# 2020 Spring Flood Outlook

Covering Central/Southern
Minnesota and Western Wisconsin

*March 12, 2020*

# Overview

Update of Flood Potential for Spring 2020

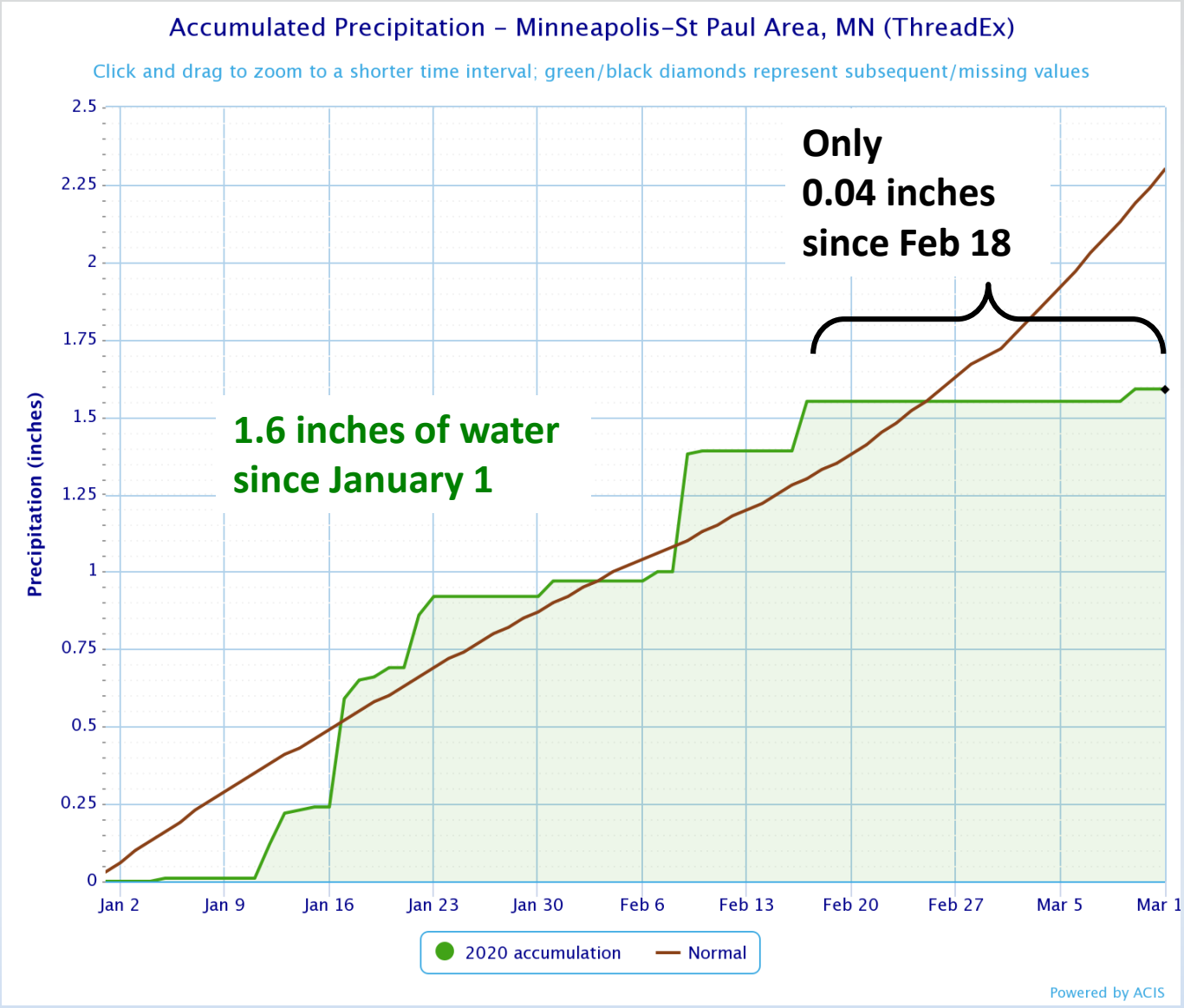
Look at the long range weather trends

Look at where to find current info

## Main Message –

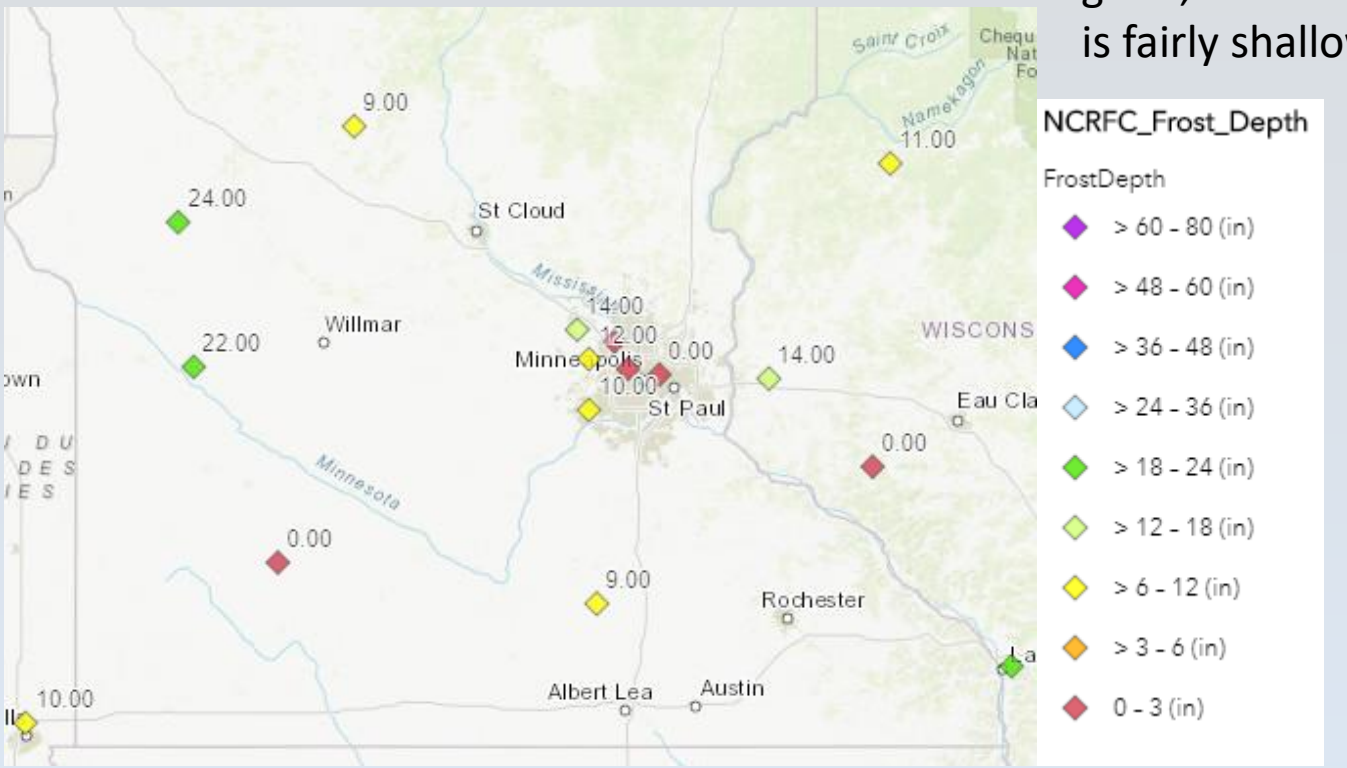
**The major/moderate flooding risk across the Upper Midwest has DECREASED due to the recent dry weather, but there are several weeks of spring left and the flood risk COULD INCREASE if we get into a wet pattern.**

# The first few weeks of the 2020 Spring have been dry, which has reduced the major/moderate flood risk compared to last week's briefing

