

The Great Flood on the Mississippi of 1993

This flood was the most severe experienced in the United States. It surpassed all others in precipitation amounts, record river levels, area of land flooded, persons displaced, crop and property damage and flood duration.

The autumn of 1992 was very wet, resulting in saturated soils, and during the following winter a normal to above normal amount of snow accumulated in the Upper Midwest. The spring rains of 1993 were exceptionally heavy, and in many places higher than previously recorded. They caused rapid melting of the winter snows with spring flooding beginning in March. The weather continued wet with several places recording over double the normal rainfall for the five-month period April to August. As well as the generalized heavy rain, there were many intense, localized storms. Major flooding began on the Minnesota River, a tributary of the Mississippi, after a period of particularly heavy rainfall in mid-June over the States of Minnesota and Iowa. The next heavy rain in late June caused flooding on the Mississippi that coincided with the arrival of the earlier flood wave on the Minnesota at the confluence of the two rivers to form the first major flood crest moving down the Mississippi. More rain in early July added to this flood crest. Rain in late July fell further south and largely after the first flood crest had passed. This led to a double crest in southern regions. The second crest at Saint-Louis, the confluence of the Missouri, occurred 11 days after the first and reached 15.11 m, 1.95 m above the previous record, set 20 years previously. Though the Missouri also flooded, flood control reservoirs in the upper Missouri basin withheld sufficient water to reduce flood peak levels by two to three metres. Further south the Ohio River joins the Mississippi and as this was carrying normal flows, there was adequate channel capacity for the high flows and no further flooding was observed downstream. The floods upstream receded from mid-August 1993, but the very wet state of the river basin gave fears of an increased risk of flooding throughout 1993, until the end of summer 1994.

The impact of the flood was considerable. Some 80,000 km² of land was flooded, 54,000 people had to be evacuated and there was widespread disruption of river traffic, roads and rail. River barges carry 15 per cent of United States



Fort Wayne, Indiana. Flooded house and car.
Black Star. J. Stanker