

Wednesday, February 26, 2020

Dear CSS Members,

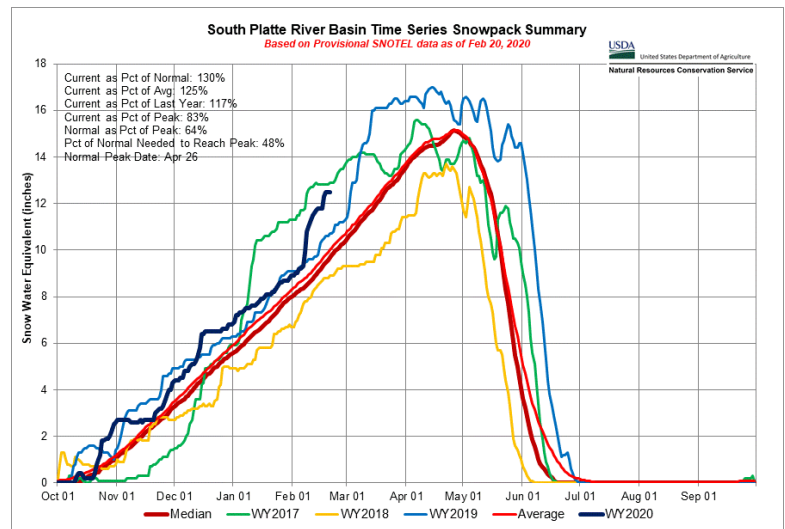


As winter wanes and spring looms, it gives one pause to think about Colorado's current snowpack and how it tracks with recent years past. An excellent source of information comes from the USDA's website for Natural Resources Conservation Service, which provides snow-survey products based on telemetered (SNOTEL) data from 95 stations located throughout the State. Their Snow Survey and Water Supply Forecasting Program provides mountain snowpack information and translates those data into streamflow forecasts for the western US and Alaska. A Snow Water Equivalent (SWE) map of the state shows that 5 basins in northern and eastern Colorado are tracking above the median values (114-130%) whereas 3 basins in the southwest are lagging a bit below (94-96%). [[SNOTEL SWE map](#)]

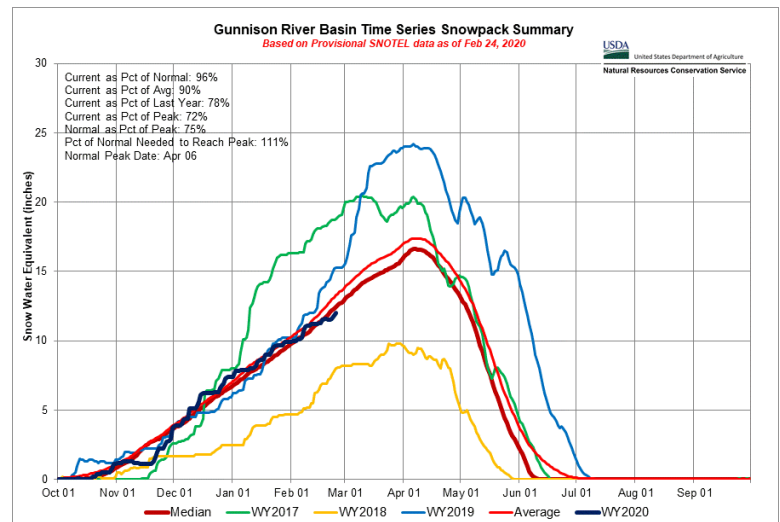
Time series plots of snowpack show a more detailed story. The frequent storms we experienced this February allowed us to get reacquainted with our shoveling techniques, resulting in the bump up to approximately 130% of normal for the South Platte basin by late February. This is certainly good news for summer water supplies in an increasingly thirsty Front Range. However, the full snow-water equivalent story won't be written until we see what kind of storms head our way over March and April.

In contrast, this year's snowpack in the Gunnison River basin has followed the normal curve more closely throughout December, January, and February resulting in values just under average (96%). What is so remarkable about the Gunnison Basin record plotted here is the epic amount of late winter and spring snow accumulation that occurred in 2019, both in this basin and farther southwest in the Dolores, San Miguel, Animas and San Juan River basins. March storms dumped huge amounts of heavy snow that rapidly piled up and made for some extremely dangerous avalanche conditions.

Our March speaker, **Jonathan Lovekin** from the Colorado Geological Survey, will describe those conditions and the geotechnical threats that avalanches posed to Lake City, CO, and upstream catchments in Hinsdale County. Jon was brought in to assess geologic hazards from avalanches in



[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/co/snow/products/?cid=nrcs144p2\\_063323](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/co/snow/products/?cid=nrcs144p2_063323)



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response to 3 emergency declarations concerning public safety. Jon will tell us about what he learned from those studies including his observations of one snow avalanche that was comingled with a massive rock avalanche. Please join us for Jon's talk on the 19th and hope we don't get snowed out!