

Wyoming — Climate Overview

Highlights for the State

Temperatures for May were 6 to 9 degrees below normal in the eastern plains and 3 to 6 degrees below normal elsewhere except the very high-elevation parts of Wyoming. A few scattered areas in the Tetons were up to 3 degrees above normal.

Precipitation for May was well-above normal (over 130%) for most of the state except for the far northwest corner and a few other small areas.

During May, area of Moderate Drought (D1) improved in the Bighorn Mountains while most Abnormally Dry (D0) areas were reduced in size with the exception of a northward expansion of D0 in the Tetons.

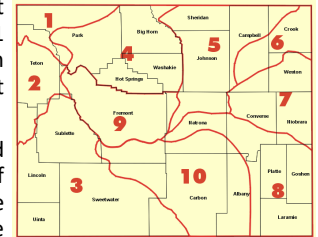
Snowpack increased in a few areas of the state, especially in the Bighorn Mountains, where late-May snows have prolonged runoff and brought some relief to an area that was dry for most of the Water Year which runs from 01 October to 31 September.

Temperature and Precipitation

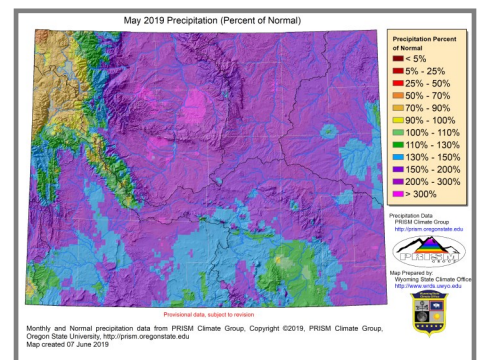
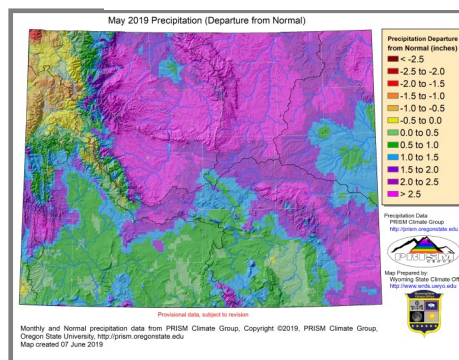
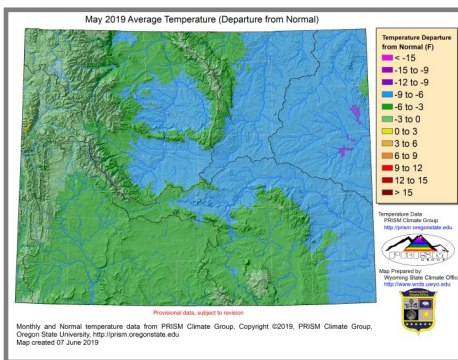
The statewide average temperature was well-below normal and ranked as the 11th coolest May since 1895. Climate Division (CD) 6 in northeast Wyoming had its coldest May of the last 125 years while CD 7 had its second coldest. CDs 1 and 2 had the warmest rankings in the state but, even those, were only the 80th and 89th warmest respectively.

Precipitation rankings were similar, and May ranked as the 11th wettest statewide. CDs 4 and 5, much of which had D0 (Abnormally Dry) conditions, ranked the wettest at the 4th and 5th wettest respectively since 1895. CDs 1 and 2 had the driest ranking for the month, but were still the 44th and 50th wettest of their record.

June (through the 11th) has been dry throughout the state with many stations under 50% of normal precipitation. The exception is the northwest corner where many stations are at or over 130% of normal. Temperatures, so far, have been mostly within $\pm 2^\circ\text{F}$ of normal. A few stations along the northern tier of the state have been 2°F to 4°F above normal.



Wyoming Climate Divisions



Wyoming — Current Drought Conditions

U.S. Drought Monitor
Wyoming

June 4, 2019
(Released Thursday, Jun. 6, 2019)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	96.25	3.75	0.00	0.00	0.00	0.00
Last Week 05-29-2019	95.42	4.58	0.00	0.00	0.00	0.00
3 Months Ago 03-05-2019	42.62	57.38	2.90	0.00	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 06-05-2018	86.35	13.65	2.47	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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droughtmonitor.unl.edu

Since the beginning of May there have been several improvements in drought conditions throughout Wyoming. Two areas with D0 (Abnormally Dry) conditions had their drought designations removed. One of these was in the southeast while the other was in central Lincoln County.

In the Wind River Mountains the D0 area was reduced in size leaving just the higher-elevations of the range impacted. The remaining D0 was removed the first week of June. D0 was also removed from Sweetwater County and part of Uinta County.

The only increase of drought at the end of May was in the Tetons where D0 conditions expanded northward to about the northern end of Jackson Lake.

The big improvement came in north-central Wyoming. In this region, rain and late-May snows brought some relief to the areas of D0 and D1 such that, by late May, the areas of D0 were drought-free and the D1 in the Bighorns had improved to D0.

With good chances for above-average precipitation the next two weeks, these areas of drought could see more improvement.

