Drought Impacts and Climate Outlook

Wyoming — Climate Overview

Highlights for the State

Temperatures for August were generally 0 to 3 degrees below normal except in the south and the higher elevations of the northwest, all of which were about 0 to 3 degrees above normal. Small areas of the northeast were as much as 6 degrees below normal.

Precipitation for the month was below to well-below normal for all but the northeast and a few pockets in the southeast. Areas of Fremont, Sublette, Lincoln, and Sweetwater Counties received less than 25% of their normal precipitation.

Drought conditions continued to expand in the southern parts of Wyoming as a result of precipitation amounts that were less than 50% of normal.

As of September 16 there are five active fires in the state. The largest of these is the Fishhawk Fire in the Absarokas which has so far burned over 11,000 acres. Recent above-normal precipitation in the area has helped reduced the fire's spread.

Temperature and Precipitation

Wyoming experienced its 29th warmest August of the last 125 years. Only Climate Division (CD) 6, in the northeast and ranked as 72nd

warmest, was in the cooler half of years. CD 3 had the lowest warm ranking finishing the month as the 19th warmest August since 1895. CD 10 was a close second, having its 20th warmest August.

The range of rankings for precipitation was wider during August. CDs 3 and 10 had the driest rankings, coming in at 19 and 23 respectively. At the other end of the spectrum was were CDs 6 and 7 which ranked as the 109th and 106th driest (or 17th and 20th wettest) of the last 125 years.



September (thru the 16th) has had above-normal temperatures across most of the state with some scattered stations in the northwest and northeast being the exception. Temperatures generally have been more above normal in the southwest and north-central portions of Wyoming. Precipitation has also been mostly above normal with some exceptions in the southwest. The northwest has received upwards of 200% of normal so far this month.



Wyoming — Current Drought Conditions



Drought conditions are expanding in Wyoming. A small area of D0 (Abnormally Dry) formed in eastern Laramie County but improved after the end of August.

During the last week of August another area of D0 evolved in southern Albany County.

The southwest, however has been the area that has seen the largest expanse of D0 form. Well-below normal precipitation and high evaporative demand through the latter part of August resulted in D0 conditions that now cover almost all of Sublette and Lincoln Counties, all of Uinta County, southwestern Fremont County and Carbon Counties, and all but northeastern Sweetwater County.

Recent precipitation in the early part of September will hopefully start to bring some relief to the southwest. Temperatures are still higher than normal and evaporative demand is still above normal so the area will remain in D0 for the near term.

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

NOAR

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Wyoming — Drought Indicators

Evaporative Demand

 \mathbf{T} he Evaporative Demand Drought Index (EDDI) is showing normal to lowdemand conditions across the northeastern half of Wyoming and above-normal demand for the southwestern half.

Looking at the two-week index, two areas of concern have developed, one in southern Albany and Carbon Counties and the other in western Sweetwater and eastern Uinta and Lincoln Counties. The northeast has trended more toward normal in the two-week index when compared to the four-week.

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

Reservoirs in Wyoming are about 70% to 90% capacity with a few exceptions such as Palisades, Bull Lake, Pilot Butte, Glendo, Guernsey, and High Savery.

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 some stations in west central Wyoming and in **Carbon and Weston Counties**

The map below shows streamflow conditions in Wyoming as of September 03.



Wyoming — Short- and Long-term Outlooks

Weather and Climate Outlooks

 ${f T}$ he next two weeks should see below-normal temperatures in the western half of the state. The rest of the state has equal chances of being above, below or normal. For precipitation the odds favor having above-normal amounts for the same time period. Later



in October the entire state will have better chances for above-normal temperatures while the signal is unclear for precipitation and equal chances for above, below, or normal amounts exist.

Looking at the October through December time period, Wyoming should expect to see above-normal temperatures, especially in the south central and southwestern parts where the chances are better than 50%. For precipitation over the last quarter of the year, the chances are highest for above-normal amounts with eastern half the state having the strongest signal.

Cooler temperatures and above-normal precipitation nearterm should help lessen drought conditions in southwestern Wyoming.



You can help us

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 October. 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

Washakie Co., Aug 17: "Crops, gardens, fields and lawns are extremely dry."

Fremont Co., Aug 22: "Low runoff level in river providing little or no irrigation water. Hay fields drying up. Grasshoppers taking over but too late in season to spray."

Goshen Co., Aug 23: "The landscape is still green, especially for this time of year. Lots of fuel but it has not dried out too much yet. The stream and river flows are good."

Hot Springs Co., Jul 20: "We live on a ranch and now worry about fire due to a wet spring and great grass and weed growth."

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/ **Chevenne Weather Forecast Office**

www.weather.gov/cys/

High Plains Regional Climate Center www.hprcc.unl.edu

National Drought Mitigation Center www.drought.unl.edu

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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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