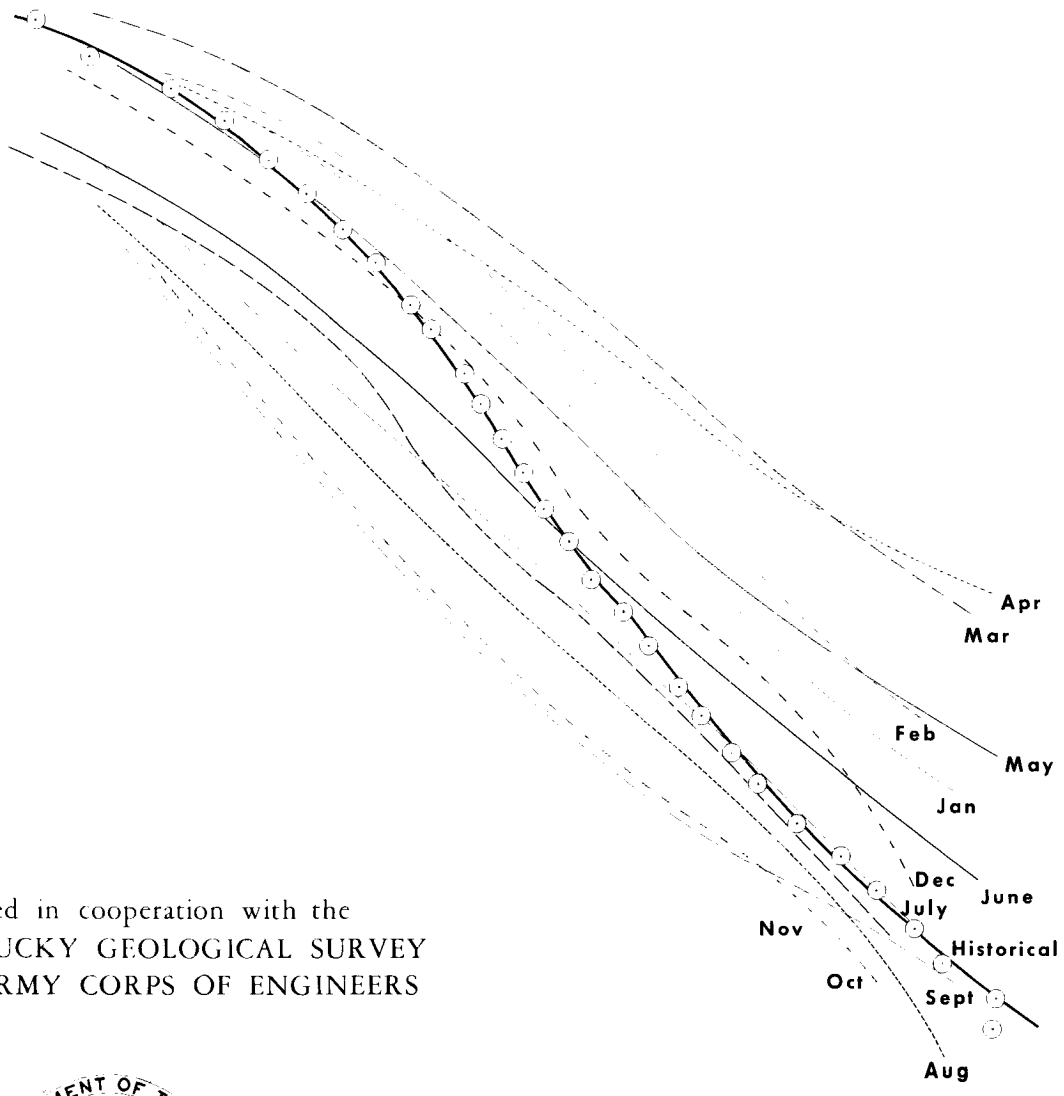
FLOW DURATION AT SELECTED STREAM-SITES IN KENTUCKY

U.S. GEOLOGICAL SURVEY
OPEN-FILE REPORT 80-1221



Prepared in cooperation with the
KENTUCKY GEOLOGICAL SURVEY
U.S. ARMY CORPS OF ENGINEERS

USGS
science for a changing world

FLOW DURATION AT SELECTED STREAM-SITES IN KENTUCKY

By F. Quinones, J. Kiesler, and J. Macy

U.S. GEOLOGICAL SURVEY

Open-File Report 80-1221

Prepared in cooperation with

THE KENTUCKY GEOLOGICAL SURVEY
AND
U.S. ARMY CORPS OF ENGINEERS

1980

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

Open-File Report

For additional information write to:

U.S. Geological Survey
Room 572 Federal Building
Louisville, Kentucky 40202

CONTENTS

ILLUSTRATIONS

FACTORS FOR CONVERTING U.S. CUSTOMARY UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the U.S. customary units published herein to the International System of Units (SI). Subsequent reports will contain both the U.S. customary and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply U.S. customary units	By	To obtain SI units
	Length	
feet (ft)	3.048×10^{-1}	meters (m)
	Area	
square miles (mi^2)	2.59	square kilometers (km^2)
	Volume	
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)

FLOW DURATION AT SELECTED STREAM SITES IN KENTUCKY

By

Ferdinand Quinones, Jay Kiesler, and Jo Ann Macy

ABSTRACT

This report presents flow-duration tables for selected stream sites in Kentucky. The data includes historical duration tables based on daily mean discharges, and tables based on mean daily discharges for individual months for the period of record. Tables for before and during regulation periods are presented.

The U.S. Geological Survey, Water Resourves Division, has collected streamflow data throughout the State of Kentucky since 1907. Streamflow records through 1970 have been published in a series of water-supply papers entitled "Surface Water Supply of the United States." Since 1961 streamflow data have been released in annual state reports.

The published records include daily mean discharges, and values of annual maximum, minimum and average discharges. The data are stored in the Water Resources Division National Water Storage and Retrieval System (WATSTORE), and are readily available to water-data users. The computer system provides a variety of statistical programs to analyze the data. A flow duration analysis is one of these programs.

Flow durations have been used for many years by scientists, engineers and water-planners involved in the design, application and management of water resources. There is a continuous demand for flow duration data for specific sites throughout Kentucky.

This report summarizes the flow duration data for all streamflow sites in the State with more than 3 years of continuous record. A continuous recording station is one at which systematic observations of stage and discharge are obtained by means of recording and non-recording instruments and periodic measurements of flow. From such a record, daily mean discharges are obtained and published as indicated above.

The data includes all historical records available in WATSTORE through the end of the 1978 water year (water years end on September 30). Data at some sites may contain only medium to high flows. The durations are valid for the specified period and data used. Care should be used when using the data for;

03216000 Ohio River at Ashland, Kentucky
03238000 Ohio River at Maysville, Kentucky
03255000 Ohio River at Cincinnati, Ohio
03220000 Ohio River at Evansville, Indiana
03384500 Ohio River at Golconda, Illinois

Duration tables based on historical monthly records are also provided to show the seasonal variation in the frequency of the flows. Additional information on other statistical programs available may be obtained from the District Chief, U.S. Geological Survey, WRD, Room 572, 600 Federal Place, Louisville, Kentucky 40202 (phone: 502-582-5241).

SIGNIFICANCE AND INTERPRETATION OF FLOW DURATION CURVES

Flow duration curves have been used since the early 1900's (Foster, 1924). The techniques used by the U.S. Geological Survey are described by Searcy (1959). The duration curve is a cumulative frequency curve that indicates the percent of the time that a particular parameter has been equalled or exceeded. Statistically, the flow-duration curve is an integral of the frequency of occurrence of the analyzed parameter. The duration-curve shows no chronological order and applies only to the period of record for which the data was collected.

Flow duration curves can be prepared from daily, weekly, monthly, or other frequencies of discharge measurements or computations. The data points are then arranged according to magnitude in a range of classes, and the percent of the time each class exceeds the total is computed. A curve can be drawn through the points, or the data can be presented in tabular form as in this report.

A duration curve should be used only for the period for which the data was collected, although at sites where long-term streamflow records are available the curve may be used to estimate future discharge probabilities. For stations with 5 or less years of record, significant changes in the distribution of flows as shown from a curve may result from a very wet or very dry year. As the length of record increases, extreme events are documented and included in the curve.

The following are typical applications of flow duration curves:

1. In conjunction with suspended-sediment concentration and load curves, the sediment load at a stream site can be computed (Miller, 1951).
2. Estimation of long-term flow duration at a station with short-term records. An index station with a long-term flow duration is necessary (Searcy, 1959).
3. Computation of statistical variables such as the mean, mode and median (Cross & Hedges, 1959).
4. Study of basin characteristics, including geologic effects, on the basis of the shape of the curve (Searcy, 1959).
5. Water-quality studies, including computation of stream-loads of chemical components and determination of maximum permissible waste allocations.
6. Long-term changes in water-quality parameters, when combined with a concentration-duration curve of the parameter of interest (Quinones, 1973).

FLOW DURATIONS BASED ON HISTORICAL AND INDIVIDUAL MONTHLY RECORDS

Normally the flow duration curve for a particular station is based on all the observations of flow throughout the year for the period of record available. Although instantaneous observations are used occasionally, they limit the range of sampling and do not provide a well defined frequency. The mean daily discharges from a recording streamflow station provide the necessary sampling to define the curve through all the flow regimes. As indicated before, a curve computed in this manner fails to take into account time and seasonal effects. The seasonal nature of streamflow can be defined from a partial duration curve based on daily mean discharges from the historical records of individual months. In the partial duration flows, as an example, all the daily mean discharges for all the January months for which records are available, are used to define a January curve.

Figure 1 shows both the historical (long-term) and individual months duration curves for the Ohio River at Louisville (station 03294500). The seasonal nature of the flow at this site, affected by significant regulation, is evident from the individual curves. This is more evident for periods of low flow. As an example, the 50 percent duration from the historical record is about 49,000 cubic feet per second (ft^3/s). At the peak of the spring flow in April, the same duration is about 180,000 ft^3/s, while during the low-flow season (September) is only about 20,000 ft^3/s).

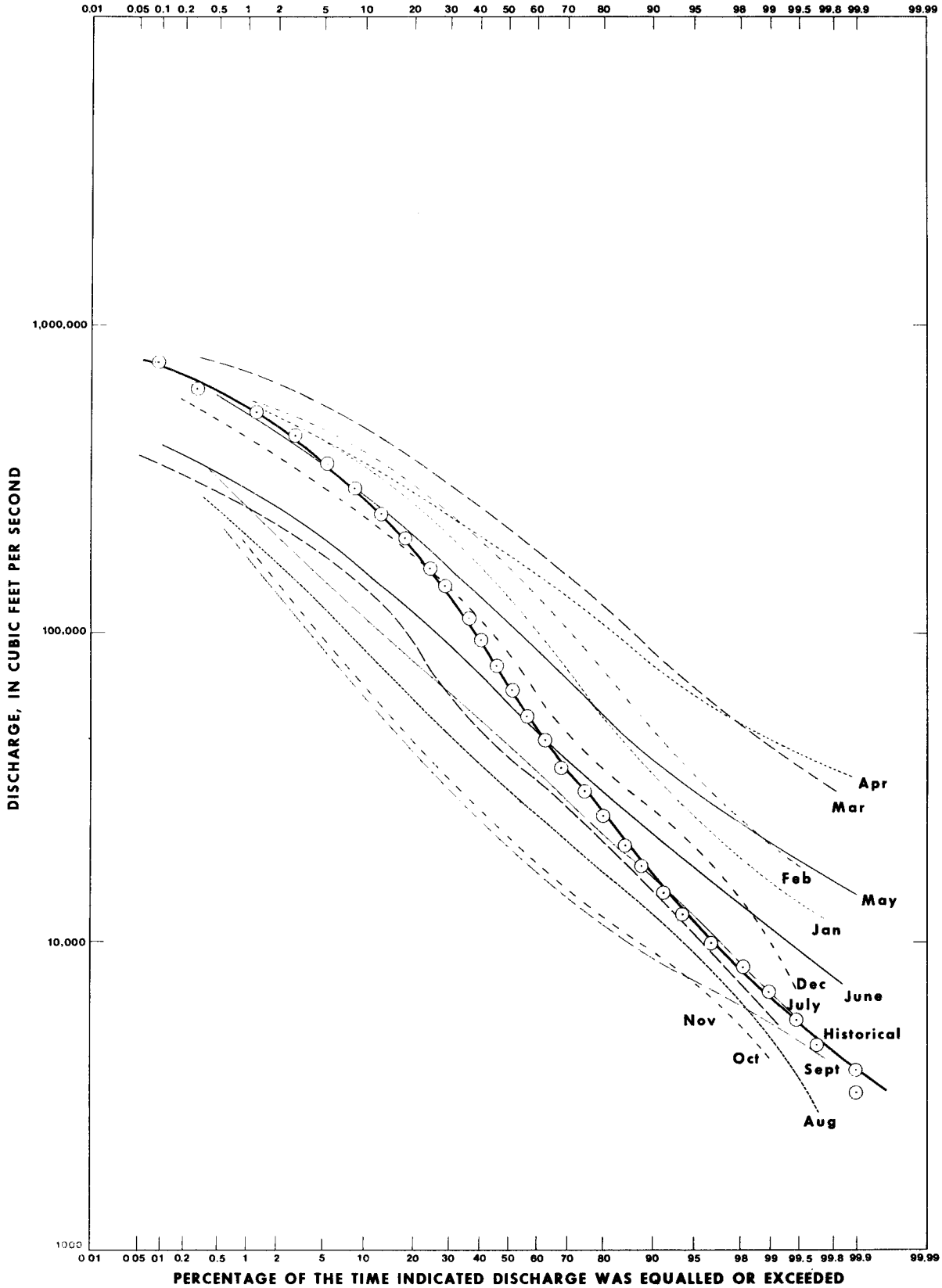


Figure 1.-- Flow duration curves for the Ohio River at Louisville (03294500) based on historical mean daily discharges and individual months, 1928-78.

Regulation has a significant effect on the flow regime at a specific stream site. Normally, high flows are reduced in magnitude and low flows are augmented. The duration curve reflects this effects in response to the magnitude and type of regulation.

Figure 2 shows flow-duration curves for the Green River near Campbellsville (station number 03306000) before and after regulation. A historical curve, including both periods is also shown. The effects of the regulation are evident from the curves.

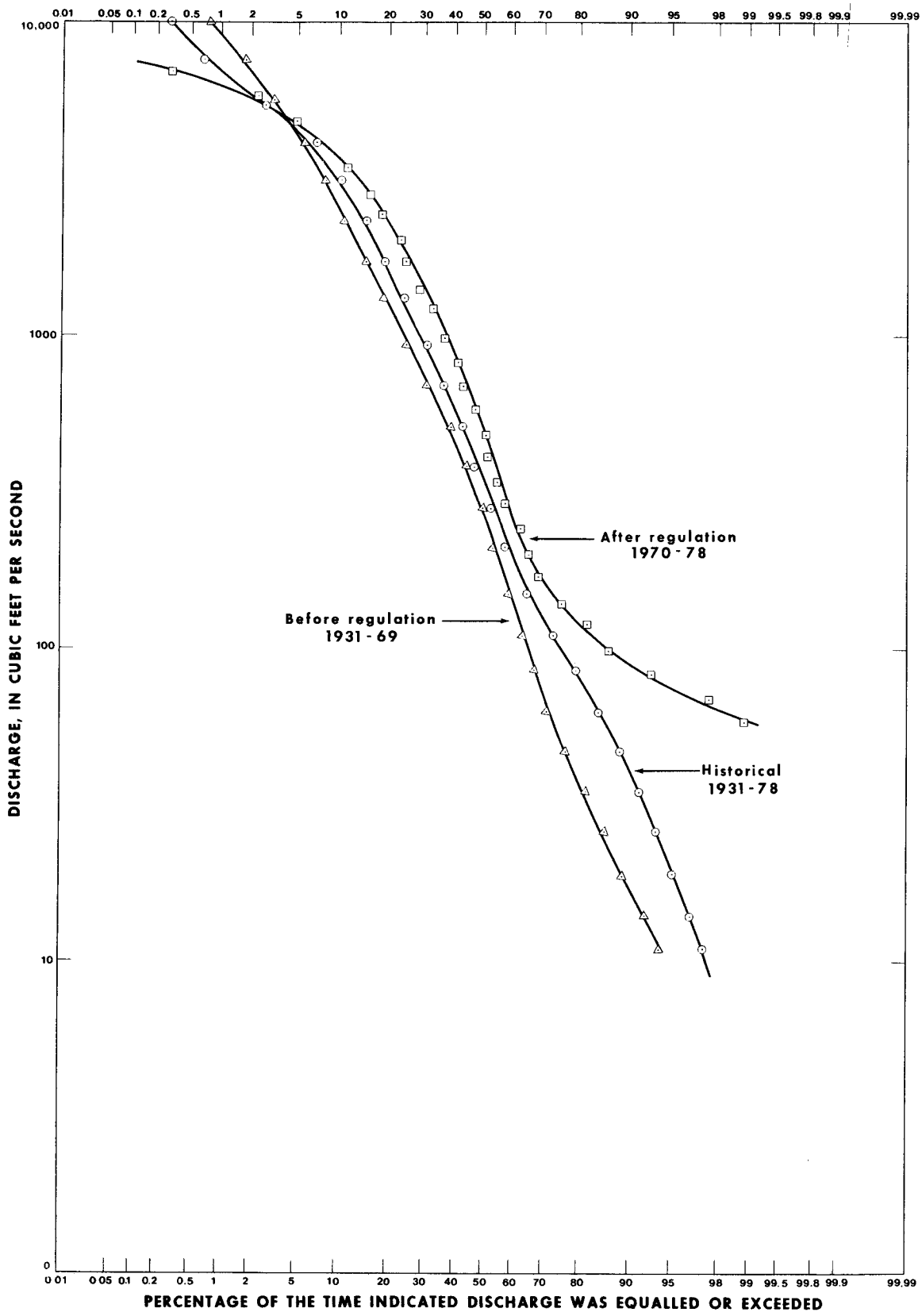


Figure 2.-- Flow duration curves at Green River near Campbellsville (03306000).

