

Water-Data Report 2006

**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, at mile 141.5.

DRAINAGE AREA.--158,030 mi<sup>2</sup>, of which 22,241 mi<sup>2</sup> 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 from the 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 from the Mississippi River Commission.

GAGE.--Water-stage and gate-position recorder. Datum of gage is at NGVD of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Oct 1, 1934, nonrecording gage, Oct 1, 1934, to May 9, 1970, recording gage at site 6.2 mi downstream at datum 223.61 ft higher. Sep 20, 1968, to May 9, 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 ft<sup>3</sup>/s, which are poor. Beginning May 10, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct 7, 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 20, 1927, reached a stage of 33.0 ft, at former site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 106,000 ft<sup>3</sup>/s May 6; gage height, 235.22 ft.

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

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	9,640	2,830	3,460	e50	3,400	6,320	5,610	67,300	11,200	7,200	4,760	1,340
2	12,400	3,120	1,540	1,220	e1,020	2,100	15,000	47,300	12,100	3,950	8,380	4,330
3	9,430	2,110	1,960	1,370	2,600	1,510	9,840	48,800	18,000	2,700	10,900	2,730
4	7,900	3,130	e986	4,930	10,800	e947	5,260	49,000	4,970	4,840	10,500	e365
5	12,900	e584	e422	e382	3,470	e50	1,640	78,600	3,610	4,460	3,130	e464
6	11,700	2,740	3,320	e50	1,430	1,960	7,440	102,000	6,480	4,150	2,360	e1,200
7	23,400	3,440	3,030	e662	5,630	1,250	4,380	84,100	11,600	2,950	4,560	1,500
8	9,420	1,500	6,310	e327	3,980	e50	2,310	53,000	14,900	5,800	6,290	4,380
9	6,920	7,050	3,020	e1,020	4,400	12,500	3,550	52,800	9,040	4,560	9,080	e1,330
10	9,120	12,200	1,280	3,530	4,180	19,100	9,460	58,100	6,610	6,360	3,710	e365
11	5,370	3,800	e657	3,440	4,000	7,390	2,590	82,000	6,370	6,710	4,040	e1,140
12	13,700	e53	e193	2,670	2,690	11,500	3,580	86,900	5,300	5,690	1,040	3,350
13	9,200	91,500	e844	3,870	6,120	20,400	5,830	84,400	15,900	12,000	3,390	1,630
14	9,190	41,800	e933	2,380	1,210	16,000	3,750	77,300	10,900	23,600	5,980	1,240
15	15,600	34,700	2,750	e494	1,510	8,220	3,980	77,700	8,990	11,600	6,600	e378
16	5,050	46,300	2,930	e841	1,890	3,940	1,340	78,800	16,100	1,890	5,280	3,810
17	5,020	3,920	e50	e850	4,380	6,150	1,130	73,300	9,440	9,730	3,640	e680
18	8,170	3,610	e50	3,240	2,830	7,200	e560	63,700	5,970	8,080	5,610	3,680
19	8,030	3,120	2,850	e1,020	1,020	9,170	2,840	58,100	18,700	13,200	5,200	7,610
20	3,020	3,630	2,100	e272	6,450	29,200	6,550	50,800	6,570	11,900	3,280	8,160
21	1,860	3,950	2,810	e867	1,740	48,000	7,410	14,100	11,000	7,710	3,970	4,230
22	e50	6,290	e556	1,640	8,090	39,100	6,570	8,550	9,680	3,500	3,440	1,880
23	4,000	4,050	e842	3,870	8,480	23,600	2,040	30,700	6,980	2,740	7,230	10,500
24	5,370	e1,010	e830	6,760	e723	25,000	1,700	21,200	7,570	2,610	5,050	15,700
25	8,710	e50	e819	3,870	1,650	15,800	7,320	13,300	12,800	2,790	3,940	1,120
26	6,190	e453	e52	2,380	1,030	13,600	14,500	23,100	6,930	2,760	5,040	e602
27	e724	e823	e392	1,780	4,730	22,800	6,280	9,130	2,400	2,640	5,850	e365
28	6,220	6,810	e816	1,570	4,150	13,100	11,500	20,900	4,660	3,700	8,100	e365
29	1,320	9,090	2,870	14,900	---	11,000	36,500	7,810	6,600	10,600	9,740	3,390
30	e542	5,100	e472	12,600	---	13,300	58,000	20,200	5,160	8,980	6,030	e786
31	e776	---	e523	5,010	---	15,600	---	16,300	---	5,280	5,780	---
<b>Total</b>	230,942	308,763	49,667	87,865	103,603	405,857	248,460	1,559,290	276,530	204,680	171,900	88,620
<b>Mean</b>	7,450	10,290	1,602	2,834	3,700	13,090	8,282	50,300	9,218	6,603	5,545	2,954
<b>Max</b>	23,400	91,500	6,310	14,900	10,800	48,000	58,000	102,000	18,700	23,600	10,900	15,700
<b>Min</b>	50	50	50	50	723	50	560	7,810	2,400	1,890	1,040	365
<b>Ac-ft</b>	458,100	612,400	98,510	174,300	205,500	805,000	492,800	3,093,000	548,500	406,000	341,000	175,800

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	26,480	44,030	49,620	45,130	47,110	73,390	73,440	74,640	64,930	34,050	16,180	15,090
<b>Max</b>	215,100	176,000	155,400	161,800	116,100	169,500	215,900	234,800	191,600	117,100	62,730	51,690
<b>(WY)</b>	(1987)	(1975)	(1993)	(1998)	(2001)	(1987)	(1973)	(1990)	(1995)	(1999)	(1992)	(1989)
<b>Min</b>	1,466	2,615	1,602	1,439	3,700	9,986	7,971	18,460	4,994	4,954	4,130	2,954
<b>(WY)</b>	(1979)	(1981)	(2006)	(1981)	(2006)	(1972)	(1981)	(1977)	(1988)	(1991)	(1991)	(2006)

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## SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1970 - 2006	
<b>Annual total</b>	13,746,862		3,736,177			
<b>Annual mean</b>	37,660		10,240		<sup>a</sup> 46,980	
<b>Highest annual mean</b>					96,810	
<b>Lowest annual mean</b>					10,240	
<b>Highest daily mean</b>	194,000	Jan 7	102,000	May 6	404,000	May 8, 1990
<b>Lowest daily mean</b>	50	Oct 22	50	Oct 22	<sup>b</sup> 14	Oct 25, 1978
<b>Annual seven-day minimum</b>	615	Dec 22	615	Dec 22	432	Oct 15, 1982
<b>Maximum peak flow</b>			106,000	May 6	<sup>c</sup> 406,000	May 7, 1990
<b>Maximum peak stage</b>			235.22	May 6	<sup>d</sup> 256.97	May 7, 1990
<b>Annual runoff (ac-ft)</b>	27,270,000		7,411,000		34,040,000	
<b>10 percent exceeds</b>	79,200		21,800		128,000	
<b>50 percent exceeds</b>	25,600		4,730		28,500	
<b>90 percent exceeds</b>	1,780		755		3,710	

<sup>a</sup> Prior to regulation, water years 1928-69, 39,920 ft<sup>3</sup>/s<sup>b</sup> Also minimum daily discharge for period of record<sup>c</sup> Maximum discharge for period of record, 536,000 ft<sup>3</sup>/s, May 27, 1943<sup>d</sup> Maximum gage height for period of record, 30.05 ft, May 27, 1943, at site and datum then in use