Water-Data Report 2013

02473000 LEAF RIVER AT HATTIESBURG, MS

Pascagoula Basin
Lower Leaf Subbasin

LOCATION.--Lat 31°20′35″, long 89°16′49″ referenced to North American Datum of 1983, in SW ¼ NW ¼ sec.2, T.4 N., R.13 W., Forrest County, MS, Hydrologic Unit 03170005, St. Stephens Meridian, on right downstream abutment of bridge on U.S. Highway 11, at eastern city limits of Hattiesburg, 150 ft downstream from Bouie Creek, 3,200 ft upstream from New Orleans and Northeastern Railroad bridge, and at mile 71.8.

DRAINAGE AREA.--1,748 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1938 to current year. Daily mean gage heights, published since January 1972. Gage height records collected in the same vicinity since 1904 are contained in reports of National Weather Service.

PERIOD OF DAILY RECORD WATER QUALITY.--
SPECIFIC CONDUCTANCE: March 1, 1965 to March 31, 1965.
WATER TEMPERATURE: October 1964 to July 1965.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 118.23 ft above NGVD of 1929 (levels by U. S. Army Corps of Engineers). Prior to Jan. 15, 1939, nonrecording gage at same site and datum. Jan. 15, 1939 to Apr. 14, 1981, recording gage in concrete house on left bank 450 ft downstream from U.S. Highway 11.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter and National Weather Service telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1900 reached a stage of about 33.6 ft from reports of National Weather Service.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 29	2215	15,600	13.48
Jan 12	1600	12,300	11.60
Jan 15	1500	20,800	16.07
Feb 13	1315	*34,700	*21.79
Feb 25	2200	17,100	14.23
May 11	1845	13,700	12.42

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 02473000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/02473000.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,110	532	799	10,700	4,920	3,690	1,510	5,480	1,370	1,080	936	602
2	1,980	531	732	8,380	3,940	3,030	1,600	10,700	1,490	1,010	892	592
3	1,550	531	684	8,960	2,760	2,640	1,910	10,700	2,280	932	865	588
4	1,370	530	656	8,270	2,160	2,420	2,170	10,300	3,140	893	840	643
5	1,160	538	1,040	6,960	1,900	2,260	2,240	10,200	2,430	868	833	724
6	997	595	1,850	4,510	1,760	2,130	2,330	7,430	2,680	1,050	891	710
7	895	630	1,180	2,870	2,490	2,000	2,150	4,550	4,260	1,090	884	622
8	832	624	903	2,260	4,170	1,890	1,760	3,010	3,740	1,150	822	588
9	795	587	773	2,210	2,940	1,810	1,570	2,200	3,360	1,010	777	571
10	765	560	988	3,680	3,190	1,760	1,470	3,830	2,280	933	780	557
11	743	548	2,570	7,600	24,200	2,340	1,640	12,700	1,670	1,020	756	561
12	723	593	2,000	10,900	32,600	5,110	4,480	12,800	1,430	1,000	756	550
13	705	761	1,930	9,950	34,300	6,610	5,650	10,200	1,260	995	1,090	547
14	688	876	1,460	16,400	31,500	7,300	7,810	7,110	1,190	924	2,810	561
15	715	797	1,050	20,300	26,600	5,580	11,600	3,990	1,130	866	1,760	550
16	747	700	880	18,700	23,100	3,430	10,100	2,680	1,040	857	1,340	534
17	711	645	2,120	16,400	16,200	2,590	7,490	2,030	993	869	1,010	527
18	677	607	2,810	15,200	6,640	2,080	5,390	1,760	961	971	958	514
19	655	583	2,200	13,900	5,710	2,150	3,610	1,600	1,170	1,180	879	511
20	651	570	1,840	9,760	7,830	2,440	3,760	1,480	1,310	1,020	837	521
21	641	561	1,760	5,880	6,470	2,290	4,710	1,370	1,210	960	838	787
22	617	554	1,500	4,210	6,950	2,010	4,260	1,370	1,170	924	848	1,270
23	588	549	1,490	3,110	13,400	1,820	3,000	2,260	1,030	934	852	1,220
24	577	543	1,200	2,640	14,900	2,120	2,200	2,370	1,060	894	787	1,020
25	571	535	1,260	2,360	15,700	2,350	2,490	1,810	1,180	916	745	5,210
26	569	539	4,790	2,160	13,700	2,700	2,320	1,430	1,140	873	708	3,820
27	558	662	6,300	2,010	7,200	2,530	1,910	1,250	986	1,020	684	2,170
28	550	966	6,850	1,880	4,730	1,930	2,850	1,150	914	3,310	666	1,340
29	543	1,050	13,800	1,790	---	1,680	4,910	1,100	890	2,750	646	977
30	536	899	15,400	4,820	---	1,580	3,900	1,070	1,130	1,550	629	833
31	534	---	13,000	6,770	---	1,520	---	1,100	---	1,080	614	---
Total	25,753	19,196	95,815	235,540	321,960	85,790	112,790	141,030	49,894	34,929	28,733	30,220
Mean	831	640	3,091	7,598	11,500	2,767	3,760	4,549	1,663	1,127	927	1,007
Max	2,110	1,050	15,400	20,300	34,300	7,300	11,600	12,800	4,260	3,310	2,810	5,210
Min	534	530	656	1,790	1,760	1,520	1,470	1,070	890	857	614	511
Med	705	585	1,500	6,770	6,800	2,290	2,670	2,370	1,200	995	838	597
Cfsm	0.48	0.37	1.77	4.35	6.58	1.58	2.15	2.60	0.95	0.64	0.53	0.58
In.	0.55	0.41	2.04	5.01	6.85	1.83	2.40	3.00	1.06	0.74	0.61	0.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	988	1,537	2,848	3,970	5,084	5,051	4,368	2,656	1,397	1,419	1,140	1,163
Max	3,187	6,985	11,840	11,620	15,550	10,910	16,810	11,520	3,958	10,260	3,644	4,275
(WY)	(1986)	(1949)	(1962)	(1990)	(1961)	(1943)	(1980)	(1991)	(1989)	(1940)	(1992)	(1979)
Min	319	440	710	797	656	903	825	544	428	327	342	321
(WY)	(2001)	(2008)	(2011)	(1957)	(2000)	(2007)	(1963)	(1963)	(2011)	(2000)	(2000)	(2000)