FLOW DURATION DATA

Flow duration data for most of the active and discontinued stream-gaging stations operated by the U.S. Geological Survey in Kentucky are shown in the appendix.

The general location of the stations are shown in figure 3 and listed in table 1. Station numbers in figure 3 and on each table are based on a complete 8 digit number such as "03218000", where the numbers "03" represents the part number for most of the stations in the State of Kentucky, and the digits "218000" represent the station number. A small number of stations in western Kentucky are represented by the "07" part number. The tables in the appendix are listed in a downstream order.

The tables were assembled from the output of computer program A969 (Statistics), with options for monthly durations. The classes used for ordering the data prints are computed by the program itself. At all sites where regulation is significant, three tables are shown. These include before and during regulation periods in addition to the historical record.

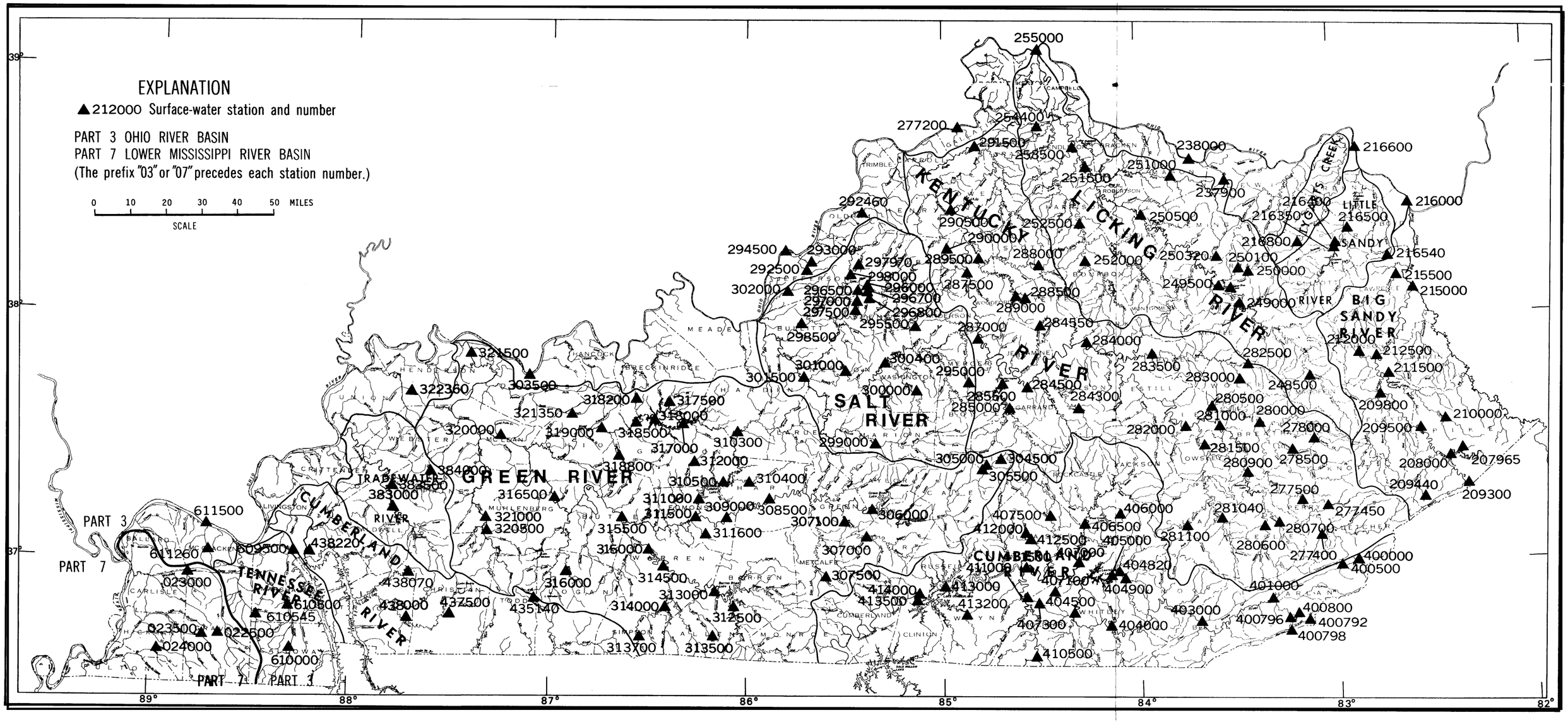


Figure 3.--Location of gaging stations in Kentucky used in this report.

Table 1.-List of stations for which data are published

Station Number	Station Name	Latitude	Longitude	Drainage Area Square Miles	Begin Year	End Year
03207962	Dicks Fork at Phyllis, Ky.	372657	0822016	.82	1975	
03207965	Grapevine Creek near Phyllis, Ky.	372557	0822114	6.20	1973	
03208000	Levisa Fork below Fishtrap Dam, near Millard, Ky.	372458	0822515	393.00	1938	
03209300	Russell Fork at Elkhorn City, Ky.	371814	0822035	554.00	1957	
03209400	Shelby Creek at Dorton, Ky.	371638	0823444	12.60	1971	1974
03209500	Levisa Fork at Pikeville, Ky.	372835	0823105	1237.00	1937	
03209800	Levisa Fork at Prestonsburg, Ky.	374015	0824638	1701.00	1963	
03210000	Johns Creek near Meta, Ky.	373401	0822729	56.30	1941	
03211500	Johns Creek near Van Lear, Ky.	374437	0824327	206.00	1939	
03212000	Paint Creek at Staffordsville, Ky.	375005	0825215	103.00	1950	
03212500	Levisa Fork at Paintsville, Ky.	374855	0824730	2143.00	1928	
03215000	Big Sandy River at Louisa, Ky.	381016	0823805	3892.00	1938	1976
03215500	Blaine Creek at Yatesville, Ky.	380840	0824105	217.00	1915	
03216000	Ohio River at Ashland, Ky.	382852	0823812	60750.00	1938	1975
03216350	Little Sandy River below Grayson Dam, near Leon, Ky.	381518	0825925	196.00	1966	
03216400	Little Sandy River at Leon, Ky.	381711	0825839	255.00	1961	
03216500	Little Sandy River at Grayson, Ky.	381948	0825622	400.00	1938	
03216540	East Fork Little Sandy River near Fallsburg, Ky.	381401	0824232	12.00	1972	
03216600	Ohio River at Greenup Dam, near Greenup, Ky.	383848	0825138	62000.00	1968	
03216800	Tygarts Creek at Olive Hill, Ky.	381757	0831025	59.60	1957	
03217000	Tygarts Creek near Greenup, Ky.	383351	0825708	242.00	1940	
03237900	Cabin Creek near Tollesboro, Ky.	383404	0833214	22.40	1972	
03238000	Ohio River at Maysville, Ky.	383855	0834549	70130.00	1939	1975
03248500	Licking River near Salyersville, Ky.	374503	0830504	140.00	1938	
03249000	Licking River at Yale, Ky.	380255	0832930	714.00	1937	1942
03249500	Licking River at Farmers, Ky.	380655	0833236	827.00	1928	
03250000	Triplett Creek at Morehead, Ky.	381104	0832548	47.50	1941	
03250100	North Fork Triplett Creek near Morehead, Ky.	381157	0832850	84.70	1967	
03250320	Rock Lick Creek near Sharkey, Ky.	381506	0833504	4.01	1973	
03250500	Licking River at Blue Lick Springs, Ky.	382519	0835957	1785.00	1938	1975
03251000	North Fork Licking River near Lewisburg, Ky.	383257	0834737	119.00	1946	
03251500	Licking River at McKinneysburg, Ky.	383558	0841600	2326.00	1924	
03252000	Stoner Creek at Paris, Ky.	381345	0841522	239.00	1953	
03252500	South Fork Licking River at Cynthiana, Ky.	382327	0841811	621.00	1917	
03253500	Licking River at Catawba, Ky.	384237	0841839	3300.00	1887	
03254400	North Fork Grassy Creek near Piner, Ky.	384731	0843050	13.60	1967	
03255000	Ohio River at Cincinnati, Oh.	390540	0843038	76580.00	1936	1976
03277200	Ohio River at Markland Dam, Ky.	384629	0845752	83170.00	1970	
03277400	Leatherwood Creek at Daisy, Ky.	370648	0830533	40.90	1963	
03277450	Carr Fork near Sassafras, Ky.	371352	0830210	60.60	1963	
03277520	North Fork Kentucky River at Hazard, Ky.	371448	0831055	466.00	1925	
03278000	Bear Branch near Noble, Ky.	372702	0831143	2.21	1954	
03278500	Troublesome Creek at Noble, Ky.	372636	0831306	177.00	1949	
03279000	Troublesome Creek near Clayhole, Ky.	372755	0831605	187.00	1928	1931
03280000	North Fork Kentucky River at Jackson, Ky.	373305	0832305	1101.00	1904	
03280500	North Fork Kentucky River near Airdale, Ky.	373700	0833800	1294.00	1928	1942
03280600	Middle Fork Kentucky River near Hyden, Ky.	370813	0832217	202.00	1957	
03280700	Cutshin Creek at Wooton, Ky.	370954	0831829	61.30	1957	
03280900	Middle Fork Kentucky River at Buckhorn, Ky.	372045	0832807	420.00	1939	1975
03281000	Middle Fork Kentucky River at Tallega, Ky.	373318	0833538	537.00	1930	

Note: Stations for which end year is not shown were active as of September 1979.

Table 1.-List of stations for which data are published, continued

Station Number	Station Name	Latitude	Longitude	Drainage Area Square Miles	Begin Year	End Year
03281040	Red Bird River near Big Creek, Ky.	371043	0833535	155.00	1972	
03281100	Goose Creek at Manchester, Ky.	370907	0834537	163.00	1964	
03281500	South Fork Kentucky River at Booneville, Ky.	372845	0834038	722.00	1925	
03282000	Kentucky River at Lock 14, at Heidelberg, Ky.	373319	0834606	2657.00	1902	
03282500	Red River near Hazel Green, Ky.	374844	0832750	65.80	1954	
03283000	Stillwater Creek at Stillwater, Ky.	374524	0832912	24.00	1954	
03283500	Red River at Clay City, Ky.	375152	0835559	362.00	1930	
03284000	Kentucky River at Lock 10, near Winchester, Ky.	375341	0841544	3955.00	1907	
03284300	Silver Creek near Kingston, Ky.	373751	0841648	28.60	1967	
03284500	Kentucky River at Lock 6, near Camp Nelson, Ky.	374443	0843512	4414.00	1910	1971
03284550	West Hickman Creek at Jonestown, Ky.	375830	0842954	11.00	1974	
03285000	Dix River near Danville, Ky.	373831	0843939	318.00	1942	
03285500	Dix River near Burgin, Ky.	374510	0844210	395.00	1909	1922
03287000	Kentucky River at Lock 6, near Salvisa, Ky.	375532	0844917	5102.00	1894	
03287500	Kentucky River at Lock 4, at Frankfort, Ky.	381206	0845254	5412.00	1887	
03288000	North Elkhorn Creek near Georgetown, Ky.	381220	0843049	119.00	1949	
03288500	Cave Creek near Fort Spring, Ky.	380115	0843538	2.53	1953	
03289000	South Elkhorn Creek at Fort Spring, Ky.	380235	0843735	24.00	1950	
03289500	Elkhorn Creek near Frankfort, Ky.	381607	0844853	473.00	1915	
03290000	Flat Creek near Frankfort, Ky.	381753	0845632	5.63	1951	
03290500	Kentucky River at Lock 2, at Lockport, Ky.	382620	0845748	6180.00	1925	
03291500	Eagle Creek at Glencoe, Ky.	384218	0844926	437.00	1912	1977
03292460	Harrods Creek Near LaGrange, Ky.	382650	0852433	24.10	1967	
03292500	South Fork Beargrass Creek at Louisville, Ky.	381239	0854207	17.20	1939	
03293000	Middle Fork Beargrass Creek at Louisville, Ky.	381414	0853953	18.90	1944	
03294500	Ohio River at Louisville, Ky.	381649	0854757	91170.30	1871	
03295000	Salt River near Harrodsburg, Ky.	374526	0845223	41.40	1952	
03295500	Salt River near Van Buren, Ky.	375806	0850803	196.00	1938	
03296000	Plum Creek Subwatershed no. 4 near Simpsonville, Ky.	381027	0852205	1.55	1954	1964
03296500	Plum Creek near Wilsonville, Ky.	380620	0852614	19.10	1954	
03296700	Plum Creek Subwatershed no. 15 near Wilsonville, Ky.	380544	0852441	1.03	1957	1961
03296800	Plum Creek Subwatershed no. 17 near Waterford, Ky.	380407	0852448	.52	1957	1961
03297000	Little Plum Creek near Waterford, Ky.	380344	0852545	5.15	1954	
03297500	Plum Creek at Waterford, Ky.	380305	0852555	31.80	1953	1977
03297970	Long Run near Eastwood, Ky.	381412	0852609	15.20	1972	1977
03298000	Floyds Fork at Fisherville, Ky.	381118	0852737	138.00	1944	
03298500	Salt River at Sheperdsville, Ky.	375906	0854303	1197.00	1938	
03299000	Rolling Fork near Lebanon, Ky.	372950	0851926	239.00	1938	
03300000	Beech Fork near Springfield, Ky.	374215	0850845	85.90	1951	
03300400	Beech Fork at Maud, Ky.	374958	0851746	436.00	1972	
03301000	Beech Fork at Bardstown, Ky.	374749	0852851	669.00	1939	
03301500	Rolling Fork near Boston, Ky.	374602	0854214	1299.00	1938	
03302000	Pond Creek near Louisville, Ky.	380711	0854745	64.00	1944	
03303500	Ohio River at Owensboro, Ky.	374642	0870632	97200.00	1936	1954
03304500	McGills Creek near McKinney, Ky.	372638	0844152	2.14	1950	
03305000	Green River near McKinney, Ky.	372519	0844501	22.40	1950	
03305500	Green River near Mount Salem, Ky.	372440	0844511	36.30	1954	
03306000	Green River near Campbellsville, Ky.	371425	0852050	682.00	1930	
03306500	Green River at Greensburg, Ky.	371513	0853011	736.00	1939	1975
03307000	Russell Creek near Columbia, Ky.	370709	0852338	188.00	1939	
03307100	Russell Creek near Gresham, Ky.	371005	0852811	265.00	1963	

Note: Stations for which end year is not shown were active as of September 1979.

