Water-Data Report 2013

02486000 PEARL RIVER AT JACKSON, MS

Pearl Basin
Middle Pearl-Strong Subbasin

LOCATION.--Lat 32°16′53″, long 90°10′44″ referenced to North American Datum of 1983, in NW ¼ NE ¼ NE ¼ sec.15, T.5 N., R.1 E., Rankin County, MS, Hydrologic Unit 03180002, Choctaw Meridian, on left bank at downstream side of bridge on U.S. Highway 80 at eastern city limits of Jackson, 0.4 mi downstream from Illinois Central and Gulf Railroad bridge, 0.4 mi downstream from Town Creek, 4.2 mi upstream from Richland Creek, and at mile 287.0.

DRAINAGE AREA.--3,171 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1901 to December 1912 (prior to October 1901 and for 1913 water year, gage heights only), August 1928 to current year. Daily mean gage heights published since October 1971. Gage-height records collected at Woodrow Wilson Bridge, 0.6 mi upstream, 1904 to 1971 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 662: Drainage area. WSP 1504: 1903, 1909. WSP 1906: 1902(M). WDR MS-87-1: 1984.

GAGE.--Water-stage recorder. Datum of gage is 233.70 ft above NGVD of 1929. Prior to Dec. 31, 1913, and Aug. 15, 1928 to Sept. 14, 1934, nonrecording gage. Prior to Oct. 1, 1975, at site at Woodrow Wilson Bridge, 0.6 mi upstream, at datum 1.20 ft higher. Since Oct. 1, 1962, supplementary water-stage recorder and concrete control at Jackson waterworks pumping plant, 3.8 mi upstream (channel change). Datum of supplementary gage is 239.40 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. About 48 ft^3/s is diverted upstream from station for municipal water supply for City of Jackson, most of which was returned to river and included in discharge records prior to the opening of the City of Jackson Waste Water Treatment Plant at Savannah Street Extension in 1975. Flow regulated since Sept. 27, 1961, by Ross R. Barnett Reservoir, 15 mi upstream. Statistics shown below are for water years 1962 to current year except instantaneous extremes, which are shown for the entire period of record. Satellite telemeter and National Weather Service telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--According to information by local residents and from newspaper records, the flood of Apr. 25, 1874, reached a stage of 37 ft and the flood of Dec. 5, 1880, reached a stage of 36 ½ ft, at former site and datum. The flood of Apr. 21, 1900, reached a stage of 36.7 ft, according to the Alabama and Vicksburg Railroad plans confirmed by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 22	0715	*32,200	*32.04
Feb 16	1330	25,600	29.76
May 7	0945	26,000	29.92

