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LOW - FLOW FREQUENCY
AND FLOW DURATION
OF TENNESSEE STREAMS

U. S. Geological Survey



OPEN-FILE REPORT 78-807

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

03540500 - EMORY RIVER AT OAKDALE, TN

LOCATION.--Lat 35°58'59", long 84°33'29", Morgan County, on left bank at Oakdale, 1,000 ft downstream from highway bridge, 1,100 ft downstream from Mud Lick Creek, and at mile 18.3.

DRAINAGE AREA.--764 mi².

PERIOD OF RECORD.-- July 1927 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
0.58	1.10	1.20	2.26	6.48	16.4
80	70	60	50	40	30
52.5	121	251	494	862	1320
20	10	5	2	1	0.5
2010	3530	5540	9860	14600	20900

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	5.13	1.05	0.27	0.06	0.02
3	5.54	1.14	0.29	0.07	0.03
7	6.32	1.29	0.44	0.13	0.03
14	7.80	1.81	0.70	0.25	0.07
30	15.2	3.47	1.35	0.56	0.19
60	32.0	8.48	3.90	1.96	0.86
120	100	31.9	16.3	9.02	4.43
183	224	92.1	55.7	36.0	21.6

03541300 - BITTER CREEK NEAR OAKDALE, TN

LOCATION.-- Lat 35°59'22", long 84°29'16", Morgan County, on left bank
0.2 mile upstream from bridge on U. S. Highway 27, 3.9 miles east
of Oakdale, and at mile 0.3.

DRAINAGE AREA.-- 12.6 mi².

PERIOD OF RECORD.-- April 1967 to June 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
0.13	0.16	0.16	0.22	0.35	0.58
80	70	60	50	40	30
1.23	2.70	5.18	10.3	17.1	25.7
20	10	5	2	1	0.5
38.2	68.0	112	212	363	590

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	0.09	0.04	0.03	0.02	
3	0.10	0.05	0.03	0.02	
7	0.11	0.05	0.03	0.02	
14					
30					
60					
120					
183					

03541500 - WHITES CREEK NEAR GLEN ALICE, TN

LOCATION.--Lat 35°47'49", long 84°45'37", Roane County, on left bank, 0.25 mile upstream from Black Creek, 2,200 ft upstream, from Southern Railway bridge, and 1.5 miles southwest of Glen Alice.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.-- June 1934 to September 1955.

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
0.13	0.17	0.18	0.23	0.45	1.15
80	70	60	50	40	30
4.78	12.7	26.8	55.1	110	178
20	10	5	2	1	0.5
283	532	871	1490	2170	3120

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	0.39	0.15	0.10	0.07	
3	0.42	0.16	0.10	0.07	
7	0.48	0.18	0.12	0.08	
14	0.64	0.23	0.14	0.10	
30	0.98	0.34	0.20	0.13	
60	2.13	0.66	0.35	0.21	
120	10.7	2.76	1.25	0.63	
183	26.0	9.88	5.71	3.56	

03543500 - SEWEE CREEK NEAR DECATUR, TN

LOCATION.-- Lat 35°34'53", long 84°44'53", Meigs County, on right bank 0.3 mile downstream from bridge on State Highway 58, 0.5 mile downstream from Dry Fork, 5 miles north of Decatur, and at mile 5.7.

DRAINAGE AREA.-- 117 mi².

PERIOD OF RECORD.-- June 1934 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
14.3	15.6	15.9	17.1	20.4	23.8
80	70	60	50	40	30
29.9	38.6	53.0	75.7	110	165
20	10	5	2	1	0.5
250	418	670	1200	1820	2600

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	19.5	15.4	13.7	12.6	11.3
3	19.9	15.6	13.9	12.6	11.4
7	20.5	16.1	14.3	12.9	11.6
14	21.6	17.1	15.3	14.0	12.7
30	23.9	18.9	16.9	15.5	14.2
60	27.2	21.2	19.0	17.4	15.9
120	35.1	25.5	22.4	20.6	19.0
183	50.4	34.8	29.6	26.4	23.6

03556000 - TURTLETOWN CREEK AT TURTLETOWN, TN

LOCATION.--Lat 35°07'57", Long 84°20'37", Polk County, on left bank
0.5 mile north of Turtletown, 0.75 mile downstream from Nigger
Creek, and 6 miles upstream from mouth.

DRAINAGE AREA.--26.9 mi².

PERIOD OF RECORD.--April 1934 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
12.6	14.1	14.3	15.7	18.0	20.8
80	70	60	50	40	30
25.6	30.2	35.6	42.2	49.6	58.6
20	10	5	2	1	0.5
68.7	87.5	112	161	220	280

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	18.3	14.3	12.7	11.4	10.1
3	18.6	14.6	12.9	11.6	10.3
7	19.2	14.9	13.1	11.7	10.3
14	20.0	15.8	13.9	12.6	11.3
30	21.6	16.8	14.8	13.4	12.0
60	23.8	18.7	16.6	15.1	13.6
120	26.8	21.4	19.3	17.8	16.5
183	31.2	25.2	22.8	21.1	19.4

03556500 - HIWASSEE RIVER NEAR McFARLAND, TN

LOCATION.-- Lat 35°10'48", long 84°26'36", Polk County, on left bank 0.25 mile downstream from Smith Creek, 0.4 mile downstream from Appalachia powerhouse of Tennessee Valley Authority, 2.8 miles west of McFarland, and at mile 53.2.

DRAINAGE AREA.-- 1,136 mi².

