Missouri Water Resources Center

Mississippi River Flood Conditions Report
April 3, 2019
Major Flood Levels Forecast for Relevant Sectors of the Mississippi River

- Flooding on the Mississippi River is currently primarily driven by abundant snowpack on the upper reaches of the Mississippi River watershed. While much of the snowpack has melted in Iowa and Illinois, significant snowpack remains above St. Paul, Minnesota. Several gages on the Upper Mississippi River in Wisconsin and Minnesota are still above flood stage. The river is still in major flood stage for several locations in Iowa and Illinois. As a result, extended high water is currently forecasted for most portions of the Mississippi River adjacent to the state of Missouri.

- The upper portions of the Mississippi River near St. Paul Minnesota, are beginning to crest and recede, dropping back to moderate flood stage in most locations. However, the Mississippi River from Davenport to Keokuk, Iowa, just upstream of Missouri, remains in major flood stage is not projected remain at these levels for the next 7-10 days.

- The Mississippi River from the border with Iowa to the New Madrid in the south east has crested in most locations and is slowly receding. Hannibal, Saverton, Clarkesville, and Winfield are all predicted to fall to moderate flood stage in next 24 hours.

- The Ohio River gage at Cairo (at the confluence of the Ohio and Mississippi Rivers) is in minor flood stage and predicted to crest in next 2 days.

- Precipitation and snow melt is also impacting the Illinois River. The Illinois River flows into the Mississippi River just above St. Louis and is experiencing some minor to moderate flooding with major flooding being reported for the Hardin gage (located on the lower Illinois River).

- Note that NWS river forecasting only incorporates 48-hour precipitation forecasts. Future precipitation along with snowmelt caused by predicted warming daytime temperatures could increase river levels from the forecasts shown below. Precipitation is forecasted for the area ranging from 1-3 inches total accumulation over the next 3 days.
National Snowpack Water Equivalent
Changes In Snowpack During Last 2 Weeks

Previous (03/19)

Current (04/03)
Regional River Gage Status
24-hour Observed Precipitation
Three-day Total Quantitative Precipitation Forecast (QPF)
7 Day Total Quantitative Precipitation Forecast (QPF)
• Near Clark County, MO

• The Mississippi River at Keokuk has dropped to moderate flood stage and is predicted to rise slowly back into major flood stage by Friday (4/05/2019).

• At Keokuk, the river levels of 19 feet close U.S Highway 61 at the bridge over the Des Moines River and affect County Road 12.
The Mississippi River at Hannibal receded to moderate flood stage and is expected to remain in that stage for the next 3-4 days.

At Hannibal, river levels of 22 feet activate preparations to install flood gates along city river front district, Burlington Northern Railroad tracks begin to flood, Highway 79 is impacted and flooding occurs at low lying areas that are unprotected.
• The Mississippi River at Clarksville (Lock and Dam 24) has receded to moderate flood stages and is predicted to remain at those levels for the forecast period.

• At Clarksville, river levels of 32 feet leads to closure of Lock and Dam 24, Front Street begins to flood and the Burlington Northern Railroad tracks along with sections of Highway 79 begin to flood.
• The Mississippi River at Grafton has crested and predicted to slowly recede over next week.
• At Grafton, river levels of 26 feet cause the water distribution system to begin to flood, necessitating emergency measures, and at 26.4 feet residential flooding occurs.
• The Mississippi River at Cape Girardeau is in moderate flood stage at 41.11 feet and is predicted rise and crest at 41.5 feet by Friday (04/05/19).
• At Cape Girardeau, river stages of 36 feet result in the flood gate at Themis Street closing, and stages of 38 feet result in the floodgate at Broadway closing.
• The Ohio River at Cairo is in minor flood stage at 45 feet and is predicted rise and crest at 45.3 feet by Saturday (04/06/19).
• At Cairo, river levels of 50 feet (at confluence of Ohio River and Mississippi River) lead to closure of flood gates.
• The Mississippi River at New Madrid has receded below flood stage to 33.36 feet, and is forecast to rise again into minor flood stage Thursday (04/04/2019).
Resources for Further Information

• Department of Natural Resources Flood Page: https://dnr.mo.gov/flood
• National Weather Service – Mississippi River Flooding: https://www.weather.gov/dvn/MississippiRiverOutlook
• National Weather Service – River Forecasts, Missouri Basin: https://www.weather.gov/dvn/River_Levels#Top
• Missouri Water Resources Center – Mississippi River Informational Page: https://dnr.mo.gov/geology/wrc/interstate-waters/mississippi_river.htm