



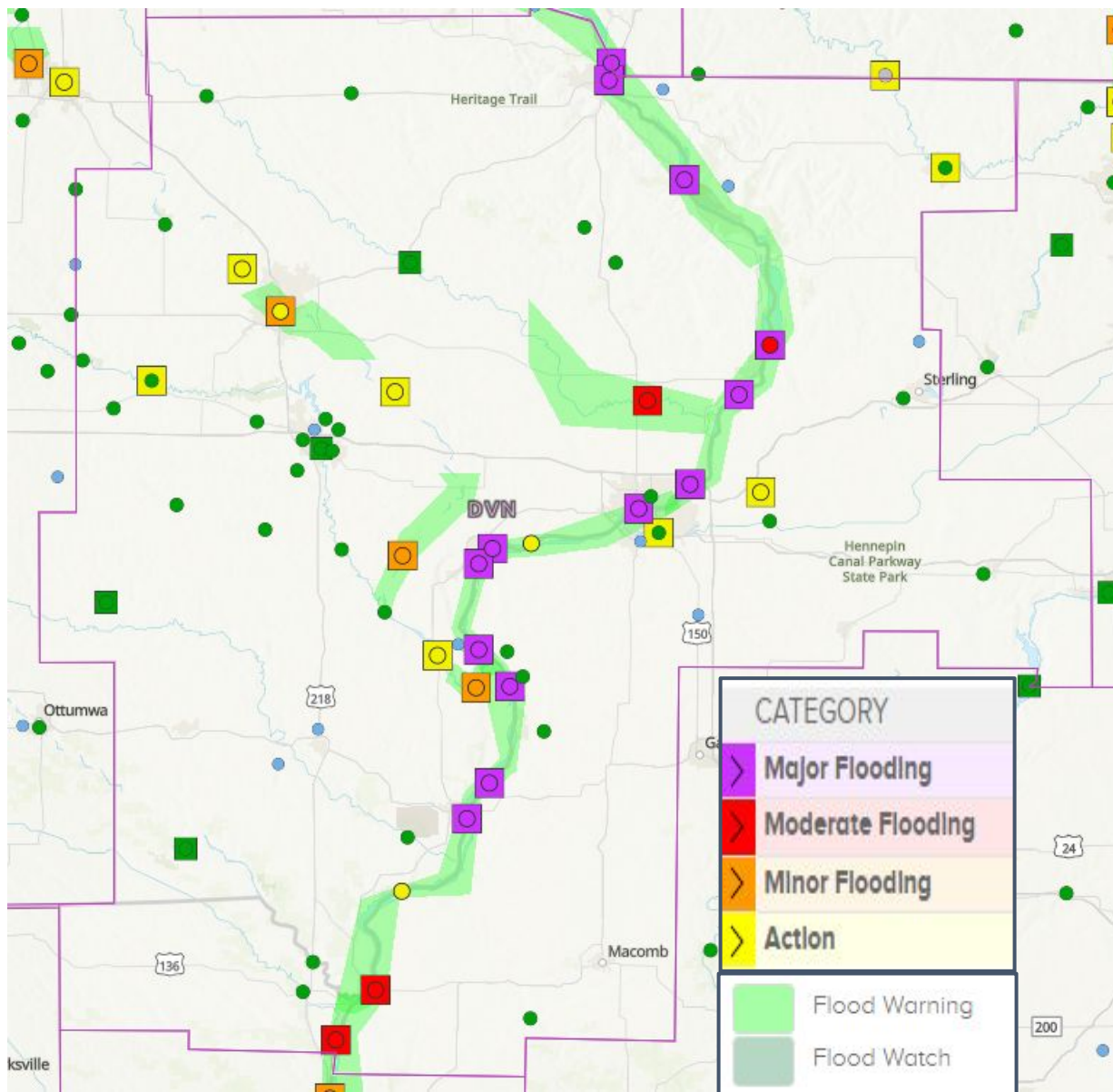
# Summer Flood Outlook 2024

NWS Quad Cities IA/IL

Sunday, July 7, 2024

## Key Messages

- **Mississippi River-** Major flooding occurring and expanding to all locations from Dubuque to Burlington.
- **Cedar/Iowa River-** Elevated levels on the Cedar. Lower Iowa is being impacted from high stages on the Mississippi.



Map showing current flood risk forecasts





# Summer Flood Outlook 2024

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## What's New

### Mississippi River—

- We are currently seeing somewhat earlier than anticipated crests from Dubuque to Fulton. Crests are likely to be broad, lasting 3 or more days in many locations north of Lock and Dam 14.
- The next 5-7 days are showing chances for low precipitation, except for on Day 3 (Tuesday noon to Wednesday noon), where there is a possible system that could bring 3+ inches in a 24 hour window.
- Despite 1 chance for heavy rain, the pattern is shifting to a drier or lighter pattern as we move into the middle of the month.

### Cedar and Iowa Rivers—

- Lower Iowa River is currently seeing minor flooding and backwater effects from the high water on the Mississippi River.
- The Cedar River below Vinton is seeing elevated river levels, Conesville remains above flood stage, and Cedar Rapids is expected to be at flood stage in the next 18-36 hours

### Wapsipinicon River—

- River levels are over moderate at DeWitt and forecasted to stay above moderate for the next 5 days before dropping rapidly below flood stage.





