California sees record dry start in '13

Below-normal snowpack heightens water worries

Peter Fimrite, San Francisco Chronicle, 3-1-13

There are certain benefits to having two full months of beach and barbecue weather in the middle of the winter.

Drinking water is not one of them.

Snow surveyors with the California Department of Water Resources tromped out under brilliant blue skies and alarmingly warm weather Thursday to measure what is left of the Sierra snowpack near Echo Summit. Let's just say it was a good day for a stroll.

Only 29 inches of snow was measured in the meadow behind Phillips Station, a historic, privately owned cabin near Echo Summit. That's compared with 4 feet two months ago.

But that's only part of the bad water dream in California, which just had the driest January-February on record.

The Central Sierra, which includes the Lake Tahoe area, was only 67 percent of normal, based on the average of 40 electronic monitoring stations. That's compared with 90 percent of normal last month and 134 percent of normal on Jan. 2, when the first snow survey of the year was conducted.

The entire Sierra, from south to north, had an average of only 16 inches of water in the snow, based on measurements from more than 300 sites. That's 66 percent of normal and 57 percent of the average snowpack on April 1, which is typically the peak time for water officials because all the water that melts after that date is captured in reservoirs.

'Frozen reservoir'

The snowpack, dubbed California's "frozen reservoir" by water officials, normally provides about a third of the water for California's farms and communities. But only 2.2 inches of rain has fallen since December in the mountainous regions from Shasta Lake to the American River, just 13 percent of average. The next driest first two months of the year occurred in 1991, when 4 inches of precipitation fell, water department officials said.

There would have to be several big, icy storms over the next month to get the state close to normal precipitation this year, but no precipitation is currently forecast.

Mark Cowin, the state's water resources director, said the situation is more difficult as a result of restrictions on the amount of water that can be taken out of the Sacramento-San Joaquin River Delta in order to protect the delta smelt and other endangered fish. He touted as a possible solution the highly controversial proposal to build a pair of tunnels underneath the delta.

"Near-record dry weather combined with pumping restrictions to protect delta smelt are making this a gloomy water supply year," Cowin said. "This scenario is exactly why we need an alternative water conveyance system as proposed in the Bay Delta Conservation Plan to both protect fish species and give California a reliable water supply."

Projecting availability

The monthly snow surveys, which traditionally begin right around New Year's Day, are important because they are used to project the amount of the water that will be available in the summer to help irrigate millions of acres of farmland and quench the thirst of California's 37.8 million people.

The water content of the snow has proved over time to be a reliable measure of how much drinking water will be available in California after the snow melts and is stored in the department's reservoirs.

The water content of the snow at Phillips Station, which at 6,800 feet elevation is considered a good median measurement, was only 54 percent of normal, an enormous drop since January, when it was 94 percent of normal.

DWR currently estimates that it will be able to deliver 40 percent of the slightly more than 4 million acre-feet of water requested for this calendar year by the 29 public agencies that supply more than 25 million people and nearly a million acres of irrigated farmland.