PERIOD OF RECORD.-- October 1942 to September 1975.

REMARKS: Flow regulated by Chatuge, Nottely, and Hiwassee Lakes (for period of Record), and by Appalachia Lake (since February 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
97	144	149	197	390	857
80	70	60	50	40	30
1430	1880	2270	2480	2690	2880
20	10	5	2	1	0.5
3090	3380	4210	6410	8330	9700

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	105	68.7	59.5	54.6	51.0
3	292	147	99.2	70.5	47.0
7	476	235	153	103	63.6
14	733	359	220	138	75.6
30	1100	622	399	254	139
60	1290	951	812	714	618
120	1700	1400	1280	1180	1090
183	1920	1660	1550	1470	1380

03557000 - HIWASSEE RIVER NEAR RELIANCE, TN

LOCATION.-- Lat 35°13'20", long 84°31'34", Polk County, on State Highway 40, 0.5 mile downstream from Spring Creek, 2.9 miles downstream from Reliance, 8.6 miles downstream from Appalachia powerhouse of Tennessee Valley Authority, and at mile 45.0.

DRAINAGE AREA.-- 1,223 mi².

PERIOD OF RECORD.-- September 1900 to December 1913.

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
429	500	513	606	725	886
80	70	60	50	40	30
1140	1410	1740	2040	2460	2940
20	10	5	2	1	0.5
3590	5040	7000	11200	15500	22000

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	790	572	478	409	
3	799	575	479	410	
7	837	593	489	414	
14	878	619	509	431	
30	971	688	564	474	
60	1100	764	624	524	
120	1260	896	766	679	
183	1500	1070	915	812	

03559500 - OCOEE RIVER AT COPPERHILL, TN

LOCATION.--Lat 34°59'29", long 84°22'33", Polk County, on right bank
0.2 mile upstream from Fightingtown Creek, 0.4 mile downstream from
Copperhill, and at mile 37.5.

DRAINAGE AREA.-- 352 mi².

PERIOD OF RECORD.-- October 1942 to January 1971.

REMARKS:Sixty-six percent of drainage area regulated by Blue Ridge
Lake. Record includes diversion from this stream by Tennessee
Copper Co.

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
110	121	124	144	217	316
80	70	60	50	40	30
482	615	717	806	891	987
20	10	5	2	1	0.5
1120	1320	1520	1940	2470	2960

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	128	98.2	86.2	77.6	
3	169	119	98.9	84.4	
7	249	159	122	96.3	
14	327	209	159	124	
30	447	318	251	200	
60	542	411	340	284	
120	642	519	449	390	
183	703	617	576	545	

03560500 - DAVIS MILL CREEK AT COPPERHILL, TN

LOCATION.--Lat 34°59'43", long 84°22'56", Polk County, on right bank 0.1 mile upstream from mouth, 0.4 mile northwest of Louisville & Nashville Railroad station, and 0.8 mile northwest of post office at Copperhill.

DRAINAGE AREA.--5.16 mi².

PERIOD OF RECORD.-- January 1949 to September 1975.

REMARKS: Flow includes an unknown amount of diversion from other drainage basins through the sulphuric acid plant of Tennessee Copper Co. Some fluctuation due to irregular release of wastes by Tennessee Copper Co. just above gage.

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
5.39	5.79	5.90	6.46	21.0	25.6
80	70	60	50	40	30
30.3	33.9	37.5	41.1	44.6	48.3
20	10	5	2	1	0.5
53.8	96.4	121	141	156	170

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	24.8	18.4	15.3	13.0	
3	26.8	20.0	16.5	13.8	
7	28.6	21.2	17.5	14.5	
14	28.8	21.8	18.5	16.1	
30	28.8	24.2	22.8	22.0	
60	31.1	26.2	24.9	24.3	
120	33.6	28.0	26.7	26.1	
183	36.2	30.1	28.6	27.9	

03561000 - NORTH POTATO CREEK NEAR DUCKTOWN, TN

LOCATION.-- Lat 35°00'54", long 84°22'58", Polk County, on right bank 50 ft upstream from bridge on State Highway 40, 1.5 miles south of Ducktown, and 2 miles upstream from mouth.

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.-- June 1934 to September 1970.

REMARKS: Discharge includes diversion from Brush Creek and from Ocoee River. This diversion was small prior to June 1941. Some fluctuations caused by Tennessee Copper Co. plant's irregular pumpage from mines.

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
6.41	6.89	7.01	7.94	10.2	12.7
80	70	60	50	40	30
16.2	19.0	21.5	24.4	27.9	32.0
20	10	5	2	1	0.5
37.6	50.0	67.4	100	146	190

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	11.9	7.91	6.06	4.71	
3	12.4	8.53	6.65	5.26	
7	13.0	9.16	7.38	6.06	
14	13.7	10.1	8.37	7.10	
30	15.4	11.2	9.21	7.76	
60	17.9	13.0	10.7	9.00	
120	20.1	15.0	12.6	10.9	
183	22.5	16.8	14.1	12.1	

03561500 - OCOEE RIVER AT McHARG, TN

LOCATION.-- Lat 35°00'25", long 84°24'46", Polk County, 0.6 mile downstream from highway bridge, 1 mile downstream from McHarg railroad siding, 1 mile downstream from North Potato Creek, 3 miles downstream from Copperhill, and at mile 34.6.

DRAINAGE AREA.--447 mi².

PERIOD OF RECORD.--May 1917 to May 1918, December 1918 to November 1930.