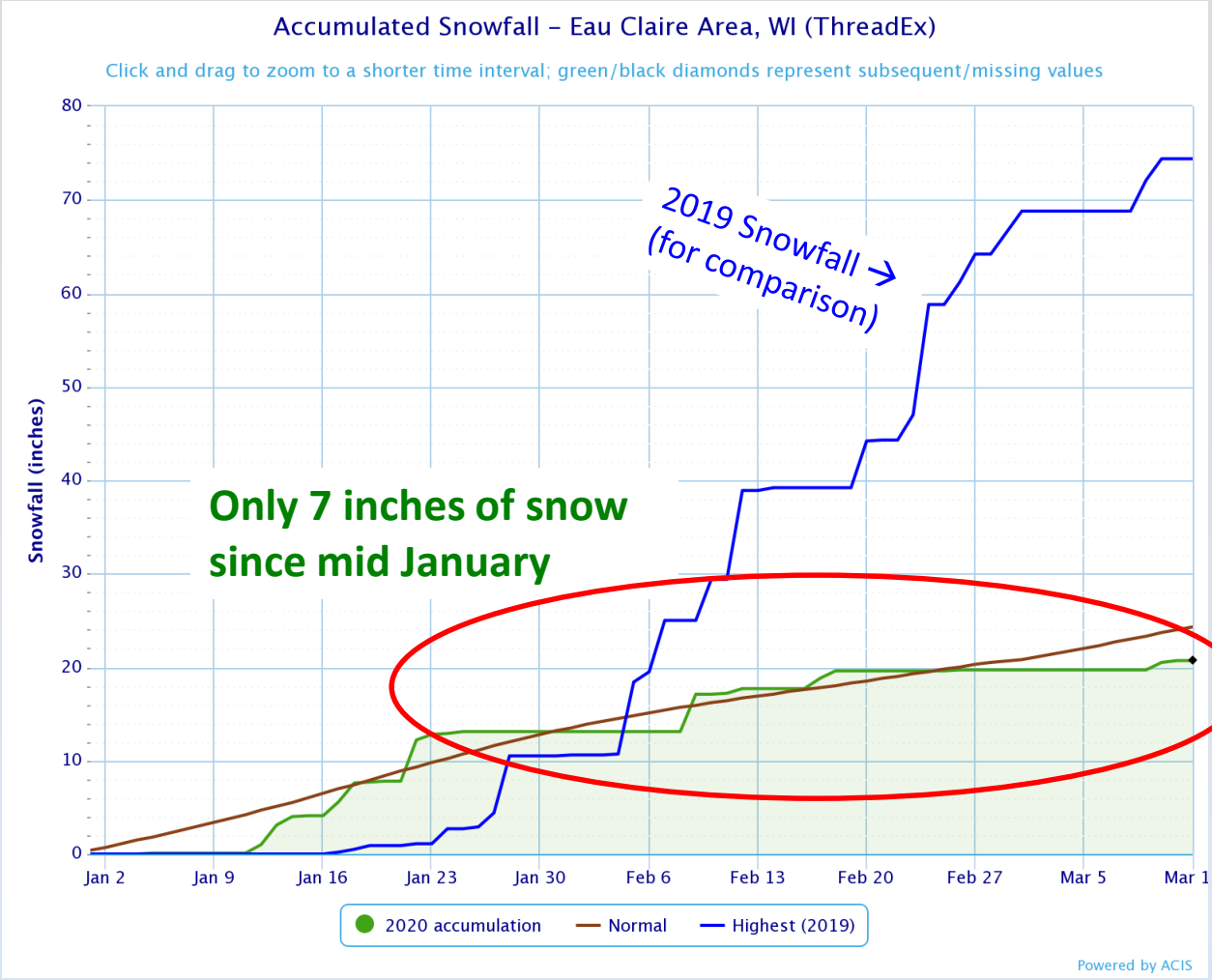


# Frost depth is decreasing across the region

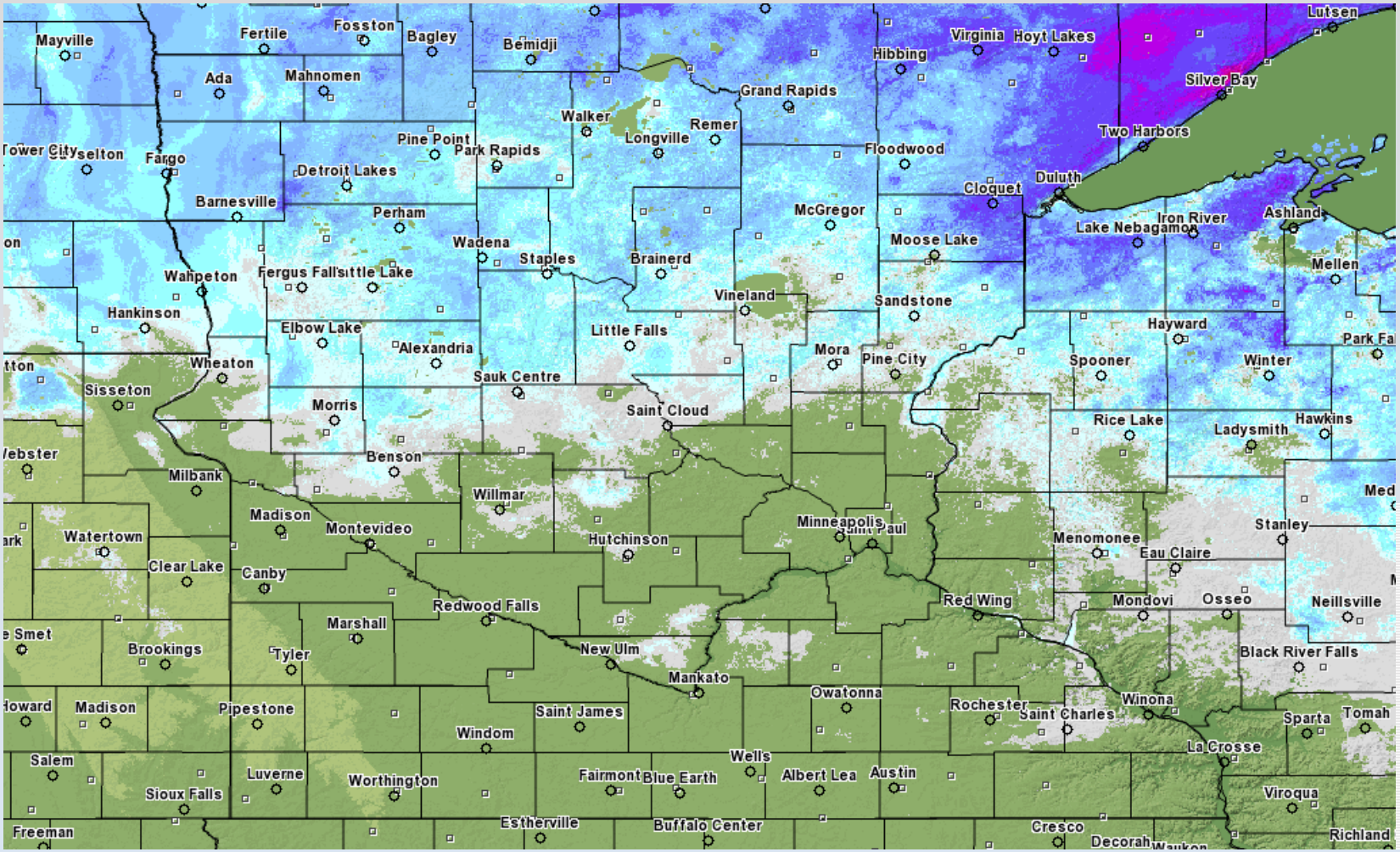
The news is still good, frost depth is fairly shallow.



