

Water-Data Report 2009

07074500 WHITE RIVER AT NEWPORT, AR

Upper White Basin
Upper White-Village Subbasin

LOCATION.--Lat 35°36'18", long 91°17'19" referenced to North American Datum of 1983, in NE ¼ NE ¼ sec.10, T.11 N., R.3 W., Jackson County, AR, Hydrologic Unit 11010013, approximately 60 ft downstream State Hwy 367 bridge, and at river mile 254.7.

DRAINAGE AREA.--19,900 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Sep 1927 to Sep 1931 (published as "near Newport") and Oct 1937 to current year. Gage height records collected at present site since 1885 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR Arkansas 1973: Drainage area. WDR Arkansas 2001: 2000.

GAGE.--Water-stage recorder. Datum of gage is 194.09 ft above NGVD of 1929. Sep 1927 to Sep 1931, nonrecording gage at site 2.8 mi downstream at datum 2.30 ft lower. Oct 1, 1937 to Aug 14, 1953, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Some regulation and diversions since 1943 by Norfolk Lake, capacity 1,983,000 acre-ft; since 1948 by Clearwater Lake (Missouri), capacity 413,700 acre-ft; since Jul 24, 1951, by Bull Shoals Lake, 149 mi upstream, capacity 5,408,000 acre-ft; since Sep 9, 1956, by Table Rock Lake (Missouri), capacity 3,567,500 acre-ft; and since Dec 26, 1963, by Beaver Lake, capacity 1,951,500 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr 16, 1927 reached a stage of 35.6 ft, from records of National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55,500 ft³/s, May 10, gage height, 22.79 ft; minimum discharge, 6,480 ft³/s, Jan 27, gage height, 1.92 ft.

