

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN

LOCATION.--Lat 36°28'38", long 84°40'09", Scott County, Hydrologic Unit 05130104, on left bank at bridge on State Route 297, 1.0 mi above Anderson Branch, 1.3 miles below North White Oak Creek, 10.1 mi southwest of Oneida, and at mile 70.1.

DRAINAGE AREA.--806 mi².

PERIOD OF RECORD.--October 1983 to September 1987. October 1998 to September 1999, May 2001 to current year. Occasional discharge measurements, water years 1961-62, 1979-80, 1991-94.

GAGE.--Data collection platform. Datum of gage is 862.79 ft Sandy Hook datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	1700	48,100	28.95	Sep 17	1800	*65,900	*33.74
Mar 6	1430	39,700	26.35				

Minimum discharge, 118 ft³/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	667	316	2,210	2,060	1,280	747	3,080	864	2,970	835	2,290	447
2	579	296	1,690	2,460	1,160	946	2,340	1,210	1,430	589	1,090	286
3	515	284	1,380	3,080	1,250	2,570	1,930	3,630	1,350	751	604	384
4	454	275	1,310	2,560	1,440	2,200	1,600	2,360	4,290	766	418	383
5	407	317	1,660	4,060	3,680	1,820	1,310	1,700	3,060	541	322	274
6	374	1,390	1,720	6,930	37,000	25,200	1,120	1,300	1,710	624	297	211
7	342	2,420	1,600	3,780	15,300	9,420	994	991	1,100	1,250	259	186
8	314	1,580	1,470	2,690	5,670	4,420	924	778	809	952	220	6,680
9	288	1,100	1,340	2,260	3,630	3,000	823	637	671	595	191	5,020
10	270	852	1,390	1,860	2,790	2,440	729	1,070	547	426	169	2,230
11	263	722	3,530	1,480	2,300	1,910	669	702	472	326	155	1,260
12	261	646	2,700	1,320	1,930	1,600	935	609	401	283	156	841
13	253	788	2,140	1,250	1,700	1,360	8,940	511	496	279	212	622
14	262	913	2,190	1,160	1,460	1,180	8,290	434	440	250	291	481
15	392	748	2,690	1,080	1,320	1,070	5,130	442	836	225	212	374
16	570	991	2,390	987	1,250	1,150	3,390	1,130	646	213	174	316
17	397	2,600	2,640	895	1,170	1,910	2,480	733	604	201	152	41,200
18	332	2,220	2,680	1,500	1,120	1,930	1,920	1,070	1,130	510	138	21,000
19	300	9,270	2,600	3,320	1,140	2,840	1,520	2,810	829	393	127	4,640
20	281	9,150	2,300	2,550	1,390	2,340	1,280	1,160	533	273	120	2,490
21	264	4,140	1,900	2,050	1,990	4,780	1,120	712	409	211	135	1,600
22	254	2,650	1,690	1,700	1,930	4,190	988	519	380	180	155	1,130
23	239	1,990	1,750	1,440	1,490	2,880	911	483	365	166	213	838
24	232	1,790	4,590	1,250	1,260	2,220	1,060	441	834	188	196	664
25	227	2,460	3,990	1,530	1,120	1,750	966	338	1,120	200	722	550
26	229	2,120	2,820	3,640	977	1,430	1,640	294	4,660	844	351	461
27	308	1,760	2,230	2,980	938	1,230	2,030	575	1,910	2,880	251	386
28	466	2,030	1,820	2,460	855	1,080	1,500	707	1,110	1,200	199	345
29	510	3,850	1,540	2,020	792	967	1,200	767	740	611	169	316
30	408	2,840	2,110	1,790	---	3,960	991	591	613	409	153	296
31	351	---	2,380	1,520	---	4,550	---	2,680	---	835	448	---
TOTAL	11,009	62,508	68,450	69,662	99,332	99,090	61,810	32,248	36,465	18,006	10,589	95,911
MEAN	355	2,084	2,208	2,247	3,425	3,196	2,060	1,040	1,216	581	342	3,197
MAX	667	9,270	4,590	6,930	37,000	25,200	8,940	3,630	4,660	2,880	2,290	41,200
MIN	227	275	1,310	895	792	747	669	294	365	166	120	186
CFSM	0.44	2.59	2.74	2.79	4.25	3.97	2.56	1.29	1.51	0.72	0.42	3.97
IN.	0.51	2.88	3.16	3.22	4.58	4.57	2.85	1.49	1.68	0.83	0.49	4.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	314	1,295	1,853	2,077	2,903	2,288	2,132	1,815	780	489	375	610										
MAX	870	3,506	3,434	4,553	6,368	4,021	4,611	5,631	1,976	1,758	1,302	3,197										
(WY)	(1986)	(1987)	(2003)	(1999)	(2003)	(2002)	(2003)	(1984)	(2003)	(1999)	(1985)	(2004)										
MIN	43.4	49.4	196	602	1,245	1,054	539	347	230	124	61.4	25.9										
(WY)	(1999)	(1999)	(2000)	(1986)	(2002)	(2003)	(1986)	(2001)	(1984)	(2000)	(1987)	(1999)										

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	774,945		665,080			
ANNUAL MEAN	2,123		1,817		1,429	
HIGHEST ANNUAL MEAN					2,169	2003
LOWEST ANNUAL MEAN					899	2000
HIGHEST DAILY MEAN	45,300	Feb 16	41,200	Sep 17	49,300	May 7, 1984
LOWEST DAILY MEAN	137	Aug 28	120	Aug 20	18	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	154	Aug 25	143	Aug 16	20	Sep 14, 1999
MAXIMUM PEAK FLOW			65,900	Sep 17	65,900	Sep 17, 2004
MAXIMUM PEAK STAGE			33.74	Sep 17	33.74	Sep 17, 2004
INSTANTANEOUS LOW FLOW			118	Aug 20	17	Oct 1, 1998
ANNUAL RUNOFF (CFSM)	2.63		2.25		1.77	
ANNUAL RUNOFF (INCHES)	35.77		30.70		24.10	
10 PERCENT EXCEEDS	4,110		3,150		3,050	
50 PERCENT EXCEEDS	931		1,080		620	
90 PERCENT EXCEEDS	268		254		63	

