

Water-Data Report 2010

**07074500 WHITE RIVER AT NEWPORT, AR**

Upper White Basin  
Upper White-Village Subbasin

LOCATION.--Lat 35°36'19", long 91°17'20" 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 mi<sup>2</sup>.

**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, 114,000 ft<sup>3</sup>/s, Nov. 2, gage height, 29.02 ft; minimum discharge, 7,030 ft<sup>3</sup>/s, Sept. 7, gage height, 1.55 ft.

## 07074500 WHITE RIVER AT NEWPORT, AR—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18,000	101,000	23,700	55,700	50,500	32,800	43,400	31,100	24,000	21,600	15,500	9,570
2	18,800	111,000	27,300	53,700	49,800	30,300	44,100	33,300	22,900	20,400	15,100	10,400
3	19,900	110,000	36,300	52,300	46,200	29,700	45,600	33,600	22,600	15,200	14,600	11,100
4	20,300	99,200	39,800	52,000	45,000	28,200	48,000	32,000	23,000	10,800	15,200	10,700
5	20,700	87,300	42,700	51,700	45,900	26,200	45,600	30,600	23,400	9,010	16,500	9,670
6	20,600	78,200	44,600	53,300	48,500	23,400	43,200	29,300	24,800	8,800	15,500	8,640
7	20,500	71,200	45,600	54,600	50,800	21,100	43,400	27,800	25,200	8,260	e14,900	e7,460
8	20,800	65,700	46,300	55,400	51,000	19,600	44,100	26,000	24,600	8,270	e14,300	e7,780
9	22,700	61,000	47,800	56,000	50,300	18,000	44,500	23,800	25,100	9,110	e12,400	8,370
10	35,100	57,500	49,000	56,000	50,300	18,100	45,200	22,200	25,500	12,500	e10,600	9,930
11	43,100	54,300	48,900	55,200	48,700	21,400	46,000	22,300	25,600	17,700	e9,580	13,700
12	43,800	51,400	48,700	53,700	47,600	26,000	45,700	24,800	25,800	19,100	e12,600	14,100
13	42,800	49,400	48,800	51,900	47,100	27,700	44,200	25,400	25,000	26,300	15,600	13,600
14	48,600	47,300	48,700	50,100	47,700	28,300	42,700	24,200	24,400	35,800	14,800	12,200
15	52,700	45,500	48,400	48,500	47,900	25,500	41,000	22,900	23,900	33,500	13,700	12,000
16	52,300	43,900	48,100	47,400	48,100	22,800	36,000	26,600	24,800	28,400	12,000	12,200
17	49,300	42,700	47,500	46,700	48,200	20,900	31,400	30,000	24,700	e24,600	10,500	11,700
18	46,000	41,400	47,000	45,600	48,000	18,900	29,700	33,400	24,400	e21,900	9,780	10,900
19	42,300	40,400	46,100	44,000	46,700	16,700	29,000	33,600	24,300	e19,900	10,700	11,000
20	37,400	38,500	45,700	43,600	43,800	15,300	28,700	34,400	24,400	19,300	11,600	11,700
21	32,900	36,600	45,400	41,800	41,500	14,600	28,200	42,800	24,500	21,200	11,900	12,000
22	29,400	34,700	45,000	42,000	40,700	16,200	26,700	46,800	24,500	23,000	12,600	11,900
23	36,400	32,900	45,400	43,500	40,300	22,600	27,400	46,800	24,400	e23,700	12,200	11,200
24	45,300	31,200	53,400	44,800	40,500	35,000	33,400	43,900	24,400	e23,700	10,600	11,300
25	43,300	29,200	74,200	47,400	40,000	41,600	39,500	40,900	24,500	e23,600	13,800	12,100
26	41,400	27,500	79,300	48,700	38,500	46,500	36,900	38,100	24,900	e19,200	11,600	11,000
27	40,800	26,200	75,300	50,100	36,700	49,600	35,100	35,400	25,400	17,900	9,760	10,300
28	44,400	25,300	72,600	49,500	35,200	49,500	33,800	33,400	25,800	17,000	8,730	9,390
29	46,800	24,500	69,100	48,800	---	48,000	32,300	31,100	25,100	16,500	8,740	8,730
30	56,700	24,000	64,500	49,700	---	45,800	31,000	28,700	22,900	15,100	9,710	8,460
31	78,700	---	59,600	50,300	---	43,900	---	26,300	---	15,700	8,870	---
<b>Total</b>	1,171,800	1,589,000	1,564,800	1,544,000	1,275,500	884,200	1,145,800	981,500	734,800	587,050	383,970	323,100
<b>Mean</b>	37,800	52,970	50,480	49,810	45,550	28,520	38,190	31,660	24,490	18,940	12,390	10,770
<b>Max</b>	78,700	111,000	79,300	56,000	51,000	49,600	48,000	46,800	25,800	35,800	16,500	14,100
<b>Min</b>	18,000	24,000	23,700	41,800	35,200	14,600	26,700	22,200	22,600	8,260	8,730	7,460
<b>Ac-ft</b>	2,324,000	3,152,000	3,104,000	3,063,000	2,530,000	1,754,000	2,273,000	1,947,000	1,457,000	1,164,000	761,600	640,900

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10,870	15,790	23,120	26,030	28,870	33,960	37,770	33,390	21,670	16,670	13,340	11,290
<b>Max</b>	37,800	52,970	89,140	90,830	95,540	117,400	164,200	102,800	98,630	43,020	34,390	29,530
<b>(WY)</b>	(2010)	(2010)	(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)

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## SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1943 - 2010	
<b>Annual total</b>	11,313,920		12,185,520			
<b>Annual mean</b>	31,000		33,380		<sup>a</sup> 22,700	
<b>Highest annual mean</b>					46,320	
<b>Lowest annual mean</b>					8,073	
<b>Highest daily mean</b>	111,000	Nov 2	111,000	Nov 2	340,000	Apr 18, 1945
<b>Lowest daily mean</b>	6,660	Sep 6	<sup>b</sup> 7,460	Sep 7	2,870	Sep 27, 1954
<b>Annual seven-day minimum</b>	7,210	Jan 21	8,940	Sep 4	2,960	Sep 24, 1954
<b>Maximum peak flow</b>			114,000	Nov 2	343,000	Apr 17, 1945
<b>Maximum peak stage</b>			29.02	Nov 2	<sup>c</sup> 35.19	Apr 18, 1945
<b>Instantaneous low flow</b>			7,030	Sep 7	2,820	Oct 26, 2000
<b>Annual runoff (ac-ft)</b>	22,440,000		24,170,000		16,440,000	
<b>10 percent exceeds</b>	48,900		51,500		47,400	
<b>50 percent exceeds</b>	26,400		31,100		15,900	
<b>90 percent exceeds</b>	11,300		11,500		6,640	

<sup>a</sup> Prior to regulation, water years 1928 to 1931, 1938 to 1942, 26,370 ft<sup>3</sup>/s

<sup>b</sup> Estimated

<sup>c</sup> Observed

