Water forecast is bleak for major reservoir in Southwest US

February 7 2018, by Dan Elliott

One of the most important reservoirs in the southwestern U.S. will likely collect less than half its normal amount of spring runoff this year because of a warm, dry winter across much of the region, forecasters said Wednesday.

Lake Powell, which straddles Utah and Arizona, is expected to get 47 percent of its average inflow because of scant snow in the mountains that feed the Colorado River, said Greg Smith, a hydrologist with the Colorado Basin River Forecast Center, part of the National Oceanic and Atmospheric Administration.

Smith said there is only a 10 percent chance that enough mountain snow will fall during the rest of the winter and spring to bring inflows back to average. It was the seventh-worst forecast for Lake Powell in 54 years.

"Things are looking pretty grim" along some of the tributaries that feed the Colorado River, Smith said during an online conference on the spring outlook for Lake Powell.

Powell, along with Lake Mead on the Nevada-Arizona border, helps ensure the Colorado River system has enough water to get through dry years. The river supplies water to about 40 million people and 6,300 square miles (16,000 square kilometers) of farmland in seven states: Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming.

The river also serves cities and farms in northwest Mexico.

Lackluster runoff into Lake Powell this spring is not likely to have an immediate impact on water users because most reservoirs upriver from Powell filled up after last winter's healthy snowfall, said Marlon Duke, a spokesman for the U.S. Bureau of Reclamation, which manages Powell, Mead and other reservoirs.

But consecutive dry winters could mean some water users won't get their normal allotment in future years.

This winter's snowfall in the mountains that feed the Colorado has been far short of average overall but varies widely. Along the Green River, a Colorado River tributary in Wyoming, the snowpack is 110 percent of average. Along the San Juan River in southwestern Colorado and northwestern New Mexico, it's 32 percent of average.

One reason is a strong winter weather pattern steering big storms away from the Southwestern United States and sending them north, said Russ Schumacher, Colorado's state climatologist and an associate professor of atmospheric science at Colorado State University.

Another reason is exceptionally warm temperatures across much of the Southwest, he said.

About 90 percent of the Colorado River's water comes from snowmelt in the region known as the Upper Colorado River Basin, a large swath of Colorado, Utah and Wyoming and smaller sections of Arizona and New Mexico.

The river system has been stretched thin for years because of a prolonged drought interrupted by occasional snowy years. Lake Mead, the largest reservoir in the country, has dropped to 41 percent of

capacity. Lake Powell, the second-largest, is at 56 percent.

Some climate scientists say global warming is already shrinking the river. A study published last year by researchers from the University of Arizona and Colorado State University said climate change could cut the Colorado's flow by one-third by the end of the century.