

A winter landscape featuring a red barn with a white door and a small cupola, situated in a snow-covered field. In the background, there are rolling hills covered in snow and a dense forest of trees with white frost on their branches. The sky is a clear, pale blue.

2021 Spring Flood Outlook

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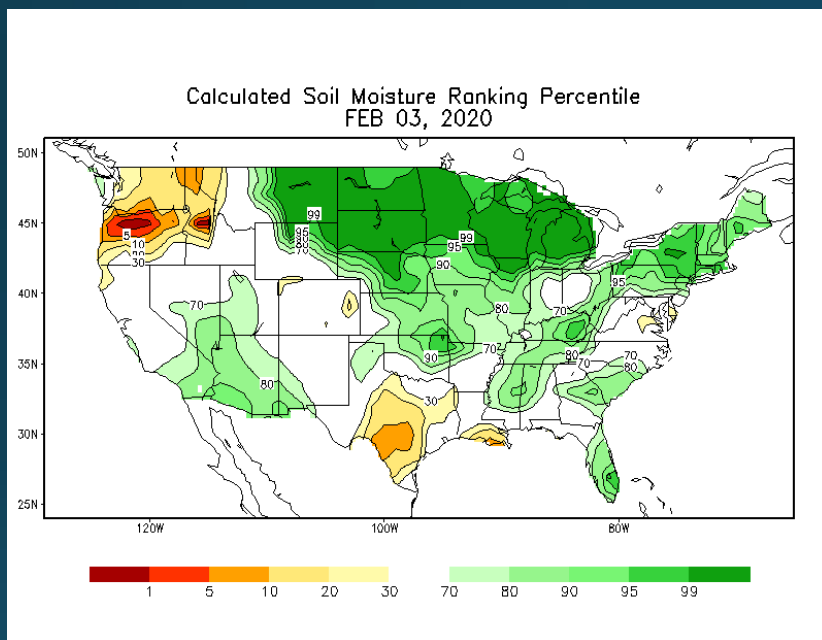
Spring 2021 Flooding Outlook

- Current conditions point to lower potential for spring flooding this year.
 - Near normal river levels
 - Lower to near normal soil moisture
 - Below normal snowpack
 - Shallow frost depths
- Things can change, we are only about 1/2 way through the Winter. Continue to monitor the latest forecasts and communications from the National Weather Service.

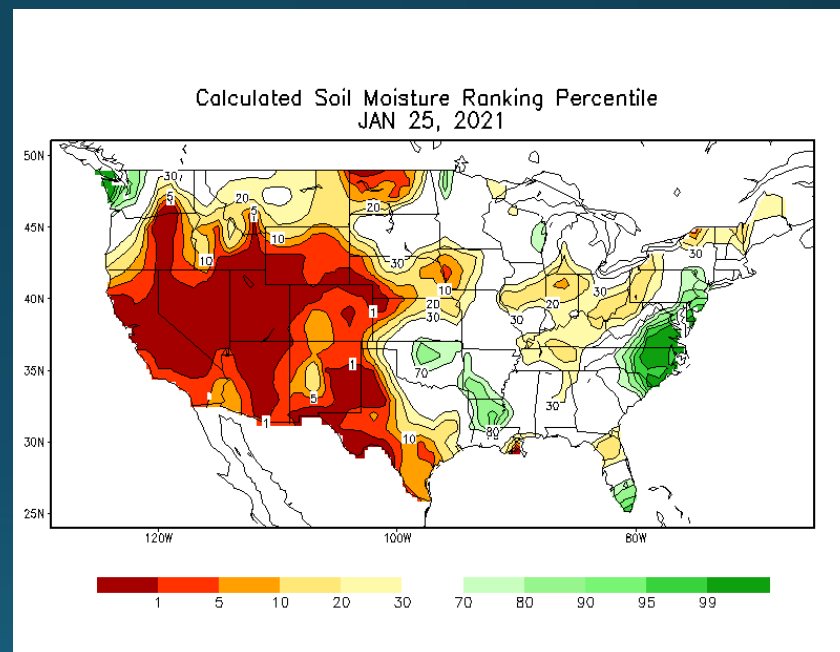


Soil Moisture

Last Year



This Year



Soil moisture is much lower this year. Last years soil moisture ranking was near the 99 percentile across much of the Upper Mississippi River Basin. That ranking is near normal this year or slightly below in some spots.

