

Wyoming - Current Drought Conditions

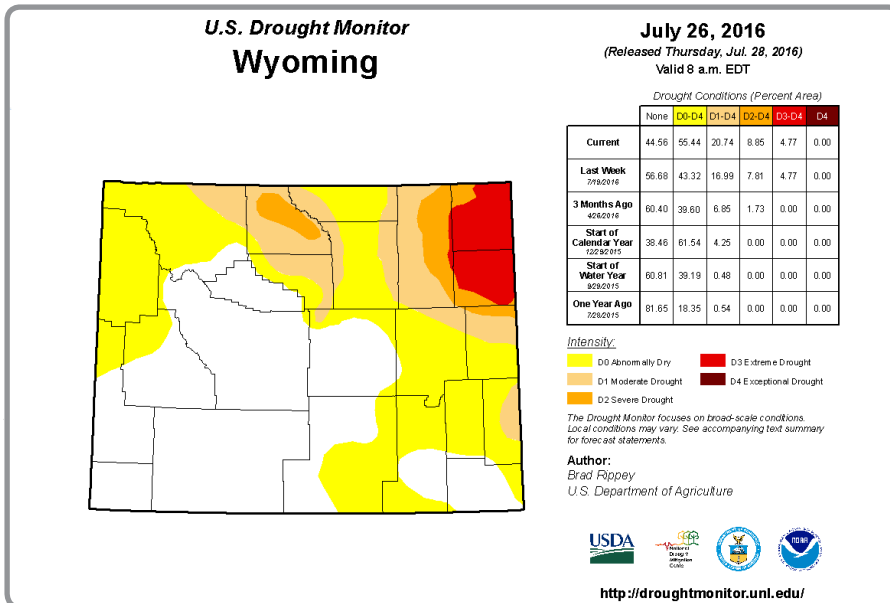
Highlights for the State

Statewide, June 2016 was the 2nd-warmest June on record, and the 10th-driest June on record (since 1895). For the climate division that encompasses parts of Weston and Niobrara counties, it was the record-driest June.

Over the past month, drought conditions have intensified and expanded in northeastern Wyoming. According to the latest U.S. Drought Monitor, portions of Crook, Campbell, and Weston Counties are in extreme drought (D3) while parts of Campbell and Niobrara County are also in moderate (D1) and severe (D2) drought.

Over the past week, abnormally dry (D0) conditions have expanded to include all of Converse, Platte, and Goshen Counties, and parts of Albany and Carbon Counties. Abnormally dry and moderate drought conditions persist in the Powder River and has expanded to cover all of the Bighorn Basin. The western flanks of the Bighorns have degraded further and are portions are in D2.

Due to the abnormally dry and warm conditions in June, above-normal wildland fire potential is expected for northeastern Wyoming through August.

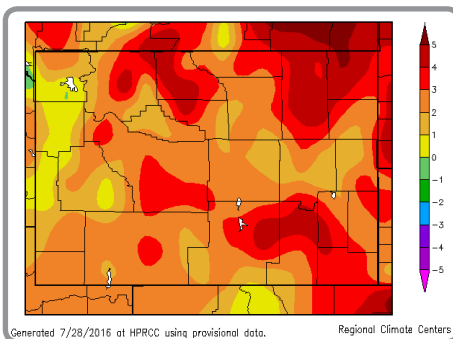


The U.S. Drought Monitor, established in 1999, is a weekly map of drought conditions that is produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln. The U.S. Drought Monitor website is hosted and maintained by the NDMC. <http://droughtmonitor.unl.edu>

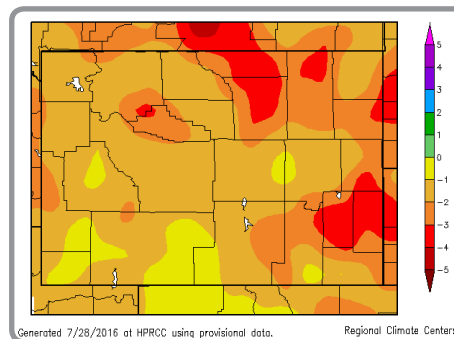
Wyoming - Climate Overview for Last 60 Days

