

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN

LOCATION.--Lat 36°28'38", long 84°40'10", 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)
Dec 1	0930	*43,400	*27.51	Dec 11	1000	20,700	19.13
Dec 9	2245	35,100	24.78				

Minimum discharge, 62 ft³/s, Sept. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	1,300	33,300	888	1,630	2,200	2,700	8,110	260	133	142	592
2	253	1,050	9,400	877	1,450	1,910	12,500	4,220	243	171	132	330
3	237	895	4,690	1,070	3,170	1,690	9,670	2,810	245	183	119	225
4	220	5,330	3,150	1,010	3,220	1,550	5,140	2,120	280	161	111	174
5	203	6,130	2,420	964	2,480	1,430	3,330	1,640	264	226	107	142
6	187	3,140	2,280	1,100	2,040	1,270	2,500	1,400	246	170	113	123
7	175	2,240	7,650	1,610	1,690	1,120	2,130	1,200	909	150	115	109
8	165	1,680	8,320	6,440	1,610	1,340	2,770	1,010	570	132	145	100
9	157	1,270	16,800	5,990	1,500	1,620	2,530	861	470	126	282	93
10	156	1,030	18,900	3,610	1,380	1,420	2,120	782	760	128	331	88
11	157	886	16,700	3,270	1,270	1,350	1,770	747	661	114	203	83
12	158	9,580	8,110	11,400	1,120	1,290	1,570	659	509	124	164	78
13	192	7,950	4,750	6,090	1,210	1,160	1,670	565	408	156	138	75
14	453	3,770	3,230	10,500	3,410	1,020	3,490	512	378	1,650	124	71
15	460	2,550	2,470	5,990	5,220	901	3,190	567	343	3,860	275	69
16	355	1,980	2,040	3,760	3,540	867	2,400	557	268	1,460	198	72
17	300	1,600	1,720	2,740	2,670	1,020	1,910	441	231	1,080	167	86
18	255	1,350	1,500	2,120	2,110	1,040	1,570	375	190	879	598	134
19	4,020	1,180	1,340	1,750	1,720	1,010	1,340	331	166	1,590	1,300	131
20	5,140	1,130	1,180	1,580	1,640	987	1,140	2,830	153	1,430	783	115
21	2,600	1,120	1,010	1,430	5,710	944	979	4,660	144	958	443	97
22	1,690	958	978	1,260	8,290	897	896	2,190	135	2,960	286	86
23	1,230	934	1,230	1,100	4,430	896	1,220	1,430	137	1,410	212	77
24	1,040	4,640	2,080	881	3,080	881	1,200	1,030	129	694	173	70
25	995	8,270	1,600	826	2,400	826	967	770	117	447	148	65
26	801	4,050	1,440	838	1,920	836	858	622	109	312	131	65
27	693	2,780	1,300	805	1,600	766	1,090	524	105	250	120	66
28	825	2,600	1,130	692	1,650	4,660	1,230	442	114	206	113	110
29	3,060	2,310	1,050	839	---	4,880	6,910	369	110	189	386	140
30	2,360	5,210	1,010	1,780	---	3,090	12,700	322	119	172	514	116
31	1,700	---	954	1,950	---	2,690	---	289	---	154	453	---
TOTAL	30,510	88,913	163,732	85,160	73,160	47,561	93,490	44,385	8,773	21,675	8,526	3,782
MEAN	984	2,964	5,282	2,747	2,613	1,534	3,116	1,432	292	699	275	126
MAX	5,140	9,580	33,300	11,400	8,290	4,880	12,700	8,110	909	3,860	1,300	592
MIN	156	886	954	692	1,120	766	858	289	105	114	107	65
CFSM	1.22	3.68	6.55	3.41	3.24	1.90	3.87	1.78	0.36	0.87	0.34	0.16
IN.	1.41	4.10	7.56	3.93	3.38	2.20	4.31	2.05	0.40	1.00	0.39	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	381	1,462	2,196	2,144	2,874	2,213	2,231	1,780	735	508	367	570
MAX	984	3,506	5,282	4,553	6,368	4,021	4,611	5,631	1,976	1,758	1,302	3,197
(WY)	(2005)	(1987)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	806,268		669,667			
ANNUAL MEAN	2,203		1,835		1,470	
HIGHEST ANNUAL MEAN					2,169 2003	
LOWEST ANNUAL MEAN					899 2000	
HIGHEST DAILY MEAN	41,200	Sep 17	33,300	Dec 1	49,300	May 7, 1984
LOWEST DAILY MEAN	120	Aug 20	65	Sep 25	18	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	143	Aug 16	75	Sep 21	20	Sep 14, 1999
MAXIMUM PEAK FLOW			43,400	Dec 1	65,900	Sep 17, 2004
MAXIMUM PEAK STAGE			27.51	Dec 1	33.74	Sep 17, 2004
INSTANTANEOUS LOW FLOW			a62	Sep 25	17	Oct 1, 1998
ANNUAL RUNOFF (CFSM)	2.73		2.28		1.82	
ANNUAL RUNOFF (INCHES)	37.21		30.91		24.78	
10 PERCENT EXCEEDS	4,330		4,510		3,160	
50 PERCENT EXCEEDS	1,120		1,010		650	
90 PERCENT EXCEEDS	218		124		68	

a Also occurred on Sept. 26.

