

Water-Data Report 2006

**07264000 BAYOU METO NEAR LONOKE, AR**

Arkansas Basin  
Bayou Meto Subbasin

LOCATION.--Lat 34°44'13", long 91°54'58" referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.6, T.1 N., R.8 W., Lonoke County, AR, Hydrologic Unit 08020402, near left bank on downstream side of bridge on State Highway 31, 3.0 mi upstream from Brushy Slough, and 3.5 miles south of Lonoke, at mile 106.4.

DRAINAGE AREA.--207 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Oct 1954 to current year. Gage height records and results of discharge measurements since Jun 1948 at site 4.8 mi upstream are contained in reports from the U.S. Army Corps of Engineers, Vicksburg District; published as "Big Bayou Meto near Lonoke".

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 199.11 ft above NGVD of 1929. Prior to Feb 10, 1955, water-stage recorder at site 4.8 mi upstream at datum 6.97 ft higher. Feb 10 to Jun 29, 1955, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records poor, including estimated record. Part of low flow is drainage from areas irrigated with ground water and from large minnow farm supplied with ground water. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft<sup>3</sup>/s, May 10, gage height, 20.83 ft; minimum discharge, 0.03 ft<sup>3</sup>/s, Jul 13 and 14, gage height, 3.23 ft.

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**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	303	1.1	171	19	211	e120	e68	478	27	4.2	72	48
2	128	0.89	127	26	185	e87	e110	663	32	92	47	32
3	54	0.44	82	29	158	e60	e140	864	30	37	4.0	18
4	31	0.29	48	23	149	e48	e145	1,080	26	11	23	3.2
5	19	0.34	29	16	149	e45	168	1,280	25	5.0	47	0.56
6	16	0.34	25	12	141	e42	155	1,360	18	86	84	14
7	10	0.53	20	11	119	e37	128	1,410	14	119	115	0.40
8	11	0.41	17	10	e96	e28	123	1,470	10	96	101	1.8
9	8.6	e0.4	15	9.3	e83	e28	109	1,500	11	87	88	14
10	7.0	e0.3	14	14	e76	e110	87	1,540	7.9	80	65	66
11	5.3	e1.0	14	14	e77	e150	69	1,550	6.8	59	27	26
12	3.7	1.7	13	15	e100	e160	51	1,470	4.9	14	32	50
13	2.6	2.0	12	19	e140	e140	36	1,360	0.46	0.05	81	81
14	2.9	7.9	14	20	e150	e73	31	1,230	0.88	0.08	87	111
15	4.6	55	13	24	e150	e82	23	1,090	9.2	6.7	88	102
16	3.3	111	12	28	e120	e110	23	945	5.7	5.5	83	99
17	2.6	124	12	37	e54	e79	24	766	4.5	45	61	99
18	3.0	101	11	64	e39	e31	19	573	2.1	49	17	132
19	2.9	62	10	112	e35	e27	16	397	47	45	2.8	149
20	2.2	36	11	114	e31	e81	21	282	99	52	37	151
21	2.5	21	11	83	e42	e163	69	217	97	33	30	140
22	3.0	6.3	11	91	e63	e253	275	180	94	89	45	144
23	3.9	1.5	12	252	e84	e403	376	146	80	72	37	129
24	3.2	1.5	14	329	e110	e508	388	111	45	78	7.0	123
25	2.8	1.1	15	435	e120	e569	361	80	20	42	4.8	124
26	2.5	0.87	20	478	e110	e508	304	62	73	2.8	6.9	120
27	2.2	1.1	24	419	e120	e360	245	49	98	0.12	72	105
28	1.6	15	22	285	e120	e247	203	39	69	0.97	92	95
29	1.2	57	20	183	---	e165	170	33	27	27	89	88
30	1.0	148	15	141	---	e110	231	23	11	107	81	84
31	0.87	---	17	197	---	e58	---	24	---	90	65	---
<b>Total</b>	645.47	760.01	851	3,509.3	3,032	4,882	4,168	22,272	995.44	1,435.42	1,691.5	2,349.96
<b>Mean</b>	20.8	25.3	27.5	113	108	157	139	718	33.2	46.3	54.6	78.3
<b>Max</b>	303	148	171	478	211	569	388	1,550	99	119	115	151
<b>Min</b>	0.87	0.29	10	9.3	31	27	16	23	0.46	0.05	2.8	0.40
<b>Ac-ft</b>	1,280	1,510	1,690	6,960	6,010	9,680	8,270	44,180	1,970	2,850	3,360	4,660

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	60.9	240	465	411	504	547	483	411	143	55.1	45.7	63.8
<b>Max</b>	775	1,394	1,451	1,515	1,680	1,283	1,517	1,698	1,191	482	402	391
<b>(WY)</b>	(1985)	(1958)	(1974)	(1991)	(1956)	(1997)	(1973)	(1968)	(1974)	(1960)	(1966)	(1978)
<b>Min</b>	0.35	0.00	2.87	21.0	65.2	157	64.5	14.7	2.28	1.28	1.09	1.84
<b>(WY)</b>	(2000)	(2000)	(1955)	(2000)	(1972)	(2006)	(1960)	(2001)	(1988)	(1980)	(2000)	(1999)

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## SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1955 - 2006	
<b>Annual total</b>	66,453.76		46,592.10			
<b>Annual mean</b>	182		128		285	
<b>Highest annual mean</b>					550	1973
<b>Lowest annual mean</b>					95.2	1963
<b>Highest daily mean</b>	1,630	Jan 11	1,550	May 11	5,570	Dec 29, 1987
<b>Lowest daily mean</b>	0.00	Aug 13	0.05	Jul 13	0.00	Oct 10, 1954 <sup>a</sup>
<b>Annual seven-day minimum</b>	0.11	Aug 12	0.37	Nov 4	0.00	Oct 18, 1954
<b>Maximum peak flow</b>			1,590	May 10	5,750	Dec 29, 1987
<b>Maximum peak stage</b>			20.83	May 10	27.11	Dec 29, 1987
<b>Instantaneous low flow</b>			0.03	Jul 13 <sup>a</sup>	0.00	Jan 1, 1987 <sup>a</sup>
<b>Annual runoff (ac-ft)</b>	131,800		92,420		206,300	
<b>10 percent exceeds</b>	657		262		855	
<b>50 percent exceeds</b>	22		48		82	
<b>90 percent exceeds</b>	0.72		2.6		5.6	

<sup>a</sup> Occurred on multiple days