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
136	152	156	196	304	395
80	70	60	50	40	30
529	660	779	926	1080	1270
20	10	5	2	1	0.5
1520	2000	2590	3460	4400	5350

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	349	215	159	121	
3	363	224	165	125	
7	385	239	176	133	
14	406	249	183	138	
30	454	286	212	161	
60	505	319	239	184	
120	616	411	325	264	
183	729	505	412	347	

03561500 - OCOEE RIVER AT McHARG, TN

LOCATION.-- Lat 35° 00' 25", long 84° 24' 46", 0.6 mile downstream from highway bridge, 1 mile downstream from McHarg railroad siding, 1 mile downstream from North Potato Creek, 3 miles downstream from Copperhill, and at mile 34.6.

DRAINAGE AREA.-- 447 mi².

PERIOD OF RECORD.-- December 1930 to October 1942.

REMARKS: Flow regulated by Blue Ridge 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
146	154	156	175	210	264
80	70	60	50	40	30
410	619	797	911	1010	1100
20	10	5	2	1	0.5
1210	1490	1880	2540	3400	4090

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	172	139	126	117	
3	201	158	143	132	
7	239	171	148	134	
14	302	205	170	148	
30	362	240	195	164	
60	470	327	272	234	
120	645	474	400	345	
183	769	614	541	486	

03562000 - BRUSH CREEK NEAR DUCKTOWN, TN

LOCATION.--Lat 35°02'12", long 84°26'09", Polk County, 100 ft downstream from bridge on U.S. Highway 64, 3 miles west of Ducktown, at mile 0.75.

DRAINAGE AREA.--14.4 mi².

PERIOD OF RECORD.-- June 1934 to September 1942.

REMARKS: Some flow diverted to North Potato Creek. Site inundated by Ocoee No. 3 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
5.25	5.46	5.51	5.96	6.59	7.69
80	70	60	50	40	30
10.1	12.2	14.8	17.7	21.4	26.2
20	10	5	2	1	0.5
33.9	47.4	66.8	115	170	243

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	5.6	5.1	5.0	*	
3	5.7	5.3	5.1	*	
7	6.1	5.4	5.2	*	
14					
30					
60					
120					
183					

* Figures cannot be determined from available data.

03563000 - OCOEE RIVER AT EMF, TN

LOCATION.-- Lat 35°05'48", long 84°32'07", Polk County, on left bank, 150 ft west of U.S. Highway 64, 700 ft downstream from Tennessee Valley Authority's Ocoee No. 2 powerplant, 0.75 mile upstream from former village of Emf (Caney Creek), 0.75 mile upstream from Big Creek, 2.4 miles south of Archville, and at mile 19.6.

DRAINAGE AREA.-- 524 mi².

PERIOD OF RECORD.-- January 1913 to November 1930..

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
190	260	265	307	368	434
80	70	60	50	40	30
550	695	840	996	1190	1410
20	10	5	2	1	0.5
1690	2250	2960	4230	5630	7100

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	366	235	180	142	
3	402	288	238	202	
7	424	305	253	214	
14	436	315	263	224	
30	492	354	289	240	
60	529	384	319	271	
120	630	470	405	360	
183	762	565	486	430	

03563000 - OCOEE RIVER AT EMF, TN

LOCATION.-- Lat 35°05'48", long 84°32'07", Polk County, on left bank, 150 feet west of U.S. Highway 64, 700 ft downstream from Tennessee Valley Authority's Ocoee No. 2 powerplant, 0.75 mile upstream from former village of Emf (Caney Creek), 0.75 mile upstream from Big Creek, 2.4 miles south of Archville, and at mile 19.6.

DRAINAGE AREA.-- 524 mi².

PERIOD OF RECORD.--December 1930 to September 1975.

REMARKS: Flow regulated by Blue Ridge Lake, Ocoee No. 3 Lake, and by powerplant 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
86.0	180	195	277	436	651
80	70	60	50	40	30
833	945	1040	1120	1210	1310
20	10	5	2	1	0.5
1480	1800	2290	3160	4050	5100

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	111	30.2	14.4	7.51	
3	292	91.1	41.3	19.4	
7	510	305	210	142	
14	630	386	271	191	
30	722	521	421	345	
60	829	637	535	454	
120	931	765	675	601	
183	991	842	768	710	

03564500 - OCOEE RIVER AT PARKSVILLE, TN

LOCATION.--Lat 35°05'48", long 84°39'15", Polk County, on right bank 0.4 mile downstream from Parksville Dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville, and at mile 11.5.

DRAINAGE AREA.--595 mi².

PERIOD OF RECORD.-- December 1911 to September 1916, March 1921 to September 1975.

REMARKS: Flow regulated by Blue Ridge Lake, Ocoee No. 3 Lake, and Lake Ocoee.

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
67.1	87.2	93.0	125	191	285
80	70	60	50	40	30
665	915	1070	1220	1380	1560
20	10	5	2	1	0.5
1810	2210	2820	3730	4900	6240

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	102	50.1	32.1	21.5	
3	209	119	87.7	68.2	
7	395	224	159	117	
14	522	312	225	167	
30	664	425	316	239	
60	812	575	454	362	
120	936	692	562	460	
183	1010	784	666	573	

03565000 - HIWASSEE RIVER ABOVE CHARLESTON, TN

LOCATION.-- Lat 35°12'33", long 84°39'31", Polk County, on right bank
0.2 mile downstream from Ocoee River, 0.3 mile upstream from
Louisville & Nashville bridge, 2.5 miles north of Benton, 15.2 miles
upstream from Charleston, and at mile 34.2.

