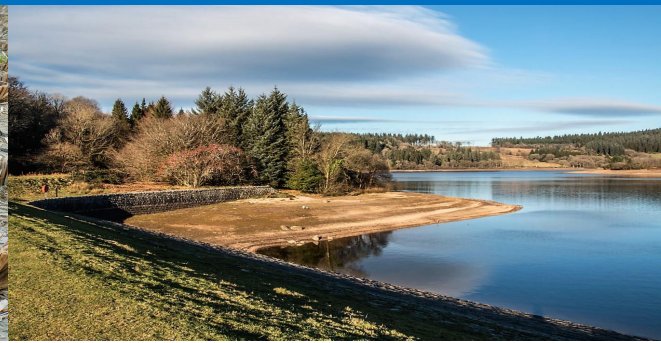
Drought Information Statement for Montana

Valid April 21, 2024

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

Contact Information:

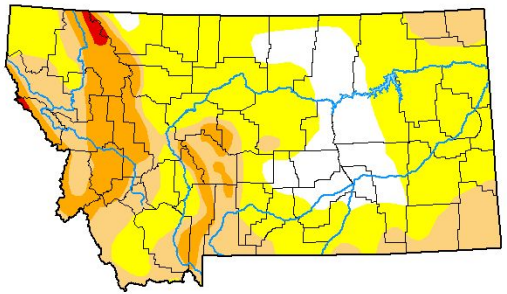
- This product will be updated, May 31, 2024, or sooner, if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/TFX/DroughtInformationStatement for previous statements.



U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for Montana

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



U.S. Drought Monitor

Montana

April 16, 2024

(Released Thursday, Apr. 18, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.10	85.90	35.40	12.69	0.50	0.00
Last Week 04-09-2024	9.22	90.78	40.42	13.21	0.00	0.00
3 Months Ago 01-16-2024	24.71	75.29	38.48	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 04-18-2023	33.34	66.66	40.21	5.29	0.00	0.00

Intensity:

None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

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

Author:

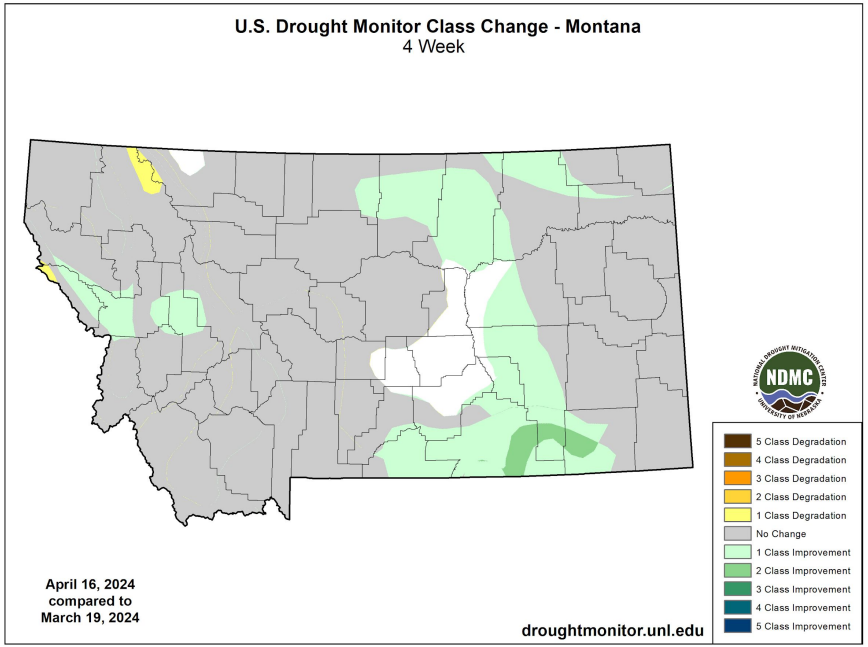
Lindsay Johnson
National Drought Mitigation Center

