

Salt River Flood

Late July-Early August, 2008

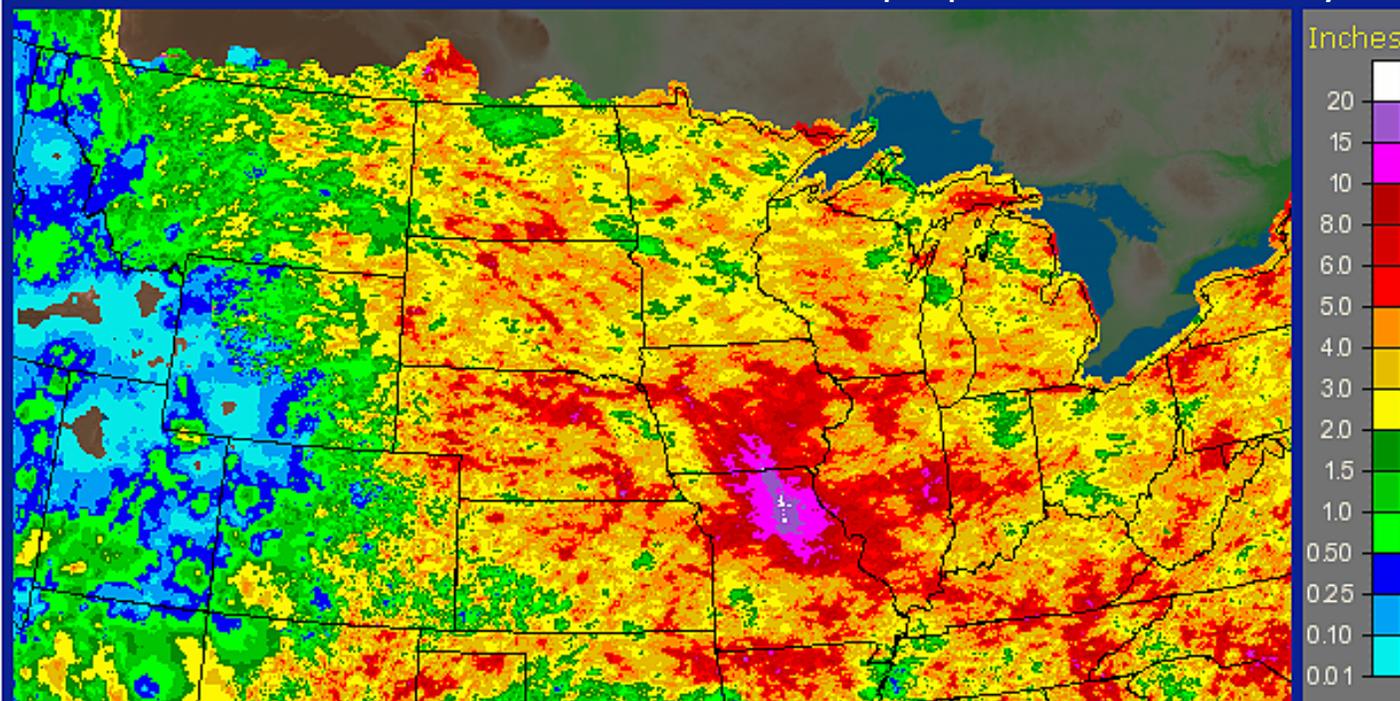
Overview

Into the end of July nearly zonal flow aloft allowed for a series of weather disturbances to traverse the central portion of the nation, while surface high pressure remained fairly strong across the Northern Plains and Great Lakes Region, as well as the southeastern Gulf Coast. The combination of the various weather features resulted in a region of low pressure to remain anchored across the Central Plains and Mid-Mississippi Valley. These factors resulted in southerly flow from the Gulf Coastal Region to bring moist and unstable air northward and collide with a nearly stationary frontal boundary draped across portions of Nebraska, Iowa, Missouri, and eastward through the Ohio River Valley. With the aid of weather disturbances aloft, a series of thunderstorm complexes moved along the frontal boundary and across the Salt River Basin dropping several inches of rain at a time. By the very end of July the remnants of Hurricane Dolly moved northward from the Gulf Coast placing an even greater stress over the already swollen and flooded Salt River Basin. With two weeks of heavy rainfall and remnants of Hurricane Dolly, Mark Twain Lake, a flood control reservoir for the Salt River Basin, reached a record level of 640.36 feet on July 30, swelling it to twice its normal size. The previous record was 636.77 feet in 1993. On July 30 the Army Corps of Engineers closed the lake to all boating traffic, and increased the water released through Clarence Cannon Dam into the Salt River to 50,000 cubic feet per second (cfs) resulting in flooding of locales downstream. By the end of July multiple locations through Central and Northern Missouri had posted over 10-inch rainfall totals for the month of July (over 15 inches especially for locations within the Salt River Basin.) The Midwestern Regional Climate Center concluded at the time, *"Based on preliminary data, July 2008 was the 8th wettest on record for Missouri and Illinois, and the 14th wettest on record for the nine-state Midwest region. In addition, January-July precipitation for Missouri, Illinois, and for the Midwest as whole was the greatest on record."*