Table 1.-List of stations for which data are published, continued

Station Number	Station Name	Latitude	Longitude	Drainage Area Square Miles	Begin Year	End Year
03307500	South Fork Little Barren River near Edmonton, Ky.	365827	0853611	18.30	1940	
03308500	Green River at Munfordville, Ky.	371605	0855310	1673.00	1915	
03309000	Green River At Mammoth Cave, Ky.	371043	0860646	1983.00	1938	1950
03310000	North Fork Nolin River at Hodgenville, Ky.	373433	0854425	36.40	1940	
03310300	Nolin River at White Mills, Ky.	373303	0860243	357.00	1959	
03310400	Bacon Creek near Priceville, Ky.	372131	0855953	85.40	1959	
03310500	Nolin River at Wax, Ky.	372043	0860721	600.00	1935	1962
03311000	Nolin River at Kyrock, Ky.	371627	0861503	703.00	1929	
03311500	Green River at Lock 6, at Brownsville, Ky.	371225	0861540	2762.00	1924	
03311600	Beaverdam Creek at Rhoda, Ky.	370918	0861335	10.90	1961	
03312000	Bear Creek near Leitchfield, Ky.	372536	0861645	30.80	1949	
03312500	Barren River near Pageville, Ky.	365109	0860437	531.00	1939	1963
03313000	Barren River near Finney, Ky.	365342	0860802	940.00	1941	
03313500	West Bays Fork at Scottsville, Ky.	364453	0861147	7.47	1949	
03313700	West Fork Drakes Creek near Franklin, Ky.	364308	0863244	110.00	1968	
03314000	Drakes Creek near Alvaton, Ky.	365343	0862250	478.00	1939	
03314500	Barren River at Bowling Green, Ky.	370004	0862551	1848.00	1901	
03315000	Barren River at Lock 1, at Greencastle, Ky.	370510	0863010	1966.00	1923	1937
03315500	Green River at Lock 4, at Woodbury, Ky.	371056	0863748	5403.00	1917	
03316000	Mud River near Lewiston, Ky.	370015	0865426	90.50	1938	
03316500	Green River at Paradise, Ky.	371553	0865843	6182.00	1939	
03317000	Rough River near Madrid, Ky.	373531	0861946	225.00	1936	1959
03317500	North Fork Rough River near Westview, Ky.	374132	0862329	42.00	1954	
03318000	Rough River near Falls of Rough, Ky.	373633	0862947	454.00	1936	1956
03318200	Rock Lick Creek near Glen Dean, Ky.	373924	0863343	20.10	1955	1971
03318500	Rough River at Falls of Rough, Ky.	373520	0863305	504.00	1939	
03318800	Caney Creek near Horse Branch, Ky.	372750	0863920	124.00	1956	
03319000	Rough River near Dundee, Ky.	373251	0864318	757.00	1939	
03320000	Green River at Lock 2, at Calhoun, Ky.	373202	0871550	7564.00	1930	
03320500	Pond River near Apex, Ky.	370720	0871910	194.00	1940	
03321000	Pond River near White Plains, Ky.	371337	0872057	346.00	1927	1940
03321350	South Fork Panther Creek near Whitesville, Ky.	373708	0865315	58.20	1968	
03322360	Beaverdam Creek near Corydon, Ky.	374214	0874152	14.30	1972	
03383000	Tradewater River at Olney, Ky.	371326	0874653	255.00	1940	
03383500	Tradewater River near Dalton, Ky.	371628	0874748	283.00	1927	1940
03384000	Rose Creek at Nebo, Ky.	372258	0873759	2.10	1951	
03400000	Poor Fork at Harlan-Letcher County Line, Ky.	370000	0825435	51.70	1940	1943
03400800	Martins Fork near Smith, Ky.	364457	0831452	55.80	1968	
03401000	Cumberland River near Harlan, Ky.	365048	0832121	374.00	1940	
03403000	Cumberland River near Pineville, Ky.	364848	0834558	809.00	1938	
03404000	Cumberland River at Williamsburg, Ky.	364438	0840930	1607.00	1908	
03404500	Cumberland River at Cumberland Falls, Ky.	365014	0842036	1977.00	1907	
03404820	Laurel River at Municipal Dam, near Corbin, Ky.	365813	0870711	140.00	1972	
03404900	Lynn Camp Creek at Corbin, Ky.	365705	0840537	53.80	1957	
03405000	Laurel River at Corbin, Ky.	365809	0840738	201.00	1910	1973
03406000	Wood Creek near London, Ky.	370940	0840643	3.89	1952	
03406500	Rockcastle River at Billows, Ky.	371016	0841746	604.00	1936	
03407000	Rockcastle River at Rockcastle Springs, Ky.	370035	0841855	745.00	1921	1931

Note: Stations for which end year is not shown were active as of September 1979.

Table 1.-List of stations for which data are published, continued

Station Number	Station Name	Latitude	Longitude	Drainage Area Square Miles	Begin Year	End Year
03407100	Cane Branch near Parkers Lake, Ky.	365205	0842657	.67	1956	
03407300	Helton Branch at Greenwood, Ky.	365307	0842855	.85	1955	
03407500	Buck Creek near, Shopville, Ky.	371238	0842752	165.00	1952	
03410500	South Fork Cumberland River near Stearns, Ky.	363737	0843200	954.00	1942	
03411000	South Fork Cumberland River at Nevelsville, Ky.	365025	0843500	1271.00	1915	1950
03411500	Cumberland River at Burnside, Ky.	365921	0843635	4865.00	1825	1950
03412000	Pitman Creek near Somerset, Ky.	370805	0843515	26.30	1949	1953
03412500	Pitman Creek at Somerset, Ky.	370701	0843531	31.30	1952	
03413000	Cumberland River near Jamestown, Ky.	365600	0850000	5331.00	1937	1940
03413200	Beaver Creek near Monticello, Ky.	364751	0845346	43.40	1968	
03414000	Cumberland River near Rowena, Ky.	365302	0850622	5790.00	1825	
03435140	Whippoorwill Creek near Claymour, Ky.	365229	0870520	20.80	1973	
03437500	South Fork Little River at Hopkinsville, Ky.	365022	0872852	46.50	1936	
03438070	Muddy Fork Little River near Cerulean, Ky.	365840	0874236	30.50	1968	
03438220	Cumberland River near Grand Rapids, Ky.	370118	0881316	17598.00	1939	
03609500	Tennessee River near Paducah, Ky.	370111	0881650	40200.00	1875	
03610000	Clarks River at Murray, Ky.	363534	0881800	89.70	1950	
03610500	Clarks River near Benton, Ky.	365224	0882048	227.00	1937	
03610545	West Fork Clarks River near Brewers, Ky.	364648	0882803	68.70	1968	
03611260	Massac Creek near Paducah, Ky.	370229	0884239	14.60	1971	
03611500	Ohio River at Metropolis, Il.	370851	0884427	203000.00	1928	
07022500	Perry Creek near Mayfield, Ky.	364045	0883757	1.72	1951	
07023000	Mayfield Creek at Lovelaceville, Ky.	365709	0884930	212.00	1936	1972
07023500	Obion Creek at Pryorsburg, Ky.	364110	0884335	36.30	1948	
07024000	Bayou de Chien near Clinton, Ky.	363743	0885750	68.70	1939	

Note: Stations for which end year is not shown were active as of September 1979.

Cross, W. P., and Hedges, R. E., 1959, Flow duration of Ohio streams: Bulletin No. 3, Ohio Water Plans Inventory, Ohio Department of Natural Resources, Ohio, 152 p.

Foster, H. A., 1924, Theoretical frequency curves and their application to engineering problems: American Society Civil Engineers Transaction, v. 87, p. 142-203.

Miller, C. R., 1951, Analysis of flow-duration, sediment-rating curve method of computing sediment yield: U.S. Bureau of Reclamation, Hydrology Branch, 55 p.

Quinones, F., 1973, Chemical-quality and flow-duration curves for selected streams in Puerto Rico: U.S. Geological Survey Report PR-7, 6 p. + appendix.

Searcy, J. K., 1959, Flow-duration curves: U.S. Geological Survey Water-Supply Paper 1542-A, 33 p.

APPENDIX

FLOW DURATION TABLES

STATION 03207962 DICKS FORK AT PHYLLIS, KY. 1975-1978

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .01	97.8	100	100	100	100	100	100	100	100	100	96.0	95.2	87.5
>= .02	94.6	100	100	100	100	100	100	100	100	100	87.9	88.7	70.8
>= .03	93.2	100	100	100	100	100	100	100	100	100	87.1	83.1	63.3
>= .04	92.0	98.9	100	100	100	100	100	100	100	100	87.1	75.8	60.0
>= .05	85.0	79.6	93.3	100	100	100	100	100	100	95.6	76.6	54.8	46.7
>= .07	81.6	75.3	87.8	100	100	100	100	100	100	94.4	62.9	50.0	40.8
>= .09	78.2	71.0	75.6	100	100	100	100	100	100	88.9	55.6	44.4	36.7
>= .10	77.4	71.0	75.6	100	100	100	100	100	100	86.7	50.8	43.5	35.8
>= .20	63.5	64.5	70.0	93.5	95.7	94.1	98.9	97.8	72.0	36.7	28.2	29.0	20.0
>= .30	50.3	47.3	56.7	84.9	93.5	83.5	91.4	76.7	45.2	14.4	14.5	20.2	11.7
>= .40	42.7	36.6	45.6	77.4	90.3	80.0	89.2	52.2	37.6	11.1	8.9	11.3	6.7
>= .50	36.7	31.2	35.6	73.1	80.6	72.9	80.6	38.9	31.2	7.8	6.5	8.9	4.2
>= .60	33.1	25.8	32.2	64.5	77.4	67.1	76.3	33.3	28.0	7.8	3.2	8.1	2.5
>= .80	27.0	21.5	27.8	50.5	57.0	61.2	71.0	24.4	24.7	2.2	1.6	5.6	1.7
>= 1.00	22.9	18.3	24.4	41.9	49.5	47.1	62.4	21.1	21.5	2.2	1.6	4.8	.8
>= 1.30	18.6	10.8	21.1	33.3	41.9	36.5	51.6	17.8	19.4	2.2	1.6	3.2	.8
>= 1.70	13.3	7.5	16.7	18.3	32.3	18.8	37.6	14.4	18.3	1.1	1.6	3.2	.8
>= 2.20	8.5	4.3	13.3	11.8	22.6	7.1	23.7	12.2	10.8	1.1		2.4	
>= 2.80	6.1	3.2	11.1	5.4	16.1	4.7	17.2	8.9	8.6	1.1		1.6	
>= 3.50	4.5	2.2	8.9	3.2	11.8	4.7	11.8	7.8	6.5			.8	
>= 4.50	3.0	1.1	6.7	2.2	8.6	3.5	5.4	5.6	5.4			.8	
>= 5.80	2.0		4.4	2.2	5.4	2.4	3.2	4.4	3.2			.8	
>= 7.40	1.5		3.3	2.2	3.2	2.4		4.4	3.2			.8	
>= 9.00	1.0		1.1	1.0	3.2			4.4	2.1			.8	
>= 12.00	.5		1.1		2.1			4.4					
>= 15.00	.5				2.1			4.4					
>= 20.00	.3				2.1			2.2					
>= 25.00	.2				2.1			1.1					
>= 32.00	.1				1.0			1.1					

STATION 03207965 GRAPEVINE CREEK NEAR PHYLLIS, KY. 1974-1978

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .04	100	100	100	100	100	100	100	100	100	100	100	100	100
>= .05	99.9	98.7	100	100	100	100	100	100	100	100	100	100	100
>= .07	98.8	94.2	100	100	100	100	100	100	100	99.3	96.1	99.4	96.7
>= .09	97.9	91.6	100	100	100	100	100	100	100	96.0	94.2	98.1	95.3
>= .10	97.9	91.6	100	100	100	100	100	100	100	96.0	94.2	98.1	95.3
>= .20	94.3	81.9	98.0	100	100	100	100	100	97.4	90.7	87.1	89.0	88.0
>= .30	91.7	76.1	91.3	100	100	100	100	100	94.8	88.7	84.5	85.2	80.7
>= .40	88.7	71.0	90.0	100	100	100	100	100	91.0	85.3	73.5	80.6	74.0
>= .50	84.4	63.2	86.0	100	100	100	100	100	85.2	80.0	63.2	69.0	68.0
>= .70	79.8	59.4	84.0	98.7	100	100	100	100	80.0	73.3	50.3	57.4	56.0
>= .90	76.3	55.5	81.3	96.8	100	98.6	100	100	76.8	66.7	40.0	52.9	48.7
>= 1.10	73.3	51.6	79.3	96.1	98.7	97.2	100	100	74.8	60.0	34.6	49.0	40.0
>= 1.50	67.6	46.5	73.3	96.1	96.8	95.0	100	94.7	70.3	47.3	25.2	39.4	28.0
>= 2.00	59.4	38.1	61.3	85.8	94.8	90.1	100	79.3	65.8	38.7	15.5	29.7	15.3
>= 2.60	53.9	32.3	53.3	80.6	92.3	87.9	96.1	71.3	63.2	28.0	12.3	21.3	10.0
>= 3.50	46.5	24.5	43.3	73.5	89.7	83.7	84.5	56.7	55.5	18.7	7.7	14.2	7.3
>= 4.60	39.2	18.7	28.0	59.4	78.1	75.9	77.4	50.0	45.8	15.3	5.8	11.0	6.0
>= 6.00	32.3	14.2	24.7	45.2	65.8	61.0	69.7	43.3	38.1	11.3	3.9	8.4	2.7
>= 8.00	27.4	11.6	22.0	38.1	59.4	48.9	60.6	36.0	31.0	10.0	3.9	6.5	1.3
>= 11.00	21.0	5.8	18.7	26.5	48.4	32.6	54.8	30.0	21.3	8.0	2.6	3.9	
>= 14.00	16.9	4.5	16.7	20.6	41.3	19.1	46.5	24.7	17.4	6.7	1.9	3.2	
>= 18.00	12.9	2.6	13.3	15.5	31.6	10.6	41.3	18.7	12.3	4.7	.6	2.6	
>= 24.00	10.0	1.9	12.0	10.3	24.5	9.2	31.6	14.0	9.0	4.7		2.6	
>= 32.00	6.6	1.9	8.0	5.1	17.4	6.3	20.6	8.6	7.0	4.0		.6	
>= 43.00	4.8	.6	5.3	4.5	10.3	5.6	16.1	6.6	5.8	2.0		.6	
>= 56.00	3.2		5.3	2.5	5.8	2.8	9.6	6.0	3.8	2.0		.6	
>= 74.00	2.0		3.3	1.9	4.5	1.4	5.8	4.0	1.9	1.3		.6	
>= 98.00	1.5		2.6	1.2	3.8		4.5	3.3	.6	1.3		.6	
>= 130.00	1.0		2.0		2.5		3.8	2.0	.6	1.3			
>= 170.00	.9		2.0		2.5		3.2	1.3	.6	1.3			
>= 230.00	.3		.6		1.2		.6	.6	.6	.6			
>= 300.00	.2		.6		.6			.6	.6				
>= 400.00								.6					