Less potential for runoff this year. What about frost depth?

Frost Depth

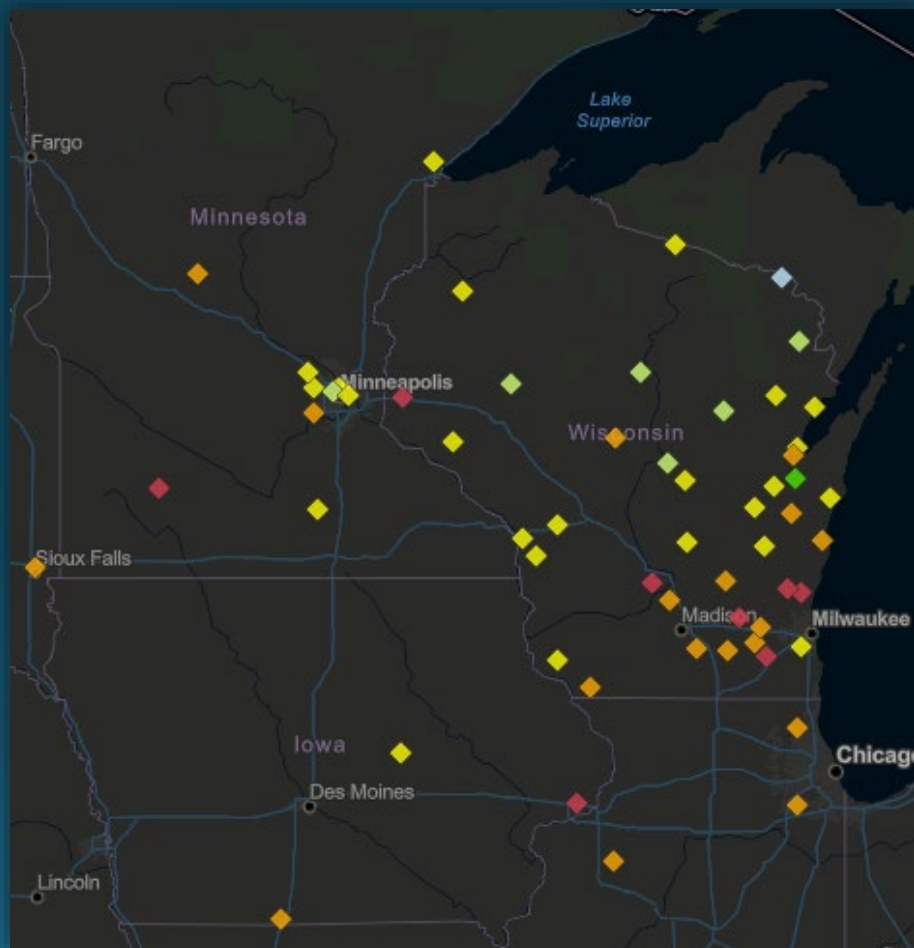
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NCRFC_Frost_Depth

FrostDepth

- ◆ > 60 - 80 (in)
- ◆ > 48 - 60 (in)
- ◆ > 36 - 48 (in)
- ◆ > 24 - 36 (in)
- ◆ > 18 - 24 (in)
- ◆ > 12 - 18 (in)
- ◆ > 6 - 12 (in)
- ◆ > 3 - 6 (in)
- ◆ 0 - 3 (in)



Frost depth compared to last year?

