Water-Data Report 2012

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)
Mar 26	2100	*21,900	*28.31

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 02486000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/02486000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	253	188	822	9,660	4,660	2,500	11,800	292	639	215	172	5,880
2	245	187	719	7,970	3,770	3,090	9,300	1,200	257	216	171	7,030
3	241	207	1,490	6,720	7,420	6,250	8,430	1,130	225	218	171	5,340
4	240	206	668	5,350	12,300	5,070	6,850	284	321	216	171	3,240
5	234	200	441	3,650	15,500	5,320	4,900	240	3,800	231	172	1,640
6	229	197	483	2,510	17,200	5,920	2,940	232	3,380	234	311	1,260
7	224	193	440	2,480	16,400	3,950	2,380	234	1,180	231	253	534
8	223	191	426	2,670	14,300	3,210	1,970	252	275	232	187	297
9	222	194	413	2,540	12,200	10,300	1,880	596	241	241	195	288
10	220	189	401	2,620	10,200	11,100	1,070	518	255	291	185	274
11	214	196	405	2,870	7,930	10,400	469	244	592	268	177	268
12	265	192	404	4,590	5,980	10,400	404	1,040	3,990	392	172	264
13	293	188	409	3,660	4,190	9,250	373	3,350	1,760	677	166	264
14	219	187	399	3,010	4,330	7,910	352	1,870	1,980	580	170	267
15	208	185	405	2,500	4,340	7,280	339	1,790	2,890	1,920	166	266
16	207	222	2,570	2,880	8,760	6,960	387	1,180	2,370	2,120	350	270
17	205	201	2,420	2,740	9,660	6,410	2,580	1,100	1,300	1,360	3,740	279
18	198	187	1,060	4,280	11,500	5,310	2,540	870	329	651	3,880	1,540
19	199	182	1,430	2,050	15,400	4,610	618	427	289	3,460	2,320	1,110
20	204	179	2,530	1,630	15,900	4,530	418	324	275	5,340	1,980	694
21	203	184	1,840	1,940	16,400	5,250	1,290	232	265	3,580	1,930	1,700
22	204	406	2,470	2,220	15,700	12,300	1,630	218	258	5,110	1,310	651
23	200	384	3,070	1,650	13,600	14,800	2,810	216	252	2,190	563	445
24	196	221	2,920	2,440	11,500	18,800	3,940	205	243	1,140	252	433
25	193	189	4,490	4,640	9,430	20,600	2,170	208	241	542	267	427
