

07289000 MISSISSIPPI RIVER AT VICKSBURG, MS

Lower Mississippi-Natchez Basin
Lower Mississippi-Natchez Subbasin

LOCATION.--Lat 32°18'54", long 90°54'21" referenced to North American Datum of 1983, in SW ¼ sec.32, T.16 N., R.3 E., Warren County, MS, Hydrologic Unit 08060100, Washington Meridian.

DRAINAGE AREA.--1,144,500 mi² of which 4,000 mi² probably is noncontributing, The 4,000 mi² probably not contribution is in the Great Divide basin in Southern Wyoming.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge: January 1928 through September 1999, January 2008 to current year. Prior to July 1931, monthly discharges only, published in WSP 1311. October 1999 to January 2008 in U.S. Army Corps of Engineers publications.

Gage Heights: April 1930 - September 2001 in reports of the U.S. Geological Survey. Since December 1871, referred to canal gages (above 30.0 ft or 9.14 m only, since December 1949), September 1934 to December 1964, referred to bridge gage, in reports of Mississippi River Commission. January 1937 to December 1964 referred to bridge gage, January 1968 to December 1976, referred to gage 1.1 miles upstream and January 1977 to September 1986 referred to gage at mile 435.3 (corrected), in reports of the U.S. Army Corps of Engineers. Since May 1873, in reports of the National Weather Service.

Extreme of Stage, intermittently 1828 to 1871, and since 1871, extremes of discharge for various years 1858 to 1926 and since 1926, annual mean discharges since 1871, and records of daily discharge 1828 to 1964 are available in reports of the Mississippi River Commission. Since January 1947 daily discharge in reports of the U.S. Army Corps of Engineers. Prior to 1968, published as Mississippi River near Vicksburg.

REVISED RECORDS.--WRD Miss. 1975: Drainage area.

GAGE.--Water stage recorder operated by the U.S. Army Corps of Engineers. Datum of gage is 46.22 feet above sea level (U.S. Army Corps of Engineers benchmark) or 46.16 ft. above mean gulf level. The U.S. Geological Survey operated a water-stage recorder over the cavity in the fourth pier from the left bank at a combined highway and railway bridge of Vicksburg Bridge Commission of Warren County, at southern city limits of Vicksburg, 1.5 miles downstream from the Yazoo River diversion canal, and at mile 435.7 (corrected), operated until January 1977. Gages used by Mississippi River Commission: Dec. 10, 1871, to Sept. 30, 1929, nonrecording gage at the mouth of the Yazoo diversion canal, 1.5 mi upstream from the bridge gage, since October 1929, nonrecording gage on Yazoo diversion canal, 1600 ft upstream from the mouth. Gage used by National Weather Service, May 18, 1873, to Oct. 29, 1919, nonrecording gage 0.5 mi upstream from the bridge gage, Oct. 30, 1919, to Nov. 30, 1922, nonrecording gage at mouth of Yazoo Canal, Dec. 1, 1922, to Aug. 31, 1934, nonrecording gage on Yazoo diversion canal, Sept. 1, 1934, to Dec. 31, 1962, nonrecording gage at bridge, Jan. 1, 1963, to Dec. 31, 1967, water-stage recorder on left bank near downstream side of bridge, Jan. 1, 1968, to Dec. 31, 1976, on left bank at site 1.1 mi upstream, and since Jan. 1, 1977, on left bank at downstream side of Interstate 20 bridge. All gages at same datum, but readings differ due to slope of water surface between them.

COOPERATION.--Stage record and some streamflow measurements furnished by U.S. Army Corps of Engineers.

