

Water-Data Report 2008

## **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, The gage is approximately 60 ft below the State Hwy 367 bridge, which crosses the White River at Newport. This is at river mile 254.7 on the White River (from maps of White River, May 1973).

DRAINAGE AREA.—19,900 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Sep 1927 to Sep 1931 (published as "near Newport"), 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, 266,000 ft<sup>3</sup>/s, Mar 21, gage height, 33.87 ft; minimum discharge, 3,970 ft<sup>3</sup>/s, Nov 21, gage height, -0.55 ft.

## 07074500 WHITE RIVER AT NEWPORT, AR—Continued

**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	7,600	7,620	5,210	13,700	8,930	24,800	76,200	67,700	34,200	32,000	27,300	25,400
2	7,810	6,110	5,040	e12,700	9,300	21,900	90,700	60,100	34,100	32,000	26,000	25,400
3	8,620	5,350	4,930	12,100	9,030	21,100	107,000	59,100	34,200	30,600	26,500	26,800
4	9,230	4,810	4,910	13,500	8,430	34,500	119,000	58,100	33,800	30,300	26,500	34,600
5	8,750	5,400	5,220	14,900	7,780	48,300	128,000	56,200	33,500	31,000	25,900	47,900
6	8,060	6,590	5,640	13,600	8,440	55,200	124,000	52,900	32,200	31,400	25,700	55,100
7	8,230	5,910	6,570	12,100	10,200	54,300	115,000	49,900	31,400	31,400	25,700	47,200
8	9,280	6,110	6,670	10,400	14,600	54,400	104,000	47,100	30,600	30,800	26,200	38,900
9	9,140	6,590	7,020	11,300	16,700	54,200	93,300	45,400	30,700	30,200	27,300	32,600
10	9,070	6,700	6,800	13,800	15,700	54,300	88,900	44,900	29,900	30,200	28,800	27,800
11	10,300	6,190	6,400	13,600	14,200	56,100	122,000	44,000	30,400	30,300	29,100	24,700
12	9,460	6,280	7,310	12,900	15,000	56,900	202,000	43,000	30,400	30,900	29,400	23,300
13	8,230	5,820	9,660	12,200	24,000	56,700	223,000	42,300	30,400	31,100	28,500	22,500
14	7,700	5,720	11,500	11,100	28,500	56,400	178,000	40,300	29,900	33,300	27,600	18,900
15	7,640	6,020	15,600	10,200	29,800	56,800	142,000	38,000	30,200	34,400	27,100	16,600
16	7,760	5,800	28,200	9,830	28,800	57,900	123,000	35,700	30,500	32,700	27,700	24,200
17	8,270	5,400	29,800	10,300	28,100	58,500	111,000	34,600	31,300	29,700	29,300	25,700
18	8,140	5,140	28,500	10,200	29,900	59,200	103,000	35,500	31,600	27,500	28,800	24,100
19	7,350	4,860	26,300	9,610	34,500	76,800	93,100	34,400	31,800	27,000	27,700	25,800
20	6,770	4,230	25,300	9,580	36,700	159,000	82,100	33,400	31,500	27,300	e27,600	26,800
21	6,190	4,320	24,900	9,030	34,400	257,000	75,800	32,700	31,200	27,300	e27,700	26,600
22	5,780	4,250	23,600	8,430	35,700	222,000	70,600	32,100	30,500	27,900	29,300	27,000
23	7,070	4,480	22,900	e8,900	37,400	172,000	66,600	31,600	30,200	28,700	30,200	27,600
24	7,090	4,120	21,200	8,480	38,400	143,000	65,200	30,300	30,400	29,000	28,900	27,800
25	7,680	4,640	19,600	9,690	38,900	127,000	64,800	29,700	30,500	29,700	27,900	26,800
26	8,190	5,290	18,400	11,900	38,600	114,000	69,400	30,000	30,800	30,000	27,100	26,300
27	7,690	5,520	17,600	10,500	37,300	105,000	73,600	30,400	30,700	30,300	26,300	26,500
28	7,610	5,450	16,900	9,010	33,400	94,900	75,200	30,600	30,900	30,700	26,000	26,800
29	8,070	5,450	16,200	7,780	28,800	86,400	75,000	32,100	31,400	30,700	26,000	26,900
30	8,240	5,530	15,400	7,610	---	79,000	73,800	33,400	31,600	30,300	26,000	26,700
31	7,890	---	14,600	8,070	---	73,800	---	34,000	---	29,100	25,700	---
<b>Total</b>	248,910	165,700	457,880	337,020	701,510	2,591,400	3,135,300	1,269,500	940,800	937,800	849,800	863,300
<b>Mean</b>	8,029	5,523	14,770	10,870	24,190	83,590	104,500	40,950	31,360	30,250	27,410	28,780
<b>Max</b>	10,300	7,620	29,800	14,900	38,900	257,000	223,000	67,700	34,200	34,400	30,200	55,100
<b>Min</b>	5,780	4,120	4,910	7,610	7,780	21,100	64,800	29,700	29,900	27,000	25,700	16,600
<b>Ac-ft</b>	493,700	328,700	908,200	668,500	1,391,000	5,140,000	6,219,000	2,518,000	1,866,000	1,860,000	1,686,000	1,712,000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10,240	15,080	22,840	25,850	28,510	34,270	37,810	33,250	21,580	16,520	13,320	11,190
<b>Max</b>	26,280	41,430	89,140	90,830	95,540	117,400	164,200	102,800	98,630	43,020	34,390	29,530
<b>(WY)</b>	(1994)	(1973)	(1983)	(1950)	(1949)	(1945)	(1945)	(1943)	(1945)	(1951)	(1957)	(1957)
<b>Min</b>	3,667	3,795	4,371	5,310	7,052	9,148	6,539	6,022	5,986	5,354	4,611	3,702
<b>(WY)</b>	(2001)	(1955)	(1944)	(1944)	(1964)	(1981)	(1981)	(2001)	(2001)	(1944)	(1944)	(1954)

## 07074500 WHITE RIVER AT NEWPORT, AR—Continued

## SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1943 - 2008	
<b>Annual total</b>	7,310,700		12,498,920			
<b>Annual mean</b>	20,030		34,150		<sup>a</sup> 22,500	
<b>Highest annual mean</b>					46,320	
<b>Lowest annual mean</b>					8,073	
<b>Highest daily mean</b>	84,900	Jan 17	257,000	Mar 21	340,000	Apr 18, 1945
<b>Lowest daily mean</b>	4,120	Nov 24	4,120	Nov 24	2,870	Sep 27, 1954
<b>Annual seven-day minimum</b>	4,410	Nov 19	4,410	Nov 19	2,960	Sep 24, 1954
<b>Maximum peak flow</b>			266,000	Mar 21	343,000	Apr 17, 1945
<b>Maximum peak stage</b>			33.87	Mar 21	<sup>b</sup> 35.19	Apr 18, 1945
<b>Instantaneous low flow</b>			3,970	Nov 21	2,820	Oct 26, 2000
<b>Annual runoff (ac-ft)</b>	14,500,000		24,790,000		16,300,000	
<b>10 percent exceeds</b>	44,300		73,800		47,300	
<b>50 percent exceeds</b>	14,700		27,800		15,600	
<b>90 percent exceeds</b>	6,500		6,580		6,590	

<sup>a</sup> Prior to regulation, water years 1928-31, 1938-42, 26,370 ft<sup>3</sup>/s<sup>b</sup> Observed