

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK, AR

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

LOCATION.--Lat 34°47'35", long 92°21'30" referenced to North American Datum of 1983, 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.--158,138 mi² of which 22,241 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.

REVISED RECORDS.--WDR 2010: Drainage area.

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 by the McClellan-Kerr Arkansas River 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, 192,000 ft³/s, Oct. 31, gage height, 242.26 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	60,200	182,000	30,500	63,900	52,200	77,500	108,000	32,300	81,400	67,000	32,600	16,100
2	65,600	168,000	39,000	63,300	56,600	74,100	79,000	44,700	76,700	49,100	31,200	13,600
3	56,300	162,000	42,300	59,100	77,600	61,700	71,600	28,100	68,900	31,800	20,000	13,900
4	39,800	165,000	40,500	58,900	88,500	62,200	73,100	22,200	68,900	37,000	28,300	23,600
5	38,300	148,000	36,900	32,300	85,200	61,600	74,700	23,400	60,400	48,000	32,700	2,920
6	41,800	108,000	42,000	41,700	110,000	58,800	81,000	24,200	56,500	36,700	40,900	6,010
7	63,300	95,700	27,400	43,700	106,000	58,000	67,200	24,400	39,600	53,500	24,700	9,380
8	37,800	87,300	25,300	47,800	81,700	55,800	47,100	27,800	17,400	62,000	22,500	12,900
9	75,400	72,300	23,900	40,700	87,100	37,600	72,700	12,400	39,300	81,400	33,300	34,000
10	131,000	72,100	4,440	26,600	93,200	21,800	68,100	9,170	43,800	113,000	18,600	86,400
11	172,000	77,000	8,680	26,500	85,400	44,100	60,500	27,100	52,800	102,000	28,300	108,000
12	178,000	79,500	17,300	37,500	80,700	63,200	45,500	8,690	62,800	89,700	19,300	32,300
13	172,000	74,200	17,900	27,900	85,600	65,700	36,500	25,000	52,500	95,800	27,800	20,600
14	177,000	66,900	28,400	19,300	94,200	52,500	43,200	44,200	37,700	111,000	20,600	32,700
15	184,000	70,400	22,400	26,500	98,500	49,000	41,100	54,100	62,900	71,100	17,200	35,400
16	181,000	70,700	22,600	13,200	74,000	45,900	32,800	80,700	89,300	39,600	27,300	17,700
17	172,000	85,500	13,400	28,300	77,000	54,100	45,700	90,700	87,500	20,800	14,200	12,500
18	166,000	68,900	10,400	20,100	79,200	55,900	29,100	83,200	98,100	22,800	14,200	34,900
19	155,000	47,600	24,400	20,400	83,000	32,700	21,100	71,900	120,000	57,500	21,700	44,200
20	124,000	51,500	6,450	30,400	70,800	43,000	31,000	79,600	124,000	61,600	12,600	31,600
21	100,000	68,500	8,630	51,600	65,500	45,300	40,300	124,000	116,000	83,900	19,200	26,700
22	91,200	49,000	19,200	71,200	76,900	70,100	34,700	158,000	90,600	67,900	18,700	24,400
23	106,000	55,000	7,560	87,300	89,000	73,100	21,100	159,000	85,700	45,000	5,870	26,200
24	128,000	53,500	65,100	90,500	98,500	89,900	35,800	148,000	86,900	64,800	12,300	25,800
25	133,000	47,200	115,000	90,400	95,000	106,000	40,300	152,000	73,200	66,200	13,600	21,800
26	110,000	45,700	138,000	79,200	78,800	103,000	38,000	150,000	67,100	55,100	17,200	e490
27	119,000	40,500	91,000	65,300	73,100	105,000	33,200	147,000	70,100	35,900	5,600	1,170
28	125,000	38,500	61,300	59,000	77,200	118,000	24,700	121,000	60,700	41,600	9,870	13,200
29	123,000	47,900	65,400	67,200	---	136,000	45,000	93,700	74,800	49,800	4,500	12,500
30	148,000	30,000	62,600	81,100	---	135,000	32,800	82,100	80,900	43,600	3,970	1,000
31	185,000	---	46,500	84,500	---	131,000	---	65,300	---	35,500	14,200	---
Total	3,658,700	2,428,400	1,164,460	1,555,400	2,320,500	2,187,600	1,474,900	2,213,960	2,146,500	1,840,700	613,010	741,970
Mean	118,000	80,950	37,560	50,170	82,880	70,570	49,160	71,420	71,550	59,380	19,770	24,730
Max	185,000	182,000	138,000	90,500	110,000	136,000	108,000	159,000	124,000	113,000	40,900	108,000
Min	37,800	30,000	4,440	13,200	52,200	21,800	21,100	8,690	17,400	20,800	3,970	490
Ac-ft	7,257,000	4,817,000	2,310,000	3,085,000	4,603,000	4,339,000	2,925,000	4,391,000	4,258,000	3,651,000	1,216,000	1,472,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	28,320	42,850	47,830	45,170	48,020	73,110	76,630	80,130	68,410	39,600	18,590	18,510
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 2009		Water Year 2010		Water Years 1970 - 2010	
Annual total	23,932,365		22,346,100			
Annual mean	65,570		61,220		^a 48,910	
Highest annual mean					96,810	
Lowest annual mean					10,240	
Highest daily mean	241,000	May 8	185,000	Oct 31	404,000	May 8, 1990
Lowest daily mean	365	Jan 25	490	Sep 26	^b 14	Oct 25, 1978
Annual seven-day minimum	9,110	Aug 13	9,580	Aug 24	432	Oct 15, 1982
Maximum peak flow			192,000	Oct 31	^c 406,000	May 7, 1990
Maximum peak stage			242.26	Oct 31	^d 256.97	May 7, 1990
Annual runoff (ac-ft)	47,470,000		44,320,000		35,430,000	
10 percent exceeds	167,000		119,000		132,000	
50 percent exceeds	46,300		55,000		30,300	
90 percent exceeds	12,200		17,200		3,980	

^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

