Drought Impacts and Outlook

Wyoming — Climate Overview

Highlights for the State

Temperatures for 2017 have been below normal for much of the west and north. The southeast and a few other stations around the state have been about $2^{\circ}F$ above normal.

Precipitation for 2017 has been well above normal in the west and south with conditions more normal to below normal in the northeast. Dec-Feb was the wettest period on record with an average of 5.44" of precipitation statewide.

Drought conditions in 2017 have improved in the southeast. This area has the last remaining D1 in the southern half of Wyoming; a large area of D1 still exists in the northeast part of the state.

Snowpack has continued to increase in all but the northeast part of the state. Several basins have already exceeded their normal peak snow -water equivalent for the season.

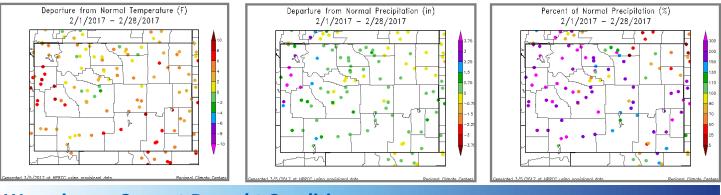
Temperature and Precipitation

January temperatures were below normal with the statewide temperature ranking as the 40th coolest since 1894. Climate Division (CD) rankings varied between the 24th coolest (CD 9 or the Wind River Basin) and the 55th coolest (CDs 7 and 8, Lower North Platte and Cheyenne/Niobrara river basins). February was warm statewide, ranking as the 16th warmest February in 123 years. CDs 2 (Snake River Basin) and 10 (Laramie and Upper North Platte River Basins) ranked as the 11th warmest.

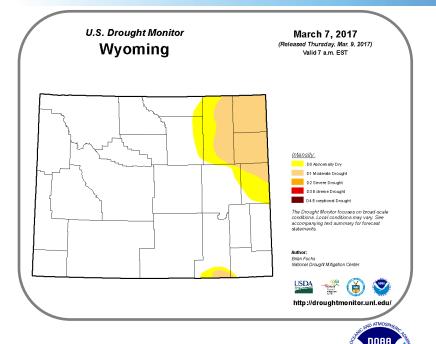
March temperatures, so far, have been normal to well-below normal throughout most of the state with the exception of some northeastern and north-central stations.

For statewide precipitation, January was the 19th wettest of the last 123 years. Of particular note are CDs 3 and 10 which finished the month as the 6th wettest on record. These two divisions comprise roughly the counties of Albany, Carbon, Sweetwater, Sublette, Uinta, and the southern half of Lincoln. At the other end of the spectrum was CD 7 (Northern Niobrara, Weston, southern Campbell, and Northern Converse counties) as the 43rd driest. February was wet statewide, ranking as the 5th wettest and 16th warmest. CD 2 (Snake River Basin) ranked as the 2nd wettest February in the last 123 years. CDs 1 (far northwest Wyoming), 9 (Wind River Basin), and 3 (Green and Bear river basins) were similar, ranking as the 3rd, 4th, and 5th wettest respectively since 1894.

March's precipitation (through the 8th) has been minimal except for the Snake River Basin and a few scattered sites in the north-central part of Wyoming.



Wyoming — Current Drought Conditions



Drought conditions have improved some in the southeast since the last outlook. The Abnormally Dry (D0) conditions have been removed from all but southern Albany and extreme southwestern Laramie counties. The areas of Moderate Drought (D1) in the northeast and southeast has remained the same.

Severe Drought (D2) has been removed from southeastern Weston and northeastern Niobrara counties.

The removal of D2 during the last week of January marks the first time since the week of February 16, 2016 that Wyoming has had no D2 or worse conditions within its borders.

Drought conditions in the northeast will likely persist since those areas have been receiving below-normal precipitation.

The U.S. Drought Monitor, is 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

January—February 2017

Wyoming — Drought Indicators

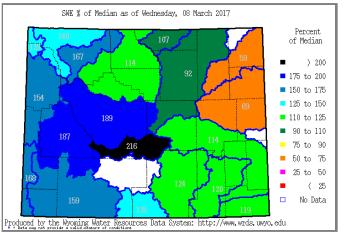
Snowpack

The statewide snowpack has continued to increase significantly in the first months of 2017. Some basins are at or near historical highs. The Powder River Basin (92% of its median), the Belle Fourche (59%) and the Cheyenne (69%) are the only basins in the state below 100% of median snow-water equivalent. At the other extreme are the Sweetwater, Wind, and Upper Green River basins which are all above 185%.

This high snowpack has its negatives, too. Snowmelt and ice jams are already causing flooding on the Bighorn and Wind rivers as well as areas around Big Piney and Kemmerer.

Snowpack products can be found at: http://www.wrds.uwyo.edu/products and data.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/

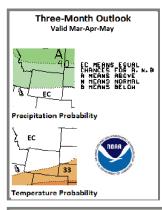


Wyoming — Short- and Long-term Outlooks

Weather and Climate Outlooks

For the next two weeks the chances are greater for above-normal temperatures statewide. The chances of above-normal temperature increase toward the southeast. Precipitation is expected to be above-normal for the northwestern three-quarters of the state for the next week, while the southeast quarter has equal chances of being above-normal, normal, or below -normal. In Week 2 (March 20-26) most of the state is expected to have above-normal precipitation.

Looking at the Apr-Jun time frame, the southern half of the state shows slightly greater



chances for above-normal temperatures. For precipitation, the northern quarter of the state has a slightly elevated chance of above-normal precipitation. For the May-Jul period, temperature signals show greater chances for above-normal conditions for all but the northeast guarter of the state. For precipitation, there are slightly better chances for abovenormal conditions for the northern half of the state while there are equal chances for above-normal, normal, or belownormal precipitation for the southern half.

Need a Forecast?

Visit your local National Weather

the most up-to-date forecast at:

http://www.weather.gov

Service Weather Forecast Office for

Drought conditions are expected to persist in the northeast part of the state as well as in the very southern part of Albany County.

Stay Tuned and In Touch

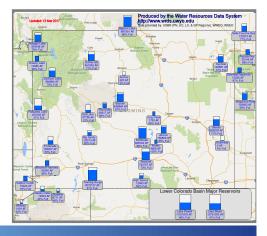
The next Wyoming Drought Impacts and Outlook Summary will be released around April 13th. If you need information in the meantime, please reach out to any of the partners listed to the right or contact Tony Bergantino directly at Antonius@uwyo.edu

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

Water Resources

Reservoirs statewide are still in good shape, though with exceptions, such as Palisades in the Snake River Basin (about 40% full) and Bull Lake in the Wind River Basin (31% full). Streamflows statewide are normal to above normal for this time of year.

The map below shows reservoir conditions in Wyoming as of March 13. This map may be accessed online at: http:// www.wrds.uwyo.edu/surface water/ teacups.html



Heard Around the State

Weston Co., Jan 25: Feeding hay every day due to snow cover (4-5"). Some drifting in roadways and around buildings/corrals.

Teton Co., Jan 26: Snowpack 48" on the flat and roof amounts are 4-8' threatening structures

Carbon Co., Jan 28: The wildlife have had little or no feed due to depth of snow. They are congregating on roadways by the hundreds. It's very difficult for them to migrate through the deep snow.

Washakie Co., Feb 18: Snowpack in the mountains nearby is above normal which looks good for irrigation this summer. The ice jams on the Big Horn River have broken up and cleanup from the flooding in low lying areas along the river is underway.

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.oce.usda.gov/northernplains/ Western Water Assessment

wwa.colorado.edu

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