

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK, AR

Lower Arkansas-Fourche La Fave Basin
Lower Arkansas-Maumelle Subbasin

LOCATION.--Lat 34°47'27", long 92°21'32" referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.23, T.2 N., R.13 W., Pulaski County, AR, Hydrologic Unit 11110207, in metal shelter on dam and at mile 141.5.

DRAINAGE AREA.--158,000 mi², of which 22,200 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Sep 1927 to current year. Prior to Oct 1969, published as "07263500 Arkansas River at Little Rock". Monthly discharge only for some periods, published in WSP 1311. Gage height records collected at or near former site since 1873 are contained in reports of National Weather Service. Gage-height records collected since 1883 at site 5.5 mi downstream, and intermittent records of discharge since 1885 are contained in reports of Mississippi River Commission.

GAGE.--Water-stage and gate-position recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct 1934, nonrecording gage, Oct 1934, to May 1970, recording gage at site 6.2 mi downstream at datum 223.61 ft higher. Sep 1968, to May 1970, auxiliary water-stage recorder 5.5 mi upstream from former gage.

REMARKS.--Water-discharge records fair except estimated daily discharges and discharges less than 15,000 ft³/s, which are poor. Beginning May 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct 1988, the North Little Rock Electric Department hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Jun 1833 reached a stage of 34.6 ft, at former site and datum. Flood of Apr 1927, reached a stage of 33.0 ft, at former site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 288,000 ft³/s, Mar 21; minimum daily discharge, 166 ft³/s, Nov 23.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

