

Prepared in cooperation with the Tennessee Department of Conservation Division of Water Resources

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03417000 OBEY RIVER BELOW DALE HOLLOW DAM, TN

LOCATION.-- Lat 36°32'12", long 85°27'22", Clay County, on right bank 1200 ft downstream from Dale Hollow Dam, 3 miles east of Celina, 7.1 miles upstream from mouth, and 24 miles downstream from Wolf River.

DRAINAGE AREA.-- 935 mi².

PERIOD OF RECORD.-- April 1944 to September 1958

REMARKS: Flow completely regulated by Dale Hollow Reservoir (since August 1943)

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.0	0.0	0.0	0.0	0.0	0.0
80	70	60	50	40	30
0.0	0.0	343	966	1480	2160
20	10	5	2	I	0.5
2960	4000	5000	6120	6700	7390

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0
30					
60					
120					
183					

03417500 - CUMBERLAND RIVER AT CELINA, TN

LOCATION.-- Lat 36°33'20", long 85°30'47", Clay County, on right pier of bridge on State Highway 52 at Celina, 600 ft downstream from Obey River and at mile 380.8.

DRAINAGE AREA. -- 7307 mi².

PERIOD OF RECORD, -- October 1922 to July 1943. (unregulated)

REMARKS: See next page for characteristics since regulation began.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
185	205	210	243	326	474
80	70	60	50	40	30
1040	1820	2980	4850	7450	10700
20	10	5	2	1	0.5
15800	28000	46800	67500	83600	98400

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
t	294	182	140	112	86.9
3	311	188	142	122	102
7	323	198	153	124	108
4	350	224	183	157	135
30	447	265	210	176	147
60	676	378	284	227	178
120	1610	820	548	383	248
183	2820	1500	1010	702	450

03417500 - CUMBERLAND RIVER AT CELINA, TN

LOCATION.--Lat 36°33'20", long 85°30'47", Clay County, on right pier of bridge on State Highway 52 at Celina, 600 ft downstream from Obey River and at mile 380.8.

DRAINAGE AREA. -- 7307 mi².

PERIOD OF RECORD.-- August 1943 to September 1975

REMARKS: Flow regulated by Lake Cumberland (since August 1950) and by Dale Hollow Reservoir (since August 1943).

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
150	202	216	335	865	1680
80	70	60	50	40	30
3110	4620	6370	8340	10800	14000
20	10	5	2	1	0.5
18900	28500	36000	45300	_53000	62200

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	524	265	175	128	82.0
3	711	321	203	136	84.9
7	1140	457	260	156	85.0
14	1870	713	375	205	95.7
30	2680	1100	593	325	150
60	3790	1650	907	503	233
120	4650	2540	1730	1210	778
183	5660	3560	2680	2080	1520

03418000 ROARING RIVER NEAR HILHAM, TN

LOCATION .-- Lat 36°20'27", long 85°25'35", Overton County, on left bank 700 ft upstream from Cleek Branch, 0.2 mile downstream from bridge on State Highway 136, 1.4 miles upstream from Flat Creek, 2.7 miles west of Windle, 5.0 miles south of Hilham, and 13 miles north of courthouse in Cookeville. DRAINAGE AREA.-- 78.7 mi² (includes 27.1 mi² without surface drainage).

PERIOD OF RECORD.--July 1932 to September 1975.

REMARKS: Discharge affected occasionally by change in storage in a water-supply reservoir on Carr Creek since 1964

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
3.40	3.97	4.04	4.81	6.30	8,50
80	70	60	50	40	30
13.1	19.2	28.0	42.0	62.6	92.7
20	10	5	2	<u> </u>	0.5
145	250	400	735	1070	1600

MAGNITUDE AND FREQUENCY

LOWEST AVERAGE FLOW IN CUBIC FEET PER SECOND, FOR INDICATED RECURRENCE INTERVAL IN YEARS.

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	5.73	4.13	3.51	3.09	2,68
3	6.22	4,48	3.77	3.28	2.80
7	6.65	4.70	3.91	3.35	2.81
14	7.21	5.04	4.16	3.55	2.96
30	8.66	5.84	4.70	3.91	3.16
60	10.9	7.09	5.64	4.67	3.77
120	16.7	10.2	7.84	6.28	4.86
183	25.3	14.9	11.3	9.00	6.96

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03418500-CANEY FORK AT CLIFTY, TN

LOCATION.-- Lat 35°53'28", long 85°13'05", Cumberland County, on right bank, 50 ft downstream from county highway bridge, 200 ft upstream from Pilot Falls, 0.6 mile south of Clifty, and 3 miles upstream from Clifty Creek.

