

## Wyoming — Climate Overview

### Highlights for the State

**T**emperatures for both October and November were much warmer than normal.

**P**recipitation since October 1 has been above normal in the western half of the state, and below normal in the eastern half.

**D**rought conditions have improved in the northwest with D1 being removed from Park County. Drought conditions worsened in the south and southeast with D1 being introduced to Carbon, Albany, and Laramie counties.

**T**he snowpack has started out well-below normal, with all basins at 25% to 75% of median for late November.

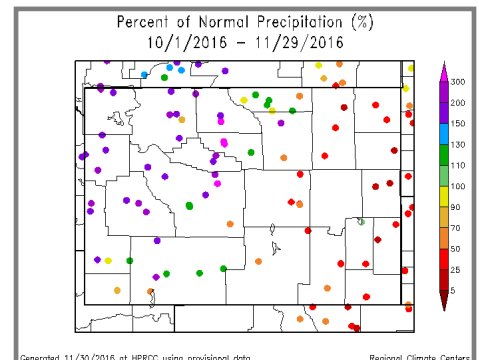
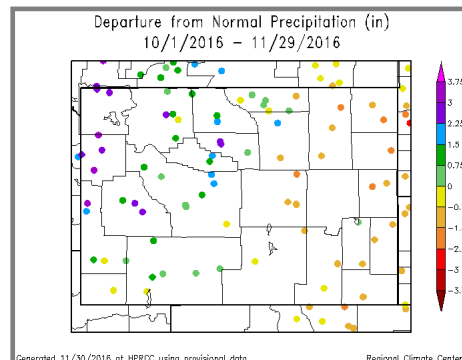
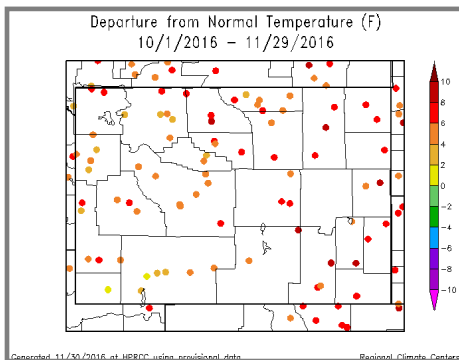
### Temperature and Precipitation

**O**ctober was a warm month for Wyoming, with most locations 2°F to 8°F above normal, and ranked as the 11th warmest since 1894. The eastern half of the state saw the highest anomalies with the southeastern part being in the 10 warmest Octobers. Climate Division 8 (Lower North Platte) had the 3<sup>rd</sup>-warmest October in the last 122 years. The western half of the state was a bit cooler but still was in the top third warmest Octobers on record.

**N**ovember has been even warmer than October relative to normal, with temperatures in most locations 6°F to 12°F above normal through the 28<sup>th</sup> of the month. The warmest conditions have been in the northern and eastern parts of the state.

**F**or statewide precipitation, it was the 20th wettest October since 1894. The northwest part of the state was much wetter than the east. Climate Division 2 (Snake River Basin) had the wettest October on record, and Climate Division 1 (far northwest corner of the state) had its 2<sup>nd</sup>-wettest October. In the east, Climate Division 7 (Niobrara and parts of Converse and Weston counties) had its 23<sup>rd</sup> driest October of the last 122.

**N**ovember's precipitation (through the 28<sup>th</sup>) has been generally below normal except for a swath running southwest from Sheridan to Sweetwater counties, where precipitation has been 130-200% of normal.



## Wyoming — Current Drought Conditions

### U.S. Drought Monitor Wyoming

**November 29, 2016**  
(Released Thursday, Dec. 1, 2016)  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	56.01	43.99	14.11	1.73	0.00	0.00
<b>Last Week</b> 11/22/2016	56.01	43.99	14.11	1.73	0.00	0.00
<b>3 Months Ago</b> 9/30/2016	43.63	56.37	29.95	9.06	2.63	0.00
<b>Start of Calendar Year</b> 1/2/2015	38.46	61.54	4.25	0.00	0.00	0.00
<b>Start of Water Year</b> 9/27/2016	41.39	58.61	24.40	9.97	0.00	0.00
<b>One Year Ago</b> 11/29/2015	38.42	61.58	0.09	0.00	0.00	0.00

**Intensity**

<span style="color: yellow;">■</span> D0 Abnormally Dry <span style="color: orange;">■</span> D1 Moderate Drought <span style="color: red;">■</span> D2 Severe Drought	<span style="color: red;">■</span> D3 Extreme Drought <span style="color: darkred;">■</span> D4 Exceptional Drought
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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

**W**hile drought has lessened in intensity and area in northwest Wyoming, the southeastern part has had Abnormally Dry (D0) conditions expand to cover all of Carbon, Albany, Platte, Goshen, and Laramie counties. D0 has also moved into parts of eastern Sweetwater County. Moderate Drought (D1) has entered the state in the southeast and is now covering extreme southwestern Laramie County as well as southern Albany and much of Carbon counties.

**I**n the northwest, D1 has been removed from Park County, and D0 has been removed from Big Horn County and pulled back to the northwest in Park County.

