

Water-Data Report 2010

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, 8,760 ft³/s, Dec. 29, gage height, 20.02 ft; minimum discharge, 72 ft³/s, June 21, 22, 23, gage height, 4.36 ft.

07077555 CACHE RIVER NEAR COTTON PLANT, 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	3,480	7,280	2,020	7,740	3,430	2,010	1,630	878	1,690	128	1,670	419
2	3,400	7,910	1,900	7,380	3,270	1,940	1,850	1,500	1,540	177	1,530	410
3	3,280	8,070	1,780	6,960	3,090	1,860	2,050	2,010	1,380	260	1,400	403
4	3,200	7,970	1,640	6,600	2,920	1,760	2,190	2,570	1,260	355	1,280	394
5	3,100	7,830	1,510	6,200	e2,800	1,640	2,250	2,970	1,200	447	1,170	382
6	2,940	7,580	1,400	5,810	e2,740	1,510	2,220	3,190	1,100	500	1,050	364
7	2,780	7,220	1,310	5,480	e2,690	1,420	2,150	3,280	966	503	927	347
8	2,620	6,900	1,250	5,060	e2,680	1,300	2,060	3,350	826	460	824	346
9	2,560	6,520	1,270	4,850	e2,690	1,170	1,940	3,380	658	385	731	340
10	2,510	6,190	1,330	4,770	e2,810	1,010	1,850	3,520	467	319	637	319
11	2,420	5,840	1,480	4,690	e3,000	933	1,830	3,610	300	282	599	296
12	2,340	5,520	1,680	4,730	3,200	862	1,800	3,600	217	257	574	280
13	2,350	5,210	1,830	4,730	3,340	802	1,740	3,550	182	251	522	268
14	2,460	5,010	1,910	4,680	3,440	745	1,660	3,430	156	309	485	275
15	2,640	4,850	1,970	4,540	3,510	679	1,580	3,350	133	495	474	325
16	3,000	4,720	2,060	4,350	3,500	614	1,510	3,240	115	812	470	407
17	3,510	4,580	2,160	4,170	3,390	560	1,420	3,180	104	1,230	472	512
18	3,910	4,430	2,240	3,870	3,210	516	1,300	3,140	90	1,650	474	631
19	4,130	4,270	2,250	3,570	3,030	490	1,150	3,070	81	2,010	473	722
20	4,220	4,140	2,200	3,360	2,860	485	949	2,950	74	2,330	474	783
21	4,250	3,940	2,110	3,220	2,730	498	712	2,810	73	2,580	474	811
22	4,360	3,690	2,000	3,100	2,650	524	492	2,680	75	2,720	466	782
23	4,510	3,430	1,970	3,060	2,550	536	338	2,560	75	2,750	458	698
24	4,510	3,170	2,450	3,140	2,460	521	273	2,430	87	2,670	449	566
25	4,530	2,950	3,330	3,220	2,370	507	274	2,310	107	2,540	438	409
26	4,440	2,770	5,750	3,360	2,290	519	250	2,190	107	2,420	432	278
27	4,290	2,610	7,970	3,500	2,200	557	219	2,110	96	2,320	429	198
28	4,170	2,460	8,570	3,570	2,100	703	219	2,070	83	2,180	429	153
29	4,110	2,310	8,530	3,600	---	904	295	2,020	81	2,040	430	125
30	4,870	2,180	8,330	3,610	---	1,140	480	1,940	99	1,930	430	106
31	6,060	---	8,120	3,540	---	1,380	---	1,830	---	1,810	426	---
Total	110,950	151,550	94,320	140,460	80,950	30,095	38,681	84,718	13,422	39,120	21,097	12,349
Mean	3,579	5,052	3,043	4,531	2,891	971	1,289	2,733	447	1,262	681	412
Max	6,060	8,070	8,570	7,740	3,510	2,010	2,250	3,610	1,690	2,750	1,670	811
Min	2,340	2,180	1,250	3,060	2,100	485	219	878	73	128	426	106
Ac-ft	220,100	300,600	187,100	278,600	160,600	59,690	76,720	168,000	26,620	77,590	41,850	24,490
Cfs/m	3.06	4.32	2.60	3.87	2.47	0.83	1.10	2.34	0.38	1.08	0.58	0.35
In.	3.53	4.82	3.00	4.47	2.57	0.96	1.23	2.69	0.43	1.24	0.67	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	723	1,158	2,085	2,337	2,220	2,145	1,784	1,536	758	701	752	616
Max	3,579	5,052	5,102	6,779	5,238	5,759	6,812	5,607	2,699	1,413	2,591	2,063
(WY)	(2010)	(2010)	(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)

07077555 CACHE RIVER NEAR COTTON PLANT, AR—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1987 - 2010	
Annual total	960,486		817,712			
Annual mean	2,631		2,240		1,407	
Highest annual mean					2,356	
Lowest annual mean					422	
Highest daily mean	8,570	Dec 28	8,570	Dec 28	9,770	Dec 28, 1987
Lowest daily mean	96	Jan 26	73	Jun 21	7.8	Nov 1, 2000
Annual seven-day minimum	120	Jan 21	79	Jun 18	8.6	Oct 28, 2000
Maximum peak flow			8,760	Dec 29	9,950	Dec 28, 1987
Maximum peak stage			20.02	Dec 29	20.23	Dec 21, 2001
Instantaneous low flow			72	Jun 21 ^a	7.8	Dec 1, 1999 ^b
Annual runoff (ac-ft)	1,905,000		1,622,000		1,020,000	
Annual runoff (cfs)	2.25		1.91		1.20	
Annual runoff (inches)	30.54		26.00		16.34	
10 percent exceeds	5,030		4,700		3,500	
50 percent exceeds	2,150		1,970		812	
90 percent exceeds	547		279		115	

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