DRAINAGE AREA.-- 2,001 mi².

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

REMARKS: Flow regulated by six reservoirs 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
940	1130	1170	1380	1810	2260
80	70	60	50	40	30
2850	3290	3600	3900	4160	4500
20	10	5	2	1	0.5
4950	6190	8160	11100	13500	16000

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	1000	668	533	440	
3	1420	1060	912	811	
7	1880	1400	1200	1050	
14	2070	1570	1360	1200	
30	2480	1900	1630	1420	
60	2760	2320	2120	1970	
120	3160	2760	2580	2440	
183	3390	2990	2810	2670	

03565040 - CHESTUEE CREEK ABOVE ENGLEWOOD, TN

LOCATION.-- Lat 35°26'24", long 84°26'51", McMinn County, on left bank
2.5 miles above Englewood, 2.7 miles above mouth of Little Chestuee
Creek and 20 ft downstream from road bridge.

DRAINAGE AREA.-- 14.8 mi².

PERIOD OF RECORD.-- January 1944 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
2.18	2.24	2.26	2.42	2.87	3.43
80	70	60	50	40	30
4.61	6.40	8.40	11.3	15.6	22.0
20	10	5	2	1	0.5
30.5	47.6	72.3	125	210	333

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	2.99	2.36	2.14	2.00	
3	3.04	2.37	2.14	2.05	
7	3.12	2.45	2.23	2.09	
14	3.28	2.50	2.24	2.15	
30	3.68	2.71	2.39	2.18	
60	4.29	3.00	2.57	2.30	
120	5.68	3.94	3.36	2.99	
183	7.08	5.16	4.55	4.18	

03565160 - MIDDLE CREEK BELOW HWY 39 NEAR ENGLEWOOD, TN

LOCATION.-- Lat 35°25'16", long 84°31'16", McMinn County, on left bank 1.8 miles west of Englewood, 1.6 miles above junction with Chestvee Creek and 0.5 mile below Highway 39 bridge.

DRAINAGE AREA.-- 32.7 mi².

PERIOD OF RECORD.-- January 1944 to October 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
7.52	7.97	8.08	8.48	9.53	11.1
80	70	60	50	40	30
13.6	17.5	22.6	28.8	38.4	51.9
20	10	5	2	1	0.5
72.2	109	145	222	330	488

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	8.90	7.76	7.38	7.15	
3	9.14	7.85	7.38	7.08	
7	9.30	7.93	7.45	7.14	
14	9.57	8.17	7.71	7.43	
30	10.7	8.77	8.09	7.66	
60	12.3	9.74	8.81	8.19	
120	15.5	11.8	10.4	9.53	
183	18.0	14.3	13.0	12.2	

03565120 - CHESTUEE CREEK AT ZION HILL, TN

LOCATION.--Lat 35°24'05", long 84°31'22", McMinn County, on left bank, 2.5 miles southwest of Englewood, 2.1 miles above confluence with Middle Creek, and 2,000 ft downstream from road bridge.

DRAINAGE AREA.--37.8 mi².

PERIOD OF RECORD.-- January 1944 to December 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
7.51	7.95	8.07	8.52	9.42	11.0
80	70	60	50	40	30
14.0	18.0	22.9	29.7	40.0	55.1
20	10	5	2	1	0.5
75.5	116	175	300	445	643

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	9.32	7.67	7.09	6.71	
3	9.42	7.80	7.23	6.85	
7	9.56	7.95	7.38	7.02	
14	9.99	8.15	7.50	7.08	
30	11.0	8.92	8.15	7.64	
60	12.9	9.95	8.89	8.19	
120	16.0	12.3	10.9	10.1	
183	19.0	15.4	14.2	13.4	

03565250 - CHESTUEE CREEK AT DENTVILLE, TN

LOCATION.--Lat 35°16'58", long 84°36'32", McMinn County, on left bank at highway bridge at Dentville, 1.2 miles downstream from Big Foot Branch and 18.1 miles above mouth.

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.-- January 1944 to December 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
23.2	24.6	24.9	26.6	29.1	33.7
80	70	60	50	40	30
44.0	56.2	72.8	93.7	128	176
20	10	5	2	1	0.5
251	378	537	837	1230	1800

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	29.0	23.5	21.6	20.4	
3	29.2	23.8	21.9	20.8	
7	29.7	24.1	22.1	20.9	
14	30.8	24.7	22.6	21.3	
30	34.7	27.4	24.7	23.0	
60	39.7	30.3	27.0	24.8	
120	48.5	37.3	33.5	31.1	
183	57.8	46.1	42.4	40.3	

03565300 - SOUTH CHESTUEE CREEK NEAR BENTON, TN

LOCATION.-- Lat 35°10'02", long 84°42'59", Polk County, on downstream right wingwall of county highway bridge, 1,000 ft downstream from Climer Branch, 2.4 miles southwest of Benton Station, 2.8 miles north of Ocoee, and 3.6 miles west of Benton.

DRAINAGE AREA.--31.8 mi².

