

# This city has around 20 days of fresh water left. Officials are racing to find another source



The Gallinas River, which provides water for Las Vegas, New Mexico, is so contaminated with charred soil and vegetation that the current filtration system cannot clean it.

(CNN) — A city in New Mexico has about 20 days of fresh water left, and officials there are scrambling to find another source to prevent cancer-causing particles from flowing out of faucets.

The hillsides around Las Vegas, New Mexico, were scorched by the [state's largest wildfire](#) on record this spring, which burned more than 340,000 acres. Then, an unusually wet [monsoon season](#) brought significant summer rainfall -- something that would typically be celebrated in the [drought-stricken West](#), but instead has led to [disaster-upon-disaster](#) as rainfall washed the charred debris into the region's water system.



Now, one of the city's two reservoirs is filled with contaminated water that the current filtration system cannot handle. It's also a health risk -- when carbon reacts with high levels of chlorine used to treat water, it can

become carcinogenic.

"We need to get the carbon out of the water before we add disinfection," Las Vegas Utilities Director Maria Gilvarry told residents at a recent forum.

With time running out to secure a new clean source, city officials plan to spend this weekend testing and pre-treating the water from a nearby lake, hoping it can provide enough to keep the taps running clear.

"Our fingers are crossed on that," Las Vegas Mayor Louie Trujillo told CNN, adding the tests "will determine the quality of water we're going to be sending to one of our reservoirs."

It could take multiple days to complete the tests and pretreatment to get it right; Gilvarry told CNN the key is finding the right level of chemicals that will make the water drinkable, but not too much to create carcinogenic byproducts in the supply.



A water treatment plant employee holds up a contaminated water sample from the Gallinas River in early August.

If the quality of the new water source is good enough to run through the city's water infrastructure, that will buy it a few months of water, which officials are hoping is enough time to install another treatment system capable of processing the sediment-heavy water in their second, currently unusable reservoir. If not, city and state officials may have to implement a boil order or take other actions to ensure clean water; but it's too early to tell what those actions may be, Gilvarry said.

It's a particularly frustrating situation, given just how good this year's monsoon season was.

"After the biggest fire in the state's history, we had the best monsoon season in probably 14 years," Trujillo told CNN. "Unfortunately, we weren't able to use any of that water that was coming down our river because it was too heavily polluted for the treatment facility that we currently have."

## Giant trees, tiny particles

The West's megafires do more than burn trees and shrubs. A massive, hot fire also completely changes the composition of the soil, making it less stable, more prone to erosion and therefore more likely to wash into the water system.

In the case of Las Vegas, the huge burn scar from Calf Canyon/Hermits Peak Fire combined with hard monsoon rainfall resulted in thousands of acres of ash and debris falling into the Gallinas River watershed.

When the erosion happened, it posed dual threats to the city's water supply. One was that trees and rocks could fall into the river and damage water infrastructure. The other was that ashy sludge could contaminate the water itself.

The US Army Corps of Engineers constructed debris catchment nets that have prevented damage to water infrastructure itself, said Army Corps Capt. Robert Zebrowski, and they "fortunately haven't had a giant flow of trees."



The Calf Canyon/Hermits Peak Fire burned hundreds of thousands of acres near Las Vegas, New Mexico, earlier this summer.

But the smaller particles have been much harder to control.

The Army Corps installed wattles -- mesh nets filled with hay -- along the watershed to try to catch the ashy sludge before too much got into the water system. It has succeeded in slowing the contamination but isn't a solution to the problem, Zebrowski said.

"There's no way to stop all ash from getting in everywhere," Zebrowski added.