NWS Central Region: July, 2008 Monthly Observed Precipitation

Valid at 8/1/2008 1200 UTC - Created 8/1/08 22:44 UTC

Total precipitation for the month of July

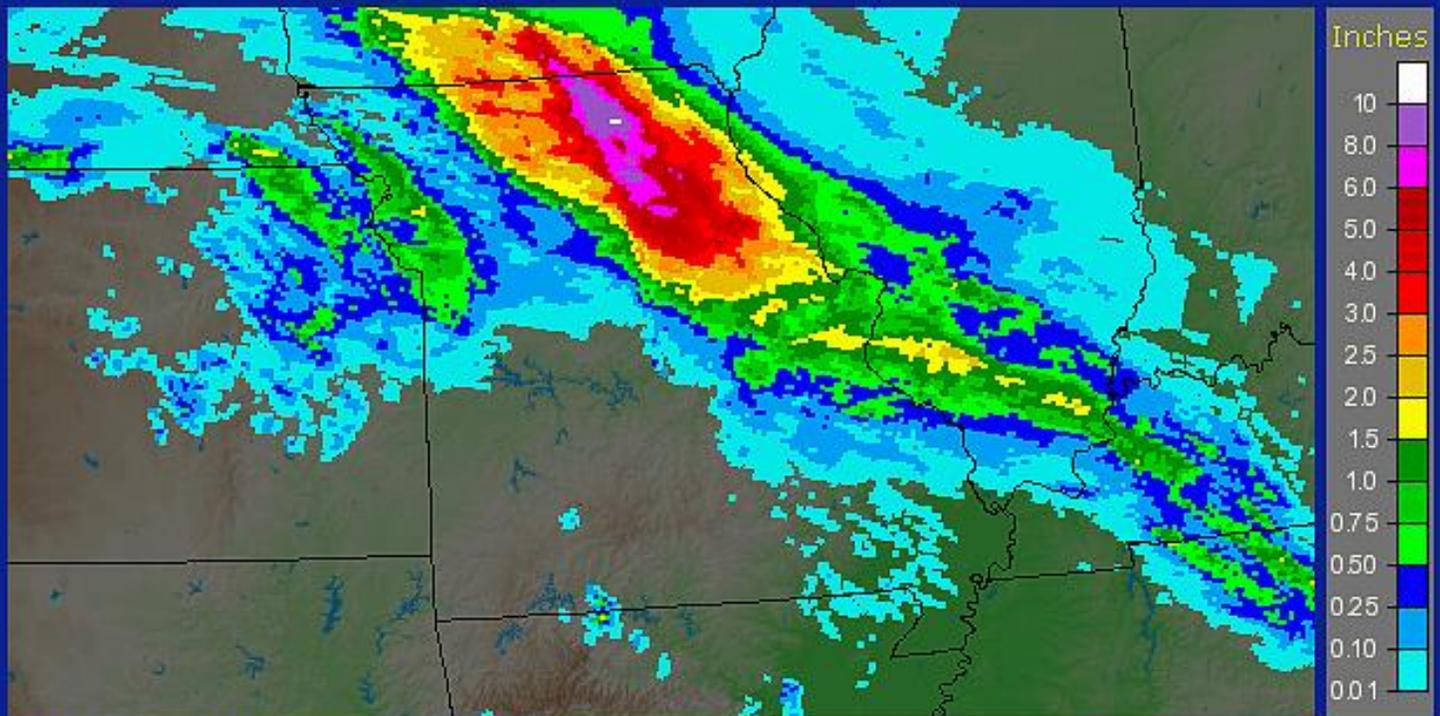


NWS Advanced Hydrologic Prediction Center

Total Precipitation

Missouri: Current 1-Day Observed Precipitation
Valid at 7/25/2008 1200 UTC - Created 7/25/08 18:43 UTC

