

## Wyoming — Climate Overview

### Highlights for the State

Temperatures for the winter (Dec-Feb) were generally below normal across the state with many stations in all but the southeast having temperatures more than 4°F below normal.

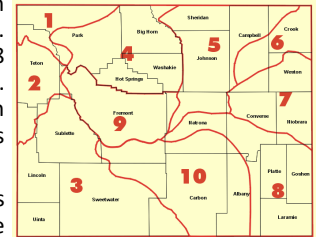
Winter precipitation statewide was normal. Though average statewide, percentages by station, ranged widely and many locations had totals that were less than 50% of normal. These places were balanced by several stations in the north which had winter totals exceeding 200% of normal.

Abnormally Dry (D0) conditions expanded into east-central and southeast Wyoming during the Dec to Feb season. The drought in the south central part of the state improved from Severe Drought (D2) to Abnormally Dry with much of the improvement taking part during late February.

Snowpack at the end of February was above average in all but four of the state's basins. Nine of the basins were at 110% of normal or greater.

### Temperature and Precipitation

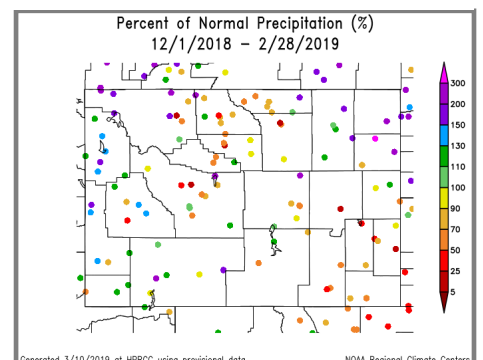
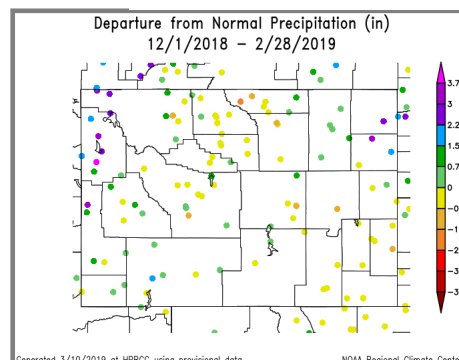
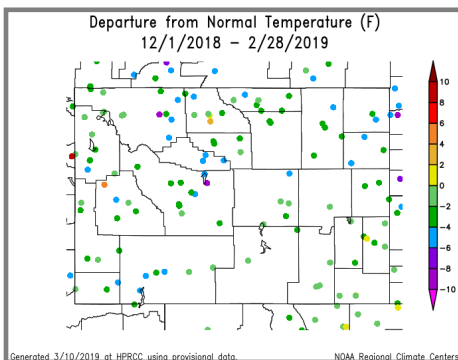
Winter (Dec thru Feb) temperatures were below normal to near normal for most of Wyoming. Climate Divisions (CD) 3 and 6, at opposite corners of the state, were the coldest and ranked, respectively, as the 34th and 35th coolest winters of the last 124 years. Interestingly, the two warmest CDs were 1 and 8 which are also at opposite corners of the state. These two divisions ranked as the 49th and 54th warmest winters of the last 124 years. The state, as a whole, had its 55th coldest winter.



Wyoming Climate Divisions

Precipitation for the winter was more varied across the CDs with the two extremes being CD 8 in the southeast which had its 17th driest winter and CD 6 in the northeast corner which experienced its 13th wettest winter since 1895. Looking at statewide precipitation, the winter of 2018-2019 was right in the middle and ranked as the 62nd driest and 63rd wettest.

March has started with dry conditions in central and northeast Wyoming and wet everywhere else. In terms of temperature, March had a cold start with temperatures decreasing toward the northeast.



## Wyoming — Current Drought Conditions

### U.S. Drought Monitor Wyoming

**March 5, 2019**  
(Released Thursday, Mar. 7, 2019)  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	42.62	57.38	2.90	0.00	0.00	0.00
Last Week 02-26-2019	42.62	57.38	6.99	0.00	0.00	0.00
3 Months Ago 12-04-2018	60.13	39.87	13.41	3.26	0.00	0.00
Start of Calendar Year 01-01-2019	63.17	36.83	13.41	3.27	0.00	0.00
Start of Water Year 09-25-2018	57.11	42.89	13.77	3.47	0.21	0.00
One Year Ago 03-06-2018	79.87	20.13	2.93	0.00	0.00	0.00

**Intensity:**

<span style="display: inline-block; width: 15px; height: 15px; background-color: yellow; border: 1px solid black;"></span> D0 Abnormally Dry	<span style="display: inline-block; width: 15px; height: 15px; background-color: red; border: 1px solid black;"></span> D3 Extreme Drought
<span style="display: inline-block; width: 15px; height: 15px; background-color: orange; border: 1px solid black;"></span> D1 Moderate Drought	<span style="display: inline-block; width: 15px; height: 15px; background-color: darkred; border: 1px solid black;"></span> D4 Exceptional Drought
<span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black;"></span> D2 Severe Drought	

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

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U.S. Department of Agriculture

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

D0 (Abnormally Dry) conditions have expanded since the beginning of December to cover almost all of Lincoln County. In the northwest, D0 expanded into all of Hot Springs and Washakie Counties as well as most of Big Horn County. The expansion in north central Wyoming includes portions of the Bighorn Mountains in Sheridan and Johnson Counties.

In the southeast, D0 coverage increased to include all of Carbon, most of Converse, and the southeastern half of Natrona Counties. Albany and Laramie Counties also saw large areas covered by the D0 conditions.

