

2020 SPRING FLOOD OUTLOOK

JOHN WETENKAMP

NWS LA CROSSE, WI

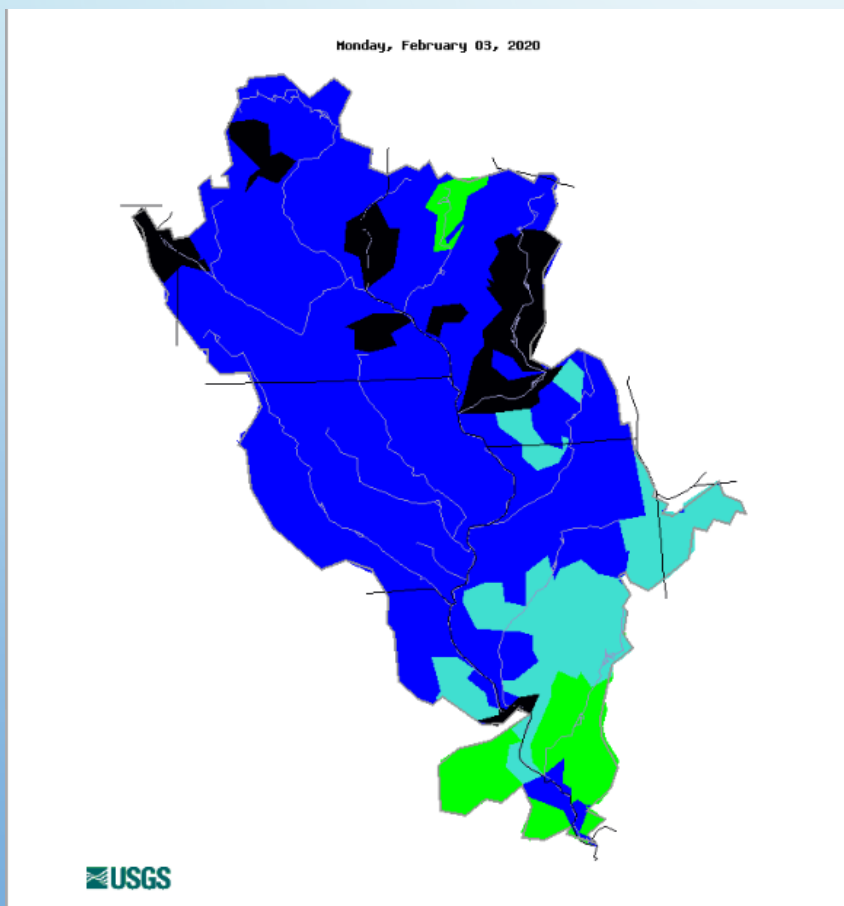


SPRING 2020 FLOODING POTENTIAL

- INCREASED THREAT FOR SPRING FLOODING
 - HIGH RIVER LEVELS
 - HIGH SOIL MOISTURE
 - SNOWPACK INCREASING (NORTHERN AREAS)
- SIGNIFICANT FLOODING IS NOT YET CERTAIN. CONTINUE TO MONITOR THE LATEST FORECASTS AND COMMUNICATIONS FROM THE NATIONAL WEATHER SERVICE.

CURRENT RIVER LEVELS

Map of daily streamflow compared to historical streamflow for the day of the year (Upper Mississippi)



Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	Data

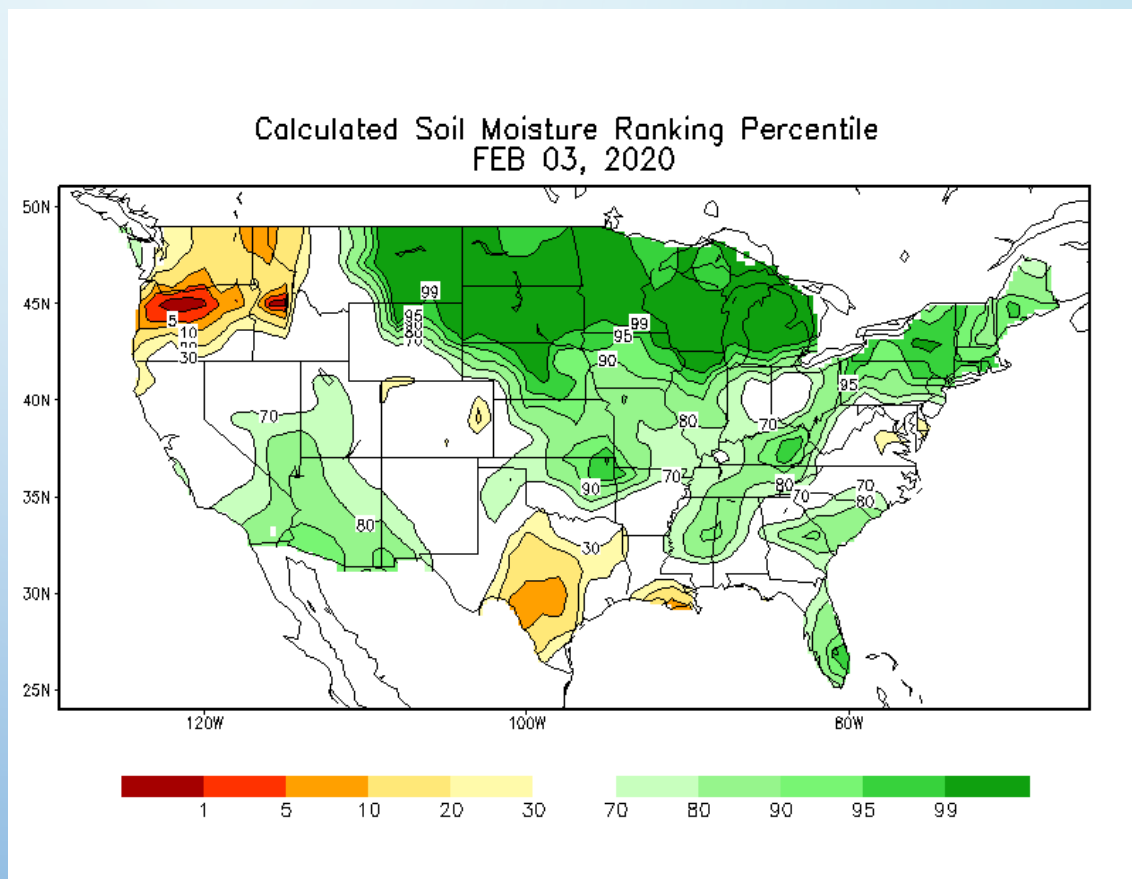
Most of the Upper Mississippi is >90 Percentile



Soils are very wet from above normal precipitation over the past year.

99th percentile across much of the western Great Lakes into the Dakotas.