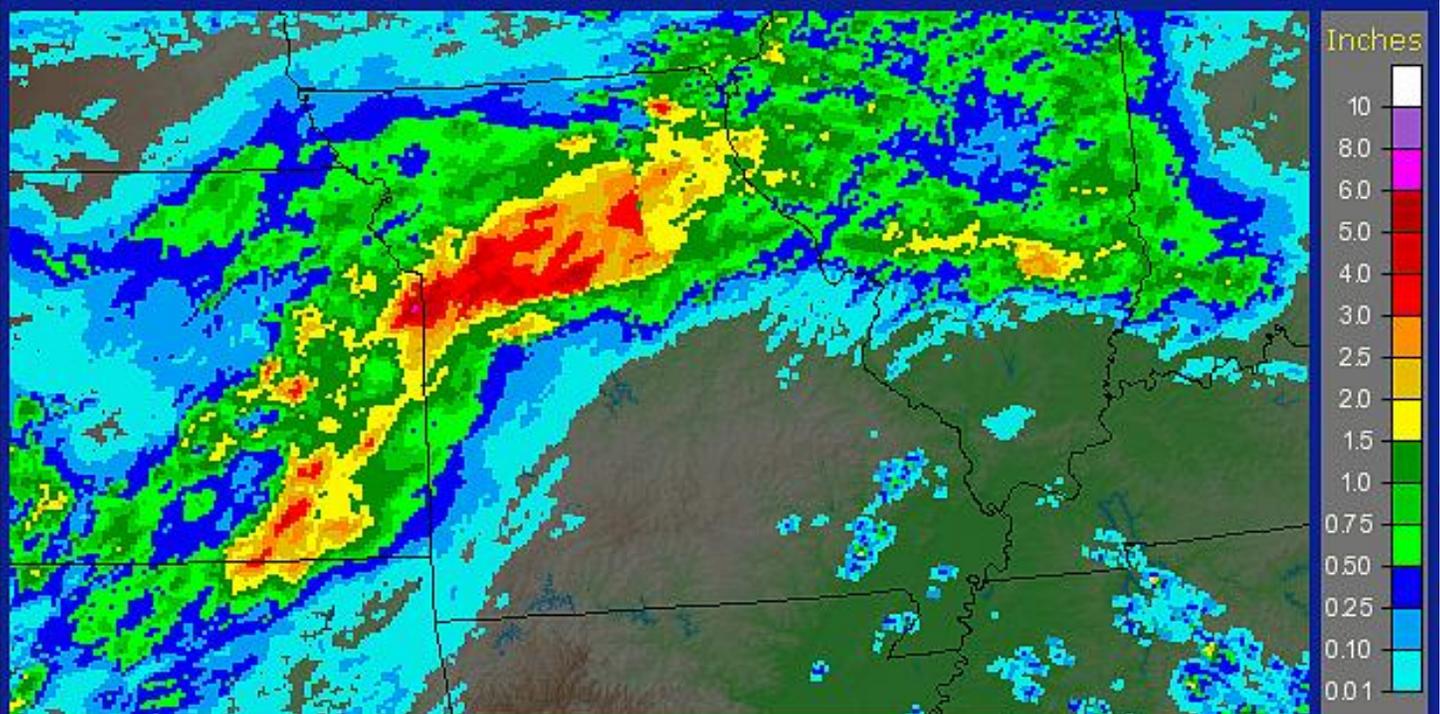
Total precipitation for July 25th



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Missouri: 7/30/2008 1-Day Observed Precipitation
Valid at 7/30/2008 1200 UTC - Created 8/1/08 10:32 UTC

