

Regional Operations Center

Upper Mississippi Valley Spring Hazard Outlook Above Average Risk of Significant Flooding in the Red River Valley

Setting the Stage: Precipitation and Soil Moisture

Precipitation since this past fall has helped to improve soil moisture across northern parts of the basin, resulting in some improvement to the ongoing drought. The areas with the highest snow water equivalent were across eastern North Dakota into western Minnesota due to some heavy snowfall events from mid to late winter. Elsewhere across the basin, the overall conditions this winter were generally drier than normal. Even so, drought conditions have improved compared to this time last year across the region and are certainly much improved from the widespread drought that was present this past summer.



Spring Climate Outlook: March - May

The March outlook favors increased chances for wetter than normal conditions across the southeastern part of the basin, with warmer than normal conditions favored across the southern part of the basin and a slight chance for cooler than normal conditions favored across the north. The long-range outlook for March through May favors increased chances for warmer than normal conditions across almost the entire region. Wetter than normal conditions are slightly favored across the southeastern part of the region, with equal chances for above or below normal precipitation across the northwestern part of the region.

 5
 10
 25
 50
 75
 100
 125
 150
 175
 200
 300
 400
 500
 750

 ABOVE: Percent of 1991-2020 Normals Precipitation, from Dec. 1, 2021 to Mar. 10, 2022. (Source: MRCC)







ABOVE: Temperature and Precipitation Outlooks for March through May 2022. (Source: CPC)



Central Region

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Flood Risk

The flood risk for this spring is considered to be generally average for much of the Upper Mississippi Valley, with an above normal flood risk for the Red River Valley in the Hudson Bay Drainage. The bulk of any flooding that occurs will likely be minor with a few locations potentially experiencing moderate flooding. However, moderate and even some major flooding will be possible in the Red River Valley due to contributions from the existing high snow water content. Spring temperatures along with rainfall and thunderstorm chances ultimately will drive the flood risk through the spring.

Drought Conditions

The U.S. Drought Monitor shows that drought conditions exist across northern and central portions of the region. However, the combination of snow melt and runoff, spring precipitation chances, and the average to above-average flood risk could result in some areas potentially seeing improvement or even removal of drought designations this spring across portions of Minnesota, Wisconsin, Illinois, lowa, and Michigan.

Flood Information

Due to the average to above average flood risk potential, keep these tips in mind when it comes to flooding:

- Floodwaters can contain chemicals, sewage, and disease.
- Water depth can change unexpectedly (i.e., storm drainage issues).

Agricultural Information

The upcoming wet trend and warmer than normal temperatures across southern parts of the basin suggest the following potential agricultural impacts:

• The combination of wet soils from the winter and wet spring days may delay or impact spring crop planting.



ABOVE: March-May 2022 Spring Flood Outlook. (Source: NOAA NWS AHPS)



For more information visit:

Local Forecast – <u>weather.gov</u> Long-Range Outlooks – cpc.ncep.noaa.gov River Forecasts – water.weather.gov/ahps/forecasts.php Weather & Climate Data – <u>ncei.noaa.gov</u> Fire Outlook – <u>nifc.gov/nicc</u> Drought Information – <u>drought.gov</u> Agricultural Outlook – <u>usda.gov/oce/ag-outlook-forum</u> Streamflow Data -<u>https://waterwatch.usgs.gov/index.php?id=ww</u>



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