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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	26,400	25,800	24,900	19,500	26,100	30,800	40,200	36,800	29,200	23,200	e23,600	7,550
2	25,600	26,000	23,600	18,500	24,000	29,300	41,100	37,600	26,400	23,600	24,400	7,910
3	24,900	25,900	23,100	18,900	23,300	24,100	42,700	42,500	23,800	24,400	24,100	8,160
4	25,000	25,300	22,200	18,200	23,800	19,600	43,000	45,400	25,400	24,600	23,700	7,510
5	25,100	25,400	18,700	16,100	25,000	18,700	42,500	48,500	25,400	24,100	23,800	6,780
6	25,100	25,600	18,200	15,300	24,900	18,600	41,800	49,600	24,000	23,700	22,700	6,660
7	25,900	25,600	16,800	17,000	24,500	17,700	40,600	51,000	23,000	23,400	21,500	7,060
8	26,600	26,000	14,700	15,700	21,200	16,400	38,000	53,200	22,100	23,700	21,400	8,660
9	26,700	26,400	12,800	14,100	16,600	14,700	34,500	53,600	21,200	23,800	19,900	9,150
10	25,900	26,300	14,100	13,800	15,000	12,500	30,700	55,100	21,100	23,700	18,600	9,820
11	26,000	26,500	14,600	13,000	20,300	12,500	28,000	53,400	21,500	23,400	e16,300	11,000
12	26,200	26,900	14,200	12,400	37,600	16,200	27,100	50,200	22,200	23,900	e16,700	10,600
13	26,500	27,200	13,500	11,900	46,400	18,500	28,900	47,800	23,300	25,000	e17,400	9,980
14	26,300	26,600	12,800	13,400	49,000	19,700	32,900	46,300	27,900	26,900	e15,800	9,680
15	26,500	25,800	11,100	13,900	48,300	19,600	35,800	47,000	32,300	26,100	15,200	9,090
16	26,300	25,800	9,420	17,000	48,100	17,500	35,200	46,700	30,400	23,900	15,400	12,600
17	e26,300	26,100	9,930	17,400	48,600	15,400	34,000	47,400	27,800	24,100	13,600	27,200
18	26,200	25,500	12,800	15,500	48,900	14,100	32,700	47,400	26,100	26,100	13,100	34,300
19	26,100	26,000	e12,000	12,100	49,000	13,300	31,100	e46,700	24,500	24,800	13,000	33,900
20	26,200	26,100	12,900	9,500	48,700	13,900	32,100	e45,400	23,500	23,600	11,900	28,400
21	26,000	26,100	13,600	7,900	48,300	12,700	34,200	e43,500	23,600	24,100	11,200	26,300
22	24,800	25,800	11,900	7,430	47,600	11,300	33,300	e41,500	23,400	32,200	11,300	22,700
23	24,000	26,600	9,810	7,230	46,600	9,930	31,500	40,100	23,800	31,300	10,900	27,800
24	23,900	26,300	12,300	7,340	44,000	9,380	31,300	38,400	23,500	27,100	10,300	39,400
25	24,600	26,000	14,200	7,060	39,600	10,800	30,400	38,500	23,500	24,400	9,730	39,800
26	25,400	26,100	12,800	6,750	36,500	13,500	29,600	39,000	23,400	24,000	9,570	35,300
27	25,700	26,100	11,800	6,730	34,200	17,600	29,100	38,000	22,900	23,400	10,100	30,100
28	25,600	25,600	11,800	11,900	32,000	26,400	32,600	37,500	23,200	23,400	10,200	25,400
29	26,000	25,500	12,900	25,800	---	35,400	39,800	e36,200	23,200	22,500	9,490	21,700
30	26,200	25,500	16,200	31,400	---	40,800	37,700	e34,200	22,800	22,500	8,890	19,000
31	25,800	---	19,300	28,900	---	39,800	---	32,300	---	e23,900	8,180	---
Total	797,800	780,400	458,960	451,640	998,100	590,710	1,042,400	1,370,800	734,400	764,800	481,960	553,510
Mean	25,740	26,010	14,810	14,570	35,650	19,060	34,750	44,220	24,480	24,670	15,550	18,450
Max	26,700	27,200	24,900	31,400	49,000	40,800	43,000	55,100	32,300	32,200	24,400	39,800
Min	23,900	25,300	9,420	6,730	15,000	9,380	27,100	32,300	21,100	22,500	8,180	6,660
Ac-ft	1,582,000	1,548,000	910,300	895,800	1,980,000	1,172,000	2,068,000	2,719,000	1,457,000	1,517,000	956,000	1,098,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	10,470	15,240	22,720	25,680	28,620	34,040	37,760	33,410	21,620	16,640	13,350	11,300
Max	26,280	41,430	89,140	90,830	95,540	117,400	164,200	102,800	98,630	43,020	34,390	29,530
(WY)	(1994)	(1973)	(1983)	(1950)	(1949)	(1945)	(1945)	(1943)	(1945)	(1951)	(1957)	(1957)
Min	3,667	3,795	4,371	5,310	7,052	9,148	6,539	6,022	5,986	5,354	4,611	3,702
(WY)	(2001)	(1955)	(1944)	(1944)	(1964)	(1981)	(1981)	(2001)	(2001)	(1944)	(1944)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1943 - 2009	
Annual total	13,663,590		9,025,480			
Annual mean	37,330		24,730		^a 22,540	
Highest annual mean					46,320	1945
Lowest annual mean					8,073	1981
Highest daily mean	257,000	Mar 21	55,100	May 10	340,000	Apr 18, 1945
Lowest daily mean	7,610	Jan 30	6,660	Sep 6	2,870	Sep 27, 1954
Annual seven-day minimum	8,450	Jan 29	7,210	Jan 21	2,960	Sep 24, 1954
Maximum peak flow			55,500	May 10	343,000	Apr 17, 1945
Maximum peak stage			22.79	May 10	^b 35.19	Apr 18, 1945
Instantaneous low flow			6,480	Jan 27	2,820	Oct 26, 2000
Annual runoff (ac-ft)	27,100,000		17,900,000		16,330,000	
10 percent exceeds	73,800		41,300		47,200	
50 percent exceeds	27,600		24,400		15,700	
90 percent exceeds	12,100		10,900		6,610	

^a Prior to regulation, water years 1928 to 1931, 1938 to 1942, 26,370 ft³/s

^b Observed