DRAINAGE AREA. -- 111 mi²

PERIOD OF RECORD.-- October 1930 to June 1949.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.10	0.12	0.13	0.19	0.49	1.23
80	70	60	50	40	30
4.77	13.0	29.0	65.1	110	180
20	10	5	2		0.5
292	530	861	1510	2230	3010

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
<u> </u>	0.29	0.06	0.02	0	0
3	0.34	0.07	0.02	0	0
7	0.43	0.11	0.05	0.02	0.01
4	0.51	0.15	0.08	0.05	0.03
30	0.84	0.25	0.14	0.08	0.05
60	1.69	0.54	0.31	0.20	0.12
120	9.85	4.32	2.78	1.91	1,25
183	22.4	10.5	7.03	5.04	3.47

03419000 BEE CREEK AT HERBERT, TN

LOCATION.--Lat 35°45'46", long 85°15'10", Bledsoe County 500 ft downstream from Glade Creek and 0.75 mile northwest of Herbert

DRAINAGE AREA. -- 101 mi².

PERIOD OF RECORD. -- October 1930 to October 1937

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.0	0.0	0.0	0.0	0.05	0.86
80	70	60	50	40	30
4.17	12.1	26.9	55.5	95.4	159
20	10	5	2	1	0.5
259	473	761	1470	2540	3400

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
77	0.0	0.0	0.0	0.0	
14					
30					
60					
120					
183					

03420000 - CALFKILLER RIVER BELOW SPARTA, TN

LOCATION.--Lat 35°54'31", long 85°28'46", White County, on right bank 0.75 mile downstream from abandoned hydroelectric power plant of Tennessee Valley Authority, 1.5 miles southwest of Sparta, and at mile 11.5.

DRAINAGE AREA. -- 175 mi² (includes 64 mi² without surface drainage).

PERIOD OF RECORD. -- September 1940 to September 1971.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
16.4	18.3	18.6	21.0	25.2	31.3
80	70	60	50	40	30
47,4	67,4	96,8	149	227	335
20	10	5	2	<u> </u>	0.5
503	866	1360	2320	3170	4310

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
<u> </u>	25.2	18.2	15.4	13.5	11.7
3	25.5	18.7	16.0	14.2	12.5
7	26.6	19.7	17.2	15.4	13.7
14	28.0	20.7	18.0	16.1	14.4
30	30.7	22.4	19.5	17.7	16.1
60	38.6	25.9	21.7	19.1	16.8
120	56.3	34.5	27.3	22.7	18.8
183	85.0	53.9	43.0	35.8	29.4

03420500 - BARREN FORK NEAR TROUSDALE, TN

LOCATION.-- Lat 35°39'55", long 85°53'00", Warren County, on left bank
15 ft downstream from highway bridge on Trousdale-McMinnville pike,
3.25 miles east of Trousdale, 4.5 miles downstream from Bullpen Creek,
6 miles west of McMinnville, 6.2 miles upstream from Hickory Creek,
and at mile 16.6.
DRAINAGE AREA.--126 mi².

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PERIOD OF RECORD.--July 1932 to September 1957.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
34.4	36.4	36.9	40.0	45.2	49.1
80	70	60	50	40	30
57.1	65.9	77.7	97.6	128	177
20	10	5	2	1	0.5
247	403	676	1340	2100	3000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	44.6	38.9	36.1	33.8	31.4
3	45.3	39.5	36.7	34.4	32.0
	45.7	39.9	37.1	34.8	32.4
14	47.1	41.1	38.2	35.9	33.3
30	49.6	42.9	39.5	36.7	33.6
60	53.1	45.2	41.6	38.9	36.1
120	62.7	51.6	47.3	44.3	41.5
183	76.4	61.8	55.8	51.6	47.5

03421000 - COLLINS RIVER NEAR MCMINNVILLE, TN

LOCATION.-- Lat 35°42'32", long 85°43'46", Warren County, on left bank 10 ft downstream from bridge on U.S. Highway 70S, 1.75 miles downstream from Barren Fork, 2.5 miles northeast of McMinnville, and at mile 19.3.

DRAINAGE AREA. -- 642 mi².

