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In Austin, Growing Water Needs — and Conservation

by **Kate Galbraith**
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Larry Maginnis, the forester at the University of Texas at Austin, can't hide his frustration. Pecan trees, cedar elms and even sycamores are struggling amid the drought. Live oaks are shedding leaves.

“I'm personally watching seven years of work go up into smoke in this drought,” says Maginnis, standing in front of a stately tree called the deodar cedar, planted in 1898, that he said is suffering.

Things could get even worse. If it doesn't start raining soon — and the summer forecasts are grim — Austin's twice-a-week watering rules could change to to once-a-week rules in late August or early September, a step that UT's landscapers say will be even tougher on trees.

The drought, with all its implications for large water users like UT and homeowners alike, has heightened Austin officials' interest in a long-term water-management plan for the Highland Lakes, a key water source for this growing city and others in Central Texas. Austin gets its water from the lower Colorado River basin, and in times of drought, it relies heavily on Lake Buchanan and Lake Travis, where levels are now falling rapidly.

Austin has arranged enough water until at least 2050, according to Greg Meszaros, director of the Austin Water Utility. Somewhat controversially, the city paid $100 million up front to the Lower Colorado River Authority (LCRA) in 1999 to reserve rights to a large amount of water, up to 325,000 acre-feet a year (the city

used 164,000 acre-feet in 2009, though usage dropped in wetter 2010). Once Austin's water use grows by a certain amount, prepayment privileges will expire and Austin will need to start paying the LCRA, which manages water in the Highland Lakes, a fair amount for the water.

Austin is the LCRA's largest urban customer, but it also has substantial rights of its own to water along the lower Colorado River, which it uses in rainy times, when the river is full.

In the long-term negotiations that are taking place among lake interests, cities, environmentalists and downriver rice farmers (who use considerably more water than Austin does), one of the chief concerns in Austin is the levels of the lakes. If the lakes go too low, the city faces tighter watering restrictions, as do LCRA power plants. The process plays out like this: When the amount of water in Lake Travis and Lake Buchanan combined falls below 900,000 acre-feet, the LCRA asks Austin and its other city water customers, including Burnet, Marble Falls and Pflugerville, to use less water.

The lakes currently contain nearly 1.2 million acre-feet of water, but they are dropping at a rate of up to 40,000 acre-feet each week — and Bob Rose, the LCRA's chief meteorologist, said at a news conference on Monday that the 900,000 acre-foot trigger could be reached by late summer or early fall.

The LCRA guarantees the water supply for cities and merely asks for the cuts, rather than mandating them. However, the cities tend to comply.

The most immediate consequence is that landscapes suffer. Maginnis, the UT forester, says that landscapers around Austin are making good money right now clearing dying trees. Lawns around the city are patchy and brown. "Drive on the upper decks

of I-35, look out across Austin, and you'll see dieback all over town," he says.

For the Austin Water Utility, however, conservation requirements have another consequence: less revenue. The water utility earns money by selling water, and much of that funding goes toward large infrastructure projects that are important for the city's future. They're expensive: just replacing a foot of water piping can cost $350, according to Meszaros. A controversial water treatment plant under construction will cost more than $500 million.

As conservation reduces utilities' revenues, rates creep higher. "We have been in an environment where water rates are going up," says Meszaros. For example, water rates in Austin are projected to go up 7.7 percent next year, and Austinites will also pay a "water sustainability fee" for the first time next year (expected to total about $4.40 a year for the average meter).

Meanwhile, conservation is working: Austin recorded its lowest average water use in recent history last fiscal year, with 135 gallons used per capita per day, though last year was (for awhile) quite rainy. So far this year, water use is 137 gallons per capita per day, though summer — traditionally the highest-usage period — is just beginning. But conservation measures are already taking hold: On Monday, for example, the University of Texas turned off most of its fountains, in a voluntary effort to save water, and it is upgrading some of its irrigation equipment over the long term to save water too. Austin's goal is to bring per-capita water usage down to 140 gallons daily, per person, by 2020.

However — and herein lies the complexity of water management on the Highland Lakes — conservation measures by Austin and other cities do not necessarily mean that the lake levels will stay higher, some advocates for central Texas cities say. That's

because even as cities conserve, water released from the lakes continues to flow hundreds of miles downstream to rice farmers, who use it to water their fields. Rice farming is a water-intensive crop, and the rice farmers, who were some of the earliest major customers of the LCRA when it was created in the 1930s, are able to buy their water far more cheaply than cities. They use substantially more water than the cities do; last year the farmers used 57 percent of the water allocated from the Highland Lakes. That is true even though Austin has grown rapidly: Its population has more than doubled since 1980, and is projected to rise by another 50 percent by 2040.

For the farmers, however, there's a catch: In exchange for the cheap water, they agree that their water deliveries can be "interrupted" — reduced or cut off altogether — in times of drought. (Cities cannot get similar deals, because the notion of cutting off Austin or Pflugerville is a non-starter — thus their contracts are called "firm," or uninterruptible.) However, in practice the farmers have never actually been cut off. They won't even have their water allocation reduced this year, despite the drought's toll. So while cities, which have guaranteed water supplies, are asked to conserve water, the farmers, who get cheap water in exchange for accepting the risk of being cut off, continue to use water, within the limits of their permits.

To cities, this seems unfair. "The LCRA is advertising, conserve conserve, conserve. [But] that water that's being conserved is not staying behind the dams," said David Vaughn, the city manager for Burnet, an LCRA customer, who stressed nonetheless that he appreciated the concessions irrigators have made in the long-term water-management negotiations.

Rice farmers have "heard that concern loud and clear," says Ronald Gertson, a Wharton County rice farmer who serves as an advocate for the industry on water issues. The problem with the

logic, Gertson said, is that all stakeholder groups (including rice farmers) engage in conservation — and the conservation ends up benefiting the lakes as a whole, rather than the individual entity (like a city) doing it. Any water saved means that the lakes may be less likely to reach their trigger points for lower usage, Gertson said.

Even under current rules, the farmers could lose a crop for the first time next year, if lake volumes remain below 1.4 million acre-feet on Jan. 1.

Over the long term, cities' power — and rights to the water supply — seem poised to grow. Quite simply, while rice farming is a fairly static business, Central Texas cities are growing. Austin's population has exploded, and its water use tripled between 1970 and 2009. This isn't just about people moving in; it's also about attracting high-tech companies, which need lots of pure water to make semiconductor chips.

Matt Largey and Erika Aguilar of KUT 90.5 FM, Austin's NPR affiliate, contributed reporting. This is the third article in a five-part series on the LCRA, "Water Fight," that is running this week in The Texas Tribune and on KUT. Tomorrow: Rice farmers near the Gulf discuss their water needs.