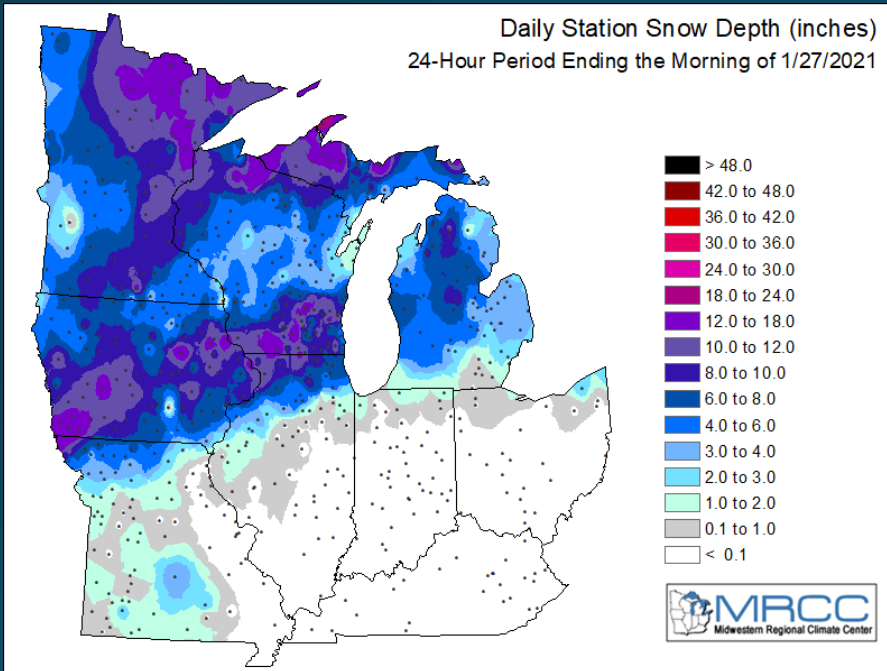
- January 26, 2020
 - Frost Depth at NWS La Crosse: **17 inches**
- January 26, 2021
 - Frost Depth at NWS La Crosse: **8 inches**



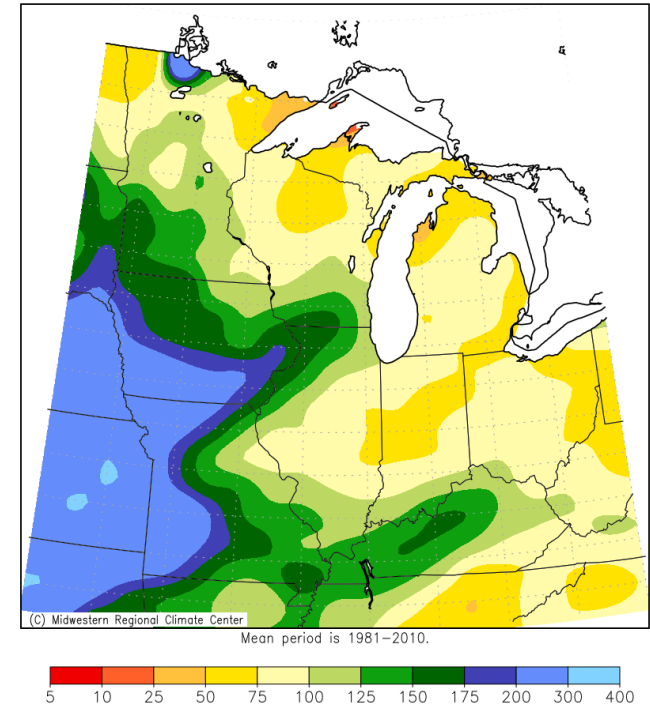
Current Snow/Precipitation Information

National Weather Service

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Accumulated Precipitation: Percent of Mean
December 28, 2020 to January 26, 2021