droughtmonitor.unl.edu

Recent Change in Drought Intensity

Link to the latest 4-week change map for Montana

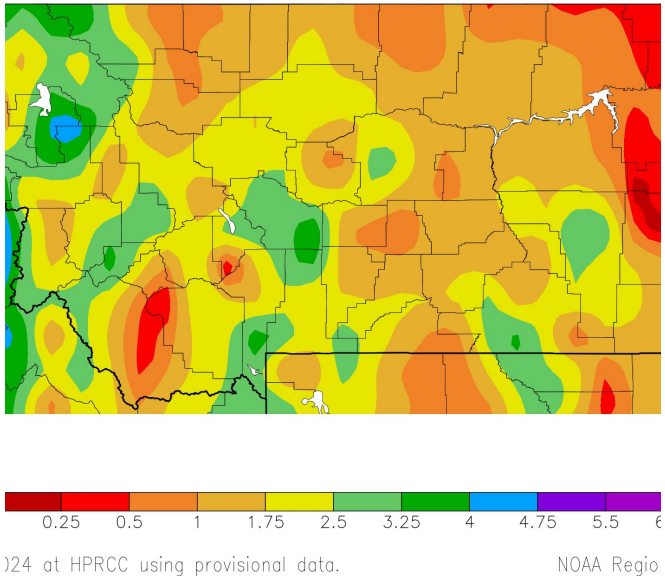
- Four Week Drought Monitor Class Change.
  - Drought Worsened: Drought conditions worsened over scattered areas of western MT, during the past four weeks.
  - No Change: No change in drought conditions over the past month were observed over most of the state.
  - Drought Improved: Areas of improvement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



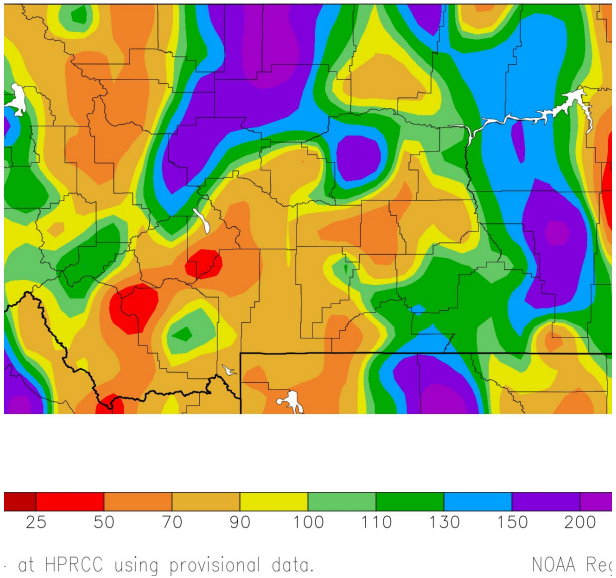
Precipitation

- During the past month, most of the state received 1” to 2.5” of precipitation, with some isolated areas of western, central and southern MT receiving 3” to 4”. Some areas of the state received less than 1” of moisture.
- Most of western, southwestern and south central, MT received below normal precipitation, while much of the rest of MT received areas of above normal precipitation.

Precipitation (in)
3/21/2024 – 4/19/2024



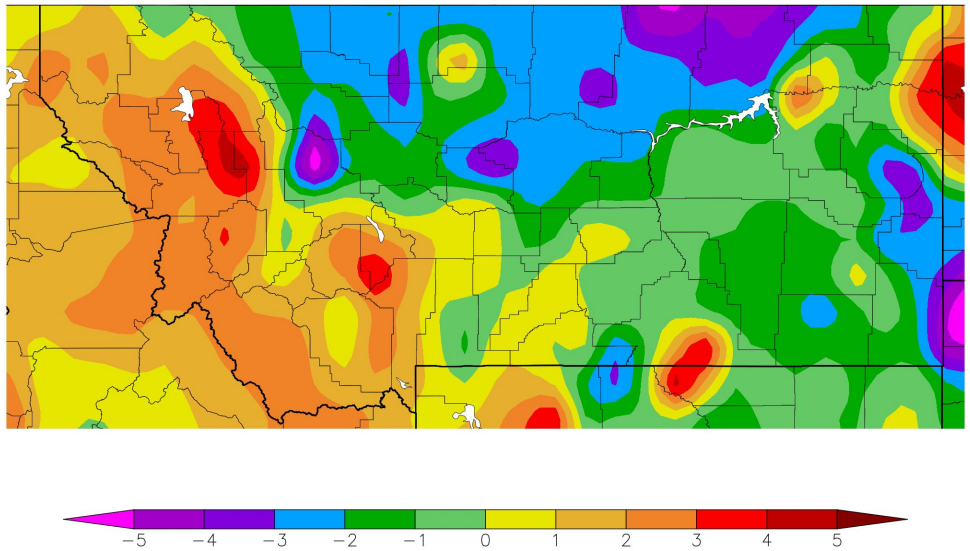
Percent of Normal Precipitation (%)
3/21/2024 – 4/19/2024