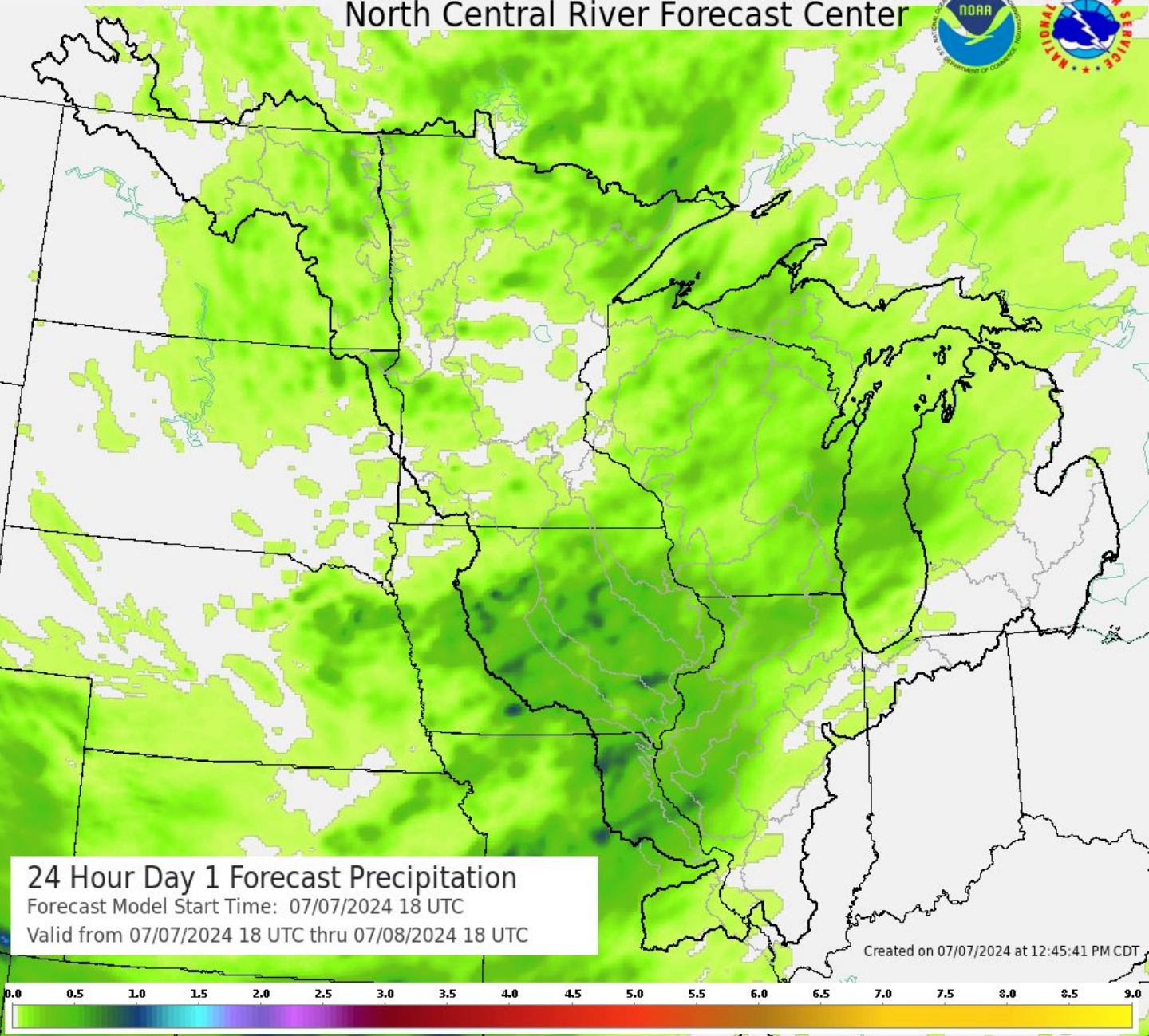
# Summer Flood Outlook 2024

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Sunday, July 7, 2024

## \*24 Hours of Predicted Rainfall in River Forecasts\*

North Central River Forecast Center





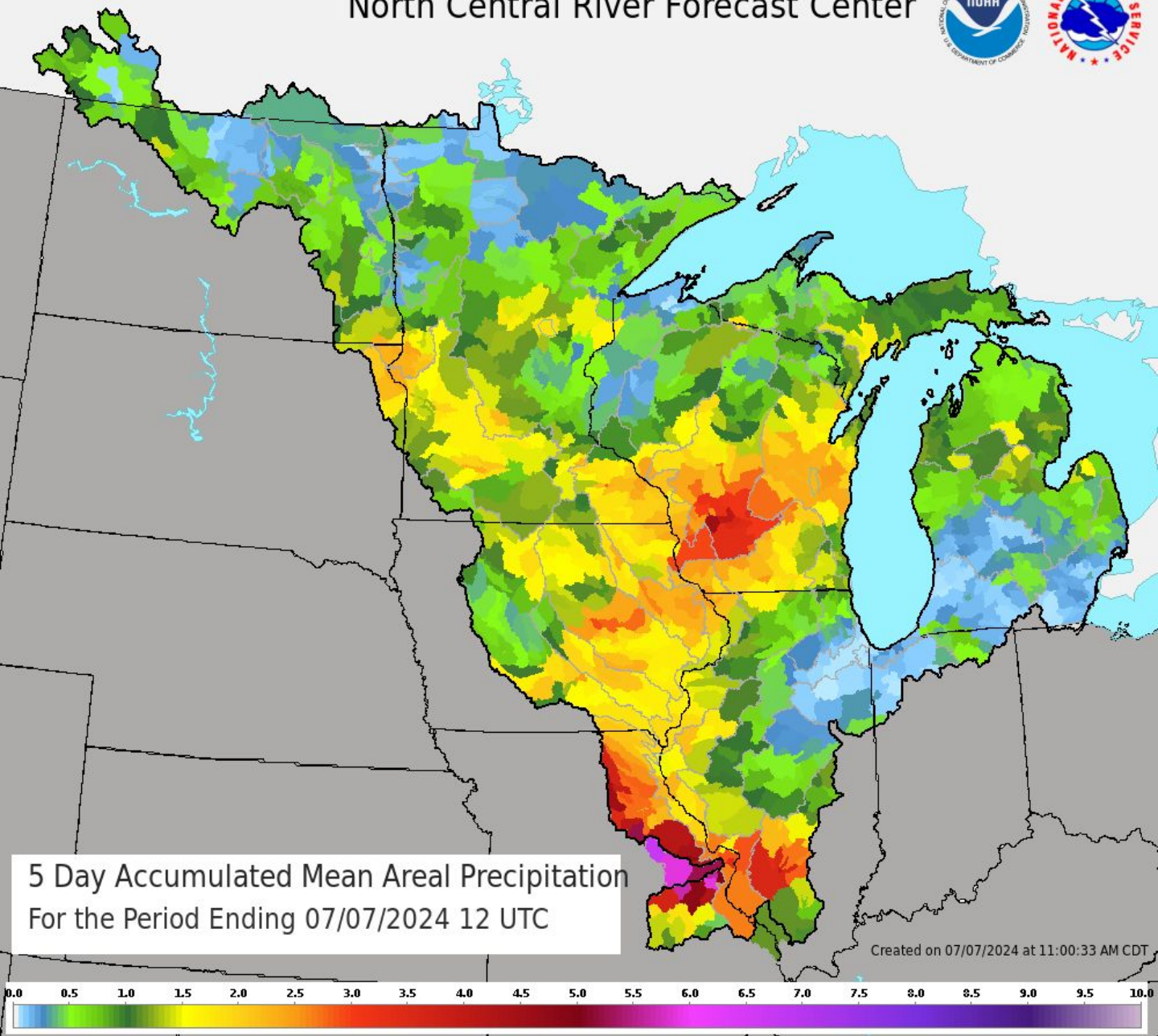
# Factors Considered in this Outlook

NWS Quad Cities IA/IL

Sunday, July 7, 2024

- Seasonal Temperatures and Precipitation
- Soil Moisture and Drought
- Current River Streamflows
- Weather Forecasts and Outlooks

North Central River Forecast Center





# Current Soil Moisture

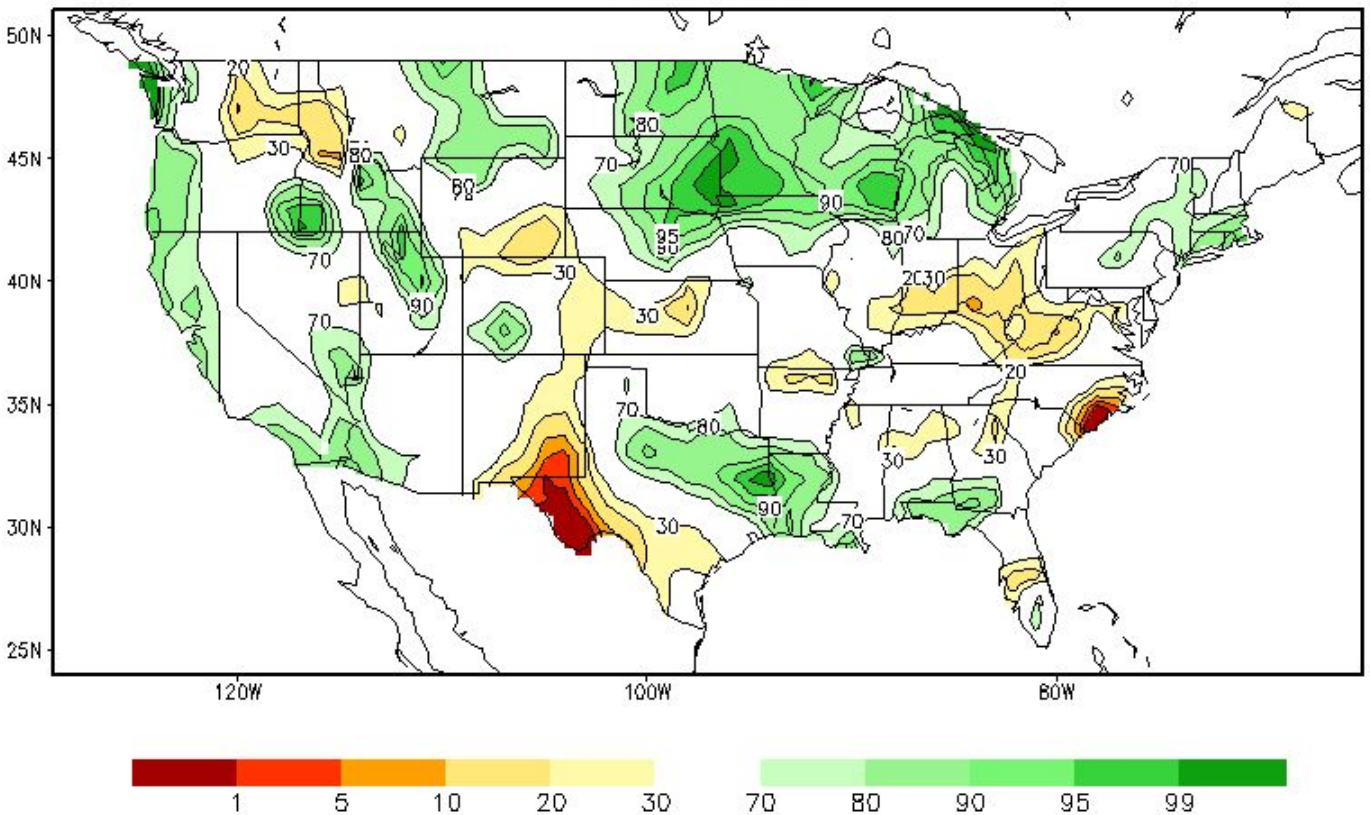
NWS Quad Cities IA/IL

Sunday, July 7, 2024

## Soil moisture mixed bag across the region:

- Much of the local area remains near normal on soil moisture, with areas south of the Quad Cities below normal.
- Soil moisture is normal to well above normal in the Upper Mississippi River Valley, particularly Minnesota and Wisconsin.