PERIOD OF RECORD.--October 1957 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
2.99	3.27	3.35	3.70	4.47	5.30
80	70	60	50	40	30
6.98	9.30	13.4	19.2	28.7	42.2
20	10	5	2	1	0.5
61.7	106	190	404	560	796

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	3.91	3.06	2.74	2.50	
3	4.07	3.14	2.76	2.55	
7	4.25	3.35	3.00	2.77	
14	4.58	3.56	3.16	2.88	
30	5.41	4.03	3.52	3.18	
60	6.76	4.96	4.35	3.96	
120	8.91	6.24	5.49	5.06	
183	14.2	8.98	7.25	6.17	

03565500 - OOSTANAULA CREEK NEAR SANFORD, TN

LOCATION.--Lat 35°19'39", long 84°42'19", McMinn County, on right bank
20 ft downstream from highway bridge, 1.3 miles southeast of
Sanford, 3.5 miles northeast of Calhoun, and at mile 5.7.

DRAINAGE AREA.--57.0 mi².

PERIOD OF RECORD.--October 1954 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
17.4	18.7	19.0	20.3	22.3	24.6
80	70	60	50	40	30
29.6	36.2	45.8	58.1	74.0	94.8
20	10	5	2	1	0.5
125	187	277	459	670	940

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	21.5	18.7	17.8	17.2	
3	21.7	18.9	18.0	17.4	
7	22.3	19.2	18.1	17.8	
14	22.8	19.7	18.7	18.1	
30	24.4	21.3	20.3	19.8	
60	26.5	22.8	21.6	21.0	
120	30.7	25.5	23.9	23.0	
183	36.3	29.7	27.9	26.9	

03566000 - HIWASSEE RIVER AT CHARLESTON, TN

LOCATION.--Lat 35°17'16", long 84°45'07", Bradley County, at Hiwassee Packing Plant; 250 ft downstream from old highway bridge, 250 ft upstream from Southern Railway bridge, 1,700 ft upstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.9.

DRAINAGE AREA.--2,298 mi².

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

REMARKS: Some diversions above the station for industrial and municipal water supplies. Flow regulated by five reservoirs.

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
663	860	880	1050	1380	1740
80	70	60	50	40	30
2350	2870	3430	3880	4380	5000
20	10	5	2	1	0.5
6040	8270	11400	16400	21000	26900

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	1110	737	588	485	
3	1340	890	706	577	
7	1590	1070	853	702	
14	1800	1210	959	779	
30	2060	1360	1060	849	
60	2320	1570	1230	983	
120	2740	1920	1550	1270	
183	3080	2290	1940	1690	

03566420 - WOLFTEVER CREEK NEAR OOLTEWAH, TN

LOCATION.-- Lat 35°03'43", long 85°03'59", Hamilton County, on right bank at bridge on county road, 0.6 mile downstream from Southern Railway bridge, 0.85 mile south of post office at Ooltewah, and 1.65 miles above mouth of Little Wolftever Creek.

DRAINAGE AREA.-- 18.8 mi².

PERIOD OF RECORD.--February 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
2.74	2.90	2.94	3.28	3.92	4.33
80	70	60	50	40	30
5.42	6.74	9.34	13.4	18.9	27.0
20	10	5	2	1	0.5
40.2	71.9	123	250	393	520

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	3.24	2.61	2.31	2.08	
3	3.36	2.74	2.43	2.19	
7	3.51	2.90	2.59	2.34	
14	3.96	3.40	3.09	2.84	
30	4.53	3.92	3.62	3.39	
60	5.95	4.94	4.50	4.17	
120	8.05	5.99	5.31	4.88	
183	10.6	7.22	6.07	5.33	

03567500 - SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TN

LOCATION.-- Lat 35°00'50", long 85°12'27", Hamilton County, on right bank 0.3 mile upstream from bridge on U.S. Highway 11, 0.8 mile downstream from West Chickamauga Creek, 1.5 miles south of Chickamauga, 6 miles east of the city hall in Chattanooga, and at mile 12.4.

DRAINAGE AREA.-- 428 mi².

PERIOD OF RECORD.-- October 1928 to September 1975.

REMARKS: Some diurnal fluctuation at low flow caused by small mills upstream.

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
80.7	87.4	89.2	97.0	111	124
80	70	60	50	40	30
152	185	230	296	402	555
20	10	5	2	1	0.5
813	1480	2620	4430	6500	9300

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	108	90.2	81.7	75.2	68.4
3	111	93.4	85.2	78.9	72.4
7	114	95.6	87.5	81.4	75.0
14	118	98.7	89.8	83.0	75.9
30	127	104	94.2	87.0	79.7
60	140	113	102	94.3	87.1
120	179	141	128	118	110
183	231	174	154	140	127

03568000 - TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'43", Hamilton County, on right bank at Rivermont Golf and Country Club, 0.5 mile downstream from South Chickamauga Creek, 3 miles downstream from Chickamauga Dam, 3.5 miles upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.--21,400 mi² (approximately).

PERIOD OF RECORD.--April 1874 to February 1936.

REMARKS: Unregulated. See next page for present characteristics.

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
5440	6170	6300	7070	8410	10200
80	70	60	50	40	30
13700	17500	22000	27300	33700	41800
20	10	5	2	1	0.5
53700	77800	109000	158000	192000	222000

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	7930	6110	5330	4770	4210
3	8120	6250	5470	4900	4340
7	8380	6460	5650	5070	4500
14	8880	6800	5920	5300	4680
30	9780	7450	6490	5800	5120
60	11400	8570	7410	6590	5800
120	14800	11000	9600	8600	7650
183	18600	14300	12600	11500	10300

03568000 - TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.-- Lat 35°05'12", long 85°16'43", Hamilton County, on right bank at Rivermont Golf and Country Club, 0.5 mile downstream from South Chickamauga Creek, 3 miles downstream from Chickamauga Dam, 3.5 miles upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.-- 21,400 mi² (approximately).

