

Rains notwithstanding, state drought isn't over

Storms help, but spring snowpack will hold key

Matt Weiser, Sacramento Bee, 1-29-10

The question now gurgles up from every storm drain and creek in California: Is the drought over?

The simple answer is no. The reasons why are not so simple.

Two weeks of heavy rain and snow – nice as it is – cannot entirely erase three years of drought statewide.

For starters, California's largest reservoirs are far from full. This includes Shasta, Oroville and Folsom, all vital storage points for state and federal water supply canals.

These reservoirs likely won't fill completely with the snowpack on the ground now, especially if there is no more of it by April Fools' Day.

"Until we get the reservoirs back to normal and see a normal to slightly above normal spring snowmelt coming, it would be perilous to suggest the drought is over," said Rob Hartman, hydrologist in charge at the California Nevada River Forecast Center, an arm of the National Weather Service in Sacramento. "There's a lot of winter yet to go and anything could happen."

Beyond that, and despite the state's economic woes, California keeps growing. That means ever-greater water demand, which each year pushes total salvation from drought further away.

Nature gives California a finite water supply, whether it's snow in the mountains or groundwater deep beneath our feet. It is now widely recognized that all of our water supplies are overtapped.

The governor's Delta Blue Ribbon Task Force, for instance, revealed in 2008 that state officials have granted water rights equal to eight times the average annual flow in the Sacramento-San Joaquin Delta watershed, which catches half of California's precipitation. Even more water-rights applications are pending.

Climate change throws another wrench in the works. Global warming is expected to bring more rain and less snow. This will mean less water melting from the mountains to slake California's thirst through summer and fall.

Environmental protections are another limitation. To save salmon and protect water quality in the Delta, federal officials have ruled that we must divert less water.

For all these reasons, the state Department of Water Resources estimated in a draft report this week that it will be able to send State Water Project customers only 60 percent of contracted water amounts in average water years. Drought years would produce even less.

The water project serves a portion of the water demand for about 25 million Californians from Napa to San Diego.

"We have to operate under the premise that there's less water to deal with than we've had in the past," said Mark Svoboda, climatologist at the National Drought Mitigation Center in Nebraska. "It's all of our responsibility to really manage water like we are in a drought every year."

The state snowpack on Thursday stood at 117 percent of average for the date, thanks to those big storms over the past two weeks. That's good news.

But it's not enough good news.

What really matters is snowpack on April 1, considered the end of winter.

Maury Roos, DWR hydrologist, said a snowpack that's still at 117 percent on April 1 could mean the end of drought conditions.

But we don't know what the next two months will bring. Long-range forecasts still suggest increased odds for above-normal precipitation through April due to El Niño conditions in the Pacific Ocean.

But the next 10 days look relatively dry. And El Niño can be fickle.

"We're being cautious because we've seen them fizzle in the past," said Roos.

Without more storms the snowpack will continue to shrink. Water will be lost to evaporation and groundwater percolation. Reservoir operators also are required to release water to maintain flood-storage space through June.

Even if this winter's snows continue piling up to above-average depths, it could be just a wet pulse in a much longer string of drought years.

With these factors in mind, there is no formula in a dog-eared state policy manual for declaring an end to the drought. Instead, it's a "judgment call," said Wendy Martin, DWR drought coordinator.

"Regardless of what this year is or what this month is, the message is that we have to change how we use water," Martin said. "People need to prepare for a drier reality."