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 02486000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/02486000.2013.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	2,820	242	1,700	15,600	7,060	17,400	11,000	8,830	547	267	248	235
2	1,720	238	943	17,100	6,490	13,900	9,760	12,600	1,650	267	245	232
3	1,170	238	901	16,800	5,690	11,200	8,440	16,400	1,480	266	243	231
4	1,130	306	759	16,000	4,980	8,950	7,530	22,000	1,500	266	247	228
5	1,120	439	2,130	14,600	4,420	7,500	6,380	23,600	1,810	286	250	224
6	1,030	727	1,370	12,900	4,250	6,370	7,200	24,900	3,000	268	251	226
7	625	731	1,530	11,100	3,790	4,820	7,060	25,800	3,310	264	240	228
8	549	714	1,640	9,170	3,360	3,180	6,380	24,700	5,240	263	235	226
9	284	457	1,480	8,640	3,000	2,690	5,270	21,800	7,360	261	377	225
10	267	400	2,830	8,520	6,100	2,960	4,480	20,000	5,760	260	629	230
11	261	387	3,700	7,730	12,900	10,700	4,870	18,100	3,460	571	285	278
12	266	1,410	4,050	6,010	15,000	12,800	3,790	15,300	2,930	720	292	236
13	381	1,160	4,500	6,040	20,800	14,200	915	13,700	2,110	2,550	365	229
14	271	1,080	4,520	10,100	23,600	16,000	2,020	11,800	2,450	2,190	510	236
15	249	1,000	3,700	14,200	24,400	16,100	3,140	9,840	1,420	1,620	429	236
16	246	743	4,330	20,900	25,400	15,100	6,680	7,590	1,300	1,220	262	233
17	239	720	7,030	27,300	24,800	13,800	7,140	5,670	1,280	721	738	229
18	604	722	6,590	29,500	24,000	11,900	5,890	4,090	1,670	323	430	226
19	558	715	6,880	29,700	23,900	11,200	9,350	2,260	3,280	370	260	228
20	1,850	715	6,300	29,900	21,500	9,520	9,670	2,980	1,690	299	253	336
21	2,680	713	5,360	31,400	18,900	7,260	8,920	2,770	1,270	261	254	4,140
22	2,040	713	4,160	31,800	21,900	6,060	7,950	3,150	706	258	251	1,460
23	967	713	3,650	29,600	22,800	4,930	7,520	2,290	334	253	256	4,930
24	745	712	3,070	25,000	22,900	5,860	7,720	1,570	525	252	256	7,480
25	500	713	7,230	17,800	22,900	7,350	9,100	1,480	364	255	257	8,400
26	426	855	12,300	13,900	22,400	8,720	8,460	1,170	290	251	247	6,420
27	408	1,720	11,700	11,300	21,600	10,200	6,560	830	279	522	244	6,130
28	279	1,580	14,000	8,620	20,300	11,200	5,790	489	274	333	242	4,070
29	247	1,760	15,700	5,760	---	11,500	6,450	573	358	258	240	1,490
30	247	1,860	15,400	4,130	---	11,300	6,600	587	288	246	238	1,250
31	247	---	15,200	4,470	---	11,000	---	570	---	247	237	---
Total	24,426	24,483	174,653	495,590	439,140	305,670	202,035	307,439	57,935	16,388	9,511	50,522
Mean	788	816	5,634	15,990	15,680	9,860	6,734	9,917	1,931	529	307	1,684
Max	2,820	1,860	15,700	31,800	25,400	17,400	11,000	25,800	7,360	2,550	738	8,400
Min	239	238	759	4,130	3,000	2,690	915	489	274	246	235	224
Med	500	715	4,160	14,200	20,600	10,700	6,870	7,590	1,490	267	253	235
Cfsm	0.25	0.26	1.78	5.04	4.95	3.11	2.12	3.13	0.61	0.17	0.10	0.53
In.	0.29	0.29	2.05	5.81	5.15	3.59	2.37	3.61	0.68	0.19	0.11	0.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,303	1,968	5,565	8,086	9,081	9,097	8,236	4,186	1,471	1,124	945	1,123
Max	12,000	8,586	26,640	28,310	24,940	23,560	34,330	22,880	7,278	6,454	7,996	8,407
(WY)	(2010)	(2003)	(1983)	(1974)	(1983)	(1980)	(1979)	(1983)	(1997)	(1989)	(1975)	(2011)
Min	94.7	85.3	271	338	321	1,233	412	256	133	180	197	138
(WY)	(1964)	(1964)	(1963)	(2000)	(2000)	(2007)	(2007)	(2007)	(1963)	(1984)	(1969)	(1963)

