

Drought Information Statement for Montana

Valid April 13, 2024

Issued By: NWS Great Falls, NWS Missoula, NWS Glasgow, NWS Billings Contact Information:

- No further updates to this product are planned, as D3 drought has ended.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/TFX/DroughtInformationStatement for previous statements.



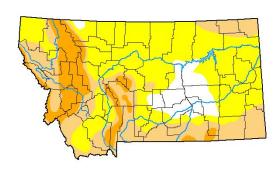




Link to the <u>latest U.S. Drought Monitor</u> for Montana

- D3 Drought conditions have ended in Montana.
- Drought intensity and Extent
 - D4 (Exceptional Drought): None occurring
 - D3 (Extreme Drought): None occurring
 - D2 (Severe Drought): A portion of western MT, with scattered areas across portions of central and southern MT
 - D1 (Moderate Drought): Much of western and southern MT and portions of northeast MT
 - D0: (Abnormally Dry): Most of the state

U.S. Drought Monitor Montana



April 9, 2024

(Released Thursday, Apr. 11, 2024)
Valid 8 a m. FDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сигтепт	9.22	90.78	40.42	13.21	0.00	0.00
Last Week 04-02-2024	5.76	94.24	41.30	16.51	1.00	0.00
3 Month's Ago 01-09-2024	30.69	69.31	22.34	3.05	0.00	0.00
Start of Calendar Year 01-02-2024	39.20	60.80	21.30	2.68	0.00	0.00
Start of Water Year 09-26-2023	56.28	43.72	37.28	23.21	9.51	0.00
One Year Ago	29.07	70.93	42.29	7.91	0.00	0.00







The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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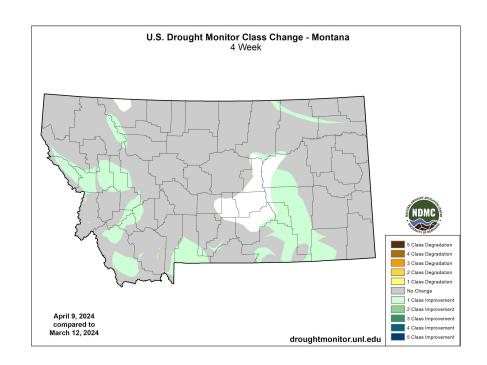
droughtmonitor.unl.edu



Recent Change in Drought Intensity

Link to the latest 4-week change map for Montana

- Four Week Drought Monitor Class Change.
 - Drought Worsened: No locations worsened, during the past four weeks.
 - No Change: No change in drought conditions over the past month were observed over portions of the state.
 - Drought Improved: Areas of improvement occurred over western, central and eastern MT.

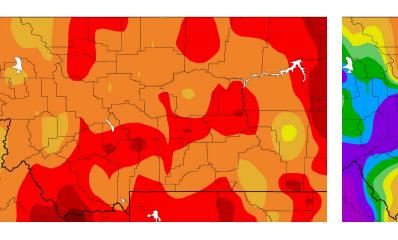




- During the past month, most of the state received 1" to 2" of precipitation, with some isolated areas of western and eastern MT receiving 3" to 4". Some areas of the state received less than 1" of moisture.
- Portions of northwest, southwest and eastern MT received below average precipitation. Portions of southern MT received only 25% to 50% of normal precipitation values.

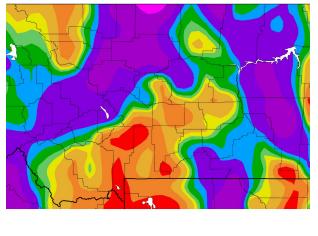
Precipitation (in) 3/12/2024 - 4/10/2024

)24 at HPRCC using provisional data.



