

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, on dam and at river 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 McClellan-Kerr Navigation System. In 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 discharge, 242,000 ft³/s, May 8, gage height, 245.97 ft; minimum discharge, 0.00 ft³/s, occurred on many days.

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK, AR—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	64,600	22,700	23,100	41,300	32,800	20,600	110,000	111,000	147,000	25,400	16,900	19,700
2	63,000	29,300	1,690	43,700	23,800	13,300	115,000	147,000	134,000	32,100	5,510	15,600
3	68,100	22,600	5,860	29,300	30,500	15,300	133,000	212,000	110,000	24,700	13,300	8,660
4	57,400	20,600	10,600	28,600	25,000	18,500	130,000	222,000	77,500	18,800	18,800	21,000
5	34,200	18,000	12,000	36,000	27,500	9,990	105,000	221,000	65,800	29,900	17,100	10,400
6	31,300	9,680	5,150	29,600	31,700	9,720	103,000	228,000	73,400	16,400	20,800	14,900
7	50,900	18,500	3,300	38,200	9,260	4,740	91,600	236,000	68,000	16,100	18,000	19,300
8	75,800	21,900	5,350	15,500	19,100	15,200	76,100	241,000	72,300	20,500	14,400	14,400
9	49,900	40,700	12,700	22,000	10,800	5,470	65,000	231,000	72,100	17,800	15,600	18,200
10	40,800	52,700	17,000	28,000	27,400	11,800	71,400	215,000	60,800	20,100	8,890	21,900
11	42,200	26,600	11,400	25,000	46,600	26,300	77,000	208,000	62,400	16,300	31,100	39,600
12	41,400	45,900	10,200	22,900	106,000	22,200	74,000	201,000	51,500	14,500	12,000	55,800
13	22,200	40,300	7,320	22,700	113,000	29,900	92,500	191,000	46,300	20,100	16,000	54,100
14	15,300	32,900	e365	23,900	94,800	32,000	121,000	195,000	64,600	19,300	15,000	43,100
15	20,800	34,300	17,100	12,700	77,400	35,500	123,000	194,000	77,800	13,600	5,060	29,400
16	38,800	10,500	7,830	10,900	57,000	20,800	96,700	203,000	65,300	18,900	4,550	74,000
17	32,800	15,400	14,600	7,500	59,100	34,400	80,400	204,000	47,600	16,500	3,850	91,900
18	21,800	31,500	24,500	3,050	56,100	25,500	79,000	194,000	59,300	3,700	13,900	99,300
19	20,200	15,600	9,820	12,300	43,300	16,400	87,300	182,000	54,800	16,900	5,380	103,000
20	19,000	13,300	5,790	16,500	34,400	26,400	94,500	175,000	53,500	2,040	16,800	82,500
21	32,600	25,300	14,400	e11,600	36,200	12,600	110,000	174,000	62,900	19,900	40,700	75,000
22	45,700	11,600	15,700	e16,200	36,800	15,500	106,000	168,000	64,700	25,200	37,200	64,100
23	21,400	4,960	5,220	7,570	35,900	12,900	108,000	171,000	48,100	30,100	34,000	115,000
24	44,500	15,200	16,300	9,340	21,900	10,600	114,000	174,000	48,000	10,500	37,700	137,000
25	38,700	10,800	19,100	e365	27,700	33,400	124,000	184,000	47,200	10,100	46,900	112,000
26	35,500	9,290	6,920	6,940	23,900	41,900	122,000	188,000	50,200	24,200	39,200	78,600
27	38,500	11,200	6,690	25,500	26,800	60,900	96,700	184,000	48,500	30,900	43,800	68,400
28	28,500	8,200	35,800	90,600	34,400	65,700	76,200	176,000	40,600	21,100	21,600	63,700
29	32,500	3,190	43,700	119,000	---	105,000	80,000	166,000	19,500	21,700	21,600	64,900
30	20,200	1,100	33,100	63,800	---	105,000	89,000	163,000	20,800	19,600	20,400	55,200
31	23,200	---	25,600	40,200	---	103,000	---	162,000	---	31,400	8,420	---
Total	1,171,800	623,820	428,205	860,765	1,169,160	960,520	2,951,400	5,921,000	1,914,500	608,340	624,460	1,670,660
Mean	37,800	20,790	13,810	27,770	41,760	30,980	98,380	191,000	63,820	19,620	20,140	55,690
Max	75,800	52,700	43,700	119,000	113,000	105,000	133,000	241,000	147,000	32,100	46,900	137,000
Min	15,300	1,100	365	365	9,260	4,740	65,000	111,000	19,500	2,040	3,850	8,660
Ac-ft	2,324,000	1,237,000	849,300	1,707,000	2,319,000	1,905,000	5,854,000	11.74 $\times 10^6$	3,797,000	1,207,000	1,239,000	3,314,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	26,070	41,900	48,080	45,040	47,150	73,180	77,320	80,350	68,340	39,110	18,560	18,360
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)

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK, AR—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1970 - 2009	
Annual total	31,856,055		18,904,630			
Annual mean	87,040		51,790		^a 48,600	
Highest annual mean					96,810	
Lowest annual mean					10,240	
Highest daily mean	288,000	Mar 21	241,000	May 8	404,000	May 8, 1990
Lowest daily mean	365	Dec 14	365	Dec 14	^b 14	Oct 25, 1978
Annual seven-day minimum	6,280	Dec 2	6,280	Dec 2	432	Oct 15, 1982
Maximum peak flow			242,000	May 8	^c 406,000	May 7, 1990
Maximum peak stage			245.97	May 8	^d 256.97	May 7, 1990
Annual runoff (ac-ft)	63,190,000		37,500,000		35,210,000	
10 percent exceeds	184,000		123,000		132,000	
50 percent exceeds	63,800		31,100		29,700	
90 percent exceeds	15,000		9,540		3,910	

^a Prior to regulation, water years 1928 to 1969, 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