SOIL MOISTURE

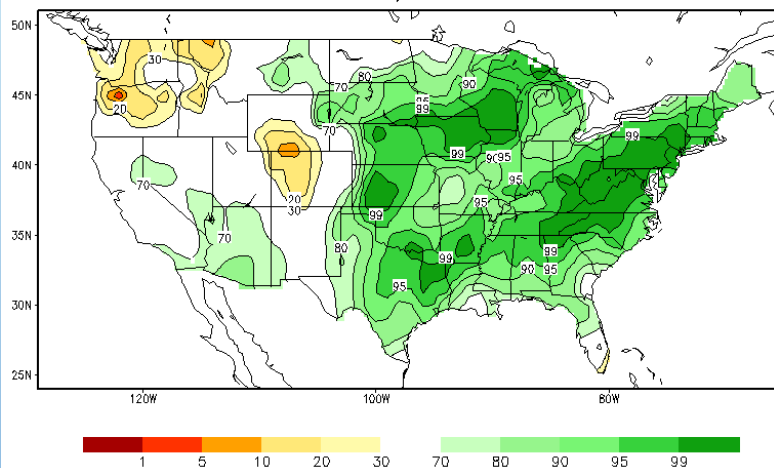


SOIL MOISTURE COMPARISON

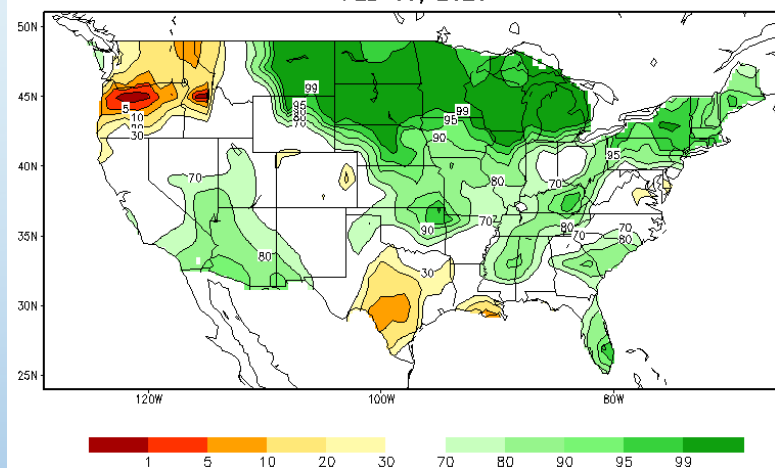
February 2019

February 3, 2020

Calculated Soil Moisture Ranking Percentile
FEB, 2019

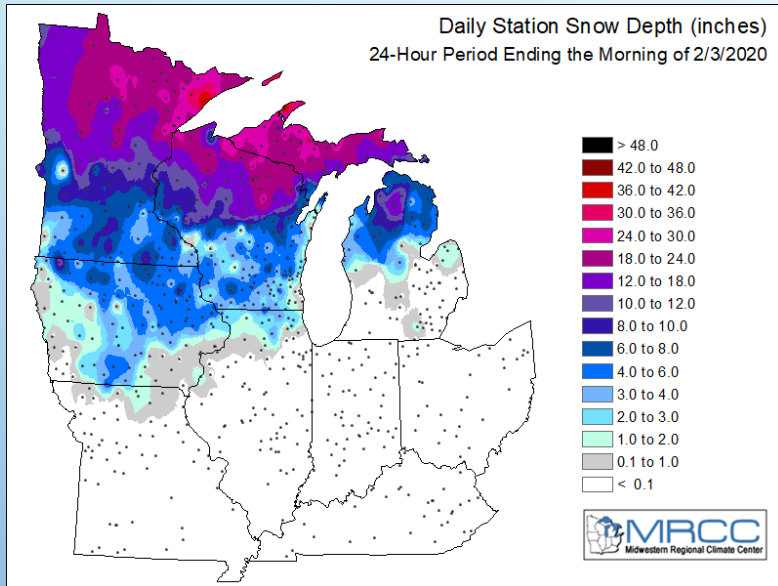


Calculated Soil Moisture Ranking Percentile