26	189	319	7,290	7,460	7,600	21,600	1,390	213	233	263	365	420
27	189	3,000	11,100	6,700	6,320	21,700	1,190	213	231	256	392	416
28	198	2,260	11,900	7,380	5,000	21,400	408	210	225	236	593	411
29	196	1,540	12,200	7,760	3,470	20,700	294	207	223	191	1,170	444
30	196	1,840	12,100	6,630	---	18,300	289	364	220	179	7,980	1,980
31	192	---	11,100	4,990	---	15,100	---	1,280	---	176	7,910	---
Total	6,699	14,214	98,815	130,190	290,960	320,320	75,411	20,739	28,739	32,956	37,841	38,332
Mean	216	474	3,188	4,200	10,030	10,330	2,514	669	958	1,063	1,221	1,278
Max	293	3,000	12,200	9,660	17,200	21,700	11,800	3,350	3,990	5,340	7,980	7,030
Min	189	179	399	1,630	3,470	2,500	289	205	220	176	166	264
Med	207	195	1,430	3,010	9,660	7,910	1,510	292	275	268	267	438
Cfsm	0.07	0.15	1.01	1.32	3.16	3.26	0.79	0.21	0.30	0.34	0.38	0.40
In.	0.08	0.17	1.16	1.53	3.41	3.76	0.88	0.24	0.34	0.39	0.44	0.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,313	1,991	5,563	7,931	8,953	9,082	8,266	4,074	1,462	1,136	958	1,112
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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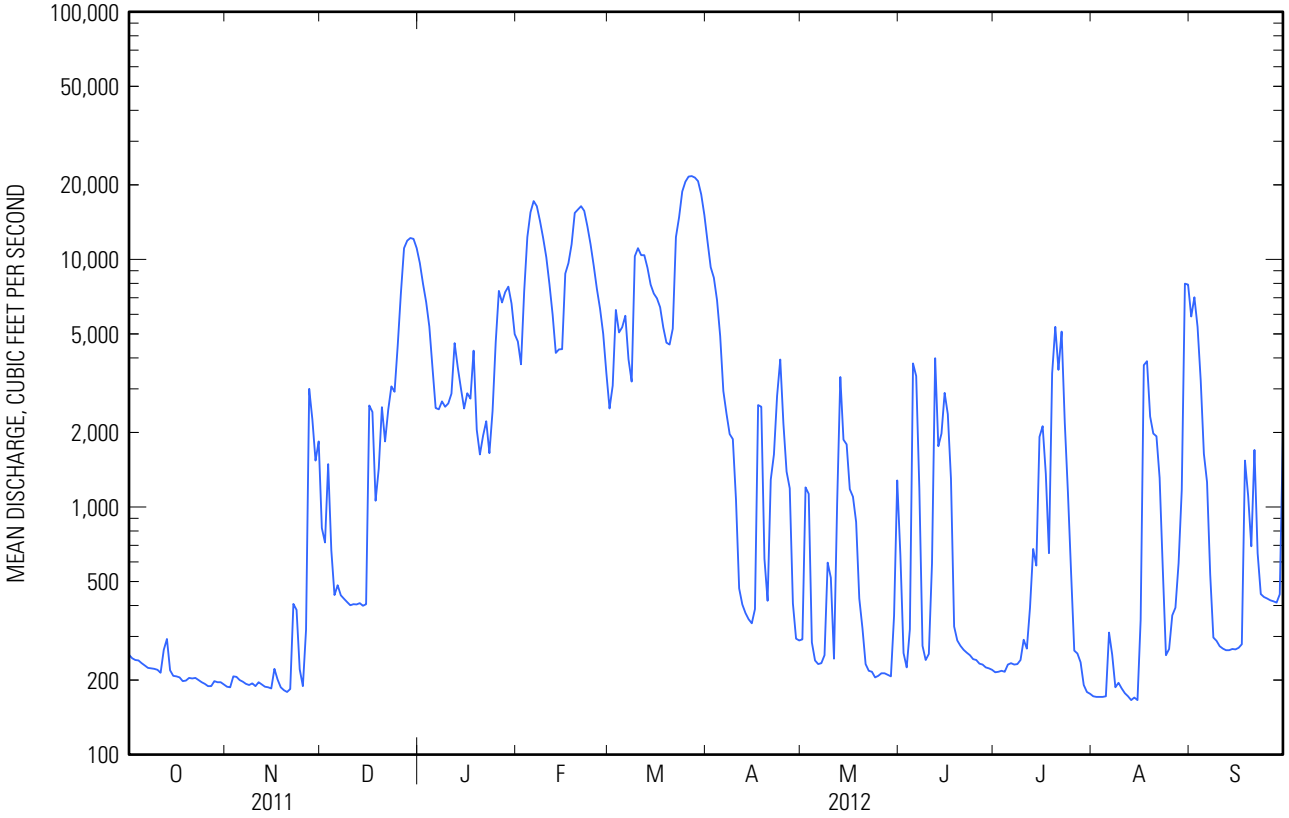
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1962 - 2012	
Annual total	1,104,012		1,095,216			
Annual mean	3,025		2,992		4,297	
Highest annual mean					12,000	1983
Lowest annual mean					942	1963
Highest daily mean	32,200	Sep 8	21,700	Mar 27	126,000	Apr 17, 1979
Lowest daily mean	179	Nov 20	166	Aug 13[a]	45	Sep 18, 1963
Annual seven-day minimum	190	Nov 9	173	Jul 30	63	Sep 17, 1963
Maximum peak flow			21,900	Mar 26	128,000	Apr 17, 1979
Maximum peak stage			28.31	Mar 26	43.28	Apr 17, 1979
Annual runoff (cfsm)	0.954		0.944		1.36	
Annual runoff (inches)	12.95		12.85		18.41	
10 percent exceeds	7,960		9,500		12,500	
50 percent exceeds	719		660		1,240	
90 percent exceeds	207		196		246	

[a] Also Aug. 15.



