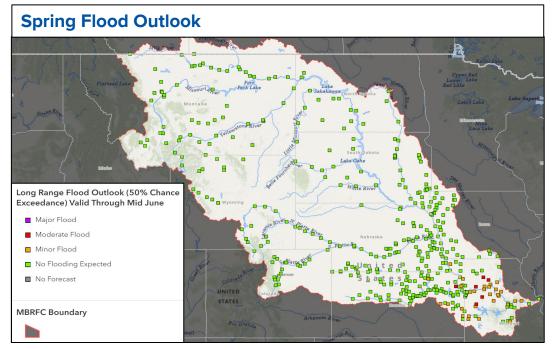
# **Near to Below Normal Flood Risk with Ongoing Drought in Parts of the Basin**

**Missouri Basin Spring Hazard Outlook** 

#### Flood Risk and Mountain Snow Update

Overall, the flood risk through this spring is considered near normal to below normal across the basin. There is at least a 50% chance of minor to moderate flooding for the lower Missouri River basin this spring. Mountain snowpack is well below average in the northern Rockies and near-average in the Platte River system. Overall, below normal mountain runoff is expected through the spring.



#### Flood Risk Considerations

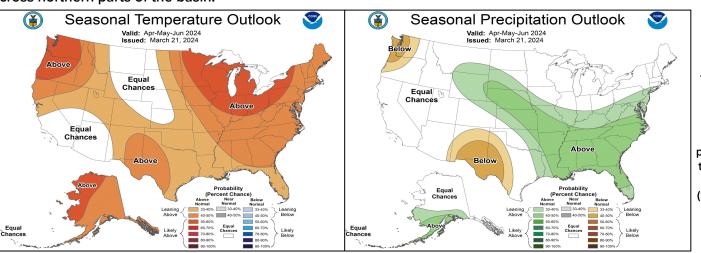
- Soils are still very dry across northern and eastern portions of the Missouri Basin.
- Frozen ground is not expected to influence runoff concerns.
- Springtime thunderstorm activity will likely drive some of the spring flood risk across the lower part of the basin.

LEFT: 90 Day Spring Flood Outlook, 50% Probability of Exceedance (Source: MBRFC)

# **April-May-June Temperature and Precipitation Outlook**

A transition from El Niño to ENSO-neutral is likely by the April through June period. These ENSO-neutral conditions are favored to transition toward a developing La Niña by this summer. The current seasonal temperature and precipitation outlooks reflect a blend of ENSO model guidance, model trends, and soil moisture, as applicable.

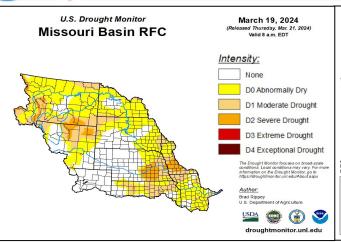
The spring outlook for April through June 2024 slightly favors increased chances for warmer than normal conditions across eastern parts of the basin with equal chances for above, below, or near normal seasonal temperatures favored across western parts of the basin. As for precipitation, the outlook slightly favors wetter than normal conditions across central and southern parts of the basin with equal chances for above, below, or near normal precipitation across northern parts of the basin.

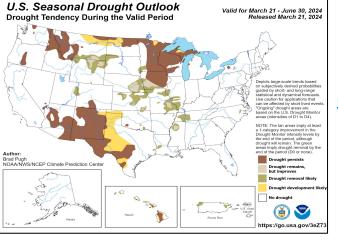


LEFT: **Temperature** and Precipitation Outlooks for the 3-month period of April through June 2024. (Source: CPC)

Released: March 21, 2024

**Regional Operations Center** 





LEFT: U.S.
Drought Monitor
as of March 19,
2024
(Source: U.S.
Drought Monitor)

RIGHT: Seasonal Drought Outlook through June 30, 2024 (Source: CPC)

### **Drought Conditions and Drought Outlook**

The mid-March U.S. Drought Monitor update notes that nearly 26% of the Missouri River Basin is experiencing some degree of drought conditions, with 6% of the region currently experiencing severe, extreme, or exceptional drought. The seasonal drought outlook suggests some areas of improvement in drought conditions across southeastern parts

of the basin, with persisting or developing drought conditions possible across northern portions of the basin.

#### Fire Risk

The combination of ongoing drought and warmer than normal conditions favored for this spring will result in an early and active start to the fire season across parts of the Northern Plains and Central Plains. Limited snow from the winter has left grasses upright in some areas, which will further increase fire risk.

#### **Water Resource Information**

Near or below normal streamflow and water levels, along with drier soils for parts of the basin, suggest the following potential impacts to water resources:

- Water supply concerns and limited groundwater.
- Increase in water quality issues.
- Lower flow on parts of the Missouri River.
- Potential impacts for water recreation and/or tourism.

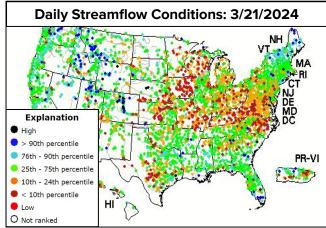
## **Agricultural Information**

The spring outlooks across the basin suggest the following potential agricultural impacts across parts of the basin:

- Continued winter wheat damage from ongoing drought.
- Low water in stock ponds due to dry conditions.
- Limited water possible for livestock or irrigation.
- Earlier than average crop planting may be possible.



ABOVE: April 2024 outlook for Significant Wildland Fire (Source: NIFC)



ABOVE: Daily Streamflow Conditions (Source: USGS)

#### For more information visit:

Local Forecast – weather.gov

Long-Range Outlooks –

cpc.ncep.noaa.gov

River Forecasts – water.weather.gov/ahps/forecasts.php

Weather & Climate Data – ncei.noaa.gov

Fire Outlook – nifc.gov/nicc

Drought Information – drought.gov

Agricultural Outlook – usda gov/oce/ag-outlook-f

Agricultural Outlook – <u>usda.qov/oce/aq-outlook-forum</u> Streamflow Data -

https://waterwatch.usgs.gov/index.php?id=ww