# February and early March snowfall have been minimal

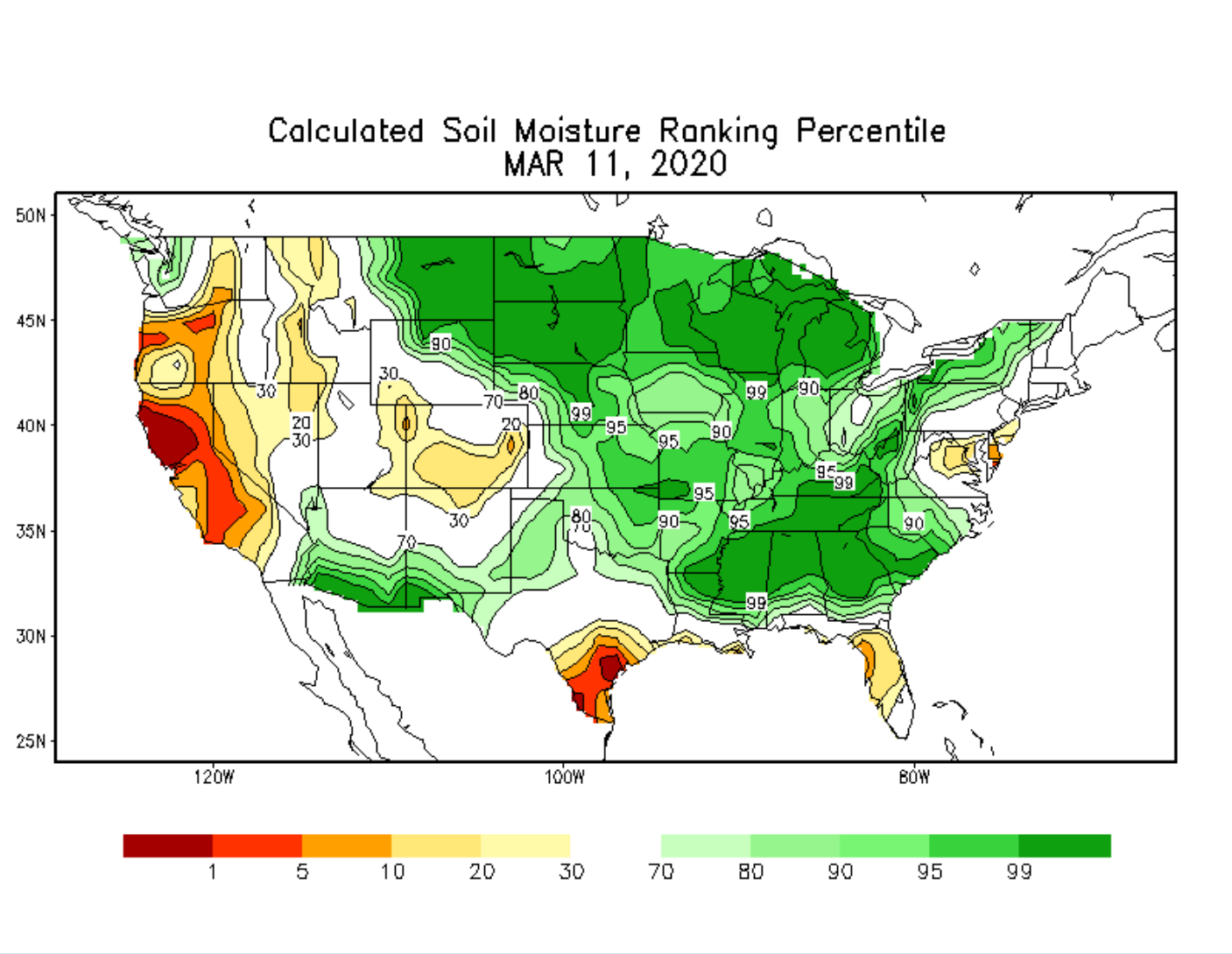


# Modeled Snow Water Equivalent (SWE) is well below normal




Minimal water content for much of the area

# But, soils are still very wet across the region




Soil Moisture over most of the upper Midwest is the basically the highest on record for the 11th of March.

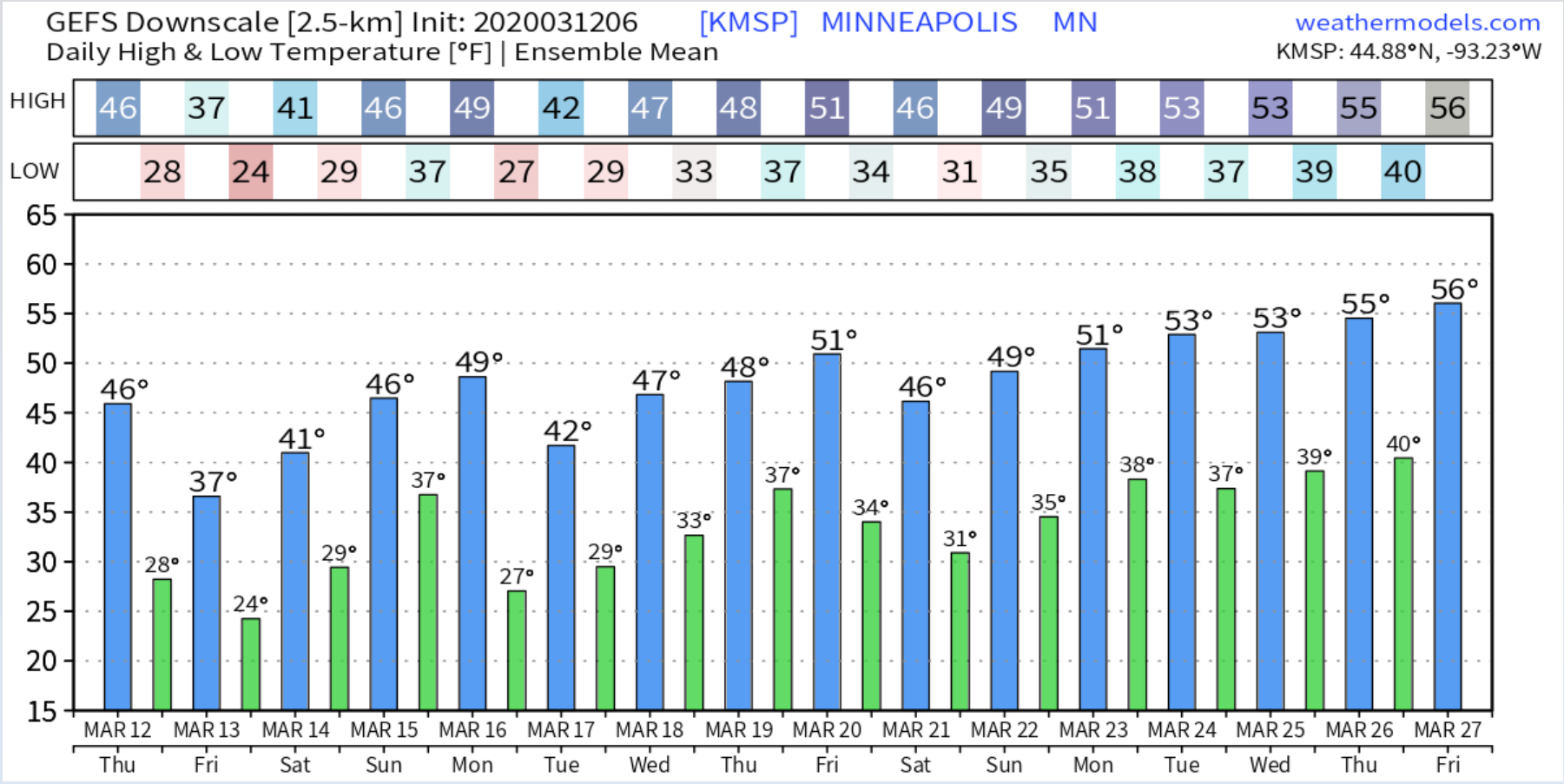
# In summary, the risk for major/moderate flooding HAS DECREASED

