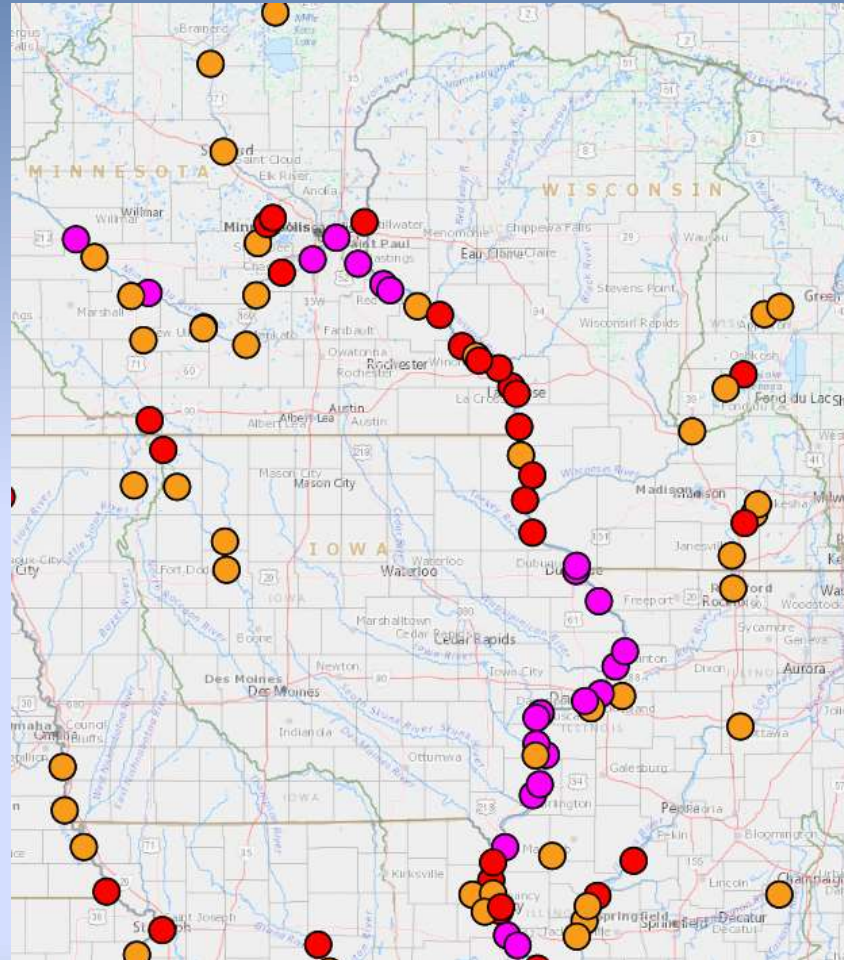




NWS Quad Cities Flood Update

April 1, 2019

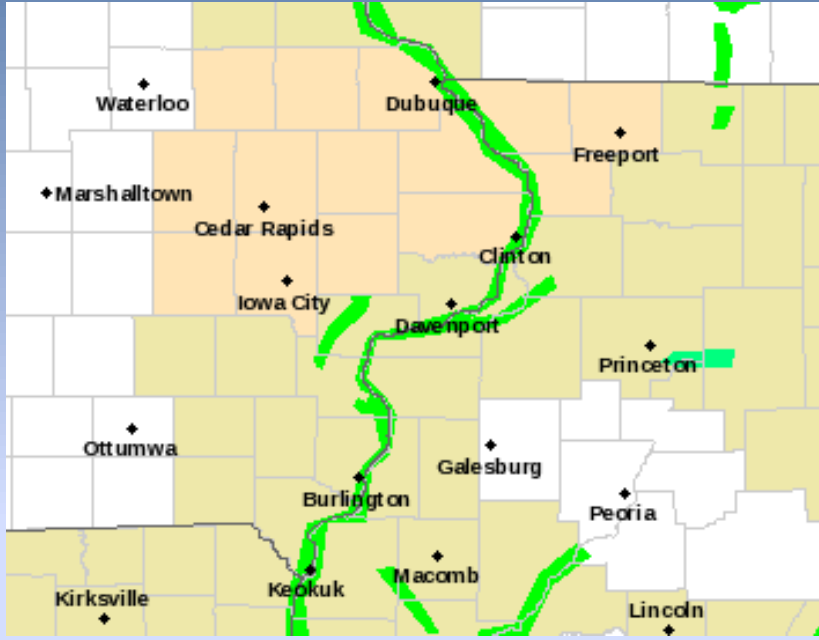


National Weather Service

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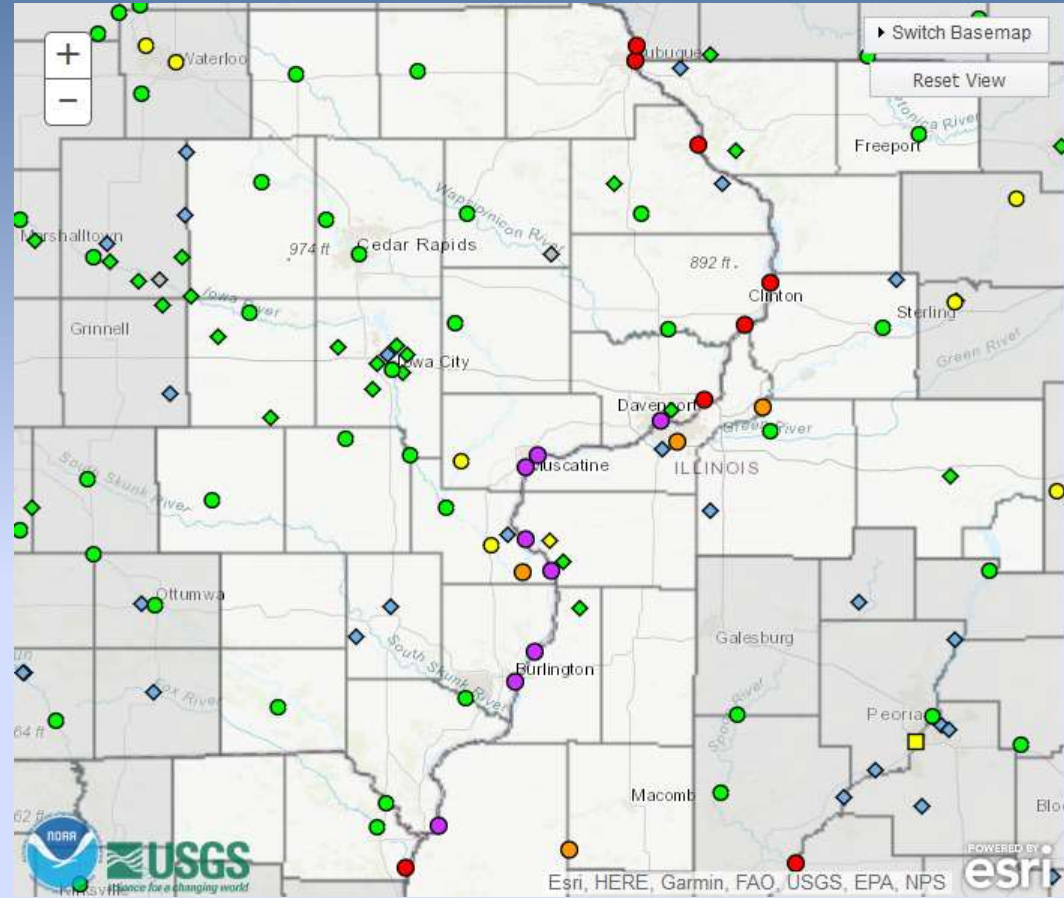


Current Warnings



Flood Warnings remain on the Rock & La Moine River in Illinois & the Cedar River in Iowa.

