## URGENT

April 4, 2023

## FOR IMMEDIATE RELEASE

For More Information, Please Contact:
STEVE HAUGEN, Kings River Watermaster, (559) 266-0767
Copy by: RANDY McFARLAND, KRWA Public Information Consultant, (559) 260-2775


snow surveyors fighting their way through massive peak-of-season snow accumulations across the Kings River watershed have confirmed that winter's repeated huge storms have created snow depth and water content readings never before seen. The Kings River Water Association reported today that KRWA and Pacific Gas and Electric snow survey teams measuring 22 remote high-country courses found record-setting snow depths at 21 locations and highest-ever water content readings on 16 of the courses.
Their April 1 surveys, all made within a few days of the date upon which winter snow conditions are presumed to have reached their peak, found watershed snow depths averaging 183.3 inches, compared with a historical average of 68 inches. Water content (or snow water equivalent as it is known by surveyors) averaged 73.7 inches among the 22 courses measured, and $263.3 \%$ of average overall. A year ago on April 1, the watershed snowpack averaged 29 inches in depth.
Those 2023 Kings River amounts are all far higher than the 126 inches of snow measured by state surveyors near Echo Summit, with a water content of 54 inches ( $221 \%$ of average). "The Department of Water Resources makes a big deal of those measurements which tend to be inaccurately reported as being representative of the entire state's snow conditions," said Kings River Watermaster Steve Haugen. "You have to use the local data which our Kings River reports far more accurately in representing the huge snow accumulation present over the southern Sierra ranges."

Haugen termed the record Kings River figures "remarkable" but said they were not unexpected given the onslaught of major snow-producing storm events that a dozen atmospheric river episodes produced over the southern Sierra Nevada.

He added that snow survey figures, coupled with Airborne Snowpack Observatory measurement data, means "all of this will go together over the next several days to paint a more accurate picture on the amount of spring and summer runoff we may ultimately have."

Haugen said the River Forecast Center is predicting another four days this week of declining Kings River runoff that is mostly from lower elevations. "Runoff is then forecast to pick up as clear and warmer weather reaches into the high country," Haugen said. The KRWA, U.S. Army Corps of Engineers and emergency services officials in Fresno, Kings and Tulare counties have been warning of the prospect for high Kings River water flows below Pine Flat Dam in the coming months as the reservoir fills with snowmelt runoff.

Current California Department of Water Resources forecasting predicts the Kings River most probably will have some 3.1 million acre-feet of runoff during the peak April-through-July period, but that it could be as great as 3.6 million acre-feet. All of that water must pass through Pine Flat Reservoir, in the foothills northeast of Sanger in Fresno County. That flood control and irrigation water storage facility has one million acre-feet of capacity and about 300,000 acre-feet of currently available storage. The latter has been created by the Corps with increasing larger flood releases in anticipation of the coming runoff. In addition, PG\&E's upstream reservoirs add another 185,000 acrefeet vacant space.

Assistant Kings River Watermaster Matt Meadows reported the watershed's greatest snow depth233 inches-was measured at Rattlesnake Creek, at an elevation of 9,900 feet above the river's North Fork. Water content there was also the most measured anywhere in the Kings watershed, 92.5 inches, $270 \%$ of average. By comparison, on April 1, 2022, surveyors visiting Rattlesnake Creek measured only 10.5 inches of snow with a water equivalent of 10.5 inches.

Meadows said the deep snow presented challenges to surveyors. "We've had to use really big snowshoes, like the kind you would pull out of antique stores," Meadows said. "KRWA has two pair, one five feet long and the other four feet. We only sink down about three inches." That is considerably less than for those utilizing modern, smaller snowshoes.

Transported between courses to be measured by helicopter, Meadows said the KRWA team "saw avalanches all over." No courses measured by KRWA have had such problems but Meadows said surveyors in the eastern Sierra have been at high risk from avalanches this winter."