Temperature

- 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)
3/21/2024 – 4/19/2024



Generated 4/20/2024 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 Flathead and the Yellowstone River Basins.
- We continue to monitor for any periods of potential flooding that may occur.

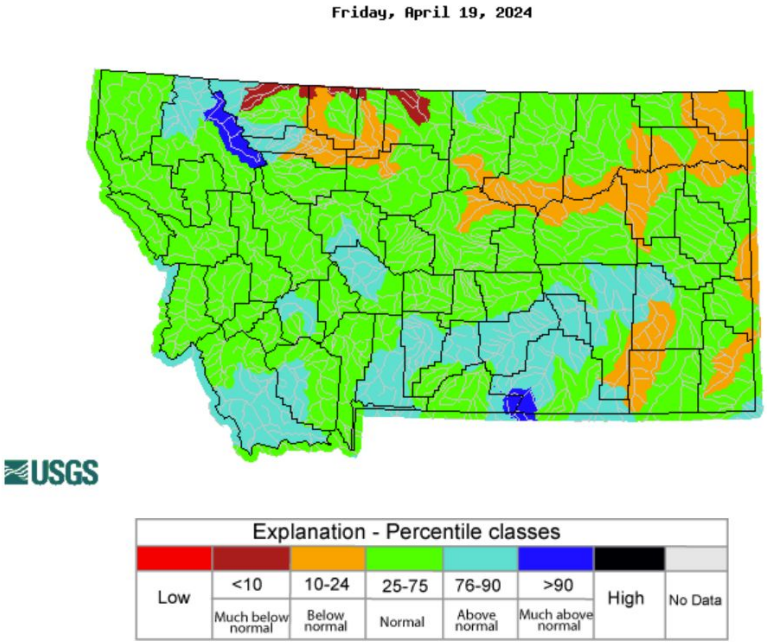
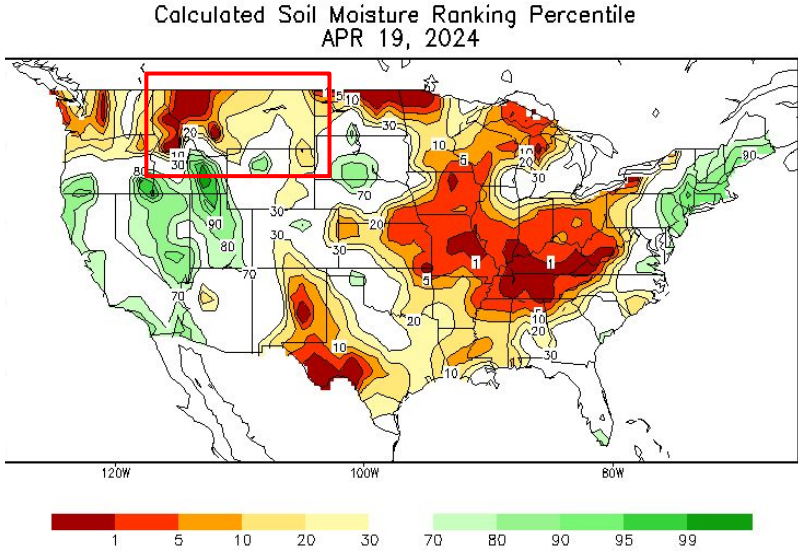
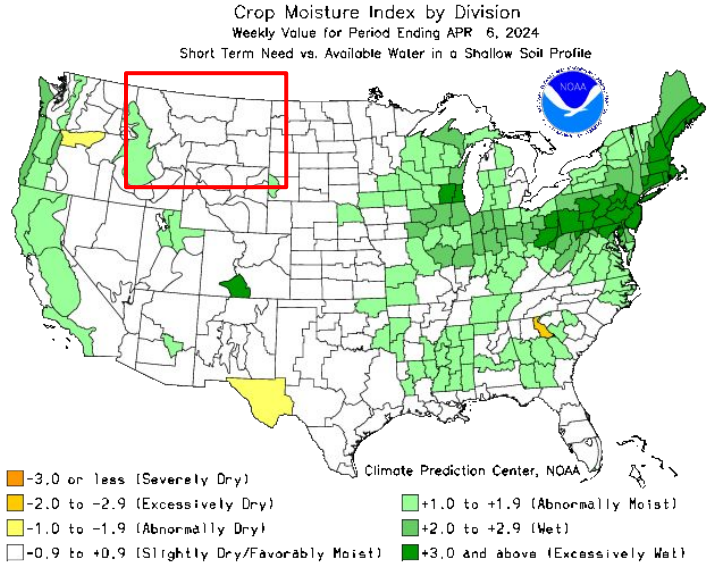