FEB 03, 2020

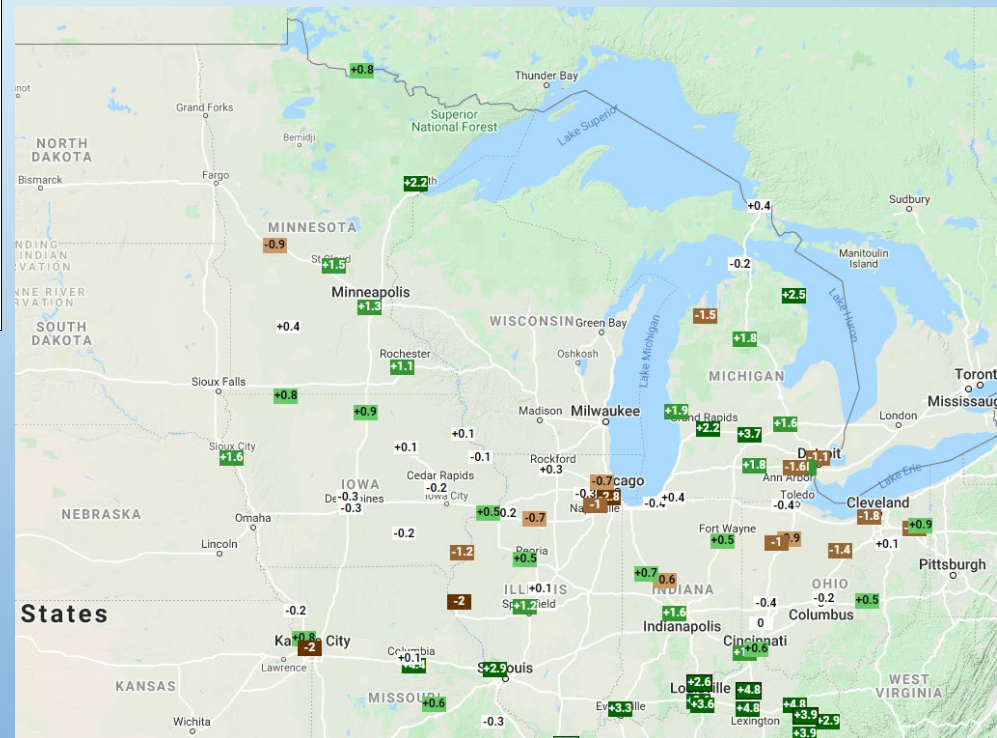


CURRENT SNOW/PRECIPITATION INFORMATION

National Weather Service
Protecting Lives and Property



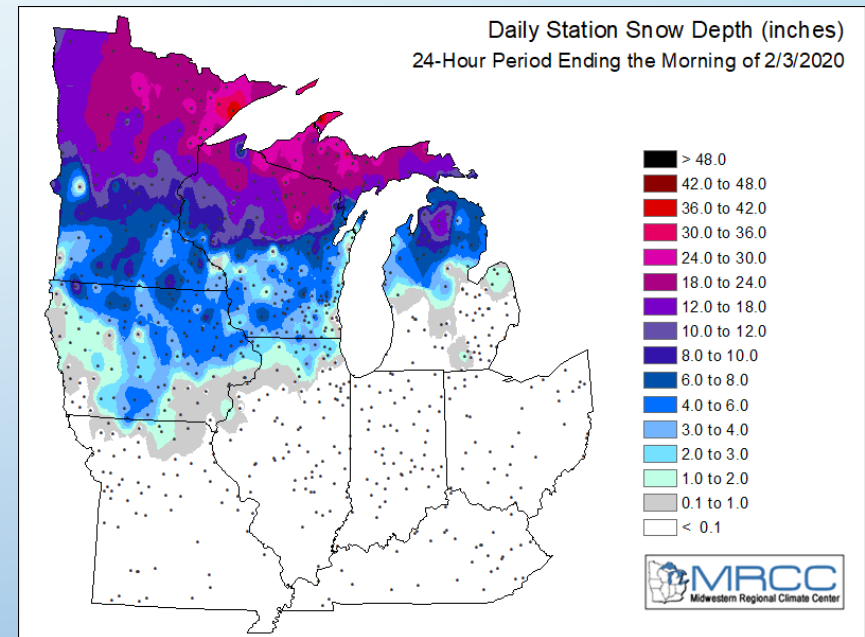
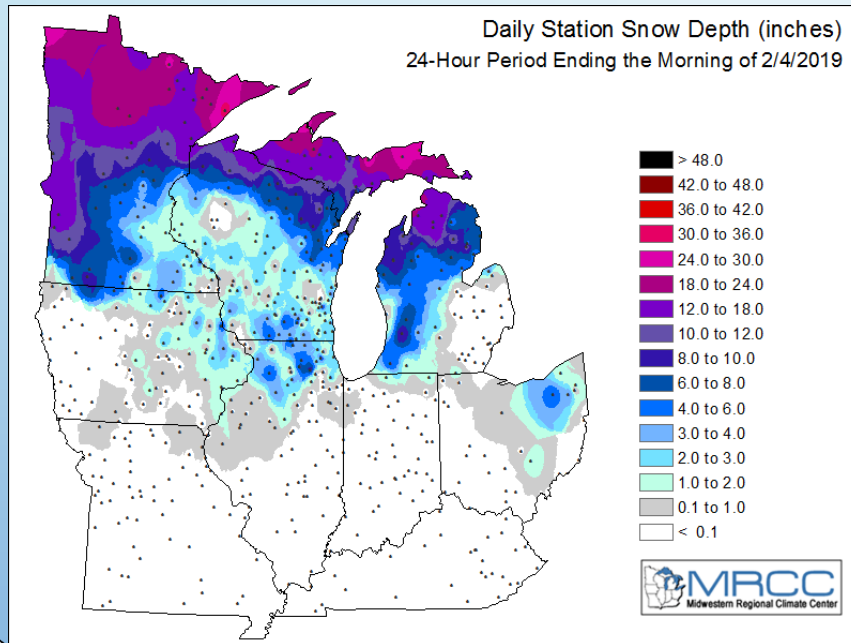
Precipitation Departure from Normal (Past 3 Months)



