Drought Impacts and Climate Outlook

Wyoming
July 2019

Wyoming — *Climate Overview*

Highlights for the State

Temperatures for July were generally 0 to 3 degrees below normal for the far east and for the northern half of the state with the exception of the areas west of the Bighorn basin. The remainder of Wyoming fell in the range of 0 to 3 degrees above normal.

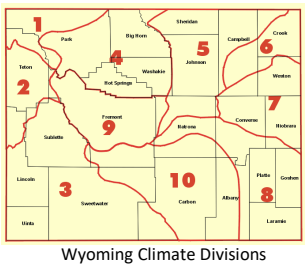
Precipitation for the month was markedly different on the two sides of the Divide. The southwestern half of the state was well below normal with much of the area receiving less than 50% of normal. The northeastern half of the state generally saw above-normal precipitation with a few exceptions such as the Bighorn Mountains.

After a brief drought-free period, some areas of D0 (Abnormally Dry) conditions have formed in the southwest part of the state.

As of August 05 there is one active wildfire, Lick Creek at the northern end of the Bighorn Mountains, burning. This fire is currently at only 4 acres and 70% contained.

Temperature and Precipitation

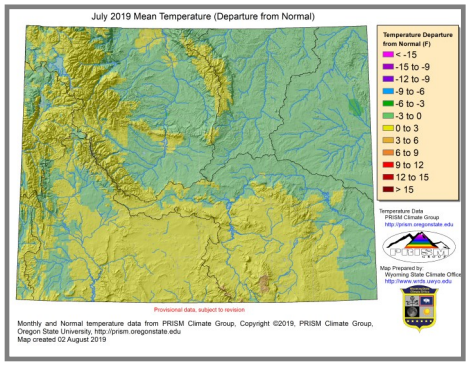
Wyoming experienced its 45th warmest July of the last 125 years. Only Climate Divisions (CD) 5 and 6, in the northeast, had rankings that were in the cooler half of years. These two divisions saw their 55th and 43rd coolest Julys, respectively. CD 10 had the lowest warm ranking finishing the month as the 29th warmest July since 1895.

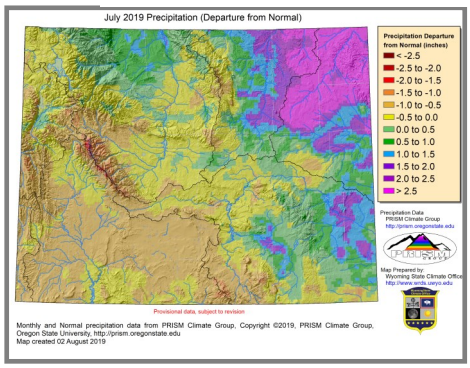


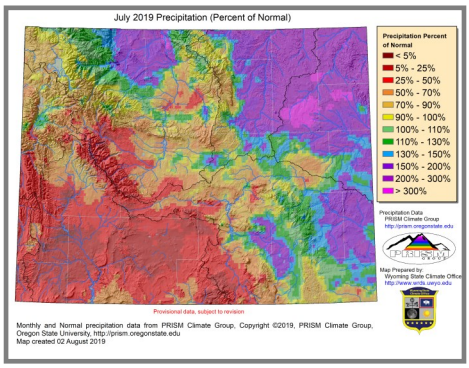
Wyoming Climate Divisions

The range of rankings for precipitation rankings was wider during July with CDs 3 and 10 in the southwest having the driest rankings at 5 and 6 respectively out of 125. CDs 4 and 5 in north central Wyoming were at the other end of the ranking and had the 32nd and 29th wettest Julys since 1895.

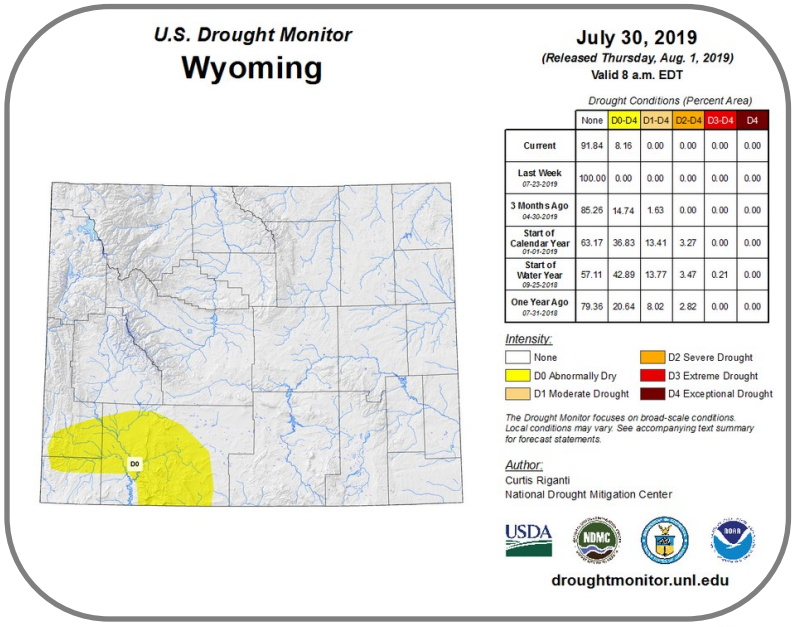
August (thru the 7th) has had above-normal temperatures across most of the state with the northwest being somewhat more above-normal than other portions. Precipitation has been varied across the state though mostly below normal. The northwest has the highest number of stations that are, so far, reporting above-normal precipitation for August.