Temperature and Precipitation Anomalies

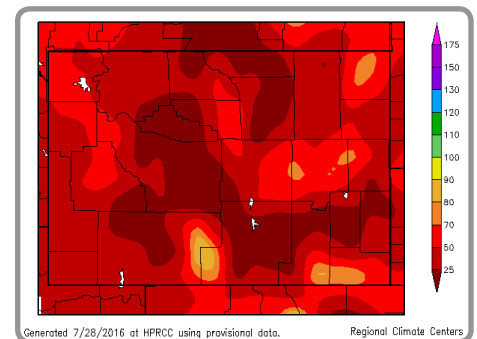
Departure from Normal Temperature (°F)
May 29 - July 27, 2016



Departure from Normal Precipitation (in)
May 29 - July 27, 2016



Percent of Normal Precipitation (%)
May 29 - July 27, 2016



Temperatures from late May through late July were above normal for nearly all of Wyoming, with several areas experiencing temperatures of 3-5 degrees F above normal as indicated in the map above. Climate Division 4, which includes most of the Bighorn Basin, had the second warmest June on record, while the Powder River Basin had the third warmest June on record (1895-present).

The temperature and precipitation maps above are updated on a daily basis and may be obtained here:
<http://hprcc.unl.edu/onlinedataservices.php>

Wet conditions experienced in May for most of the state reversed in June and July, as nearly all of the state experienced below-normal precipitation through late July. Most of the state received less than 50% of normal precipitation from late May through late July, with portions of the Wind River, Upper Bighorn, Powder River, and North Platte Basins, in addition to the Red Desert region, receiving less than 25% of normal (see above, right). This translated into deficits of 3-4 inches for the Bighorn and Powder River Basins as well as Platte and Goshen Counties (see above, left).

Heard Around the State

"Conditions in Weston County continue to deteriorate. Available livestock water is deteriorating as well, with several requests for assistance to drill water wells, install pipelines and haul water."
Source: USDA, Newcastle, Wyoming, July 21, 2016

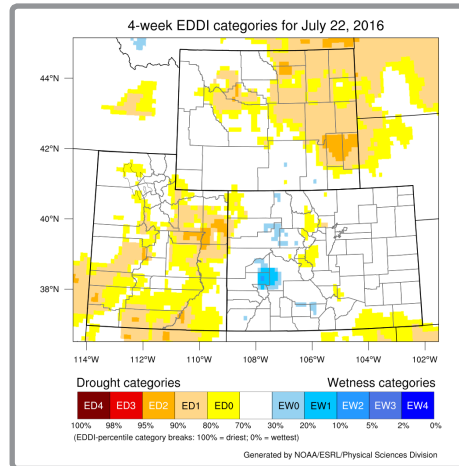
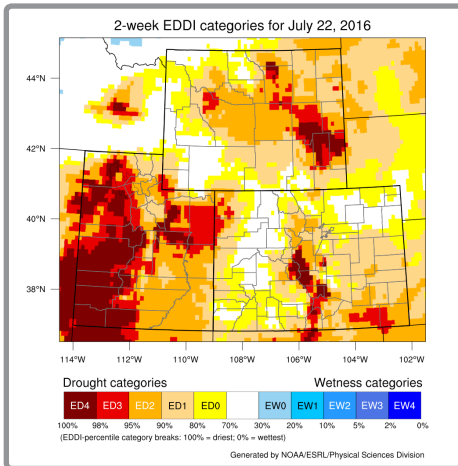
For more impact information, see: <http://droughtreporter.unl.edu/map/>

Wyoming - Drought Indicators

Evaporative Demand

The Evaporative Demand Drought Index (EDDI) is a relatively new index that is being used to monitor areas experiencing enhanced drying power of the atmosphere. The 2-week and 4-week EDDI maps below show a trend of higher than normal evaporative demand over the past month in the Wind River and Upper Bighorn Basins, which could expand drought impacts in these areas. This same trend is being observed for Converse, Platte, and Goshen counties. These areas will need closer monitoring over the next month, as drought conditions could intensify.