STATION 03208000 LEVISA FORK BELOW FISHTRAP DAM, NEAR MILLARD, KY. 1938-1968 NO REGULATION

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= .2	100.0	100.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= .3	99.9	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
>= .4	99.8	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
>= .6	99.7	98.2	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8
>= .9	99.5	97.1	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8
>= 1.3	99.1	94.6	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.1
>= 1.9	98.6	92.0	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.0
>= 2.8	98.0	90.8	95.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	89.5
>= 4.0	97.4	90.0	93.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	86.6
>= 5.8	96.5	88.3	93.0	98.5	100.0	100.0	100.0	100.0	100.0	100.0	99.5	97.3	81.6
>= 8.4	95.2	82.9	91.4	97.1	99.2	99.6	100.0	100.0	100.0	100.0	99.2	94.5	78.8
>= 12.0	93.1	73.2	88.6	94.9	98.1	99.4	100.0	100.0	100.0	99.7	98.2	90.4	74.3
>= 18.0	89.2	61.2	83.7	92.6	96.9	99.3	100.0	100.0	99.7	97.8	93.2	83.4	63.7
>= 25.0	84.8	51.0	75.0	88.4	94.5	99.2	100.0	100.0	98.9	94.2	87.6	75.0	54.0
>= 37.0	78.1	39.0	64.9	81.7	91.7	98.9	100.0	99.5	97.4	85.3	76.4	64.1	40.0
>= 53.0	70.9	28.7	51.4	75.9	88.2	98.0	100.0	98.8	95.4	74.5	62.1	51.9	28.1
>= 77.0	63.2	17.8	41.9	68.0	84.5	95.3	99.5	98.3	89.4	61.2	48.9	38.8	17.5
>= 110.0	56.1	12.5	33.3	61.5	79.2	91.5	98.3	97.3	77.9	46.8	36.5	29.8	12.0
>= 160.0	49.0	8.2	26.3	53.1	75.1	83.8	95.8	93.0	61.9	35.5	28.3	22.9	8.1
>= 230.0	42.0	6.2	19.4	44.7	67.1	75.6	91.3	85.1	48.8	25.4	20.7	17.3	5.6
>= 340.0	33.4	3.8	13.8	36.1	51.9	63.8	84.0	66.5	35.7	16.3	15.9	12.4	3.8
>= 490.0	25.0	2.2	8.3	27.1	37.1	51.3	69.6	48.7	24.6	10.4	11.0	9.6	2.6
>= 710.0	16.8	.9	5.4	18.1	24.5	35.2	51.1	32.5	14.7	5.9	7.3	5.9	1.8
>= 1000.0	11.2	.4	3.4	12.2	16.1	24.6	34.8	21.1	10.0	3.5	3.9	4.0	1.2
>= 1500.0	6.3	.1	1.4	6.9	9.6	14.0	20.8	11.0	5.8	2.2	1.5	2.2	.7
>= 2200.0	3.3		.5	3.6	5.3	8.0	11.3	4.9	3.7	1.2	.7	1.1	.2
>= 3100.0	1.9		.1	2.1	3.3	5.1	6.6	2.4	1.8	.6	.2	.8	.1
>= 4500.0	1.0		.1	1.1	1.6	2.8	3.5	1.2	1.1	.4	.2	.3	.1
>= 6600.0	.4			.2	.6	1.6	1.5	.3	.5	.1		.1	
>= 9500.0	.2			.1	.4	.7	.7	.2	.3				
>= 14000.0					.3		.2						
>= 20000.0							.2						

STATION 03208000 LEVISA FORK BELOW FISHTRAP DAM, NEAR MILLARD, KY. 1969-1978 REGULATED

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= .2	99.7	98.1	98.3	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= .3	99.6	97.4	98.3	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= .4	99.4	97.1	96.3	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= .6	99.2	95.5	95.7	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= .8	99.2	95.5	95.0	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 1.1	99.1	95.5	94.3	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 1.5	99.1	95.5	93.7	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 2.1	99.1	65.5	93.7	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 2.9	98.9	95.5	92.0	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 4.1	98.9	95.5	91.7	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 5.6	98.9	95.2	91.7	100.0	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 7.9	98.7	94.8	91.3	98.1	100.0	100.0	100.0	99.7	100.0	100.0	100.0	100.0	100.0
>= 11.0	98.3	94.2	91.3	97.7	100.0	99.6	100.0	99.7	100.0	100.0	100.0	99.7	97.7
>= 15.0	96.5	86.1	91.3	97.1	100.0	99.6	100.0	99.7	100.0	100.0	100.0	93.5	91.3
>= 21.0	94.4	81.3	87.7	90.0	100.0	99.6	100.0	99.7	100.0	98.7	95.2	90.0	90.7
>= 29.0	93.0	80.6	87.7	88.4	100.0	99.6	96.8	99.3	99.7	93.3	91.6	90.0	90.0
>= 41.0	92.4	79.4	87.3	87.7	100.0	99.6	92.9	99.3	99.7	93.3	90.6	90.0	89.7
>= 57.0	88.4	74.8	86.7	85.2	97.7	99.3	91.0	89.7	97.4	92.0	82.6	81.9	84.0
>= 79.0	81.4	71.0	79.7	83.9	96.1	98.6	91.0	86.7	93.5	81.0	63.9	61.6	71.0
>= 110.0	69.5	65.8	74.3	81.6	93.5	95.4	90.0	69.3	82.6	62.0	38.4	34.2	48.0
>= 150.0	64.9	62.3	67.7	77.1	89.0	95.0	88.7	65.3	76.5	55.7	29.7	28.4	45.7
>= 210.0	57.6	54.2	60.3	67.1	83.2	93.6	85.2	59.3	71.3	39.7	21.3	22.9	34.7
>= 300.0	47.8	45.1	45.3	49.3	72.5	90.4	74.5	53.6	62.5	27.6	14.8	14.5	26.6
>= 410.0	36.8	33.5	32.6	39.0	55.8	77.6	60.9	45.3	49.6	19.0	5.4	10.9	14.0
>= 570.0	25.8	18.0	21.6	27.4	45.4	56.3	42.2	33.3	40.6	9.3	2.9	7.7	7.0
>= 800.0	16.4	10.3	13.0	20.0	31.9	35.1	29.0	20.6	25.1	6.3	.9	4.5	1.6
>= 1100.0	11.3	5.8	7.6	13.8	22.5	22.3	21.9	15.6	16.7	5.3	.6	2.5	1.0
>= 1500.0	7.9	4.1	4.3	11.2	15.1	14.5	15.8	12.0	12.9	3.3	.3	1.6	.6
>= 2200.0	4.9	1.6	3.0	5.1	10.3	7.8	11.6	8.6	8.0	2.0	.3	.6	
>= 3000.0	2.8	.6	1.0	3.8	4.5	3.9	8.0	6.3	4.8	.6			
>= 4200.0	1.2		.3	1.2	2.9	1.7	4.1	4.3					
>= 5800.0	.4		.3		.5	.7	.9	2.0					
>= 8100.0								.3					

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0
>= .20	99.9	99.5	99.4	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0
>= .30	99.8	98.9	99.3	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	99.6
>= .40	99.7	98.8	98.8	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	99.3
>= .60	99.6	97.5	98.6	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	99.1
>= .90	99.4	96.7	97.8	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	98.4
>= 1.30	99.1	94.8	96.9	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	97.8
>= 1.90	98.7	92.9	96.4	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	95.4
>= 2.80	98.2	91.9	94.8	99.8	100.0	100.0	100.0	99.9	100.0	100.0	100.0	99.8	92.0
>= 4.00	97.7	91.4	93.0	99.5	100.0	100.0	100.0	99.9	100.0	100.0	100.0	99.2	89.8
>= 5.80	97.1	90.0	92.7	98.9	100.0	100.0	100.0	99.9	100.0	100.0	99.6	98.0	86.1
>= 8.40	96.1	85.9	91.4	97.3	99.4	99.7	100.0	99.9	100.0	100.0	99.4	95.8	84.0
>= 12.00	94.3	78.1	89.3	95.6	98.5	99.5	100.0	99.9	100.0	99.8	98.7	92.5	79.7
>= 18.00	90.7	66.2	85.6	92.2	97.7	99.4	100.0	99.9	99.8	98.4	94.5	85.0	70.2
>= 25.00	86.9	58.5	78.2	88.4	95.9	99.3	100.0	99.8	99.1	94.2	89.0	78.7	62.9
>= 37.00	81.7	49.4	70.6	83.3	93.8	99.1	98.2	99.4	98.0	87.2	79.9	70.4	52.2
>= 53.00	75.6	40.3	60.4	78.2	90.8	98.3	97.8	97.1	95.9	78.8	68.9	59.9	42.8
>= 77.00	67.9	31.1	51.5	71.9	87.5	96.1	97.3	95.9	90.6	66.7	53.2	44.5	30.8
>= 110.00	59.4	25.8	43.6	66.5	82.8	92.5	96.2	90.5	79.1	50.5	37.0	30.8	20.8
>= 160.00	52.5	21.6	36.1	58.2	78.1	86.6	94.0	85.8	65.3	39.3	28.2	23.7	17.1
>= 230.00	45.3	18.0	29.4	49.1	70.2	79.7	89.4	78.6	53.7	28.4	20.5	17.8	11.9
>= 340.00	35.8	13.0	20.9	38.7	55.8	69.5	80.6	62.2	40.4	17.6	14.8	12.5	7.4
>= 490.00	26.5	8.2	13.0	28.1	40.3	55.9	64.8	46.3	29.8	10.7	9.2	9.5	4.6
>= 710.00	17.4	4.4	7.6	18.9	27.1	37.3	46.7	30.5	18.5	6.1	5.9	5.9	1.9
>= 1000.00	11.6	2.0	4.7	12.9	18.3	25.3	32.5	20.2	12.2	4.0	3.1	3.9	1.2
>= 1500.00	6.7	1.1	2.1	8.0	11.1	14.1	19.5	11.3	7.5	2.5	1.2	2.1	.7
>= 2200.00	3.7	.4	1.1	4.0	6.6	7.9	11.4	5.8	4.7	1.4	.6	1.0	.1
>= 3100.00	2.1	.1	.3	2.4	3.5	4.8	6.9	3.4	2.5	.5	.1	.6	
>= 4500.00	1.0		.1	1.1	1.8	2.4	3.4	1.7	.8	.3	.1	.2	
>= 6600.00	.3			.1	.6	1.2	1.2	.6	.3				
>= 9500.00	.1				.3	.5	.5	.1	.2				
>= 14000.00					.2		.1						
>= 20000.00							.1						

STATION 03209300 RUSSELL FORK AT ELKHORN CITY, KY. 1961-1964 NO REGULATION

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 6.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= 8.2	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0
>= 10.0	98.9	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3
>= 13.0	97.4	82.3	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.5
>= 17.0	96.6	79.8	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	80.8
>= 21.0	95.6	77.4	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	71.7
>= 27.0	93.4	73.4	92.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.1	63.3
>= 34.0	90.7	61.3	88.3	100.0	100.0	100.0	100.0	100.0	100.0	98.3	98.4	88.7	53.3
>= 43.0	88.0	52.4	86.7	100.0	100.0	100.0	100.0	100.0	100.0	97.5	93.5	83.9	42.5
>= 54.0	84.4	40.3	82.5	100.0	100.0	100.0	100.0	100.0	100.0	96.7	85.5	77.4	30.8
>= 69.0	77.5	21.8	60.8	100.0	100.0	100.0	100.0	100.0	100.0	93.3	68.5	66.1	20.0
>= 87.0	72.8	12.9	49.2	96.8	99.2	100.0	100.0	100.0	100.0	88.3	56.5	56.5	15.0
>= 110.0	67.4	7.3	40.8	84.7	98.4	100.0	100.0	100.0	94.4	79.2	50.8	42.7	11.7
>= 140.0	61.7	5.6	31.7	72.6	97.6	100.0	100.0	97.5	83.1	70.8	41.9	33.1	9.2
>= 180.0	55.5	3.2	27.5	62.1	93.5	100.0	100.0	93.3	66.1	58.3	33.9	24.2	6.7
>= 220.0	51.0	1.6	25.8	58.9	92.7	100.0	100.0	86.7	52.4	44.2	29.0	16.9	6.7
>= 280.0	46.3	1.6	22.5	50.0	89.5	99.1	100.0	83.3	37.9	32.5	23.4	13.7	5.0
>= 360.0	41.0	1.6	19.2	40.3	83.1	93.8	100.0	74.2	28.2	25.0	16.1	9.7	4.2
>= 450.0	37.0	1.6	16.7	35.5	68.5	88.5	100.0	69.2	21.8	20.8	12.1	8.9	3.3
>= 570.0	32.3	1.6	13.3	28.2	57.3	83.2	96.8	59.2	19.4	15.0	8.1	5.6	3.3
>= 720.0	28.1	.8	9.2	24.2	52.4	73.5	88.7	51.7	16.9	12.5	5.6	3.2	1.7
>= 920.0	22.0		7.5	18.5	37.5	46.0	78.2	45.8	14.5	9.2	3.2	3.2	1.7
>= 1200.0	16.9		6.7	15.3	30.6	33.6	59.7	34.2	10.5	6.7	2.4	2.4	1.7
>= 1500.0	12.5		4.1	11.2	21.7	24.7	49.1	22.5	8.0	4.1	1.6	2.4	.8
>= 1900.0	9.1		3.3	7.2	17.7	19.4	34.6	16.6	5.6	2.5	.8	1.6	.8
>= 2400.0	6.4		3.3	4.0	11.2	17.6	25.0	10.0	3.2	.8	.8	.8	.8
>= 3000.0	3.9		.8	2.4	6.4	9.7	17.7	5.0	2.4	.8	.8	.8	.8
>= 3800.0	2.7		.8	.8	5.6	7.9	12.0	2.5	1.6		.8		.8
>= 4800.0	1.6		.8	.8	2.4	4.4	8.8	.8	.8		.8		
>= 6000.0	.7			.8	.8	2.6	4.0				.8		
>= 7600.0	.6			.8		1.7	4.0				.8		
>= 9700.0	.4					.8	3.2				.8		
>= 12000.0	.2					.8	2.4						
>= 16000.0							.8						

STATION 03209300 RUSSELL FORK AT ELKHORN CITY, KY. 1966-1978 REGULATED

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 8.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= 11.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7
>= 14.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5
>= 17.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2
>= 22.0	99.6	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	96.4
>= 27.0	98.7	100.0	96.9	98.3	98.8	100.0	100.0	100.0	100.0	98.7	99.0	98.8	94.4
>= 34.0	97.7	100.0	94.4	94.5	96.8	100.0	100.0	100.0	100.0	97.2	97.0	98.5	94.4
>= 43.0	97.2	100.0	94.1	92.8	96.0	100.0	100.0	100.0	100.0	95.4	95.8	98.3	93.6
>= 54.0	96.5	99.3	93.8	92.6	95.0	98.9	100.0	100.0	100.0	93.6	94.3	98.0	92.8
>= 69.0	95.7	96.0	93.8	92.1	94.0	98.4	100.0	100.0	100.0	92.8	92.1	97.0	91.8
>= 87.0	93.6	93.1	93.6	89.3	93.8	98.1	100.0	100.0	99.5	92.1	87.1	92.3	85.1
>= 110.0	89.2	88.6	93.1	87.3	92.8	97.8	100.0	100.0	98.5	85.4	75.2	85.6	66.9
>= 140.0	79.9	66.5	91.3	82.9	91.3	97.5	100.0	100.0	93.3	69.7	56.8	64.5	45.9
>= 170.0	73.0	60.5	89.7	78.2	90.3	94.8	98.8	96.2	88.6	60.8	46.7	45.4	27.9
>= 220.0	64.8	50.1	83.6	73.4	86.4	91.3	96.8	91.5	78.9	43.8	32.0	34.0	17.7
>= 280.0	57.8	40.2	67.4	67.2	82.9	88.3	95.5	83.6	71.7	35.6	22.6	26.3	14.1
>= 350.0	50.8	34.2	54.1	61.5	76.4	84.7	90.8	72.6	61.3	27.9	16.9	19.9	11.0
>= 440.0	43.3	25.8	41.3	52.6	66.3	79.6	82.9	59.2	54.3	22.3	13.6	15.4	7.7
>= 550.0	35.4	19.1	28.2	42.4	58.1	71.1	67.0	48.2	47.9	15.9	11.4	11.4	6.2
>= 700.0	28.0	14.6	22.3	35.5	46.7	57.5	52.1	36.7	40.2	11.5	6.9	8.4	4.9
>= 880.0	22.2	12.7	17.9	29.3	38.7	41.4	40.9	30.5	32.0	9.7	4.7	6.5	3.1
>= 1100.0	17.7	10.9	13.1	21.3	33.5	32.2	33.7	24.6	26.6	7.9	2.0	4.2	2.6
>= 1400.0	13.3	6.2	9.0	15.9	27.0	22.3	27.0	19.0	20.1	6.7	1.5	3.0	1.8
>= 1800.0	10.2	3.9	6.1	12.6	21.3	15.8	23.8	16.1	14.3	5.1	.7	1.7	1.2
>= 2200.0	8.0	2.4	5.1	9.9	16.3	12.2	19.6	13.8	11.1	3.3	.7	.9	1.0
>= 2800.0	5.8	1.4	2.8	7.1	11.9	7.6	16.3	10.2	8.6	2.5	.2	.2	.5
>= 3500.0	4.2	.9	2.3	5.9	7.9	5.9	12.4	7.1	6.2	1.7			.2
>= 4500.0	2.4	.2	2.3	2.9	4.7	2.9	7.6	5.3	2.2	.2			
>= 5600.0	.9		.7	1.2	1.9	1.0	2.7	3.5	.2	.2			
>= 7100.0	.4		.2	.7	.7	.2	1.7	1.2	.2				
>= 9000.0	.2				.7		1.2	.7	.2				
>= 11000.0	.1				.4		.9	.5					
>= 14000.0	.1				.4		.2	.5					
>= 18000.0								.5					