PERIOD OF RECORD. -- May 1925 to September 1975.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
59.3	64.2	65.6	73.8	89.0	108
80	70	60	50	40	30
155	217	319	495	735	1060_
20	10	5	2	1	0.5
1570	2610	4150	7390	10500	14400

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	82.1	61.7	52.7	46.1	39.5
3	86.1	65.0	55.6	48.6	41.6
7	90.5	71.0	62.6	56.5	50.3
14	96.8	76.5	67.8	61.5	55.2
30	106	82.0	73.0	66.9	61.2
60	129	92.4	79.4	71.0	63.2
120	204	_135	110	93.5	78.1
183	293	192	155	129	106

03421500 - COLLINS RIVER NEAR ROLAND, TN

LOCATION.-- Lat 35°46'39", long 85°41'40", Warren County at Hennessee bridge, 1 mile downstream from Mountain Creek, 2.5 miles northwest of Rowland, 5 miles southwest of Rock Island, and at mile 7.5.

DRAINAGE AREA. -- 755 mi².

PERIOD OF RECORD. -- April 1916 to September 1924.

REMARKS: Site now inundated by Great Falls Lake.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
96.0	104	106	119	149	185
80	70	60	50	40	30
277	421	601	845	1120	1460
20	10	5	2	I	0.5
-2 020	3300	5110	8530	12000	17000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
	120	77	62	50	
3	130	88	72	59	
7	145	97	80	68	
14					
30					
60					
120					
183					

03422500 - CANEY FORK NEAR ROCK ISLAND, TN

LOCATION.-- Lat 35°48'26", long 85°37'44", Warren County, on right bank 180 ft downstream from powerhouse of Tennessee Valley Authority, 0.5 mile downstream from dam at mouth of Collins River, 1 mile northwest of Rock Island, 64 miles upstream from Center Hill Dam, and at mile 90.3.

DRAINAGE AREA. -- 1678 mi².

PERIOD OF RECORD.-- December 1911 - September 1975.

REMARKS: Flow regulated by Great Falls Lake

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
35.7	39.8	40.9	46.5	65.4	130
80	70	60	50	40	30
394	748	1120	1600	2200	3170
20	10	5	2	1	0.5
4500	7100	11700	20600	28400	37100

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
t	62.8	37.9	30.6	26.2	22.5
3	92.6	51.9	39.2	31.4	24.8
7	158	87.0	62.2	46.7	33.3
14	212	121	87.4	65.5	46.4
30	290	165	116	84.9	57.6
60	402	221	154	111	74.9
120	586	366	288	237	191
183	857	539	421	343	271

03423000 - FALLING WATER RIVER NEAR COOKEVILLE, TN

LOCATION.-- Lat 36°04'38", long 85°31'17", Putnam County, on left bank at old Burgess Mill site, 0.6 mile upstream from Post Oak Creek and 6.0 miles south of the courthouse in Cookeville.

DRAINAGE AREA.-- 67.0 mi² (includes 21.1 mi² without surface drainage). PERIOD OF RECORD.-- July 1932 to September 1952.

REMARKS: Low flow affected by storage in Cookeville City Lake. Some diurnal fluctuation at low flow caused by Burgess Mill prior to 1953.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
1.99	2.45	2.58	3.36	4,87	6.47
80	70	60	50	40	30
10.3	16.5	26.1	39.2	59.7	89.7
20	10	5	2	I	0.5
134	250	432	7 90	1160	1600

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	4.58	2.83	2.14	1.68	1.26
3	4.61	3.06	2.48	2.09	1.72
7	5.06	3.40	2.76	2.32	1.91
<u> </u>	5.68	3.79	3.05	2.54	2.06
30	6.84	4.53	3.56	2.88	2.24
60	8.53	5.31	4.05	3.20	2.43
120	15.5	8.55	6.08	4.50	3.16
183	24.8	14.1	10.2	7.78	5.65

03424500 - CANEY FORK BELOW CENTER HILL DAM NEAR LANCASTER, TN

LOCATION.-- Lat 36°06'10", long 85°50'40", Smith County, on left bank 1.1 miles downstream from Center Hill Dam, 2 miles south of Lancaster, 4.7 miles upstream from Indian Creek, 10 miles north of Smithville, and at mile 25.5.

DRAINAGE AREA. -- 2183 mi².

PERIOD OF RECORD.-- October 1922 to September 1958.

REMARKS: Flow regulated by Great Falls Lake (for period of record) and by Center Hill Reservoir (since October 1948).

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99,1	99	98	95	90
32.3	38.2	39.5	50.0	78.1	215
80	70	60	50	40	30
510	900	1350	2020	2930	3830
20	10	5	2	1	0.5
5460	9170	12700	20800	28100	35700

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	132	54.8	32.2	19.9	11.1
3	152	64.5	38.3	24.0	13.6
7	200	86.5	50.8	31.1	16.9
14	272	120	68.0	39.3	19.4
30	360	161	90.0	50.7	23.9
60	523	265	164	103	56.3
120	924	496	312	197	107
183	1110	742	599	500	408

LOCATION.-- Lat 36°14'53", long 85°57'19", Smith County, on left pier of Cordell Hull Bridge on State Highway 25, at Carthage, 1.0 mile Downstream from Caney Fork and at mile 308.2.