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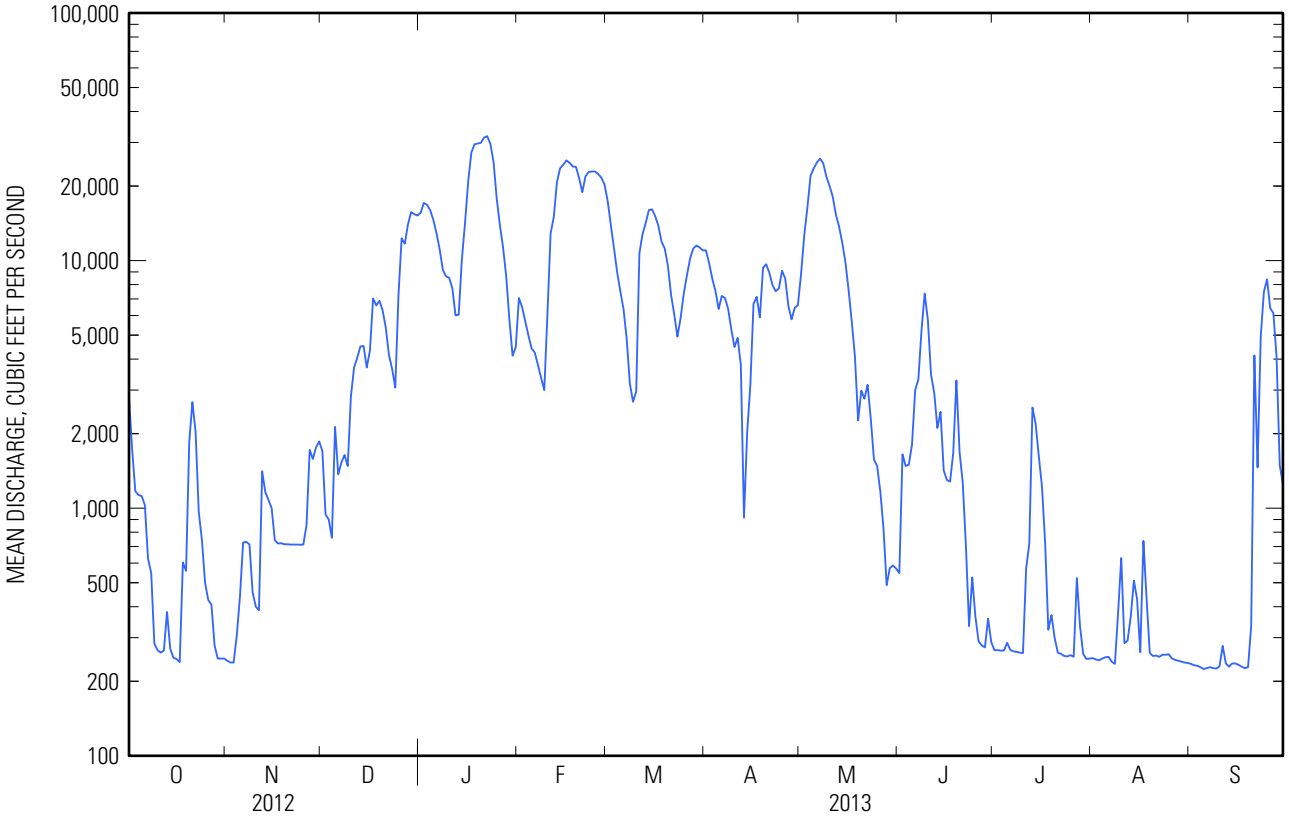
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1962 - 2013	
Annual total	1,199,050		2,107,792			
Annual mean	3,276		5,775		4,326	
Highest annual mean					12,000	1983
Lowest annual mean					942	1963
Highest daily mean	21,700	Mar 27	31,800	Jan 22	126,000	Apr 17, 1979
Lowest daily mean	166	Aug 13	224	Sep 5	45	Sep 18, 1963
Annual seven-day minimum	173	Jul 30	227	Sep 4	63	Sep 17, 1963
Maximum peak flow			32,200	Jan 22	128,000	Apr 17, 1979
Maximum peak stage			32.04	Jan 22	43.28	Apr 17, 1979
Annual runoff (cfsm)	1.03		1.82		1.36	
Annual runoff (inches)	14.07		24.73		18.53	
10 percent exceeds	9,660		16,900		12,600	
50 percent exceeds	1,230		2,190		1,250	
90 percent exceeds	232		247		246	