Calculated Soil Moisture Ranking Percentile  
JUN, 2024





# Current Drought Conditions

NWS Quad Cities IA/IL

Sunday, July 7, 2024

## Soil moisture continues to increase, depleting drought:

- Upper Midwest is mostly drought free, with a few areas of abnormally dry conditions. Some areas of moderate drought are starting to develop.

## Midwest

Map released: Weds. July 3, 2024

Data valid: July 2, 2024 at 8 a.m. EDT

### Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

### Authors

United States and Puerto Rico Author(s):

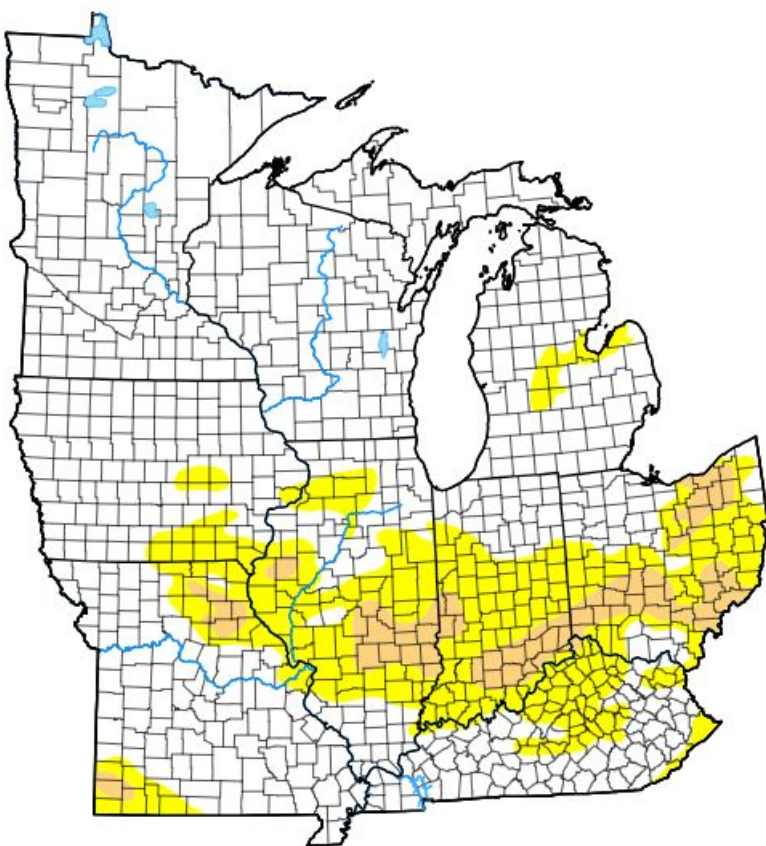
[Adam Hartman](#), NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):

[Brad Rippey](#), U.S. Department of Agriculture



[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)



## Contribution to flood risk:

- Drier soils will not absorb as much water leading to more runoff. A caveat to this is that over the long term, much of the area is still in a rainfall deficit, so the uppermost soil conditions can dry out faster than expected, even when not in active drought.





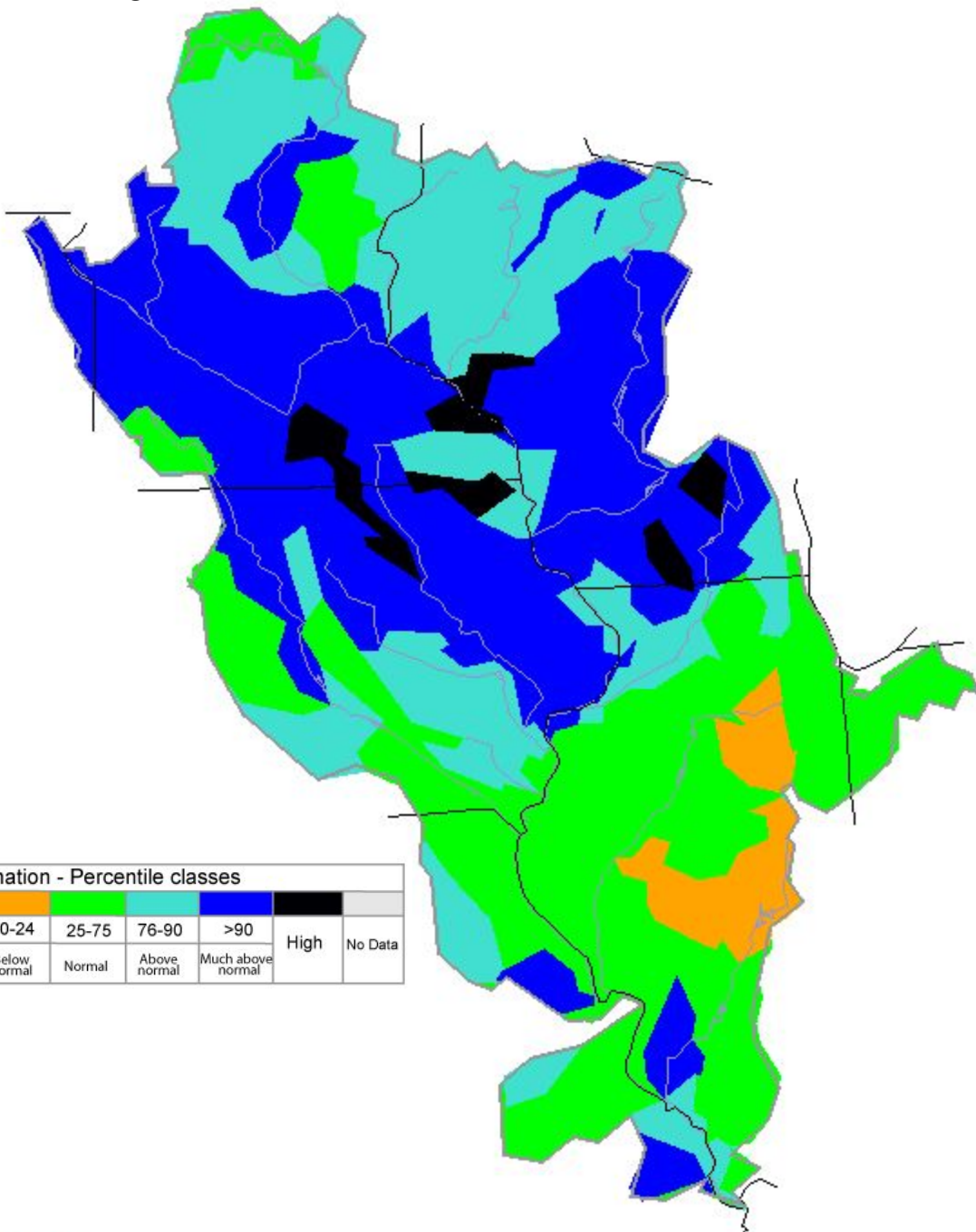
# Streamflows

NWS Quad Cities IA/IL

Sunday, July 7, 2024

Streamflows are near to above normal through much of the local area. Above average precipitation will keep river levels elevated. Upstream watersheds are also well above average.

Saturday, July 06, 2024



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		





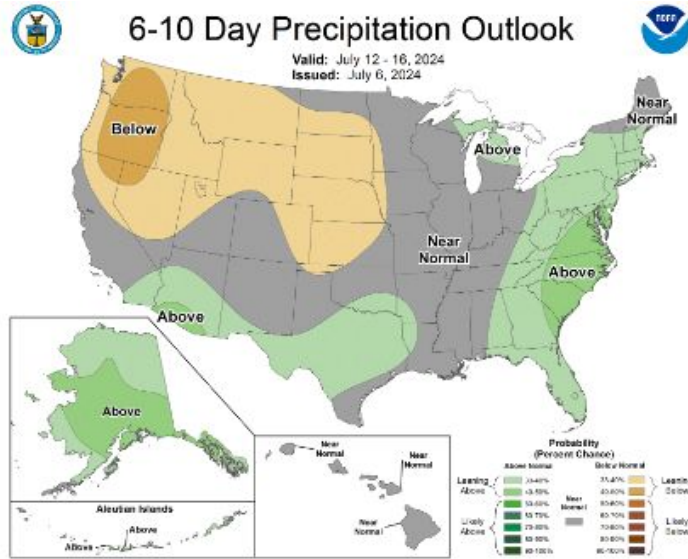
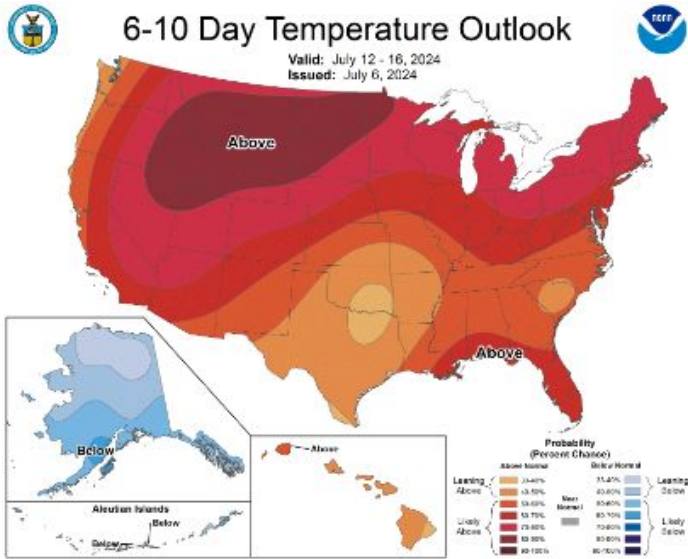
# Weather Outlooks