Total precipitation for July 30th

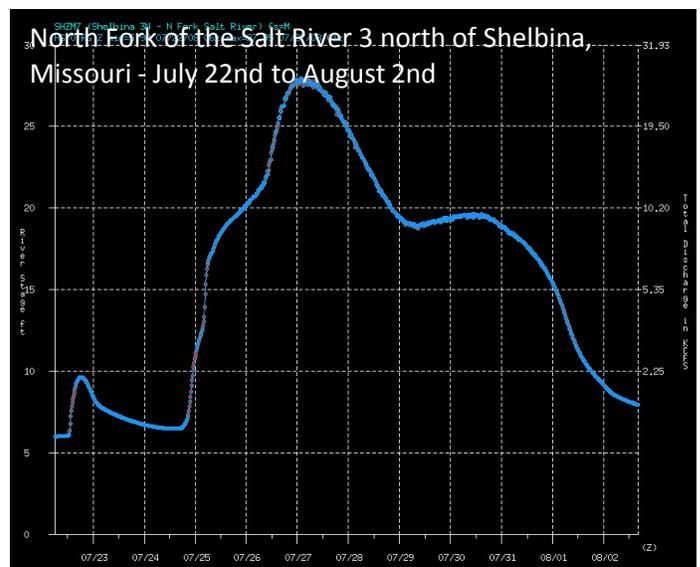
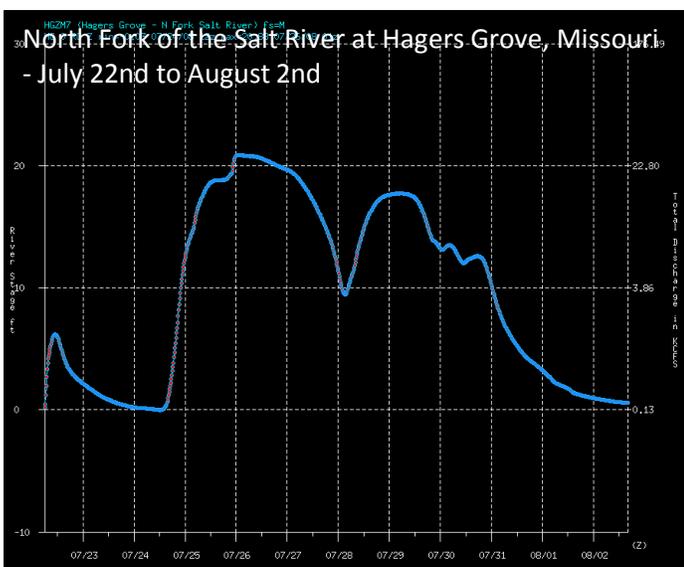
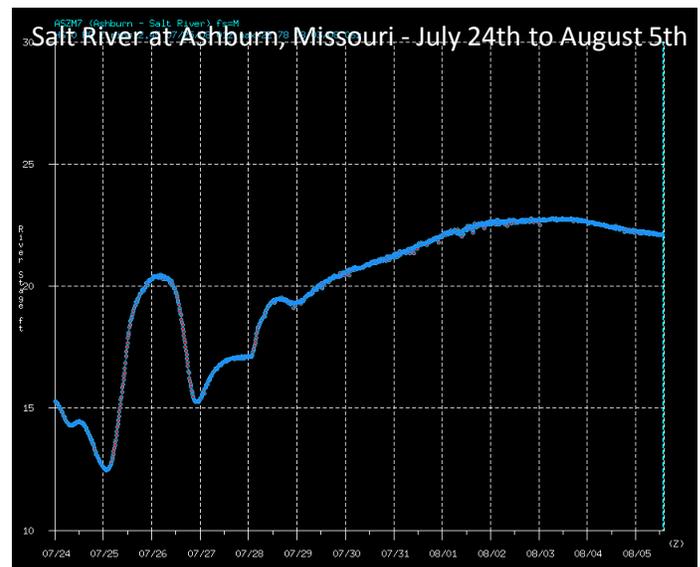
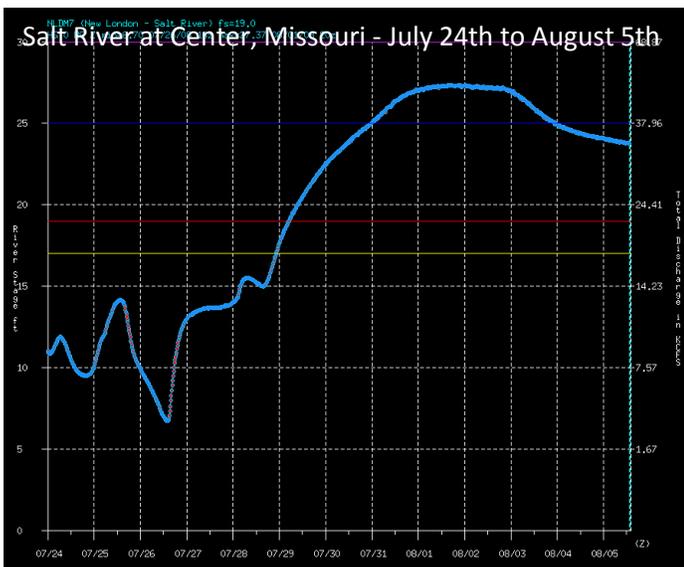
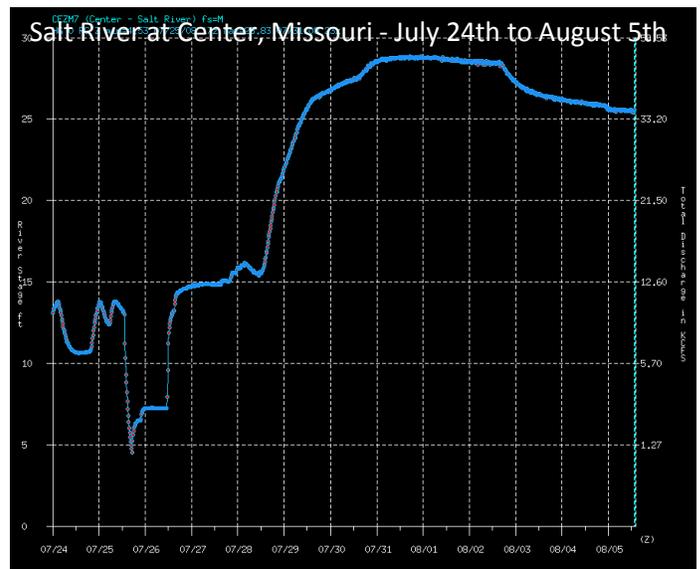
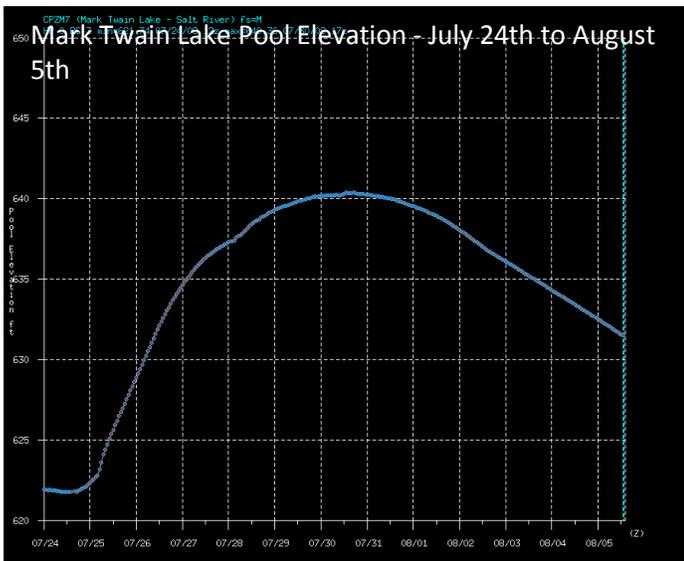