DRAINAGE AREA.--10,690 mi².

PERIOD OF RECORD. -- October 1922 to July 1943.

REMARKS: Flow regulated by Great Falls Lake (for period of record). For characteristics since 1943 see next page.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
495	547	554	633	801	1120
80	70	60	50	40	30
2080	3330	5280	7940	11900	16700
20	10	5	2	I	0.5
24500	43000	65000	98300	122000	134000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	640	475	417	379	345
3	678	501	440	400	365
7	752	549	478	431	390
14	845	601	514	458	407
30	. 1100	740	615	534	461
60	1470	925	742	625	522
120	2880	1680	1240	955	703
183	4470	2590	1890	1430	1030

03425000 - CUMBERLAND RIVER AT CARTHAGE, TN

LOCATION.-- Lat 36°14'53", long 85°57'19", Smith County, on left pier of Cordell Hull Bridge on State Highway 25, at Carthage, 1.0 mile downstream from Caney Fork and at mile 308.2.

DRAINAGE AREA.-- 10,690 mi².

PERIOD OF RECORD. -- August 1943 to September 1975.

REMARKS: Flow regulated by Lake Cumberland (since July 1950), by Dale Hollow Reservoir (for period of record) by Great Falls Lake (for period of record), and by Center Hill Reservoir (since October 1948).

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
553	668	700	1050	1850	2870
80	70	60	50	40	30
5150	7350	9720	12400	15900	20700
20	10	5	2		0.5
28400	41300	53100	70400	81000	91700

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
<u> </u>	1430	770	545	404	285
3	1710	893	615	445	303
7	2260	1140	754	521	334
14	2850	1410	913	618	384
30	3670	1810	1150	752	445
60	4760	2370	1510	992	588
120	6070	3510	2510	1850	1280
183	7800	4960	3780	2960	2190

03425500 - SPRING CREEK NEAR LEBANON, TN

LOCATION.-- Lat 36°10'49", long 86°14'29", Wilson County, on downstream end of middle pier of bridge on Eastover Road, 0.6 mile downstream from Black Branch, and 3.4 miles southeast of the square in Lebanon.

DRAINAGE AREA.--35.3 mi².

PERIOD OF RECORD, -- October 1954 to September 1961.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.0	0.0	0.0	0.0	0.02	0.16
80	70	60	50	40	30
0.78	2.65	6.73	13.5	23.1	36.9
20	10	5	2	<u> </u>	0.5
59.1	133	253	587	810	1120

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
<u> </u>	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	
14					
30					
60					
120					
183					

03426000 - DRAKES CREEK ABOVE HENDERSONVILLE, TN

LOCATION.--Lat 36°22'14", long 86°37'00", Sumner County, on downstream wingwall of left abutment of former Long Hollow Pike bridge, at Shackle Island, 2 miles downstream from Hogan Branch and 4.5 miles north of Hendersonville.

DRAINAGE AREA. -- 19.2 mi²

PERIOD OF RECORD.-- October 1954 to September 1961.

Remarks:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.03	0.03	0.03	0.05	0.21	0.38
80	70	60	50	40	30
0.91	1.75	3.29	5.34	11.4	18.8
20	10	5	2	1	0.5
31.0	50.8	84.0	188	320	450

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	0.04	0.02	0.01	0.0	
3	0.04	0.02	0.01	0.0	
7	0.05	0.02	0.02	0.01	
4				L	
30					
60					
120					
183					

03426500 - CUMBERLAND RIVER BELOW OLD HICKORY, TN

LOCATION.-- Lat 36°15'39", long 86°40'30", Davidson County, on downstream end of left pier of bridge on State Highway 45, 1.5 miles west of Old Hickory, 2.1 miles east of Madison, 3.3 miles downstream from Mansker Creek, 4.1 miles downstream from Old Hickory Dam, and at mile 212.1

DRAINAGE AREA.--11,736 mi².

PERIOD OF RECORD. -- October 1931 - September 1942.