**** All are observing receding levels!**

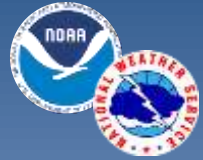


Mississippi River Continues to Rise



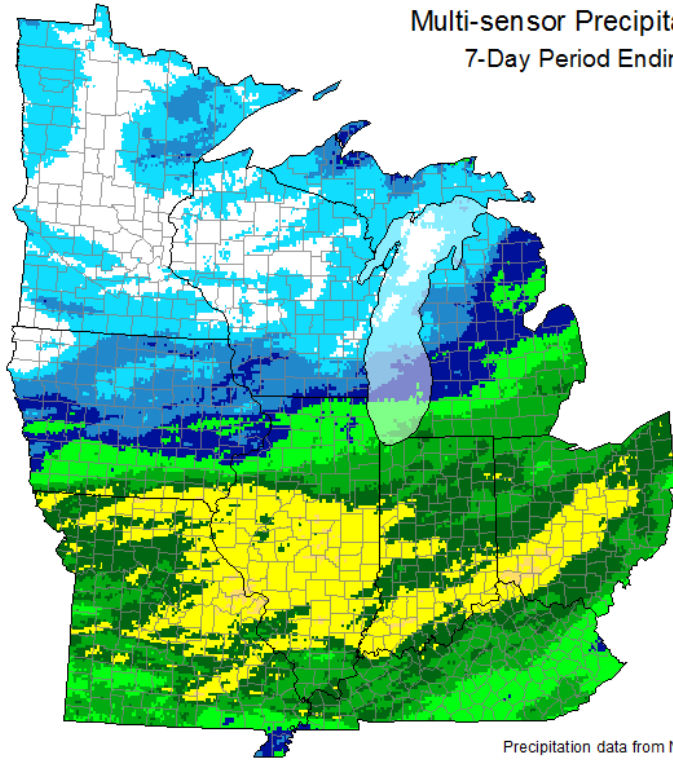
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Observed Precipitation: 3/24 – 3/30

Multi-sensor Precipitation: Observed (inches)
7-Day Period Ending the Morning of 3/31/2019

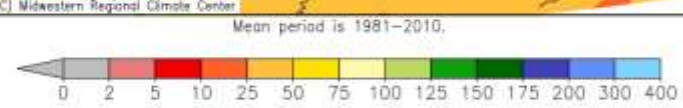
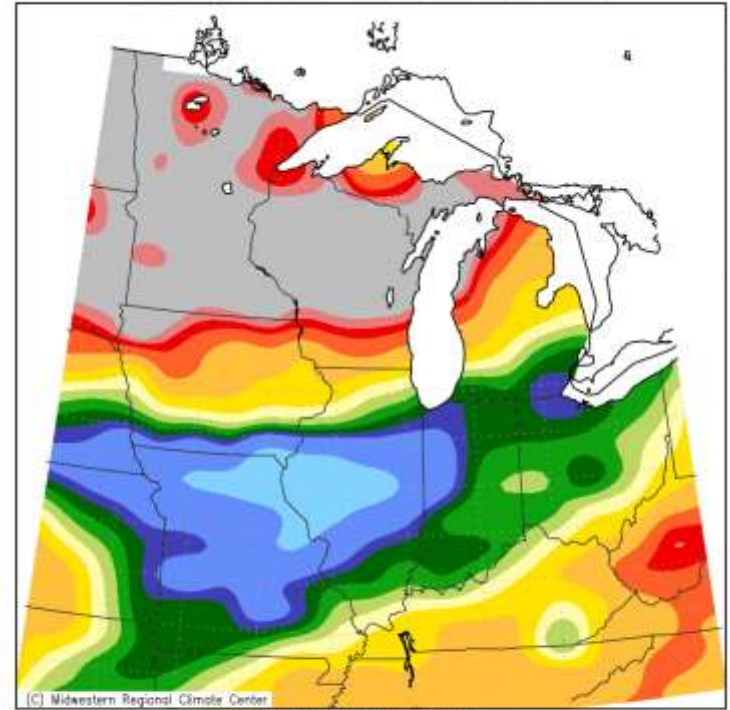


