

Water-Data Report 2009

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, 3.5 mi south of Lonoke, and at river 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 fair except estimated daily discharges, which are poor. Part of low flow is drainage from areas irrigated with groundwater and from large minnow farm supplied with groundwater. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,860 ft³/s, May 10, gage height, 25.81 ft; minimum discharge, 3.6 ft³/s, Aug 31, gage height, 6.18 ft.

07264000 BAYOU METO NEAR LONOKE, AR—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	78	34	72	454	949	231	1,390	1,080	917	24	1,010	14
2	67	27	74	304	936	278	1,400	1,330	643	36	1,030	24
3	65	25	75	199	806	249	1,410	1,690	373	19	930	18
4	58	23	118	156	561	190	1,360	2,010	254	9.1	695	12
5	46	20	171	168	340	147	1,300	2,230	179	17	659	12
6	35	29	223	320	222	140	1,210	2,990	150	36	676	11
7	150	34	211	494	174	130	1,110	3,510	130	75	467	14
8	239	24	155	548	150	119	946	3,650	114	91	242	22
9	309	17	220	561	139	110	705	3,710	98	74	133	27
10	324	14	362	498	221	106	447	3,780	92	49	99	24
11	240	19	354	362	398	110	288	3,690	89	34	88	25
12	123	89	288	257	514	165	352	3,480	82	27	102	21
13	75	146	215	221	675	438	750	3,240	84	17	92	20
14	61	119	e155	184	801	679	893	2,920	85	41	82	17
15	56	114	e134	143	857	820	973	2,560	83	47	66	42
16	67	105	142	129	814	898	1,050	2,220	86	81	46	494
17	101	87	185	118	650	896	1,090	1,930	80	107	19	835
18	111	72	241	109	424	810	1,070	1,710	69	87	14	958
19	99	64	e240	103	284	631	1,030	1,550	58	53	42	1,040
20	80	48	e289	99	241	410	978	1,450	54	27	78	1,130
21	67	46	e319	100	188	264	906	1,340	51	90	101	1,170
22	50	44	e318	100	172	197	816	1,190	40	187	92	1,170
23	49	42	259	97	160	171	659	979	27	319	75	1,110
24	53	107	273	90	158	159	439	820	13	398	56	972
25	49	134	331	e82	161	353	264	849	9.3	320	37	736
26	44	133	348	e78	165	e539	171	916	17	168	34	452
27	40	128	363	71	144	e721	134	1,020	18	92	30	255
28	39	110	432	263	146	e923	198	1,120	15	108	18	157
29	40	93	492	587	---	e1,120	734	e1,180	16	140	14	131
30	42	80	566	762	---	e1,280	960	e1,160	16	241	8.4	106
31	40	---	569	885	---	1,360	---	1,090	---	764	6.1	---
Total	2,897	2,027	8,194	8,542	11,450	14,644	25,033	62,394	3,942.3	3,778.1	7,041.5	11,019
Mean	93.5	67.6	264	276	409	472	834	2,013	131	122	227	367
Max	324	146	569	885	949	1,360	1,410	3,780	917	764	1,030	1,170
Min	35	14	72	71	139	106	134	820	9.3	9.1	6.1	11
Ac-ft	5,750	4,020	16,250	16,940	22,710	29,050	49,650	123,800	7,820	7,490	13,970	21,860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	63.1	234	460	426	499	544	496	433	142	58.4	50.6	85.0
Max	775	1,394	1,451	1,648	1,680	1,283	1,517	2,013	1,191	482	402	940
(WY)	(1985)	(1958)	(1974)	(2007)	(1956)	(1997)	(1973)	(2009)	(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)

07264000 BAYOU METO NEAR LONOKE, AR—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1955 - 2009	
Annual total	153,899		160,961.9			
Annual mean	420		441		290	
Highest annual mean					550	
Lowest annual mean					95.2	
Highest daily mean	2,280	Sep 9	3,780	May 10	5,570	Dec 29, 1987
Lowest daily mean	12	Aug 6	6.1	Aug 31	0.00	Oct 10, 1954 ^a
Annual seven-day minimum	22	Nov 5	14	Aug 30	0.00	Oct 18, 1954
Maximum peak flow			3,860	May 10	5,750	Dec 29, 1987
Maximum peak stage			25.81	May 10	27.11	Dec 29, 1987
Instantaneous low flow			3.6	Aug 31	0.00	Jan 1, 1987 ^a
Annual runoff (ac-ft)	305,300		319,300		210,000	
10 percent exceeds	1,100		1,110		872	
50 percent exceeds	226		159		87	
90 percent exceeds	56		25		5.7	

^a Occurred on several days