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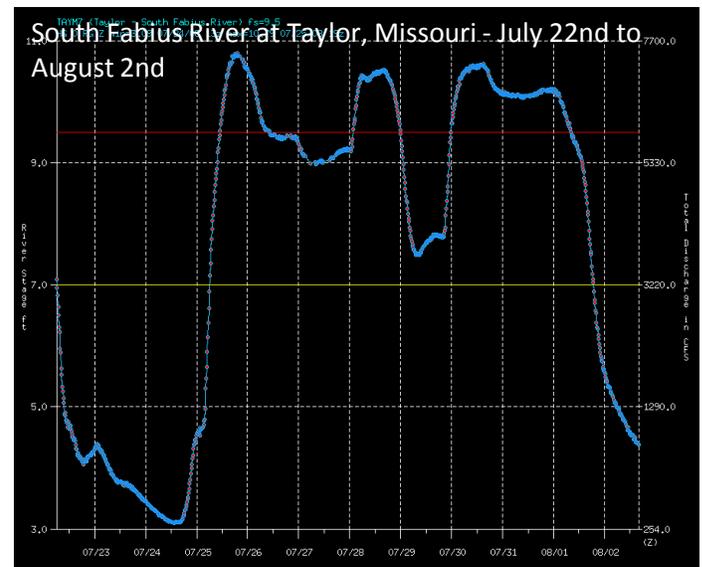
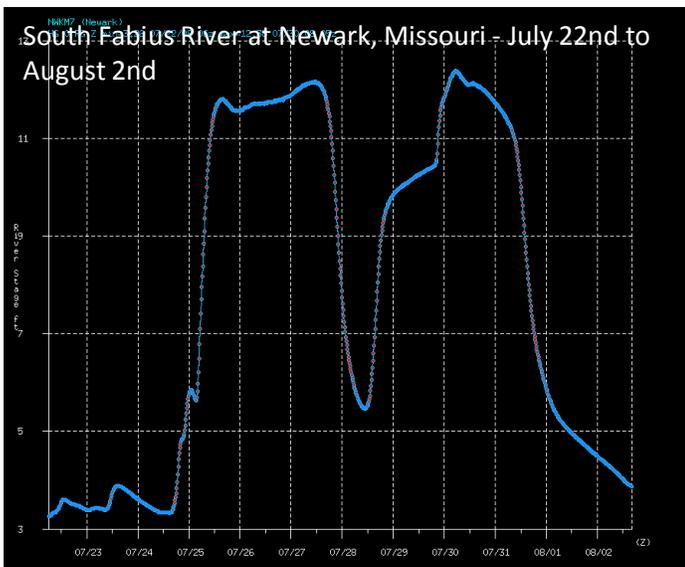
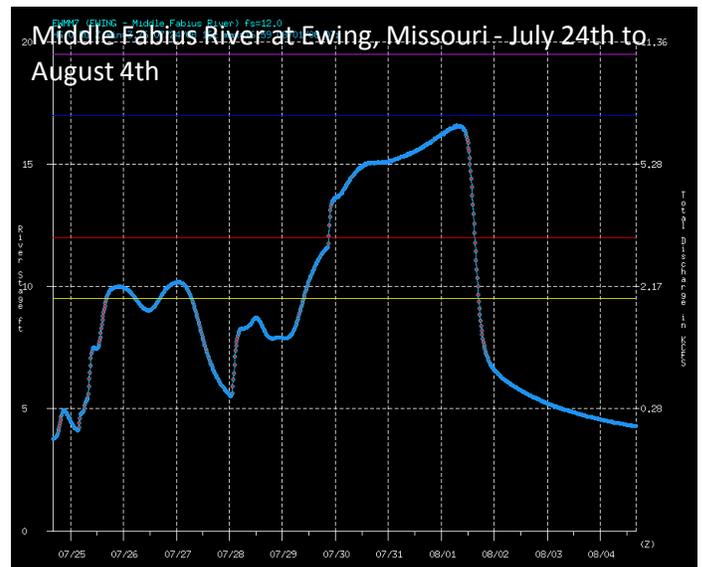