NOAA Regio

Percent of Normal Precipitation (%) 3/12/2024 - 4/10/2024

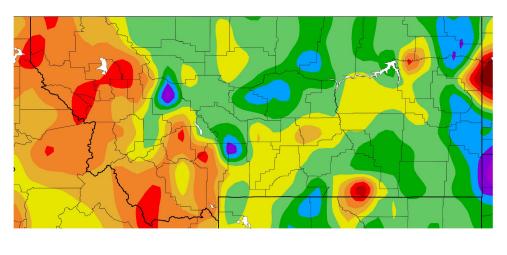


at HPRCC using provisional data.

NOAA Rec

Western and southwestern
 Montana, as well as, isolated
 areas of the rest of the state,
 experienced warmer than normal
 temperatures. Most of north
 central, central and eastern
 Montana, experienced below
 normal temperatures.

Departure from Normal Temperature (F) 3/12/2024 - 4/10/2024





Generated 4/11/2024 at HPRCC using provisional data.

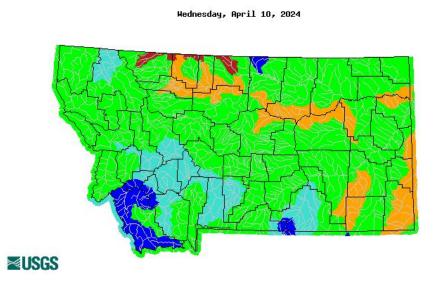
NOAA Regional Climate Centers





Hydrologic Conditions and Impacts

- The average streamflow for Most of Montana, is at a level that is considered normal for this time of year.
- Much above normal streamflow has been measured for portions of the Upper Missouri Basin, as well as, portions of the Milk and Yellowstone Basins.
- We continue to monitor for any periods of potential flooding that may occur.



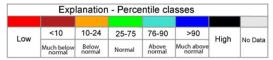
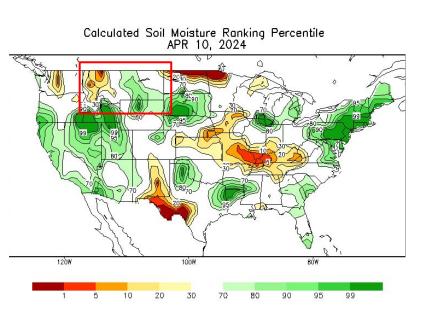
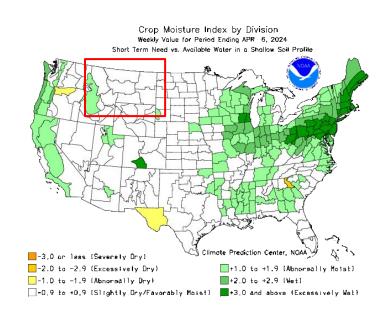


Image Caption: USGS 7 day average streamflow HUC map valid, April 10, 2024



Agricultural Impacts





• Soil Moisture Ranking Percentile continues very low across northwestern MT, where soil moisture values are only in the 0 to 10 percentile range.



Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

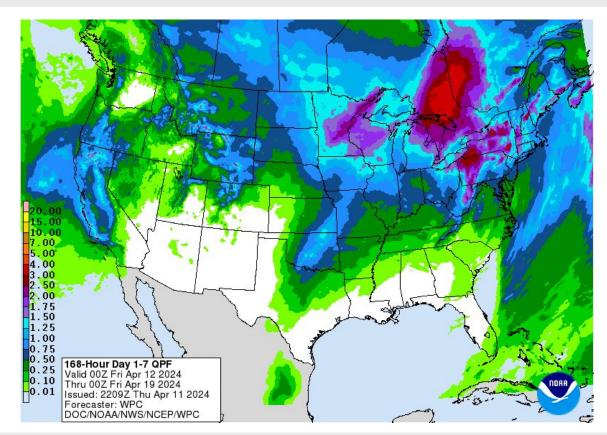
- Fire impacts are possible on grasslands a few weeks after they dry out.
- For the mountains, fire season will occur after the snow melts out.