REMARKS: Flow regulated by Great Falls Lake (for period of record). For characteristics since 1942 see next page.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
447	482	491	570	756	1080
80	70	60	50	40	30
2210	3280	4850	7280	10700	15800
20	10	5	2		0.5
24400	44700	73800	108000	127000	138000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	416	194	128	89.2	
3	567	391	332	295	
7	691	483	412	366	
14	779	547	467	415	
30	1060	660	527	442	
60	1440	884	680	546	
120	2940	1670	1170	847	
183	4290	2630	1930	1460	

03426500 - CUMBERLAND RIVER BELOW OLD HICKORY, TN

LOCATION.-- Lat 36°15'39", long 86°40'30", Davidson County, on downstream end of left pier of bridge on State Highway 45, 1.5 miles west of Old Hickory, 2.1 miles east of Madison, 3.3 miles downstream from Mansker Creek, 4.1 miles downstream from Old Hickory Dam, and at mile 212.1.

DRAINAGE AREA.-- 11,736 mi².

PERIOD OF RECORD, -- October 1947 to September 1975.

REMARKS: Flow regulated by Lake Cumberland (since July 1950), by Dale Hollow Reservoir (since August 1943), by Great Falls Lake (for period of record), by Center Hill Reservoir (since October 1948), and by Old Hickory Lake (since June 1954).

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
686	1040	1090	1570	2330	3730
80	70	60	50	40	30
6040	. 8250	10600	13500	17500	23300
20	10	5	2		0.5
31900	44100	57100	73900	86100	95900

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	5Ó
1	1790	846	524	336	194
3	2270	1290	922	687	484
7	2920	1640	1140	811	533
4	3690	2080	1420	993	632
30	4910	2850	1900	1270	744
60	6310	3630	2390	1570	905
120	7510	4880	3680	2820	2020
183	9280	6200	4770	3740	2760

03426800 - EAST FORK STONES RIVER AT WOODBURY, TN

LOCATION.-- Lat 35°49'41", long 86°04'36", Cannon County, on center pier on downstream side of bridge on U.S. Highway 70S, at Woodbury, 0.4 mile downstream from Doolittle Branch, and at mile 45.6.

DRAINAGE AREA.-- 39.1 mi².

PERIOD OF RECORD.-- October 1962 to September 1973.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
4.08	4.40	5.50	5.20	6.60	8.45
80	70	60	50	40	30
12.2	15.9	21.1	28.3	38.7	56.7
20	10	5	2	1	0.5
83.9	143	225	420	670	1300

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	7.17	5.13	4.12	3.35	
3	7.31	5.22	4.18	3.39	
7	7.50	5.47	4.46	3.69	
14	8.15	5.88	4.81	4.02	
30	9.19	6.31	5.07	4.18	
60	11.7	7.80	6.21	5.11	
120	16.5	9.56	7.16	5.63	
183	22.1	13.4	10.2	8.08	

03427000 - BRADLEY CREEK AT LASCASSAS, TN

LOCATION.-- Lat 35°55'39", long 86°17'25", Rutherford County, on downstream end of county road bridge pier near midstream, 900 ft. south of Lascassas, 0.4 mile downstream from Jarman Branch, 2.0 miles upstream from mouth, and 8.0 miles northeast of the courthouse in Murfreesboro. DRAINAGE AREA.-- 37.0 mi².

PERIOD OF RECORD. -- October 1954 to September 1961.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.02	0.02	0.02	0.03	0.08	0.24
80	70	60	50	40	30
0.94	2.81	6.26	12.4	22.4	36.9
20	10	5	2	1	0.5
61.5	127	251	622	993	1290

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	0.02	0.0	0.0	0.0	
3	0.03	0.0	0.0	0.0	
7	0.04	0.01	0.0	0.0	
14					
30					
60	, 			1	
120					
183					

03427500 - EAST FORK STONES RIVER NEAR LASCASSAS, TN

LOCATION.--Lat 35°55'06", long 86°20'02", Rutherford County, on left bank, 100 feet upstream from highway bridge, 2.5 miles southwest of Lascassas, 3.7 miles downstream from Bradley Creek, 6.0 miles northeast of the courthouse in Murfreesboro, and at mile 15.4

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.-- February 1951 to October 1958, June 1963 to September 1975.

REMARKS: Frequent diurnal fluctuations at low flow caused by small mills above station.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

		00 1	09	95	90
99.5	99.1	99	98		
4.00	4.80	5.02	6.62	10.2	14.7
80	70	60	50	40	30
25.6	41.8	66.3	113	190	300
20	10	5	2		0.5
514	985	1770	3650	5860	9090

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	7.62	3.25	2.10	1.58	
3	8.18	4.62	3.40	2.63	
7	9.94	5.97	4.56	3.63	
14	11.7	6.79	5.14	4.10	
30	14.9	8.92	6.94	5.69	
60	22.7	12.5	9.51	7.71	
120	54.1	26.6	18.2	13.3	
183	87.6	46.8	33.6	25.5	

03428000 - WEST FORK STONES RIVER NEAR MURFREESBORO, TN

LOCATION.-- Lat 35°49'20", long 86°25'03", Rutherford County, on downstream end of second pier from right abutment of bridge on State Highway 99, 0.8 mile downstream from Middle Fork and 2.2 miles southwest of the courthouse in Murfreesboro.

