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Arizona Cities Could Face Cutbacks in Water From Colorado River, Officials Say

By MICHAEL WINES JUNE 17, 2014

Arizona could be forced to cut water deliveries to its two largest cities unless states that tap the dwindling Colorado River find ways to reduce water consumption and deal with a crippling drought, officials of the state's canal network said Tuesday.

The warning comes as the federal Bureau of Reclamation forecasts that Lake Mead, a Colorado River reservoir that is the network's sole water source, will fall next month to a level not seen since the lake was first filled in 1938.

Officials of the Central Arizona Project, which manages the 336-mile water system, say the two cities, Phoenix and Tucson, could replace the lost water, at least in the short term, by tapping groundwater supplies, lakes and rivers.

If they do not reduce consumption, the cuts could be necessary by as early as 2019, according to an analysis by the water project, and officials said that depending on drought conditions, the chances of water cutbacks by 2026 could be as high as 29 percent.

Although experts have been aware for years that shortages would eventually occur, the analysis represents a marked turnabout in officials' thinking.

"We're dealing with a very serious issue, and people need to pay attention to it," Sharon Megdal, a University of Arizona water expert and board member of the Central Arizona Project, said in an interview. "The possibility of cutbacks of water deliveries to municipalities is higher than we've ever thought it was going to be."

The mere prospect of a shortage in Arizona cities, now raised publicly for the first time, is but a proxy for the rising concern among many experts over a longer-term water crisis across the entire Southwest. States along the lower Colorado River use much more water than flows into the lake in an average year, a

deficit that upstream states shouldered for decades by opening their reservoir sluices to release more water.

But the drought has all but ended that practice, and Lake Mead has begun a sharp decline; the principal upstream reservoir, Lake Powell, now holds only 42 percent of its capacity, and Lake Mead about 45 percent.

If upstream states continue to be unable to make up the shortage, Lake Mead, whose surface is now about 1,085 feet above sea level, will drop to 1,000 feet by 2020. Under present conditions, that would cut off most of Las Vegas's water supply and much of Arizona's. Phoenix gets about half its water from Lake Mead, and Tucson nearly all of its.

As a practical matter, neither the states nor the federal government can allow major cities to run dry. But because the lakes' water levels drop faster the lower they get — the canyons holding their water are V-shaped — Arizona officials say governments must act soon to stave off that worst-case scenario.

Under an accord negotiated in 2007, the lower Colorado states have already laid out cuts in water deliveries for every 25-foot drop in Mead's level, down to 1,025 feet above sea level. For example, Arizona farmers are expected to lose some of their allotment when the lake falls below 1,075 feet.

But lake levels lower than 1,025 feet are uncharted territory. "We have a plan to deal with less severe shortages, but we need to start coming up with a plan to avoid deeper shortages, or to figure out how to deal with the impacts that will come," said Tom Buschatzke, an assistant director of the Arizona Department of Water Resources.

Tom McCann, the Central Arizona Project's assistant general manager for operations, said the states needed to reduce Lake Mead drawdowns by at least 800,000 or 900,000 acre-feet of the 10.2 million taken each year.

An end to the drought, followed by a few years of heavy rains, could rescue the states. But many now say that climate change would make that a temporary respite. Most scientists believe global warming will make an already arid region even drier in this century.

"We can't expect to live on releases from the upper basin anymore," Mr. McCann said. "The states need to come together and make hard choices so we can stem the decline of Lake Mead."

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