STATION 03209300 RUSSELL FORK AT ELKHORN CITY, KY. 1961-1978 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 6.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= 8.4	99.9	99.8	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	98.9
>= 11.0	99.6	97.1	100	100	100	100	100	100	100	100	100	100	98.1
>= 14.0	99.3	96.1	99.8	100.	100.	100.	100.	100.	100.	100.	100.	100.	96.3
>= 18.0	99.0	95.3	99.8	100.	100.	100.	100.	100.	100.	100.	100.	99.5	93.1
>= 23.0	98.1	94.8	98.5	100.	100.	100.	100.	100.	100.	99.8	99.8	96.2	87.4
>= 25.0	96.7	93.4	95.4	97.8	98.7	100.	100.	100.	100.	98.7	98.9	94.1	83.3
>= 38.0	95.2	90.7	93.0	95.7	97.3	100.	100.	100.	100.	96.9	96.4	92.5	80.2
>= 49.0	93.9	88.4	92.6	94.6	97.1	99.6	100.	100.	100.	94.3	92.8	90.5	77.0
>= 62.0	92.0	82.8	88.7	94.6	96.2	98.8	100.	100.	100.	93.1	87.8	88.2	73.3
>= 80.0	89.4	76.7	85.2	93.0	95.3	98.6	100.	100.	99.8	90.7	81.2	82.8	70.0
>= 100.0	86.1	74.6	82.6	88.7	94.8	98.4	100.	100.	99.1	85.9	72.2	75.8	61.5
>= 130.0	78.1	58.1	79.1	84.4	93.7	98.4	100.	99.8	93.4	73.0	57.2	59.3	42.2
>= 170.0	69.1	48.2	75.4	77.1	91.9	96.3	99.1	96.1	85.7	58.1	42.1	38.5	21.9
>= 220.0	61.4	39.4	68.9	71.7	88.5	93.7	97.7	90.9	74.0	41.5	30.1	28.5	14.3
>= 280.0	55.2	31.7	55.9	65.2	85.3	91.3	96.8	84.4	65.1	33.0	22.0	22.2	11.3
>= 360.0	48.1	26.0	44.1	58.1	79.2	87.4	92.8	73.9	53.8	24.8	15.4	15.9	8.5
>= 470.0	40.0	18.1	32.0	49.5	66.7	79.5	83.5	59.8	45.2	18.9	12.0	11.6	5.6
>= 600.0	32.8	14.2	23.0	38.7	56.3	67.7	71.9	49.6	38.9	13.3	8.6	8.8	4.6
>= 770.0	25.9	10.9	17.6	31.5	46.2	52.6	57.2	40.0	31.0	10.7	5.4	5.7	3.1
>= 990.0	20.1	9.1	13.5	24.0	35.8	37.2	46.8	31.7	24.9	8.9	3.4	4.3	2.6
>= 1300.0	14.7	6.3	8.9	17.2	28.3	26.0	34.6	23.9	18.1	6.7	1.8	2.9	1.9
>= 1600.0	11.4	4.3	6.7	13.8	22.4	18.9	29.4	18.5	13.8	5.2	1.3	2.0	1.3
>= 2100.0	8.1	1.9	4.6	9.1	16.4	13.5	23.1	14.0	9.3	2.5	.7	.8	.9
>= 2700.0	5.6	1.2	3.5	6.2	11.2	8.4	17.5	9.2	6.9	2.2	.3	.5	.5
>= 3500.0	3.9	.8	1.8	4.8	7.5	6.6	12.5	6.1	4.8	1.2	.1	.1	.3
>= 4500.0	2.2	.1	1.8	2.3	4.3	3.1	8.4	4.0	1.7	.1	.1		.1
>= 5800.0	.8		.5	1.0	1.7	1.3	3.2	2.0	.1		.1		
>= 7400.0	.4		.1	.5	.7	.3	2.3	.7	.1		.1		
>= 9500.0	.2				.3	.1	1.4	.3			.1		
>= 12000.0	.1				.3	.1	1.0	.3					
>= 16000.0							.1	.3					
>= 20000.0							.1	.1					
>= 26000.0							.1	.1					

STATION 03209440 SHELBY CREEK AT CORTON, KY. 1973-1976

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	.01	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7
>=	.02	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0
>=	.03	100.0	100.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.7
>=	.05	99.9	98.7	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.3
>=	.07	99.2	94.2	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.7	85.3
>=	.09	99.0	92.3	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	97.4	84.0
>=	.10	99.0	92.3	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	97.4	84.0
>=	.20	97.3	87.1	98.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	93.5	92.3	73.3
>=	.30	95.6	82.6	98.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0	89.7	85.2	65.3
>=	.40	93.4	80.6	98.0	100.0	100.0	100.0	100.0	100.0	100.0	94.0	87.1	77.4	50.7
>=	.50	91.5	77.4	98.0	100.0	100.0	100.0	100.0	100.0	98.7	93.3	85.2	74.2	41.3
>=	.70	88.4	76.1	98.0	100.0	100.0	100.0	100.0	94.0	93.5	86.7	80.6	67.7	36.7
>=	1.00	84.9	70.3	98.0	100.0	100.0	100.0	100.0	92.7	89.0	77.3	74.8	58.1	33.3
>=	1.40	79.9	57.4	94.7	98.1	100.0	100.0	100.0	92.0	85.8	71.3	67.1	47.1	27.3
>=	1.90	74.3	43.9	86.7	93.5	100.0	100.0	100.0	92.0	83.9	65.3	60.0	38.1	22.0
>=	2.60	69.3	34.2	78.7	92.9	100.0	100.0	100.0	91.3	82.6	57.3	49.0	28.4	16.0
>=	3.60	64.5	29.0	67.3	91.6	98.1	100.0	97.4	90.7	77.4	49.3	45.2	22.6	10.7
>=	5.10	57.2	22.6	42.0	86.5	94.2	99.3	93.5	86.7	71.0	40.0	32.3	16.8	8.0
>=	7.00	49.1	18.1	31.3	69.7	87.7	94.4	85.8	82.0	63.2	29.3	24.5	11.6	5.3
>=	9.70	39.6	15.5	23.3	56.1	77.4	78.2	76.1	66.7	50.3	16.7	21.3	9.0	3.3
>=	14.00	31.1	11.6	18.7	41.9	58.7	65.5	67.7	53.3	37.4	12.7	16.1	6.5	3.3
>=	19.00	25.3	9.0	15.3	33.5	54.2	57.7	56.8	43.3	24.5	10.7	11.6	2.6	1.3
>=	26.00	19.7	7.1	10.7	25.2	47.7	51.4	49.0	34.0	11.6	7.3	8.4	1.9	1.3
>=	36.00	14.6	4.5	6.6	18.7	39.3	46.4	36.1	23.3	5.8	5.3	3.8	1.2	1.3
>=	50.00	9.2	1.9	4.0	11.6	32.9	29.5	23.2	16.0	1.9	2.6	1.2	1.2	.6
>=	70.00	6.1	1.9	2.6	7.7	22.5	15.4	19.3	9.3	1.2	2.0	.6	.6	
>=	97.00	3.8	.6	1.3	5.1	12.2	9.1	12.9	6.6	1.2	2.0		.6	
>=	130.00	2.2	.6	1.3	3.2	8.3	5.6	7.0	5.3	.6	2.0			
>=	190.00	1.4	.6	1.3	1.9	3.2	3.5	5.1	3.3	.6	.6			
>=	260.00	.6		.6	1.2	2.5	1.4	2.5	2.0	.6				
>=	360.00	.3		.6	.6	.6	.7	.6	1.3	.6				
>=	500.00	.1				.6				.6				

STATION 03209500 LEVISA FORK AT PIKEVILLE, KY. 1937-1964 NO REGULATION

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	2.0	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>=	2.7	99.9	99.3	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>=	3.7	99.7	97.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	98.9
>=	5.1	99.5	96.2	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	98.1
>=	6.9	99.1	93.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	95.2
>=	9.5	98.6	91.3	99.6	100.	100.	100.	100.	100.	100.	100.	100.	100.	92.8
>=	13.0	97.9	89.1	97.0	100.	100.	100.	100.	100.	100.	100.	100.	99.9	89.3
>=	18.0	97.1	85.8	95.2	99.9	100.	100.	100.	100.	100.	100.	99.8	99.3	85.1
>=	24.0	96.0	81.7	92.3	98.9	100.	100.	100.	100.	100.	100.	99.3	98.4	81.0
>=	33.0	94.0	73.2	90.4	97.4	100.	100.	100.	100.	100.	99.9	98.6	93.0	75.3
>=	45.0	91.3	63.1	86.0	95.6	99.0	99.3	100.	100.	100.	99.6	97.3	86.7	69.6
>=	62.0	88.2	55.7	79.4	92.6	97.3	99.2	100.	100.	99.5	97.3	93.8	80.8	63.7
>=	84.0	84.4	44.0	73.6	89.2	96.2	99.2	100.	100.	99.3	94.4	88.2	74.9	55.1
>=	110.0	79.8	36.8	65.2	84.3	94.3	99.2	100.	100.	98.6	89.0	80.0	66.1	44.8
>=	160.0	73.1	26.5	53.7	78.4	90.2	99.0	99.6	99.5	96.4	81.6	68.9	55.3	29.1
>=	210.0	67.6	20.5	46.3	72.0	87.1	96.7	99.6	98.8	93.8	73.0	59.1	45.6	19.5
>=	290.0	60.5	14.2	35.7	65.4	83.3	93.1	99.2	97.4	82.8	59.4	48.9	35.0	13.1
>=	400.0	54.1	9.9	29.0	56.9	79.2	89.6	98.8	95.8	70.5	45.6	40.0	27.0	9.3
>=	550.0	47.5	7.8	23.1	48.6	74.0	83.9	97.1	90.9	56.2	33.0	30.5	21.0	6.2
>=	740.0	40.8	5.9	18.4	41.6	63.1	78.1	93.9	81.4	43.1	23.0	23.8	15.8	3.7
>=	1000.0	34.4	3.9	14.0	35.7	52.2	70.2	88.5	68.1	32.3	16.4	18.3	12.4	2.6
>=	1400.0	26.6	2.5	9.1	28.1	39.9	59.9	74.1	50.5	23.1	11.2	12.1	9.1	1.0
>=	1900.0	19.8	1.9	6.4	20.5	28.4	46.3	58.9	37.8	16.7	7.3	7.8	6.2	.6
>=	2600.0	13.6	.8	3.9	13.7	19.8	34.6	41.6	25.3	11.2	3.9	5.2	4.5	.3
>=	3500.0	9.1	.5	2.5	8.9	13.9	22.8	28.0	17.0	8.0	2.2	2.9	2.6	.2
>=	4800.0	5.5	.4	1.8	5.1	9.3	14.2	17.8	8.5	5.2	1.6	1.4	1.5	
>=	6600.0	3.3	.2	.7	2.8	6.0	9.1	11.3	4.5	2.6	.7	.8	1.0	
>=	9000.0	1.9	.2	.4	1.6	3.2	6.4	6.2	2.9	1.6	.2	.4	.4	
>=	12000.0	1.2	.1	.2	1.1	1.9	3.9	3.9	1.8	1.1	.1	.2	.1	
>=	17000.0	.6			.4	1.0	2.8	2.5	.7	.5		.1	.1	
>=	23000.0	.3				.4	1.4	1.3	.2	.3				
>=	31000.0	.1				.4	.5	.5	.1	.2				
>=	43000.0					.2		.2		.1				
>=	58000.0					.1		.1						

STATION 03209500 LEVISA FORK AT PIKEVILLE, KY. 1966-1978 REGULATED

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	48	100	100	100	100	100	100	100	100	100	100	100	100	100
>=	59	99.4	100	97.2	97.5	98.8	100	100	100	100	99.7	100	100	100
>=	72	98.6	100	95.4	93.8	97.3	100	100	100	100	98.5	99.5	100	99.0
>=	88	97.6	99.5	94.4	92.6	95.5	100	100	100	100	97.2	97.5	100	94.6
>=	110	96.5	97.3	94.1	92.1	95.0	99.2	100	100	100	95.6	96.8	99.0	88.7
>=	130	95.3	95.3	93.8	90.8	94.5	98.4	100	100	100	94.4	96.3	97.0	83.1
>=	160	92.4	83.1	92.3	89.3	94.0	98.1	100	100	100	91.5	91.6	92.1	77.2
>=	200	88.9	75.2	91.0	87.3	93.5	97.8	100	100	99.8	85.6	82.4	84.1	70.8
>=	240	84.5	70.5	89.0	84.6	93.3	97.8	100	100	96.0	77.2	72.2	74.2	60.0
>=	300	79.4	67.2	85.1	80.6	92.1	97.0	100	99.5	93.1	71.3	59.1	61.8	46.7
>=	370	73.0	61.0	76.9	77.4	91.6	94.3	98.3	95.6	86.4	62.3	47.1	47.4	38.7
>=	450	66.7	53.6	70.5	75.4	87.8	91.0	96.5	90.8	82.1	49.7	35.5	39.7	29.2
>=	550	60.7	46.9	62.1	72.0	86.4	88.8	94.8	86.4	77.7	39.7	25.6	28.5	20.5
>=	680	53.9	37.7	51.5	64.0	80.6	86.6	90.6	78.2	70.2	30.0	18.6	22.6	17.2
>=	830	47.7	28.3	41.8	57.1	76.2	84.7	83.6	69.0	62.3	25.4	14.4	19.1	12.8
>=	1000	41.2	23.3	34.9	50.4	66.3	77.4	72.7	62.3	57.6	19.0	9.7	14.9	8.5
>=	1200	35.8	19.4	26.2	43.9	58.3	71.1	66.7	53.6	52.9	14.4	6.9	11.9	6.4
>=	1500	28.6	15.6	20.0	35.2	49.6	57.5	53.3	43.6	42.9	10.3	3.5	8.2	4.9
>=	1900	22.1	12.4	13.8	25.3	40.2	41.4	42.4	34.1	34.5	9.5	2.5	5.2	4.1
>=	2300	18.0	9.2	11.3	20.8	32.3	34.6	34.7	28.2	28.3	8.7	2.0	3.2	3.1
>=	2800	14.5	6.2	9.7	17.6	27.5	25.9	28.3	23.1	22.3	7.4	1.0	3.0	2.3
>=	3400	11.5	4.0	6.2	14.6	22.8	19.6	25.1	18.7	18.1	5.4	.7	1.7	1.5
>=	4200	9.2	2.5	4.9	11.7	18.9	14.4	21.1	15.6	14.4	4.4	.7	.5	1.0
>=	5200	7.1	2.4	3.5	8.9	14.3	9.5	18.8	12.5	11.4	3.0		.2	.5
>=	6300	5.5	1.4	2.8	7.1	10.9	7.6	14.6	10.2	8.6	2.0		.2	.2
>=	7800	4.1	.9	2.0	5.2	7.9	5.4	11.9	8.4	5.7	1.2			.2
>=	9500	2.6	.4	1.5	3.9	4.4	4.0	7.4	6.1	2.9	.5			
>=	12000	1.4		.7	1.2	2.9	1.9	4.7	3.8	1.4	.5			
>=	14000	.8		.2	.7	1.9	1.0	2.2	2.8	.4	.2			
>=	18000	.3		.2	.2	.4	.2	1.4	1.0	.2				
>=	21000	.2			.2	.4	.2	.9	.7	.2				
>=	26000					.2		.4	.2					
>=	32000							.2	.2					
>=	40000								.2					