**C**onditions remain unchanged in the northeastern part of the state.

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 — Drought Indicators

## Snowpack

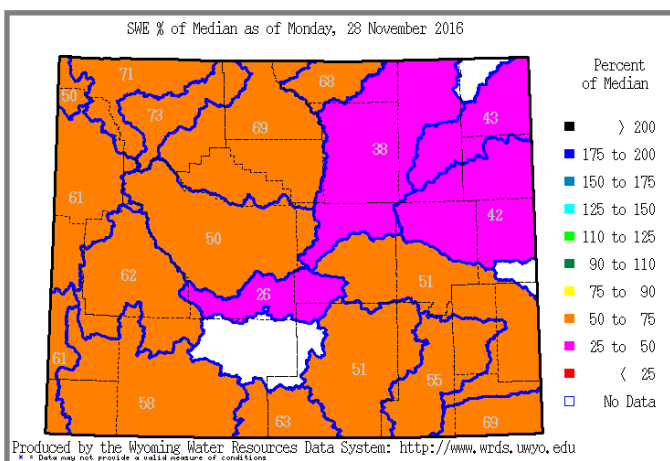
For the next several months, this section will be showing snow pack conditions for Wyoming.

Snowpack conditions become much more meaningful as the pack builds. Early in the season the median values are much lower, so a small change in the amount of snow water equivalent (SWE) can make a big difference percentage-wise when compared to that median value.

That said, compared to the median SWE for late November, all basins are well below normal. Compared to last year at this time, only the Bighorn and Tongue basins are higher this year.

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

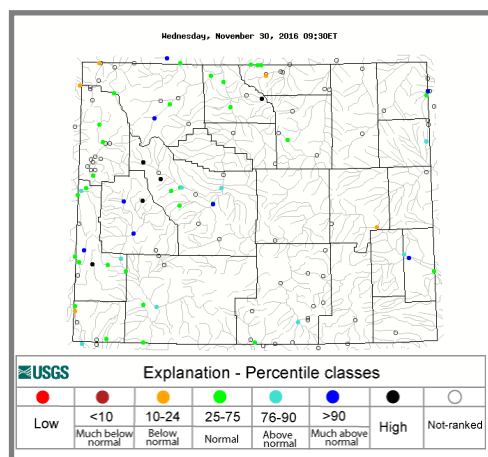
Do you have drought impacts to report? We still need your on-the-ground reports and you can input them here: <http://droughtreporter.unl.edu/submitreport/>



## Water Resources

Reservoirs statewide are still in good shape, though with exceptions, such as Palisades in the Snake River Basin (<20% full) and Glendo in the Platte River Basin (<45% full). Streamflows statewide are normal to above normal for this time of year with a few exceptions in various locations.

The map below shows streamflow for November 30 compared to the historical average for this date.

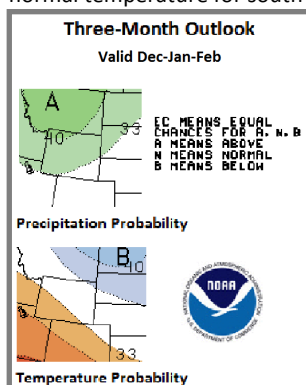


# Wyoming — Short- and Long-term Outlooks

## Weather and Climate Outlooks

For the next two weeks the chances are greater (better than 50% chance) for below-normal temperatures statewide and for above-normal precipitation in the northern and western parts of Wyoming.

Looking further out, the Dec-Feb period has the odds favoring above-normal temperatures for the southwestern half of Wyoming and better chances for above-normal precipitation for all but the southeastern part of the state. The Jan-Mar period has good chances for above-normal temperature for south-central and southwest Wyoming while precipitation is more likely to be above normal in the north and northwest parts of the state for the same period.



There is less certainty when looking at the Feb-Apr period. This is, in part, a result of the weak La Niña pattern that is in play since Wyoming typically lays at the boundary area of its influence. The temperature outlook for that period thus has Wyoming with even chances of above-normal, below-normal, or normal temperatures. The outlook is for precipitation to be above-normal in the northern parts of the state.

Drought conditions are expected to persist in the northeast and southeast areas of the state into 2017.

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

## Stay Tuned and In Touch

The next Wyoming Drought Impacts and Outlook Summary will be released around January 12th. 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](mailto:Antonius@uwyo.edu)

The Wind River Indian Reservation and Surrounding Area Climate and Drought Summary at: [http://hprcc.unl.edu/pdf/Wind-River-Climate-Drought-Summary\\_Sep16.pdf](http://hprcc.unl.edu/pdf/Wind-River-Climate-Drought-Summary_Sep16.pdf)

## Heard around the State

Niobrara County, Nov 10: Dust pneumonia is a real threat as we wean calves, pastures very dry and grasses breaking off as cattle walk on it and fire danger is high.

Weston County, Nov 4: Extremely dry. Live-stock and wildlife depending on pipeline and water wells. Very dusty causing respiratory concerns with livestock.

Laramie County, Oct 10: We are feeding more hay (horses) as the pasture growth has ground to a halt. We are also watering the lawn (buffalo grass), which is something we rarely do.

## Partners

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

