

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)	
		NEW ORLEANS/BATON ROUGE, LA	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR:	YEAR
		MONTH APRIL	2014
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE	
		KENNETH GRAHAM METEOROLOGIST-IN-CHARGE	
		DATE MAY 15, 2014	

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)

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Turbulent Storms and Heavy Rains Developed across Southeastern Louisiana and Southern Mississippi in April...

As April started, an area of low pressure deepened over the Gulf of Mexico. Scattered thunderstorms developed by April 6th across southeastern Louisiana, southwestern Mississippi and coastal Mississippi, with severe weather and locally heavy rainfall. Areal-average rainfall totals ranged from near 0.5 inch over coastal Mississippi to around 1.2 inches over east-central Louisiana by early April 6th.

As the day progressed on April 6th and continued into April 7th, copious rainfall drenched the region due to a cold front's southward progression. The weather system induced more stormy weather on April 8th. Many locations measured over 2.0 inches for the period from April 7th through April 9th. The heaviest rains occurred over south-central and east-central Louisiana, along with southwestern Mississippi. Bayou Sorrel Lock, LA reported 5.60 inches on April 7th alone, while Mount Hermon, LA measured 4.15 inches that day. Areal-average rain totals for the weather week ending on April 13th ranged from 0.33 inch to around 1 inch.

Another strong weather system pushed through the region on April 14th and 15th and induced severe weather with copious downpours. These storms soaked east-central Louisiana, extreme southeast Louisiana, and coastal Mississippi. Many locations measured over 2.0 inches in the two-day weather event. The greatest amounts (in inches) occurred on April 15th as follows:

Stennis/Diamondhead, MS	3.92	Ocean Springs, MS	3.47	Slidell, LA	3.42
Saucier, MS	3.74	Abita Springs, LA	3.36	Waveland, MS	3.23

Additional light rains occurred on April 18th. By April 20th, areal-average rain totals for the week ranged from 1.75 inches to near 2.15 inches. A slight reprieve occurred during the weather week that ended on April 27th. No significant rainfall developed over southeastern Louisiana and southern Mississippi.

Stormy weather developed with a strong frontal boundary that pushed across Louisiana and Mississippi during the last few days of April. Along with bouts of severe weather, isolated heavy rainfall occurred, especially over Mississippi. Biloxi measured 5.58 inches on April 29th alone. Rainfall over Louisiana was considerably less; most areas measured less than 0.5 inch with the weather system. High pressure moved into the region on April 30th.

Floods...

Flooding began in late March and persisted into April on the Bogue Chitto River near Bush and on the Lower Pearl River at Bogalusa and Pearl River. Flood waters receded at Bush on April 1st. The Lower Pearl River remained above the flood stages at Bogalusa and Pearl River into May. Due to repeated periods of heavy rainfall during the month, flooding reached moderate levels by mid-April at both locations.

With the heavy downpours during the first days of April, flooding developed on the Tangipahoa River at Robert, LA and on the Bogue Chitto River at Tylertown, MS by April 7th. Flooding redeveloped at Bush on April 9th. These floods had all ended by April 11th.

When the strong cold front produced copious downpours on April 14th and 15th, flooding developed across coastal Mississippi. The Biloxi River rose above flood stage on April 14th at Lyman, while flooding started on the Pascagoula River at Graham Ferry. By April 16th, flooding had developed on the Wolf River at Gulfport and on the Tchoutacabouffa River near D'Iberville. The flood waters receded everywhere except Graham Ferry by April 16th; floods ended there on April 20th.

In response to the heavy rainfall, as well as weather systems upstream, the Mississippi River rose above flood stage at Red River Landing, LA on April 19th. The river remained in flood until April 25th.

The late-April storm system induced flooding on April 29th at Lyman, MS on the Biloxi River and at D'Iberville, MS on the Tchoutacabouffa River. Flood conditions persisted into May at both locations.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal
Southwest Mississippi (1 Site)	5.47	N/A
South Central Mississippi (1 Site)	3.30	- 1.58
Coastal Mississippi	8.83	+4.21
Central Louisiana (2 Sites)	4.64	+0.18
East Central Louisiana	3.98	-0.74
South Central Louisiana (6 Sites)	4.98	+0.67
Southeast Louisiana	2.74	-1.27

Extreme Rainfall for the Month (Inches and Departure from Normal)

Saucier, MS	12.18	+7.24	Waveland, MS	10.03	+4.99
Biloxi, MS	10.76	+6.28	Bayou Sorrel Lock, LA	9.08	+4.71
Ocean Springs, MS	10.41	+6.41	Mt. Hermon, LA	7.17	+2.06

Drought...

At the onset of April, soil moisture contents were at normal levels for all areas, except over a small portion of the Lower Atchafalaya River Basin. With the heaviest rains generally east of this region, abnormally dry (D0) soil moisture contents persisted there during most of the month, before deteriorating to moderate drought (D1) levels by April 29th. At the same time, abnormally dry conditions spread east across the River Parishes and over the remainder of the Atchafalaya River Basin. Soil moisture contents declined over Pointe Coupee; Iberville; Assumption; Terrebonne; Ascension; St. James; St. John the Baptist; St. Charles; Jefferson; and Lafourche Parishes. All other areas had normal soil moisture contents throughout April.