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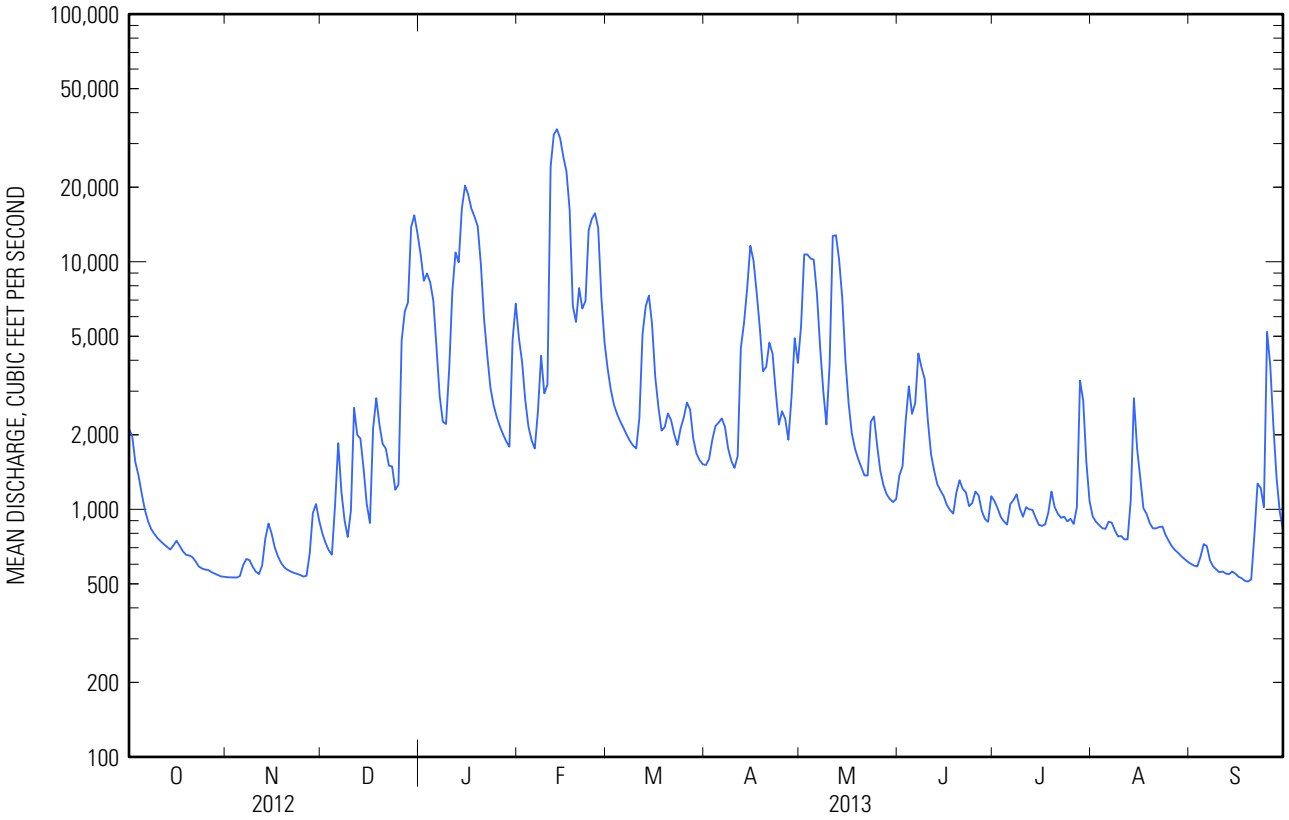
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1938 - 2013	
Annual total	913,944		1,181,650			
Annual mean	2,497		3,237		2,622	
Highest annual mean					5,121	1980
Lowest annual mean					851	2000
Highest daily mean	30,300	Mar 23	34,300	Feb 13	110,000	Apr 15, 1974
Lowest daily mean	401	Jul 2	511	Sep 19	247	Sep 6, 2000
Annual seven-day minimum	409	Jun 28	531	Sep 14	260	Sep 1, 2000
Maximum peak flow			34,700	Feb 13	121,000	Apr 15, 1974
Maximum peak stage			21.79	Feb 13	34.03	Apr 15, 1974
Instantaneous low flow			507	Sep 19[a]	240	Sep 6, 2000
Annual runoff (cfsm)	1.43		1.85		1.50	
Annual runoff (inches)	19.45		25.15		20.38	
10 percent exceeds	5,730		8,010		6,020	
50 percent exceeds	1,070		1,430		1,260	
90 percent exceeds	551		588		542	