- > 20.0
- 15.0 to 20.0
- 10.0 to 15.0
- 8.0 to 10.0
- 6.0 to 8.0
- 5.0 to 6.0
- 4.0 to 5.0
- 3.0 to 4.0
- 2.0 to 3.0
- 1.5 to 2.0
- 1.0 to 1.5
- 0.50 to 1.00
- 0.25 to 0.50
- 0.10 to 0.25
- 0.01 to 0.10
- < 0.01 (Not Shown)
- Missing Data



Precipitation data from NWS AHPS: <http://water.weather.gov/precip>

Accumulated Precipitation: Percent of Mean
March 24, 2019 to March 30, 2019



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign



National Weather Service

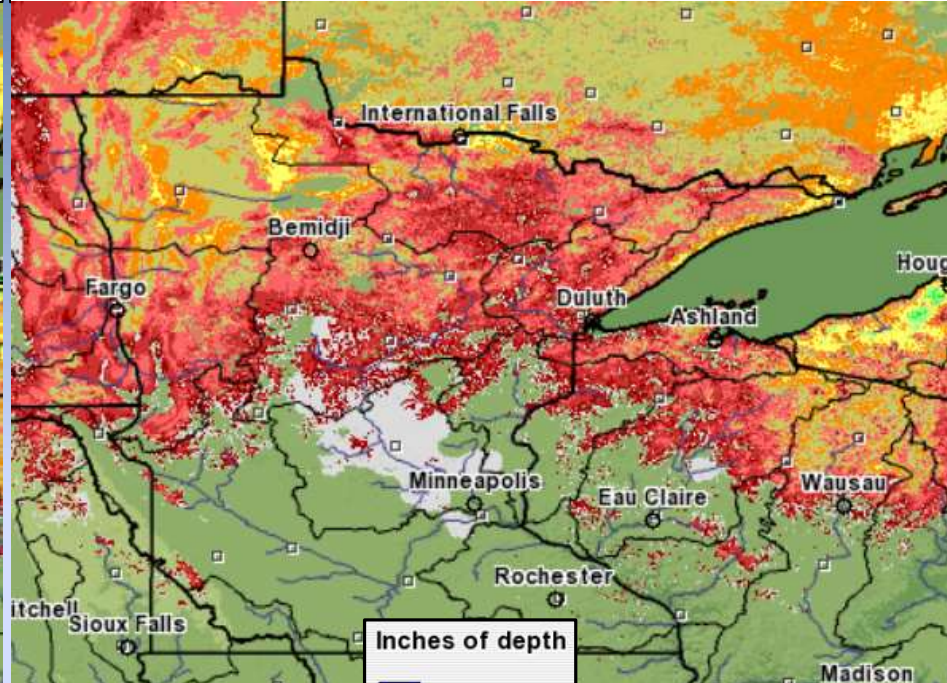
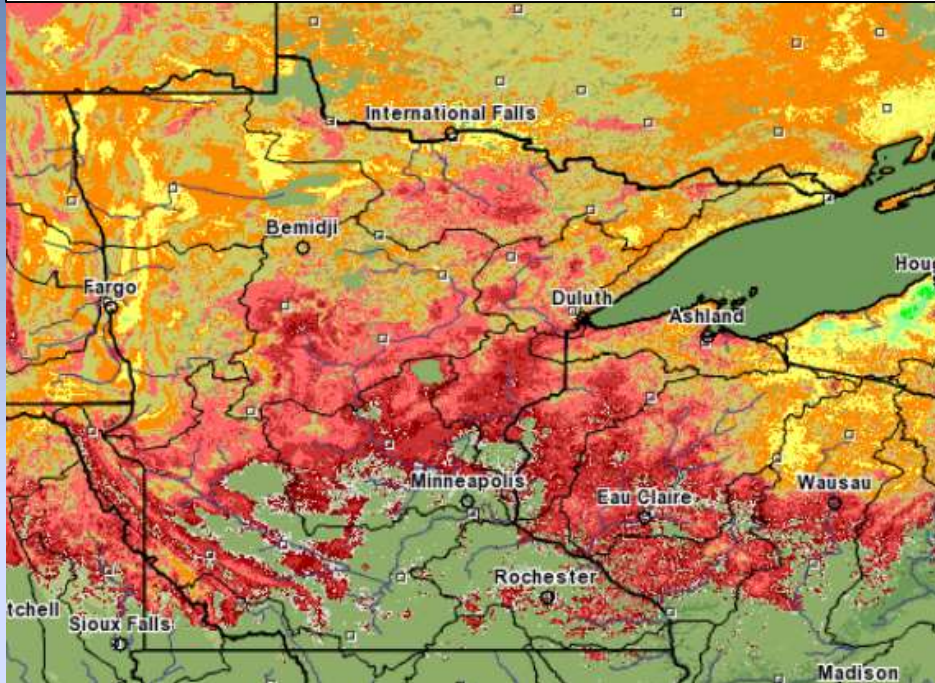
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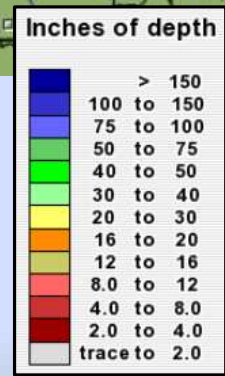
Snowpack Change in the Past 7 Days

Snow Depth – March 25, 2019

Snow Depth – April 1, 2019



Considerable melting has occurred in the past week. Overall, the melt has occurred at a favorable pace.