NWS Quad Cities IA/IL

Sunday, July 7, 2024

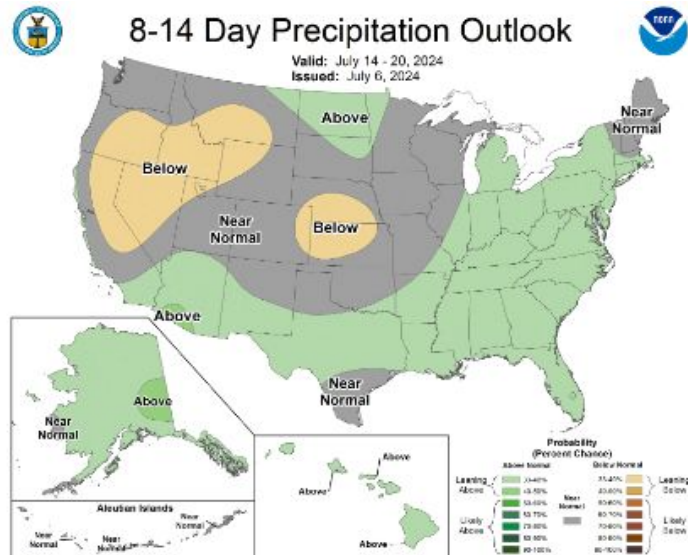
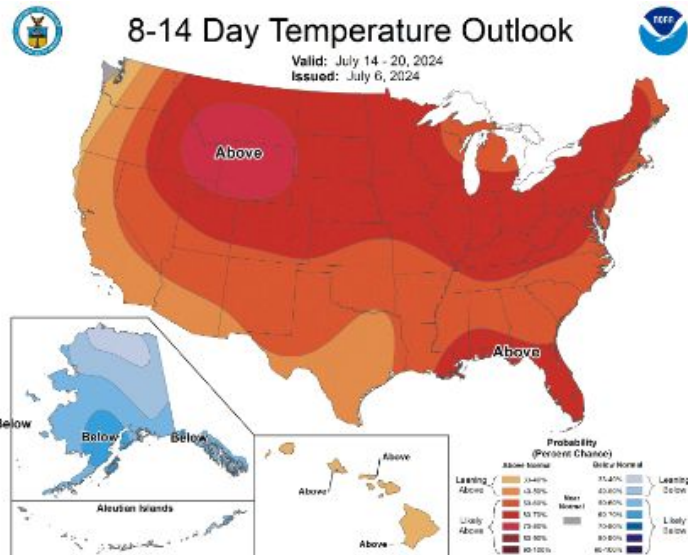
## Temperature and Precipitation Outlooks (7/12-7/16):

- Above normal temperatures and near normal precipitation are favored, both locally and upstream.



## Temperature and Precipitation Outlooks (7/14-7/20):

- Above average temperatures and near average precipitation is favored locally and upstream in the 8-14 day period..







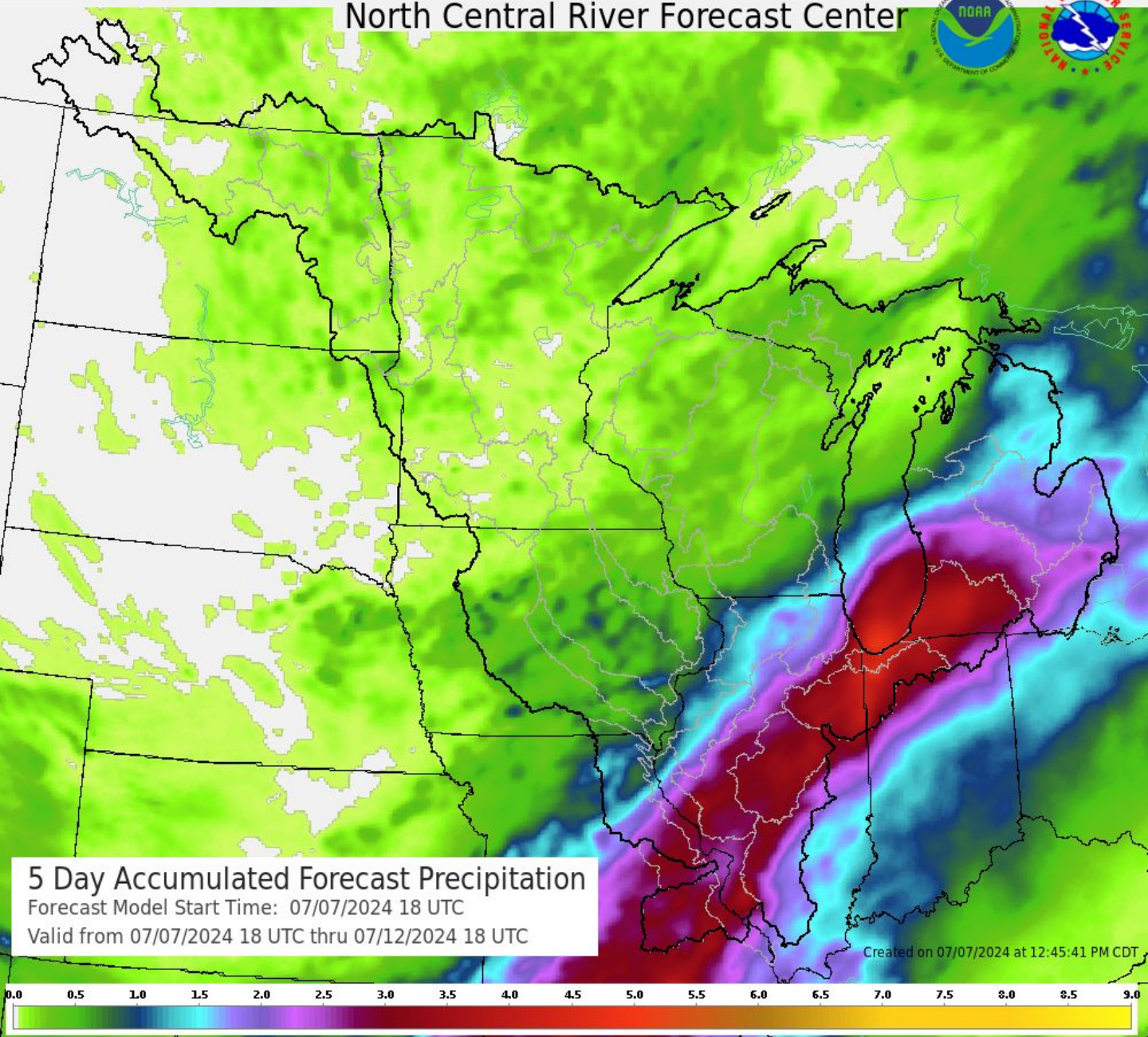
# 5-Day Precipitation Forecast

NWS Quad Cities IA/IL

Sunday, July 7, 2024

5 Day Precipitation outlooks showing the possibility of 0.5-1.25 inches of rain likely in eastern Iowa and the upstream areas. A large rain producing system is currently anticipated to set up in a broad band from St Louis to Chicago. That system could contribute 4 or more inches depending on where it sets up.

North Central River Forecast Center





# 7-Day Mississippi River Outlook

NWS Quad Cities IA/IL

Sunday, July 7, 2024

7 Day outlook shows rises along the Mississippi River with all but two locations having already reached the Major flood stage. Cresting has finally reached the stretch of River from Camanche north. Forecasting actual crest peaks and timing will be made difficult in many locations due to multi day broad crests, which are vulnerable to small spikes from localized rain events. Time period above Major flood stage at some locations is currently predicted to last 2-3 weeks total, but will vary if there is any significant rain event from the Quad Cities north.

