Taps have run dry in a major Mexico city for months. A similar water crisis looms in the US, experts say

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About 300 miles southwest of San Antonio, water taps have run dry in a major Mexico city.

Thousands of residents wake up at dawn to check their taps and fill up containers. Others line up with large jugs, bottles and buckets at cisterns around the city, where fights have broken out when people try to jump the line.

This is the scene in the industrial hub of Monterrey, Mexico—the nation's third largest city and one of its wealthiest. Officials there announced in early June they would restrict access to running water in and around the 5-million-person city, allowing only six hours of water access a day. Some neighborhoods didn't receive any water at all.

The problem is dire: Two of the three main reservoirs serving the city are practically empty, a problem made even worse by an exceptionally dry spring and summer.

Summer temperatures soar past 100 degrees most days, as residents grapple with the effects of a water shortage that's been a longtime coming, according to experts.

But Monterrey isn't alone in its water crisis.

Drought is sapping the water from huge swaths of North America and making it increasingly hard for humans to count on running water. Experts know some communities are more vulnerable than others, but the growing challenge remains the same: Keep the taps from running dry.

"I hope that (people) realize the conditions experienced in Mexico are happening near their homes in the U.S.," said Heather Tanana, an assistant research professor at University of Utah's College of Law.

In the U.S., many Native American tribes along the Colorado River Basin lack access to reliable water sources and clean drinking water, free

of contaminants like uranium and arsenic. Some community members regularly travel long distances to haul water for everyday use.

Other parts of rural America also struggle with reliable access to water. The town of Rawlins, Wyoming, saw taps run dry in March as the result of outdated infrastructure. In Utah, two towns last year halted construction because of a declining water supply.

But those struggles are often overshadowed by the dramatic deterioration of water levels at Lake Powell and Lake Mead, the two largest reservoirs in the U.S.

The drying lakes show the crisis is real, but most Americans remain comfortably insulated from concerns about drinking water—for now at least. Experts say that day-to-day comfort masks a looming problem.

"There is a fundamental supply and demand imbalance where there is more demand from the river than the river can reliably supply in a given year," explained Jack Berggren, a water policy analyst at Western Resources.

Millions in Mexico living without reliable water

Monterrey's water crisis had been brewing for years as at least three factors slowly combined into a perfect storm: a growing population, a worsening drought and poor planning.

In the past, rain at just the right time could hide the reality that the region's population was growing faster than the city's water supply could keep up with. That's what happened in 1998 and 2013, when a wet September prevented a crisis.

But now, the rain hasn't shown up to save the city.

Climate experts point to La Niña, a weather phenomenon that cools surface waters in the Pacific Ocean and results in fewer clouds, less rainfall and more evaporation in northern Mexico.

Environmental advocates and experts say government mismanagement is also to blame. One frequently cited example: Mexico's government allowed beverage companies to extract huge amounts of water to produce beverages like beer and soda in the region—in the middle of a drought. Those companies have continued large-scale production amid the shortage.

State and federal government authorities have also said that construction of another dam was needed to shore up the water supply but it wasn't built in time.

For now, authorities have been tapping into Monterrey's groundwater supply to help alleviate the crisis—a solution experts warn isn't sustainable.

Some steps are also being taken to reduce consumption. For example, President Andres Manuel Lopez Obrador has announced the federal government will support beer companies who want to move production to southern parts of the country.

'It's already happening' in the US

Experts don't foresee a Monterrey-level crisis unfolding in a major U.S. city any time soon, but they say the Western water crisis will play out in ways that can't be overlooked.

"We're not there at the level that Monterrey is experiencing yet, but we could go there in the future," said Mark Lubell, an environmental science and policy professor at UC Davis. "We're definitely pushing

really hard on our water supply reliability in California and in the Colorado River Basin right now."

There are parallels between what is happening in Monterrey and what experts see occurring in the U.S.

Just as industry helped drain Monterrey's water supply, U.S. agriculture is currently sapping up the vast majority of Colorado River water in drought-stricken states.

Just as Monterrey's swelling population quickly overtook its infrastructure, the population in the Western U.S. has soared in recent decades as big cities—such as Phoenix and Las Vegas—attracted millions of people to live in the desert.

And just as Monterrey's crisis had been looming for decades before quickly spiraling out-of-control, experts in the U.S. say there's been ample warning that our water use plans are flawed—decades old, overly optimistic and poorly executed.

"(That's) the severity and seriousness of where we are, because everyone acknowledges there's not enough water for our current demands, and our current demands don't account for growing populations or the full use of tribal water rights," said Tanana.

Some of the most vulnerable regions in the U.S. are already seeing problems similar to what is happening in Mexico.

Today, 22 of the 30 federally recognized tribes within the Colorado River Basin have rights to about a fourth of the river's water supply.

But having rights on paper isn't all that is needed to access the water. Proper infrastructure that gets the water from source to community is a

must, yet it is something many tribes lack as the result of decades of underfunding and neglect from the federal government.

"Existing water infrastructure is deteriorating or inadequate, ... (and) investment in water infrastructure has not kept up with population growth and other needs," according to a Water and Tribes Initiative 2021 report.

Meanwhile, Lake Mead and Lake Powell were both at 27% capacity as of late July, according to NASA. For Lake Mead, that's its lowest point since 1937, the year it was filled for the first time.

"What's happening at Lake Powell and Lake Mead is so dramatic and it's happening quicker than anyone thought it would," said Berggren.

What next?

As droughts linked to the climate crisis further strain water resources in the West, more communities are likely to have their day-to-day life impacted by water shortages.

There is still time for the U.S. to avoid a crisis like the one Monterrey is currently experiencing—but only if changes are made soon, experts say.

The goal: Bring water usage and water supply back in line, so that we are not tapping into reserves that will one day dry up.

This means state and federal government action is needed now, according to Lubell.

The U.S. Bureau of Reclamation, the government agency that owns and operates major dams and reservoirs in the country, announced in June the seven Western states that rely on the Colorado River Basin for water

supplies had 60 days to agree on a plan to use drastically less water.

If states fail to draft a plan by Tuesday, the federal government has threatened to intervene.

The agriculture sector is expected to be the hardest hit by conservation cuts, but Lubell says there might also be urban cutbacks that mimic California's measures during drought season, including rules on outdoor and other nonessential water uses.

But some experts believe those cuts won't be enough, and states seem far from a deal, even an inadequate one.

And as climate change shifts temperatures and rainfall, the West's water system vulnerability increases.

Avoiding a widespread water crisis also involves helping communities where one is already unfolding.

Nonprofits like Dig Deep and National Tribal Water Center lead efforts to help bring clean, running water to tribal communities across the country.

Another important part is giving Native American tribes, who have historically been excluded, a seat at the table when discussing water allocation and conservation measures, said Tanana.

Tribes were largely left out of discussions concerning Colorado River management until 2018, when they helped draft the Colorado Contingency Plan.

"I don't think we'll be successful unless we bring all of those interests together," she said.

Federal agencies are starting to step up. The Biden administration announced earlier this year that tribes will receive $1.7 billion from the bipartisan infrastructure law to enable water projects for existing settlements to be completed.

Individuals also will need to change their behavior to help fight the water crisis—but that will only be effective if those efforts are coordinated, Tanana said.

It's the difference between saving a few gallons when one person takes a shorter shower and saving millions of gallons when massive numbers of people change their habits. That kind of impact requires leaders to plan and coordinate.

"We have to figure out how to deal with it," said Lubell. "If we don't, at some point, we will have cities that could face (the) sort of crisis that Monterrey is facing."