



Preparation for 2023 Spring Flooding

Prepared
by:

Public Works Department

April 10, 2023

Fridley Public Works and Public Safety

- So far in March...
 - Reviewing Plans
 - Preparation of flood system in Riverview Heights neighborhood
 - Keeping updated in forecasts and river projections

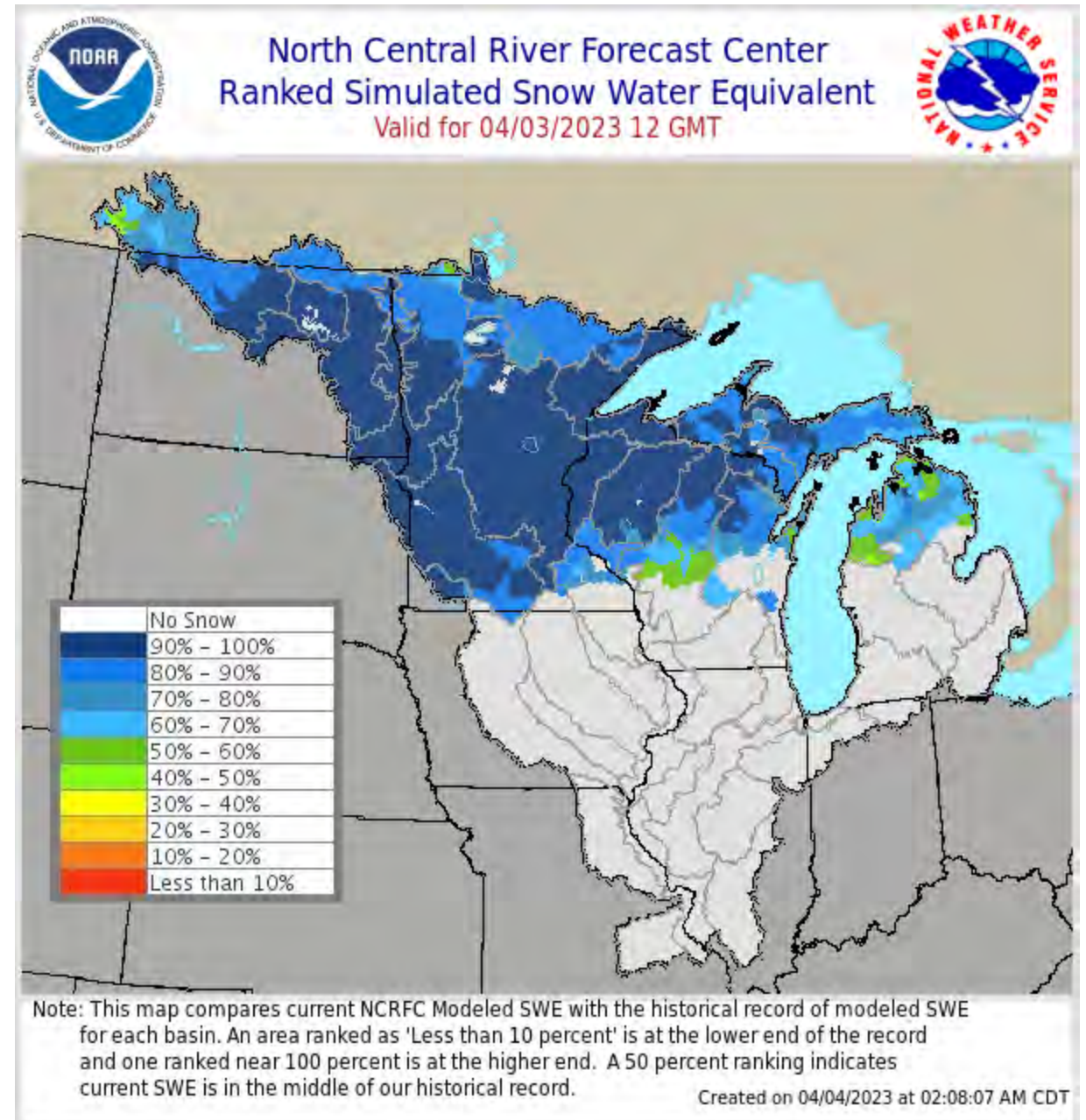
Flash Flooding

- Not anticipated to be severe, unless rainfall events dictate otherwise.



Snowpack

- Third highest snow total on record this season
- Widespread nature of high snowfall
- Soil-Water Equivalency = in top three snowpacks on record for this time in April.