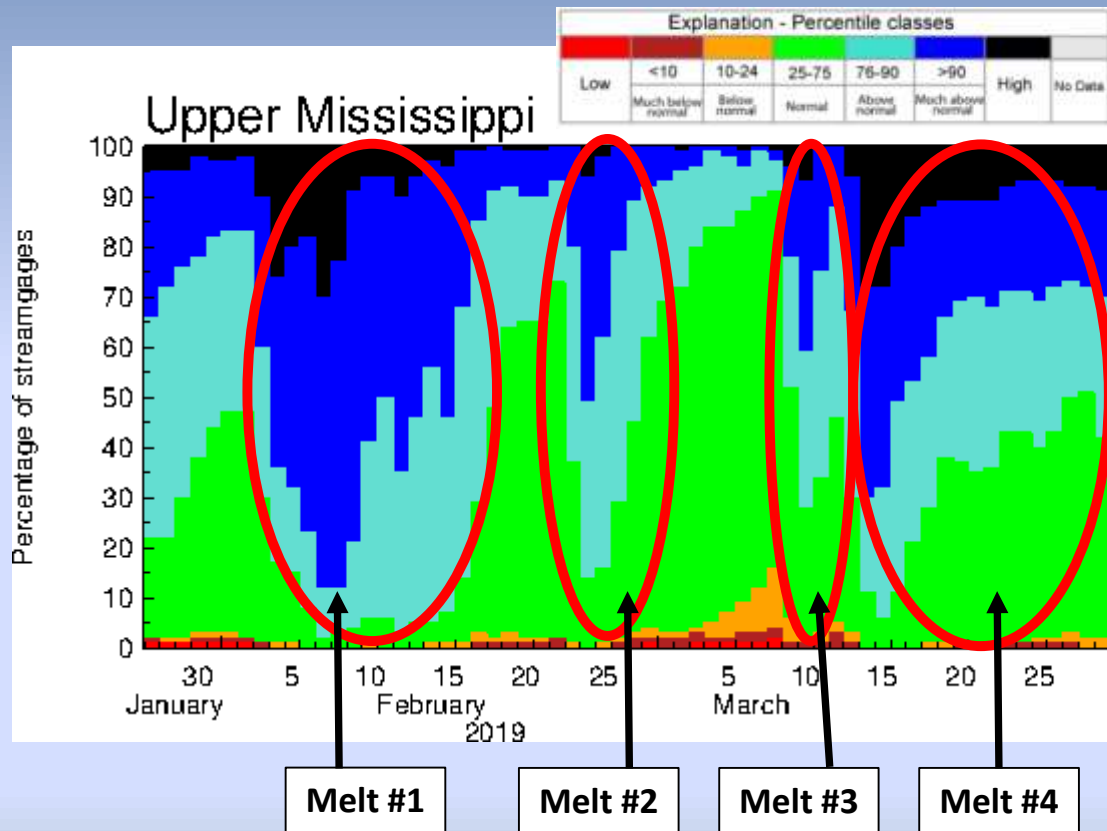




River Conditions

Upper Mississippi River Basin

The graphic shows the number of rounds of snowmelt that occurred across the Upper Mississippi River Watershed. With every melt, the number of streamgages with above normal flows increased.



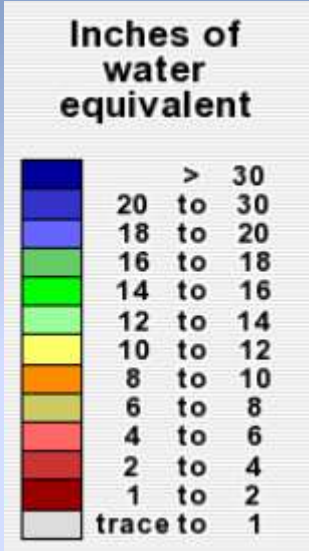
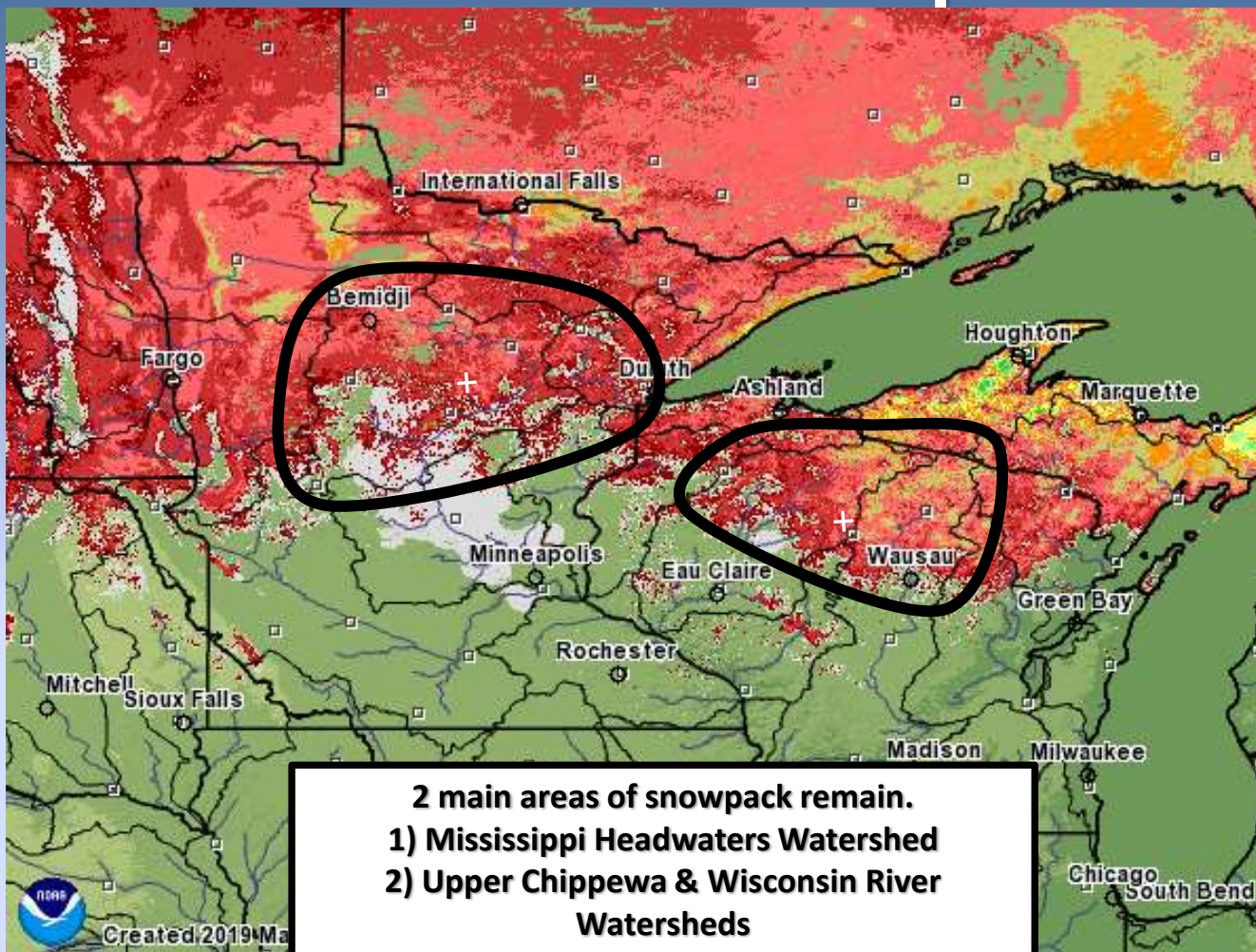
The 4 different rounds of melting lessened the chances for record flooding on the Mississippi River substantially.