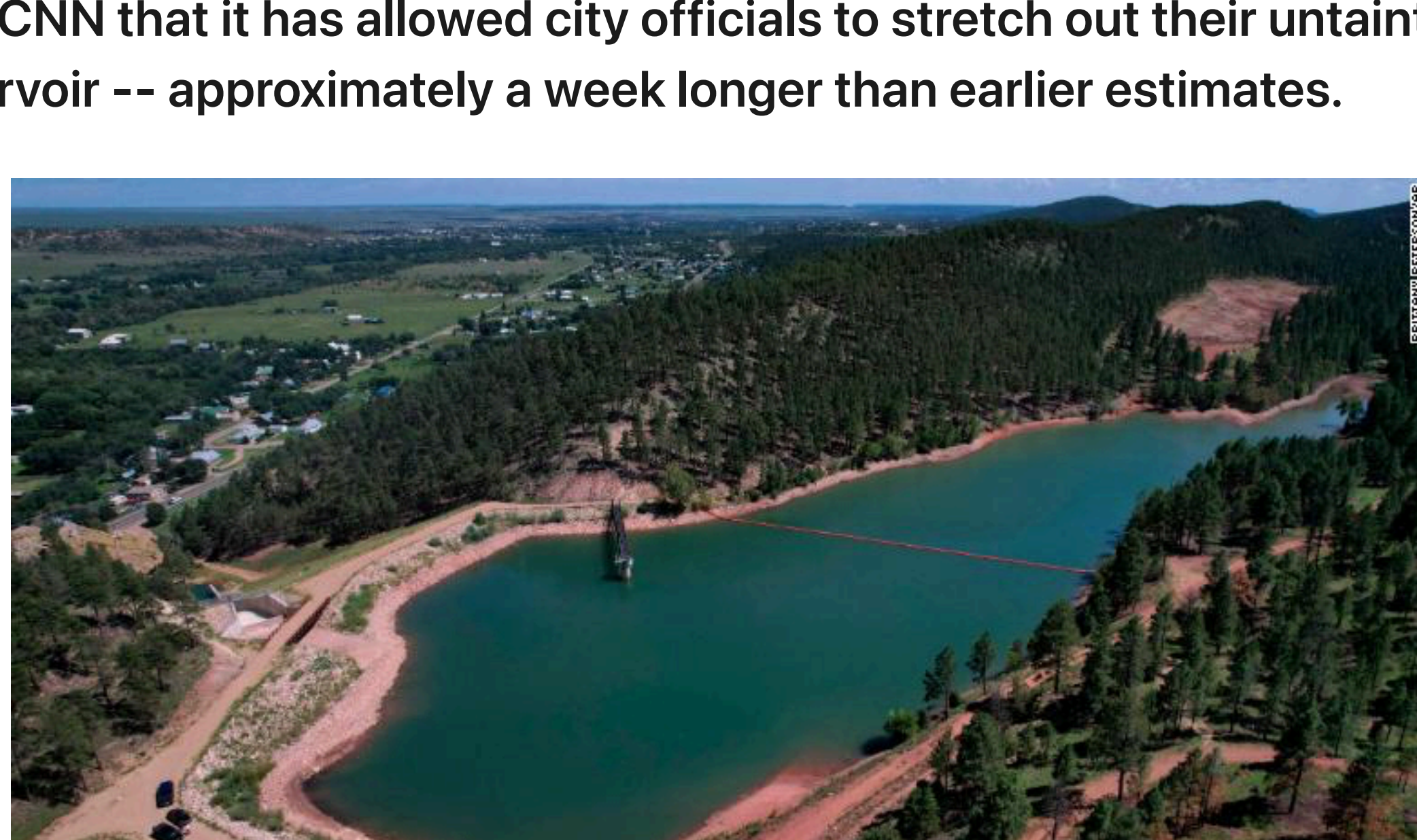
Gilvarry said that even if they can secure a clean backup source, there will be some amount of sediment in the drinking water for the next decade, simply because the fire burned such a large swath of the land surrounding Las Vegas.

## Living with less

As Las Vegas counts down the days that it still has potable water, residents have been living with less and less.

"It's pretty critical at this point, we're doing all we can," Trujillo said, adding citizens have been asked to reduce their water usage down to 44 gallons of water a day per person, conserving as much water as possible.

This collective conservation has bought Las Vegas more time. Gilvarry told CNN that it has allowed city officials to stretch out their untainted reservoir -- approximately a week longer than earlier estimates.



Bradner Reservoir, which supplies drinking water for the city of Las Vegas, New Mexico.

Las Vegas was already operating in drought restrictions before the wildfire happened earlier this year, asking residents to not fill pools, wash cars or water their lawns. But the fire and its aftermath turned the water situation into a crisis.

Trujillo said the community has been strong and stuck together in the face of an incredibly difficult year.

"The people of this area are just so strong and very cooperative," he said, but added that residents are "very concerned."

State and federal funding has helped the community get at least a temporary water treatment system, but Las Vegas needs much more funding to replace their current water treatment facility with updated infrastructure to pretreat the water. Trujillo is hoping the immediate crisis can help spur a longer-term solution.

"The silver lining for me is the most permanent solution to this is to replace our water treatment facility and improve some of our infrastructure," he said. "That's still a ways away, but it's within grasp now."