STATION 03209500 LEVISA FORK AT PIKEVILLE, KY. 1938-1978 HISTORICAL

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	MONTHLY DURATIONS FOR PERIOD OF RECORD PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	2.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>=	2.7	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>=	3.7	99.8	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3
>=	5.1	99.7	97.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.8
>=	6.9	99.4	95.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.8
>=	9.5	99.1	94.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.3
>=	13.0	98.6	92.8	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	92.9
>=	18.0	98.1	90.6	96.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.5	90.2
>=	24.0	97.3	88.0	95.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	99.5	99.0	87.5
>=	33.0	96.0	82.4	93.7	98.3	100.0	100.0	100.0	100.0	100.0	99.9	99.1	95.4	83.7
>=	45.0	94.2	75.7	90.8	97.1	99.4	99.6	100.0	100.0	100.0	99.8	98.2	91.0	79.7
>=	84.0	88.8	63.0	80.8	90.6	96.2	99.5	100.0	100.0	99.5	95.3	91.5	82.2	67.3
>=	110.0	85.2	57.5	75.2	87.2	94.6	99.2	100.0	100.0	99.1	91.0	85.7	75.8	58.4
>=	160.0	79.4	46.1	67.1	82.4	91.7	98.7	99.8	99.7	97.6	84.3	76.5	66.4	44.1
>=	210.0	74.2	39.2	61.3	77.6	89.5	97.2	99.8	99.2	95.5	75.4	66.1	56.5	34.6
>=	290.0	66.8	32.6	52.0	71.2	86.5	94.6	99.4	98.2	86.5	62.6	52.4	43.7	23.9
>=	400.0	59.5	26.1	43.7	64.2	83.2	91.0	98.6	95.1	75.7	48.2	40.6	31.9	17.6
>=	550.0	51.9	21.0	35.8	57.3	78.5	85.8	96.5	89.7	63.4	34.6	28.6	23.1	10.6
>=	750.0	44.0	14.9	27.4	48.8	68.1	80.8	91.7	79.5	50.1	23.8	20.8	17.2	6.8
>=	1000.0	36.8	10.7	20.9	41.1	57.8	72.3	83.8	67.1	40.2	16.8	15.1	13.0	4.4
>=	1400.0	28.0	7.4	13.6	31.7	44.5	60.4	69.2	50.0	30.1	11.0	9.1	8.9	2.4
>=	1900.0	20.6	5.6	9.0	22.2	32.7	44.3	54.1	37.6	22.0	7.8	5.9	5.7	1.7
>=	2600.0	14.4	2.6	6.0	15.7	23.2	32.4	38.3	26.0	15.4	5.0	3.7	3.9	1.1
>=	3500.0	9.7	1.8	3.7	10.7	16.6	21.1	26.9	18.0	10.8	3.0	2.2	2.2	.6
>=	4800.0	6.3	1.1	2.6	6.5	11.4	13.2	18.8	10.4	7.3	2.1	1.0	1.1	.3
>=	6600.0	3.9	.6	1.3	4.1	7.5	8.2	12.4	6.2	4.1	1.1	.5	.7	
>=	9000.0	2.3	.3	.8	2.4	4.0	5.6	7.2	4.1	2.3	.3	.3	.3	
>=	12000.0	1.3		.4	1.1	2.3	3.1	4.4	2.4	1.2	.2	.1		
>=	17000.0	.6			.3	1.1	1.9	2.3	.8	.4				
>=	23000.0	.2				.5	.9	1.2	.3	.3				
>=	31000.0	.1				.3	.3	.4	.1	.1				
>=	43000.0					.1		.1						

STATION 03209800 LEVISA FORK AT PRESTONSBURG, KY. 1966-1978 REGULATED 27

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= 61	99.7	100.0	98.2	99.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0	100.0
>= 75	99.1	100.0	96.2	95.8	99.8	100.0	100.0	100.0	100.0	98.7	98.8	100.0	100.0
>= 92	98.4	99.5	94.9	94.5	98.3	100.0	100.0	100.0	100.0	98.5	97.5	100.0	98.2
>= 110	97.9	99.3	94.6	93.5	97.3	100.0	100.0	100.0	100.0	97.2	96.8	100.0	95.9
>= 140	96.8	96.5	94.4	93.1	96.3	99.7	100.0	100.0	100.0	95.4	96.0	99.0	91.5
>= 170	94.6	86.8	94.1	92.1	96.3	99.2	100.0	100.0	100.0	94.1	94.5	96.0	82.6
>= 210	91.8	79.4	92.6	91.1	95.3	98.9	100.0	100.0	100.0	88.7	86.4	90.6	79.0
>= 250	88.6	73.4	90.3	88.6	94.5	98.6	100.0	100.0	99.8	84.4	80.9	81.9	71.5
>= 310	83.5	68.2	88.2	86.1	93.8	98.1	100.0	100.0	96.5	77.7	69.0	72.7	52.8
>= 380	77.8	61.0	83.3	84.1	93.3	97.8	100.0	100.0	91.6	69.2	57.6	55.8	40.5
>= 460	72.5	55.3	79.0	80.9	93.3	96.5	99.0	97.2	86.6	60.0	46.4	44.7	32.3
>= 560	66.7	50.9	69.0	77.4	89.8	93.7	97.5	95.1	82.4	49.5	35.0	37.5	24.4
>= 690	61.2	43.4	61.3	73.9	86.6	91.3	95.3	90.8	77.7	41.0	26.8	29.5	17.9
>= 850	56.2	34.5	52.6	70.0	84.4	88.8	93.8	87.4	73.4	32.6	19.1	24.6	14.6
>= 1000	51.6	27.8	44.4	63.5	79.7	87.5	91.8	81.8	68.2	26.4	15.4	21.8	13.1
>= 1300	43.8	20.8	35.4	53.1	68.7	83.4	81.4	69.0	60.5	20.3	8.9	16.1	10.5
>= 1600	36.7	17.4	25.9	45.4	57.8	74.7	71.0	57.9	53.3	14.4	5.0	12.2	7.4
>= 1900	30.8	14.9	20.8	37.5	49.4	64.3	62.3	48.5	43.7	11.8	3.2	8.9	6.2
>= 2300	24.7	11.7	15.9	29.5	41.7	48.0	52.9	39.2	36.2	9.7	2.0	5.5	4.9
>= 2800	19.8	7.7	11.8	25.1	34.7	38.1	42.7	32.3	30.3	7.9	1.0	3.7	2.6
>= 3500	15.5	5.7	7.9	19.1	29.5	28.1	32.5	26.4	25.3	6.9	.5	2.7	2.1
>= 4300	12.3	4.2	5.6	16.1	24.1	20.4	27.5	23.1	18.4	5.4	.5	1.7	1.3
>= 5200	10.1	2.7	4.1	12.9	20.5	16.3	24.8	18.4	15.6	4.1	.2	.7	.7
>= 6400	7.9	2.2	3.0	9.9	17.3	10.6	19.8	15.3	12.6	3.0		.2	.7
>= 7800	6.2	1.2	2.5	8.1	12.6	8.4	17.3	12.5	9.1	2.0		.2	.5
>= 9600	4.4	.7	2.5	6.2	8.4	6.2	12.6	8.4	5.4	1.7		.2	.2
>= 12000	2.6		.5	3.4	5.7	3.5	8.4	6.1	2.9	1.0			
>= 14000	1.6		.5	1.4	2.7	2.4	5.9	4.6	1.7	.7			
>= 18000	.7		.5	.7	1.4	1.0	2.7	1.7	.4				
>= 21000	.4		.2	.2	.7	.8	2.4	1.0	.2				
>= 26000	.2				.4	.2	1.2	.7					
>= 32000					.2		.2	.5					
>= 39000							.2	.2					

STATION 03209800 LEVISA FORK AT PRESTONSBURG, KY. 1964-1978 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 20.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>= 25.0	99.7	96.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
>= 32.0	99.5	95.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2
>= 40.0	99.3	95.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3
>= 50.0	99.1	94.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	96.2
>= 63.0	98.3	94.0	96.4	97.8	100.0	100.0	100.0	100.0	100.0	99.8	99.6	97.8	93.8
>= 79.0	97.3	93.1	93.8	95.9	99.8	100.0	100.0	100.0	100.0	98.9	98.1	96.8	90.9
>= 100.0	96.0	92.9	91.1	94.8	97.8	100.0	100.0	100.0	100.0	97.8	95.3	95.1	87.1
>= 130.0	94.9	91.2	90.0	93.5	96.8	99.8	100.0	100.0	100.0	96.4	94.4	93.5	83.6
>= 160.0	93.1	85.8	89.1	91.4	96.3	99.5	100.0	100.0	100.0	93.3	93.1	91.4	76.9
>= 200.0	90.1	76.6	88.2	89.9	95.7	99.1	100.0	100.0	100.0	88.4	86.7	85.6	71.1
>= 250.0	86.0	69.9	84.0	87.1	94.6	98.8	100.0	100.0	99.8	80.7	78.9	75.3	63.6
>= 320.0	80.1	63.4	80.2	84.5	93.8	98.3	100.0	100.0	95.9	72.0	64.7	64.1	44.4
>= 400.0	73.8	56.6	74.9	81.5	93.1	97.9	100.0	99.1	89.7	62.4	51.6	47.3	33.1
>= 500.0	67.9	50.3	67.6	77.4	92.3	95.8	98.7	97.1	83.9	51.1	39.4	37.4	25.1
>= 630.0	61.3	43.2	59.3	73.1	87.7	92.2	96.3	94.4	76.8	41.6	27.1	29.0	16.4
>= 790.0	56.1	35.3	50.2	69.0	85.8	90.6	95.1	90.0	71.4	32.2	18.5	23.4	13.6
>= 990.0	50.7	26.7	41.3	62.2	81.1	88.0	93.1	84.9	64.5	24.2	13.5	19.4	11.6
>= 1300.0	43.1	20.4	32.9	52.3	70.3	82.1	83.9	73.1	54.6	18.7	7.7	14.2	9.3
>= 1600.0	36.3	16.8	24.2	43.7	60.0	73.1	74.8	62.2	47.7	13.3	4.3	10.5	6.7
>= 2000.0	29.2	14.0	17.8	34.4	50.3	59.0	63.4	51.6	36.8	10.0	2.8	7.1	4.9
>= 2500.0	22.4	9.7	13.6	26.0	39.4	40.3	53.1	40.2	30.1	8.7	.9	4.3	2.9
>= 3100.0	17.3	6.5	8.7	20.2	32.5	31.1	40.4	32.9	24.7	6.4	.4	2.6	2.0
>= 3900.0	13.5	4.3	6.6	16.3	25.8	22.6	32.2	27.3	18.7	5.5	.4	1.9	1.3
>= 5000.0	10.1	3.0	4.4	12.6	20.4	16.2	26.2	20.2	13.5	4.0	.2	.6	.6
>= 6300.0	7.8	2.3	3.1	9.4	16.7	10.3	21.9	16.0	10.9	2.6		.2	.6
>= 7900.0	5.8	1.0	2.4	7.7	11.8	7.7	17.4	12.0	7.3	1.7		.2	.4
>= 9900.0	3.9	.4	2.0	5.1	7.7	5.1	12.6	7.3	4.3	1.5		.2	.2
>= 12000.0	2.5		.4	3.0	5.3	3.0	9.0	5.5	2.5	.8			
>= 16000.0	1.0		.4	1.0	2.1	1.1	4.3	2.4	.6				
>= 20000.0	.5		.4	.2	.6	.9	2.7	1.1	.4				
>= 25000.0	.2		.2		.4	.2	1.7	.6	.2				
>= 31000.0					.2		.2	.4					
>= 39000.0							.2	.2					

STATION 03210000 JOHNS CREEK NEAR META, KY. 1941-1978

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .01	98.0	92.2	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	96.4	90.1
>= .02	98.0	92.1	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	96.4	90.1
>= .03	98.0	92.1	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	96.4	90.1
>= .04	98.0	92.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	96.4	90.1
>= .06	98.0	92.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	96.4	90.1
>= .09	97.9	91.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.0	96.4	89.9
>= .10	97.9	91.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.0	96.4	89.9
>= .20	97.3	90.5	98.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	97.7	95.2	86.8
>= .30	96.7	88.5	97.1	99.7	100.0	100.0	100.0	100.0	100.0	99.6	96.9	94.7	83.8
>= .40	96.1	86.5	96.4	99.5	100.0	100.0	100.0	100.0	100.0	99.4	96.4	93.2	82.2
>= .60	94.8	83.5	94.7	98.3	100.0	100.0	100.0	100.0	99.7	98.4	94.2	91.3	77.6
>= .90	92.5	78.1	93.0	96.2	99.2	100.0	100.0	100.0	99.6	96.3	91.1	85.6	71.7
>= 1.40	89.3	69.9	89.8	94.7	98.1	99.9	100.0	100.0	98.8	93.5	86.4	78.7	62.2
>= 2.00	86.1	62.8	86.5	92.5	97.1	99.9	100.0	100.0	98.6	90.5	81.7	70.2	54.8
>= 2.90	81.5	51.2	80.6	90.7	96.3	99.9	100.0	100.0	97.7	84.3	73.1	60.4	45.4
>= 4.30	75.9	43.1	73.5	87.4	95.5	99.8	100.0	100.0	96.1	71.5	60.8	50.2	35.3
>= 6.30	69.6	35.5	62.0	81.7	93.4	99.7	100.0	99.7	89.8	59.2	49.8	39.2	28.0
>= 9.20	63.1	28.2	51.3	75.9	90.6	98.3	99.9	98.8	81.2	46.9	37.5	30.0	21.8
>= 13.00	57.6	24.1	44.6	70.6	86.8	94.3	98.8	97.5	71.0	38.2	29.0	22.9	18.1
>= 20.00	50.5	17.7	35.8	61.1	82.4	88.7	97.6	91.7	56.4	27.7	20.5	16.9	14.2
>= 29.00	43.8	11.3	26.9	51.6	76.6	83.1	95.3	80.1	46.3	20.3	15.9	12.8	9.5
>= 42.00	36.1	6.3	20.2	41.9	63.0	74.6	88.7	64.6	36.2	14.2	11.9	9.1	6.6
>= 62.00	27.4	4.1	14.3	29.9	47.1	61.0	72.7	48.4	26.3	9.7	8.7	5.5	4.3
>= 90.00	19.5	2.6	10.0	22.0	34.5	43.3	53.9	32.9	17.9	6.8	6.6	3.1	2.8
>= 130.00	12.9	1.7	5.5	14.9	23.9	27.3	37.3	22.0	11.7	4.5	3.9	2.1	2.0
>= 190.00	8.1	.9	3.0	9.5	14.9	17.1	23.7	14.6	6.9	2.5	2.9	1.3	1.5
>= 280.00	4.7	.7	1.2	5.7	7.9	10.3	14.6	8.4	4.3	1.5	1.5	.5	.7
>= 410.00	2.6	.4	.9	3.4	4.0	5.9	8.2	4.4	2.3	.9	.8	.4	.3
>= 610.00	1.5		.3	1.6	2.5	3.9	5.2	2.8	1.1	.4	.3	.3	.2
>= 890.00	.8		.2	1.0	1.3	1.7	2.6	1.8	.4	.2		.2	.1
>= 1300.00	.4		.1	.3	.8	1.3	1.7	1.0	.2				
>= 1900.00	.1				.4	.6	.5	.3	.1				
>= 2800.00													

