

CUMBERLAND RIVER BASIN

03421000 COLLINS RIVER NEAR MCMINNVILLE, TN

LOCATION.--Lat 35°42'30", long 85°43'55", Warren County, Hydrologic Unit 05130107, on left bank at downstream side of bridge on U.S. Highway 70S, 1.8 mi downstream from Barren Fork River, 2.5 mi northeast of McMinnville, and at mile 19.5.

DRAINAGE AREA.--640 mi².

PERIOD OF RECORD.--October 1924 to current year. Prior to April 1925 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 873: 1929, 1932(M), 1934-35, 1936(M), 1937. WSP 1276: 1925-26, 1928(M), 1933, 1936, 1940. WSP 2110: Drainage area.

GAGE.--Data collection platform. Datum of gage is 825.78 ft, Sandy Hook datum. Prior to Oct. 16, 1926, nonrecording gage on upstream side of bridge at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1854 is believed to have been about equal to that of Mar. 23, 1929, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 1	1230	18,100	18.75	Dec 10	0430	*24,600	*22.56
Dec 8	0000	16,500	17.76	Feb 22	0300	11,400	14.09

Minimum discharge, 104 ft³/s, Sept. 14, 15.

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	325	364	14,500	804	778	1,670	1,630	2,190	244	214	169	500
2	321	379	7,310	766	795	1,510	4,210	1,430	268	216	159	369
3	294	386	3,740	741	1,610	1,340	3,300	1,120	313	216	153	283
4	272	443	2,570	719	1,470	1,230	2,370	920	362	287	150	221
5	258	1,310	1,970	692	1,300	1,120	1,820	794	329	290	145	180
6	244	1,220	2,030	700	1,170	1,020	1,490	714	382	251	138	158
7	234	891	9,930	859	1,050	941	2,450	655	2,560	260	139	143
8	225	706	11,600	3,280	996	986	4,960	598	888	217	141	134
9	220	578	11,200	3,370	985	1,230	4,000	546	1,000	200	140	128
10	218	505	19,800	2,430	917	1,130	2,720	502	840	189	142	122
11	215	480	9,400	2,030	834	1,060	2,060	463	658	202	146	117
12	226	896	5,220	2,980	770	976	1,700	430	561	201	152	113
13	356	2,090	3,590	2,030	769	897	1,530	402	536	242	177	109
14	303	1,650	2,670	3,720	1,330	817	1,310	380	497	293	219	107
15	300	1,230	2,100	2,810	2,130	743	1,110	433	434	396	182	107
16	266	970	1,770	2,210	1,920	702	956	428	368	397	191	151
17	245	825	1,540	1,810	1,660	700	849	379	318	342	183	184
18	239	719	1,380	1,510	1,420	724	774	347	283	328	204	251
19	729	643	1,240	1,330	1,240	719	711	326	262	367	262	211
20	2,230	599	1,100	1,230	1,360	675	656	332	245	372	308	168
21	1,540	579	985	1,130	6,590	638	609	345	232	504	273	147
22	1,000	558	928	1,020	8,980	615	614	354	228	509	212	133
23	751	631	1,550	913	4,660	618	826	339	233	391	177	125
24	636	4,740	1,890	810	3,030	637	715	308	224	328	160	118
25	559	6,200	1,510	753	2,280	613	636	287	214	288	157	112
26	504	3,480	1,310	724	1,820	585	588	273	203	238	152	119
27	464	2,290	1,180	687	1,540	562	570	261	197	209	146	119
28	434	1,970	1,050	632	1,440	659	581	252	224	189	141	117
29	411	1,810	966	660	---	1,450	623	243	218	180	139	145
30	394	3,070	911	903	---	1,280	2,460	238	214	168	167	142
31	380	---	860	843	---	1,370	---	232	---	166	184	---
TOTAL	14,793	42,212	127,800	45,096	54,844	29,217	48,828	16,521	13,535	8,650	5,408	5,033
MEAN	477	1,407	4,123	1,455	1,959	942	1,628	533	451	279	174	168
MAX	2,230	6,200	19,800	3,720	8,980	1,670	4,960	2,190	2,560	509	308	500
MIN	215	364	860	632	769	562	570	232	197	166	138	107
CFSM	0.75	2.20	6.44	2.27	3.06	1.47	2.54	0.83	0.70	0.44	0.27	0.26
IN.	0.86	2.45	7.43	2.62	3.19	1.70	2.84	0.96	0.79	0.50	0.31	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

MEAN	319	784	1,634	2,114	2,422	2,499	1,786	1,111	636	450	323	304
MAX	2,345	4,286	6,783	6,262	6,564	6,279	4,412	5,021	4,216	2,091	1,439	1,328
(WY)	(1976)	(1958)	(1991)	(1974)	(1939)	(1929)	(1994)	(2003)	(1928)	(1989)	(1942)	(2004)
MIN	63.5	69.0	107	126	391	619	462	225	85.9	115	76.2	62.9
(WY)	(1932)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1988)	(1944)	(1925)	(1925)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1925 - 2005	
ANNUAL TOTAL	610,039		411,937		1,193	
ANNUAL MEAN	1,667		1,129		2,193	
HIGHEST ANNUAL MEAN					409	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	28,300	Feb 6	19,800	Dec 10	64,100	Dec 23, 1990
LOWEST DAILY MEAN	215	Oct 11	107	Sep 14	37	Oct 28, 1961
ANNUAL SEVEN-DAY MINIMUM	226	Oct 6	115	Sep 9	50	Sep 24, 1925
MAXIMUM PEAK FLOW			24,600	Dec 10	75,300	Mar 23, 1929
MAXIMUM PEAK STAGE			22.56	Dec 10	39.10	Mar 23, 1929
INSTANTANEOUS LOW FLOW			a104	Sep 14	35	Sep 21, 1930
ANNUAL RUNOFF (CFSM)	2.60		1.76		1.86	
ANNUAL RUNOFF (INCHES)	35.46		23.94		25.32	
10 PERCENT EXCEEDS	3,030		2,280		2,600	
50 PERCENT EXCEEDS	882		613		539	
90 PERCENT EXCEEDS	294		159		115	

a Also occurred on Sept. 15.