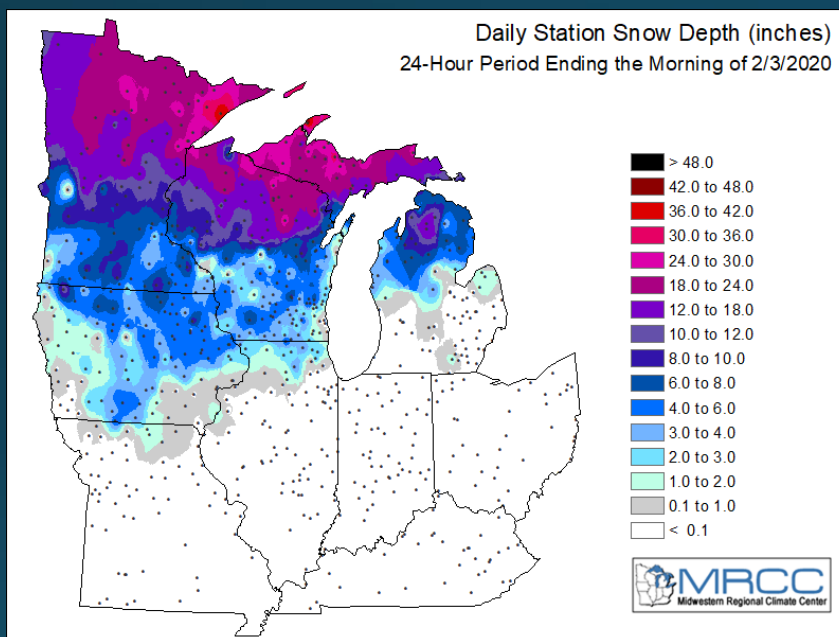
Midwestern Regional Climate Center

Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

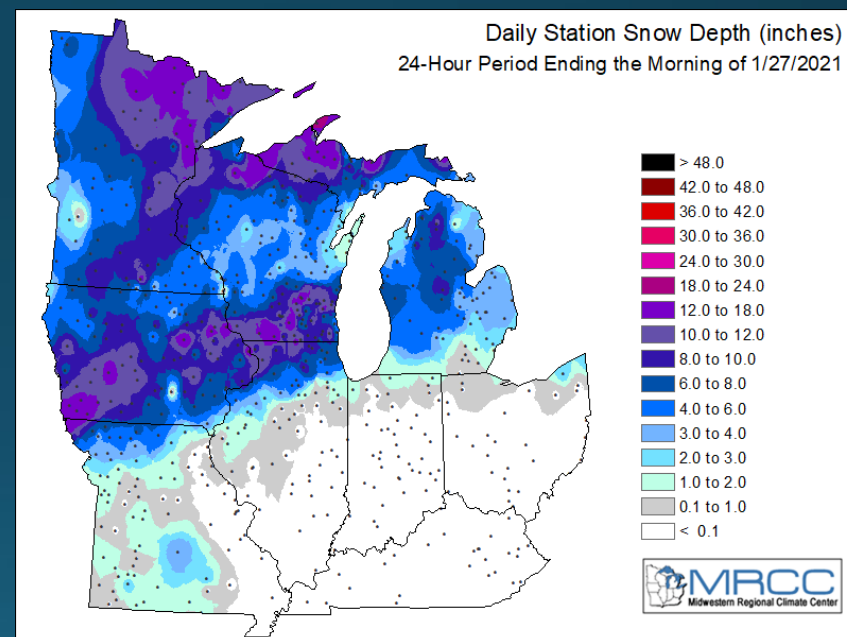


Snowpack Comparison

February 3, 2020