Current Snow Water Equivalent

Remaining liquid water in the snow available for runoff as of 4/1/2019



2 main areas of snowpack remain.
1) Mississippi Headwaters Watershed
2) Upper Chippewa & Wisconsin River Watersheds

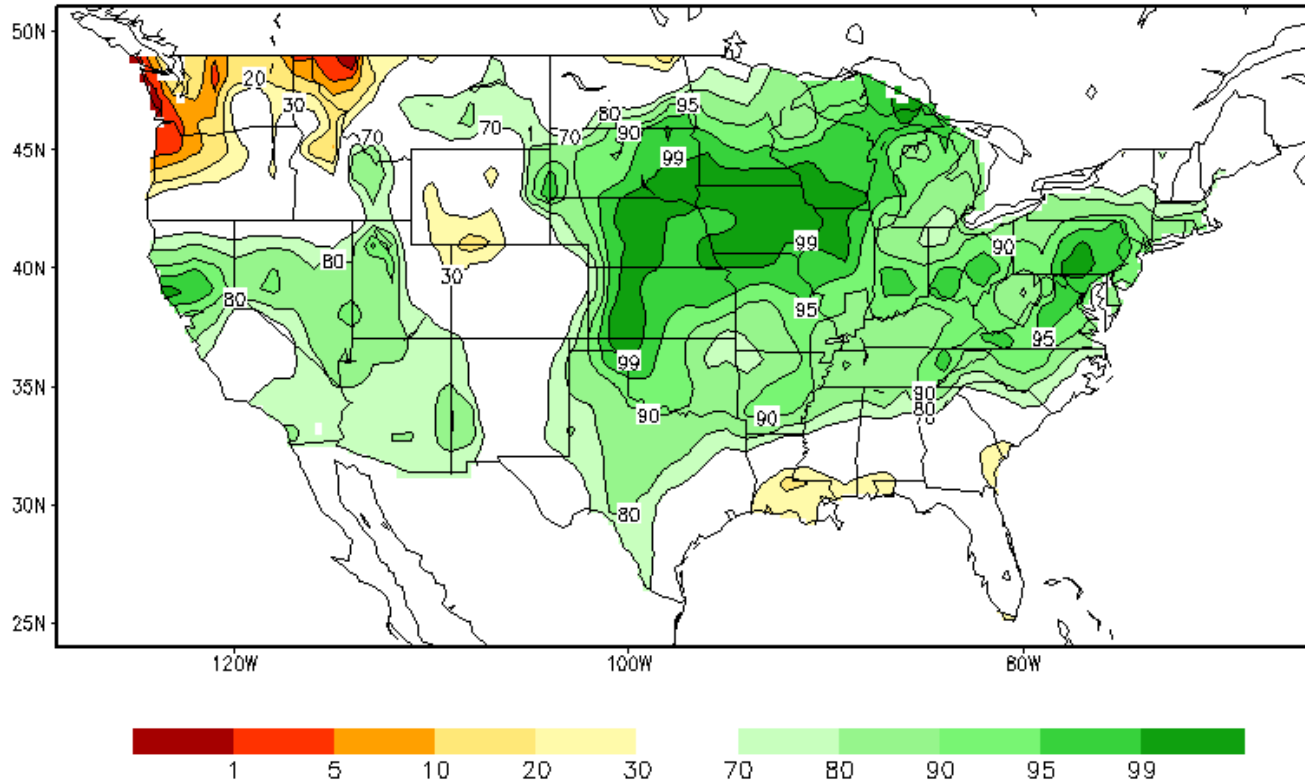
Last rise due to snowmelt expected 4/15-4/25





