



Saving storm water to manage flood and drought? Researchers say it's possible

by: [Yoojin Cho](https://www.kxan.com/meet-the-team/yoojin-cho/1001479576) (https://www.kxan.com/meet-the-team/yoojin-cho/1001479576)

Posted: May 13, 2019 / 10:38 PM CDT

Updated: May 13, 2019 / 10:38 PM CDT

AUSTIN (KXAN) — It seems like a never ending cycle, dealing with flooding like Austin did last week and then facing a drought within months.

The University of Texas at Austin researchers say Texas needs a better way to manage its water supply. In a news release, they said, "In a perfect world, there would be a way to capture water from rivers during storms and other high-flow times and save it for the dry times when it's needed."

Bridget Scanlon and Qian Yang at UT Austin's Bureau of Economic Geology [published a study](#) after analyzing the the amount of water flowing in major Texas rivers during heavy rains.

Scanlon explained, "The amount of water we could capture in 2015 through 2017 is about similar to the capacity of Lake Mead, which is our largest reservoir in the U.S."

They found two-thirds, if there was a way to do it, could be stored in aquifers along the Texas Gulf Coast.

"We either have too much water or we don't have enough water," Yang said in the news release about the study. "And so, what can we do then to manage water resources during these extremes? That is the motivation we had. In Texas, we have a large storage capacity underground."

The study suggests using that space to store water, and then during a drought, pump that water back out for our use.

Three cities in Texas, El Paso, San Antonio and Kerrville, do this already.

"Rather than storing water in a surface water reservoir like Lake Travis, lakes we're all accustomed to, you just put that same water underground," said John Dupnik, Deputy Executive Administrator of Water Science and Conservation at the TX Water Development Board. "Surface water reservoirs lose a lot of water to evaporation. When you put it underground, you don't have that problem."

What the researchers are suggesting is implementing that on a larger scale, but it may be easier said than done.

"We may need some temporary storage space to store the water we capture," Yang said.

"Particularly, if you would want to capture those flows to provide some sort of flood mitigation benefit. You wouldn't physically be able to pump the water back into the ground fast enough to actually mitigate for flood," Dupnik added.

He said there also needs to be a system to clean the water before it goes into aquifers.

"There's bacteria, pesticides, fertilizers, all the things that come with run off, you would want to treat it somehow to a quality that would be good enough to inject into an aquifer," Dupnik said.

Copyright 2019 Nexstar Broadcasting, Inc. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

SHARE THIS STORY