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

Evaporative Demand

The Evaporative Demand Drought Index (EDDI) is a measure of the “thirst” of the atmosphere and how much moisture it is taking up. This intake of moisture causes a drying of vegetation and soil at the surface.

Looking at the situation over the last two weeks, the main area of the state showing normal conditions is the northwest. The rest of the state is in low-demand conditions, meaning the uptake of moisture to the atmosphere is less than normal. The 4-week period ending June 5 shows much the same conditions.

Additional products: 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

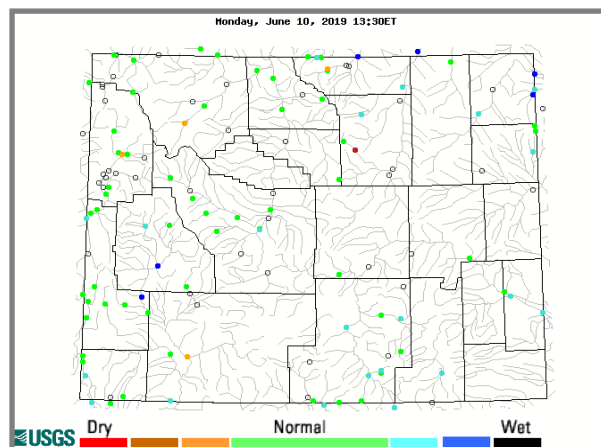
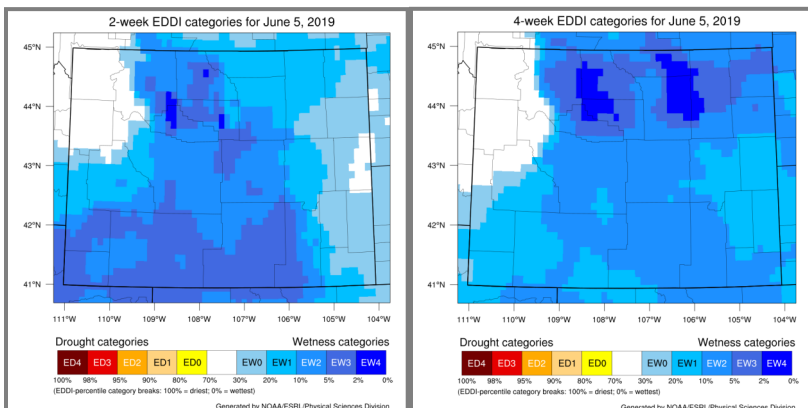
With the exception of Anchor, reservoirs in Wyoming are all about 75% capacity or better.

Reservoir conditions may be viewed online in larger format at:

http://www.wrds.uwyo.edu/surface_water/teacups.html

Streamflows in Wyoming are at or above normal. Currently, only five stations (one each in Teton, Park, Sheridan, Johnson, and Sweetwater Counties) have below normal flows.

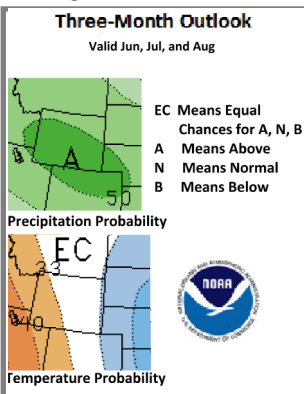
The map below shows streamflow conditions in Wyoming as of June 10.



Wyoming — Short- and Long-term Outlooks

Weather and Climate Outlooks

The rest of June should have Wyoming experiencing better chances for above-normal precipitation. Some of this precipitation still has the potential to fall as snow, especially in the Bighorns where melt-out is now looking to come about two weeks later than normal.



For temperature there is a mix of conditions with the eastern two-thirds of the state having odds that favor below-normal temperatures. While the signal is not very strong, the northwestern parts of Wyoming could see above-normal temperatures for the earlier part of this period.

With the expectation of above-normal precipitation and below-normal temperatures over the coming weeks, along with the very low evaporative demand conditions, some areas of drought are expected to improve.

A possible exception to this could be the area of D0 (Abnormally Dry) in Teton County where there are chances of above-normal temperature. This region is also showing normal evaporative demand as opposed to the very low demand over much of the rest of Wyoming.

Heard Around the State

Washakie County, May 04: “The 7” of snow and we got this week soaked in fast. The freezing temps overnight took out lots of flowers and our asparagus.”

Converse County, May 10: “Its great for the ground but hard to plant things in mud.”

Sheridan County, May 12: “Wet early spring, slowing down my yard activities. Farmers and ranchers happy for the moisture, pastures and hayfields getting a good start.”

Natrona County, May 26: “I took a core sample in the front pasture. The ground is wet, what would be considered well irrigated, down to 24 inches.”

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
www.colorado.edu

You can help us

We are continually looking for precipitation observers and will equip Wyoming volunteers with a 4” rain gauge. To sign up, select “Join CoCoRaHS” at <https://cocorahs.org>

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 Summary will be released in July. 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: WindRiverRes-Climate-Drought-Summary-Mar2017.html

