Wyoming — Climate Overview

Highlights for the State

Temperatures for October were mostly 6 to 9 degrees below normal except for a few parts of the north which were 9 to 12 degrees below normal. A few small areas of the southwest were as warm as 3 degrees below normal. Hundreds of daily record low temperatures were set in October.

Precipitation in the southwest (Sweetwater and Carbon Counties especially) was well below normal (less than 50% of normal). Higher elevations areas received above normal precipitation while the remainder was generally 70% to 130%.

Drought conditions have lessened in extent during October with DO (Abnormally Dry) remaining in the southwest where precipitation was less than 50% of normal.

As of November 4 the Fishhawk Fire is 100% contained leaving no active fires in the state.

October 2019 Average Temperature - Departure from 1981-2010 Normal (Degree F) **Temperature Departure** **Temperature Departure

Temperature and Precipitation

Wyoming experienced its 2nd coldest October of the last 125 years; only the year 1919

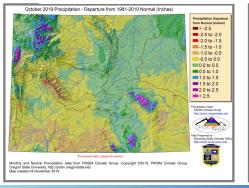
ranked colder. None of the Climate Divisions (CDs) were in the warmer half of their years and, in fact, all of them ranked in the coldest 5%. CD 8 (Lower North Platte River) ranked the warmest in its 125-year history but still had its 6th coldest October. CD2 (Snake River) had its coldest ever October since 1895.

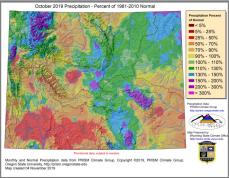
Wyoming had its 55th wettest October of the last 125 years. CD 6 in the northeast ranked the wettest of its history, coming in as the 25th wettest October. CD 3, in the southwest and where D0 (Abnormally Dry) conditions linger, had the driest ranking being the 33rd driest October.



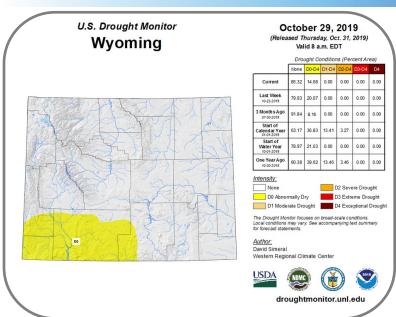
Wyoming Climate Divisions

November (thru the 8th) has had well below-normal precipitation across the entire southwest with stations there being between 5% or less of their normal. A few stations in the north are running about 130% to 200% above normal. With only two exceptions in Fremont and Uinta Counties, the below-normal temperatures have continued into November across the entire state.





Wyoming — Current Drought Conditions



Drought conditions have improved in Wyoming during the month of October and now are confined to the area of southwest Wyoming that received less than 50% of normal precipitation for the month. This area covers all of Uinta County, most of Sweetwater County, southern Lincoln County, and the far western parts of Carbon County.

During the week of the 9th DO (Abnormally Dry) was removed from Sublette and northern part of Lincoln Counties.

During the week of the 22nd there was actually some expansion across Carbon, Albany, and Laramie Counties but, during the last week of October the D0 was pulled back to a little west of the Rawlins area.

Higher evaporative demand in the southwest may keep the D0 there for a bit longer. Lower demand in the northern half of the state should keep drought from forming in that region of the state for the near future.

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

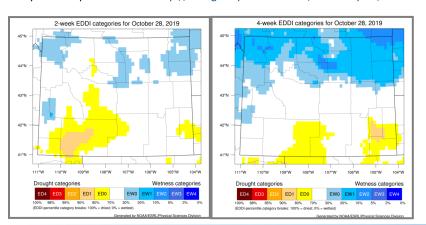
Evaporative Demand

The Evaporative Demand Drought Index (EDDI) is showing normal to low-demand conditions across the northern half of Wyoming and some above-normal demand for the southern half.

Looking at the two-week index, there is an area of concern in the southwest in the Rock Springs area. At the four-week timescale, the northern half of the state is showing low demand while a few areas of higher demand exist in the southern half, especially in southern Platte 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/



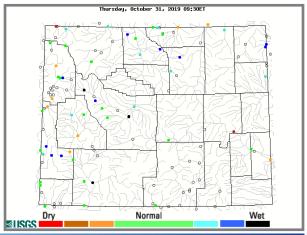
Water Resources

Reservoirs in Wyoming started the 2020 Water Year with good volumes. Most major reservoirs are about 70% to 90% capacity with a few exceptions such as Jackson Lake, Glendo, Bull Lake, 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 except some stations in the west and in Sheridan and Converse Counties

The map below shows streamflow conditions in Wyoming as of October 31.



Wyoming — October Extremes

A Cold Month

Although hundreds of low temperature records were tied or broken during October, there were a few high temperature records that were set, too.

Out of 133 stations reporting in Wyoming during October, 22 set or tied at least one daily record high temperature. 15 stations set one or more record highs. 12 daily record highs were tied and another 35 were set. 16 of those were at the station in Lyman which started in August of 2018 and thus only had one previous temperature on record.

Many more records were tied or broken at the other end of the thermometer, though. Of those 133 stations, 2 had daily record lows tied and 107 had daily record lows broken.

There were 83 daily record lows tied and 3 stations tied their record low October temperature. 506 daily records fell and 68 stations set their record low October temperature.

While no all-time records were broken at any of the stations in Wyoming, Daniel Fish Hatchery did set a new record state low temperature for the month of October. On the 30th of October, the temperature there fell to -34F which broke the previous statewide October record low temperature of -33F which was set at Soda Butte in Yellowstone Park on October 29th, 1917. This -33F had been the lowest ever recorded temperature in the Continental US during the month of October. Unfortunately for Wyoming records, Peter's Sink in Utah recorded a -35F just the day before the Daniel Fish Hatchery low was set.

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 December. 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

Fremont Co., Oct 24: "I got the hoses back out in order to water the apple trees. This not common in October."

Park Co., Oct 25: "Excess moisture is slowing/ stopping sugar beet harvest. I've recorded over 11 inches of moisture this year so far-which is usually around 6 inches per year."

Platte Co., Oct 25: "Pretty typical fall pasture for animals. Have good grass for winter forage."

Sweetwater Co., Oct 25: "With little precipitation this month, extended periods of strong winds have made the soil drier than normal. I will consider hand watering some of my windbreak plantings when possible."

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