Image Caption: USGS 7 day average streamflow HUC map valid, April 10, 2024

Agricultural Impacts



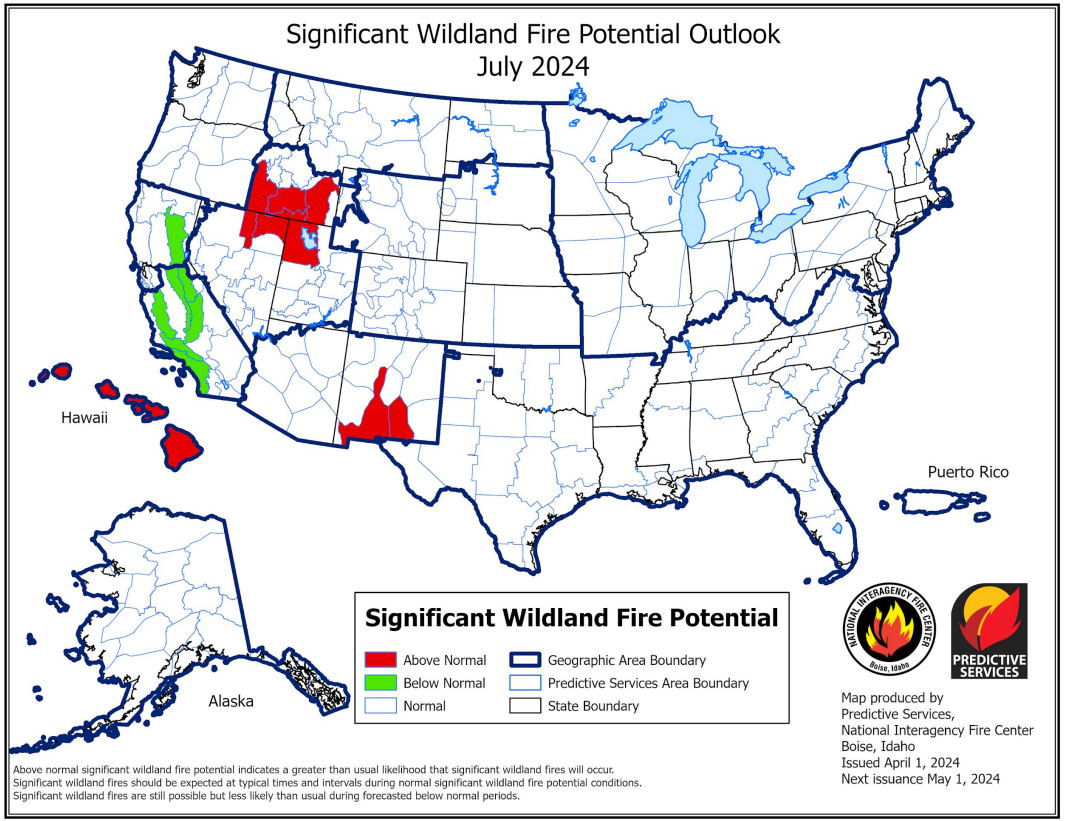


- Soil Moisture Ranking Percentile continues very low across western MT, where soil moisture values are only in the 0 to 10 percentile range.

