Over the past month, drought conditions have rapidly spread and intensified across the Northern Plains. According to the latest release of the U.S. Drought Monitor on July 18th, approximately 40% of the Missouri River Basin is now in drought. This impacts over a million people.

The USDA recently approved emergency haying of CRP acres, while the hardest hit states all have ways to connect ranchers in need of hay with those who have hay to sell.

**Montana:** The Montana Department of Agriculture offers a Hay Hotline for producers looking to buy or sell hay. The site may be accessed here: [http://agr.mt.gov/Hay-Hotline](http://agr.mt.gov/Hay-Hotline).

**North Dakota:** The North Dakota Department of Agriculture offers an interactive map for producers to help them locate hay. This map may be accessed here: [http://arcg.is/2t6sL1Z](http://arcg.is/2t6sL1Z).

**South Dakota:** South Dakota State University Extension provides a Feed & Forage Finder, which is available via Facebook group. Simply click the “Join Group” button to join in the conversation: [www.facebook.com/groups/560422267324542/](http://www.facebook.com/groups/560422267324542/).

Generally, temperatures since late June have been above normal for the much of the Northern Plains, with several areas having departures of at least 2-4°F above normal. After a brief cooldown at the end of June, July has been exceptionally warm, with month-to-date temperature departures of 6-10°F across portions of Montana and the Dakotas. Interestingly, during this time, several locations set new record lows with temperatures only in the 40°Fs, while new record highs were set due to widespread temperatures above 100°F.

Precipitation continued to be much below normal over the past month, with the majority of the Northern Plains receiving less than 50% of normal precipitation. Year-to-date precipitation totals indicate widespread deficits of 3-6 inches across eastern Montana and the Dakotas, with some isolated pockets of 6-9 inches below normal. Heavy rains in some locations, like south-central Nebraska, have eliminated short-term dryness, but areas in drought largely missed out on potentially beneficial rains.
Northern Plains - Drought Impacts

Agriculture
Impacts to agriculture continue to mount with numerous crops impacted. Currently, about 50% of the nation’s spring wheat production is within drought and the percentage of the crop in very poor to very poor condition increased significantly since June. Spring wheat futures have also spiked in response to the ongoing drought and outlooks. Stunted growth in corn and soybeans continues to be an issue. In some areas, producers have begun to cut corn for silage.

Cattle producers continue to cull herds as feed shortages persist. Additionally, there have been scattered reports of poor water quality in stock ponds, which has resulted in cattle deaths.

Water Resources
At the beginning of the summer, drought impacts were primarily confined to the agricultural sector; however, water resources are starting to be stressed. Widespread water restrictions have not gone into effect, but some communities and producers have been impacted by isolated restrictions. For instance, in north-central Montana, the Rocky Boy’s Indian Reservation is facing water shortages for its 3,000 residents.

Streamflows in the Dakotas have recently declined, with many locations reporting below normal to much below normal flows. The main stem of the Missouri River has not shown any impacts to drought due to ample snowfall last winter and spring.

Northern Plains - Short- and Long-term Outlooks

Weather, Climate, and Wildfire Outlooks
Neither the short- nor long-term outlooks offer much drought relief. The Quantitative Precipitation Forecast map in the upper left depicts the amount of precipitation expected over the next 7-day period. For the Northern Plains, small amounts are expected to the west, while heavier amounts are expected in the east. Through the beginning of August, the 8-14 day temperature and precipitation outlooks (center and right, respectively), indicate the potential for continued hot and dry conditions across the Northern Plains. In the longer-term, the NOAA Climate Prediction Center extended outlooks indicate enhanced odds for warmer conditions across the entire region in August.

According to the National Interagency Fire Center, there is an above normal risk for significant wildland fires for eastern Montana, western portions of the Dakotas, and northeast Wyoming in July. Burn bans have already gone into effect in several communities, and firework bans were common for 4th of July festivities. Looking ahead, eastern Montana and western North Dakota are at an above normal risk for significant wildland fires through October.

Report Your Impacts
Are you experiencing drought impacts in your area? Please report them to the National Drought Mitigation Center’s Drought Impact Reporter. Started in 2005, this database is used by the U.S. Drought Monitor authors to better understand the conditions on the ground.

Stay Tuned and In Touch
If you need more drought information, please reach out to any of the partners listed to the right or contact your local State Climatologist directly:

Montana: Kelsey Jencso, state.climatologist@umontana.edu
North Dakota: Adnan Akyuz, adnan.akyuz@ndsu.edu
South Dakota: Laura Edwards, laura.edwards@sdstate.edu

Partners
High Plains Regional Climate Center
https://hprcc.unl.edu

National Drought Mitigation Center
www.drought.unl.edu

National Integrated Drought Information System
www.drought.gov
www.drought.gov/drought/dews/missouri-river-basin

National Centers for Environmental Information
www.ncdc.noaa.gov

National Weather Service
http://www.weather.gov

Montana Department of Natural Resources & Conservation
http://dnrc.mt.gov/

Montana State Climate Office
http://climate.umt.edu/

North Dakota State Climate Office
https://www.ndsu.edu/ndsco/

South Dakota State Climate Office
https://climate.sdstate.edu/

South Dakota State University Extension
http://igrow.org/

USDA Northern Plains Regional Climate Hub and University of Wyoming Extension
www.climatehubs.oce.usda.gov/northernplains

Contact: Natalie Umphlett (numphlett2@unl.edu)
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National Centers for Environmental Information
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National Weather Service
http://www.weather.gov

Montana Department of Natural Resources & Conservation
http://dnrc.mt.gov/

Montana State Climate Office
http://climate.umt.edu/

North Dakota State Climate Office
https://www.ndsu.edu/ndsco/

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