*Where We Stand on March 12th…*

| Threat | Impact to Potential Spring Flooding | Timing | Trend Since Jan |
|---|---|---|---|
| High base river levels | **Threat Remains High** | Nov-Mar | Steady |
| High soil moisture | **Threat Remains High** | Oct-Mar | Steady |
| Frost Depth* | **Decreased threat** | Jan-Mar | Decreasing |
| Snowpack/Liquid Equivalent | **Decreased threat** | Dec-Mar | Decreasing |
| Rate of Snowmelt/Temps | **Decreased threat – most of the snow has melted** | Mar-Apr | Decreasing |
| Spring Precipitation | **To Be Determined** | Mar-Apr | n/a |

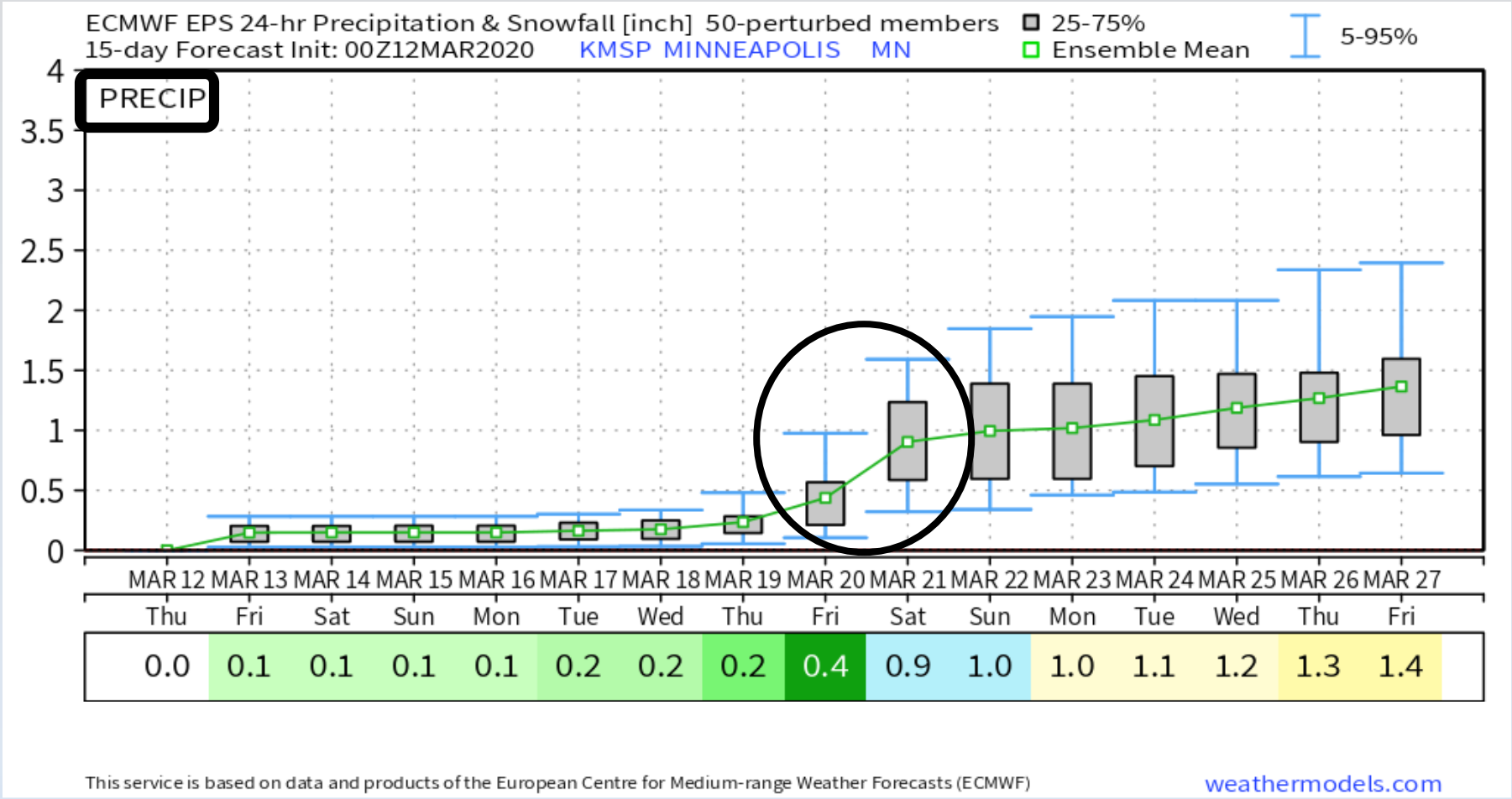
**But, we still have wet soils, high flows, so the flood risk COULD INCREASE if we get in a wet weather pattern with heavy rain**