## July 7th Update: Mississippi River Crest Timing

**July 7, 2024**  
**12:59 PM**

Flood Categories	Minor	Moderate	Major	Values are in FEET. - Sites at and upstream of Camanche are cresting. Crests may last 1-4 days.											
Location	SUN 7/7 PM	MON 7/8 AM	MON 7/8 PM	TUE 7/9 AM	TUE 7/9 PM	WED 7/10 AM	WED 7/10 PM	THU 7/11 AM	THU 7/11 PM	FRI 7/12 AM	FRI 7/12 PM	SAT 7/13 AM	SAT 7/13 PM	SUN 7/14 AM	
Dubuque LD11	CRESTING ~20.85						<20.5								
Dubuque Railroad	CRESTING ~22.3									<21.5					
Bellevue	CRESTING ~20.16						<20.0								
Fulton	CRESTING ~20.0									<20.0					
Camanche	CRESTING ~21.3													<20.5	
Le Claire	>14.2					CRESTING ~14.4									
Rock Island	>19.9			CRESTING ~20.0											
Illinois City	>19.7			CRESTING ~20.0											
Muscatine	>21.0			CRESTING ~21.5											
New Boston	>20.2					CRESTING ~20.7									
Keithsburg	>18.5			CRESTING ~18.7											
Gladstone	>15.7			CRESTING ~16.0											
Burlington	>20.0			CRESTING ~20.2											
Keokuk	>18.1											CRESTING ~18.8			
Gregory Landing	>19.3											CRESTING ~19.8			

**IMPACTS** Roads and buildings near the river may be flooded. Please heed any closures.

**CONSIDERATIONS** Current forecasts only include forecast rainfall for the next 24 hours. Additional rainfall beyond 24 hours may increase, delay, and/or prolong the crest.

National Oceanic and Atmospheric Administration  
U.S. Department of Commerce

**National Weather Service**  
**Quad Cities, IA/IL**



# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Dubuque (Lock and Dam 11) is showing a broad crest that reached just over 20.8 feet Saturday morning. Timing and height of final crest may change as crests this broad are easily spiked by small, local rain events.





# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Dubuque (Railroad Bridge) is showing a broad crest that reached just over 22.3 feet Saturday morning. Timing and height of final crest may change as crests this broad are easily spiked by small, local rain events.



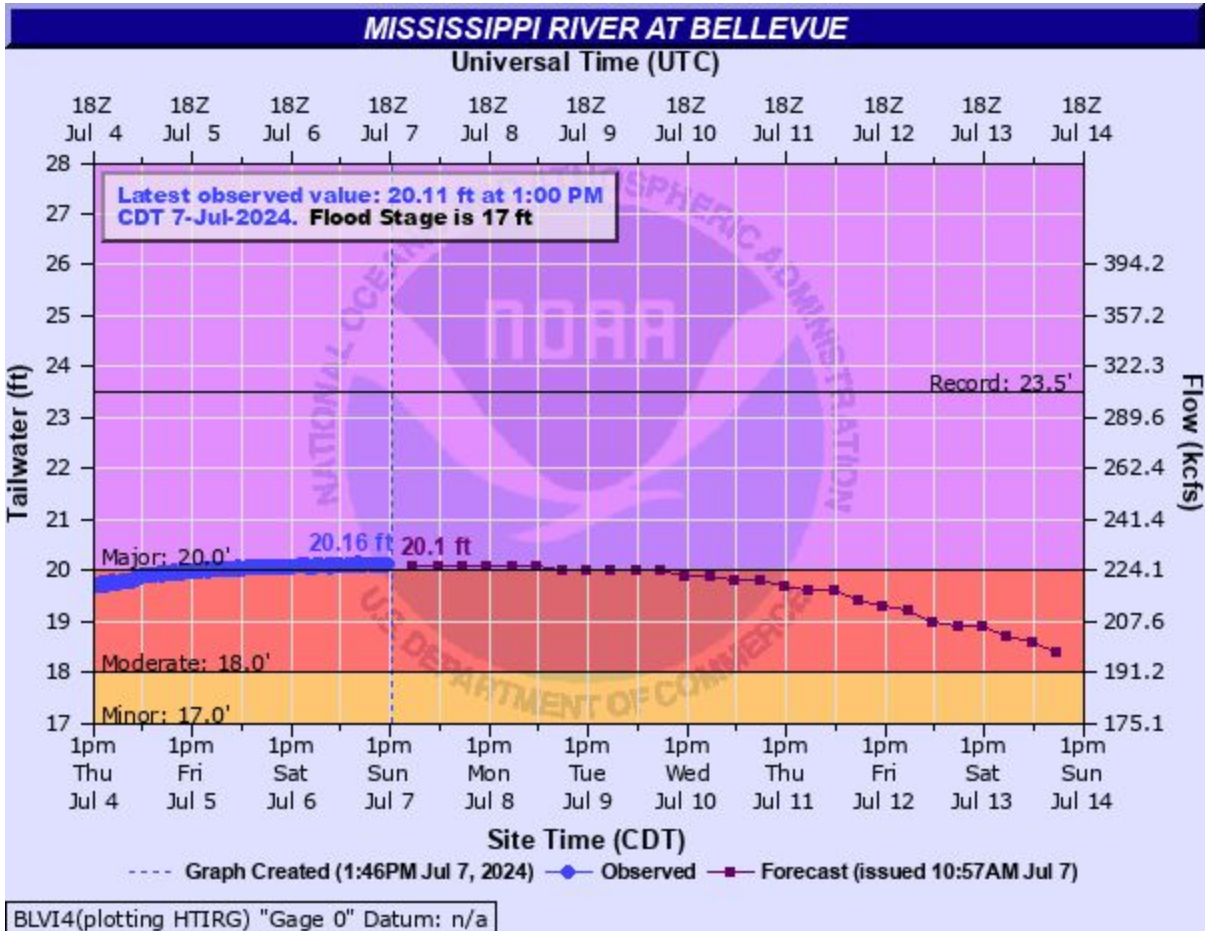


# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Bellevue is showing a broad crest that reached just under 20.2 feet Saturday morning. Timing and height of final crest may change as crests this broad are easily spiked by small, local rain events.



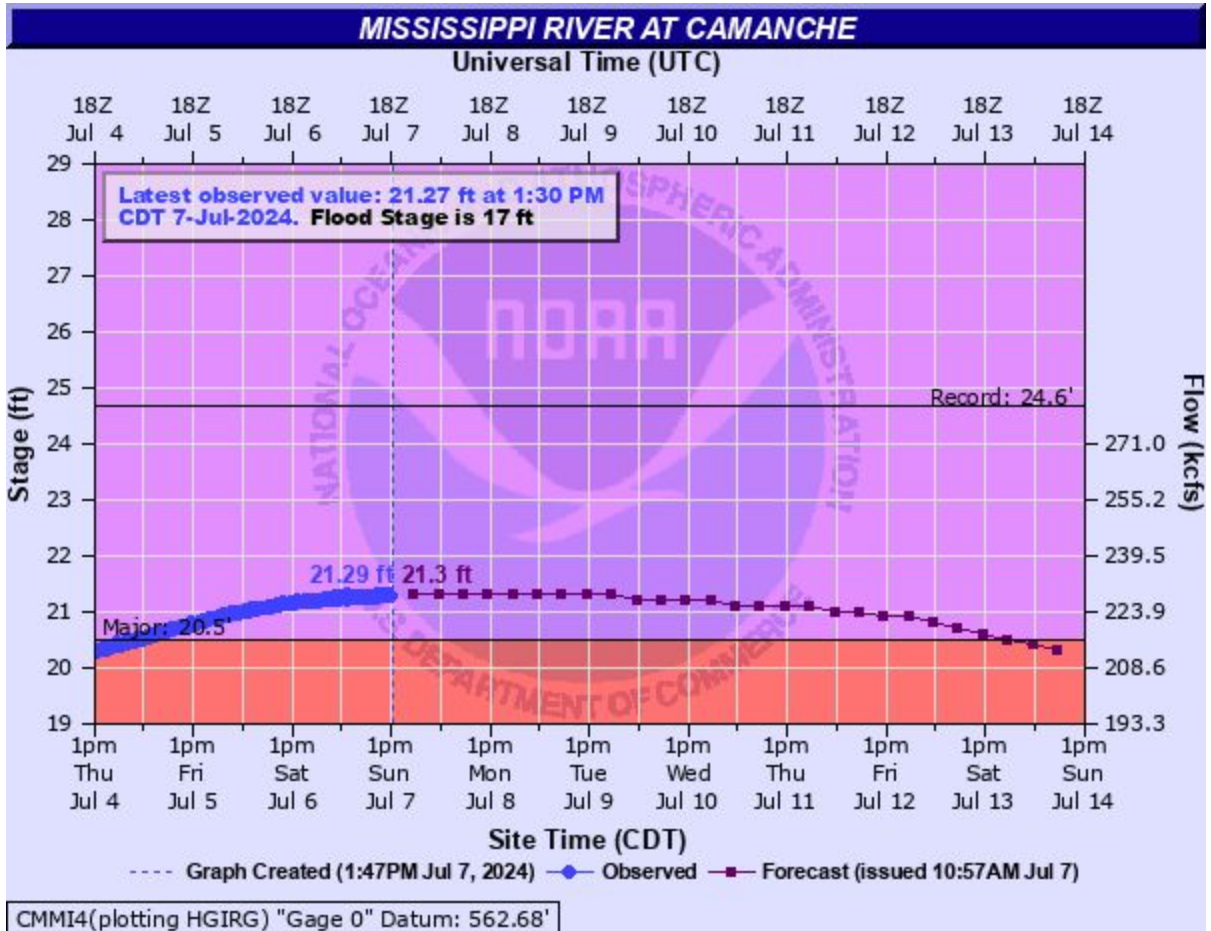


# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Camanche is forecasted to reach 21.3 feet by the end of the weekend. Water from upstream will keep river above Major flood stage well into next week, longer depending on future rainfall.