Fire Hazard Impacts

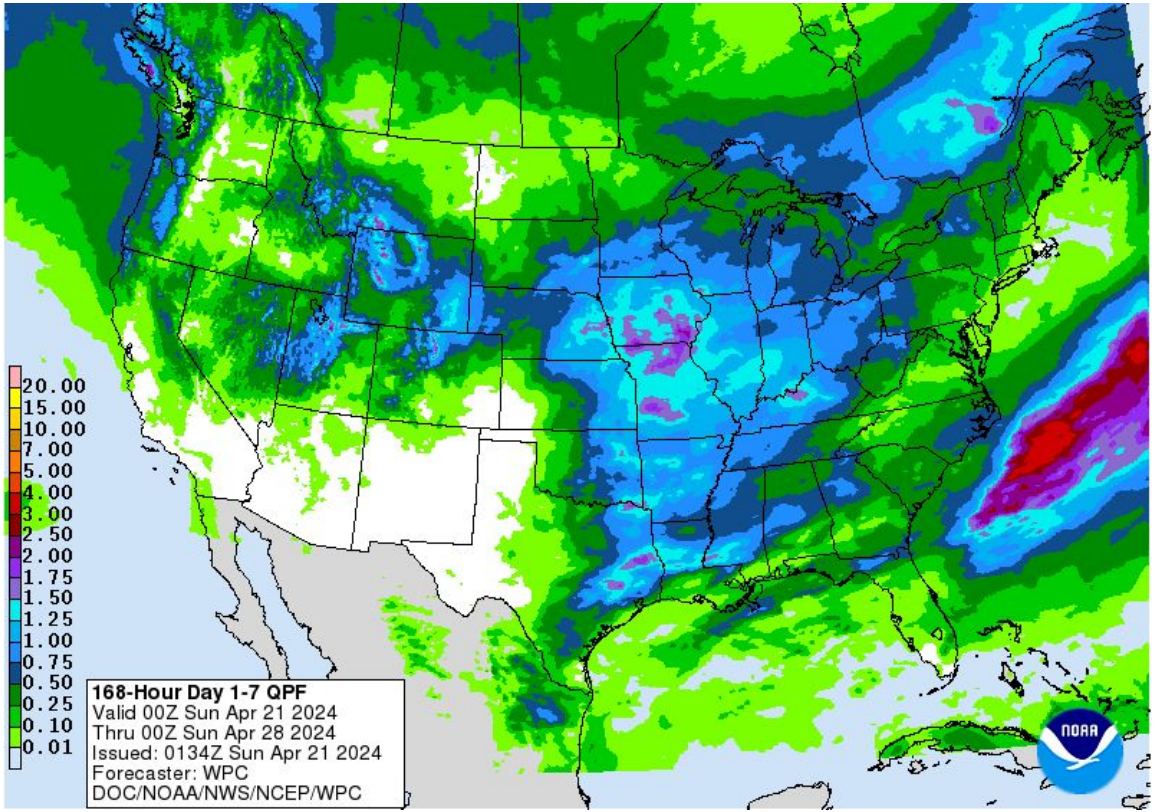
Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center.]