SNOWPACK COMPARISON

February 4, 2019

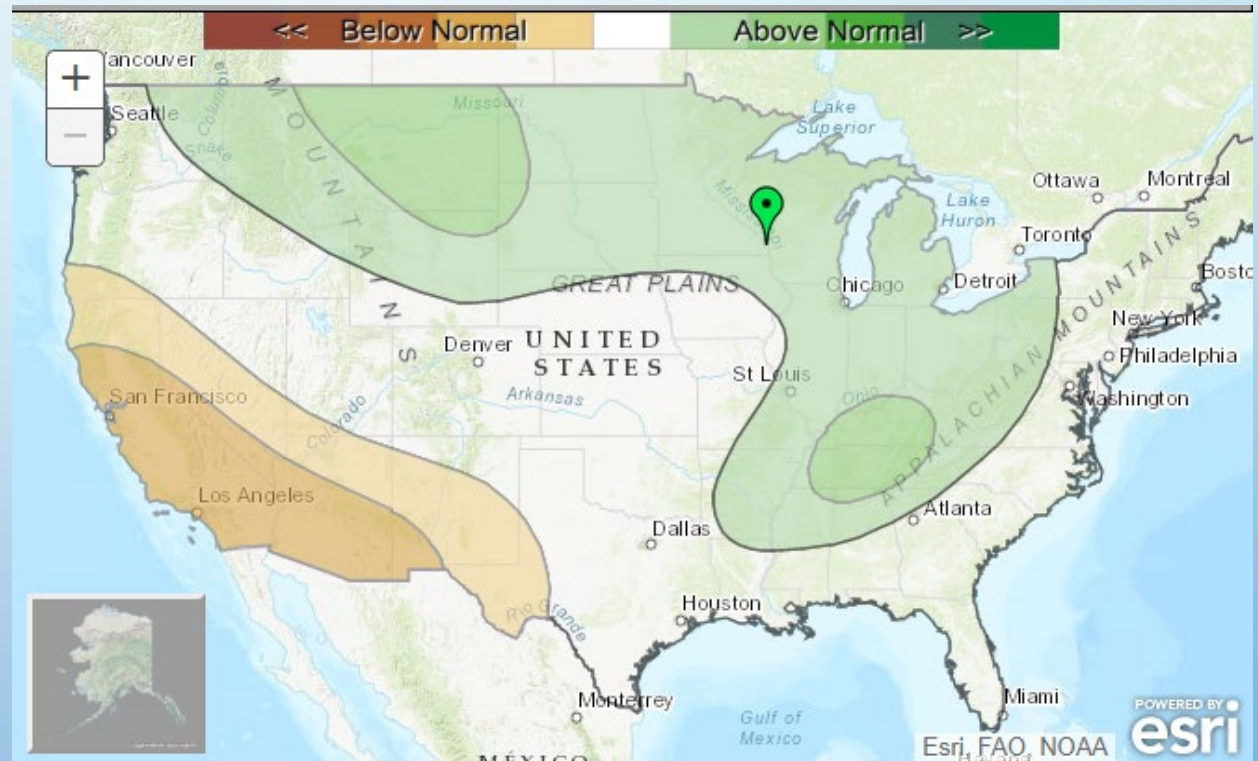
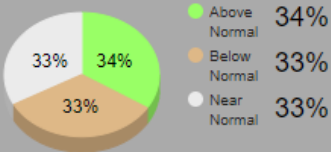
February 3, 2020