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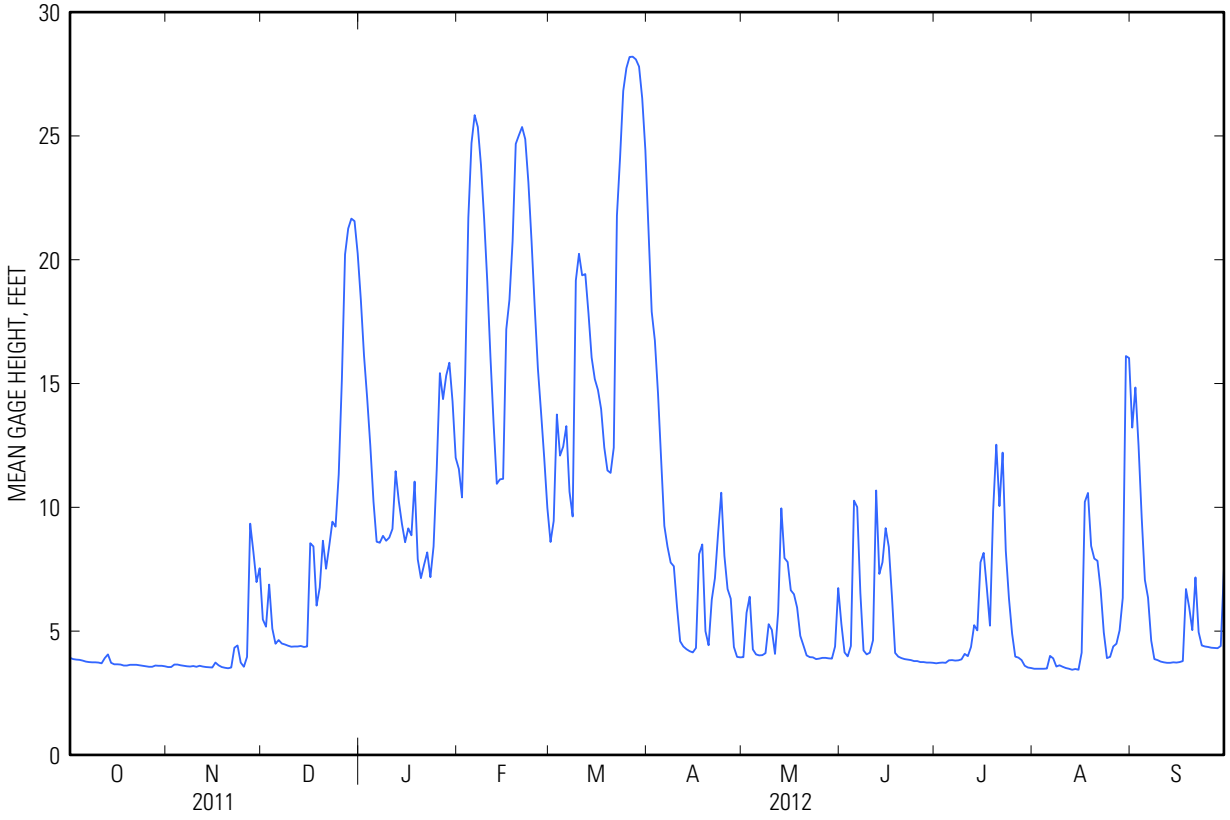
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.92	3.55	5.47	18.38	11.55	8.60	21.16	3.95	5.29	3.70	3.48	13.22
2	3.87	3.55	5.18	16.13	10.40	9.45	17.90	5.74	4.14	3.72	3.48	14.84
3	3.85	3.65	6.88	14.41	15.33	13.75	16.74	6.39	3.98	3.73	3.48	12.48
4	3.84	3.65	5.10	12.48	21.69	12.09	14.59	4.26	4.40	3.72	3.48	9.57
5	3.81	3.62	4.49	10.23	24.71	12.45	11.89	4.06	10.27	3.82	3.49	7.07
6	3.77	3.60	4.64	8.61	25.84	13.28	9.25	4.02	10.01	3.83	4.00	6.35
7	3.75	3.58	4.50	8.57	25.36	10.63	8.41	4.03	6.55	3.81	3.90	4.62
8	3.74	3.57	4.46	8.85	23.82	9.63	7.77	4.11	4.22	3.82	3.57	3.87
9	3.74	3.59	4.41	8.65	21.65	19.16	7.62	5.28	4.06	3.86	3.62	3.83
10	3.73	3.56	4.37	8.78	19.10	20.24	5.99	5.05	4.13	4.08	3.56	3.77
11	3.70	3.60	4.38	9.13	16.06	19.37	4.59	4.08	4.63	3.99	3.51	3.74
12	3.91	3.57	4.38	11.46	13.36	19.42	4.38	5.77	10.68	4.36	3.48	3.72
13	4.06	3.55	4.40	10.25	10.95	17.84	4.27	9.96	7.31	5.24	3.44	3.72
14	3.72	3.54	4.36	9.33	11.13	16.05	4.19	7.95	7.78	5.03	3.47	3.74
15	3.66	3.53	4.38	8.59	11.15	15.18	4.14	7.79	9.16	7.78	3.44	3.73
16	3.66	3.73	8.55	9.15	17.19	14.74	4.32	6.65	8.40	8.16	4.13	3.75
