NWS FORM E-5 (11-88)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HYDROLOGIC SERVICE AREA (HSA)
(PRES. BY WSOM E-41)	NATIONAL WEATHER SERVICE	New Orleans/Baton Rouge, LA
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR:
		MONTH: MAY YEAR: 2003
TO:	Hydrometeorological Information Center, W/OH2	SIGNATURE Paul S. Trotter, MIC
	NOAA / National Weather Service 1325 East West Highway, Room 7230	In Charge of HSA
	Silver Spring, MD 20910-3283	DATE JUNE 16, 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).

...Much below average rainfall occurred over much of the region during May...

The month began with mild, dry weather over the Central Gulf Coast as a surface ridge of high pressure was centered over the Ohio Valley. The high-pressure center eased eastward during the first few days of May, setting up a 'return flow' pattern and pumping warm moist Gulf air across Louisiana and Mississippi. A cold front slowly worked its way southeastward from the Central Plains into central Louisiana between May 1st and May 3rd triggering some severe thunderstorms and heavy rains over northern Louisiana and central Mississippi. The front became stationary before it slid northward as a warm front during the day on May 3 producing numerous thunderstorms over central and northern Mississippi adding to the rainfall over that region. Minor flooding occurred on the Pearl River at Bogalusa between May 4th and May 8th as a result of upstream heavy rainfall. The river crested at 18.5 feet on May 6th, which is only half a foot above flood stage.

In the low levels a steady flow of southerly winds pumped warm moist Gulf air into the central Gulf Coastal region along with daytime heating that de-stabilized the lower atmosphere. However, a strong upper-level ridge remained entrenched over the area. Normally these conditions would fire-up shower and thunderstorm activity, but this upper-level ridge served as an atmospheric "cap", blocking the vertical lift of the unstable air mass producing mostly fair skies and no rain over most of Louisiana and Mississippi..

On May 17th the Atchafalaya river at Morgan City went into flood as a result of heavy rains that occurred over the Ohio valley region a couple of weeks earlier. Minor flooding continued the rest of the month and was cresting at 1.8 feet above it's flood stage or at 5.8 feet on the May 31st.

The flood waters that came down the Ohio river and into the Mississippi river reached Red River Landing on May 23^{rd} bringing it into flood. Minor flooding continued at Red River Landing the rest of May and was cresting at 51.2 feet, which is 3.2 feet above it's flood stage, on the 31^{st} .

A weak cold front moved through southeast Louisiana and southern Mississippi on the 19th producing widely scattered showers and thunderstorms along it's path, mainly over the northern portions of Louisiana and Mississippi. The front become stationary over coastal Louisiana and Mississippi on May 20th before retreating northward as a weak warm front on May 21st. This weak front generated the first real rainfalls across southeastern Louisiana and coastal Mississippi with amounts ranging from 1 to 3 inches. The rest of the month was pretty much dominated by a high pressure system creating mostly fair skies and warm temperatures, except for some isolated thunderstorms on the 26th and 27th that produced pockets of 1 to 2 inches of rain over the Florida Parishes of southeast Louisiana and the Mississippi Gulf coastal counties.