PERIOD OF RECORD.-- March 1936 to April 1974.

REMARKS: Since March 1936, flow regulated by increasing number of reservoirs above the 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
7950	9110	9400	11000	136000	16700
80	70	60	50	40	30
21000	24500	27000	29500	32700	367000
20	10	5	2	1	0.5
42800	56500	82100	116000	143000	164000

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	10500	6600	4730	3420	
3	12800	9610	8170	7100	
7	15700	11800	9920	8480	
14	17400	13400	11500	9960	
30	19800	15500	13300	11600	
60	21800	17300	15000	13200	
120	24600	19800	17100	14900	
183	26400	21400	18600	16300	

03571000 - SEQUATCHIE RIVER NEAR WHITWELL, TN

LOCATION.-- Lat 35°12'22", long 85°29'48", Marion County, on right bank 15 ft downstream from highway bridge, 1.5 miles east of Whitwell, 3 miles upstream from bridge on State Highway 27; 4.5 miles downstream from Griffith Creek, and at mile 25.1.

DRAINAGE AREA.-- 402 mi² (includes 18 mi² without surface drainage).

PERIOD OF RECORD.-- January 1921 to September 1975.

REMARKS: Prior to 1950 some diurnal fluctuation caused by small mills 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
31.5	33.7	34.3	39.2	48.4	62.2
80	70	60	50	40	30
95.8	138	204	328	498	715
20	10	5	2	1	0.5
1050	1780	2770	4510	6150	7940

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	48.4	34.2	28.6	24.7	20.9
3	49.7	35.6	30.0	26.1	22.4
7	51.6	37.1	31.5	27.6	23.8
14	54.3	38.6	32.5	28.3	24.3
30	59.7	41.4	35.0	30.9	27.2
60	71.4	48.0	40.4	35.7	31.6
120	111	70.0	56.1	47.3	39.5
183	169	107	85.2	71.2	58.7

03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN.

LOCATION.-- Lat 35°00'41", long 85°41'51", Marion County, on right bank 150 ft upstream from South Pittsburg Ferry landing on Tennessee State Highway 156, 0.5 mile downstream from Battle Creek, 0.5 mile east of South Pittsburg, 4.6 miles downstream from Sequatchie River, 6.5 miles downstream from Nickajack Dam, and at mile 418.2.

DRAINAGE AREA.-- 22,640 mi² (approximately).

PERIOD OF RECORD.-- October 1935 to September 1975.

REMARKS: Since March 1936, flow regulated by indreasing number of reservoirs above the 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
8900	10000	10200	12100	15000	17700
80	70	60	50	40	30
22100	25500	28300	31000	34600	39300
20	10	5	2	1	0.5
45800	62100	88400	126000	155000	178000

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	10700	7210	5660	4550	
3	13800	10600	9220	8170	
7	16600	12800	11000	9650	
14	18100	14200	12300	10900	
30	20300	16000	13900	12300	
60	22500	18000	15700	13800	
120	25200	20200	17500	15400	
183	27000	21600	18900	16700	

03578000 - ELK RIVER NEAR PELHAM, TN

LOCATION.--Lat 35°17'48", long 85°52'12", Grundy County, on right bank at downstream side of bridge on U.S. Highway 41, 1.1 miles southeast of Pelham, 1.8 miles upstream from Caldwell Creek, and at mile 194.2.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--December 1951 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
1.52	1.72	1.75	2.00	2.65	4.11
80	70	60	50	40	30
8.22	16.2	30.2	53.2	87.3	127
20	10	5	2	1	0.5
187	331	552	943	1334	1800

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	3.02	1.71	1.27	0.99	
3	3.13	1.78	1.32	1.04	
7	3.31	1.87	1.39	1.09	
14	3.70	2.09	1.55	1.21	
30	4.61	2.53	1.86	1.45	
60	6.45	2.88	1.95	1.68	
120	12.1	5.25	3.39	2.35	
183	27.6	13.8	9.15	6.36	

03578500 - BRADLEY CREEK NEAR PRAIRIE PLAINS, TN

LOCATION.-- Lat 35°21'21", long 85°58'45", Coffee County, on left bank 165 ft downstream from highway bridge, 1.1 miles northwest of Prairie Plains, and 3.6 miles upstream from mouth.

DRAINAGE AREA.-- 41.3 mi².

PERIOD OF RECORD.-- December 1951 to September 1959.

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
3.21	3.30	3.32	3.56	4.10	4.76
80	70	60	50	40	30
7.34	10.3	15.4	23.5	39.5	57.7
20	10	5	2	1	0.5
84.8	145	233	429	670	990

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	7.2	4.5	3.2	2.2	
3	7.5	5.0	3.8	3.0	
7	7.8	5.6	4.4	3.6	
14					
30					
60					
120					
183					

03579100 - ELK RIVER NEAR ESTILL SPRINGS, TN

LOCATION.-- Lat 35°17'08", long 86°06'20", Franklin County, on left bank 8 ft downstream and 8 ft shoreward from corner of bridge on Corn Mill Road, 1.7 miles northeast of Estill Springs, 2.7 miles downstream from Elk River Dam, 4.0 miles upstream from bridge on U.S. Highway 41-A and at
DRAINAGE AREA.-- 275 mi². mile 167.3.

PERIOD OF RECORD.--January 1921 to April 1952.

REMARKS: Unregulated. See next page for present characteristics.

