

<b>NWS FORM E-5</b> (11-88) (PRES. by NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA) <b>WFO Jackson, Mississippi</b>
	<b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>	REPORT FOR: MONTH            YEAR <b>November        2004</b>
TO:    Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE <p style="text-align: center;"><b>Alan E. Gerard, MIC</b>          In Charge of HSA</p>	DATE <b>December 6, 2004</b>

*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...**

This month's weather was characterized by a series of Upper Southwest US low pressure areas sweeping across the Hydrologic Service Area (HSA). Rainfall was once again above normal over all of the HSA, especially over Southeast Arkansas and Northeast Louisiana.

From the 1<sup>st</sup> until the 3<sup>rd</sup>, an upper level low pressure pushed eastward across the area. At the surface, a low pressure center with an associated cold front pushed from Southeast Arkansas to Central Mississippi and through the state by late on the 3<sup>rd</sup>. Rainfall amounts ranged from 1.25 inches to near 5.00 inches over Southeast Arkansas. Some heavier 24 hour rainfall amounts during the period ending at 7am: 4.46 inches at Rayville, LA (11/2); 4.25 inches at Portland, AR (11/2); 4.00 inches at Crossett, AR (11/2); 3.69 inches at Bastrop, LA (11/2); and 3.31 inches at Lake Providence, LA (11/2).

From the 5<sup>th</sup> until the 10<sup>th</sup>, dry weather prevailed over the area. A dry cold front pushed across the area from the 7<sup>th</sup> into the 8<sup>th</sup>, reinforcing the seasonable cool, dry air over the area. By the 10<sup>th</sup>, another upper level closed low formed over northern New Mexico.

From the 11<sup>th</sup> until the 12<sup>th</sup>, the upper level low kicked out rapidly to the northeast. A surface cold front swept across the area on the 11<sup>th</sup> with a fast moving squall line ahead of it. Rainfall amounts varied widely over the area, ranging from no rainfall over portions of Southeast Arkansas and Northeast Louisiana to around 1.75 inches over portions of Southeast Mississippi.

From the 14<sup>th</sup> until the 17<sup>th</sup>, high pressure remained entrenched over the Southeast US.

The most significant rainfall event occurred from the 18<sup>th</sup> until early on the 24<sup>th</sup>, where a series of upper air disturbances pushed through the area. The first system pushed east of the area leaving a stationary front from Southeast Arkansas through northern Mississippi. A stationary boundary also remained over southern Mississippi. From the 22<sup>nd</sup> to the 24<sup>th</sup>, a second upper level system slowly moved east. The stationary front in the northern sections of the HSA began to push to the east as a cold front.

Heavy rainfall and severe weather occurred over most areas of the HSA. Rainfall amounts for the period ranged from 1.50 inches over southern and southeastern portions of Mississippi to amounts in exceeding 6.75 inches over Northeast Louisiana and north and central portions of Mississippi. Some heavier 24 hour rainfall amounts during the period ending at 7am: 4.64 inches at St. Joseph, LA (11/24); 4.17 inches at Grenada, MS; 3.50 inches at Leland, MS (11/24); 3.10 inches at Crossett, AR and Clayton, LA (11/24); 2.94 inches at Moorhead, MS (11/24); 2.82 inches at Port Gibson, MS (11/24).

From the 24<sup>th</sup> to the 26<sup>th</sup>, high pressure built into the area; however, by the 27<sup>th</sup>, another upper level low pushed across the area with an associated surface cold front. Some locally heavy rainfall was reported across the HSA. Rainfall amounts ranged from .50 inches to around 2 inches.

High pressure built back into the area on the 28<sup>th</sup> and 29<sup>th</sup>; however, once again, another southwest upper level trough pushed to the east, with an associated surface cold front. The front cleared the HSA on the 30<sup>th</sup>. Rainfall amounts ranged from .50 inches to around 1.50 inches.

### River and Soil Conditions...

Rainfall during the month has left soil moisture conditions well above seasonal norms along and above Interstate 20. Soil moisture conditions are at seasonal or slightly above seasonal norms over portions of the HSA below Interstate 20.

Rivers over HSA experienced repeated minor to moderate rises during the month. The most significant rises occurred over Northeast Louisiana and over the Yazoo River Basin, Upper Pearl River Basin, and the Big Black River Basin. Some minor river flooding occurred along the Upper Pearl River, the Upper Big Black River and along the Yalobusha River.

Rainfall for the next 60 to 90 days is expected to be above normal over Southwest Mississippi and portions of Northeast Louisiana. With normal to above normal soil conditions over these areas, flood potential should be above normal, especially for portions of Northeast Louisiana along and north of Interstate 20. Rainfall for the 60 to 90 period, for the remainder of the HSA, should be near normal; however, with above normal soil moisture conditions prevailing along and north of Interstate 20, flood potential should be above normal. South of Interstate 20, flood potential should be near normal to slightly above normal.

### Rainfall for the month of November...

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMAL
Southeast Arkansas (Chicot & Ashley counties)	11.50 to 13.00 inches	Well above normal.

Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	10.00 to 13.00 inches northern sections	Well above normal.
	10.00 to 11.00 inches central sections	Well above normal.
	9.50 to 11.25 inches southern section	Well above Normal.
Lower Yazoo	8.00 to 11.25 inches	Well above normal.
Big Black	7.50 to 9.00 inches upper basin	Above to well above normal.
	7.76 to 9.00 inches middle basin	Above to well above normal.
	8.25 to 11.50 inches lower basin	Well above normal.
Homochitto/ Bayou Pierre	6.75 to 10.50 inches	Above to well above normal.
Pearl(abv Jackson)	8.00 to 11.00 inches	Well above normal.
Pearl(Blo Jackson)	6.25 to 7.75 inches	Above to well above normal.
Pascagoula	6.50 to 10.00 inches over the Leaf basin.	Above to well above normal.
	6.75 to 10.50 inches over the Black Creek	Above to well above normal.
	6.25 to 6.75 inches over the Chickasawhay basin	Above normal.
Tombigbee tributaries in the JAN HSA	6.00 to 10.25 inches	Above to well above normal.

The heaviest rainfall amounts in the HSA for the month were: 13.02 inches at Rayville, LA; 12.80 inches at Portland, AR; 11.60 inches at Clayton,

LA; 11.52 at Crossett, AR; 11.25 inches at Leland, MS; 11.22 inches at Larto Lake, LA; 11.06 at St. Joseph, LA; 11.00 inches at Walnut Grove, MS and Bastrop, LA; 10.70 inches at Lake Providence, LA; 10.37 inches at Topton, MS; 10.32 inches at Natchez, MS; 10.25 inches at Yazoo City, MS; 10.22 inches at Winnsboro 5SE.

**November Rainfall for Selected Cities...**

City Airport	November Rainfall	Departure From normal	2004 Rainfall	Year Departure From Normal
Jackson, MS	8.14	+3.10	57.51	+6.90
Meridian, MS	10.61	+5.66	60.61	+7.27
Greenwood, MS	9.05	+4.20	53.28	+4.24

**Mississippi River...**

The Mississippi River from Arkansas City to Natchez experienced a rise until around mid-month. After falling for a week, the river continued to rise until the end of the month.

The river was above seasonal norms for all of the month:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	22.10	11/13/04	12.92	11/01/04
Greenville, MS	33.49	11/14/04	24.29	11/01/04
Vicksburg, MS	27.66	11/30/04	18.05	11/01/04
Natchez, MS	36.59	11/30/04	26.40	11/02/04

Total Flood Warning products issued: 15  
 Total Flood Statement products issued: 47  
 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