January 27, 2021



National Weather Service

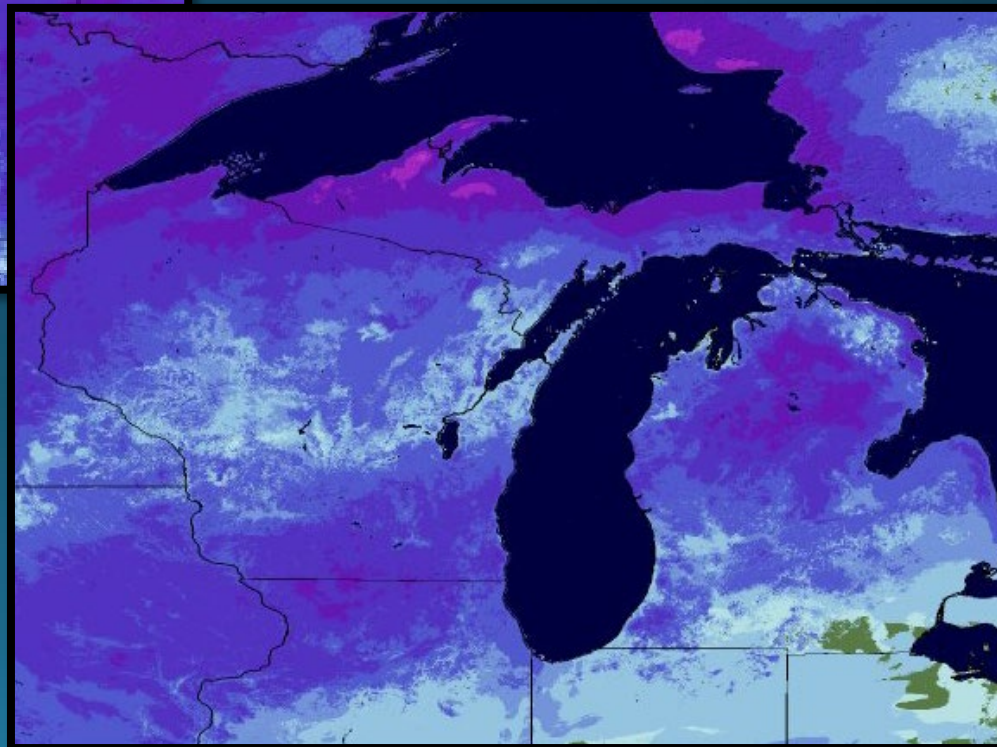
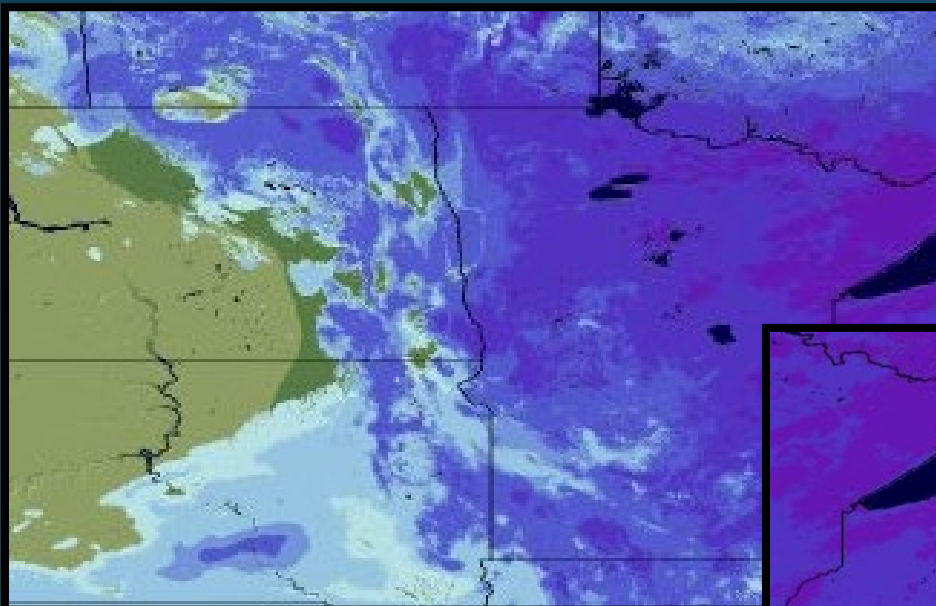
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Snow Water Equivalent 1/27/21