D1 (Moderate Drought) expanded northward in Sweetwater and Lincoln Counties during the second week in January. In late February, conditions improved such that D1 conditions changed to D0 for all but parts of Lincoln and Uinta Counties.

Conditions along the Carbon and Sweetwater County border have improved and the area has been upgraded from D2 (Severe Drought) to D0 (Abnormally Dry) over the course of the winter as a result of above-average precipitation in the Little Snake River Basin.

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

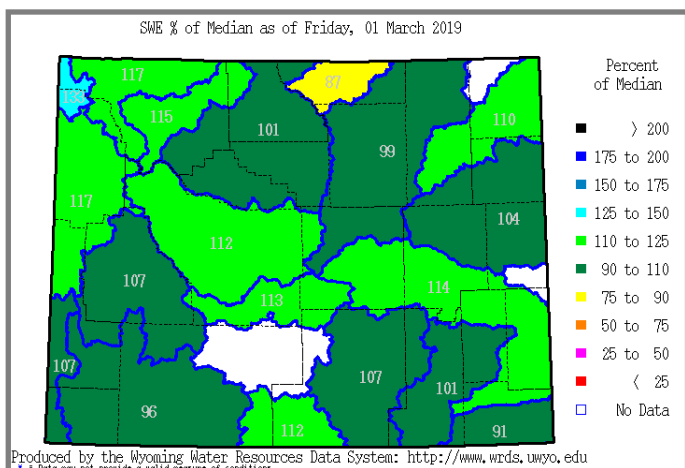
## Snowpack

Snowpack throughout the state at the end of the Dec-Feb period was generally at average to above-average conditions and ranged from a high of 133% of median snow water equivalent in the Madison-Gallatin River Basin (far northwest Wyoming) to a low of 87% of median in the Tongue River Basin (north central).

Compared to conditions at this time last year, snowpack is somewhat less in the north but much improved over what southern Wyoming previously experienced.

Additional products can be found at: [http://www.wrds.uwyo.edu/products\\_and\\_data.html](http://www.wrds.uwyo.edu/products_and_data.html)

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



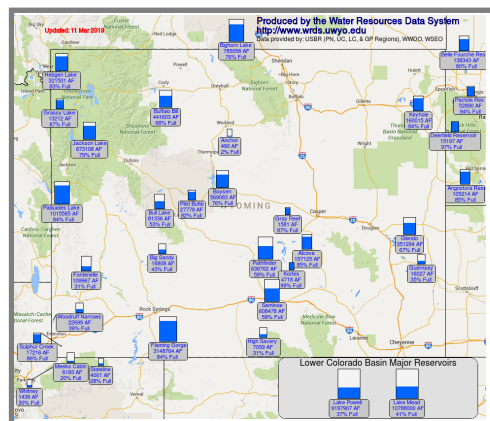
## Water Resources

Reservoir levels in Wyoming are lower but most of the major facilities are at or well-above 50% capacity, which is typical for this time of year.

Reservoir conditions may be viewed online in larger format at: [http://www.wrds.uwyo.edu/surface\\_water/teacups.html](http://www.wrds.uwyo.edu/surface_water/teacups.html)

Downstream, Lake Mead continues to hold at around 40% capacity, however Lake Powell has steadily declined over 5% during the December thru February season (<40% full).

The map below shows reservoir conditions in Wyoming as of 11 March.

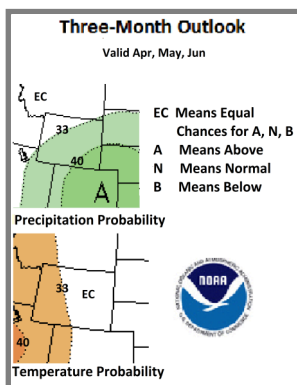


## Wyoming

### Weather and Climate Outlooks

The latter half of March has drier conditions returning to Wyoming which will impede snowpack growth. Cold temperatures are expected to continue through much of March for the entire state and hopefully this will keep the snowpack from melting too quick.

As we move into April and look at longer term conditions, the precipitation signal begins to fade and the outlook becomes more neutral, having even chances for above, below, or normal precipitation. Over the three-month period (Mar thru May), the overall signal for precipitation indicates better chances for above normal precipitation in the southern three-quarters of the state, but that signal is still faint.



For temperature, the signal is also quite weak in the Mar thru May timeframe with most of the state having equal chances of above, below, or normal temperatures. The western quarter of Wyoming does have slightly better chances for above-normal temperatures but, as a caution, this is only a slight tilt toward the above-normal side of the scale.

For April through June the temperature signal continues, giving only the western third of Wyoming slightly better chances of above-normal temperatures. Precipitation is favored to be above-normal for all but the northwest third of the state.

Drought conditions are expected to improve in southwest Wyoming.

#### 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 Climate Outlook will be released in April. 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: [WindRiverRes-Climate-Drought-Summary-Mar2017.html](http://WindRiverRes-Climate-Drought-Summary-Mar2017.html)

### Heard Around the State

Sheridan Co., Feb 28: "Sixty days of snow on the ground, very cold conditions. The frost has grown to several feet deep instead of several inches. At the plumbing department in a hardware store several people were asking about remedies for frozen sewer lines and frozen water lines. Standard depth on these lines is 6ft."

Washakie Co., Feb 02: "There is still snow on the ground and piles all around from plowing and shoveling. Gutters are solid ice from melting during the day then regressing overnight."

Sweetwater Co., Jan 27: "Snowpack portends to provide good moisture for spring growing conditions."

### 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)

