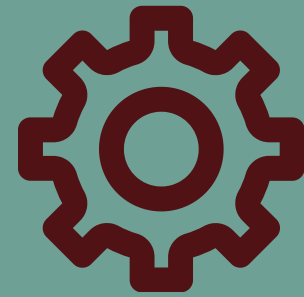
Contribute to campus-wide water conservation efforts by engaging in one or all of these small strategies:



Save

water in residence halls and during daily activities

Help reduce domestic water use in on-campus housing by **shortening shower time** and **turning the tap off** while brushing your teeth or shaving. Wash your laundry in **full loads** to take advantage of the water amount in each cycle, and with cold water to save energy. Becoming a water steward begins with weaving conservation into everyday habits!



Report

spills and maintenance issues with water infrastructure

Notice something off with a faucet or irrigation line? Report it to our experts to make sure it's addressed as soon as possible.

For issues in residence halls, submit a maintenance request in your [Student Housing Portal](#).

For other parts of campus, contact our Facilities team through [Bobcat FixIt](#).

To report a chemical spill, call **512-245-3616**.



Volunteer

with university or local organizations involved in water stewardship

Get involved in city and campus efforts to maintain clean, high quality waterways.

Participate in [My TXST My Home](#) campus cleanups to keep campus and the river free of litter.

Join [Bobcat Stream Team](#) to learn about water quality testing and ecology.

Keep up with the [TXST Office of Sustainability](#) to hear about upcoming stewardship opportunities.



Advocate

for water resource protection to local and state government

The biggest influence on aquifer levels and water scarcity in San Marcos is **urban development**. What types of businesses, industries, and housing projects are being built, and how much water are they using?

You can participate in the process for approving or blocking certain kinds of development in San Marcos by speaking to elected officials and attending public government meetings. Remember to make your voice heard!

Every Drop Counts!

Every effort made towards water conservation and stewardship has a **downstream effect**, even if it feels small.

When everyone pitches in to preserve water resources, together we can ensure a future of healthy ecosystems and healthy communities.

***Protect our aquifer-
it's the Bobcat way!***

