

Water-Data Report 2008

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 Hwy 31, 3 mi upstream from Brushy Slough, and 3.5 mi south of Lonoke, and at mile 106.4.

DRAINAGE AREA.--207 mi².

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 of U.S. Army Corps of Engineers, Vicksburg District; published as "Big Bayou Meto near Lonoke".

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

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

REMARKS.--Water-discharge records poor, including estimated daily discharges. 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, 2,290 ft³/s, Sep 9, gage height, 23.17 ft; minimum discharge, 7.8 ft³/s, Aug 12, gage height, 3.31 ft.

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	49	59	388	438	161	433	e367	307	283	209	23	216
2	65	50	222	345	218	394	e414	307	264	205	35	219
3	75	45	116	259	284	444	e911	367	252	211	114	555
4	65	44	91	202	274	797	1,300	480	246	221	102	1,310
5	55	39	93	174	228	1,000	1,620	578	240	213	55	1,700
6	40	35	92	159	208	1,150	1,750	525	237	206	12	1,870
7	42	31	88	157	193	1,310	1,840	396	233	197	22	2,020
8	39	26	79	155	263	1,430	1,930	332	232	205	87	2,180
9	37	26	72	160	273	1,440	2,090	317	231	233	55	2,280
10	36	26	69	154	223	1,370	2,170	335	227	225	58	2,250
11	34	24	84	146	180	1,240	2,190	525	231	224	85	2,140
12	32	27	147	138	198	1,100	2,120	510	234	222	41	1,950
13	31	27	284	131	324	909	2,030	471	230	217	151	1,740
14	25	28	418	125	503	744	1,910	405	230	222	173	1,520
15	25	31	565	121	667	723	1,760	338	229	215	213	1,280
16	49	31	701	117	786	811	1,560	310	226	203	237	1,050
17	88	32	786	113	887	e900	1,320	303	214	157	221	847
18	213	31	888	107	933	e979	1,090	287	201	94	196	664
19	227	33	1,010	105	985	e1,020	874	270	206	96	150	507
20	193	31	1,260	107	1,100	e1,000	746	256	213	167	178	359
21	136	35	1,340	104	1,190	e982	703	251	200	145	300	265
22	105	50	1,280	101	1,220	e958	646	256	196	122	407	223
23	90	81	1,200	98	1,160	e939	552	282	206	99	475	194
24	110	89	1,120	98	1,070	e918	502	290	215	132	422	169
25	169	117	1,020	100	1,010	e885	470	286	205	114	319	147
26	252	251	908	101	935	e843	470	274	198	91	271	129
27	279	375	795	100	792	e799	464	277	203	69	255	119
28	220	457	685	99	630	e691	435	292	195	119	238	109
29	131	505	602	110	508	e588	379	347	200	64	229	98
30	91	496	544	110	---	e489	333	362	199	13	223	87
31	68	---	503	116	---	e373	---	315	---	19	223	---
Total	3,071	3,132	17,450	4,550	17,403	27,659	34,946	10,851	6,676	4,929	5,570	28,197
Mean	99.1	104	563	147	600	892	1,165	350	223	159	180	940
Max	279	505	1,340	438	1,220	1,440	2,190	578	283	233	475	2,280
Min	25	24	69	98	161	373	333	251	195	13	12	87
Ac-ft	6,090	6,210	34,610	9,020	34,520	54,860	69,320	21,520	13,240	9,780	11,050	55,930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	62.5	237	463	429	501	546	490	403	142	57.2	47.3	79.8
Max	775	1,394	1,451	1,648	1,680	1,283	1,517	1,698	1,191	482	402	940
(WY)	(1985)	(1958)	(1974)	(2007)	(1956)	(1997)	(1973)	(1968)	(1974)	(1960)	(1966)	(2008)
Min	0.35	0.00	2.87	21.0	65.2	116	64.5	14.7	2.28	1.28	0.58	1.84
(WY)	(2000)	(2000)	(1955)	(2000)	(1972)	(2007)	(1960)	(2001)	(1988)	(1980)	(2007)	(1999)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1955 - 2008	
Annual total	95,898.66		164,434			
Annual mean	263		449		287	
Highest annual mean					550	
Lowest annual mean					95.2	
Highest daily mean	3,010	Jan 19	2,280	Sep 9	5,570	Dec 29, 1987
Lowest daily mean	0.00	Jun 3	12	Aug 6	0.00	Oct 10, 1954 ^a
Annual seven-day minimum	0.00	Aug 12	26	Nov 8	0.00	Oct 18, 1954
Maximum peak flow			2,290	Sep 9	5,750	Dec 29, 1987
Maximum peak stage			23.17	Sep 9	27.11	Dec 29, 1987
Instantaneous low flow			7.8	Aug 12	0.00	Jan 1, 1987 ^a
Annual runoff (ac-ft)	190,200		326,200		208,000	
10 percent exceeds	896		1,190		864	
50 percent exceeds	84		230		85	
90 percent exceeds	0.50		48		5.6	

^a Occurred on several days