National Weather Service

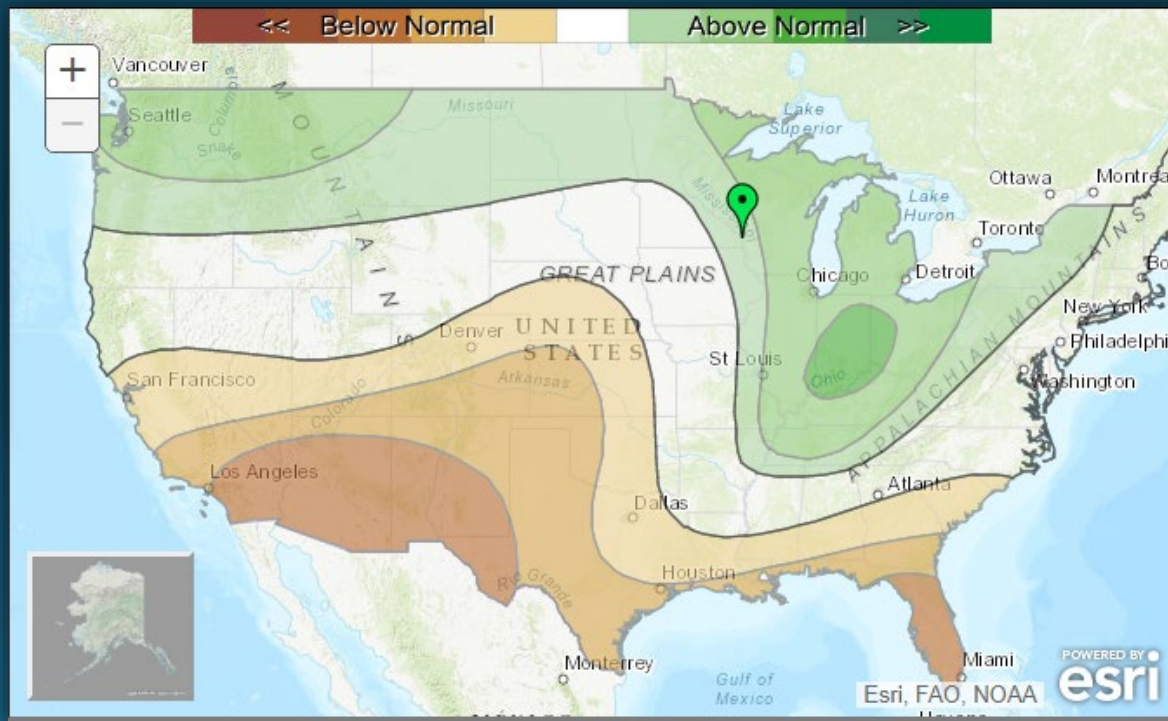
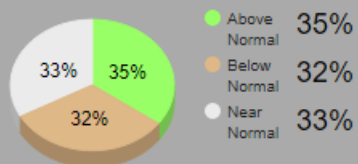
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Precipitation Outlook Through April