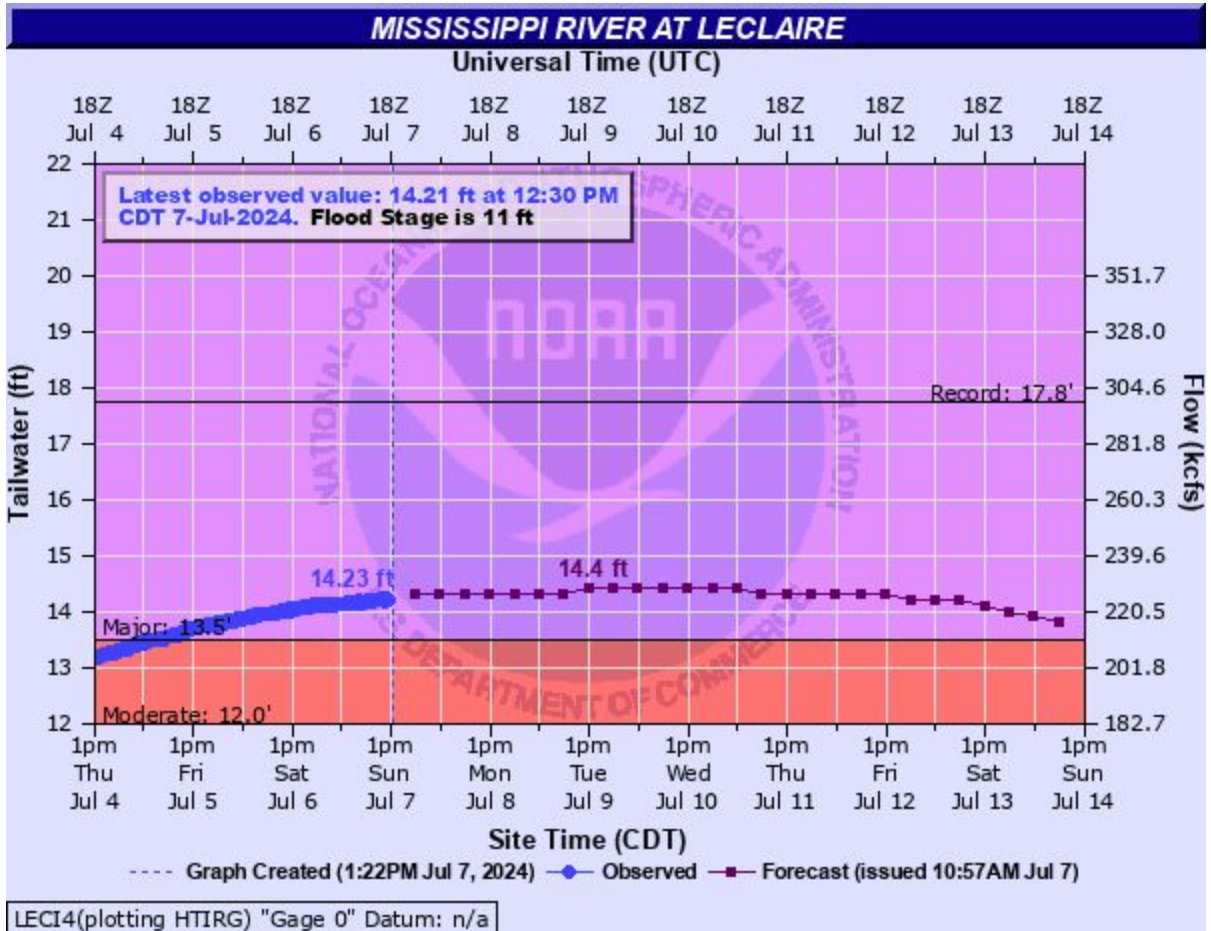


# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at LeClaire is forecasted to reach 14.4 feet by Tuesday. Water from upstream will keep river above Major flood stage well into next week, longer depending on future rainfall.



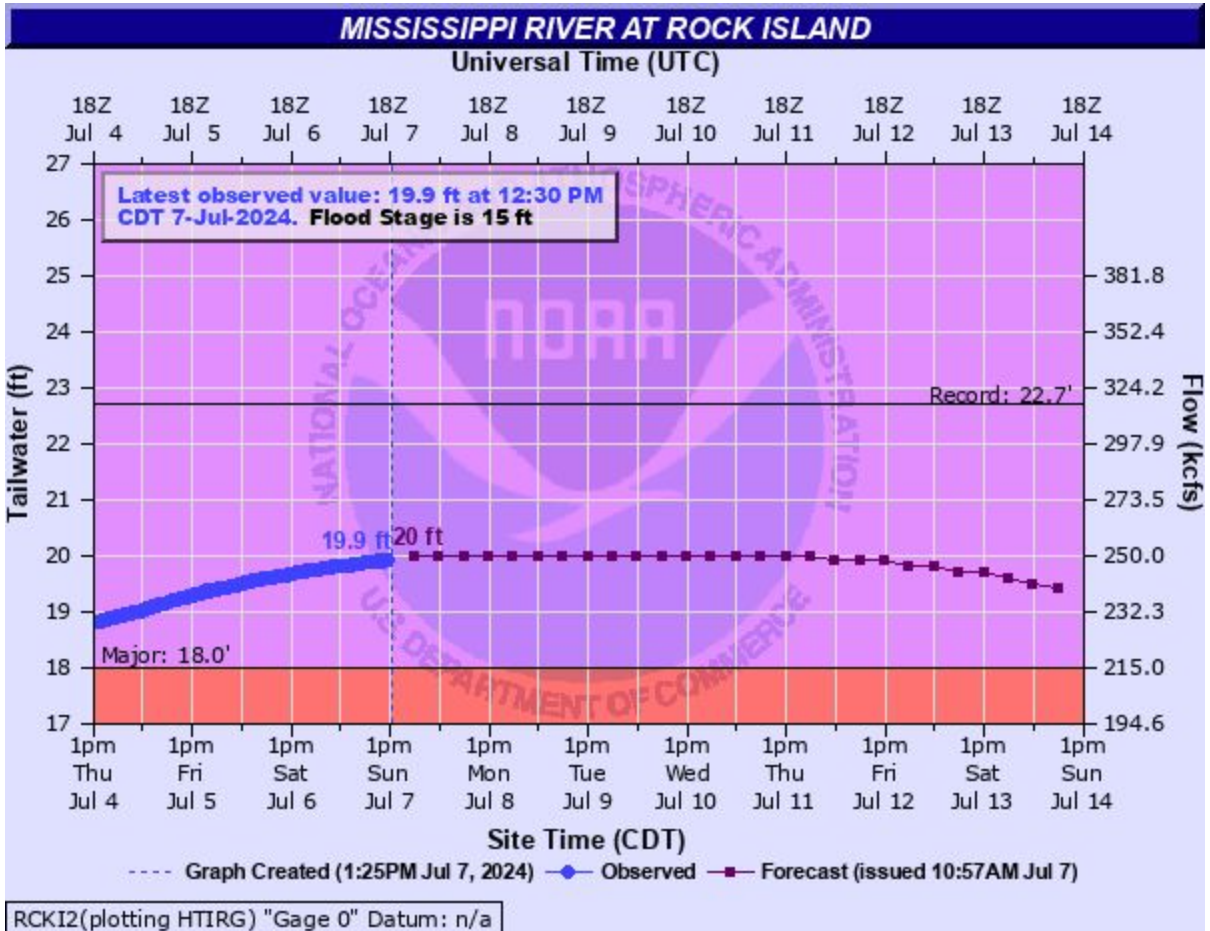


# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Rock Island is forecasted to reach 20.0 feet by Monday. Upstream rains will keep river above Major flood stage well into next week, longer depending on future rainfall.







# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Muscatine is forecasted to reach 21.5 feet by Tuesday. Upstream rains will keep river above Major flood stage well into next week, longer depending on future rainfall.





# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at New Boston is forecasted to reach 20.7 feet by the middle of next week. Upstream rains will keep river above Major flood stage well into next week, longer depending on future rainfall.





# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Burlington is forecasted to reach 20.2 feet by Monday. Upstream rains will keep river above Major flood stage well into next week, longer depending on future rainfall.



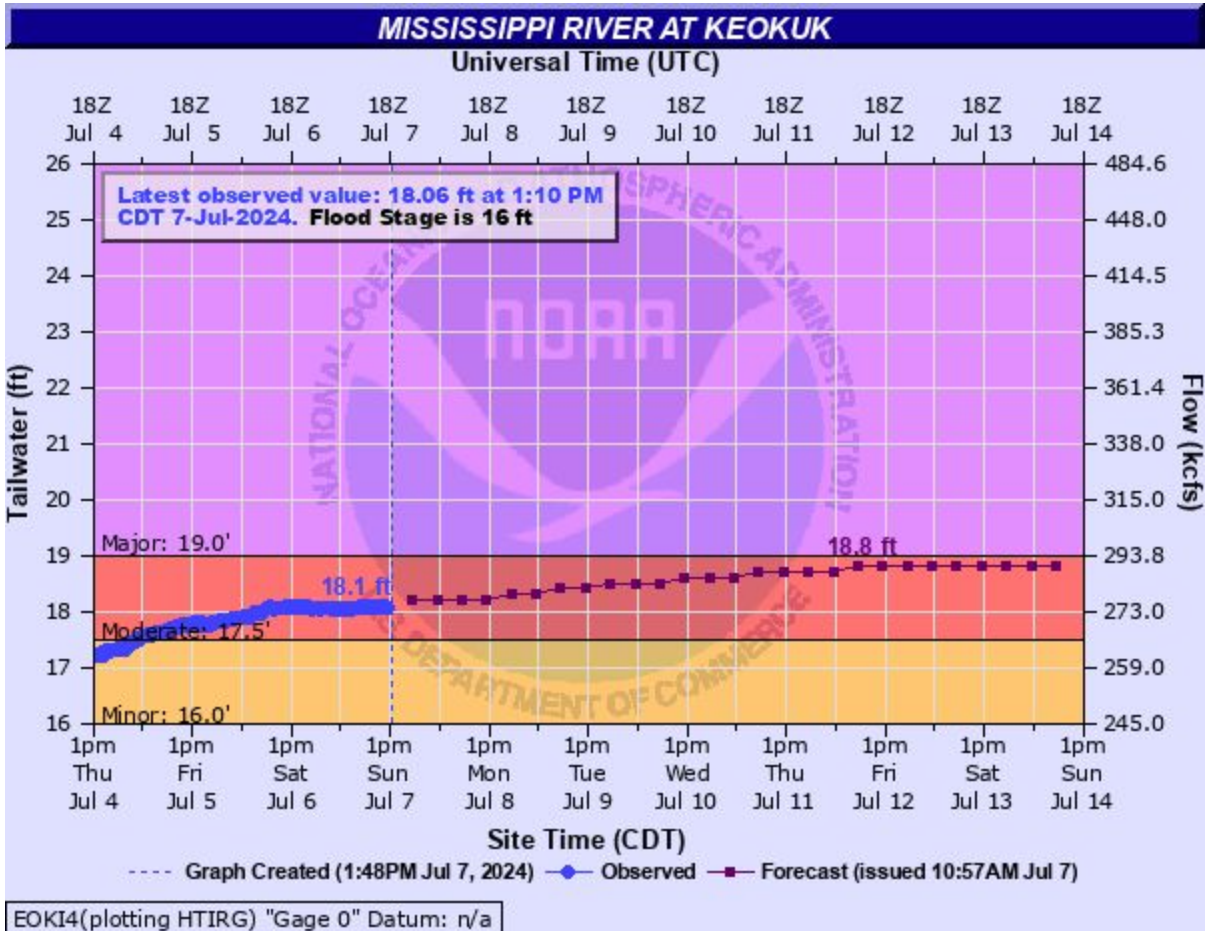


# Mississippi River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Mississippi River at Keokuk is forecasted to reach 18.8 feet by the end of the week.



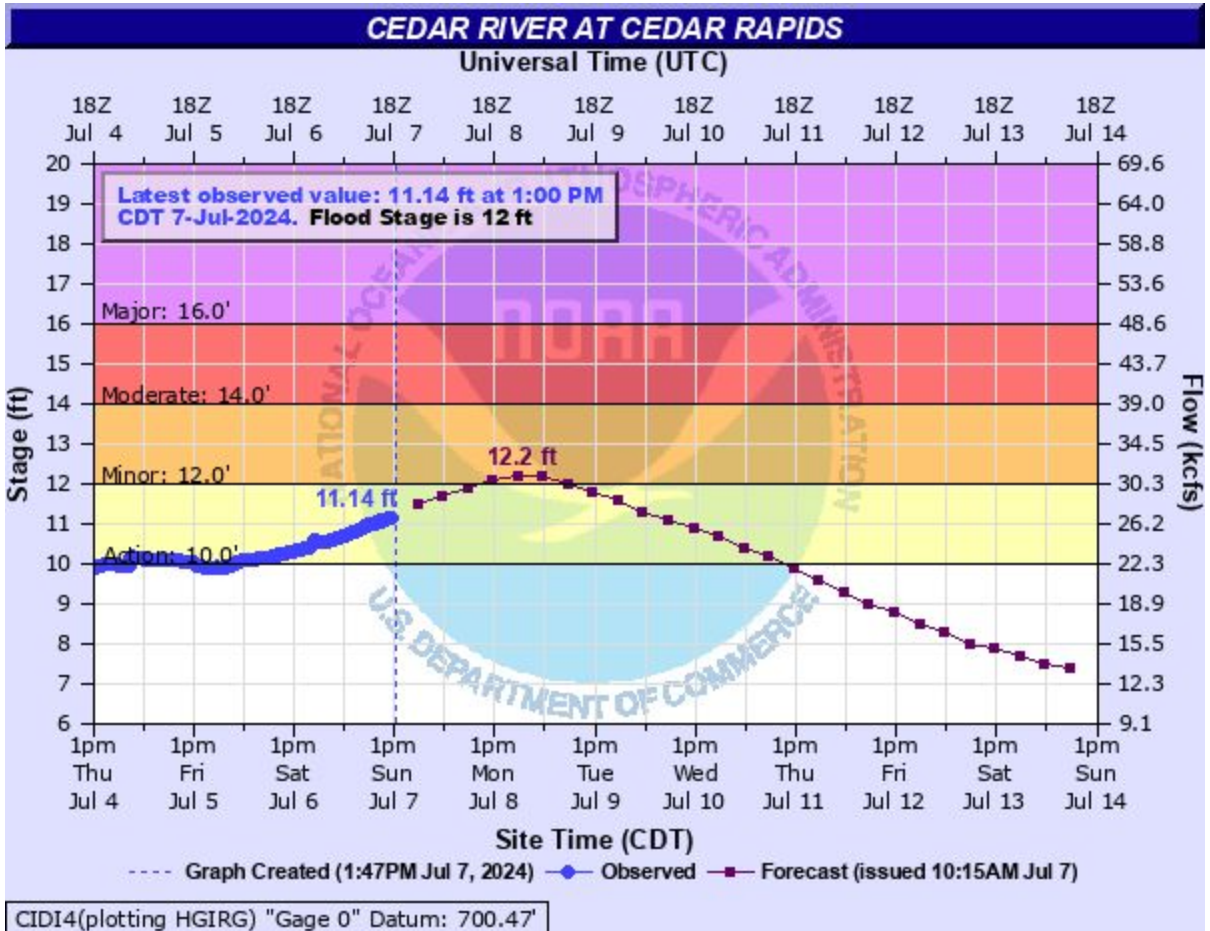


# Other River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Cedar River at Cedar Rapids likely to reach flood stage on Monday and return below flood stage sometime on Tuesday.





# Other River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Cedar River at Conesville crested right below 15 feet last Monday, and likely will remain above flood stage for the next week due to water moving down from upstream areas. Expected to get to near 14.5 feet by the middle of the week.