PRECIPITATION OUTLOOK THROUGH APRIL

Breakdown for La Crosse, WI

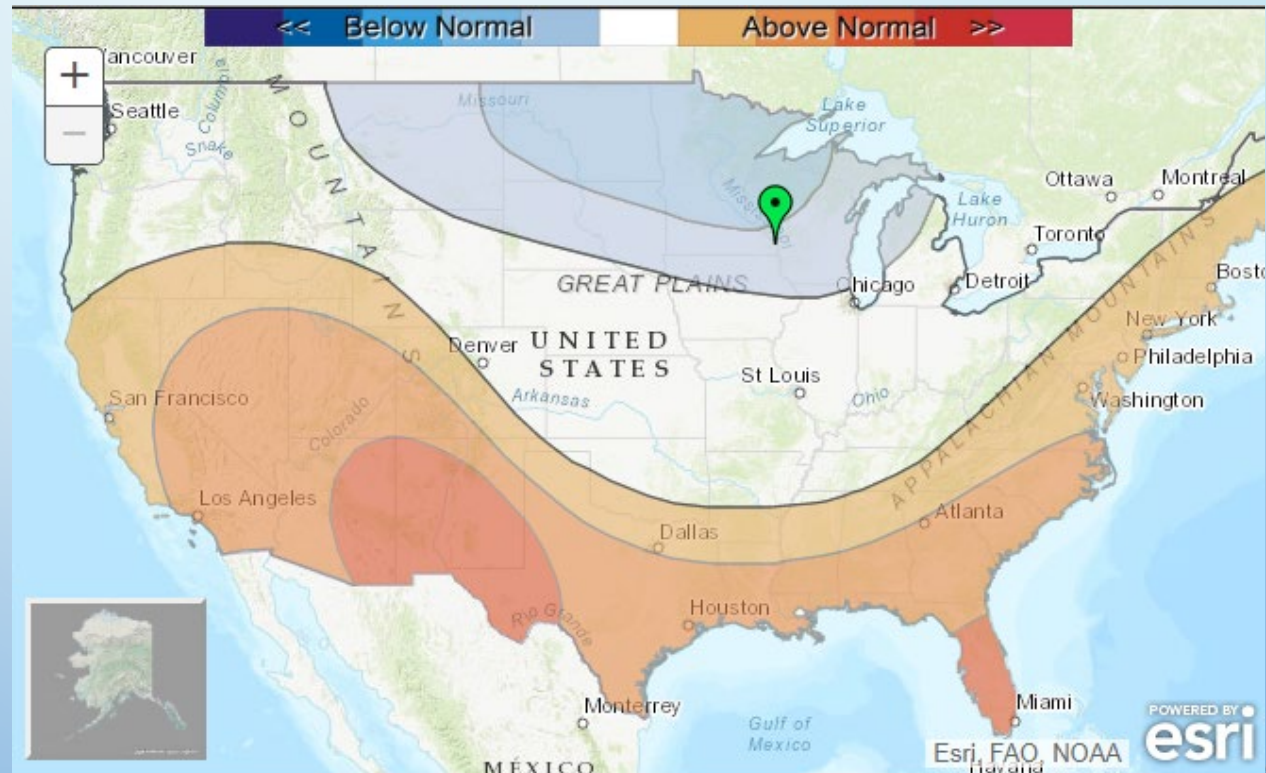
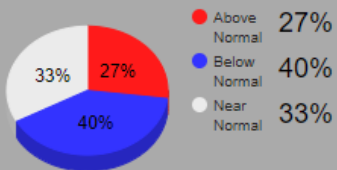
Three Category Precipitation Outlook
Normal Precipitation: **6.52**



