

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
		REPORT FOR: MONTH YEAR September 2004
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		SIGNATURE Alan E. Gerard, MIC In Charge of HSA
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		DATE October 7, 2004

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

Synopsis...

One word describes the month of September ... DRY! Measurable rainfall occurred no more than 4 to 6 days during the month over any portion of the HSA; in fact, some locations over northwestern sections of the HSA reported no measurable rainfall. The entire state would have been significantly below normal if it were not for the western edge of Hurricane Ivan moving over eastern sections of Mississippi.

No rainfall was reported during the first several days of the month. Return moisture flow around a high pressure to the east of Mississippi produced conditions favorable for afternoon showers and thunderstorms on the 3rd and 4th. Rainfall amounts over the 2 day period ranged from no rainfall over portions of the northwest sections of the HSA to 3 inches at Kosciusko, MS.

Drier air filtered into the HSA on the backside of Hurricane Frances, which moved into southern Georgia on the 5th and 6th. A dry cold front moved across the HSA on the 7th, reinforcing the fair and dry conditions already in place. Fair and dry weather remained over the area until late on the 12th.

An upper level disturbance moved across the area on the 12th and early on the 13th producing rainfall mainly east of I-55. Rainfall amounts ranged from no rainfall over portions of the HSA west of I-55 to 2.50 inches over the northeast sections.

No rainfall occurred until Hurricane Ivan began to move onshore into southern Alabama early on the 16th. Damaging high winds and heavy rainfall occurred over eastern and southeastern sections of Mississippi from the 16th into early on the 17th. Event rainfall ranged from less than .10 inches to over 5 inches in northeast portions of the HSA. Some event totals: 5.33 inches at Gholson, MS; 4.89 inches at Bluff Lake, MS; 3.80 inches at Mississippi State University.

As Ivan pushed to the northeast, a cold front pushed through the area on the 17th bringing a little cooler and drier air. No rainfall occurred over the area until the remnants of Ivan pushed back into Gulf of Mexico on the

22nd and reformed as a Tropical Storm off of the coast of Louisiana. Rainfall on the 22nd and 23rd occurred mainly over extreme southern and southwest Mississippi, Northeast Louisiana, and portions of Southeast Arkansas. Heaviest rainfall was reported over southern portions of Northeast Louisiana and Southwest Mississippi where .25 to .50 inches was reported.

No rainfall was reported for the remainder of the month. The only feature to affect the area was a dry cold front that pushed through the HSA on the 28th.

River and Soil Conditions...

Soil moisture depletion continued over all but the extreme eastern portions of Mississippi where rainfall from Hurricane Ivan brought soil moisture to or slightly above seasonal norms; however, by the end of the month, even this area was in need of rainfall. Soil moisture levels had fallen well below seasonal norms over all but the extreme east where conditions were at or slightly below seasonal norms. Agricultural interests were reporting below adequate moisture conditions for fall pasture growth over most areas of the HSA.

Most rivers were at base flow by the end of the month. Some minor river rises occurred on HSA rivers at the beginning of the month and over eastern sections during mid-month due to Hurricane Ivan. No mainstem river flooding was reported.

Above normal rainfall is anticipated over the next several weeks. This could alleviate the low soil moisture conditions currently over the HSA. Near normal rainfall is expected for November and December, generally west of I-55 and south of I-20. This should produce a near normal flood potential for these areas. Below normal rainfall is expected for November and December east of I-55 and north of I-20, this should keep the flood potential over these areas near or slightly below normal.

Rainfall for the month of September...

RIVER BASIN RAINFALL DEPARTURE FROM NORMAL

Southeast Arkansas (Chicot & Ashley counties)	0.00 to 0.10 inches	Well below normal.
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<p>Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)</p>	<p>0.00 to 0.75 inches northern sections</p> <p>0.50 to 1.25 inches central sections</p> <p>0.25 to 1.50 inches southern section</p>	<p>Well below normal.</p> <p>Well below normal.</p> <p>Well below normal.</p>
<p>Lower Yazoo</p>	<p>0.00 to 1.75 inches</p>	<p>Well below normal.</p>
<p>Big Black</p>	<p>0.50 to 1.50 inches upper basin</p> <p>0.50 to 2.75 inches middle basin</p> <p>0.25 to 1.50 inches lower basin</p>	<p>Well below normal.</p> <p>Below to well below normal.</p> <p>Well below normal.</p>
<p>Homochitto/ Bayou Pierre</p>	<p>0.25 to 1.50 inches</p>	<p>Well below normal.</p>
<p>Pearl(abv Jackson)</p>	<p>1.00 to 5.50 inches</p>	<p>Well above over extreme northeast basin to well below southwest basin.</p>
<p>Pearl(Blo Jackson)</p>	<p>0.50 to 1.50 inches</p>	<p>Well below normal.</p>
<p>Pascagoula</p>	<p>0.25 to 2.00 inches over the Leaf basin.</p> <p>1.25 to 2.00 inches over the Black Creek</p> <p>3.00 to 5.00 inches over the Chickasawhay basin</p>	<p>Well below normal.</p> <p>Well below normal.</p> <p>Near normal to above normal</p>

Tombigbee tributaries in the JAN HAS	3.00 to 5.50 inches	Near normal to well above normal.
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The heaviest rainfall amounts in the HSA for the month were: 5.60 inches at Gholson, MS; 5.25 inches at Bluff Lake, MS; 5.00 inches at Pat Harrison Waterway's Dunn's Falls WP, MS; 4.96 inches at MSU Starkville, MS; 4.70 inches at Collinsville, MS

The following rainfall sites reported less than a tenth of inch of rainfall during the month: 0.00 inches at Leland, MS; Portland, AR and Lake Providence, LA; .03 inches at Grenada, MS; Stoneville Exp Station, MS; and Elliot, MS; .04 inches at Rolling Fork, MS; .07 inches at Lexington, MS and Crossett, AR; .08 inches at Rayville, LA.

September Rainfall for Selected Cities

City Airport	September Rainfall	Departure From normal	2004 Rainfall	Year Departure From Normal
Jackson, MS	1.43	-1.80	44.61	+2.46
Meridian, MS	3.51	-0.13	43.49	-1.62
Greenwood, MS	0.04	-3.21	41.61	+1.07

Mississippi River...

The Mississippi River from Arkansas City to Natchez experienced an early month rise and then a fall until around the middle of the month. However, for the remainder of the month, the river experienced a rise. The river stayed at or above seasonal norms for all of the month. The provisional high and low stages for September are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	20.13	09/30/04	6.76	09/14/04
Greenville, MS	31.23	09/30/04	17.81	09/14/04
Vicksburg, MS	24.44	09/30/04	11.29	09/16/04
Natchez, MS	30.65	09/30/04	18.53	09/16/04

Total Flood Warning products issued: 00

Total Flood Statement products issued: 00

Daily Rainfall Products (RRA'S) issued 30

Daily River Forecast Products (RVS'S) issued: 30

Daily River Stage products (RVA'S) issued 30

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Note: Provisional Stage and precipitation data was furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observers, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District