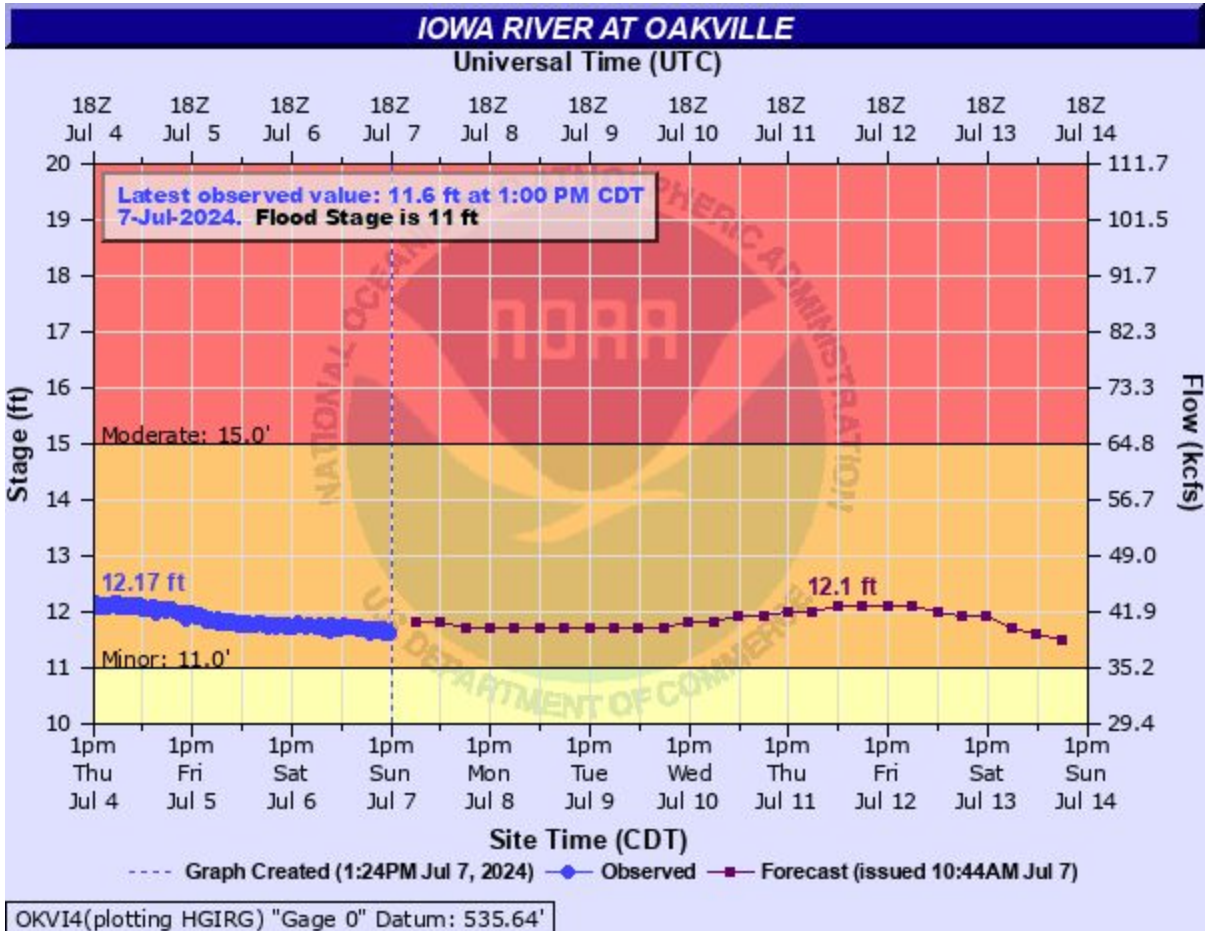


# Other River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Iowa River at Oakville crested Wednesday at 12.28 feet. Upstream rainfall and high stages on the Mississippi River causing back water effects on the lower Iowa will contribute to an extended recession and longer period above flood or action stage.





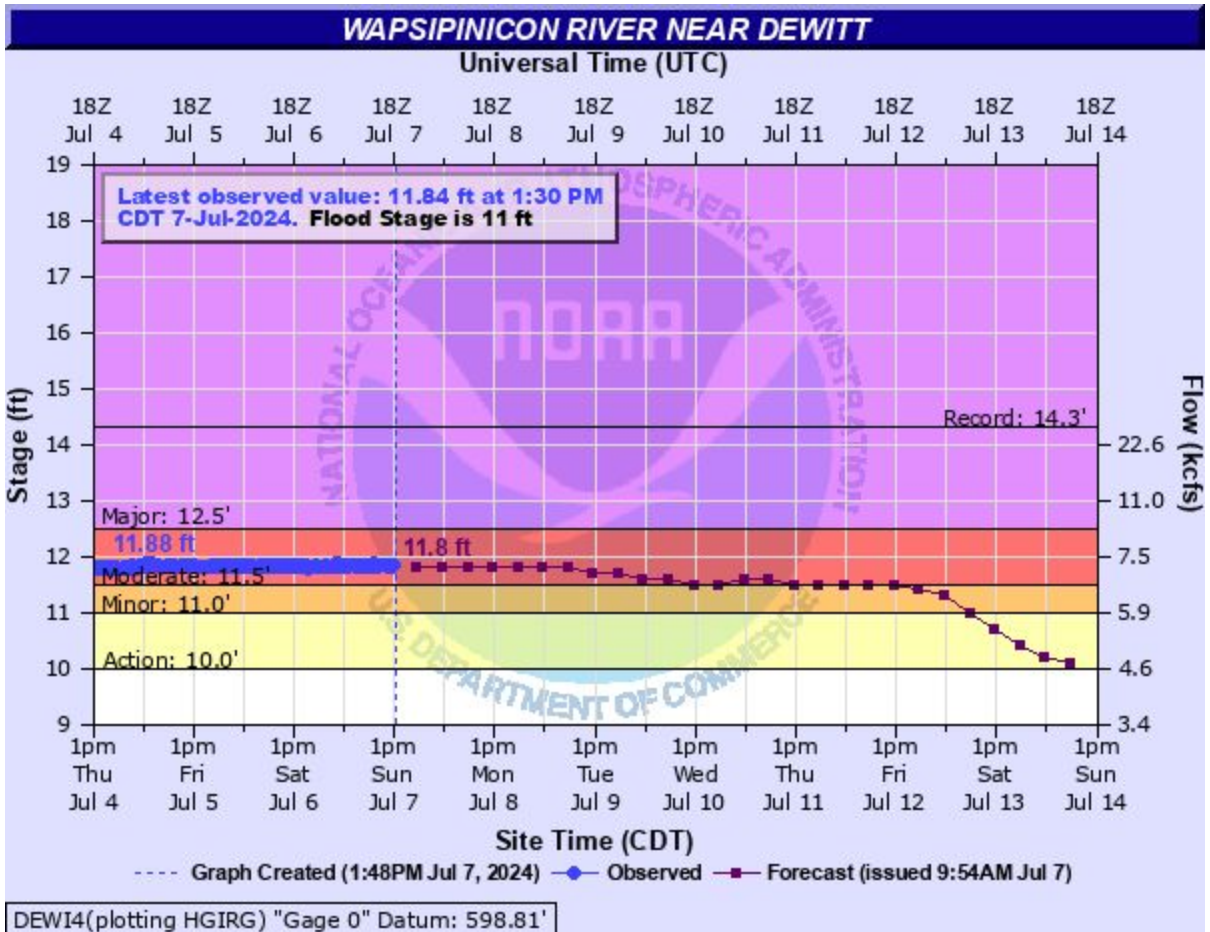
# Other River Forecasts

NWS Quad Cities IA/IL

Sunday, July 7, 2024

The Wapsipinicon River at DeWitt shows a crest of nearly 11.9 feet earlier this weekend, and continuing to remain above Moderate flood stage well into next week, before quickly dropping below flood stage.

Timing and height of final crest may change as crests this broad are easily spiked by small, local rain events.







# Information Sources

NWS Quad Cities IA/IL

Sunday, July 7, 2024

- Quad Cities WFO Forecast Discussions (technical weather and hydrology discussion) - [forecast.weather.gov/product.php?site=DVN&issuedby=DVN&product=AFD](https://forecast.weather.gov/product.php?site=DVN&issuedby=DVN&product=AFD)
- National Water Predictions Service (NWPS) – [water.noaa.gov](https://water.noaa.gov)
- North Central River Forecast Center – [www.weather.gov/ncrfc](https://www.weather.gov/ncrfc)
- Midwest Regional Climate Center (MRCC) – <http://mrcc.isws.illinois.edu/>
- US Geological Survey (USGS) WaterWatch page – <http://waterwatch.usgs.gov>
- National Operational Hydrologic Remote Sensing Center (NOHRSC) – [www.nohrsc.noaa.gov](https://www.nohrsc.noaa.gov)
- NOAA Climate Prediction Center – [www.cpc.ncep.noaa.gov](https://www.cpc.ncep.noaa.gov)
- NOAA Weather Prediction Center – [www.wpc.ncep.noaa.gov](https://www.wpc.ncep.noaa.gov)
- US Drought Monitor – [droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

Next Update:  
July 8, 2024

