

# High Country News

For people who care  
about the West

## Blogs

- The GOAT
- The Range

The GOAT Blog

## Lake Mead watch: At lowest levels since 1937

Sarah Tory | Jul 10, 2014 11:35 AM



For almost two decades, the white band of mineral deposits circling Arizona's Lake Mead like a bathtub ring, has grown steadily taller, a sign that America's largest manmade water source is in deep trouble. This week it fell to its lowest level since 1937, when Hoover Dam was completed and the reservoir filled.



The white bathtub ring around Lake Mead shows how much water levels have fallen in recent years. Credit: Chris Richards/Flickr.

The record-setting mark of 1,082 feet is just seven feet shy of the level that would spur more strict water rationing. It's the latest indication of a worrisome trend affecting the Colorado River Basin: an unholy mix of drought exacerbated by climate change and increasing water use that's leaving 40 million people who depend on the river for their drinking water and an entire region of water dependent industries thirstier than ever.

Water in Lake Mead has been dropping steadily since 1998, the last year in which the reservoir was near capacity. Currently it's just 39 percent full, a number that the Bureau of Reclamation predicts will continue to drop.

There's a 50 percent chance that by 2017, water levels in Lake Mead will have fallen below 1,075 feet, the amount needed to trigger water use restrictions for Arizona and Nevada. Those two states will be rationed first, out of the seven that share Colorado River water.

So you'd think that the seven states that rely on the Colorado River would be working frantically to reduce the amount of water they take out of the river. Well, not quite. Despite diminishing river flows and climate change models that indicate more intense and frequent dry spells, a growing population throughout the West mean most of the cities and water districts in Colorado, Wyoming, Utah, New Mexico and Arizona are planning to use *more* Colorado River water, not less.



Map from Bureau of Land Management

Many states are trying to get the last legally allowed drop of water out of the river before others do. Under the 1922 agreement, negotiated by the seven Colorado River Basin states, Colorado, Utah, New Mexico, and Wyoming are entitled to 7.5 million acre-feet per year. Currently, however, average annual use is only 4.6 million acre-feet, which means the four upper states have legal authority to increase their Colorado River diversions by as much as 2.9 million acre-feet. And the growing population makes it increasingly likely they'll take advantage of that authority.

The trouble is, the agreed-upon allocations stem from a wetter-than-average period and forecasts made nearly a century ago.

"Everyone agrees that when the Compact was signed in 1922 they were basing the Upper Basin and lower allocations on the data they had which came from years of high water levels from good snowpack," said Rose Davis, a Bureau spokeswoman in Boulder City, Nevada. "They do acknowledge the river was over-allocated."

River flows over the last century averaged 15 million acre-feet annually. But a 2012 Bureau of Reclamation study found that by 2060 flows will drop to 13.7 million acre-feet, leading to a potential 3.2 million acre-feet gap in supply and demand (one acre-foot equals the amount of water needed to cover an acre of land with one foot of water).

Nevertheless, Davis cautioned that despite the dire predictions for water levels, the projections are highly variable. "We could get a lot of snow in the next 2 years which could change things for the better," she said.

But cities like Las Vegas — which draws 90 percent of its drinking water from Lake Mead — aren't taking any chances. With one of the city's two intake pipes at risk of being exposed, the Southern Nevada Water Authority is spending at least \$829 million to dig a 20-foot-tall, 3-mile-long tunnel to go deeper into the reservoir.

And there's the recently launched Colorado River System Conservation Program, a collaborative effort among the four largest water districts that rely on the Colorado River. It will pay farmers, industries, and municipalities to reduce their water consumption.

On July 8, Nevada State Senator Tick Segerbloom introduced a bill calling for an independent audit of the Bureau of Reclamation's strategies for managing the Colorado River and criticized the Bureau for not addressing threats to the river's water levels that scientists have been warning about for years.

As the circle of white around the walls of Lake Mead grows deeper and the river that feeds the reservoir shrinks, no one can afford to ignore the underlying problem: we are draining more water out of the system than the river is putting in.

*For more HCN coverage of the Colorado River, start with "How Low Will It Go" and "New Hope for the Delta" by Matt Jenkins. Sarah Tory is an editorial intern at High Country News. She tweets @tory\_sarah.*



Still probably about a 50 percent chance of dead pool by 2025, I venture. The heck with the 50 percent chance of tighter water use by 2017. Oh, and I can't recommend enough James Powell's book of that name, "Dead Pool."



Also, per Jonathan Thompson's new piece, it's going to take more money in electric pumping costs to use that new straw.



Perhaps the dramatic increase in the number of people using the water, the significant increase in house size, and the increase in private swimming pools might have more to do with the decreased supply than the weather that has not heated for 17 years...just a computer glitch, and interesting the hottest temps were in 1935 before they finished the dam.

[Log in to add comments](#)