[a] Also Sept. 20.



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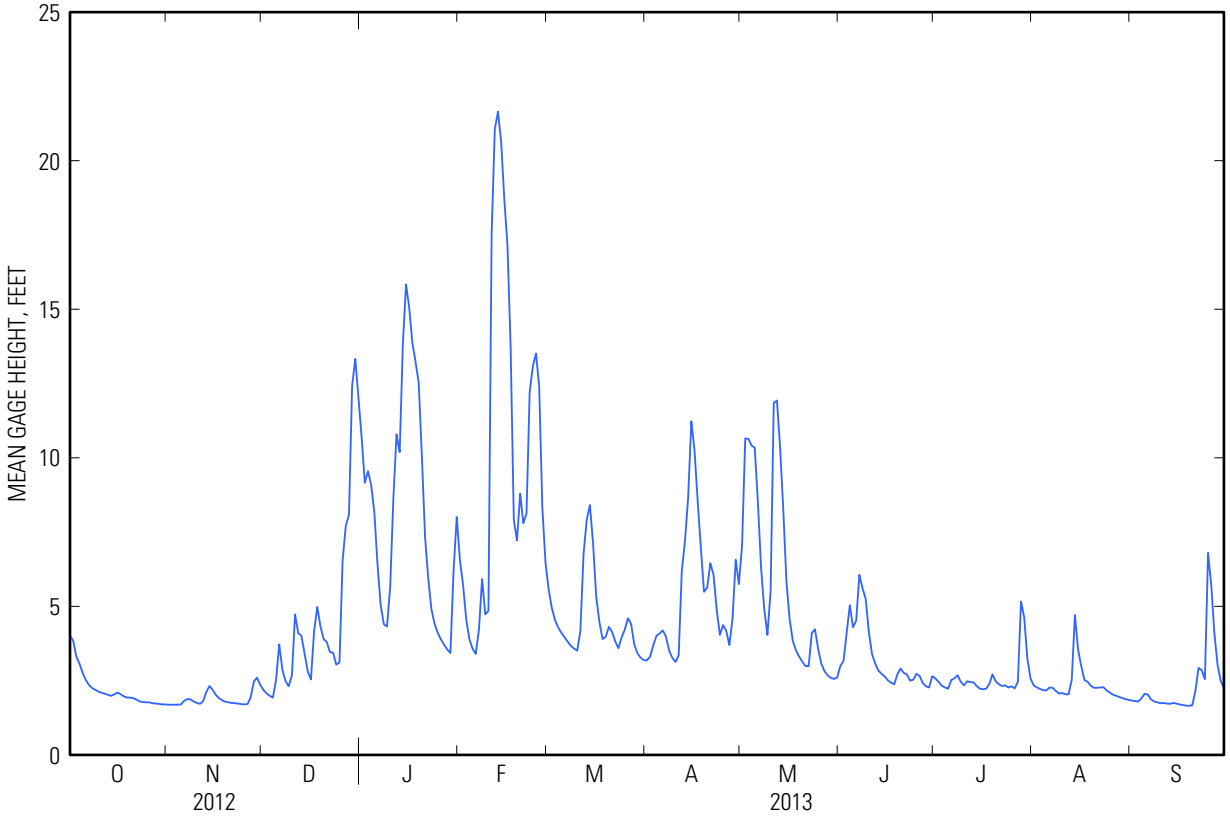
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.01	1.69	2.19	10.68	6.56	5.56	3.18	7.05	2.99	2.57	2.34	1.83
2	3.85	1.69	2.07	9.16	5.71	4.94	3.31	10.65	3.16	2.46	2.27	1.81
3	3.31	1.69	1.99	9.55	4.55	4.54	3.69	10.64	4.11	2.33	2.22	1.80
4	3.07	1.69	1.93	9.09	3.89	4.29	4.01	10.41	5.04	2.27	2.18	1.91
5	2.76	1.70	2.52	8.17	3.57	4.11	4.09	10.34	4.30	2.23	2.17	2.06
6	2.52	1.82	3.72	6.41	3.40	3.96	4.19	8.49	4.52	2.52	2.27	2.03
7	2.35	1.88	2.87	5.04	4.22	3.81	3.98	6.30	6.06	2.58	2.26	1.87
8	2.25	1.87	2.48	4.40	5.92	3.67	3.51	4.91	5.61	2.68	2.15	1.80
9	2.19	1.80	2.31	4.32	4.73	3.58	3.27	4.04	5.25	2.46	2.07	1.77
10	2.13	1.75	2.68	5.65	4.85	3.51	3.13	5.50	4.13	2.34	2.08	1.74
11	2.09	1.72	4.73	8.62	17.53	4.17	3.35	11.85	3.39	2.48	2.04	1.75
12	2.06	1.81	4.10	10.79	21.05	6.76	6.21	11.93	3.08	2.45	2.04	1.73
13	2.02	2.12	4.01	10.19	21.65	7.91	7.20	10.35	2.84	2.44	2.53	1.72
14	1.99	2.32	3.41	13.83	20.64	8.41	8.68	8.26	2.73	2.32	4.71	1.75
15	2.04	2.19	2.81	15.84	18.71	7.12	11.23	5.83	2.64	2.23	3.54	1.73
16	2.10	2.02	2.54	15.05	17.15	5.32	10.25	4.57	2.51	2.21	2.99	1.70