# The rest of March looks relatively mild



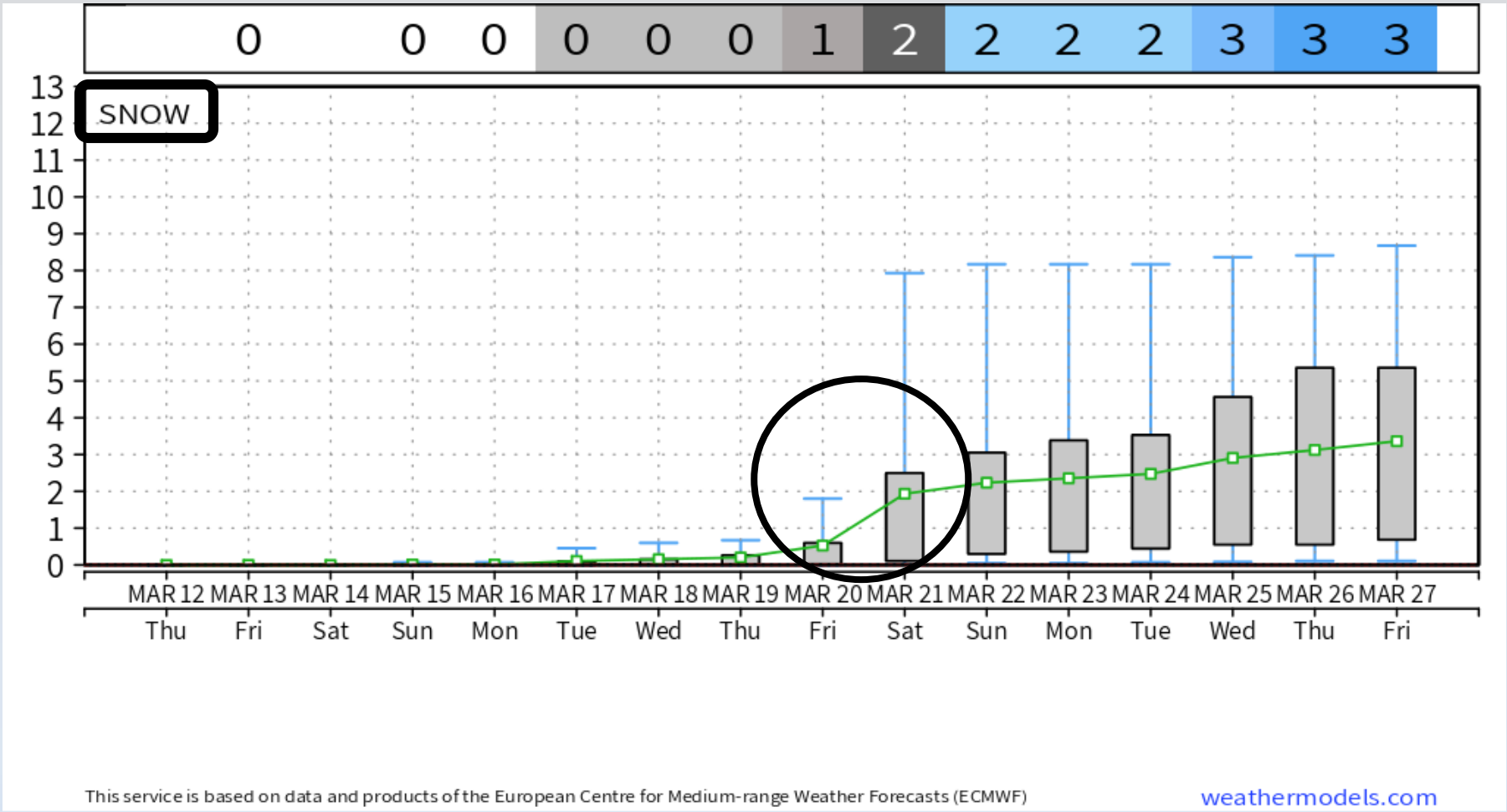
# The rest of March looks relatively dry