Seven Day Precipitation Forecast

- During this period, the mountains receive the most moisture, with forecast precipitation amounts in the 1" to 2" range.
- Most lower elevation areas receive 0.25" to 0.5" of liquid precipitation.

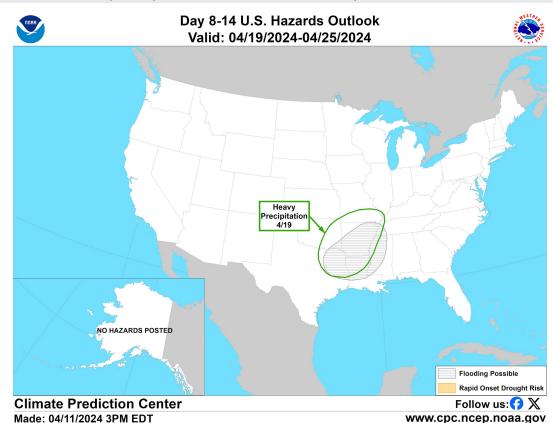




Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

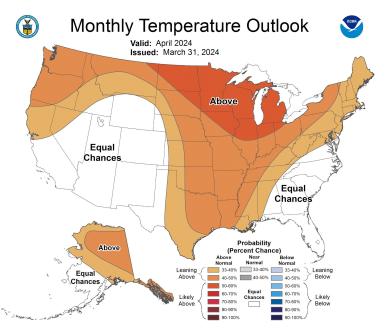
As of this time, no significant hazards are forecast to occur across The Treasure State from, April 19th to 25th.

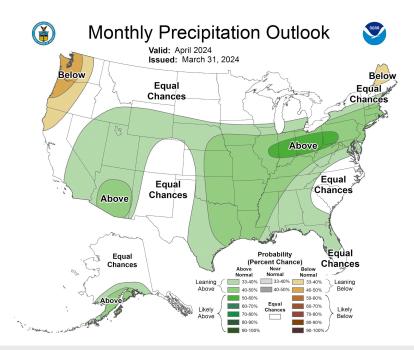


Long Range Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

- For the month of April, above normal temperatures are favored for Montana.
- Near normal chances for precipitation are favored across the state.







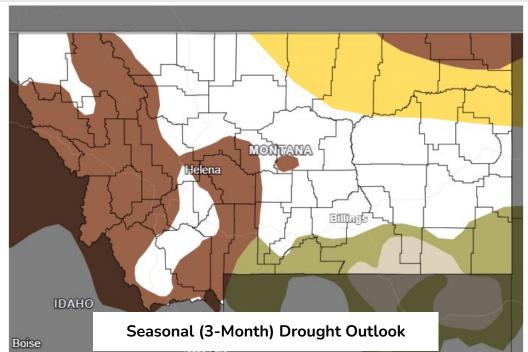
The latest monthly and seasonal outlooks can be found on the CPC homepage

- Drought conditions are predicted to continue over western, southwestern, portions of central, and far northeastern MT.
- Some expansion of drought conditions is possible across northeastern and portions of north central MT.

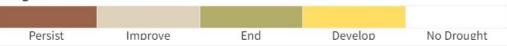
https://www.drought.gov/states/montana

Links to the latest:

<u>Climate Prediction Center Monthly Drought Outlook</u> Climate Prediction Center Seasonal Drought Outlook



Drought Is Predicted To...





Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

- Mountain snowpack continues below normal for this time of year
- Our mountains are below normal in terms of SWE. There's a real concern for water supply issues as we move through the mid and late summer period, assuming we don't receive significant amounts of high elevation spring snow.

Agricultural Impacts

Possible impacts to crops and grasslands

Fire Hazard Impacts

• Possible concerns, later this spring, in the event of rapid melting, during a period of little spring moisture replacement

Other Impacts

• Impacts to aquatic life and river activities are possible this summer.

Mitigation Actions

• Low snowpack does not equate to an absence of flooding. Flooding is possible at any time until the snow melts out of the mountains. Flood insurance needs to purchased 30 days in advance.

