Drought Impacts and Climate Outlook

Wyoming
May 2019

Wyoming — *Climate Overview*

Highlights for the State

Temperatures for April were from three degrees below to three degrees above normal across most of Wyoming. Similar to March, the higher-elevation regions such as the Laramie, Medicine Bow, Absaroka, Teton, Wind River, and Owl Creek Ranges experienced the warmest departure from normal.

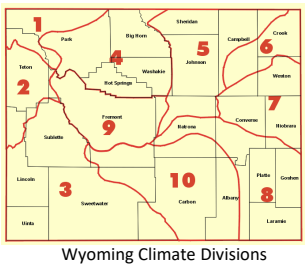
Precipitation for the month was well above average for most of the state except for the north-central and southeastern parts.

Abnormally Dry (D0) conditions were removed from several parts of western Wyoming and the area of Moderate Drought (D1) in the southwest improved. Conditions in the Bighorn Mountains worsened to D1.

Snowpack at the end of April was greater than 95% of median except in the northeast and in the Bighorn and Sweetwater River Basins. The Belle Fourche and Cheyenne River Basins melted out by the end of April.

Temperature and Precipitation

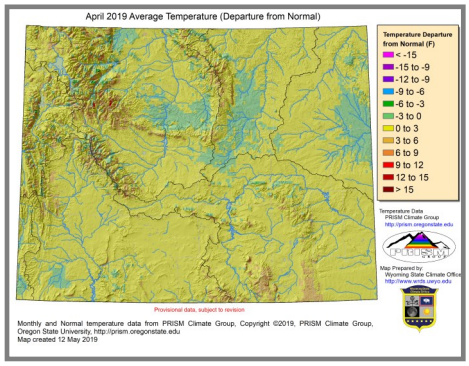
The statewide average temperature was above normal and ranked as the 32nd warmest April since 1895. Climate Division (CD) 6 in northeast Wyoming had the coolest ranking out of its last 125 years but, even so, was still the 45th warmest. The rankings were fairly uniform over the state with the rankings ranging from the 26th warmest (CD 10) to the 45th warmest.

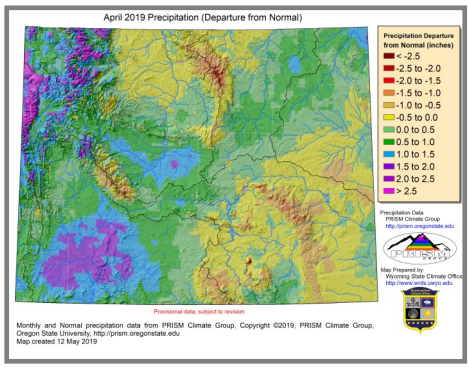


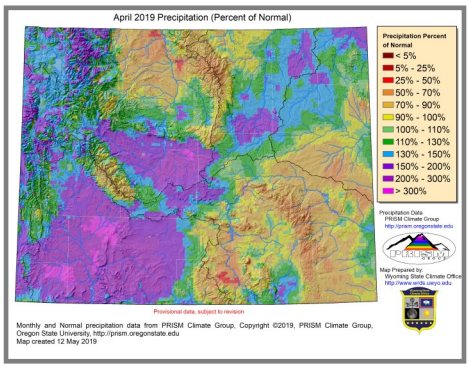
Wyoming Climate Divisions

Precipitation rankings were much more varied in April and ranged from CD 2 in the northwest which was the 9th wettest to CD 8 in the southeast which was the 79th wettest since 1895. CD 1 (also in the northwest) was the 14th wettest.

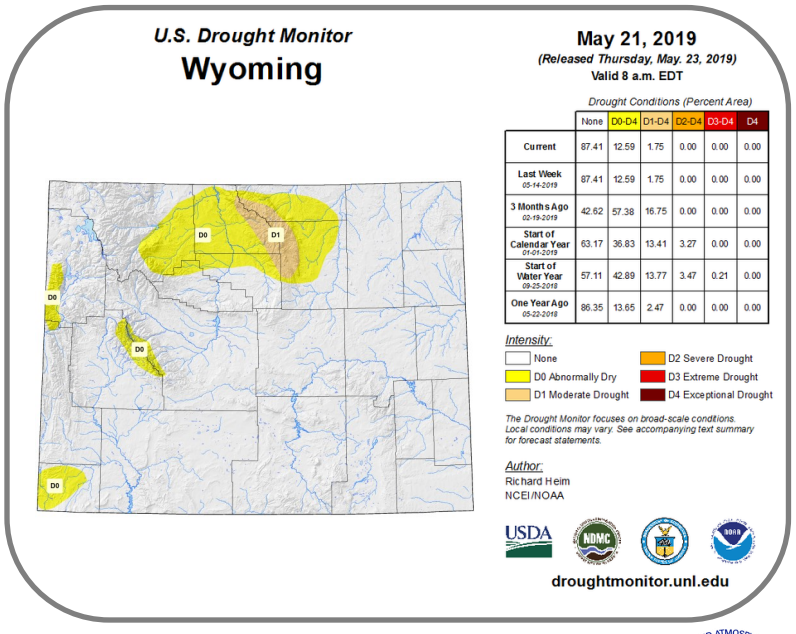
The first two-thirds of May has been wetter than normal in the north central part of the state and drier in the remaining parts. Temperatures have been below normal for the entire state for all of May with the northeast being well-below normal. This below-normal pattern is expected to continue for the rest of the month. The entire state should see beneficial moisture up to and into next month.







