

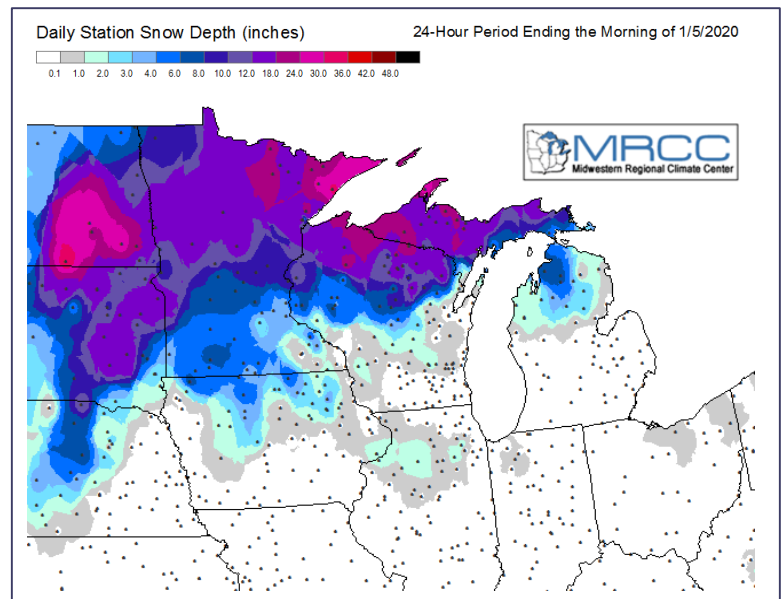
2020 Spring Flood Threat Remains a Concern

- Snowpack builds across Minnesota and Wisconsin in December
- Iowa/Southern Wisconsin/Illinois/Missouri snow free with thawed ground
- Conditions still indicate spring flooding will be more likely than in a typical year, particularly on the Mississippi River. Significant flooding potential is still unknown.
- **Additional contributing factors to flood potential will continue to be evaluated over the coming months.**

What's New?

The highest precipitation amounts fell across the northern parts of the region through December. Despite warm conditions, the snowpack over MN and WI was able to build up through early January. Snowpack is currently ranging from 1" to 6" of water equivalent, while a large part of the region has no snow on the ground. The warm conditions have also kept the ground from freezing and rivers thawed.

A potent storm system in late December brought 0.50" to 2.00" of precipitation to the region. Much of this fell as rain, keeping soils moist despite the remainder of the month being dry.

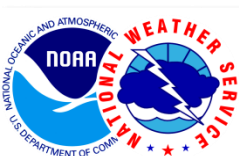


What does this mean?

- **Probabilities for Spring Flooding remain highest for the Mississippi River.**
- **The current lack of snow and frozen ground locally suggests a lesser threat for flooding on local rivers. However, wet ground in the local river basins keeps flood potential near to slightly above normal despite the lack of snow.**

January Temperature and Precipitation forecast:

Higher probability for heavy precipitation or extreme cold to the southeast and northwest of the local area respectively. This outcome would be favorable to keep the flood threat static.



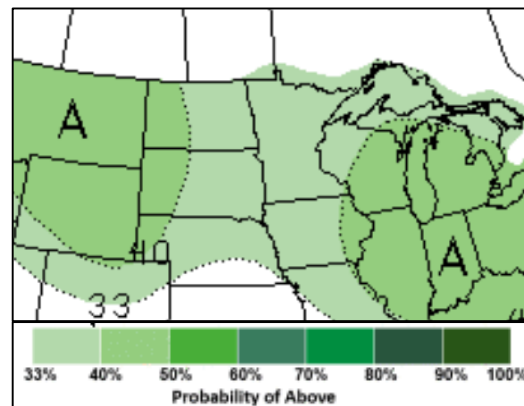
Jan/Feb/Mar 2020: *Precipitation Outlook*

Odds remain in favor for near or above normal precipitation through March.

Ground conditions remain wettest over the northern part of the region with nearly saturated soils and higher than normal river levels at mid-winter.

Normal amounts of precipitation through the remainder of the season will keep the risk for flooding this spring elevated.

Find the latest outlook at www.cpc.ncep.noaa.gov.



Spring Flood Threat Checklist (as of early Jan)

Threat	Impact to Potential Spring Flooding	Change Since Last Outlook	Link to Image
High river levels	Increased Threat	Unchanged	USGS WaterWatch
High soil moisture	Increased Threat	Unchanged	CPC Soil Moisture
Winter Precipitation	Near to Above Normal – Mississippi Near Normal – IA/IL/MO local rivers	Minimal. Highest threat: Mississippi River.	January Outlook 3 Month Outlook (Jan-Mar)
Snowpack/Liquid Equivalent	Near normal as of early January	Snowpack building over MN/WI.	Snow/Liquid Equivalent Analysis
Rate of Snowmelt	Unknown	Unchanged	24, 48, & 72 hr Snowmelt
Frost Depth	Lowered Threat	Improved	Frost Depth Map
Spring Precipitation	Unknown	Unchanged	

Next Update Planned for Early February

2020 Probabilistic Spring

Flood Outlook Dates:

February 13, 2020

February 27, 2020

March 12, 2020

Potential Flooding Impacts For Winter/Spring

- Rivers freezing at high levels
- Widespread ice jams
- Widespread flooding again for Spring 2020
- Agricultural impacts

The National Weather Service urges those with interests in flooding to stay tuned to additional communications going through the winter and early spring seasons.