Texas Developers Love Big Thirsty Lawns. That's a Huge Problem for the State's Water Supply

Cities across the state dramatically curbed water use over the last decade. Now, newcomers and first-time homeowners, and the builders catering to them, are causing it to spike again.

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If you're a native Texan, or if you've lived here awhile, you've probably had it drilled into your head: don't waste water. And you've likely noticed how our ever-hotter, ever-drier summers are wreaking havoc on our aquifers, reservoirs, rivers, trees, and landscapes.

Thanks to our old pal climate change, we are now even contending with a **new type of drought!** For those who didn't get the message, however, water utilities across much of the state have been increasing rates for heavy users, cracking down on rule breakers, and imposing stringent measures such as once-a-week watering rules.

Changing consciousness, and conservation-focused policy tools, have made a difference. Cities have cut their per-capita consumption—the average amount of water used per resident—by more than 20 percent in the last two decades. The state water plan—an ocean-sized document drafted every five years—argues that this downward trend must continue to ensure that a fast-growing Texas doesn't run out of water in the coming years.

But these best-laid plans are in jeopardy. Thanks to developers who cater to newcomers and longtime Texans who love their lawns, experts warn that per-capita water usage is starting to plateau or even increase in many areas, particularly in drought-plagued parts of the state.

Conservation officials in big cities such as Austin and San Antonio, and suburbs such as Frisco (north of Dallas) and Georgetown (north of Austin), describe a similar phenomenon: new homes are being sold with extravagant expanses of thirsty turf, irrigated with automatic sprinkler systems, many of which are poorly installed and leak-prone.

Folks moving from other parts of the country or state, where a lush green lawn might be standard, expect such amenities and are often unaware that they are now living in a water-scarce region, much of which lies at the edge of a desert. Throw in persistent drought—precisely when conservation is needed the most—and the result is wanton waste.

Yes, one more ill we can (partly) blame on the <u>Californians</u>. And New Yorkers, Floridians, and whatever natives of Delaware call themselves. And to be fair lots of Texans too.

In the Hill Country, in particular, longtime residents frequently complain about the city slickers from Austin, Dallas, and Houston moving to the water-scarce region with their thirsty lawns and swimming pools. In any case, it can be hard to disentangle supply and demand—are developers merely giving new homebuyers what they want, or are they just responding to consumer expectations?

Perhaps nowhere is the problem better illustrated than San Antonio, a nationally heralded **success story** for water conservation. To preserve the Edwards Aquifer, the underground reservoir that provides drinking water to the city and sustains some of the most productive springs in the state, San Antonio reduced its per-capita consumption by 22 percent over the last decade, dropping from 143 gallons per person per day in 2011 to 111 gallons in 2021.

But now the San Antonio Water System, the utility that serves two million residents in the Alamo City and fifteen nearby towns, is struggling to maintain the gains, says Karen Guz, its director of conservation. In 2022—a record hot and dry year—the rate shot back up to 122 gallons per capita per day, the biggest jump in 10 years.

And 2023 was about the same. That was a "wake-up call," Guz says. The drought rules were no longer working. "Yes, in San Antonio there's been a lot of progress. But when we run our models for the future, if we don't succeed at reducing per-capita demand reasonably, just a bit—like 10 percent during drought—then we need many new supplies faster." And it's unclear where those new supplies might come from.

The water-wasters comprise a relatively small group. Among single-family homes, the top 5 percent of users account for more than 20 percent of the water sales by volume in the SAWS area. Guz says the utility has seen "mixed" results from its efforts to get customers to change their behavior. Some don't realize that they're using so much and are eager to conserve. Others, she said, bristle at the steep rates charged for excessive use. They think, "I'm just out to tax the rich or something." Like many other water utilities around the state, SAWS charges higher rates for higher levels of consumption, but that's still apparently not enough to get some customers from cutting back. Now the utility is proposing a new high-use surcharge for the top 5 percent of users during extreme drought—an attempt to rein in waste.

Amy Hardberger, a native San Antonian and Texas Tech law professor who serves on the SAWS board, points out that the heaviest users aren't in the urban core. They're concentrated in the fast-growing, affluent suburbs that sprawl from San Antonio into the Hill Country. "Historically in San Antonio we relied on San Antonians" to conserve, Hardberger said. "But the vibe is changing and we have to now be a little bit more topheavy and prescriptive because these people, they don't care. They don't know where they're moving to. They want to bring their bullshit with them."

In New Braunfels, a booming burg north of San Antonio famous for Schlitterbahn and toobin' on the swift-flowing Guadalupe River, the story is similar. A very small group uses a disproportionate share of the water. "We talk to people on the phone that move from elsewhere who say, 'I've never experienced drought. When is it going to rain?'" said Andrew Cummings, the conservation manager with New Braunfels Utilities. "Not all make the connection between the area's treasured rivers and their own household consumption." The Guadalupe and Comal rivers are sustained by spring flow from the Edwards Aquifer.

Cummings says that education, wrapped in a warm, welcoming message, helps ameliorate the problem. But his utility is also investigating how to get developers to stop turning so many homebuyers into grass farmers, raising their crop with expensive treated drinking water.

Many new subdivisions in Comal County, where New Braunfels is the seat, consist of half-acre lots that are fully sodded and fully irrigated. Cummings points out that Texas law requires irrigation installers to instruct purchasers on how to use their system with conservation in mind. But in the case of new builds, the law considers the first buyer to be the developer, not the first homeowner. The utility is looking into whether it could offer educational walk-throughs to new homebuyers or require the builders or irrigators to do so.

In Frisco, a Dallas suburb that has transformed in just a couple of decades from a sleepy farm town into a vast grid of chain stores and master-planned communities with 220,000 residents, the traditional green lawn is still king. In the 1979 cult novel *The Hitchhiker's Guide to the Galaxy*, a space alien assumes cars are the dominant life form on earth and humans mere parasites. Frisco promises a similar mix-up—the all-powerful Bermuda, St. Augustine, and Zoysia clans train humans to fertilize, water, and trim their vast empire of green blades.

With almost half its water used to irrigate lawns, the city was forced years ago to grapple with the issue. Frisco has imposed detailed requirements for how irrigation systems must be installed and requires operational inspections, where the system is turned on to make sure it's working properly and not leaking. Such programs helped cut per-capita consumption nearly in half, from 300 gallons a day in 2000 to 153 gallons in 2019. (Austin Water and SAWS are both considering similar policies.) But even efficient lawn irrigation can only accomplish so much. Per-capita usage in Frisco has ticked up every year since 2019 and, as of 2023, stands at 177 gallons per day—far more than in older Dallas suburbs such as Garland and Mesquite.

More water-strapped towns have gone so far as to simply ban outdoor watering during extreme drought. Georgetown, thirty miles north of Austin and one of the fastest-growing cities in the U.S., announced last July that customers in much of the city would

no longer be allowed to water their lawns. The mayor has told citizens that they faced a choice between green grass and safe drinking water.

Hardberger thinks the goal should be to avoid ever installing irrigated turf in new homes in the first place. "How stupid is it to put all this stuff in, have people basically pay for it as part of their home price, and then we're going to try to encourage them to tear it out, right?" If homeowners want to spend lots of money on an irrigation system after they purchase a home, they are much more likely to buy a high-quality unit that they know how to use, she argues. And maybe by then, they'll have learned about the water challenges Texas faces and opt instead for **native landscaping**—which, by the way, **can be beautiful** as well as **hardy**.

Meanwhile, Hardberger has a blunt message for new Texans from wetter climates: "If you want grass, go home. We don't have it here."