

Big Sierra snowpack won't slake California's thirst

Accumulation isn't enough to make up for the last three dry years.

Mark Grossi, Fresno Bee, 3-31-10

The Sierra snowpack is hefty. Waterfalls are starting to thunder in Yosemite Valley. A spring storm adds to the bounty.

It's time to celebrate the end of the state's three-year drought. Right? Wrong.

The El Niño-powered winter apparently was not a drought buster -- even though some reservoirs may fill up and rainfall totals are above average in two-thirds of California's major cities, including Fresno.

Here's the reality check: State officials expect only about 80% of average snowmelt will find its way into rivers and reservoirs this spring.

The dry Sierra landscape will absorb the rest.

"We needed a snowpack about 120% of average to make up for the last three years," said Maury Roos, a hydrologist for the state Department of Water Resources. "We're somewhere around 100%."

State officials will announce snowpack numbers Thursday, which is considered the end of the snow season.

April and May storms might add a little more to the snowpack, but the biggest snowfall months have passed.

Since more than half of the state's water comes from the snowpack, cities, industries and agriculture are poised to hear the announcement Thursday.

The global weather force El Niño -- a warming of the Pacific Ocean at the equator -- influenced many storms to hit California this year. It was the best snow season since 2006, though some parts of the Sierra had a bigger year than others.

Officials are expected to announce that the snowpack in the Sierra north of Lake Tahoe is more than 120% of average.

The southern Sierra from the San Joaquin River south to Kern County is slightly above average.

But in the central Sierra -- from Tahoe to Yosemite -- the snowpack is less than 90%.

The hit-and-miss nature of the winter left Oroville Reservoir, the biggest reservoir for the State Water Project, at only 60% of average for this date. In contrast, massive Shasta Reservoir on the federal Central Valley Project is 103% of average.

Conservation will remain a high priority this summer, state officials said, but cities may not need to enforce severe water restrictions.

It's a different story in west Fresno County. Westlands Water District farmers probably will idle about 250,000 acres, about the same as last year in the 600,000-acre district.

The west-siders are suffering cutbacks because of the subpar runoff and Northern California water pumping cutbacks to protect threatened fish.

"Agriculture will have another year of record acres unfarmed," said Westlands spokeswoman Sarah Woolf.

From a meteorologist's point of view, the drought ends when there is average rain and snow during a winter, said Steve Mendenhall, meteorologist in charge at the National Weather Service's Hanford office.

Fresno, for instance, had 9.83 inches through Tuesday morning, which is 101% of average for this time of year.

But Mendenhall added that reservoirs often do not recover with just one average year.

Climatologists agreed, saying other factors are at work. For instance, the state had an average snowpack on April 1, 2008. But California had its driest spring on record, melting away a lot of the snow and reducing the late-spring runoff to only 60% of average.

The pattern of dry years may not have been broken, said state climatologist Mike Anderson. He said the state has had one-year reprieves in the middle of six-year droughts during the last century.

"An average year, like this one, is better than a dry year," he said. "But California's water system is too complex to understand just by looking at one year or just the snowpack."