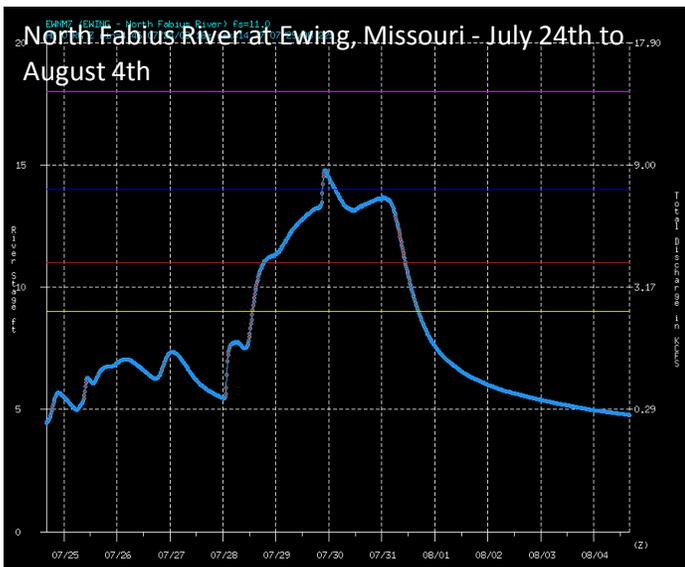
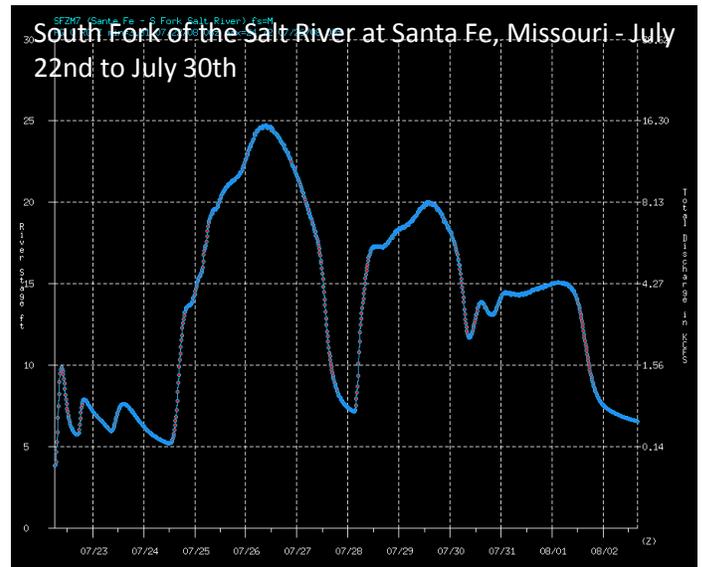
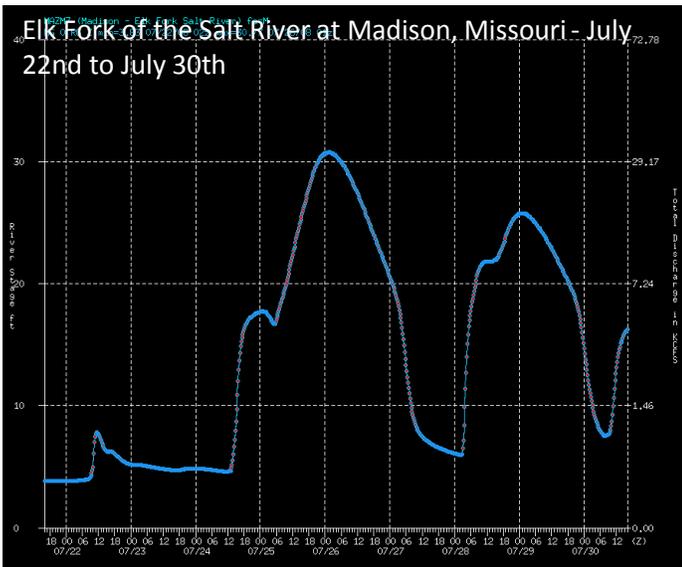
Flooding Photos