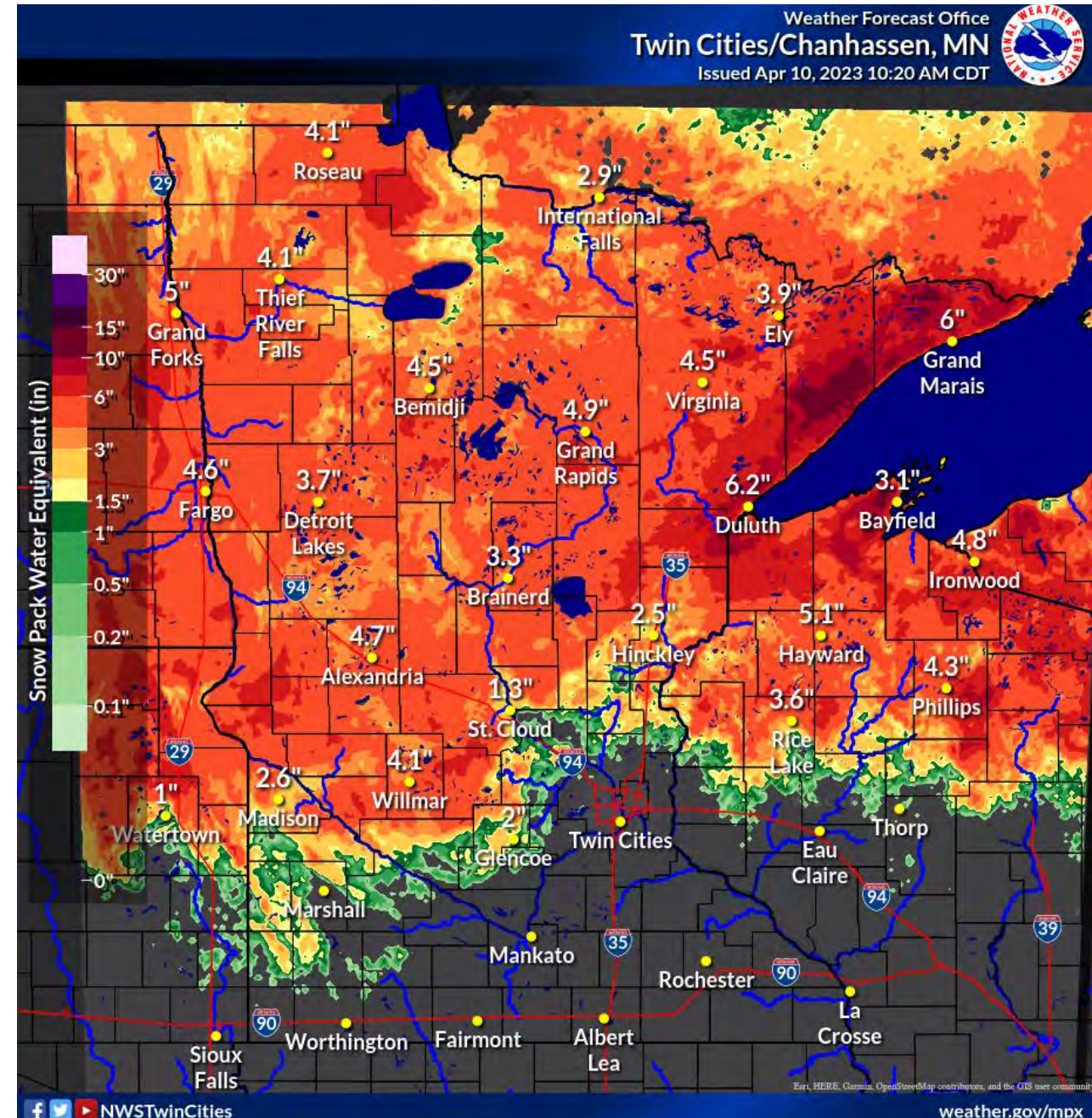


“Ripe”
Snowpack
in the
Northern
Mississippi
Basin



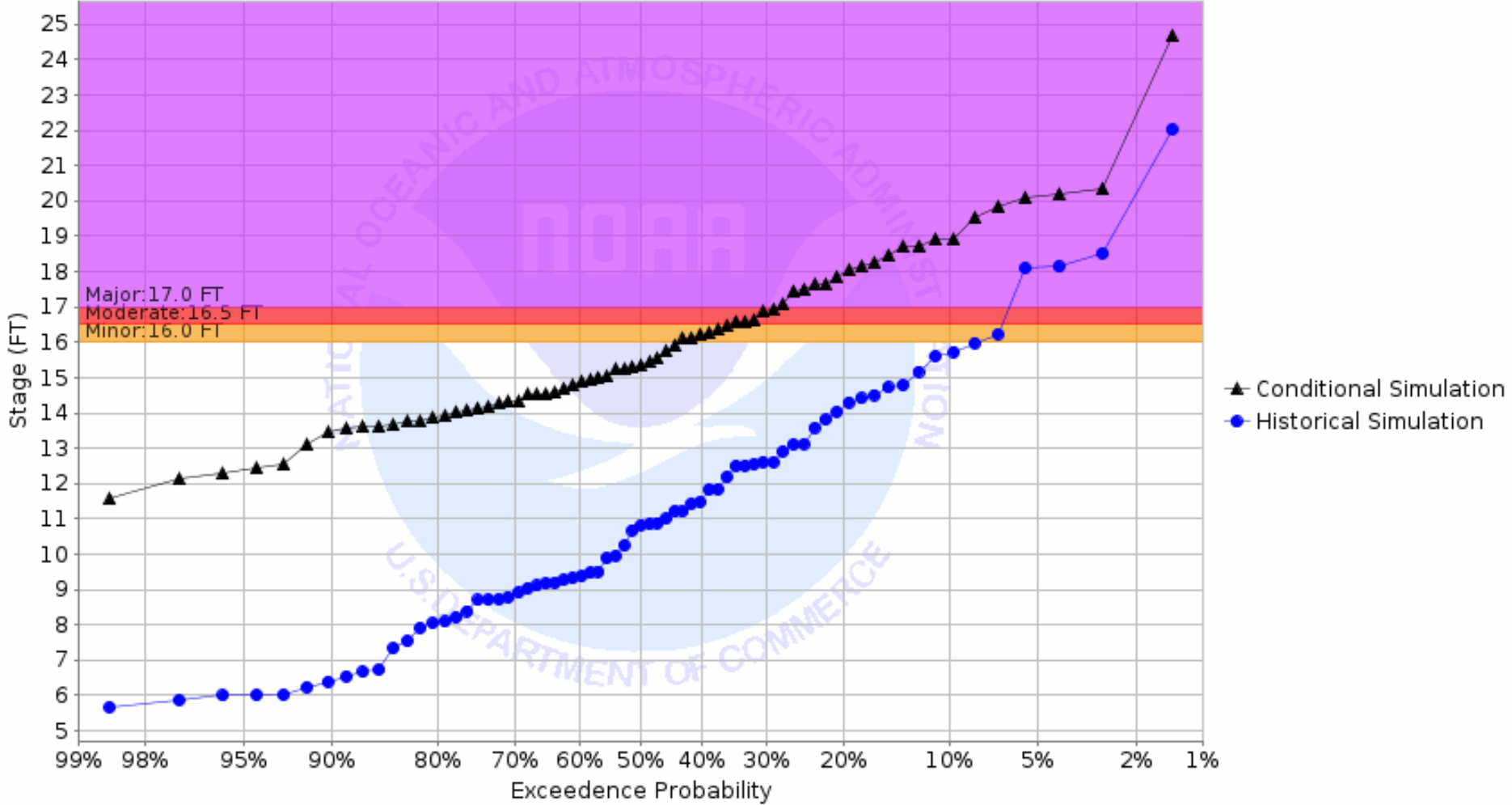
Flood Factors

- Soil Moisture
 - Recent Drought...some good news?!
 - Lakes/ponds/wetlands are low, will intercept some of the runoff.
 - Soil Moisture was very low coming into winter; has recovered some, but can also hold some moisture.
 - Frost Depth is negligible
- Runoff Timing
 - Portions of the Mississippi Basin above Fridley have melted, which may help keep the overall peak down.



NWS Mississippi River Probability Forecast

Chance of Exceeding River Stage at Mississippi River at Fridley - abv 37th Ave NE (MSPM5)
Forecast for the period 03/27/2023 - 06/25/2023
This is a conditional simulation based on the conditions as of 03/20/2023



NWS Mississippi River Predictions...4/9/2023

- There is a >95% chance the River will reach Action Level (14 feet) as measured at the river gauge located at 37th Ave.
- There is a 40% chance the River will exceed 17.1 feet which equaled the 1997 spring flood, which is the fifth highest flood on record.
- There is a 10% chance the River will reach over 20 feet which would equal the 1965 spring flood, which is the highest flood on record.

