| NWS FORM E-5<br>(11-88) | U.S. DEPARTMENT OF COMMERC NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIO | HYDROLOGIC SERVICE AREA (HSA) |            |
|-------------------------|---|-------------------------------|------------|
| (PRES. BY WSOM E-41)    | NATIONAL WEATHER SERVICE  | New Orleans/Baton Rouge, LA   |            |
| MONTHLY R               | REPORT OF RIVER AND FLOOD CONDITIONS                                      | REPORT FOR:                   |            |
|                         |   | MONTH: July                   | YEAR: 2003 |
|                         |   | SIGNATURE                     |            |
| TO:                     | Hydrometeorological Information Center, W/OH2                             | Paul S. Trotter, MIC          |            |
|                         | NOAA / National Weather Service   | In Charge of HSA              |            |
|                         | 1325 East West Highway, Room 7230   |                               |            |
|                         | Silver Spring, MD 20910-3283  | DATE <b>August 15, 20</b>     | 103        |

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).

## REVISIONS IN ITALICS

## ...Wet weather and major flooding occurred in early July with Tropical Storm Bill...

Rainfall totals for June 2003 were well above average after thunderstorms developed almost every day of the month. With the landfall of Tropical Storm Bill on June 30, June 2003 was the second wettest on record. The Atchafalaya River flooded at Morgan City, Louisiana in May and crested in June. However, due to the heavy rainfall through most of June along with the rainfall from "Bill," the river remained above flood stage into July.

Copious amounts of rain developed in Tropical Storm Bill over southeast Louisiana and much of south Mississippi. Two-day rain totals of more than six inches fell over parts of Jefferson, St. Tammany, Livingston, St. Bernard, Plaquemines, Washington, Tangipahoa, and Orleans Parishes of Louisiana, as well as in Pearl River, Jackson, Harrison, and Hancock Counties of Mississippi. For the entire event, cumulative rain totals of 10 to 12 inches were measured and/or estimated in Jackson County, Mississippi and over Livingston and St. Tammany Parishes of Louisiana. Rainfall tapered off July 1, as Tropical Storm Bill was downgraded and moved out of the region.

Extensive flash flooding developed June 30 and contributed to floods on the rain-swollen rivers over the region. In addition, storm surge flooding occurred along the Louisiana Gulf Coast in Terrebonne Parish and at Slidell and Mandeville on the northern shore of Lake Pontchartrain. With storm surges of more than 5 feet, the levee system was breached in Terrebonne Parish, which allowed extensive flooding of hundreds of homes in Montegut and around Pointe-aux-Chenes. In addition, the storm surge of five to seven feet, retarded discharge over the lower portions of the rivers draining into Lake Pontchartrain, especially in St. Tammany and Tangipahoa Parishes.

The first river flooding with Tropical Storm Bill developed on June 30 and continued into July. Considerable damage resulted as both the Bogue Falaya River and the Tchefuncte River flooded at Covington, Louisiana in St. Tammany Parish. Major flooding occurred on the Tchefuncte River at Folsom. Moderate to major river flooding developed at Robert on the Tangipahoa River, in Pearl River County at McNeil, Mississippi and along the Mississippi Gulf coast. In Harrison County, the Tchoutacabouffa River remained above flood stage at D'Iberville and the Biloxi River was above flood stage near Lyman.

By July 2, flooding had developed in Louisiana on the Natalbany river near Baptist; on the Bogue Chitto Rive near Bush; and on the Lower Pearl River at Bogalusa and at Pearl River. In Mississippi, flooding developed during this period on the East Hobolochitto Creek near Carriere; on the Wolf River at Gulfport; and on the Escatawpa River near Orange Grove. Bluff Creek, which drains into the Escatawpa River, flooded around Vancleave. Black Creek also had significant flooding in Jackson County. In all, about 250 homes over the Escatawpa River basin were flooded.

Hundreds of homes, businesses, vehicles, and roads were inundated by July 2, with most of the damage in Louisiana. Preliminary estimates from the Louisiana Commissioner of Insurance show that Tropical Storm Bill caused around \$22 million in insured damages alone. These damages resulted from more than 4,902 homeowner claims, more than 2,128 private automobile claims, nearly 1,555 commercial insurance claims, and 622 federal flood claims. No estimate was available for uninsured damages and any costs related to flood relief efforts.

Aside from the property damages and power outages accrued from the Tropical Storm, Louisiana wetlands suffered from the impacts of "Bill." Freshwater flooding produced a negative impact for the shrimping industry. The infusion of fresh water reduced the salinity of the shrimp habitats, which will have an impact on growth and reproduction. In addition, the floods pushed developing shrimp out further from their usual habitats. As a result, more costs were incurred by shrimpers, who had to travel farther for their catches.

Afternoon and evening thunderstorms over southeastern Louisiana and southern Mississippi developed through the remainder of the first week of July. Heavy rainfall, in addition to already soaked conditions resulting from "Bill," pushed several rivers back into flood during the period from July 4 through July 8. Some locations had four to five inches of rain on July 5, alone. In Louisiana, minor flooding redeveloped on the Atchafalaya River at Morgan City; on the Tangipahoa River at Robert; on the Tchefuncte River at Covington; and on the Bogue Falaya River at Camp Covington and at Boston Street in downtown Covington. In Mississippi, minor flooding redeveloped on the Wolf River at Gulfport; and on the Biloxi River at Lyman. Water from upstream and rainfall over the basin produced floods on the Pascagoula River at Graham Ferry.

Although several frontal boundaries moved across the Mississippi River Valley, weak high pressure generally dominated the weather through the remainder of July. In abundant moisture from the Gulf of Mexico, diurnal precipitation was the rule. Areal average rainfall amounts ranged from one to four inches. The accumulation of heavy rainfall pushed the Bogue Falaya River above its flood stage briefly on July 20 at Boston Street in Covington. No additional flooding occurred through the end of July.