[e, estimated; ×10⁶, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8,180	16,000	11,800	e25,100	e33,800	63,700	e214,000	160,000	124,000	155,000	33,300	20,100
2	11,400	19,900	5,530	e25,300	e24,200	57,900	e229,000	163,000	132,000	145,000	31,800	18,200
3	27,300	6,540	22,400	e26,400	e16,500	75,600	e233,000	175,000	136,000	132,000	22,200	53,800
4	72,700	5,950	15,600	e16,300	e23,500	160,000	e244,000	174,000	131,000	133,000	29,100	146,000
5	46,500	14,700	16,100	e18,000	e19,300	202,000	e244,000	171,000	136,000	137,000	34,000	172,000
6	11,800	7,590	11,100	e19,900	e46,200	195,000	e217,000	169,000	139,000	144,000	26,400	119,000
7	6,390	7,800	9,550	e8,730	e50,200	178,000	e200,000	168,000	136,000	148,000	31,300	81,500
8	24,900	6,120	9,150	e22,200	e41,300	176,000	209,000	169,000	128,000	141,000	33,200	52,900
9	17,500	3,040	9,650	e43,000	40,000	165,000	213,000	168,000	133,000	142,000	36,000	39,900
10	26,800	4,660	12,200	e41,400	39,500	148,000	215,000	160,000	134,000	138,000	36,600	45,600
11	20,600	13,800	19,700	e36,200	26,900	130,000	242,000	164,000	146,000	138,000	36,000	55,700
12	13,500	1,300	37,000	e31,100	40,300	117,000	279,000	158,000	151,000	136,000	44,000	68,000
13	7,720	15,900	51,000	e11,600	50,000	90,400	280,000	156,000	144,000	126,000	66,100	71,500
14	2,660	6,020	e53,600	e24,400	62,900	75,700	252,000	165,000	145,000	91,300	66,200	72,300
15	17,100	9,430	e73,800	e24,000	56,300	80,400	220,000	167,000	161,000	84,000	62,000	103,000
16	8,340	6,100	e95,500	e15,100	49,300	74,600	206,000	164,000	158,000	89,500	57,100	128,000
17	14,000	4,420	e56,300	e29,700	92,900	67,100	209,000	170,000	160,000	81,600	54,900	129,000
18	17,300	6,710	e35,800	e33,300	139,000	85,600	219,000	172,000	161,000	81,900	53,600	132,000
19	23,600	12,700	e45,900	e31,200	141,000	187,000	220,000	156,000	155,000	88,200	45,700	140,000
20	18,100	14,700	e36,200	e27,000	97,100	249,000	218,000	137,000	159,000	73,100	50,800	135,000
21	13,800	8,250	e37,800	e12,500	93,000	288,000	215,000	120,000	162,000	56,600	50,400	124,000
22	19,100	7,460	e45,500	e21,900	106,000	283,000	199,000	111,000	164,000	58,800	61,600	89,600
23	30,300	166	e46,700	e28,500	118,000	239,000	190,000	111,000	150,000	58,800	64,900	83,400
24	37,100	3,370	e23,400	e19,000	107,000	206,000	186,000	104,000	143,000	65,200	51,100	82,800
25	20,700	5,740	e16,200	e14,600	88,600	199,000	175,000	76,800	142,000	63,800	44,700	76,200
26	14,600	18,100	e18,000	e21,600	85,400	189,000	160,000	63,000	146,000	55,500	37,100	73,500
27	28,500	21,600	e25,800	e18,400	81,300	183,000	163,000	82,400	150,000	44,000	35,300	69,700
28	8,830	16,000	e37,100	e24,100	79,100	188,000	176,000	111,000	152,000	30,600	38,100	69,200
29	14,500	7,330	e18,000	e13,400	80,700	182,000	176,000	136,000	149,000	24,000	42,800	70,200
30	19,600	4,340	e20,800	e21,200	---	179,000	167,000	139,000	153,000	27,500	33,900	68,700
31	8,830	---	e18,800	e23,900	---	e200,000	---	128,000	---	27,300	24,000	---
Total	612,250	275,736	935,980	729,030	1,929,300	4,914,000	6,370,000	4,468,200	4,380,000	2,916,700	1,334,200	2,590,800
Mean	19,750	9,191	30,190	23,520	66,530	158,500	212,300	144,100	146,000	94,090	43,040	86,360
Max	72,700	21,600	95,500	43,000	141,000	288,000	280,000	175,000	164,000	155,000	66,200	172,000
Min	2,660	166	5,530	8,730	16,500	57,900	160,000	63,000	124,000	24,000	22,200	18,200
Ac-ft	1,214,000	546,900	1,857,000	1,446,000	3,827,000	9,747,000	12.63×10 ⁶	8,863,000	8,688,000	5,785,000	2,646,000	5,139,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	25,770	42,440	48,960	45,480	47,290	74,260	76,780	77,520	68,450	39,610	18,520	17,400
Max	215,100	176,000	155,400	161,800	116,100	169,500	215,900	234,800	191,600	190,800	80,690	86,360
(WY)	(1987)	(1975)	(1993)	(1998)	(2001)	(1987)	(1973)	(1990)	(1995)	(2007)	(2007)	(2008)
Min	1,466	2,615	1,602	1,439	3,700	9,986	7,971	18,460	4,994	4,954	4,130	2,954
(WY)	(1979)	(1981)	(2006)	(1981)	(2006)	(1972)	(1981)	(1977)	(1988)	(1991)	(1991)	(2006)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1970 - 2008	
Annual total	24,612,426		31,456,196			
Annual mean	67,430		85,950		^a 48,520	
Highest annual mean					96,810	1993
Lowest annual mean					10,240	2006
Highest daily mean	218,000	Jul 14	288,000	Mar 21	404,000	May 8, 1990
Lowest daily mean	166	Nov 23	166	Nov 23	^b 14	Oct 25, 1978
Annual seven-day minimum	6,330	Nov 6	6,330	Nov 6	432	Oct 15, 1982
Maximum peak flow			301,000	Mar 21	^c 406,000	May 7, 1990
Maximum peak stage			250.16	Mar 21	^d 256.97	May 7, 1990
Annual runoff (ac-ft)	48,820,000		62,390,000		35,150,000	
10 percent exceeds	157,000		184,000		132,000	
50 percent exceeds	52,100		63,800		29,600	
90 percent exceeds	8,830		11,800		3,830	

^a Prior to regulation, water years 1928-69, 39,920 ft³/s

^b Also minimum daily discharge for period of record

^c Maximum discharge for period of record, 536,000 ft³/s, May 27, 1943

^d Maximum gage height for period of record, 30.05 ft, May 27, 1943, at site and datum then in use