Wyoming — *Current Drought Conditions*



For three weeks of July, Wyoming was drought-free. The Drought Monitor of July 09, 2019 was the first time since November 01, 2011 that there were no areas of drought shown on the map. This was only the 6th time since 2000 where no drought was present in Wyoming.

During the last week of July a large area of D0 (Abnormally Dry) formed in the southwest covering about the northern quarter of Uinta County, parts of southern Lincoln County, and about 60% of Sweetwater County.

While many areas of Wyoming have seen beneficial moisture this summer, the southwest has received less than normal amounts and this pattern is expected to continue into August. Evaporative Demand in that part of the state is above average.

Drought conditions are expected to continue in the southwest and the area could see an expansion both in terms of area and intensity.

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

Contact: Antony Bergantino (Antonius@uwyo.edu)
http://www.wrds.uwyo.edu

Wyoming — *Drought Indicators*

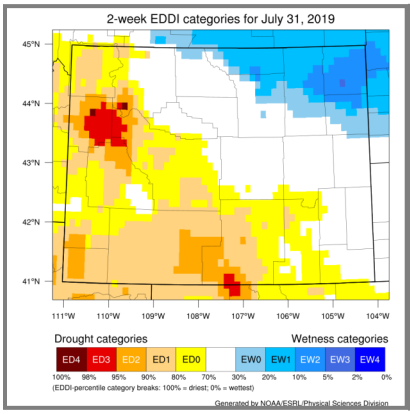
Evaporative Demand

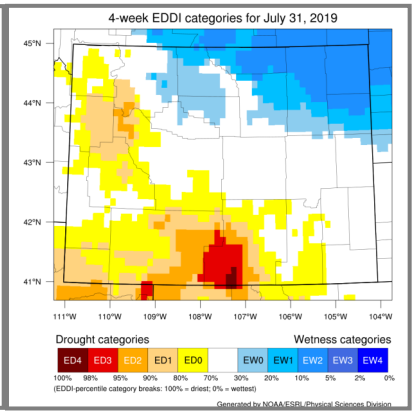
The Evaporative Demand Drought Index (EDDI) for the last two weeks of July is showing normal to low-demand conditions across the northeastern half of Wyoming and above normal demand for the southwestern half.

Looking at the conditions over the last two weeks, an area of concern has developed northwest Wyoming along the Teton-Fremont County border while a longer-term (4-week timeframe) area has developed in southwestern Carbon County.

Additional products can be found at: 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/





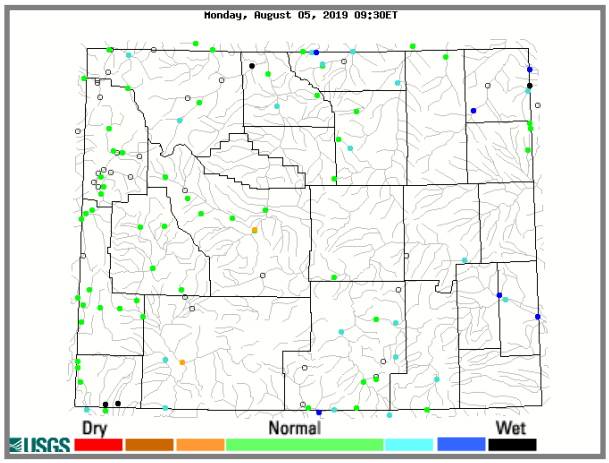
Water Resources

With only a few exceptions, reservoirs in Wyoming are all about 80% capacity or better with most running above 90%.

Reservoir conditions may be viewed online at: http://www.wrds.uwyo.edu/surface_water/teacups.html

Streamflows in Wyoming are at or above normal with the exception of a half dozen in the one station each in Fremont and Sweetwater Counties.

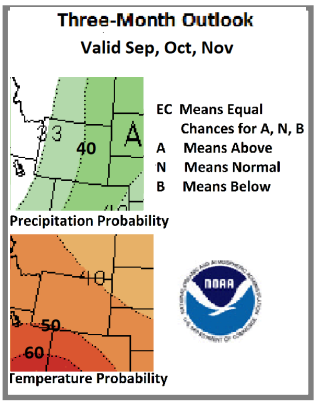
The map below shows streamflow conditions in Wyoming as of August 05.



Wyoming — *Short- and Long-term Outlooks*

Weather and Climate Outlooks

The next two weeks should have most of Wyoming experiencing better chances for below-normal precipitation. These chances are highest in the southwest. The latter week of the month is mixed with the southeast looking to receive below-normal precipitation while the northern third of the state has better chances for above-normal precipitation. The remainder of Wyoming has even chances for above, below, or just normal amounts of rainfall.



For temperature over the next two weeks, the southern part of the state has better chances of being above-normal while the last week in August could see above, below, or normal temperatures in most of the northern half of the state with below-normal temperatures possible in the extreme northern part.

Drought conditions could continue to expand in areas in the southwestern half of Wyoming. Much of this area is experiencing higher than normal evaporative demand and is more likely to have below-normal precipitation and above-normal temperatures over the next two to three weeks.

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 September. 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 Conditions may be found here: https://hprcc.unl.edu/windriver.php

Heard Around the State

Weston Co., Jul 5: "Second great year in a row! Very abnormal in my 60+ years of memory. Sweet clover everywhere and 4ft high. "

Goshen Co., Jul 6: "The garden and grass are almost too wet. Some of the xeriscape plants we put in are turning yellow. The trees are in good condition. The reservoirs are all full."

Sweetwater Co., Jul 13: "Dry conditions require increased irrigation demands. Also high fire danger due to high temps and low humidity."

Washakie Co., Jul 20: "Lawns, gardens, fields all drying out! Fire danger increasing! With temps in the 90's, folks are hiding out inside with the AC."

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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