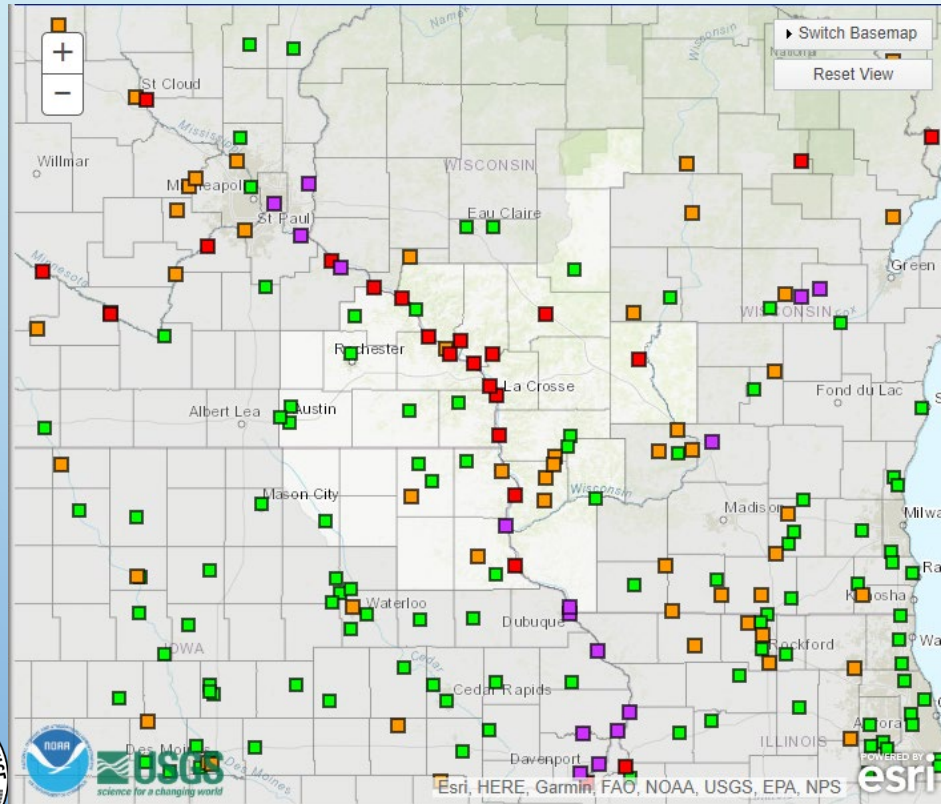
TEMPERATURE OUTLOOK THROUGH APRIL

Breakdown for La Crosse, WI

Three Category Temperature Outlook
Normal Maximum Temperature: **45**
Normal Minimum Temperature: **26**



LONG-RANGE FLOOD RISK



Long range outlook
based on conditions
on 1/20/2020.

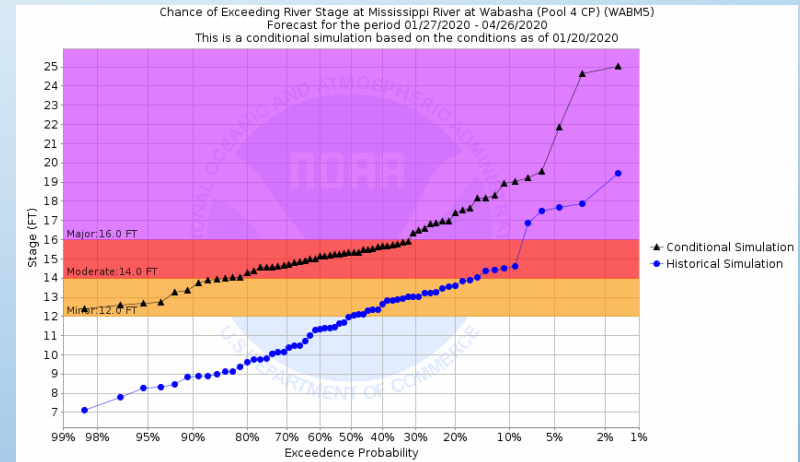
Several locations have
> 50% chance of
Moderate Flooding.

**First Spring Flood
Outlook: 2/13/2020**

SPRING FLOOD OUTLOOK DATES

National Weather Service
Protecting Lives and Property

- 1ST ISSUANCE: FEBRUARY 13TH
- 2ND ISSUANCE: FEBRUARY 27TH
- 3RD ISSUANCE: MARCH 12TH



SUMMARY

- INCREASED FLOODING THREAT THIS SPRING
- HIGHER THAN NORMAL STREAMFLOW AND WET SOIL CONDITIONS INCREASE THE FLOODING THREAT.
- HOWEVER SEVERAL OTHER FACTORS GO INTO DECREASING OR INCREASING THE FLOODING THREAT.

Threat	Impact to Potential Spring Flooding
High river levels	Increased Threat
High soil moisture	Increased Threat
Winter Precipitation	Slight Increase Northern Areas
Snowpack/Liquid Equivalent	Slight Increase Northern Areas
Rate of Snowmelt	Unknown
Frost Depth	Frost In Place But Variable Depth
Spring Precipitation	Unknown



THANK YOU

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