Hydrographs

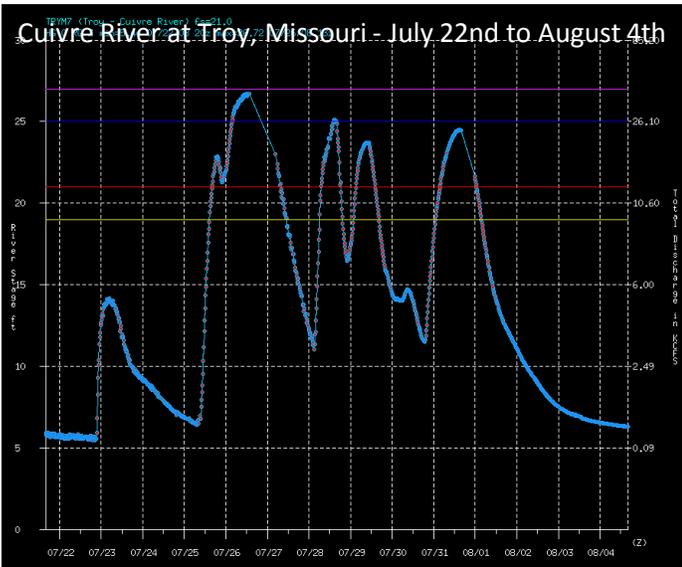


Hydrographs

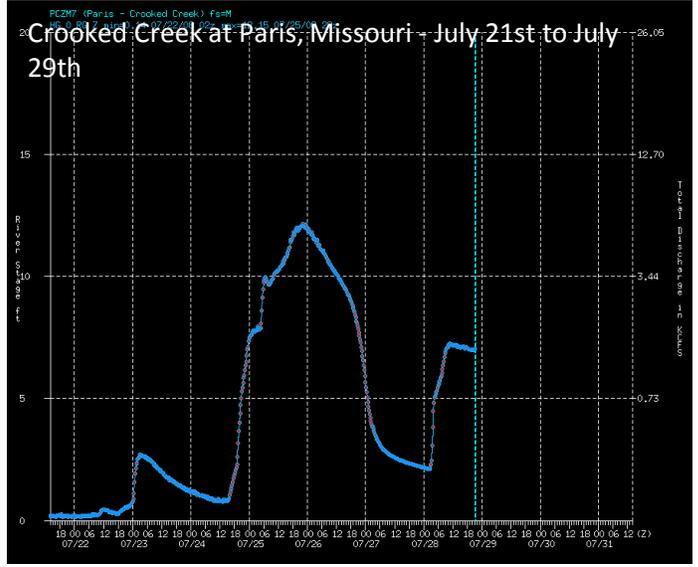


Hydrographs

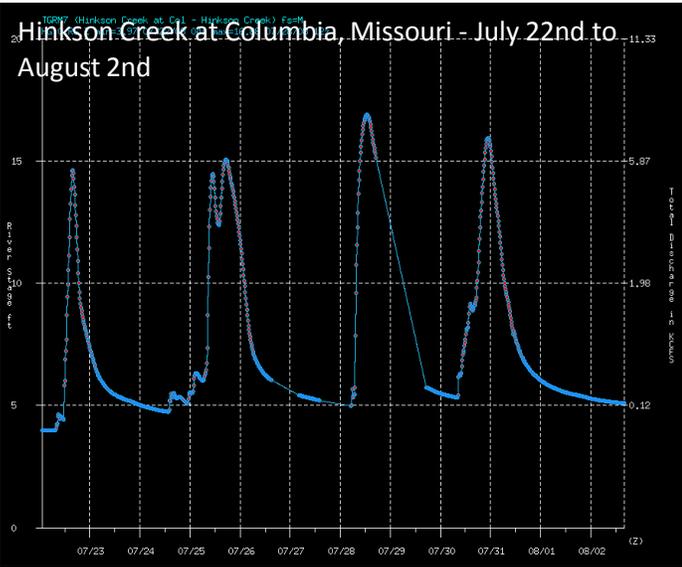
Cuivre River at Troy, Missouri - July 22nd to August 4th



