

Wyoming — Climate Overview

Highlights for the State

Temperatures for December and the first part of January have been much cooler than normal.

Precipitation for December was above normal for much of the state although some stations (Laramie Airport for one) in the far southern parts were as low as 50% of the normal.

Drought conditions improved in the northwest with D0 being removed from Teton and Park counties. Parts of the northeast saw improvement while other parts there were degraded somewhat.

The snowpack has dramatically increased in December and January and, statewide, is at the highest level for this date in any year since 1997.

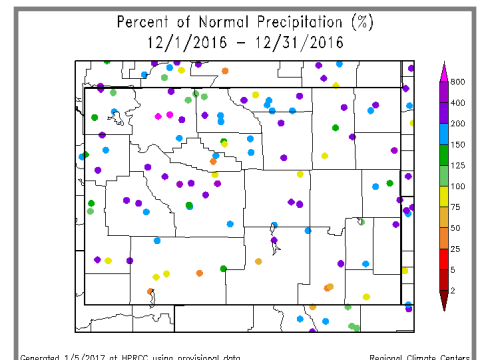
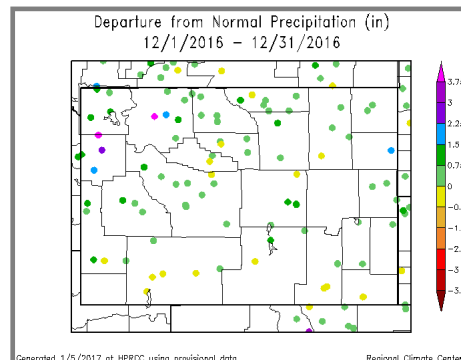
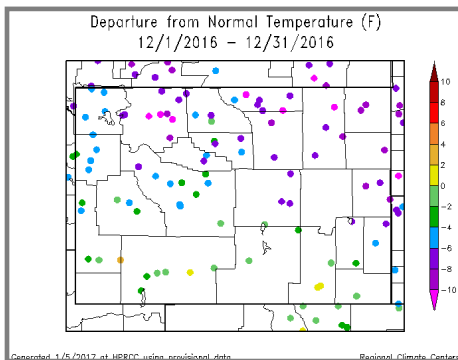
Temperature and Precipitation

December was a cool month for Wyoming, with locations in the northern two-thirds of the state being 2°F to more than 10°F below normal. December 2016 ranked as the 17th coldest December since 1894. The greatest cold anomalies were in Park, Sheridan, and Campbell counties while a few southern stations in Lincoln, Sweetwater, and Albany counties had warm anomalies up to 4°F above normal. Statewide, 2016 was the 4th warmest year since 1894.

January temperatures, so far, have been well-below normal with stations in the southern half of the state being 4°F to 12°F below normal. The extreme far western part of the state has been about 10°F below normal. Generally, the rest of Wyoming generally has been 12°F to 20°F below normal. The airport at Laramie recorded a -40°F temperature on the morning of the 6th of January. This was a record low for that date and the fifth lowest temperature ever recorded at that location.

For statewide precipitation, it was the 6th wettest December since 1894. The southern quarter of Wyoming was a bit drier than the rest of the state. Climate Division 9 (Wind River Basin) had the 2nd-wettest December on record. Statewide, 2016 was the 31st wettest year since 1894.

January's precipitation (through the 11th) has been mixed but generally there are more stations with below-normal precipitation amounts in the far northern parts of Wyoming. The southern part of the state has had above-normal precipitation so far this month thanks to heavy snowfall from January 2-5.



Wyoming — Current Drought Conditions

U.S. Drought Monitor Wyoming

January 10, 2017
(Released Thursday, Jan. 12, 2017)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.38	24.62	9.34	0.72	0.00	0.00
Last Week 1/3/2017	60.98	39.02	15.58	0.72	0.00	0.00
3 Months Ago 10/12/2016	61.01	38.99	12.66	1.73	0.00	0.00
Start of Calendar Year 1/2/2017	60.98	39.02	15.58	0.72	0.00	0.00
Start of Water Year 9/27/2016	41.39	58.61	24.40	9.97	0.00	0.00
One Year Ago 1/12/2016	31.34	68.66	11.43	0.00	0.00	0.00

Intensity

D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought
D2 Severe Drought	

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
David Miskus
NOAA/NWS/NCEP/CPC

<http://droughtmonitor.unl.edu/>

Drought conditions have improved some in parts of Wyoming while conditions have degraded in others since the last report. Abnormally Dry (D0) conditions were removed from Park and Teton counties. Moderate Drought (D1) was expanded in the northeast in Campbell county and the extreme north and northeastern parts of Niobrara and Converse counties respectively.

Severe Drought (D2) was removed from Campbell and Crook counties as well as from the northwestern part of Weston County. At the same time, D2 was introduced to the southeastern part of Weston County and to the northeastern part of Niobrara County.

In the southeast, D0 was removed from Carbon and Sweetwater counties while D1 was replaced with D0 in parts of Carbon and Albany counties. Drought conditions remain unchanged in the southwestern parts of the state.