- 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

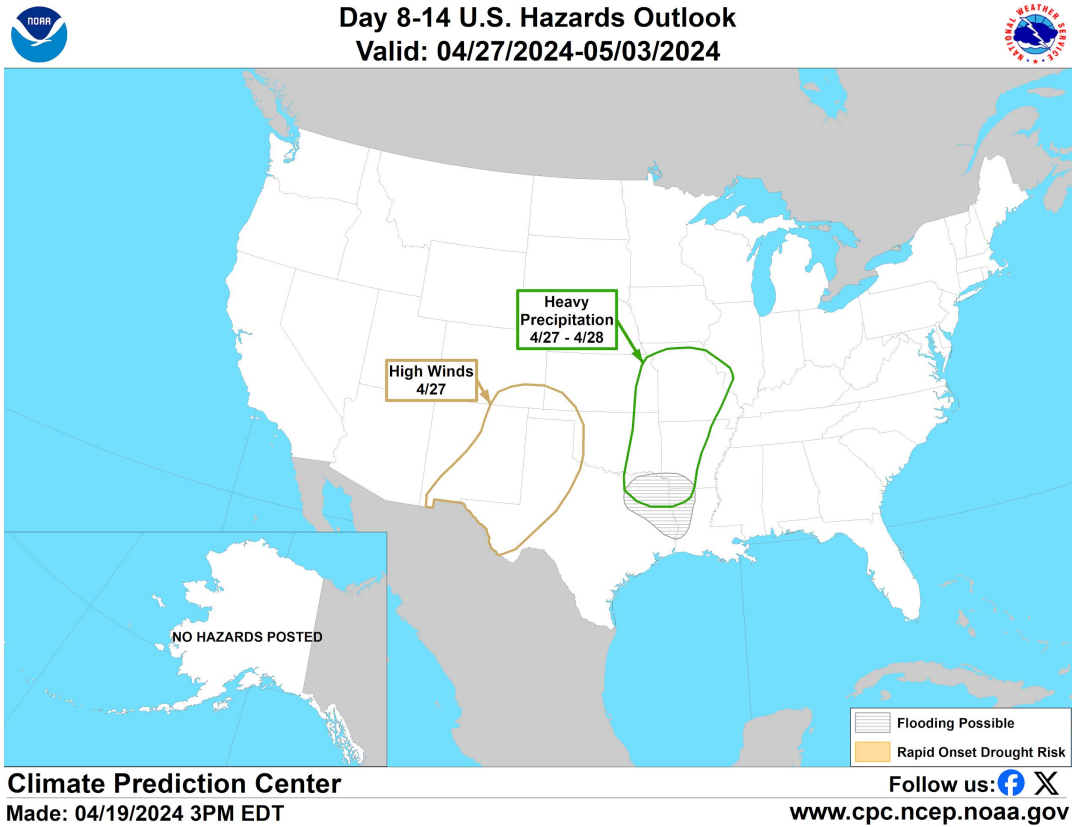
- During this period, southwest and south central MT receive the most moisture, with forecast precipitation amounts as high as 0.75” to 1.25”.
- Most lower elevation areas receive 0.01” to 0.5” of liquid precipitation.



Rapid Onset Drought Outlook

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

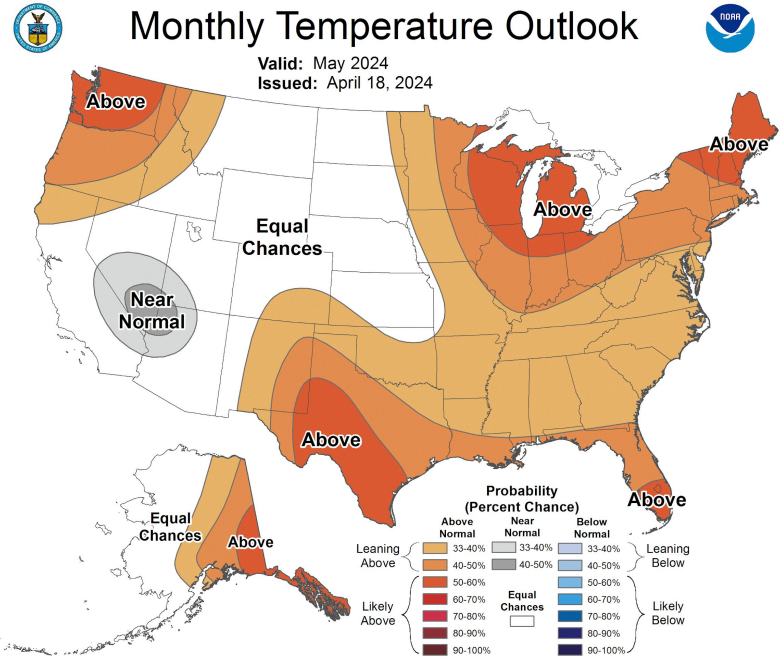
- As of this time, no significant hazards are forecast to occur across The Treasure State from, April 27th to May 3rd.