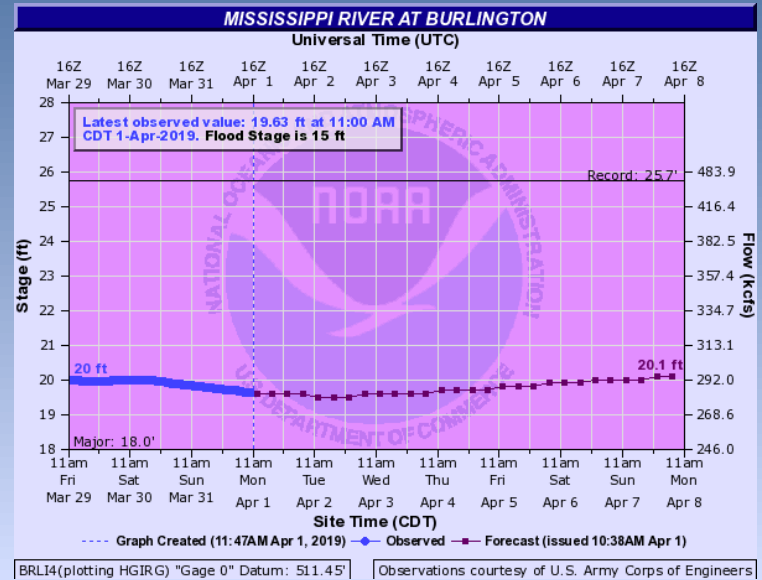
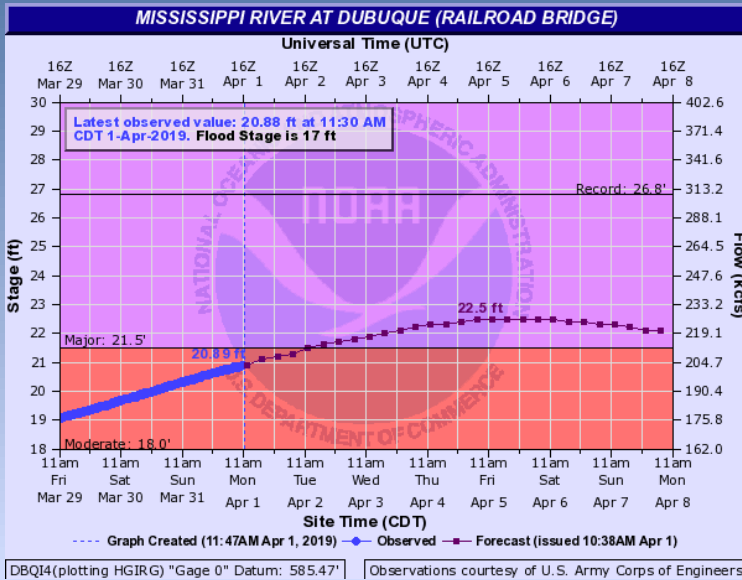
Current Soil Moisture

Calculated Soil Moisture Ranking Percentile
MAR 31, 2019





Mississippi River Crest Information



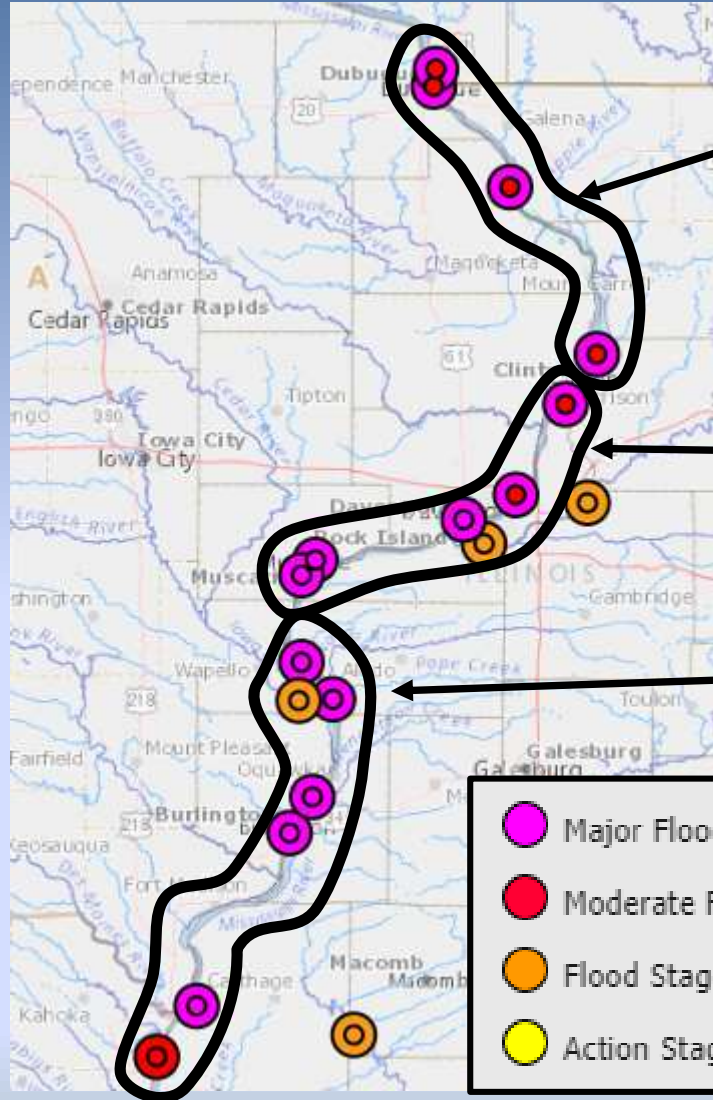
- Dubuque → Fulton: Crests are now within 7 days
- Camanche → Muscatine: Crests at the end of the 7 day forecast
- New Boston → Gregory Landing: Crests still beyond 7 days (4/8-4/12)



Forecasts

Current and Forecast stages for the next 7 days.