Perhaps a widespread system with an inch of precipitation March 20/21



# The rest of March looks relatively dry

The March 20/21 could bring snow to some as well




This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF)

weathermodels.com

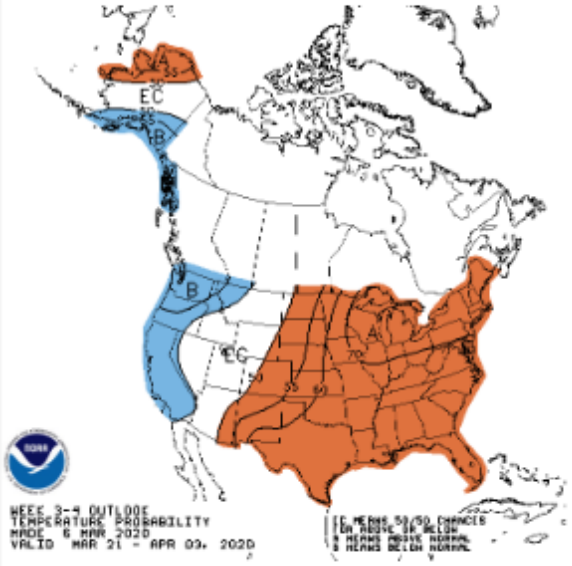
# Late March into early April – Will be updated Friday, March 13

## Week 3-4 Outlooks

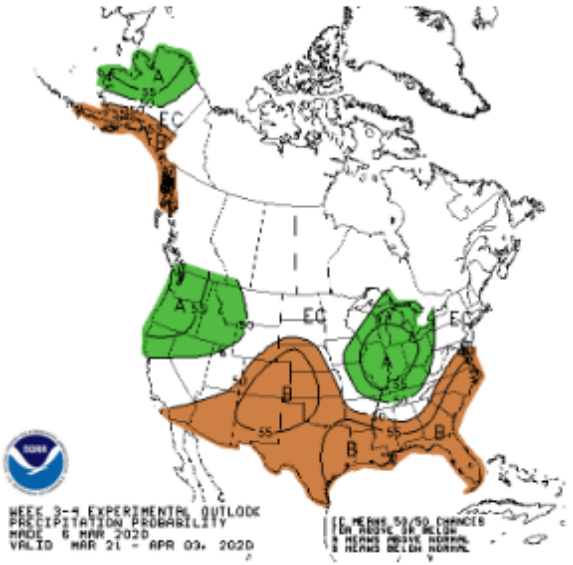
**Valid: 21 Mar 2020 to 03 Apr 2020**
**Updated: 06 Mar 2020**

Please provide comments using the online survey.

