

## COLORADO RIVER BASIN

# Shortage may be declared

## 40M people affected by low water levels

By Bruce Finley  
The Denver Post



The Colorado River rushes through the Grand Canyon in April. A Bureau of Reclamation forecast issued Wednesday for water in the Colorado River anticipates a shortage in 2019 that would trigger reduced water releases from federal reservoirs in states including Nevada and Arizona. Eric Baradat, Getty Images

The Colorado River is so strained amid population growth and a climate shift to hotter, drier conditions that federal water managers may declare an unprecedented “shortage” and cut releases from reservoirs.

The feds are imploring Western states to do more now to cut water use.

A U.S. Bureau of Reclamation forecast issued Wednesday for water in the Colorado River — an over-

subscribed lifeline for 40 million people — anticipates declaration of a shortage in September 2019 that would trigger the reduced water releases from federal reservoirs in “lower basin” states including Nevada and Arizona.

Colorado and other “upper basin” states Utah, Wyoming and New Mexico would face increased scrutiny of flows from headwaters into the Lake Powell reservoir. On Wednesday, Lake Powell measured 49 percent full and Lake Mead measured 38 percent full.

“Water stored in Lake Mead and Lake Powell has blunted the impacts of the ongoing drought and helped ensure consistent, reliable water and power,” said Brent Rhees, the bureau’s regional director for the upper basin. “We must continue



to work to protect water in the basin. Completing drought contingency plans this year will provide better certainty. ... We can't afford to wait for a crisis."

Colorado Water Conservation Board director Rebecca Mitchell said "there's no doubt" managing the river presents challenges.

"Realistic predictions on the Colorado River are for increasing demand and decreasing supply," Mitchell said.

Declaration of a water shortage along the Colorado River would be unprecedented. Federal officials are committed to waiting until the water level in Lake Mead drops below the elevation of 1,075 feet above sea level. Then they'd cut deliveries, first targeting Arizona, Nevada and Mexico.

The water level on Wednesday: 1,078 feet.

"We're within three feet. We're not going to declare a shortage in 2019," agency spokesman Marlon Duke said. "There's a 52 percent chance we will have to declare a shortage in 2020. ... We cannot just sit back and think the river is going to provide all the water we need, especially as our cities continue to grow. It all depends on what Mother Nature sends us next year."

Beyond the booming Western cities that rely on Colorado River water including Denver, Phoenix, and Las Vegas, strains on the river have food supply implications affecting salad bars as far away as New York and Washington, D.C. Colorado River water irrigates 15 percent of the nation's vegetables, nuts and fruits.

For nearly a century, Western states have shared the river water under a treaty that divvies up portions and specifies the amounts states must leave in the river to maintain healthy major reservoirs. The problem is that population growth and agriculture has been withdrawing more water each year than the river supplies. And climate conditions, far drier than the relatively wet period that was the basis for the treaty, hasten the draw-down of reservoirs meant to serve as savings accounts.

"We see this train coming, and we're trying to get ready for it," said James Eklund, Upper Colorado River Basin commissioner for Colorado, who negotiates river matters with commissioners from the other states, including California.

"Right now we're OK. If they declare a shortage in the lower basin, it is going to pull more water out of Lake Powell. That would mean we are going to have to put more water into it," Eklund said.

"The 'shortage' is like a yellow traffic signal that says: Hey, watch out. You've gotta be mindful of demands exceeding supply to such a degree that our system doesn't work."

U.S. Bureau of Reclamation Commissioner Brenda Burman has warned states they must act. Burman demanded "drought contingency plans" by the end of the year. The publication of the Colorado River forecast covering the next two years is expected to spur planning, if not immediate smarter use of water.

Federal government scientists have concluded that climate change is creating conditions in the Colorado River Basin that are more variable with more extreme precipitation and more extreme drought. Scientists say precipitation increasingly will come from rain, rather than snow, as temperatures increase. The reservoirs constructed along the river have become increasingly important in easing the impact during a dry period that began 18 years ago and ranks among the driest periods in 1,200 years.

The forecast says river flows into Lake Powell from Colorado and other upper basin states, from snowpack, probably won't exceed 75 percent of average next year. It says 8.23 million acre-feet of water will flow from Lake Powell to Lake Mead in 2019. That's more than the amount expected to flow into Lake Powell.

Colorado, Wyoming and Utah depend heavily on mountain snowpack and have been delivering water to Lake Powell as required under the Colorado River Compact. The efforts in these states to develop a plan for conservation should a shortage be declared reflects a common interest of states in managing the river cooperatively — avoiding a federal intervention to control flows into and out of reservoirs.

That plan will be done by the end of the year, Eklund said.

“We in the upper basin face water shortages every year because the nation's two largest reservoirs sit below, not above, us. We have to work with whatever falls from the heavens. Anytime we have to administer water under our priority system, someone in the upper basin is taking a shortage. That happens every year,” he said.

“We have ways to use less water. We fallow fields. We take water out of pipelines. We conserve. But we have less snow to work with than in the past and more people than ever reliant on the Colorado River system,” Eklund said.

“In a system that supports 40 million people in seven states, tribes, and Mexico, a unique environment, and several billion dollars of economic output, this challenge requires contingency planning in both the lower basin and the upper basin,” he said.

“These contingency plans will have to be implemented.”

Water advocacy groups embraced the forecast as evidence that the West's water challenges are reaching a critical point.

People in the seven Southwestern states “must learn to live with less water,” said Kim Mitchell of the Boulder-based Western Resource Advocates. “Unless we take decisive, proactive steps now, major water users, farmers, cities, businesses, and the environment all will lose water. ... Leaders at all levels throughout the basin must understand that more water is being pulled out of the Colorado River than is being replaced, and the problem is compounded by a long-term drought and climate change.”