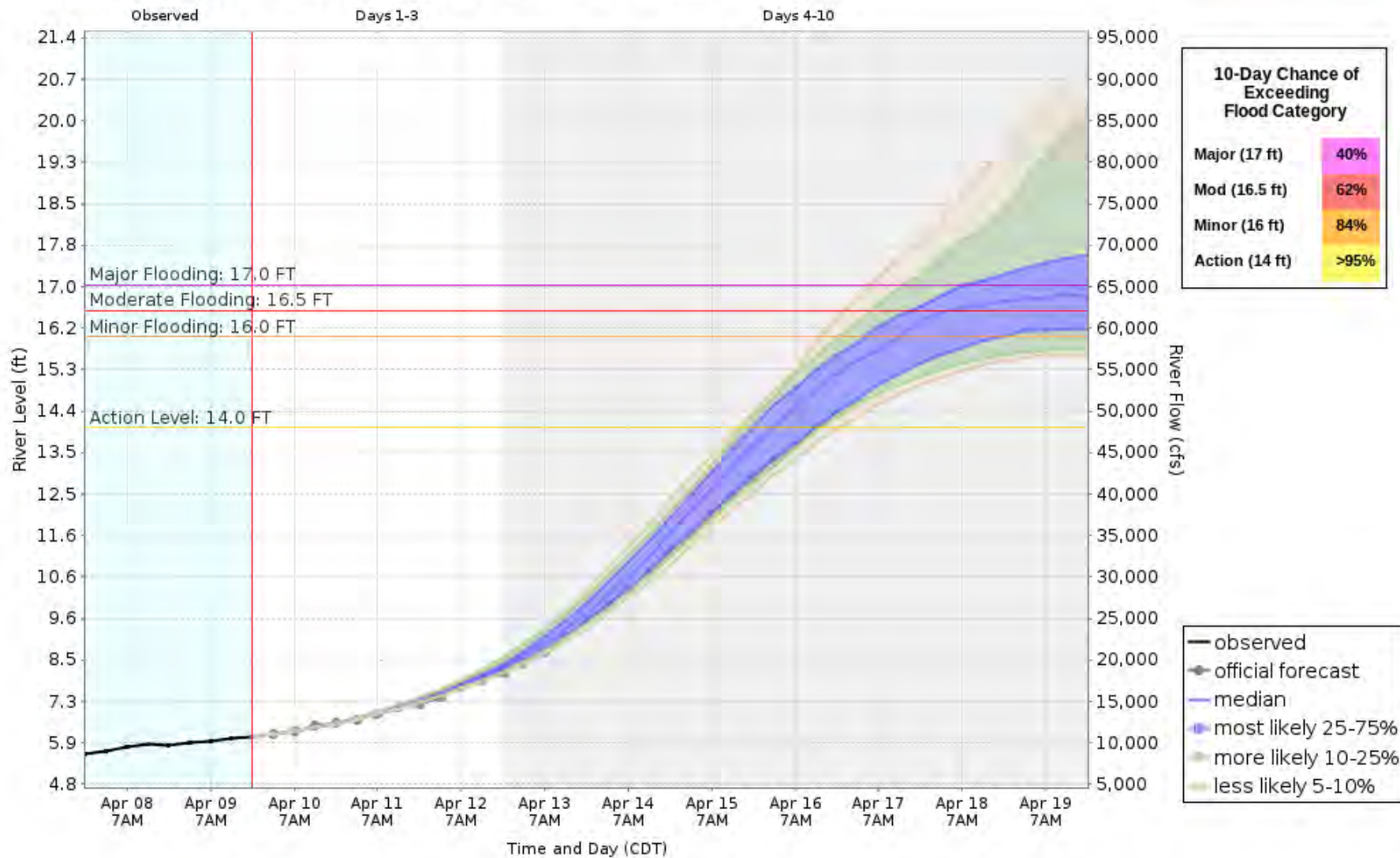
HEFS - 10 Day River Level Probabilities

Based on Hydrologic Ensemble Forecast Service Model Simulations
Used to Estimate the Range of Possible River Levels



