

How the US is running up its water bill, and what can be done

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If you paid more for water, would you be encouraged to use less of it?

Approximately one-third of the country is in at least a moderate state of drought, and UA professor Robert Glennon says current levels of consumption can't continue.

If dollar bills flowed out of the faucet and down the drain every time you

turned on the tap, would you pay more attention to how long you kept it running?

Stated simply, that's the thinking of University of Arizona professor, who says U.S. [water](#) law policy needs a serious overhaul to solve the country's severe drought conditions.

Robert Glennon, Regents' Professor and the Morris K. Udall Professor of Law and Public Policy at the James E. Rogers College of Law, says most people think of water as if it's air—an infinite and inexhaustible resource, when it's actually quite finite.

"I think that we Americans are spoiled," he said. "When we wake up in the morning, we turn on the tap and out comes as much water as we want, for less than we pay for cellphone service or for cable television."

Approximately one-third of the U.S. is in at least a moderate state of drought, with the most severe drought being experienced in the Southwest, according to the [U.S. Drought Monitor website](#).

Exacerbating the drought is a rapidly increasing population. The U.S. Census Bureau estimates the country's population will balloon from nearly 310 million in 2010 to more than 420 million in 2060.

"Where are we going to get the water and other resources for an additional 110 million fellow U.S. citizens?" Glennon asked. "It's a real challenge. And that's before you consider climate change."

Glennon, the author of "[Unquenchable: America's Water Crisis and What to Do About It](#)" and a recent Hamilton Project paper titled "Shopping for Water," says most people don't even think about their daily water use.

"Even in places where people pay a 'bill' for water, they're not actually paying for the water," he said. "What they're paying for when they write that check ... is the cost of service."

Glennon said that seasonally adjusted increasing block rates could be the answer. In short, people who use more water, pay more.

Increasing the price of water is controversial, Glennon acknowledged, adding that it's necessary to recognize the human right to water. Allotting a modest amount for basic sanitation, cooking and drinking would require only 12 to 15 gallons of water per person per day.

Multiplied times the approximately 310 million U.S. citizens, the amount would equal around 1 percent of total current U.S. water consumption.

"It's absolutely a question of bringing people into a conversation," Glennon said. "Then we can have a discussion about how to price the rest of the 99 percent of water."

Perhaps the biggest player in the water game is the agricultural industry. The U.S. Department of Agriculture Economic Research Service states that agriculture accounts for around 80 percent of the nation's consumptive water use, and more than 90 percent in many Western states.

With water so cheap, there currently are no real incentives for farmers to use less of it, to spend money on installing expensive water-conserving infrastructures or to cease crop production during the offseason.

Glennon says it's what economists call "the tragedy of the commons," in which users have limitless access to a common-pool resource.

"I like to say our water supply is like a giant milkshake glass," Glennon

said. "Each demand for water, or each well, is like a straw in the glass."

Glennon's solution, which wouldn't require any price increase for farmers, is establishing markets driven by a demand-offset system. If someone wants to add a new straw to the glass, they first need to convince someone else to remove theirs.

In this scenario, farmers could stand to even make a profit by leasing their water to others during their offseasons. In turn, the profit gained could be used toward updating their infrastructure to use water more efficiently.

This seemingly beneficial solution would be difficult to enact until U.S. water policy—which makes it difficult for farmers to trade water in some areas—is overhauled.

To Glennon, solving the U.S. drought is a matter of removing the disincentives.

"I can't emphasize enough how important this is," Glennon said.

"As I go around the country, I meet inventors and engineers who have built better mousetraps—things that work (to conserve water)," he said.

"What is so sad is that almost none of them have a viable business plan. The price of water doesn't justify it. There's the threat about running out of oil, but water is needed by virtually every business in the United States. The problem with the system is we don't think about water. We use more than we need to, and we need to change that."

Provided by University of Arizona

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