NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	(- /
MONTHLY R	EPORT OF RIVER AND FLOOD CONDITIONS	REPORT FOR: MONTH: DECEMBER YEAR: 2003
	Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	Paul S. Trotter, MIC In Charge of HSA DATE January 15, 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).

...Cold and Dry Weather Then Cold and Wet Weather in December 2003...

Fair skies dominated the weather over the Lower Mississippi River Delta in early December, as high pressure persisted over the central United States. Swollen from heavy rainfall over east-central Louisiana and southern Mississippi in late November, the Lower Pearl River reached its flood stage at Bogalusa, Louisiana. The river crested at 18.0 feet on December 3.

A series of cold fronts pushed southeast into Louisiana and Mississippi during the second week of the month. Only light rainfall developed with the first system. With the river already swollen from November rains, this additional rainfall helped push the Atchafalaya River to 4.1 feet at Morgan City, Louisiana, 0.1 feet above its flood stage. The river crested on December 10.

A low pressure area formed by December 13 over the western Gulf of Mexico. This storm system eventually tracked along the Louisiana and Mississippi coasts into Florida. Steady, occasionally heavy, rain fell over the entire region; a few thunderstorms developed in Louisiana and along the Mississippi coast. Most areas received around 0.6 inch of rain or greater, with storm totals of more than 2.00 inches reported at a few locations. Grand Isle, Louisiana recorded 3.50 inches during this event alone.

Between December 15 and December 28, a series of fronts rippled across the region. Only light rainfall developed with the first front; no rainfall developed with the second. By December 23, widespread rain developed ahead of and along a strong cold front as it traversed the area. Reported totals ranged from 0.15 inch to 0.65 inch. A subsequent cold front produced rain totals of 0.40 inch or less area wide.

A strong frontal boundary pushed southeast on December 29 and produced numerous thunderstorms. Rain amounts ranged from 0.50 inch to 2.00 inches over the area, with local heavier amounts. In the wake of this front, high pressure settled over the region. Dry, cold weather returned by New Year's Eve.

Rainfall normals for December range from around 4.20 inches over extreme southeast Louisiana to around 6.30 inches over south Mississippi and parts of east-central Louisiana. December rains generally totaled from 1.00 to 3.50 inches over the Louisiana parishes. Rain amounts over southwest Mississippi and the coast averaged more than 3.00 inches. In summary, rain totals were from three tenths of an inch below normal in extreme southeast Louisiana to more than three inches below normal at some locations in southeast and east-central Louisiana. For Mississippi, deficits were generally less than 2.00 inches.