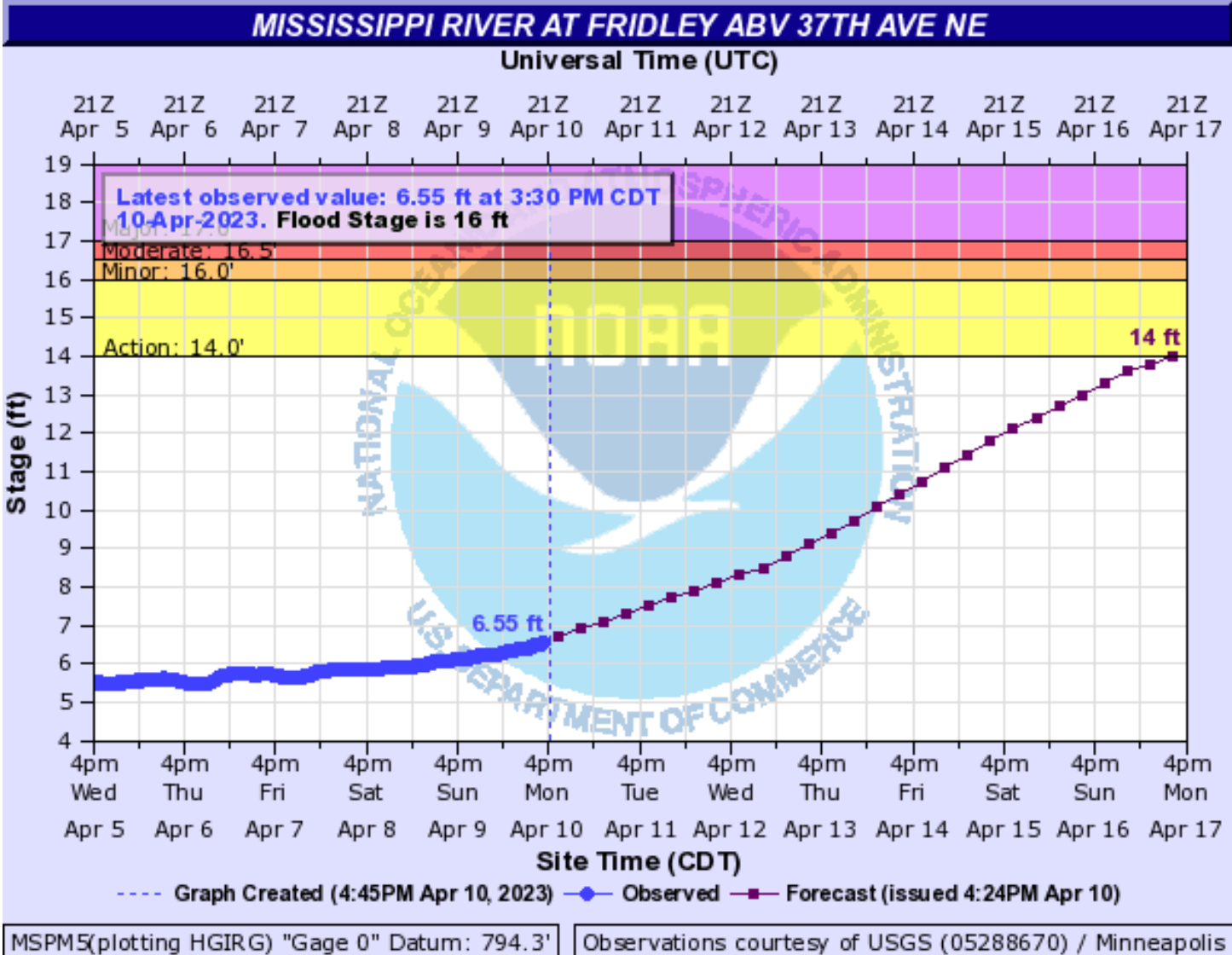
Apr 10 - Apr 20, 2023

Mississippi River at Fridley - abv 37th Ave NE (MSPM5)



NWS
Mississippi
River New
10-Day
Probability
Forecast

NWS River Conditions and Forecast



- Updated several times daily
- Factors can change timing or maximum stage
- Likely peak river stage will be next week

Flood Control Systems

- Since 1997, the City has had a flood control gate and pump installed at the Springbrook Creek outfall in Riverview Heights.
- Equipment to operate this system is mobilized when action levels are predicted to be reached. That equipment is ready now.



Riverview Heights – 3/25/19

Anoka County Emergency Management



Assistance

- If you will be in need of assistance, we request that you contact the City after a request for volunteers is issued.
- **763-572-3566** is the Public Works Mainline, **911** is an alternative number if no one is available to answer.

Public Works and Public
Safety Staff Will
Continue Monitoring
Conditions



Questions

- If you have questions, please see the Flood Preparation Page on the City's website: [FridleyMN.gov/Flood](https://www.fridleymn.gov/Flood)
- If you still have questions, please contact the **Public Works Department at 763-572-3566.**