Breakdown for La Crosse, WI

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

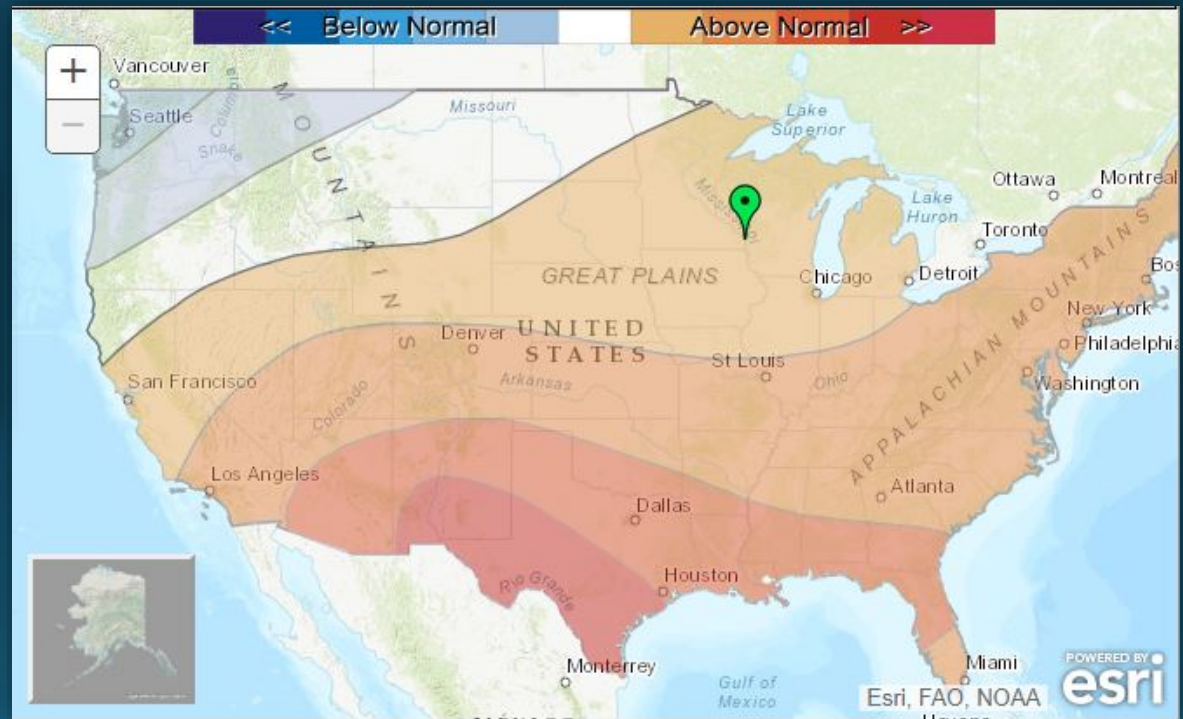
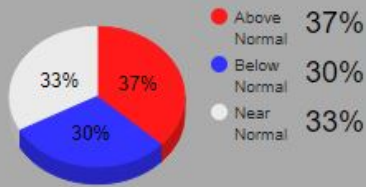


Temperatures Outlook Through April

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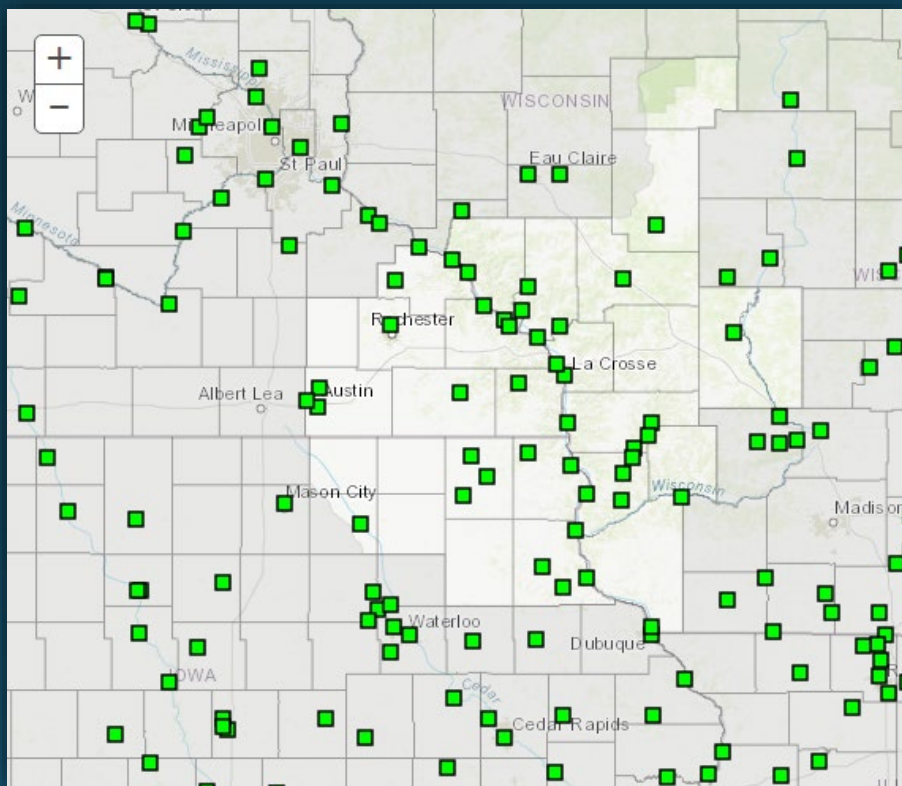
Breakdown for
La Crosse, WI



