

NWS FORM E-5
(11-88)
(PRES. BY WSOM E-41)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)
New Orleans/Baton Rouge, LA

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR:

MONTH: **APRIL**

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).

...Flooding rains occurred over much of the region during early April...

Fair weather marked the first few days of April, as a ridge of high pressure persisted over the region. When the ridge moved east, warm moist flow from the Gulf of Mexico filtered into Louisiana and Mississippi. With daytime heating and an approaching cold front, spotty showers developed by the afternoon of April 4. These showers and thunderstorms increased April 5, with several storms reaching severe thresholds and producing locally heavy rain. The frontal boundary became stationary during the evening of April 5, retreated northward as a warm front overnight, and produced numerous thunderstorms across mainly northern Louisiana, along with northern and central Mississippi. Minor flooding developed on the Pearl River in Louisiana from April 5 through April 7 at Bogalusa and Pearl River, as a result of upstream rainfall.

On April 8, a strong upper-level system approached the region, along with a slow-moving cold front. While the front moved across southeast Louisiana and southern Mississippi, the very unstable airmass combined with warm Gulf moisture already over the area and produced widespread heavy rain and scattered severe thunderstorms. Several locations recorded rainfall amounts of more than 6 inches; some areas received more than 8 inches within a 24-hour period. This heavy rain event produced flooding from April 9 through April 10. Minor flooding occurred in Louisiana at Comite on the Comite River; Bayou Manchac Point on Bayou Manchac; Robert on the Tangipahoa River; at Folsom and near Covington on the Tchefuncte River; in Covington on the Bogue Falaya River; and near Bush on the Bogue Chitto River. In southeast Mississippi, flooding developed on the West Hobolochitto Creek at McNeil and on the East Hobolochitto Creek near Carriere.

Flooding on the Pearl River was exacerbated by the heavy rainfall in south central Mississippi on the April 8 and April 9. Moderate flooding continued in Louisiana as the Pearl River remained above flood stage at Bogalusa through April 23 and above flood stage near Pearl River through April 25.

By mid-April, a large surface high pressure system settled over the region, with an associated upper-level ridge over the central portion United States. These conditions produced mostly fair weather over the region.

No flood-producing rainfall developed for the remainder of April, though several systems moved across the region. Only light rainfall developed with a frontal boundary as it moved to the coastal waters of southeast Louisiana and southern Mississippi by April 21 and stalled near the coast on April 22. Light to moderate rainfall developed again over the region on April 24 and April 25, as widespread thunderstorms tracked across the area. Although severe weather occurred with this complex system, no river flooding developed.

High pressure again became the dominant weather feature through the remainder of the month. Mostly fair skies, lower humidity, and warmer temperatures persisted over region.