Wyoming — *Current Drought Conditions*



Drought conditions in many areas of western Wyoming have improved since the beginning of April although there are two areas that have worsened.

D1 (Moderate Drought) conditions in the southwest were upgraded to D0 (Abnormally Dry) in Uinta County and removed completely from Lincoln County during the last week of April. Large areas of D0 were also removed between Uinta and Hot Springs Counties with only the high elevations of the Wind River Range remaining.

D1 conditions emerged the week of the 9th of April in the Bighorn Mountains in north-central Wyoming. During the first week of May, D0 began to form in the Tetons in extreme northern Lincoln County extending to the north end of Jackson Lake.

A moist pattern laying over the state in the coming weeks should see many of these areas improving, although drought could linger longer in the higher-elevations of the Bighorn Mountains.

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

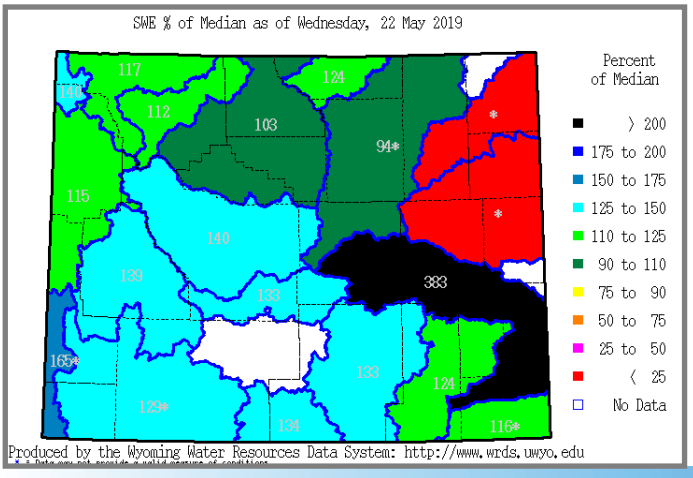
Wyoming — *Drought Indicators*

Snowpack

Snowpack as of 22 May was above average for all but the Powder River Basin (94% of median) and the Cheyenne and Belle Fourche River Basins which have melted out. While snowpack conditions are good, these values do not fully represent conditions since 2" of snow water equivalent when there is normally only 1" equates to 200% of median.

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/



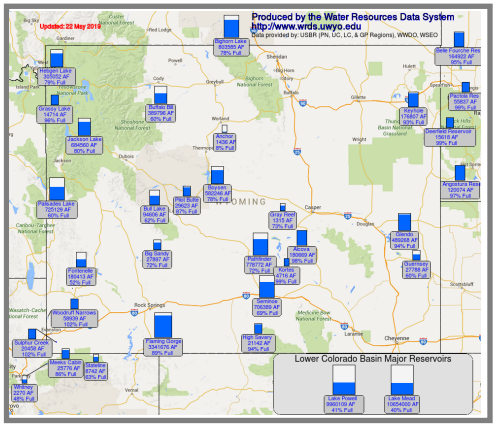
Water Resources

With the exception of Anchor, reservoirs in Wyoming are all at 50% capacity or better and have benefitted from good run off in most of the basins.

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

Downstream, Lake Mead continues to hold at around 40% capacity while Lake Powell has increased to about 41% from a low of around 37% near the end of April.

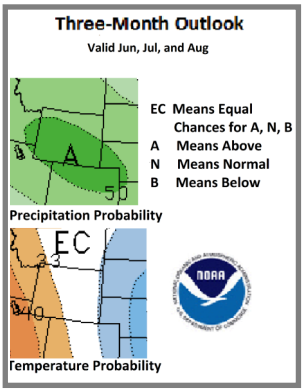
The map below shows reservoir conditions in Wyoming as of 22 May.



Wyoming

Weather and Climate Outlooks

The rest of May should see below-average temperatures across the entire state with the odds of this happening increasing toward the southeast. Precipitation is also expected to be above normal with the better chances being in the southern half of the state.



Moving into June the temperature signal fades such with even chances for above, below, or just normal temperatures. For precipitation, though, the signal remains for above-normal amounts across the entire state.

As we move into the summer months, the June through August and July through September time frames both show increasing chances of above-normal temperatures in the western parts of the state although there is still no clear indication for the rest of Wyoming. For precipitation, however, the signal is showing above-normal amounts throughout the summer and into fall with the chances being 50% or better during the June to August period.

With the expectation of above-normal precipitation over the coming months, drought conditions are likely to improve although the D1 in the Bighorn Mountains may linger beyond the other areas.

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 Outlook will be released in June. 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

Heard Around the State

Johnson Co., Apr 01: "glad to have it dry up these last few days; driveway was getting really difficult to navigate from the mud."

Washakie Co., Apr 20: "Rototillars have been busy. Many people have put in their cool weather crops. Farmers are burn clearing fields. "

Natrona Co., Apr 22: "The country is getting greener and greener. The grass is growing very well. My fields dried out enough that I was finally able to start field work, but after last nights rain I will have to wait a day before doing more."

Laramie Co., Apr 30: "Soil moisture conditions are almost ideal here in SE Wyoming, NE of Cheyenne, and they have been good all winter and spring."

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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