

Water-Data Report 2009

07077555 CACHE RIVER NEAR COTTON PLANT, AR

White Basin
Cache Subbasin

LOCATION.--Lat 35°02'08", long 91°19'21" referenced to North American Datum of 1983, in SE ¼ SW ¼ sec.21, T.5 N., R.3 W., Woodruff County, AR, Hydrologic Unit 08020302, on left bank on downstream side of bridge on Woodruff County Road 790, 1.4 mi upstream from Roaring Slough, and 4.2 mi northwest of Cotton Plant.

DRAINAGE AREA.--1,170 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1987 to current year.

REVISED RECORDS.--WDR Arkansas 1989: 1988 (M).

GAGE.--Water-stage recorder. Datum of gage is 164.17 ft above NGVD of 1929. Nonrecording gage Oct 10, 1989 to Sep 27, 1990 at same site and datum.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,380 ft³/s, May 7, 8, gage height, 19.93 ft; minimum discharge, 26 ft³/s, occurred on several days, gage height, 3.21 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	486	48	38	1,340	781	2,700	1,840	2,480	4,270	1,540	3,320	703
2	475	42	33	1,340	911	2,510	1,970	2,910	4,040	1,370	3,690	630
3	431	42	32	1,350	1,090	2,340	2,070	3,740	3,840	1,180	3,890	570
4	361	47	58	1,370	1,280	2,160	2,090	5,010	3,740	939	3,830	515
5	279	51	64	1,410	1,500	2,020	2,060	6,140	3,510	709	3,950	493
6	210	51	57	1,460	1,720	1,890	1,990	7,720	3,260	480	3,980	494
7	174	47	54	1,470	1,890	1,750	1,880	8,180	3,090	307	3,870	510
8	164	42	56	1,430	2,030	1,600	1,750	8,200	3,050	223	3,700	516
9	133	38	86	1,350	2,150	1,450	1,600	8,050	3,100	185	3,510	511
10	113	34	152	1,250	2,300	1,300	1,450	7,820	3,160	178	3,290	513
11	101	34	188	1,100	2,460	1,160	1,300	7,600	3,120	177	3,140	526
12	89	44	245	920	2,590	1,050	1,140	7,340	2,990	204	2,950	549
13	88	60	292	733	2,730	955	1,080	7,070	2,820	241	2,790	568
14	103	49	314	549	2,870	862	1,020	6,890	2,710	233	2,640	587
15	134	42	336	e400	3,010	799	927	6,560	2,600	271	2,500	672
16	164	37	392	e288	3,150	773	885	6,220	2,470	350	2,350	1,160
17	179	33	470	e228	3,320	790	864	5,920	2,370	486	2,210	1,610
18	174	30	578	197	3,480	810	867	5,580	2,320	601	2,060	2,010
19	155	29	687	173	3,610	850	1,060	5,190	2,310	693	1,930	2,590
20	129	28	765	151	3,670	898	1,280	4,890	2,270	807	1,810	3,180
21	107	28	817	136	3,700	889	1,450	4,590	2,200	958	1,680	3,710
22	95	28	837	122	3,710	851	1,540	4,320	2,120	1,150	1,550	4,080
23	100	26	835	117	3,670	778	1,590	4,170	2,060	1,280	1,420	4,280
24	111	41	878	145	3,620	703	1,600	4,210	2,040	1,430	1,300	4,640
25	117	77	932	120	3,520	e746	1,600	4,270	2,030	1,590	1,190	4,910
26	116	82	978	96	3,350	e743	1,660	4,420	2,020	1,740	1,060	4,870
27	107	76	1,070	103	3,170	915	1,770	4,720	1,990	1,880	952	4,640
28	94	66	1,200	270	2,920	1,130	1,970	5,010	1,930	2,070	875	4,260
29	79	56	1,310	439	---	1,280	2,150	5,070	1,830	2,300	839	3,930
30	66	46	1,350	543	---	1,470	2,280	4,910	1,700	2,600	810	3,650
31	55	---	1,350	658	---	1,670	---	4,610	---	2,960	766	---
Total	5,189	1,354	16,454	21,258	74,202	39,842	46,733	173,810	80,960	31,132	73,852	61,877
Mean	167	45.1	531	686	2,650	1,285	1,558	5,607	2,699	1,004	2,382	2,063
Max	486	82	1,350	1,470	3,710	2,700	2,280	8,200	4,270	2,960	3,980	4,910
Min	55	26	32	96	781	703	864	2,480	1,700	177	766	493
Ac-ft	10,290	2,690	32,640	42,170	147,200	79,030	92,690	344,800	160,600	61,750	146,500	122,700
Cfs/m	0.14	0.04	0.45	0.59	2.27	1.10	1.33	4.79	2.31	0.86	2.04	1.76
In.	0.16	0.04	0.52	0.68	2.36	1.27	1.49	5.53	2.57	0.99	2.35	1.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	593	981	2,042	2,237	2,190	2,199	1,806	1,484	772	677	755	625
Max	2,067	3,211	5,102	6,779	5,238	5,759	6,812	5,607	2,699	1,413	2,591	2,063
(WY)	(1991)	(1997)	(2002)	(1991)	(1989)	(1989)	(2008)	(2009)	(2009)	(1994)	(1998)	(2009)
Min	55.9	16.6	24.5	203	377	303	387	217	116	229	162	201
(WY)	(1988)	(2000)	(2006)	(2006)	(2000)	(1996)	(2006)	(1987)	(1988)	(2008)	(2007)	(1987)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1987 - 2009	
Annual total	534,732		626,663			
Annual mean	1,461		1,717		1,370	
Highest annual mean					2,356	
Lowest annual mean					422	
Highest daily mean	9,080	Apr 6	8,200	May 8	9,770	Dec 28, 1987
Lowest daily mean	26	Nov 23	26	Nov 23	7.8	Nov 1, 2000
Annual seven-day minimum	29	Nov 17	29	Nov 17	8.6	Oct 28, 2000
Maximum peak flow			8,380	May 7 ^a	9,950	Dec 28, 1987
Maximum peak stage			19.93	May 7 ^a	20.23	Dec 21, 2001
Instantaneous low flow			26	Nov 22 ^a	7.8	Dec 1, 1999 ^b
Annual runoff (ac-ft)	1,061,000		1,243,000		992,200	
Annual runoff (cfs)	1.25		1.47		1.17	
Annual runoff (inches)	17.00		19.92		15.91	
10 percent exceeds	4,600		4,060		3,410	
50 percent exceeds	472		1,250		791	
90 percent exceeds	63		66		112	

^a Occurred on several days^b Also Nov 1-2, 2000