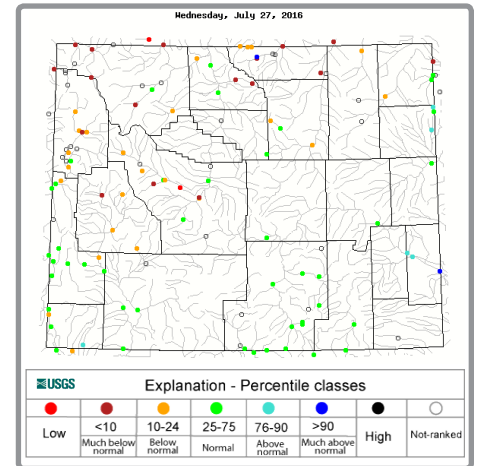
EDDI maps are updated on a daily basis for several timeframes. Current maps may be downloaded here: <http://www.colorado.edu/climate/dashboard2>.



Water Resources

Reservoir levels are in relatively in good condition statewide, although streamflows in the Tongue and Yellowstone Basin were well below normal and could affect trout and other aquatic species in those systems.

The map below shows the 28-day average streamflow compared to historical streamflow for July 27th.

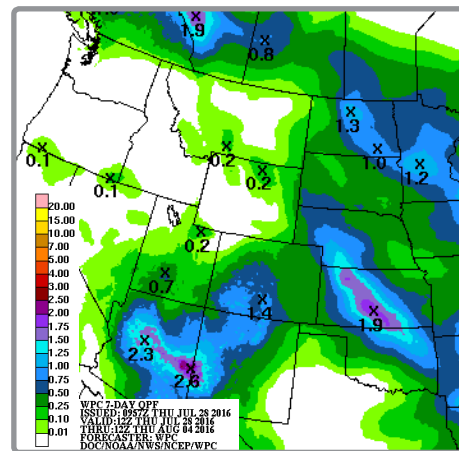


Wyoming - Short- and Long-term Outlooks

Weather, Climate, and Wildfire Outlooks

The short-term outlook does not indicate any relief to current drought conditions. The 7-day Quantitative Precipitation Forecast (QPF) map to the right depicts the amount of liquid precipitation expected to fall over a seven-day period. For Wyoming, the QPF indicates that relatively small amounts of rainfall are expected over the next week across the state. In the longer-term, the NOAA Climate Prediction Center extended outlooks do not strongly indicate enhanced odds of either dryer or wetter conditions over the next month or season.

Although the signals are not strong in either direction (dry or wet), there is an enhanced potential for wildfires for northeastern Wyoming through August. Grass fuels are in abundant supply from previous growing seasons, and dry thunderstorms may contribute to an increase in ignition for the period of July through October.



Need a Forecast?

Your local National Weather Service Weather Forecast Office can provide you with the most up-to-date forecasts available. Visit them here: <http://www.weather.gov>.

Stay Tuned and In Touch

Please stay tuned for the next Wyoming drought summary and outlook that will be released on or about August 18th. If you need information in the meantime, please reach out to any of the partners listed to the right or contact Chad McNutt directly at chad.mcnutt@noaa.gov.

Live in or around the Wind River Indian Reservation and need more information? Check out the Wind River Indian Reservation and Surrounding Area Climate and Drought Summary here: <http://www.hprcc.unl.edu/pdf/WindRiver-Climate-Drought-Summary-Jun-16.pdf>.

Summary of Conditions

It has been a very warm and dry June and July for most of Wyoming. Over the last month, extreme drought (D3) has expanded in northeastern Wyoming, while abnormally dry conditions have expanded in the Powder River Basin and down through parts of central and southeastern Wyoming. Relatively weak signals exist over the next month and season for either dryer or wetter conditions. However, if warm and dry conditions continue, drought could intensify in the Wind River and Upper Bighorn River Basins and through parts of central and southeastern Wyoming.

Partners

- Wyoming State Climate Office
www.wrds.uwyo.edu/sco/climate_office.html
- National Integrated Drought Information System
www.drought.gov
- National Weather Service
Riverton Weather Forecast Office
www.weather.gov/riv
- 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 Regional Climate Hub
www.climatehubs.oce.usda.gov/northernplains
- Western Water Assessment
<http://www.colorado.edu>