Long-Range Flood Risk

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Long range outlook
based on conditions
on 12/21/2020.

< 50% chance of
Chance of Flooding
across entire area

**First Spring Flood
Outlook: 2/11/2021**

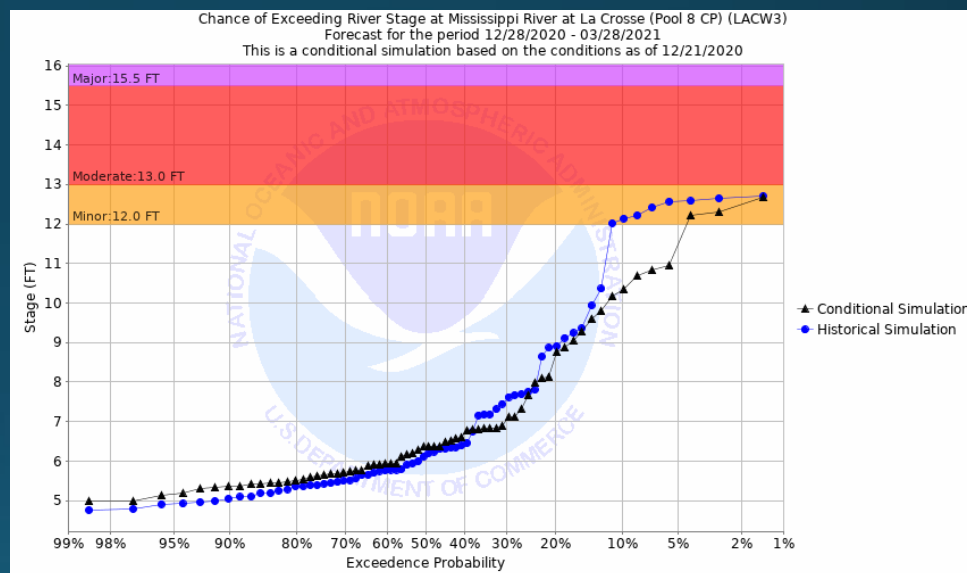


Spring Flood Outlook Dates

National Weather Service

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- 1st issuance: February 11th
- 2nd issuance: February 25th
- 3rd issuance: March 11th



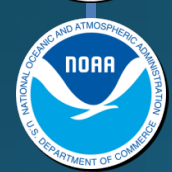
Summary

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- Overall near to below normal chances for flooding this Spring
- Near normal streamflow, soil moisture, and overall drier winter, and shallow frost depth so far
- Future precipitation and temperatures the rest of this winter-spring will be key on whether the flood risk changes.
 - Above normal precipitation and temperatures favored at this time.

Potential Spring Flooding Factors	Impact to Potential Spring Flooding
River Levels	Normal Levels
Soil Moisture	Near to Below Normal
Winter Precipitation	Near to Below Normal
Snowpack/Liquid Equivalent	Below Normal
Rate of Snowmelt	Unknown
Frost Depth	Shallow Frost
Spring Precipitation	Unknown



Thank You

Contact Information:

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