The U.S. Drought Monitor, a weekly map of drought conditions produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln. The U.S. Drought Monitor website is hosted and maintained by the NDMC. <http://droughtmonitor.unl.edu>

Wyoming — Drought Indicators

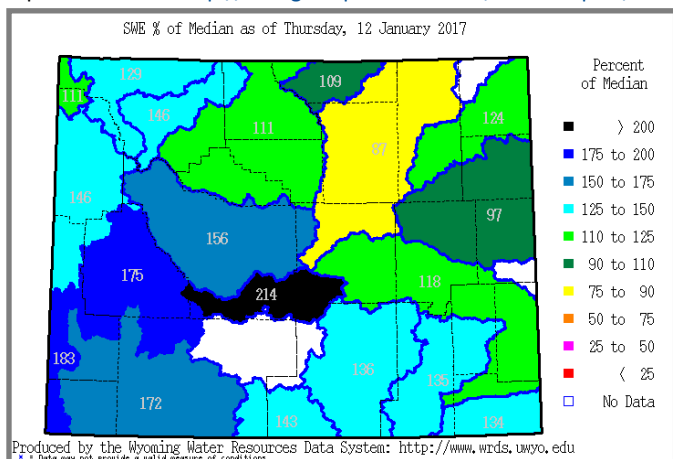
Snowpack

The statewide snowpack has increased significantly thanks to late December and early January storms. Major runoff-producing basins in Wyoming are well-above median.

Since the last report, every basin in the state has increased in percent of median snowpack. Only the Powder River Basin (87%) and the Cheyenne River Basin (97%) are less than 100% of their median for this time of year. The southwest quarter of the state is well above the median with all basins there being at least 140% of their median values. Additionally, several basins are near or at their median peak spring snow water equivalent.

Snow pack products can be found at: <http://www.wrds.uwyo.edu/sitemap.html>

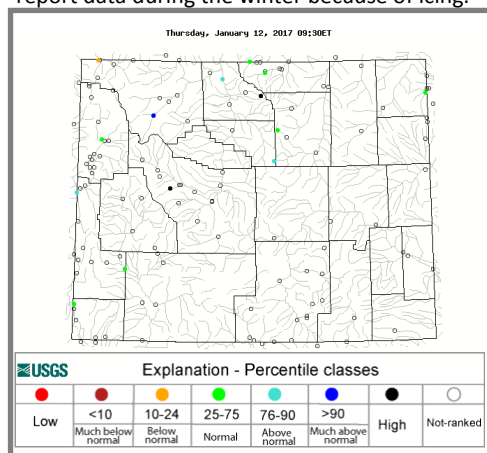
Do you have drought impacts to report? We still need your on-the-ground reports and you can input them here: <http://droughtreporter.unl.edu/submitreport/>



Water Resources

Reservoirs statewide are still in good shape, though with exceptions, such as Palisades in the Snake River Basin (about 30% full) and Bull Lake in the Wind River Basin (27% full). Streamflows statewide are normal to above normal for this time of year except for the far northwest corner.

The map below shows streamflow for January 12 compared to the historical average for this date. Most stream gauges in Wyoming do not report data during the winter because of icing.

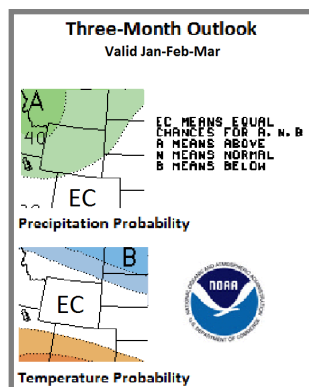


Wyoming — Short- and Long-term Outlooks

Weather and Climate Outlooks

For the next two weeks the chances are greater for above-normal temperatures statewide. The chances increase the farther east one goes. Precipitation is expected to be below normal for the next week, followed by greater chances for above-normal precipitation for week 2 (January 19-25).

Looking at the Jan-Mar time frame, the signal for temperature is weak and there are equal chances to be at, above, or below the normal. For precipitation, the odds favor above-normal conditions for most of the state. For the Feb-Apr period, temperature signals look much the same except for a slightly greater chance of above-normal temperatures in the southwest. Chances slightly favor above-normal precipitation for the northern half of Wyoming for the same period.



The Mar-May period is mostly uncertain still with a slightly better chance of above-normal temperatures for the southern third of Wyoming. There is no clear signal for precipitation.

Drought conditions are expected to persist in the northeast and southeast areas of the state into the remainder of January. Conditions are expected to remain with some improvement taking place into the middle of March.

Need a Forecast?
Visit your local National Weather Service Weather Forecast Office for the most up-to-date forecast at: <http://www.weather.gov>

Heard Around the State

Natrona, Dec 19: We had an extremely dry and warm fall. Any post hole we dug on a south facing slope was completely dry down to 48 inches so that the dirt fell off the auger, and we had to clean the holes by hand.

Washakie County, Dec 26: Over 1 foot of snow on the ground and 8 degree temperature so not much melting yet. Roads are snow-packed and icy. All travel is limited!

Park County, Dec 18: The extreme cold also kept people indoors. The snow and cold experienced this week closed schools in the area and businesses were generally closed. People did not drive unless they had to.

Partners

- Wyoming State Climate Office
www.wrds.uwyo.edu
- National Integrated Drought Information System
www.drought.gov
- National Weather Service
 - Riverton Weather Forecast Office
www.weather.gov/riw/
 - Cheyenne Weather Forecast Office
www.weather.gov/cys/
- High Plains Regional Climate Center
www.hprcc.unl.edu
- National Drought Mitigation Center
www.drought.unl.edu
- USDA Northern Plains Climate Hub and University of Wyoming Extension
www.climatehubs.ocs.usda.gov/northernplains/
- Western Water Assessment
wva.colorado.edu

Stay Tuned and In Touch

The next Wyoming Drought Impacts and Outlook Summary will be released around March 9th. If you need information in the meantime, please reach out to any of the partners listed to the right or contact Tony Bergantino directly at Antonius@uwyo.edu

The Wind River Indian Reservation and Surrounding Area Climate and Drought Summary at: http://hprcc.unl.edu/pdf/WindRiverClimateSummary_Dec16.pdf