DRAINAGE AREA. -- 128 mi² (inclues 3 mi² without surface drainage).

PERIOD OF RECORD.--July 1932 to October 1969.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.49	0.63	0.65	0.85	1.49	2.82
80	70	60	50	40	30
6.93	14.1	26.0	48.6	81.0	130
20	10	5	2	l	0.5
230	469	800	1670	2760	

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	1.10	0.49	0.29	0.13	0.05
3	1.18	0.58	0.38	0.22	0.09
7	1.36	0.63	0.53	0.34	0.17
	1.64	0.64	0.54	0.37	0.28
30	2.00	0.94	0.63	0.46	0.33
60	4.52	1.71	1.04	0.68	0.43
120	19.0	7.86	4.76	3.07	1.83
183	41.1	20.7	13.7	9.42	5.99

03428500 - WEST FORK STONES RIVER NEAR SMYRNA, TN

LOCATION.-- Lat 35°56'25", long 86°27'54", Rutherford County, near right bank at county bridge on Sulphur Springs Road, 400 ft upstream from Nice's Mill dam, 1.6 miles downstream from Overall Creek, 4.2 miles southeast of Smyrna, and at mile 6.4.

DRAINAGE AREA.--237 mi² (includes 43 mi² without surface drainage).

PERIOD OF RECORD. -- October 1965 to September 1977.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
6.60	7.73	8.04	12.0	18.2	24.9
80	70	60	50	40	30
39.4	61.9	95.7	152	227	345
20	10	5	2	<u> </u>	0.5
573	995	1580	2940	4700	6200

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
	16.9	11.9	9.06	6,90	
3	17.7	12.8	10.2	8.19	
7	19.0	13.7	11.0	8.95	
	21.0	15.3	12.5	10.3	
30	27.3	20.2	16.6	13.9	
60	38.4	27.4	21.2	16.4	
120	71.5	41.7	30.1	22.5	
183	124	70.0	48.8	35.0	

03429000 - STONES RIVER NEAR SMYRNA, TN

LOCATION.-- Lat 35 59'59", long 86⁰27'35", Rutherford County, on right bank 30 ft downstream from highway bridge at Jefferson Springs, 1.1 miles north of 01d Jefferson, 1.5 miles downstream from confluence of East and West Forks, 3.5 miles northeast of Smyrna, 4.1 miles upstream from Fall Creek, and at mile 37.2.
DRAINAGE AREA.-- 571 mi².

PERIOD OF RECORD, -- August 1925 to September 1967.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
8.80	10.8	11.4	13.8	20.0	29.9
80	70	60	50	40	30
55.0	92.5	161	268	430	680
20	10	5	2	1	0.5
1150	2200	3820	7100	10800	14900

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	14.6	9.78	7.85	6.51	
3	16.0	10.8	8.77	7.33	
7	17.9	12.2	9.95	8.37	
14	20.9	14.2	11.6	9.73	
30	27.2	16.9	13.4	11.2	
60	46.3	24.2	17.4	13.3	
120	118	61.2	42.3	30.8	
183	204	114	81.8	61.0	

03429500 - STEWART CREEK NEAR SMYRNA, TN

LOCATION.-- Lat 35⁰59'54", long 86⁰30'18", Rutherford County, on upstream end of right abutment of bridge on Fifteenth Ave., 0.4 mile downstream from Harts Branch, 1.3 miles northeast of Smyrna, and 5.3 miles upstream from mouth.

DRAINAGE AREA. -- 69.7 mi² (includes 7.6 mi² without surface drainage).

PERIOD OF RECORD. -- October 1952 to September 1958.

REMARKS: Occasional regulation at low flow caused by small dams above station.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.0	0.0	0.0	0.0	0.0	0.39
80	70	60	50	40	30
1.50	3.51	7.25	19.3	40.6	79.2
20	10	5	2	1	0.5
138	252	452	896	1390	1840

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	
14					
30					
60					
120					
183					

03430100 STONES RIVER BELOW J. PERCY PRIEST DAM, TN

LOCATION.-- Lat 36⁰09'30", long 86⁰37'14", Davidson County, on left bank 750 ft upstream from bridge on Interstate Highway 40, 900 ft downstream from J. Percy Priest Dam, 2.4 miles east of Donelson, and at mile 6.6.