STATION 03211500 JOHNS CREEK NEAR VAN LEAR, KY. 1940-1949 NO REGULATION

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .1	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= .2	99.9	99.4	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= .3	99.6	95.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	99.7
>= .4	99.4	95.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	97.7
>= .5	99.4	95.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	97.3
>= .7	98.8	93.2	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	92.0
>= 1.0	97.6	85.8	99.7	100.	100.	100.	100.	100.	100.	99.7	99.0	98.7	88.0
>= 1.4	95.8	75.5	98.7	100.	100.	100.	100.	100.	99.7	97.3	98.7	94.5	85.3
>= 2.0	93.5	66.8	94.7	99.4	100.	100.	100.	100.	99.0	96.7	98.7	87.7	80.0
>= 2.8	90.7	58.7	90.0	96.1	100.	100.	100.	100.	98.1	96.0	96.5	84.2	70.0
>= 3.9	87.9	55.2	84.0	91.0	100.	100.	100.	100.	97.1	95.3	91.6	79.7	61.3
>= 5.4	84.7	48.4	75.7	89.4	100.	100.	100.	100.	96.8	94.0	87.4	73.2	52.7
>= 7.6	79.7	37.7	67.0	88.1	97.7	98.2	100.	100.	95.5	89.0	79.4	61.9	43.0
>= 11.0	75.4	28.7	60.7	85.5	95.5	98.2	100.	100.	95.2	83.7	70.6	53.5	35.0
>= 15.0	71.3	23.9	54.0	81.9	94.5	97.5	100.	100.	93.5	75.7	62.9	44.2	28.3
>= 21.0	65.2	19.0	43.7	75.2	89.4	97.5	100.	98.7	87.1	64.7	50.3	34.5	24.0
>= 29.0	58.8	13.5	35.7	67.1	85.2	92.9	99.0	97.3	82.3	50.7	40.6	26.5	16.3
>= 40.0	53.4	11.6	30.0	60.6	77.4	85.5	98.7	96.0	75.8	41.7	32.3	21.3	11.7
>= 56.0	47.1	8.7	21.0	52.6	70.6	81.3	96.8	93.0	63.9	31.0	25.8	15.8	7.0
>= 78.0	41.3	5.5	18.7	44.8	66.1	74.9	91.6	86.7	51.3	22.0	18.4	12.6	4.7
>= 110.0	35.0	3.5	14.7	33.5	59.7	64.7	87.1	77.7	39.0	15.3	13.5	10.0	3.0
>= 150.0	28.9	1.3	12.7	28.1	46.5	55.8	81.0	61.3	30.3	11.7	10.3	8.1	1.7
>= 210.0	21.7	.6	8.7	21.6	34.2	46.6	67.4	43.3	20.3	7.0	6.5	5.2	.3
>= 300.0	15.5		5.0	13.8	23.2	35.6	53.8	29.3	11.9	5.6	4.1	4.5	
>= 410.0	10.8		3.3	9.6	15.4	26.8	38.3	18.6	7.7	3.6	3.2	3.5	
>= 580.0	6.8		1.6	5.4	10.6	16.2	25.4	12.6	3.2	3.0	2.2	2.5	
>= 800.0	4.4		1.0	3.2	7.0	11.3	15.4	7.6	1.9	2.3	1.2	2.2	
>= 1100.0	2.6		.3	1.9	5.1	6.0	8.0	6.0	.3	1.0	.9	1.6	
>= 1600.0	1.3			.9	1.9	2.1	4.5	4.3		1.0	.9	.9	
>= 2200.0	.7			.6	.9	1.0	2.5	3.0			.3	.3	
>= 3100.0	.5			.3	.6	.7	1.6	3.0				.3	
>= 4300.0	.2			.3	.6	.7	.3	.6					
>= 5900.0					.6								

STATION 03211500 JOHNS CREEK NEAR VAN LEAR, KY. 1951-1978 REGULATED

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 3.7	99.8	100	100	99.8	99.4	99.6	99.1	99.9	99.8	100	100	100	100
>= 4.7	99.7	99.1	100	99.8	99.3	99.6	99.1	99.9	99.8	100	100	99.9	99.9
>= 5.8	99.5	97.9	100	99.8	99.2	99.6	99.1	99.9	99.8	100	100	99.8	99.4
>= 7.1	99.3	97.0	99.5	99.8	99.2	99.6	99.1	99.9	99.7	100	100	99.5	98.1
>= 8.8	97.5	93.3	98.7	96.4	95.4	99.6	99.1	99.6	99.7	98.3	99.2	98.5	92.6
>= 11.0	92.0	80.3	86.5	91.5	94.4	99.2	98.7	96.1	98.6	96.0	96.2	89.7	76.9
>= 13.0	84.0	55.5	82.3	89.6	94.4	98.7	98.2	89.8	96.2	90.2	83.1	74.4	56.4
>= 16.0	79.4	48.8	80.6	86.3	93.7	98.2	96.8	87.9	96.1	82.6	75.2	64.3	43.1
>= 20.0	71.8	41.6	75.7	85.1	92.4	97.2	94.8	83.7	90.1	68.8	59.3	49.1	25.4
>= 25.0	65.6	32.3	74.0	82.9	90.6	96.8	93.1	80.5	81.5	56.0	44.9	34.8	21.4
>= 31.0	60.7	26.8	72.5	77.1	88.6	95.3	92.3	79.5	74.8	43.0	34.4	27.3	19.0
>= 38.0	57.1	21.8	72.3	71.7	86.3	92.7	91.6	77.5	70.9	34.6	28.9	23.7	15.7
>= 47.0	54.5	20.0	71.1	68.2	84.4	90.1	91.5	74.8	68.0	30.7	23.7	20.7	12.7
>= 58.0	51.8	18.8	68.2	65.1	82.4	88.9	90.6	73.1	61.4	25.5	21.5	18.1	10.7
>= 72.0	48.5	16.1	65.2	60.8	78.1	88.5	89.1	70.7	55.3	19.2	17.4	15.3	9.0
>= 88.0	45.5	14.2	58.8	56.8	73.6	87.2	85.6	67.5	51.4	16.9	14.6	13.4	8.2
>= 110.0	40.7	12.7	45.6	50.8	68.4	81.9	82.8	63.2	42.2	14.2	12.6	10.4	6.8
>= 130.0	37.4	11.2	38.8	44.6	62.6	78.4	80.4	59.4	37.7	12.4	11.4	9.0	5.6
>= 170.0	32.3	9.1	32.3	37.9	52.5	70.4	74.7	50.6	33.1	9.3	9.2	6.8	4.6
>= 200.0	29.3	7.5	28.7	34.6	45.3	64.2	71.1	46.5	29.5	7.7	8.8	5.	3.9
>= 250.0	25.0	6.9	23.6	29.0	39.2	55.2	62.9	38.8	24.4	6.3	6.9	5.0	3.5
>= 310.0	21.1	5.4	18.8	25.5	33.9	45.8	52.2	33.7	20.6	5.0	6.1	4.3	3.0
>= 380.0	17.4	4.3	13.5	22.9	28.0	38.1	43.8	28.1	17.1	3.6	5.0	3.5	1.9
>= 470.0	13.8	2.6	9.0	17.7	23.5	29.3	34.9	23.3	14.2	3.2	4.1	2.8	1.6
>= 580.0	10.9	2.4	5.9	13.8	17.8	23.0	29.6	18.5	12.2	2.6	2.7	1.9	1.1
>= 720.0	8.6	1.7	3.5	11.2	14.1	18.3	24.0	15.2	9.9	2.0	1.6	1.4	.8
>= 890.0	7.0	1.0	2.9	9.1	11.1	15.2	19.9	12.3	8.5	1.1	1.1	1.1	.5
>= 1100.0	5.4	.6	1.9	6.9	7.8	12.0	17.5	9.1	7.1	.4	.5	.8	.3
>= 1300.0	4.2	.5	1.4	5.1	5.6	9.8	14.5	7.3	5.1	.3	.1	.4	.2
>= 1700.0	3.0	.2	.9	3.1	4.4	6.1	11.5	5.9	3.1	.2		.2	.2
>= 2100.0	1.9		.2	1.3	2.7	4.1	9.1	3.4	2.6	.1		.1	
>= 2500.0	1.1		.2	.4	1.4	2.7	7.9	.7				.1	
>= 3100.0	.1						2.0	.1					
>= 3900.0													

STATION 03211500 JOHNS CREEK NEAR VAN LEAR, KY. 1940-1978 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .1	99.9	100	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	100
>= .2	99.8	99.8	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	100
>= .3	99.7	98.8	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	99.9
>= .4	99.7	98.8	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	99.4
>= .5	99.7	98.8	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	99.3
>= .7	99.5	98.3	100	99.8	99.6	99.7	99.3	99.9	99.8	100	100	100	97.9
>= 1.0	99.2	96.4	99.9	99.8	99.6	99.7	99.3	99.9	99.8	99.9	99.8	99.7	96.9
>= 1.4	98.8	93.7	99.7	99.8	99.6	99.7	99.3	99.9	99.8	99.3	99.7	98.6	96.2
>= 2.0	98.2	91.5	98.6	99.7	99.6	99.7	99.3	99.9	99.6	99.1	99.7	96.9	94.9
>= 2.8	97.5	89.4	97.4	98.8	99.6	99.7	99.3	99.9	99.3	99.0	99.1	95.9	92.3
>= 3.9	96.7	88.5	95.9	97.5	99.5	99.7	99.3	99.9	99.1	98.8	97.8	94.8	90.1
>= 5.4	95.8	85.8	93.8	97.1	99.5	99.7	99.3	99.9	99.0	98.2	96.8	93.0	87.5
>= 7.6	94.1	81.4	91.1	96.8	98.7	99.3	99.3	99.9	98.4	96.2	94.5	89.9	83.7
>= 11.0	87.8	67.1	80.3	90.2	94.8	99.0	99.1	97.2	97.5	92.1	89.7	80.7	66.8
>= 15.0	78.8	45.1	74.7	86.4	94.3	98.4	97.9	91.6	95.3	81.8	74.4	62.3	44.3
>= 21.0	69.3	34.2	67.7	82.8	91.6	97.3	95.8	86.8	88.1	64.4	54.3	44.3	25.7
>= 29.0	61.6	24.5	63.4	76.6	88.3	95.5	94.4	85.0	78.2	47.6	39.3	28.0	21.0
>= 40.0	56.1	19.0	60.8	68.7	84.1	90.5	93.6	82.1	71.5	36.2	30.3	22.1	16.4
>= 56.0	51.2	16.4	55.6	62.7	80.1	87.3	92.6	79.0	62.6	27.6	24.0	17.9	11.4
>= 78.0	46.2	13.2	50.9	55.8	74.0	85.0	89.4	74.5	53.3	19.4	18.3	13.9	8.9
>= 110.0	39.5	10.2	37.1	46.8	67.0	77.7	83.9	66.7	42.0	14.8	13.6	10.1	6.6
>= 150.0	33.4	7.4	29.0	38.0	55.7	70.6	78.0	56.3	34.3	10.9	11.0	7.5	4.7
>= 210.0	26.8	5.5	22.6	30.5	42.3	58.3	69.0	43.4	26.5	7.6	8.4	5.5	3.6
>= 300.0	20.3	4.0	15.7	22.9	32.8	45.2	54.2	32.5	18.8	5.4	5.7	4.4	2.7
>= 410.0	14.8	2.2	8.8	18.0	24.6	33.0	39.7	24.1	14.5	3.8	4.5	3.3	1.8
>= 580.0	10.0	1.7	4.7	11.7	16.8	21.5	28.2	16.5	10.0	2.9	2.8	2.0	1.2
>= 800.0	7.0	.9	2.5	8.4	11.5	15.1	20.1	12.0	7.6	2.2	1.4	1.4	.9
>= 1100.0	4.7	.4	1.4	5.6	7.5	10.7	14.6	8.1	5.2	.7	.7	.9	.4
>= 1600.0	2.7	.3	.7	2.5	3.9	5.7	9.7	5.4	2.6	.4	.2	.5	.1
>= 2200.0	1.5		.1	1.0	1.9	3.5	7.0	3.1	1.7			.1	
>= 3100.0	.3				.1	.5	1.9	.8					
>= 4300.0					.1	.3		.1					
>= 5900.0					.1								

STATION 03212000 PAINT CREEK AT STAFFORDSVILLE, KY. 1950-1975 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= .1	99.9	99.6	100	100	100	100	100	100	100	100	100	100	98.8
>= .2	99.8	99.1	100	100	100	100	100	100	100	100	100	99.9	98.2
>= .3	99.6	98.6	100	100	100	100	100	100	100	100	100	99.8	96.5
>= .4	99.4	98.1	100	100	100	100	100	100	100	100	100	99.6	95.3
>= .6	98.9	95.6	99.9	100	100	100	100	100	100	100	100	98.8	92.6
>= .8	98.3	92.3	99.5	100	100	100	100	100	100	100	100	97.3	90.6
>= 1.1	96.9	86.7	96.8	99.1	100	100	100	100	100	100	99.3	93.8	87.2
>= 1.5	95.4	83.2	94.7	97.9	100	100	100	100	100	100	97.4	90.2	81.7
>= 2.2	92.5	80.3	90.8	96.5	99.9	100	100	100	100	98.1	92.4	80.5	72.9
>= 3.0	89.3	74.3	89.6	95.1	99.6	100	100	100	100	94.7	84.1	71.5	64.7
>= 4.3	84.3	63.2	85.7	90.5	96.6	100	100	100	99.8	87.3	76.4	63.0	50.6
>= 6.0	79.6	54.5	80.4	86.6	94.8	100	100	100	99.4	79.5	67.2	53.6	41.5
>= 8.5	74.0	44.8	69.2	82.8	93.5	99.4	100	99.9	97.0	70.3	57.9	44.2	32.7
>= 12.0	69.5	36.4	63.2	80.0	92.3	99.2	100	99.7	93.5	60.5	48.9	36.8	27.7
>= 17.0	63.2	23.5	52.5	74.8	89.7	97.3	99.9	99.6	86.6	49.7	40.1	27.8	21.4
>= 24.0	57.3	15.1	43.7	66.7	87.0	94.9	98.8	97.3	78.5	39.1	32.8	21.3	16.9
>= 33.0	51.9	9.8	36.9	60.9	83.1	92.6	96.9	93.7	67.2	29.2	27.2	17.2	13.5
>= 47.0	45.6	6.1	27.9	54.6	76.6	86.8	93.3	86.4	54.6	20.5	21.8	12.3	11.2
>= 66.0	37.8	3.6	21.2	43.5	62.7	77.3	85.7	70.3	43.8	16.2	17.4	8.9	8.2
>= 93.0	29.9	2.7	14.5	35.0	47.5	63.7	74.5	56.3	33.5	10.9	12.7	6.2	5.4
>= 130.0	22.8	1.7	10.0	26.6	35.7	48.9	59.0	44.0	26.1	7.4	8.8	4.5	4.2
>= 180.0	16.8	1.3	7.1	20.4	26.3	34.0	44.6	32.3	19.2	5.1	6.9	3.1	2.9
>= 260.0	11.7	.8	4.5	14.7	17.8	23.1	32.5	23.1	13.4	3.3	4.3	2.1	2.1
>= 370.0	8.0	.2	3.2	10.5	12.0	16.2	21.6	15.5	9.3	2.3	2.7	1.6	1.7
>= 520.0	5.1	.1	2.2	5.6	7.8	11.4	13.9	9.8	5.5	1.7	2.1	.9	1.2
>= 730.0	3.2	.1	1.3	3.7	4.7	7.3	8.2	6.5	3.5	1.2	1.1	.3	.5
>= 1000.0	1.9	.1	.6	2.1	2.8	3.9	5.8	4.3	2.3	.7	.4		.5
>= 1400.0	1.1		.5	1.2	1.5	2.6	3.4	2.3	.9	.5	.2		.5
>= 2000.0	.5		.2	.2	.3	1.8	1.8	1.0	.6	.2	.2		.2
>= 2900.0	.3		.2	.1	.3	1.1	.9	.5	.3		.2		.1
>= 4000.0	.1			.1	.1	.5	.2				.1		.1
>= 5700.0						.1					.1		.1
>= 8000.0						.1							