Small circle – current flood category
Large circle – forecast flood category that is forecasted in the next 7 days.



Crests 4/5 → 4/8

Crests 4/7 → 4/9

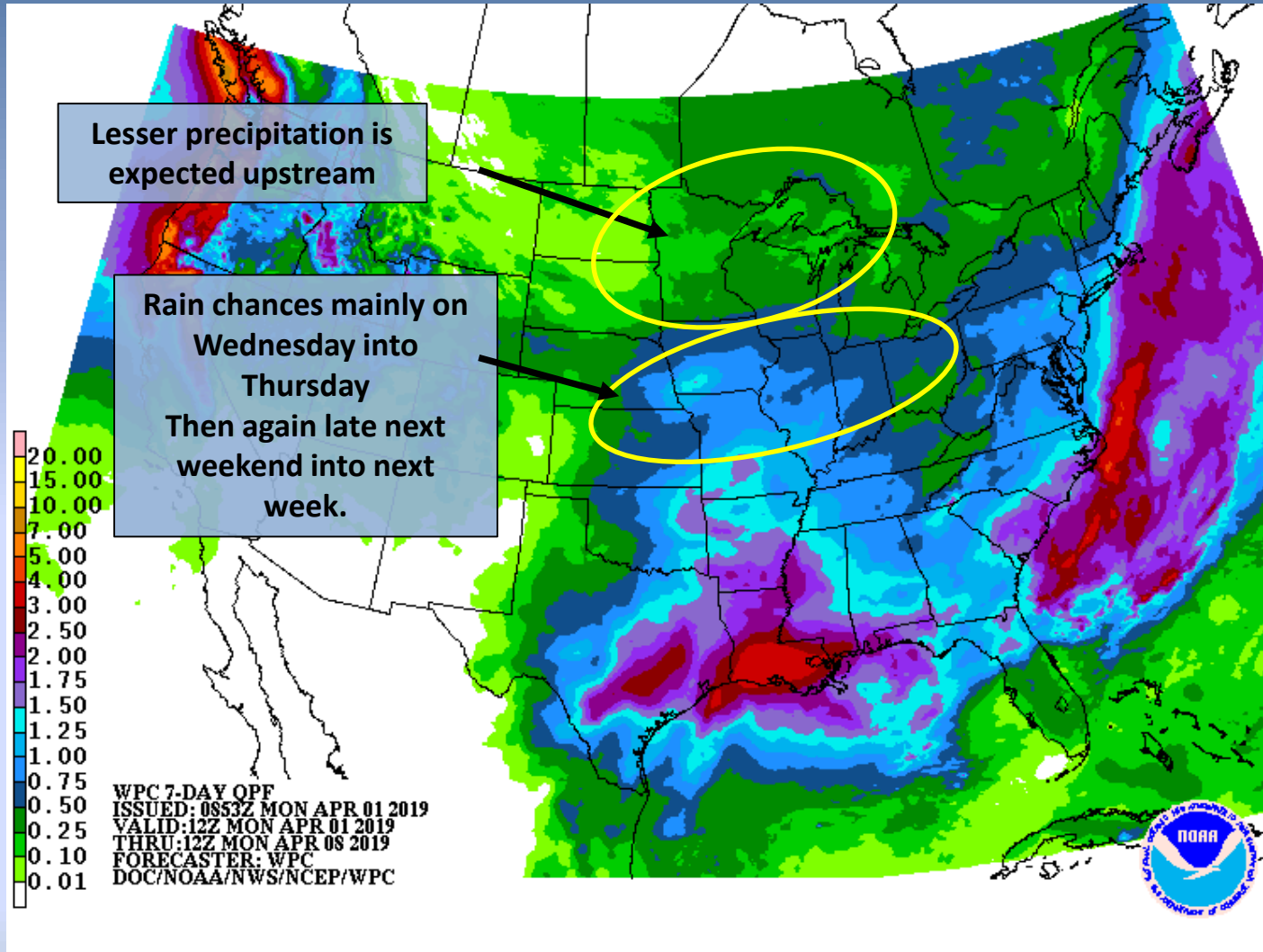
Crests 4/8 → 4/11

- Major Flood
- Moderate Flood
- Flood Stage
- Action Stage





7-Day Forecast Precipitation



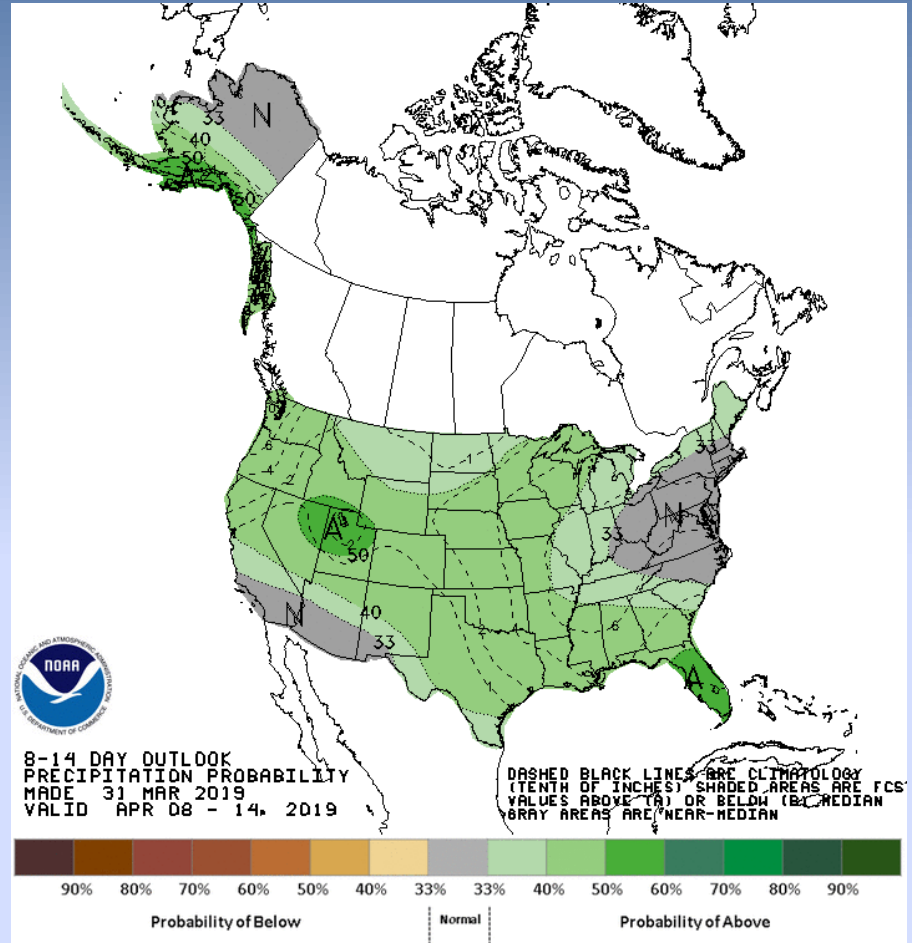
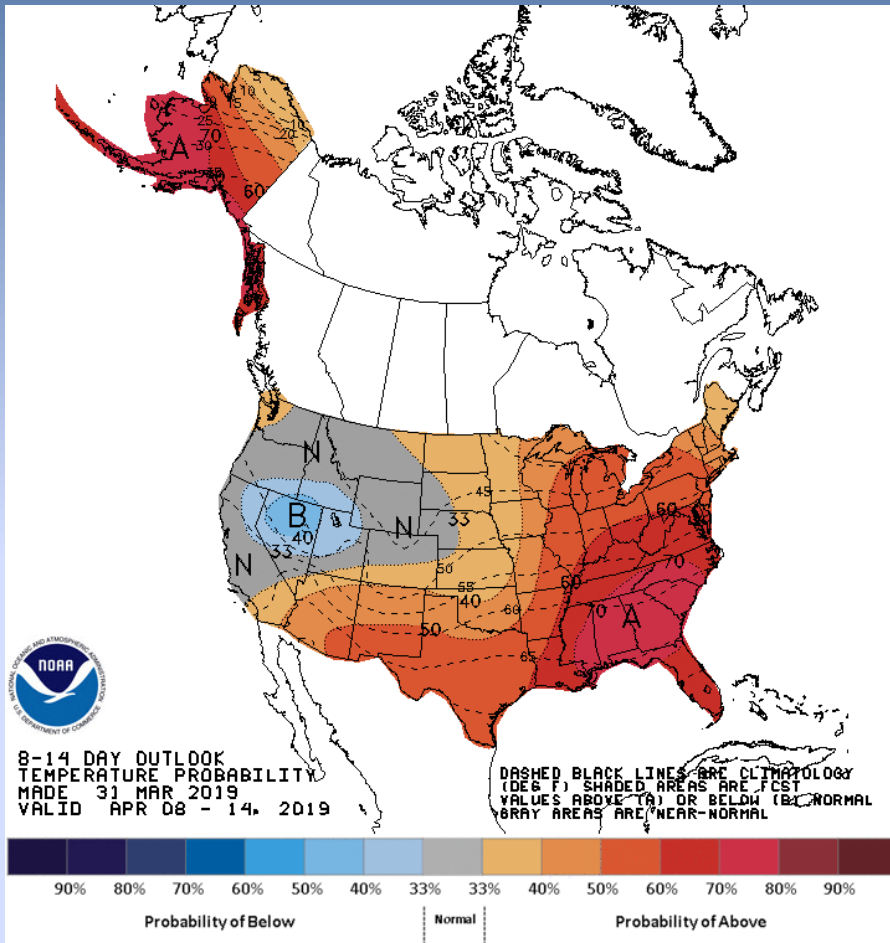
Trend continues for wetter conditions in the local area and to the south, with drier conditions to the north.

Considerable uncertainty in the rainfall forecast for the next week to 10 days.





Week 2 Outlook



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Week 2 Precipitation Risk





Summary

- Majority of the snowpack has melted. What remains may cause another minor rise from 4/15 → 4/25.
- Crests are now within 7 days in the northern parts of the area.
- Additional rainfall in the next 2 weeks will be a key player on any changes in the timing or crest heights.
- The entire area remains very susceptible to additional river rises with any rainfall.
- The rainfall forecast for the next 2 weeks does show potential for a wetter weather pattern, but confidence is low on how much rain will fall or where it will fall.
- The longer the rivers stay at high levels, the more chances there will be to have heavy rains and then subsequent river rises.





Information Sources

- Advanced Hydrologic Prediction Service (AHPS) (observations and forecasts, etc) — water.weather.gov
- Local Quad Cities WFO AHPS — water.weather.gov/ahps2/index.php?wfo=DVN
- North Central River Forecast Center — weather.gov/ncrfc
- National Operational Hydrologic Remote Sensing Center (snow information) — nohrsc.noaa.gov
- NWS Weather Prediction Center — wpc.ncep.noaa.gov
- NWS Climate Prediction Center — cpc.ncep.noaa.gov

Quad Cities WFO Forecast Discussions (technical weather and hydrology discussion)
forecast.weather.gov/product.php?site=DVN&issuedby=DVN&product=AFD

Find out more information at: www.weather.gov/dvn/River_Levels

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