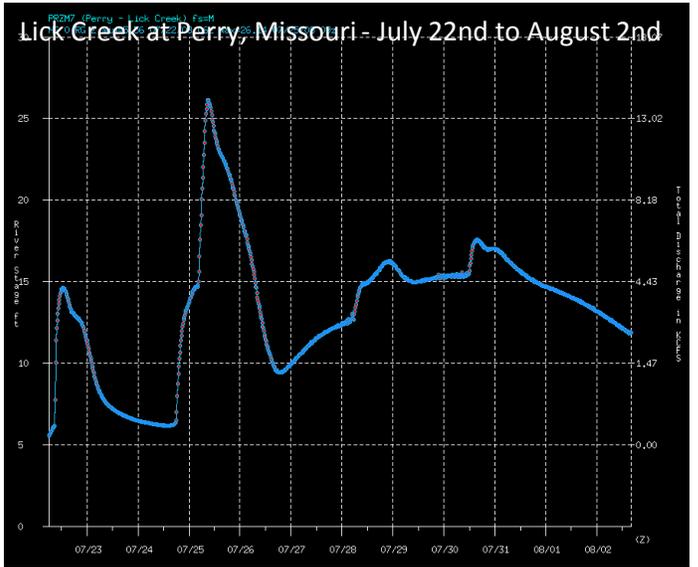
Crooked Creek at Paris, Missouri - July 21st to July 29th



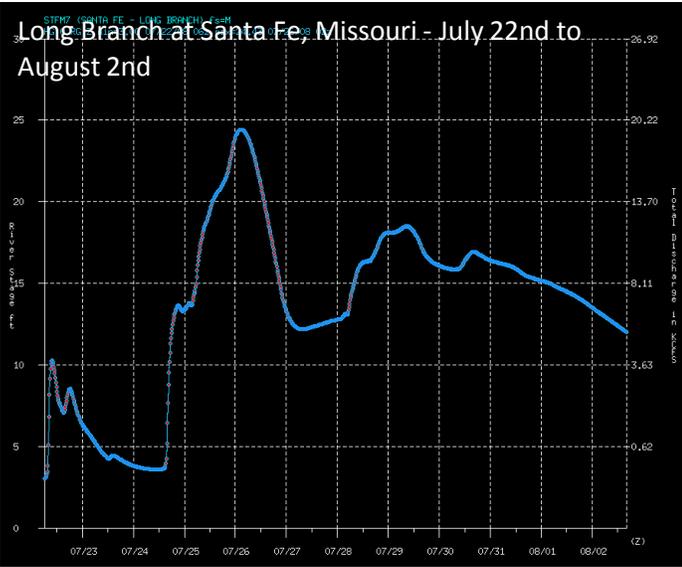
Hinkson Creek at Columbia, Missouri - July 22nd to August 2nd



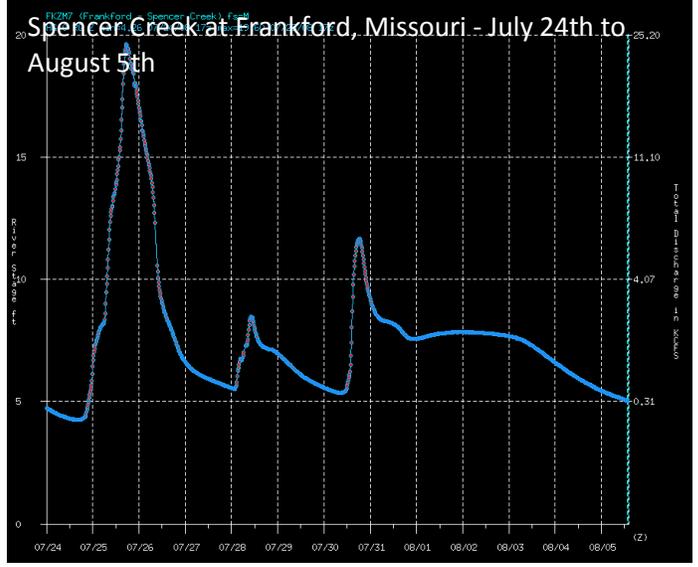
Lick Creek at Perry, Missouri - July 22nd to August 2nd



Long Branch at Santa Fe, Missouri - July 22nd to August 2nd



Spencer Creek at Frankford, Missouri - July 24th to August 5th



Any questions regarding this event review should be address to w-lsx.webmaster@noaa.gov