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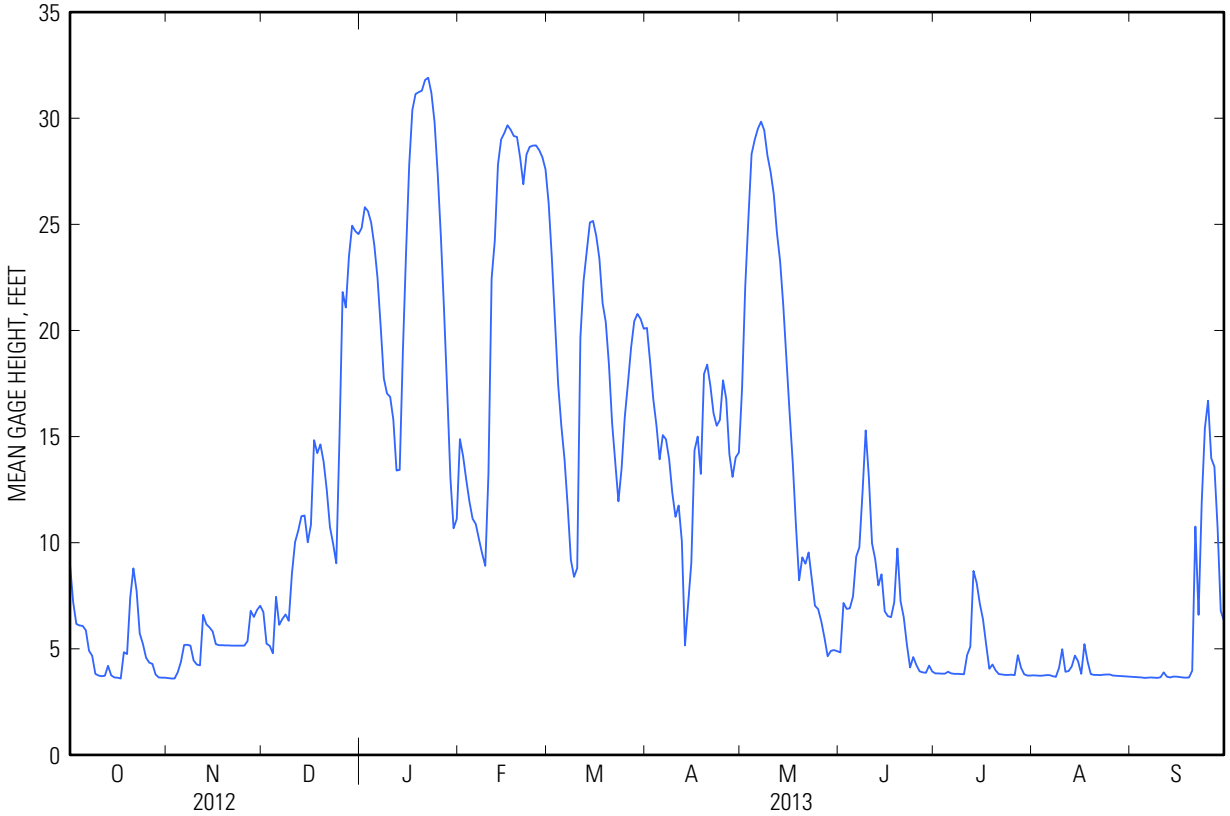
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.97	3.62	6.73	24.83	14.88	25.98	20.12	17.27	4.83	3.84	3.75	3.68
2	7.20	3.60	5.24	25.81	14.08	23.41	18.51	22.06	7.16	3.84	3.74	3.67
3	6.17	3.60	5.14	25.62	12.96	20.41	16.76	25.28	6.88	3.83	3.73	3.66
4	6.10	3.90	4.79	25.08	11.94	17.43	15.52	28.31	6.91	3.83	3.74	3.65
5	6.08	4.39	7.45	24.01	11.13	15.49	13.93	28.99	7.47	3.92	3.76	3.63
6	5.87	5.18	6.13	22.48	10.88	13.92	15.07	29.51	9.34	3.84	3.76	3.64
7	4.91	5.19	6.41	20.20	10.17	11.71	14.87	29.84	9.78	3.82	3.71	3.65
8	4.67	5.15	6.62	17.74	9.49	9.19	13.93	29.43	12.37	3.82	3.68	3.64
9	3.82	4.45	6.32	17.03	8.91	8.39	12.34	28.25	15.29	3.81	4.11	3.63
10	3.74	4.26	8.53	16.87	13.25	8.80	11.22	27.47	13.07	3.80	4.98	3.66
11	3.71	4.22	10.03	15.79	22.45	19.66	11.75	26.42	9.97	4.71	3.92	3.89
12	3.73	6.60	10.57	13.40	24.23	22.33	10.08	24.60	9.22	5.10	3.95	3.69
13	4.20	6.16	11.25	13.43	27.81	23.72	5.16	23.27	7.99	8.67	4.17	3.65
14	3.75	6.01	11.28	18.98	29.00	25.09	7.13	21.18	8.51	8.11	4.68	3.69
15	3.65	5.82	10.02	23.63	29.30	25.16	9.06	18.64	6.77	7.13	4.41	3.69
16	3.64	5.22	10.84	27.79	29.67	24.46	14.35	16.11	6.54	6.39	3.82	3.67
