Drought Impacts and Climate Outlook

Wyoming
September 2019

Wyoming — *Climate Overview*

Highlights for the State

Temperatures for September were generally 0 to 6 degrees above normal except a few parts of the far west, including most of the Bear River Basin, that were up to 3 degrees below normal. Generally the eastern parts of the state were warmer than the western half.

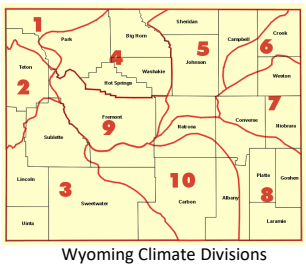
Precipitation in the southeast (Carbon, Albany, Laramie, Goshen, and Platte Counties especially) was below normal with the remainder of the state being above. The northern parts of the Big Horn Basin were over 300% of normal.

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 October 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

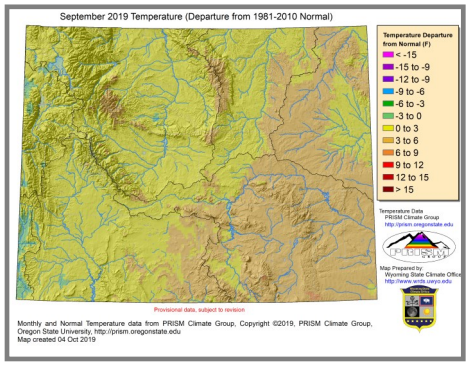
Wyoming experienced its 16th warmest September of the last 125 years. None of the Climate Divisions (CDs) were in the cooler half of their years. CD 8 had the lowest warm ranking finishing the month as the 3rd warmest September since 1895. CD 10 was a close second, having its 8th warmest September. CD2 had the coolest ranking, being the 50th warmest for the period.

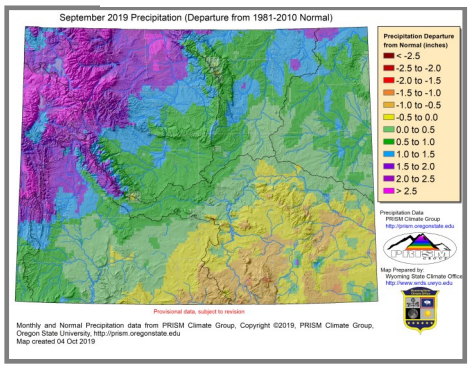


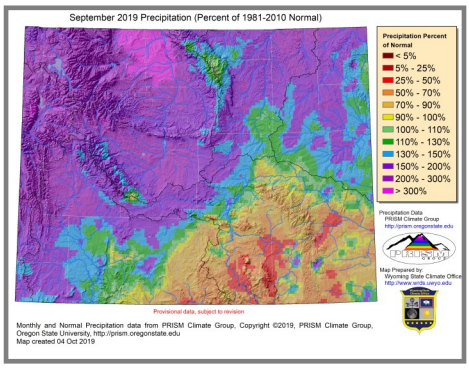
Wyoming Climate Divisions

Wyoming had its 16th wettest September of the last 125 years. CDs 1 and 2 in the northwest ranked the wettest being the 4th and 5th wettest since 1895. CD 10 had the driest ranking, coming in as the 53rd wettest.

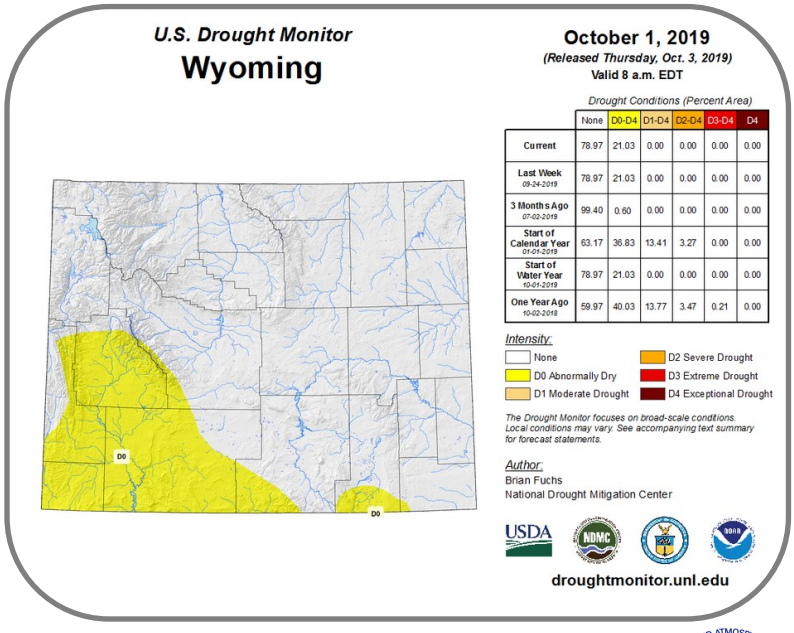
October (thru the 20th) has had below-normal temperatures across the entire state with stations being between 3 and 9 degrees below normal. Except for a few stations, most of the state has received below-normal precipitation with most stations being under 70% of normal. West-central Wyoming has seen even less with many of the stations there being 50% or less of normal.