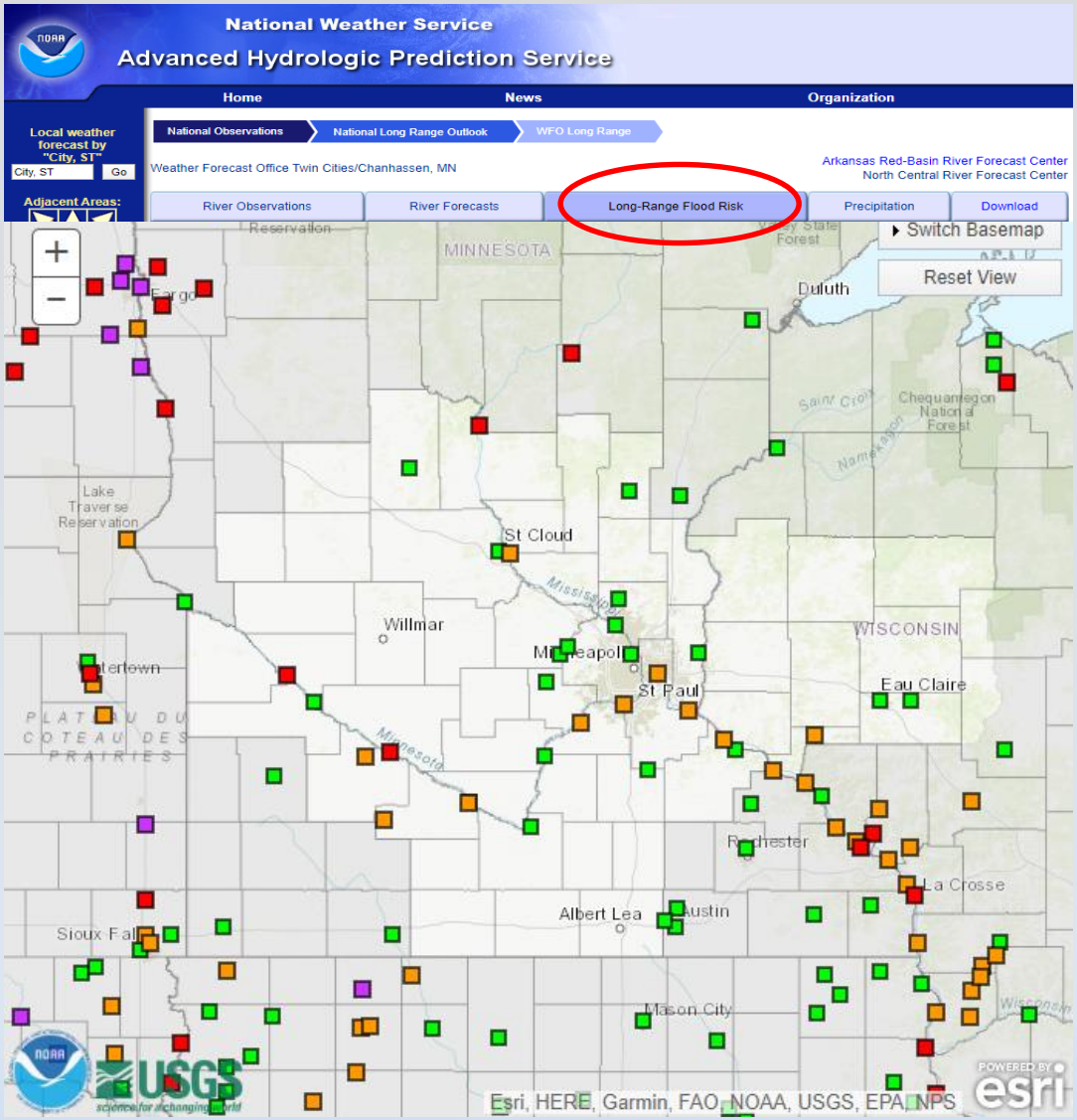
**Temperature Probability**




**Precipitation Probability (Experimental)**



# Chance of exceeding major/moderate flood levels this spring HAS DECREASED

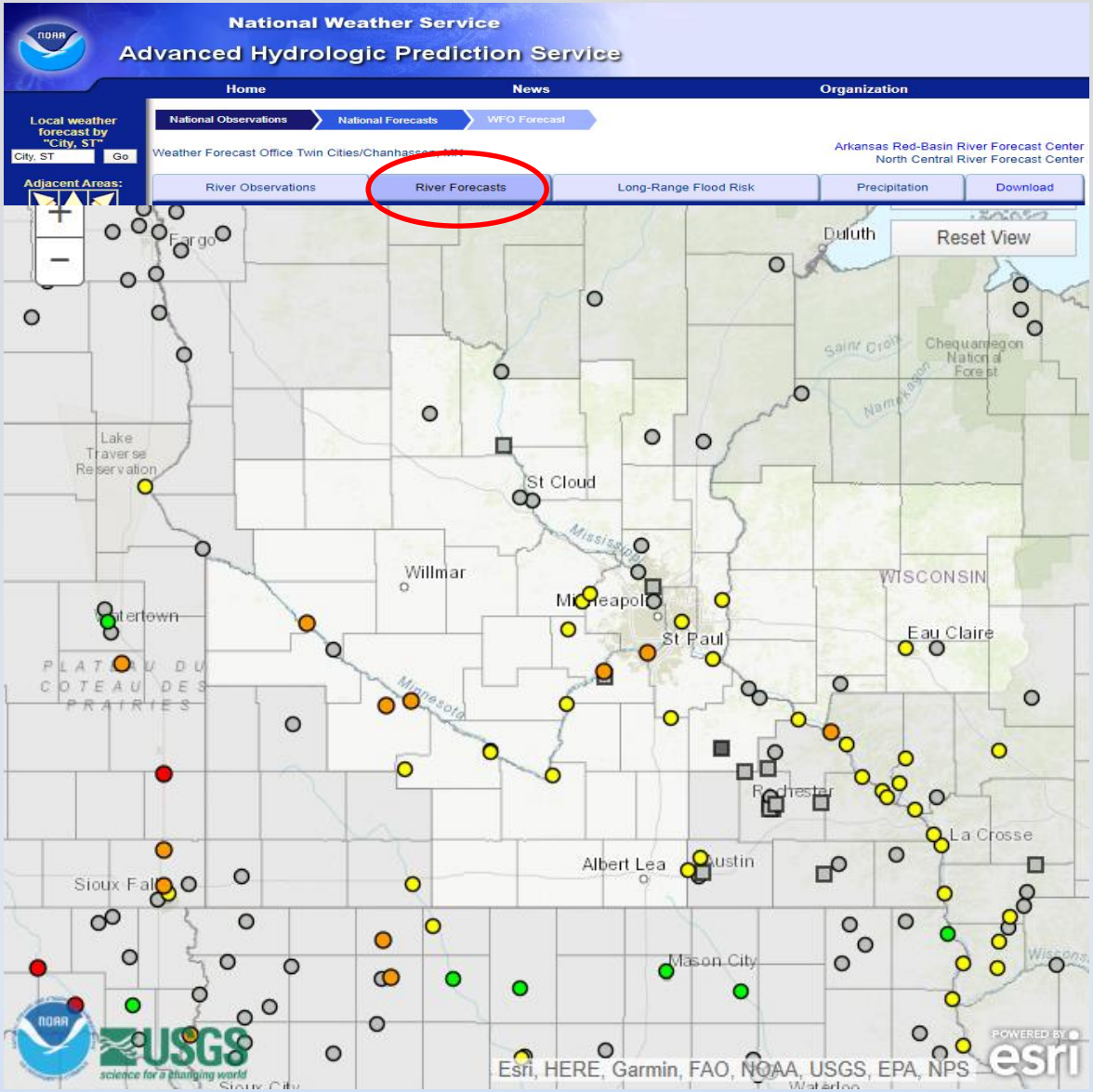



For Long Range/Seasonal Planning, use the Long Range Flood Risk tab to evaluate overall threats.

Potential for **minor to moderate flooding still exists for many areas**, with some remaining potential for moderate to major flooding in the Red River Valley.

Much will be determined by the rain/snow in late March and April. A heavy rain event on top of the saturated soils could lead to significant flooding.

# Continue to monitor current forecast page




Accounts for actual temperature and precipitation forecasts, rather than scenarios.

For today, mainly minor rises to flood stage in much of the area.

As melt continues farther north over the coming weeks we will see additional forecast information.

# Flood risk for Spring 2020

*Final Thoughts*

| Threat | Impact to Potential Spring Flooding | Timing | Trend Since Jan |
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- Area lakes, wetlands, ponds, ditches, and even groundwater are running high.
- Some flooding of lakes, ponds, lowlands, and fields is occurring or has a high probability of occurring even with normal rainfall this spring.
- More significant flooding would become a concern if significant precipitation were to occur later this month and into April and May.