17	2.04	1.91	4.16	13.87	13.71	4.47	8.54	3.84	2.43	2.23	2.52	1.68
18	1.97	1.84	4.98	13.23	7.91	3.90	6.98	3.52	2.38	2.39	2.46	1.66
19	1.93	1.79	4.33	12.52	7.22	3.98	5.49	3.31	2.71	2.71	2.33	1.65
20	1.93	1.77	3.90	10.05	8.79	4.31	5.63	3.14	2.91	2.48	2.26	1.67
21	1.91	1.75	3.80	7.34	7.80	4.14	6.45	2.99	2.76	2.38	2.26	2.15
22	1.86	1.74	3.46	5.95	8.12	3.82	6.07	2.99	2.71	2.32	2.27	2.93
23	1.80	1.73	3.44	4.91	12.21	3.59	4.89	4.10	2.50	2.34	2.28	2.85
24	1.78	1.71	3.04	4.42	13.08	3.95	4.04	4.23	2.53	2.27	2.17	2.55
25	1.77	1.70	3.11	4.11	13.51	4.22	4.37	3.57	2.73	2.31	2.10	6.80
26	1.77	1.71	6.55	3.89	12.40	4.60	4.18	3.07	2.66	2.24	2.03	5.72
27	1.74	1.94	7.71	3.71	8.32	4.41	3.70	2.82	2.42	2.46	1.99	4.08
28	1.73	2.47	8.09	3.55	6.46	3.72	4.60	2.68	2.31	5.16	1.95	3.03
29	1.72	2.60	12.43	3.43	---	3.42	6.57	2.59	2.27	4.63	1.91	2.49
30	1.70	2.36	13.33	6.21	---	3.27	5.75	2.56	2.65	3.24	1.88	2.25
31	1.70	---	12.01	8.01	---	3.19	---	2.60	---	2.57	1.85	---
Mean	2.20	1.89	4.54	8.13	10.13	4.54	5.35	5.78	3.28	2.59	2.33	2.35
Max	4.01	2.60	13.33	15.84	21.65	8.41	11.23	11.93	6.06	5.16	4.71	6.80
Min	1.70	1.69	1.93	3.43	3.40	3.19	3.13	2.56	2.27	2.21	1.85	1.65

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