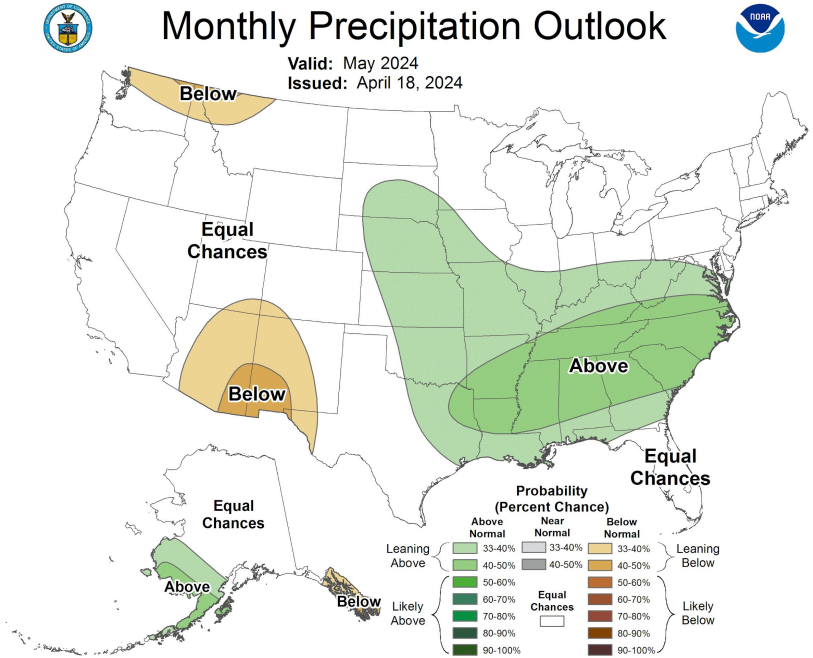


Long Range Outlooks

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

- For the month of May, warmer than normal temperatures are favored for western Montana, with near normal temperatures for the rest of the state.
- Near normal chances for precipitation are favored across most of the state, with below normal chances of precipitation expected across northwestern and portions of north central Montana.



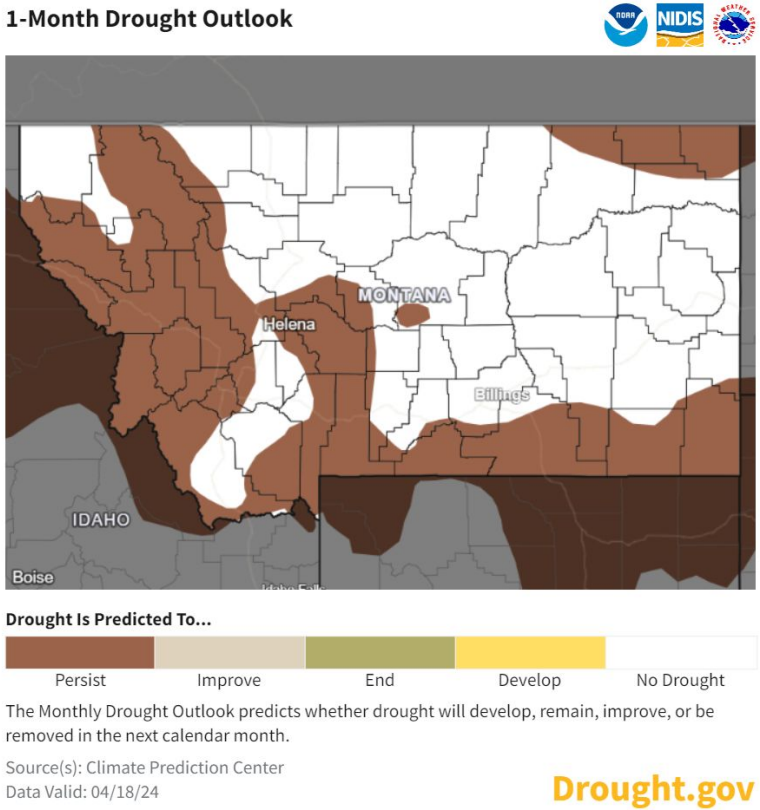


Drought Outlook

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

- Drought conditions are predicted to continue over portions of western, central, southern and far northeastern MT.

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



Links to the latest:
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook

Summary of Impacts

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.