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
29.3	36.2	37.4	42.5	49.5	55.3
80	70	60	50	40	30
69.3	101	147	220	322	466
20	10	5	2	1	0.5
679	1130	1720	2740	3710	4900

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	48.9	32.5	24.1	17.9	12.1
3	51.3	36.5	28.8	23.0	17.1
7	52.8	39.2	32.4	27.2	21.9
14	53.9	42.4	37.0	33.0	28.8
30	57.0	46.1	41.9	39.0	36.3
60	64.9	49.6	44.2	40.7	37.5
120	95.3	66.0	55.4	48.4	42.0
183	130	86.2	70.2	59.5	49.7

03579100 - ELK RIVER NEAR ESTILL SPRINGS, TN

LOCATION.-- Lat 35°17'08", long 86°06'20", Franklin County, on left bank 8 ft downstream and 8 ft shoreward from corner of bridge on Corn Mill Road, 1.7 miles northeast of Estill Springs, 2.7 miles downstream from Elk River Dam, 4.0 miles upstream from bridge on U.S. Highway 41-A, and at mile 167.3.

DRAINAGE AREA.-- 275 mi².

PERIOD OF RECORD.-- May 1952 to September 1975.

REMARKS: Flow regulated by Woods Reservoir 2.7 miles upstream.

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
23.4	25.0	25.4	28.2	34.4	44.0
80	70	60	50	40	30
64.3	89.5	130	212	322	458
20	10	5	2	1	0.5
682	1130	1810	3130	4240	5510

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	29.5	22.6	20.0	18.2	16.5
3	31.1	23.6	20.8	18.9	17.1
7	32.7	24.1	21.0	19.0	17.5
14	36.7	26.7	23.2	21.0	19.1
30	43.8	30.6	26.0	23.1	20.4
60	66.2	42.4	33.9	28.3	23.1
120	101	71.4	60.6	53.4	46.7
183	150	104	86.9	74.9	63.6

03580300 - BOILING FORK CREEK ABOVE WINCHESTER, TN

LOCATION.--Lat 35°11'14", long 86°05'42", Franklin County, on left bank, on downstream end of left pier of county road bridge, 0.65 mile upstream from Louisville & Nashville Railroad bridge, 1.0 mile east of Winchester, 2.3 miles upstream from mouth of Wagner Creek, and 5.2 miles above mouth.

DRAINAGE AREA.-- 55.9 mi².

PERIOD OF RECORD.-- August 1962 to September 1970.

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
3.70	3.78	3.80	4.01	4.70	5.81
80	70	60	50	40	30
8.60	13.6	22.8	34.4	53.0	78.5
20	10	5	2	1	0.5
114	196	304	570	760	1100

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	2.3	1.2	1.0	0.8	
3	2.5	1.3	1.0	0.9	
7	2.7	1.4	1.1	1.0	
14					
30					
60					
120					
183					

03580750 - ELK RIVER BELOW TIMS FORD DAM, TN

LOCATION.-- Lat 35°11'32", long 86°16'52", Franklin County, on right bank about 150 ft upstream from bridge on State Highway 50, about 0.3 mile downstream from Tims Ford Dam, 3.6 miles north of Lexie Crossroads, 9.5 miles west of Winchester, and at mile 133.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--April 1966 to September 1975.

REMARKS: Flow regulated by Woods Reservoir and Tims Ford 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
6.18	7.82	8.14	12.6	27.4	77.8
80	70	60	50	40	30
174	256	330	469	682	1040
20	10	5	2	1	0.5
1580	2680	3710	4930	6900	8530

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	35	6.3	3.1	*	
3	43	7.1	3.2	*	
7	53	7.7	3.5	*	
14					
30					
60					
120					
183					

* Figures cannot be determined from available data.

03582000 - ELK RIVER ABOVE FAYETTEVILLE, TN

LOCATION.-- Lat 35°08'04", long 86°32'23", Lincoln County, on right bank 100 ft downstream from highway bridge, 1.75 miles southeast of Fayetteville, 4 miles upstream from Norris Creek, and at mile 93.9.

DRAINAGE AREA.-- 827 mi².

PERIOD OF RECORD.-- September 1934 to April 1952.

REMARKS: Prior to August 1949, diurnal fluctuations at low flow caused by powerplants upstream.

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	152	153	158	176	196
80	70	60	50	40	30
246	321	433	617	930	1350
20	10	5	2	1	0.5
1930	3180	4920	8200	11000	14300

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	168	149	143	139	
3	170	151	144	140	
7	174	153	146	142	
14	179	156	148	143	
30	190	163	153	147	
60	217	176	162	154	
120	304	233	207	189	
183	421	306	261	229	

03582000 - ELK RIVER ABOVE FAYETTEVILLE, TN

LOCATION.-- Lat 35°08'04", long 86°32'23", Lincoln County, on right bank 100 ft downstream from highway bridge, 1.75 miles southeast of Fayetteville, 4 miles upstream from Norris Creek, and at mile 93.9.

DRAINAGE AREA.-- 827 mi².

PERIOD OF RECORD.-- May 1952 to September 1975.

REMARKS: Flow regulated by Woods Reservoir (since 1952), and Tims Ford Lake since December 1970.

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
128	138	141	149	173	211
80	70	60	50	40	30
287	384	515	702	1010	1430
20	10	5	2	1	0.5
2060	3380	5170	8730	11400	15000

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	147	109	94.4	83.9	
3	153	118	103	93.2	
7	169	127	111	98.8	
14	187	148	135	126	
30	221	167	146	132	
60	257	191	166	149	
120	345	253	219	197	
183	445	314	271	243	

03582500 - ELK RIVER NEAR FAYETTEVILLE, TN

LOCATION.--Lat 35° 08'10", long 86° 35'15", Lincoln County, at old dam and powerhouse of Tennessee Electric Power Co., 2 miles southwest of Fayetteville, and at mile 88.4.

