NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE (11-88) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (PRES. by NWS Instruction 10-924) NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) NEW ORLEANS/BATON ROUGE, LA		
MONTHLY REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH YEAR MAY 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 JUNE 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.

... Drought Conditions Ended over Southeastern Louisiana Due to Copious May Rainfall...

A large area of high pressure dominated the weather at the start of May. Rainfall was sparse from May 1st through May 4th. Although isolated showers produced 0.70 inch at Grand Isle, LA and 0.30 inch at Galliano, LA, amounts were generally less than 0.10 inch where rain occurred.

Extremely heavy rains during the week that ended May 11th helped to ease drought conditions over southeastern Louisiana. A cold front progressed through Louisiana and Mississippi, as a weak wave of instability moved along Louisiana's coast. The dynamics of these two weather systems combined to induce efficient, rain-producing thunderstorms from May 9th through 11th. The heaviest rains fell over the Florida Parishes, extreme southeast Louisiana, and coastal Mississippi. There were numerous locations that recorded over 4.0 inches of rain on a single day, starting during the evening of May 9th. The greatest rain totals recorded by early May 10th were:

Convent, LA	7.50	Baton Rouge/Concord	6.09
Biloxi, MS	6.72	Livingston, LA	5.77
Saucier, MS	6.67	Denham Springs, LA	5.75
St. Francisville, LA	6.43	Hammond, LA	5.31

The coastal parishes of Louisiana had modest rainfall amounts. For the weather week ending May 11th, areal-average rain totals ranged from around 1.6 inches to 4.5 inches over south-central Louisiana.

More inclement weather accompanied yet another frontal boundary during the week of May 12th through 18th. Several locations measured rain totals over 1.0 inch. Areal-average rain amounts ranged from 0.39 inch over east-central Louisiana up to 1.94 inch over coastal Mississippi.

Southeastern Louisiana and southern Mississippi had a reprieve from the weather for a period, when fair, dry conditions became established over the south through May 26th. That break ended when a slow-moving low pressure system became near-stationary north of this region from May 27th through May 31st. As a result, copious rains fell over Louisiana and over Mississippi through the end of the month. Thunderstorms developed repeatedly and yielded several bouts of severe weather and flash flooding events. Most of the heaviest rainfall occurred from May 27th through May 29th. The greatest rain totals recorded were:

	One-Day	Date	Two-Day	Date	Week	Departure from Normal
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Carville, LA	7.42	5/27/2014	7.52	5/27/2014	8.48	+ 7.28
Convent, LA	12.00	5/28/2014	17.69	5/28/2014	19.07	
Lutcher, LA	10.77	5/28/2014	14.21	5/28/2014	16.54	
Abita/Covington, LA	7.20	5/29/2014				
Donaldsonville, LA	7.15	5/29/2014	12.12	5/28/2014	12.46	+11.40
Gonzales, LA	6.94	5/29/2014	10.94	5/28/2014	12.54	+11.35
Napoleonville, LA	6.93	5/29/2015	13.46	5/28/2014	13.46	+12.12

There were widespread two-day rain totals over 4.0 inches. By June 1st, many locations had rain totals for the week of over 7.0 inches. Areal-average rain amounts ranged from 4.3 inches across coastal Mississippi to over 7.8 inches for south-central Louisiana.

Floods...

Flooding began in late March and persisted into May in Louisiana on the Lower Pearl River at Bogalusa and Pearl River. Flood waters reached moderate levels during mid-April at both locations and then began a slow decline. Late-April storms induced flooding on April 29th in Mississippi at Lyman on the Biloxi River and at D'Iberville on the Tchoutacabouffa River. Flood conditions ended in Mississippi on May 1st; flooding ended on May 4th at Pearl River, LA.

Copious rainfall caused flooding to redevelop on the Lower Pearl River at Pearl River on May 10th. With those storms, new flooding developed at Gulfport, MS on the Wolf River; at Lyman, MS on the Biloxi River; and at D'Iberville, MS on the Tchoutacabouffa River. Floods ended on all rivers except the Lower Pearl River by May 11th. The floods receded at Bogalusa and Pearl River by May 15th.

Downpours over already-soaked soils caused rises on the rivers and streams across the Pontchartrain Basin starting May 28th. Flooding developed on the Tchefuncte River at Covington and on the Bogue Falaya River at Camp Covington Girl Scout Camp and in downtown Covington at Boston Street. By May 31st, flooding started on the Wolf River near Gulfport, MS; on the Biloxi River at Lyman, MS; on the Tangipahoa River at Robert; and on the Tchefuncte River at Folsom, LA. The flood waters reached moderate impact levels at Camp Covington on May 31st. All of these locations were flooded into June.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal		
Southwest Mississippi (1 Site)	N/A	- N/A		
South Central Mississippi (1 Site)	7.03	+2.54		
Coastal Mississippi	9.56	+4.66		
Central Louisiana (2 Sites)	10.58	+5.69		
East Central Louisiana	9.86	+5.89		
South Central Louisiana (6 Sites)	12.91	+8.41		
Southeast Louisiana	916	+5 17		

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

-	Lind chie Ruminin for the fronth (inches und Deput ture from from internal)						
	Convent, LA	27.55	+22.83	Abita River/Covington, LA	13.77	+8.52	
	Lutcher, LA	22.69	+18.09	Hammond, LA	13.42	+8.95	
	Donaldsonville, LA	18.36	+13.87	St. Francisville, LA	13.26	+8.55	
	Denham Springs, LA	17.59	+12.84	Abita Springs Fire Tower, LA	12.97	+8.18	
	Gonzales, LA	17.21	+12.88	Saucier, MS	12.83	+7.32	
	Livingston, LA	16.93	+11.80	Biloxi, MS	12.54	+7.97	
	Carville, LA	15.65	+11.37	Sun, LA	12.38	+7.67	
	Napoleonville, LA	15.07	+9.50	Abita Springs, LA	12.17	+7.15	

Drought...

Soil moisture contents were at normal levels for all of southern Mississippi and most of southeastern Louisiana at the start of May. Drier conditions persisted across the Lower Atchafalaya River Basin, where soil moisture contents were at moderate drought (D1) levels. Abnormally dry conditions were established over Pointe Coupee; Iberville; Assumption; Terrebonne; Ascension; St. James; St. John the Baptist; St. Charles; Jefferson; and Lafourche Parishes. By May 6th, soil moisture contents declined further and abnormally dry (D0) conditions spread over Livingston; East Baton Rouge; West Baton Rouge; West Feliciana; and St. Helena Parishes.

With May's copious rainfall, soil moisture recovered everywhere except Assumption and Iberville Parishes, along with a small part of Ascension Parish by May 13th. Soil moisture contents were at normal levels over all of southeastern Louisiana by the end of May, thus ending the drought.