

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR:
MONTH: **FEBRUARY** YEAR: **2003**

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
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SIGNATURE
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In Charge of HSA
DATE **May 14, 2003**

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41).

...Periods of Rain Produce Major Flooding...

Heavy rainfall developed during the month of February over the Lower Mississippi River Valley, as several strong winter weather systems pushed across the region. Major flooding occurred on many of the river systems of southeastern Louisiana and southern Mississippi. With recurring bouts of copious rain, several rivers remained above their flood stages into March.

High pressure dominated the weather for the first few days of February, before giving way to a couple of storm systems that produced generally light rainfall. More significant rainfall developed during the second week of the month with areal average rainfall amounts that ranged from a few tenths of an inch over much of Louisiana to over an inch in southern Mississippi. This rainfall helped to increase the soil moisture, which in turn, helped to set the stage for flooding later in the month.

The second half of February was characterized by strong storm systems that produced days of rainfall over a large portion of the United States. The first flooding began February 17 at Bogalusa, Louisiana on the Pearl River, after a storm system pushed into the Lower Mississippi River Valley and northern Gulf of Mexico from February 14 through February 16. Areal rainfall amounts generally ranged from one half of an inch to over an inch during this period.

Behind this system, another potent low pressure area, with its associated frontal boundary, became near stationary from North Carolina to southern Texas by February 20. This system slowly sank south as another strong front moved east from the central plains in its wake. These combined weather systems produced heavy rainfall over the eastern and southern states, on February 21 and February 22. Many locations received from two inches to more than five inches of rain; soils quickly became saturated. At the same time, area creeks, streams, and rivers were unable to accommodate the copious rain amounts.

These recurring bouts of rain in late February caused the most extensive flooding, especially over the river systems of Louisiana. Floods developed February 21 through the 23 on the Amite and Comite Rivers near Comite, Darlington, Denham Springs, Bayou Manchac, and Little Prairie; on the Tickfaw River at Liverpool; on the Tangipahoa River near Osyka and Robert; on the Tchefonctte River at Folsom and Covington; on the Bogue Falaya River at Covington; and on the Pearl River at Pearl River. The Bogue Chitto River began to flood on February 22, first in Mississippi at Tylertown and then at Franklinton, Louisiana. The next day, flooding began on the Bogue Chitto River at Bush, Louisiana. Additional floods developed in Mississippi on the West Hobolochitto Creek near McNeil and on the Biloxi River near Lyman. These flood waters receded within a week, with damages generally confined to flooded agricultural areas, streets, and roadways. Some evacuations were completed around Folsom and Covington, though damages were minor. A few residents received water in their homes and yards in these areas.

Behind the combined weather systems of February 21 and February 22, a strong cold front pushed southeast into the Gulf of Mexico February 24 through February 26. When this system became near-stationary over the northern Gulf, additional heavy rain contributed to already above normal rain tallies over the area. Rain totals for this period ranged from a few tenths of an inch to around 1.5 inches over parts of southeastern Louisiana and southern Mississippi. New flooding developed in Louisiana on the Atchafalaya River at Morgan City; on the Amite and Comite River system at Port Vincent and French Settlement; and on the Tangipahoa River at Robert.

Most of the river floods in Mississippi and Louisiana receded by February 27. However, flood waters remained above the flood stages into March on the Atchafalaya River at Morgan City; on the Tangipahoa River at Robert; and on the Pearl River at Bogalusa and at Pearl River.

For the month of February, rainfall totals generally ranged from around two inches to more than six inches at most locations. A few areas in southeastern Louisiana had more than ten inches of rainfall for the month.