DRAINAGE AREA.-- 892 mi².

PERIOD OF RECORD.-- February 1939 to September 1967.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
13.7	14.7	15.0	17.6	24.3	38.4
80	70	60	50	40	30
75.3	133	223	400	645	1060
20	10	5	2	I	0.5
1710	3320	5850	10400	15500	21200

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	20.0	14.5	12.4	10.9	
3	20.7	15.0	12.8	11.2	
7	22.6	16.0	13.4	11.7	
14	25.0	17.5	14.6	12.6	
30	32.0	20.1	16.2	13.7	
60	58.1	28.8	20.2	15.2	
120	154	80.4	55.5	40.2	
183	283	164	118	88.9	

03431000 - MILL CREEK NEAR ANTIOCH, TN

LOCATION.--Lat 36°04'54", long 86°40'50", Davidson County, at downstream end of center bridge pier on Franklin-Limestone Road, 900 ft upstream from Louisville & Nashville Railroad spur track bridge, 1.6 miles north of Antioch, 2.1 miles downstream from Whittemore Branch, and 8.2 miles southeast of the State capitol in Nashville. DRAINAGE AREA.--64.0 mi².

PERIOD OF RECORD. -- October 1953 to September 1975.

REMARKS: Minor diverson from gage pool for industrial use.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.0	0.0	0.0	0.0	0.27	0.80
80	70	60	50	40	30
2.35	5.40	11.6	22.1	40.4	68.5
20	10	5	2	I	0.5
115	217	375	792	1190	1680

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
t	0.21	0.01	0.0	0.0	
3	0.24	0.01	0.0	0.0	
7	0.35	0.01	0.0	0.0	
14	0.46	0.05	0.0	0.0	
30	1.43	0.46	0.10	0.04	
60	3.46	0.91	0.25	0.05	
120	9.42	4.52	3.06	2.22	
183	18.1	8.27	5.22	3.48	

03431300 - BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TN

LOCATION .-- Lat 36°07'47", long 86°45'40", Davidson County, near center span on downstream side of bridge on access road to pit area of the race track at State Fairgrounds, 300 ft west of Craighead Street, 0.3 mile upstream from bridge on U.S. Highways 31A and 41A, and 2.8 miles southeast of the State capitol in Nashville. DRAINAGE AREA. -- 11.8 mi².

PERIOD OF RECORD.--December 1963 to September 1975.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99,1	99	98	95	90
0.50	0.60	0.60	0.66	0.88	1.26
80	70	60	50	40	30
1.92	2.74	3.99	5.79	8.72	13.8
20	10	5	2		0.5
21.7	39.2	62.3	108	170	270

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	0.66	0.41	0.31	0.24	
3	0.73	0.46	0.35	0.27	
7	0.83	0.54	0.42	0.34	
14	1.06	0.71	0.57	0.48	
30	1.69	1.06	0.80	0.62	
60	2.22	1.41	1.11	0.90	
120	3.94	2.31	1.66	1.24	
183	5.80	3.37	2.40	1.77	

03431500 - CUMBERLAND RIVER AT NASHVILLE, TN

LOCATION.--Lat 36°09'45", long 86°46'17", Davidson County on right bank pier of Shelby Ave. bridge in Nashville, 2.7 miles upstream from former lock and dam 1, 3.3 miles downstream from Mill Creek, and at mile 191.1.

DRAINAGE AREA -- 12,856 mi^2 , at former lock and dam 1.

PERIOD OF RECORD, -- October 1892 to July 1943.

REMARKS: Some regulation by Great Falls Lake (since December 1916). Site now inundated by Cheatham Lake. See next page for characteristics for 1943-54.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
602	679	700	830	1100	1550
80	70	60	50	40	30
.2670	4090	6400	9810	14400	20500
20	10	5	2	<u> </u>	0.5
30400	53300	80200	109000	126000	144000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	1060	561	362	238	139
3	1020	660	522	429	343
7	1090	742	614	528	449
I4	1210	823	683	590	505
30	1500	961	770	645	531
60	1980	1200	931	762	613
120	3430	2030	1550	1240	968
183	5640	3390	2520	1950	1430

03431500 - CUMBERLAND RIVER AT NASHVILLE, TN

LOCATION.--Lat 36°09'45", long 86°46'17", Davidson County, on right bank pier of Shelby Ave. bridge in Nashville, 2.7 miles upstream from former lock and dam 1, 3.3 miles downstream from Mill Creek, and at mile 191.1.