DRAINAGE AREA.--897 mi².

PERIOD OF RECORD.-- October 1925 to September 1934.

REMARKS: Diurnal fluctuations caused by powerplants above stations.

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
102	108	110	129	171	207
80	70	60	50	40	30
290	409	573	774	1050	1430
20	10	5	2	1	0.5
2020	3430	5390	9370	14000	20000

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	160	110	94	78	
3	170	120	100	85	
7	180	130	110	92	
14					
30					
60					
120					
183					

03583000 - BRADSHAW CREEK AT FRANKEWING, TN

LOCATION.--Lat 35°11'31", long 86°50'43", Giles County, on downstream side of second pier from right abutment of bridge on U. S. Highway 64, 0.4 mile east of Frankewing, 2.2 miles downstream from Little Bradshaw Creek, and 10.5 miles east of Pulaski.

DRAINAGE AREA.-- 36.5 mi².

PERIOD OF RECORD.-- December 1954 to September 1961, March 1966 to September 1968.

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	0.02	0.21	0.72
80	70	60	50	40	30
2.77	5.57	10.0	17.2	26.9	40.5
20	10	5	2	1	0.5
65.5	129	235	482	820	1200

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	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					

03583300 - RICHLAND CREEK NEAR CORNERSVILLE, TN

LOCATION.-- Lat 35°19'10", long 86°52'20", Marshall County, on left bank, on downstream end of pier of bridge on U. S. Highway 31A, 0.1 mile downstream from Corn Creek, 1.7 miles downstream from Louisville & Nashville Railroad bridge, 2.0 miles downstream from Town Creek, and 3.4 miles southwest of Cornersville.

DRAINAGE AREA.--47.5 mi².

PERIOD OF RECORD.-- August 1961 to September 1968.

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
0.81	0.86	0.87	1.01	1.25	1.88
80	70	60	50	40	30
3.82	7.01	11.3	18.3	29.9	49.7
20	10	5	2	1	0.5
82.3	165	354	725	1140	1590

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	0.56	0.25	0.19	0.14	
3	0.60	0.28	0.20	0.15	
7	0.70	0.31	0.24	0.16	
14					
30					
60					
120					
183					

03583500 - WEAKLEY CREEK NEAR BODENHAM, TN

LOCATION.-- Lat 35°15'08", long 87°10'08", Giles County, on right downstream bank at wingwall of highway bridge, 1.6 miles northwest of Bodenham, 1.6 miles downstream from Muckle Creek, 4.9 miles upstream from mouth, and 8.7 miles northwest of Pulaski.

DRAINAGE AREA.-- 24.4 mi².

PERIOD OF RECORD.-- October 1955 to September 1961, March 1966 to September 1968.

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
4.50	4.62	4.66	4.98	5.55	6.20
80	70	60	50	40	30
8.06	10.6	13.1	16.8	22.6	32.2
20	10	5	2	1	0.5
49.6	78.3	121	223	320	450

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	5.2	4.0	3.3	3.0	
3	5.3	4.3	3.6	3.1	
7	5.4	4.4	3.9	3.5	
14					
30					
60					
120					
183					

03584000 - RICHLAND CREEK NEAR PULASKI, TN

LOCATION.-- Lat 35°12'51", long 87°06'05", Giles County, on right bank 1,200 ft upstream from bridge on U. S. Highway 64, 1 mile downstream from Weakley Creek, 4 miles west of Pulaski, and at mile 30.1.

DRAINAGE AREA.-- 366 mi².

PERIOD OF RECORD.-- May 1934 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
18.0	19.8	20.3	24.3	31.4	41.1
80	70	60	50	40	30
61.8	91.5	131	195	304	485
20	10	5	2	1	0.5
771	1410	2350	4340	6000	8770

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	24.5	16.9	14.3	12.7	
3	25.3	17.4	14.7	13.0	
7	27.2	18.5	15.6	13.7	
14	30.7	20.8	17.4	15.1	
30	39.2	26.1	21.4	18.4	
60	54.9	34.7	27.6	22.9	
120	80.0	52.6	43.5	37.8	
183	117	81.9	70.1	62.5	

03584500 - ELK RIVER NEAR PROSPECT, TN

LOCATION.-- Lat 35° 01' 39", long 86° 56' 52", Giles County, on right bank 50 ft upstream from highway bridge, 1.1 miles downstream from Richland Creek, 3.2 miles east of Prospect, 5.4 miles upstream from Ford Creek, 7.9 miles upstream from Tennessee-Alabama State line, and at mile 41.5.

DRAINAGE AREA.-- 1,784 mi².

PERIOD OF RECORD.-- July 1904 to January 1908, February 1919 to April 1952.

REMARKS: Unregulated. See next page for present characteristics

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
144	169	174	199	242	295
80	70	60	50	40	30
428	612	896	1330	1920	2730
20	10	5	2	1	0.5
4050	7290	12000	20500	25700	31400

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	230	168	138	117	94.6
3	240	179	150	129	107
7	251	187	159	137	116
14	266	197	166	143	121
30	301	216	181	156	133
60	377	257	213	183	155
120	606	391	312	260	212
183	852	546	433	358	288