REMARKS.--Estimated daily discharges: Dec. 26,27, 29-31, Jan. 1,2,19,25,26, Feb. 3-5, 27, Mar. 8,9, Aug 13-15, and Sept. 6. Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by many reservoirs and navigation dams. U.S. Army Corps of Engineers stage sensor and telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1871, 58.4 ft U.S. Army Corps of Engineers gage on Yazoo diversion canal, approximately 56.0 ft, May 4, 1927 (U.S. Geological survey gage).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310,000 ft³/s, May 17,18, gage height, 57.17 ft; minimum discharge, 302,000 ft³/s, Nov. 12, gage height, 8.61 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated; $\times 10^6$, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	446,000	328,000	392,000	e365,000	310,000	727,000	1,400,000	1,490,000	1,740,000	925,000	594,000	449,000
2	461,000	326,000	422,000	e353,000	305,000	795,000	1,380,000	1,540,000	1,690,000	938,000	588,000	450,000
3	471,000	326,000	452,000	345,000	e314,000	852,000	1,350,000	1,590,000	1,650,000	952,000	585,000	449,000
4	481,000	325,000	472,000	336,000	e330,000	900,000	1,320,000	1,650,000	1,610,000	964,000	587,000	447,000
5	484,000	325,000	485,000	325,000	e352,000	947,000	1,310,000	1,700,000	1,580,000	979,000	586,000	446,000
6	481,000	323,000	497,000	320,000	359,000	988,000	1,270,000	1,760,000	1,540,000	982,000	583,000	e437,000
7	475,000	322,000	515,000	325,000	359,000	1,020,000	1,220,000	1,820,000	1,500,000	982,000	578,000	422,000
8	465,000	321,000	541,000	340,000	362,000	e1,050,000	1,170,000	1,890,000	1,470,000	978,000	573,000	412,000
9	454,000	315,000	570,000	366,000	384,000	e1,100,000	1,140,000	1,960,000	1,430,000	972,000	572,000	403,000
10	445,000	306,000	598,000	416,000	421,000	1,140,000	1,100,000	2,020,000	1,390,000	964,000	572,000	395,000
11	436,000	303,000	619,000	466,000	462,000	1,170,000	1,060,000	2,080,000	1,350,000	953,000	574,000	394,000
12	425,000	302,000	627,000	505,000	497,000	1,190,000	1,030,000	2,140,000	1,310,000	939,000	579,000	400,000
13	417,000	304,000	621,000	532,000	519,000	1,210,000	1,010,000	2,200,000	1,260,000	926,000	e586,000	412,000
14	415,000	308,000	604,000	539,000	522,000	1,230,000	991,000	2,230,000	1,210,000	916,000	e585,000	426,000
15	418,000	315,000	573,000	531,000	507,000	1,250,000	980,000	2,270,000	1,170,000	901,000	e579,000	437,000
16	417,000	319,000	539,000	509,000	487,000	1,260,000	983,000	2,290,000	1,130,000	886,000	570,000	446,000
17	418,000	317,000	507,000	481,000	464,000	1,280,000	992,000	2,310,000	1,090,000	870,000	558,000	448,000
18	418,000	317,000	481,000	451,000	441,000	1,300,000	1,000,000	2,310,000	1,040,000	851,000	543,000	441,000
19	417,000	316,000	456,000	e420,000	419,000	1,310,000	1,010,000	2,280,000	1,000,000	831,000	531,000	430,000
20	415,000	317,000	435,000	388,000	399,000	1,330,000	1,020,000	2,250,000	962,000	812,000	518,000	419,000
21	410,000	313,000	416,000	362,000	379,000	1,340,000	1,050,000	2,230,000	928,000	790,000	509,000	408,000
22	403,000	311,000	405,000	349,000	356,000	1,350,000	1,090,000	2,200,000	906,000	766,000	501,000	396,000
23	396,000	314,000	398,000	342,000	350,000	1,370,000	1,130,000	2,150,000	887,000	740,000	494,000	384,000
24	388,000	322,000	397,000	333,000	367,000	1,390,000	1,160,000	2,100,000	874,000	716,000	492,000	374,000
25	381,000	334,000	392,000	e324,000	413,000	1,390,000	1,200,000	2,050,000	869,000	694,000	488,000	365,000
26	377,000	343,000	e388,000	e327,000	485,000	1,400,000	1,240,000	2,010,000	870,000	677,000	482,000	363,000
27	374,000	356,000	e389,000	324,000	e565,000	1,420,000	1,290,000	1,970,000	873,000	660,000	477,000	359,000
28	367,000	366,000	384,000	322,000	648,000	1,420,000	1,340,000	1,930,000	882,000	642,000	470,000	360,000
29	361,000	371,000	e373,000	318,000	---	1,410,000	1,390,000	1,880,000	896,000	625,000	463,000	360,000
30	350,000	381,000	e365,000	314,000	---	1,410,000	1,440,000	1,830,000	910,000	614,000	455,000	359,000
31	337,000	---	e359,000	315,000	---	1,410,000	---	1,780,000	---	603,000	450,000	---
Total	13.00 $\times 10^6$	9,746,000	14.67 $\times 10^6$	11.94 $\times 10^6$	11.77 $\times 10^6$	37.35 $\times 10^6$	35.06 $\times 10^6$	61.91 $\times 10^6$	36.01 $\times 10^6$	26.04 $\times 10^6$	16.72 $\times 10^6$	12.29 $\times 10^6$
Mean	419,500	324,900	473,300	385,300	420,600	1,205,000	1,169,000	1,997,000	1,201,000	840,300	539,400	409,700
Max	484,000	381,000	627,000	539,000	648,000	1,420,000	1,440,000	2,310,000	1,740,000	982,000	594,000	450,000
Min	337,000	302,000	359,000	314,000	305,000	727,000	980,000	1,490,000	869,000	603,000	450,000	359,000
Cfs/m	0.37	0.28	0.41	0.34	0.37	1.06	1.02	1.75	1.05	0.74	0.47	0.36
In.	0.42	0.32	0.48	0.39	0.38	1.22	1.14	2.02	1.17	0.85	0.55	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	386,400	448,200	601,000	727,500	808,000	936,800	998,800	1,013,000	856,800	636,100	482,900	359,900
Max	760,000	1,047,000	928,500	1,511,000	1,301,000	1,466,000	1,731,000	1,997,000	1,201,000	907,600	1,027,000	708,800
(WY)	(1994)	(2010)	(1994)	(1991)	(2005)	(1997)	(2008)	(2011)	(2011)	(2008)	(1993)	(1993)
Min	221,000	211,800	312,800	308,300	303,700	611,200	555,300	457,000	481,900	410,800	278,500	242,500
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2006)	(1995)	(2000)	(1992)	(2002)	(1991)	(1991)

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SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1990 - 2011	
Annual total	273,339,000		286,553,000			
Annual mean	748,900		785,100		678,700	
Highest annual mean					886,500	1993
Lowest annual mean					416,800	2000
Highest daily mean	1,320,000	May 21	2,310,000	May 17 ^a	2,310,000	May 17, 2011
Lowest daily mean	302,000	Nov 12	302,000	Nov 12	150,000	Oct 31, 2000
Annual seven-day minimum	308,000	Nov 9	308,000	Nov 9	168,000	Oct 26, 2000
Maximum peak flow					2,080,000	Feb 17, 1937
Maximum peak stage					57.17	May 18, 2011
Instantaneous low flow					100,000	Nov 1, 1939
Annual runoff (cfs)	0.657		0.688		0.595	
Annual runoff (inches)	8.92		9.35		8.09	
10 percent exceeds	1,170,000		1,520,000		1,160,000	
50 percent exceeds	731,000		539,000		603,000	
90 percent exceeds	374,000		328,000		289,000	

^a Also May 18.