



SHERIDAN COUNTY SNOWPACK REPORT

February 1, 2024

The 2024 season of the Sheridan County Snowpack Report begins with snow-water content well below median in the Bighorn Mountains and across Wyoming, and roughly half what it was one year ago. Observations on Thursday, February 1st, reflect snowpack water content varying widely on the eastern Bighorns in comparison to 30-year medians, ranging from 18% to 82% of median. In the Tongue River drainage, composite snow-water data, which is Snotel remote-site data combined with manually collected snow-course data, indicate a basin average at just 56% of median. Composite snow-course and Snotel data in the Clear Creek drainage is very similar, with average basin-wide snow-water at 54% of median. Snotel site data from the entire Powder River basin, including Clear Creek, averaged lower yet at 51% of median, suggesting less snowpack water in the southern portion of the basin.

Both the Tongue River and Clear Creek watershed snowpack snow-water are significantly lower this year compared to last. Tongue River is 54% of one year ago, while Clear Creek is just 48% of 2023 data for February 1.

Interestingly, Total Water-Year-to-Date Precipitation at Snotel sites indicate both the Powder and Tongue River basins much closer to median than the snowpack water content suggests, at 86% and 99% respectively. This indicates, while it has not hung around as snowpack, both basins have received near ‘normal’ precipitation so far this water year (began October 1st).

With one exception, February 1st Snotel data shows all Wyoming river basins below median. The Bear River basin, on the Wyoming-Utah border and emptying into the Great Salt Lake, leads the State as the only basin above median, at 103% of 30-year median. The South Platte River basin, on the Wyoming-Colorado border, has the State’s lowest percent of median snow-water at just 24% of median.

Manual snow course data in this report were collected January 29th to January 31st. Snotel data is as reported, end-of-day, on January 31st. As reminder, Snotel data collectors are permanent, remote sites collecting and transmitting real-time snow-water content and precipitation data via satellite link across the West. Daily data from these sites, as well as other water supply-related reports and products can be accessed through the *Wyoming Snow Survey and Water Supply* link on the Wyoming NRCS Homepage at <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/wyoming>.

Site	Site Elevation	Observed Snow Depth (Inches)	Observed Snow Water Content (Inches)	30 year Median Water Content (Inches)	2024 Observed as % of Median	2024 Observed as % of Last Year
Tongue River Drainage						
North Tongue Snow Course	8450'	22	4.8	7.2	67%	62%
Sawmill Divide Snow Course	9260'	24	6.1	8.0	76%	87%
Woodrock Snow Course	8440'	11	2.7	5.4	50%	45%
Bald Mountain Snotel	9380'	30	7.5	11	68%	64%
Big Goose Snotel	7990'	10	2.7	4.8	56%	43%
Bone Springs Snotel	9350'	30	6.8	10.2	67%	86%
Burgess Junction Snotel	7880'	17	4.0	6.6	61%	49%
Dome Lake Snotel	8880'	18	2.0	6.7	30%	36%
Sucker Creek Snotel	8880'	24	5.2	7.6	68%	60%
Tie Creek Snotel	6870'	2	0.6	3.4	18%	10%
Average:					56%	54%
Clear Creek Drainage						
Soldier Park Snow Course	8720'	4	1.0	2.8	36%	31%
Sourdough Snow Course	8460'	12	2.8	3.4	82%	58%
Cloud Peak Snotel	9860'	30	6.8	8.8	77%	77%
Hansen Sawmill Snotel	8360'	9	1.4	4.2	33%	29%
Powder River Pass Snotel	9480'	13	3.0	7	43%	45%
Average:					54%	48%