17	3.65	3.62	8.42	8.87	18.38	13.97	8.11	6.49	6.39	6.75	10.22	3.79
18	3.61	3.55	6.03	11.04	20.75	12.42	8.50	5.95	4.12	5.22	10.58	6.70
19	3.61	3.52	6.76	7.90	24.68	11.49	5.00	4.81	3.97	9.86	8.44	5.97
20	3.64	3.50	8.65	7.14	25.03	11.39	4.43	4.42	3.91	12.53	7.93	5.04
21	3.64	3.53	7.52	7.68	25.36	12.41	6.27	4.02	3.87	10.05	7.84	7.17
22	3.64	4.33	8.44	8.18	24.87	21.78	7.14	3.95	3.85	12.21	6.69	4.96
23	3.62	4.42	9.42	7.18	23.12	24.14	8.95	3.94	3.83	8.25	4.95	4.42
24	3.60	3.73	9.22	8.42	20.74	26.82	10.59	3.87	3.79	6.33	3.91	4.38
25	3.58	3.56	11.33	11.53	18.08	27.74	8.04	3.89	3.79	4.90	3.96	4.36
26	3.56	3.96	15.17	15.42	15.61	28.19	6.70	3.92	3.75	3.97	4.38	4.33
27	3.56	9.34	20.21	14.37	13.84	28.20	6.31	3.92	3.75	3.93	4.49	4.32
28	3.61	8.21	21.26	15.32	12.00	28.09	4.36	3.90	3.73	3.83	5.03	4.31
29	3.60	6.98	21.66	15.84	9.97	27.80	3.96	3.89	3.73	3.60	6.34	4.40
30	3.60	7.54	21.56	14.28	---	26.52	3.94	4.38	3.72	3.53	16.11	7.49
31	3.58	---	20.25	12.00	---	24.42	---	6.74	---	3.51	16.03	---
Mean	3.70	4.24	8.90	10.91	18.34	17.98	7.98	5.07	5.37	5.52	5.63	5.79
Max	4.06	9.34	21.66	18.38	25.84	28.20	21.16	9.96	10.68	12.53	16.11	14.84
Min	3.56	3.50	4.36	7.14	9.97	8.60	3.94	3.87	3.72	3.51	3.44	3.72

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