17	3.60	5.17	14.83	30.39	29.46	23.38	15.00	13.75	6.49	5.20	5.22	3.65
18	4.84	5.17	14.22	31.14	29.16	21.29	13.24	10.81	7.19	4.06	4.40	3.64
19	4.75	5.16	14.63	31.23	29.12	20.40	17.95	8.23	9.73	4.26	3.81	3.65
20	7.41	5.16	13.82	31.30	28.14	18.41	18.39	9.31	7.24	3.98	3.77	3.97
21	8.79	5.15	12.48	31.80	26.89	15.65	17.40	9.01	6.49	3.81	3.77	10.76
22	7.74	5.15	10.74	31.91	28.29	13.79	16.10	9.54	5.19	3.79	3.76	6.60
23	5.72	5.15	9.95	31.19	28.65	11.95	15.51	8.28	4.12	3.77	3.78	11.90
24	5.23	5.15	9.03	29.82	28.71	13.50	15.78	7.03	4.61	3.77	3.79	15.40
25	4.58	5.15	14.88	27.37	28.72	15.91	17.65	6.87	4.23	3.78	3.79	16.69
26	4.35	5.36	21.81	24.40	28.50	17.51	16.78	6.29	3.94	3.76	3.74	13.98
27	4.29	6.79	21.08	20.92	28.17	19.20	14.17	5.52	3.89	4.70	3.73	13.58
28	3.79	6.50	23.50	17.10	27.59	20.44	13.10	4.65	3.87	4.11	3.72	10.72
29	3.65	6.83	24.94	13.05	---	20.78	14.02	4.90	4.21	3.80	3.71	6.78
30	3.64	7.03	24.68	10.68	---	20.54	14.25	4.94	3.93	3.74	3.70	6.33
31	3.64	---	24.54	11.12	---	20.08	---	4.89	---	3.74	3.69	---
Mean	5.04	5.21	12.34	22.78	22.20	18.32	14.30	16.47	7.24	4.48	3.94	6.21
Max	8.97	7.03	24.94	31.91	29.67	25.98	20.12	29.84	15.29	8.67	5.22	16.69
Min	3.60	3.60	4.79	10.68	8.91	8.39	5.16	4.65	3.87	3.74	3.68	3.63

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