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

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

Wyoming — *Drought Indicators*

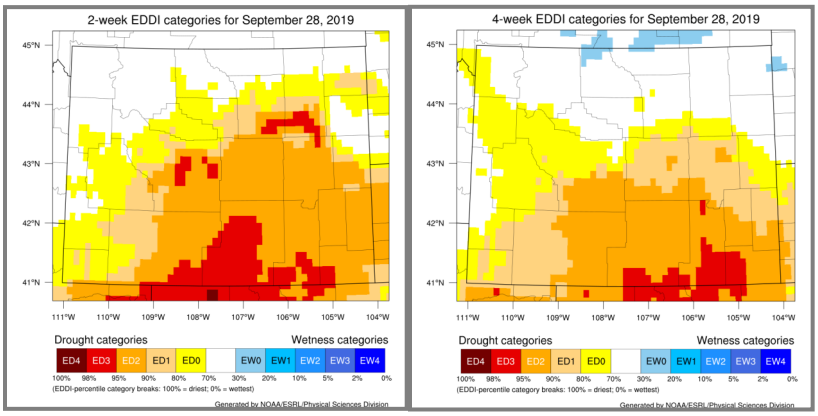
Evaporative Demand

The Evaporative Demand Drought Index (EDDI) is showing normal to low-demand 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/



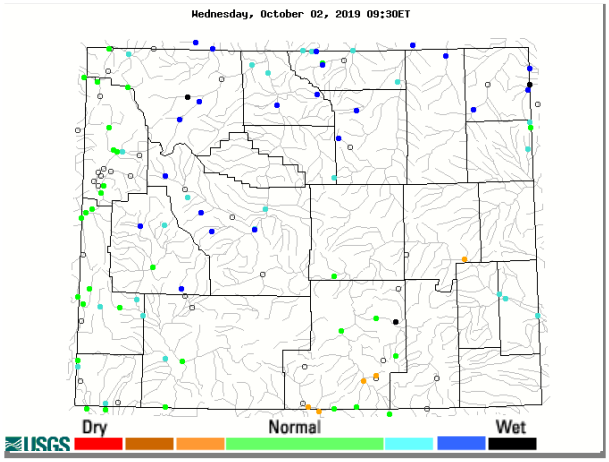
Water Resources

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.

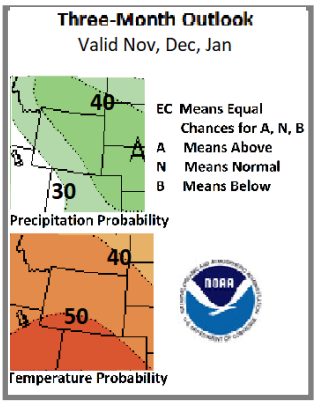
The map below shows streamflow conditions in Wyoming as of October 02.



Wyoming — *Short- and Long-term Outlooks*

Weather and Climate Outlooks

The next two weeks should see below-normal temperatures throughout the state. Looking into mid-November the odds change to favoring above normal temperature for all but the far northeastern part of Wyoming. For precipitation the coming weeks should have us expecting below normal precipitation with the northern part of the state having better chances for normal or above normal amounts.



Looking at the November through January time period, Wyoming should expect to see above normal precipitation for most of the state with the signal for this being stronger in the northeast. For temperature, above normal conditions are to be expected across all of Wyoming. This pattern is strongest in the southern regions of the state.

With warmer than normal temperatures expected, especially in the south, and the chances of above normal precipitation being the weakest there, expect to see drought conditions continue and possibly intensify in the southern third of the state.

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 November. 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

Natrona Co., Sep 2: "We had green grass into August this year, which is very unusual. Now most of the grass has turned, and the soil is dry. The grasshoppers have eaten a large share of what grew this year."

Washakie Co., Sep 8: "Still no significant precipitation. Everything is dry, lawns, fields, forests, gardens, all are in need of irrigation or deep watering! Fire danger is high."

Hot Springs Co., Sep 12: "We received .96 in rain yesterday. Many of our neighbors have hay down in the field."

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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