DRAINAGE AREA. -- 12,856 mi², at former lock and dam 1.

PERIOD OF RECORD, -- August 1943 to September 1954.

REMARKS: Some regulation by Lake Cumberland (since July 1950), by Dale Hollow Reservoir (since August 1943), by Great Falls Lake (since December 1916), by Center Hill Reservoir (since October 1948), by Old Hickory Lake (since June 1954), and by navigation pools. Site now inundated by Cheatham Lake.

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
527	585	600	760	1220	1700
80	70	60	50	40	30
2960	4730	2500	11600	16800	24200
20	10	5	2	1	0.5
35000	53000	74400	102000	121000	136000

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	838	533	419	343	
3	965	602	468	379	
7	1160	694	523	412	
14	1390	815	600	459	
30	1630	923	664	498	
60	2040	1210	919	734	
120	3240	2190	1830	1610	
183	5670	3670	2880	2340	

03431600 - WHITES CREEK AT TUCKER ROAD NEAR BORDEAUX, TN

LOCATION.--Lat 36⁰12'45", long 86⁰49'29", Davidson County, at bridge on Tucker Road, 0.8 mile downstream from Ewing Creek, 1.3 miles north of Bordeaux, and 3.9 miles northwest of the State capitol in Nashville.

DRAINAGE AREA. -- 51.6 mi².

PERIOD OF RECORD. -- October 1964 to September 1975.

REMARKS:

FLOW DURATION

1

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.43	0.54	0.57	0.82	1.48	2.36
80	70	60	50	40	30
4.74	8.15	14.0	21.8	36.1	56.5
20	10	5	2	1	0.5
90.1	174	317	577	862	1250

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
1	0.99	0.46	0.31	0.22	
3	1.10	0.53	0.36	0.26	
7	1.33	0.61	0.41	0.30	
14	1.65	0,78	0.54	0.39	
30	2.36	1.17	0.81	0.60	
60	3.68	2.29	1.84	1.57	
120	7.36	3.88	2.98	2.47	
183	12.8	7.34	5,78	4.86	

03431700 - RICHLAND CREEK AT CHARLOTTE AVE. AT NASHVILLE, TN

LOCATION.--Lat 36⁰09'04", long 86⁰51'16", Davidson County, at Charlotte Avenue bridge on U. S. Highway 70, 3.7 miles upstream from mouth, and 4.0 miles southwest of the State capitol in Nashville.

DRAINAGE AREA. -- 24.3 mi².

PERIOD OF RECORD. -- August 1964 to September 1975.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
0.30	0.33	0.34	0.44	0.78	1.22
80	70	60	50	40	30
2.05	3.53	5.65	9.05	15.2	24.5
20	10	5	2	<u> </u>	0.5
41.9	80.2	136	250	360	501

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
I	0.48	0.28	0.21	0.16	
3	0.54	0.31	0.23	0.18	
7	0.63	0.39	0.29	0.23	
14	0.88	0.53	0.40	0.31	
30	1.44	0.87	0.61	0.44	
60	2.17	1.43	1.11	0.89	
120	4.84	2.85	2.16	1.71	
183	8.50	6.13	5,32	4.81	

03431800 - SYCAMORE CREEK NEAR ASHLAND CITY, TN

LOCATION.-- Lat 36⁰19'12", long 87⁰03'04", Cheatham County, on downstream end of right bank pier of bridge on State Highway 49, at Sycamore, 3.2 miles north of Ashland City, and 4.4 miles upstream from Spring Creek.

DRAINAGE AREA. -- 97.2 mi².

PERIOD OF RECORD. -- October 1961 to September 1975.

REMARKS:

FLOW DURATION

FLOW IN CUBIC FEET PER SECOND, WHICH WAS EQUALED OR EXCEEDED FOR PERCENTAGE OF TIME INDICATED.

99.5	99.1	99	98	95	90
11.2	11.5	11.6	12.5	14.3	16.7
80	70	60	50	40	30
21.1	26.4	34.4	47.5	67.3	101
20	10	5	2	1	0.5
151	264	449	954	1540	2320

MAGNITUDE AND FREQUENCY

PERIOD (CONSECUTIVE DAYS)	2	5	10	20	50
<u> </u>	12.3	10.1	9.50	9.14	
3	12.6	10.4	9.69	9,31	
7	13.0	10.8	10.2	9.85	
14	13.9	11.5	10.8	10.5	
30	15.9	12.7	11.7	11.1	
60	19.3	15.2	13.9	13.1	
120	24.7	19.7	18,6	18.2	
183	33.5	27.6	26.4	25.8	