STATION 03212500 LEVISA FORK AT PAINTSVILLE, KY. 1915-1916 NO REGULATION
1929-1949

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 8.3	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= 11.0	99.8	97.7	100.	100.	100.	100.	100.	100.	100.	100.	99.5	100.	100.
>= 14.0	99.6	95.7	100.	100.	100.	100.	100.	100.	100.	100.	99.4	100.	100.
>= 19.0	99.1	91.9	99.0	100.	100.	100.	100.	100.	100.	100.	99.1	100.	99.8
>= 24.0	98.2	87.4	98.1	100.	100.	100.	100.	100.	100.	100.	97.2	99.2	96.2
>= 32.0	97.0	84.2	95.7	100.	100.	100.	100.	100.	100.	100.	96.8	98.0	89.7
>= 42.0	95.3	77.0	93.5	98.6	100.	100.	100.	100.	100.	99.7	94.8	96.2	83.8
>= 54.0	93.3	71.7	89.2	96.6	100.	100.	100.	100.	100.	98.9	92.3	92.8	78.7
>= 71.0	90.7	62.2	82.1	94.5	100.	100.	100.	100.	100.	98.1	91.1	88.6	72.9
>= 92.0	87.7	51.9	77.8	93.1	99.5	99.2	100.	100.	99.7	94.6	88.2	82.3	67.3
>= 120.0	84.6	43.0	73.3	90.8	98.3	99.0	100.	100.	99.2	92.4	84.2	76.5	59.4
>= 160.0	80.6	38.2	67.1	85.7	97.7	96.1	100.	100.	98.3	87.0	77.7	69.0	51.3
>= 210.0	75.9	34.1	59.2	80.5	95.5	93.3	100.	100.	97.4	79.4	69.7	61.3	41.6
>= 270.0	71.8	29.2	50.2	76.3	92.5	92.4	99.8	99.7	96.2	72.9	65.1	54.7	33.8
>= 350.0	66.5	24.1	43.0	72.5	87.9	90.6	99.5	98.7	90.8	63.8	57.0	47.8	23.5
>= 460.0	60.9	18.1	32.7	67.7	84.0	88.0	99.4	98.1	83.3	52.7	50.2	41.2	16.8
>= 590.0	56.2	14.4	28.9	61.0	80.6	85.8	98.5	96.7	74.3	44.1	43.3	35.8	12.2
>= 780.0	51.1	11.2	25.7	55.0	74.8	82.5	96.3	94.8	64.7	34.8	36.6	30.4	7.8
>= 1000.0	45.6	8.6	22.2	45.2	69.9	77.7	94.5	90.0	55.1	26.8	29.5	24.4	5.4
>= 1300.0	39.7	6.3	17.8	37.2	61.0	73.2	89.2	82.1	44.9	20.3	22.9	19.5	3.5
>= 1700.0	33.3	4.9	14.3	30.1	53.1	65.1	81.9	69.0	34.4	15.4	17.4	14.1	1.3
>= 2300.0	25.1	2.5	8.9	21.4	39.5	54.3	67.4	51.6	23.7	10.5	12.3	10.1	1.0
>= 2900.0	20.2	2.0	7.0	15.2	32.0	46.4	56.7	40.6	18.4	7.6	9.2	8.1	.5
>= 3800.0	15.0	1.3	4.2	10.1	24.4	35.9	44.3	30.0	13.5	5.3	5.8	6.6	
>= 5000.0	10.9	.7	2.8	7.6	18.7	25.9	34.7	19.2	9.8	3.6	4.1	4.4	
>= 6500.0	7.7	.6	1.7	3.6	15.3	19.0	26.4	13.1	6.6	2.2	2.4	2.7	
>= 8500.0	5.2	.6	1.2	2.3	11.9	12.3	18.5	7.7	3.6	1.4	1.5	1.8	
>= 11000.0	3.4	.3	1.2	1.3	7.6	7.9	13.5	5.0	2.1	.7	.9	.6	
>= 15000.0	2.3	.3	.7	.7	4.4	5.7	9.6	3.9	.9	.4	.4	.4	
>= 19000.0	1.5		.7	.3	3.0	3.8	6.2	3.0	.4	.1	.1	.1	
>= 25000.0	.7		.3	.1	1.3	2.0	3.2	1.5	.3				
>= 32000.0	.3			.1	1.0	1.0	1.0	.7					
>= 42000.0	.1				.3	.6	.4	.1					
>= 55000.0					.1	.1							

STATION 03212500 LEVISA FORK AT PAINTSVILLE, KY. 1951-1978 REGULATED

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 20	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= 25	99.7	97.7	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	98.3
>= 32	99.3	95.7	99.6	100.	100.	100.	100.	100.	100.	100.	100.	100.	96.0
>= 41	98.5	93.7	96.5	99.4	100.	100.	100.	100.	100.	100.	100.	100.	92.6
>= 52	97.9	91.6	94.5	99.2	100.	100.	100.	100.	100.	100.	100.	99.3	90.5
>= 66	96.9	87.3	92.0	98.8	99.3	100.	100.	100.	100.	100.	100.	98.0	87.7
>= 84	96.0	84.6	90.8	98.2	98.8	100.	100.	100.	100.	100.	99.9	95.2	84.3
>= 110	93.9	80.5	88.5	96.2	97.8	100.	100.	100.	100.	99.5	96.1	91.1	77.3
>= 130	92.1	74.7	87.0	93.9	96.0	100.	100.	100.	100.	98.8	94.4	87.3	73.1
>= 170	88.8	66.7	83.3	91.7	94.6	99.7	100.	100.	100.	96.5	89.5	79.5	64.5
>= 220	84.6	56.1	78.5	87.4	93.7	99.5	100.	100.	100.	91.1	83.9	72.0	54.0
>= 280	80.5	50.9	75.2	85.4	93.0	99.1	100.	100.	99.7	83.1	72.9	61.8	46.3
>= 350	75.6	44.6	68.3	81.9	92.4	98.6	100.	100.	98.0	74.6	61.4	53.6	35.0
>= 440	69.8	37.3	62.0	78.5	91.6	98.1	100.	99.5	91.6	66.2	49.9	40.7	23.3
>= 560	63.9	31.7	56.5	74.2	88.9	97.1	99.2	97.5	83.5	53.6	38.9	31.6	15.8
>= 720	58.6	26.3	50.0	68.9	85.6	94.6	98.2	94.4	76.8	42.9	30.4	26.0	11.7
>= 910	53.6	20.4	43.1	63.0	83.4	91.0	97.4	92.0	69.5	33.5	23.3	19.9	9.2
>= 1200	47.8	14.3	35.2	56.6	78.7	88.2	95.6	85.0	58.6	24.3	16.9	16.0	6.9
>= 1500	43.2	11.6	29.6	50.6	71.4	84.8	93.0	76.3	51.5	19.5	14.1	12.9	5.5
>= 1900	36.8	8.9	22.3	43.1	59.9	77.6	85.4	64.5	43.8	13.8	10.4	9.6	4.3
>= 2400	30.6	7.3	15.7	36.8	50.3	68.5	75.1	55.0	34.3	10.1	6.7	6.9	3.0
>= 3000	25.4	5.3	11.9	29.7	41.4	55.9	66.4	47.5	28.7	7.7	5.1	5.5	1.5
>= 3800	19.5	3.3	8.3	22.7	32.9	42.2	51.6	38.5	22.2	5.5	3.1	3.8	1.0
>= 4800	14.6	2.7	5.2	17.1	25.1	32.4	39.8	28.8	17.8	3.4	1.7	1.7	.7
>= 6100	10.7	1.8	4.0	12.3	18.2	22.3	30.2	22.2	13.7	2.1	.3	1.1	.5
>= 7800	7.9	.9	2.5	9.2	13.7	16.3	24.4	15.1	10.4	1.7	.2	.8	.3
>= 9900	5.6	.3	1.6	6.5	9.7	11.8	18.7	10.7	6.2	1.0	.1	.4	.2
>= 13000	3.5	.1	.9	3.6	5.4	7.7	13.3	7.0	3.8	.4		.3	
>= 16000	2.1		.4	1.9	3.6	4.2	8.7	4.5	1.9	.2		.2	
>= 20000	1.2		.2	.5	1.7	2.7	5.8	2.2	1.0				
>= 26000	.6		.2		.8	1.5	3.4	1.0	.5				
>= 33000	.2				.3	.6	1.1	.4	.3				
>= 41000					.2		.4	.1	.1				
>= 52000					.1		.1						

STATION 03212500 LEVISA FORK AT PAINTSVILLE, KY. 1915-1916 HISTORICAL
1929-1978

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 14	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= 18	99.9	98.5	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
>= 23	99.6	96.2	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	99.1
>= 30	99.0	93.7	99.6	100.	100.	100.	100.	100.	100.	100.	100.	99.5	95.6
>= 38	98.2	90.3	97.2	99.5	100.	100.	100.	100.	100.	100.	100.	99.2	92.0
>= 50	97.2	87.7	94.5	98.0	100.	100.	100.	100.	100.	100.	99.4	98.3	88.5
>= 64	95.9	82.0	91.5	97.1	99.5	100.	100.	100.	100.	100.	99.2	96.3	85.3
>= 82	94.4	76.7	88.3	96.3	99.1	99.7	100.	100.	99.9	99.8	99.0	93.2	81.5
>= 110	92.0	69.9	85.0	94.2	97.8	99.6	100.	100.	99.8	99.1	95.8	88.7	74.1
>= 140	89.3	62.4	81.6	91.3	95.9	99.4	100.	100.	99.7	97.3	92.8	83.6	68.2
>= 180	86.1	54.9	77.2	88.2	94.8	99.3	100.	100.	99.4	95.0	88.4	77.4	59.3
>= 230	82.0	47.8	70.5	84.3	93.4	99.1	100.	100.	99.0	89.3	82.6	69.5	50.0
>= 290	77.9	43.4	65.2	81.6	92.0	98.0	99.8	99.7	98.1	81.5	73.6	60.3	42.8
>= 370	72.1	36.6	57.9	77.0	90.2	96.8	99.8	99.3	93.5	72.8	61.9	50.7	30.2
>= 480	65.8	29.7	50.7	73.2	87.9	94.9	99.7	98.1	86.1	61.1	50.8	38.2	20.2
>= 620	60.3	25.4	45.4	68.1	84.4	93.0	98.5	96.3	78.1	49.7	40.0	31.5	14.8
>= 800	54.9	19.8	39.7	62.6	80.5	89.4	97.1	93.7	70.3	39.2	32.2	25.4	10.9
>= 1000	49.9	15.3	34.7	56.3	76.9	86.0	95.9	89.2	61.8	30.7	25.3	20.5	8.3
>= 1300	44.2	11.6	28.0	50.2	70.3	81.9	92.4	81.7	51.1	23.0	19.1	17.1	6.6
>= 1700	37.6	8.4	22.0	42.4	60.3	75.2	86.4	69.5	41.8	17.1	14.1	12.0	4.6
>= 2200	31.1	6.2	15.6	36.0	49.6	67.4	76.3	55.8	33.0	12.3	10.1	9.0	3.3
>= 2800	25.3	5.0	10.8	28.6	40.0	56.3	66.3	47.2	25.6	9.6	7.1	6.9	2.3
>= 3600	19.4	2.9	7.8	21.3	31.5	43.9	52.7	36.3	19.7	6.8	5.0	5.2	1.2
>= 4700	14.0	2.2	4.3	15.7	23.6	32.8	38.7	25.5	14.9	4.3	3.0	3.0	.9
>= 6000	10.0	1.4	3.3	10.7	17.2	22.1	28.6	19.1	11.0	2.7	1.8	2.0	.7
>= 7800	7.1	.7	1.8	7.3	12.7	15.4	22.2	12.6	7.7	2.1	1.2	1.4	.5
>= 10000	4.9	.2	1.0	4.7	9.4	11.0	16.2	8.9	4.7	1.1	.7	.7	.2
>= 13000	3.1	.1	.6	2.9	5.0	7.3	11.1	6.0	2.9	.5	.3	.4	
>= 17000	1.7		.1	1.4	2.7	4.1	6.7	3.8	1.3	.3	.2	.3	
>= 21000	1.0		.1	.4	1.4	3.0	4.5	1.8	.7				
>= 28000	.4				.5	1.7	2.2	.8	.3				
>= 35000	.1				.3	1.0	.6	.1	.1				
>= 46000					.2	.3	.3						

STATION 03215000 BIG SANDY RIVER AT LOUISA, KY. 1939-1949 NO REGULATION

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 44	100	100	100	100	100	100	100	100	100	100	100	100	100
>= 55	99.8	97.7	100	100	100	100	100	100	100	100	100	100	100
>= 69	99.0	93.2	99.3	97.7	100	100	100	100	100	100	100	100	98.3
>= 87	97.8	88.4	96.3	94.5	100	100	100	100	100	100	100	100	94.3
>= 110	96.3	84.2	91.7	91.3	100	100	100	100	100	100	100	99.4	89.3
>= 140	94.2	74.8	90.0	89.7	100	100	100	100	100	100	100	94.2	82.7
>= 170	91.9	61.9	86.7	87.7	99.7	98.9	100	100	100	100	99.4	90.3	78.3
>= 220	87.2	46.8	74.0	85.5	96.8	98.6	100	100	99.7	99.3	96.1	81.9	68.3
>= 270	84.0	36.1	71.0	81.3	95.2	97.9	100	100	99.4	97.7	93.5	76.1	61.0
>= 340	80.1	31.3	55.0	77.4	93.9	97.9	100	100	98.7	95.3	87.7	70.3	55.3
>= 420	75.6	25.8	45.7	72.9	92.9	97.2	100	99.3	96.5	92.3	82.3	64.8	39.0
>= 530	71.2	22.9	35.0	68.7	89.7	96.8	100	99.3	92.3	88.3	72.6	58.7	31.3
>= 670	66.4	17.7	31.7	65.8	87.7	93.3	99.7	97.0	88.7	79.3	61.9	51.0	24.7
>= 840	61.6	12.9	28.7	62.3	84.8	88.7	99.0	95.7	85.2	64.7	55.5	43.2	19.3
>= 1100	55.7	8.4	24.7	58.1	79.4	81.6	98.4	94.7	78.7	51.7	47.1	34.2	13.0
>= 1300	52.9	7.4	23.7	55.2	77.4	80.5	97.1	93.7	72.6	42.7	44.2	31.6	9.7
>= 1700	47.2	6.5	21.3	50.6	71.9	75.5	92.9	91.0	61.6	31.3	36.1	22.9	6.3
>= 2100	42.1	4.8	17.7	41.3	69.4	70.2	90.0	88.0	50.3	22.3	27.7	20.3	4.0
>= 2600	36.7	3.2	14.7	37.4	61.9	61.7	86.5	83.7	38.1	17.0	19.0	17.1	2.0
>= 3300	31.4	2.3	11.3	32.3	49.0	57.1	79.4	72.7	31.6	13.7	14.8	12.6	1.3
>= 4100	25.2	.6	9.0	26.8	38.1	50.7	70.6	51.3	24.8	10.3	11.0	10.0	1.0
>= 5100	20.2	.3	6.7	21.0	32.6	43.3	58.7	42.0	16.5	7.0	8.1	7.7	.3
>= 6500	15.2	.3	4.0	16.5	22.6	36.2	48.7	29.7	11.3	5.0	4.5	5.2	
>= 8100	11.5		2.0	12.2	19.3	29.4	38.7	17.3	8.7	4.0	3.2	4.1	
>= 10000	8.8		.6	9.6	16.7	24.4	30.0	10.0	6.4	3.0	2.2	3.2	
>= 13000	5.8			3.8	11.9	18.4	20.9	6.3	2.9	2.0	1.9	2.2	
>= 16000	3.9			2.9	9.0	12.0	15.4	3.6	.9	1.6	.9	1.2	
>= 20000	2.5			1.6	6.4	7.0	10.0	2.3	.6	.6	.9	.9	
>= 25000	1.6			1.2	4.5	4.9	6.4	2.0		.3	.3		
>= 32000	.8			.3	1.9	2.4	4.1	1.6					
>= 40000	.4			.3	1.2	1.4	1.6	1.0					
>= 50000	.2			.3	.9	.7	.9	.3					
>= 62000					.3	.7							
>= 78000						.7							

STATION 03215000 BIG SANDY RIVER AT LOUISA, KY. 1951-1977 REGULATED

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 75	100	100	100	100	100	100	100	100	100	100	100	100	100
>= 93	99.3	95.9	97.7	100	100	100	100	100	100	100	100	100	98.3
>= 110	98.9	93.4	96.7	100	100	100	100	100	100	100	100	100	96.5
>= 140	97.8	91.0	92.3	99.3	100	100	100	100	100	100	100	99.8	91.0
>= 180	96.5	87.1	90.4	98.5	99.6	100	100	100	100	100	100	97.1	85.8
>= 220	95.2	85.5	87.6	95.9	98.4	100	100	100	100	100	99.9	94.7	81.3
>= 270	93.1	78.8	84.9	93.3	97.9	100	100	100	100	100	97.9	90.2	74.7
>= 330	89.8	68.2	82.1	90.8	96.3	100	100	100	100	98.3	94.5	82.8	65.1
>= 410	85.8	57.9	75.9	89.0	94.2	100	100	100	100	95.8	87.5	74.9	55.3
>= 510	81.3	48.4	70.5	86.2	92.8	99.7	100	100	100	90.1	78.3	65.5	45.5
>= 630	76.6	40.9	63.2	82.1	91.5	99.5	100	100	99.8	83.3	69.6	55.6	35.3
>= 770	72.2	34.4	57.7	78.5	91.3	99.2	100	100	98.9	74.2	60.2	47.6	26.5
>= 960	67.3	27.6	52.2	74.7	90.3	97.8	100	100	94.8	67.1	49.6	37.5	18.3
>= 1200	62.3	21.6	46.0	69.5	88.1	97.0	99.1	98.8	88.1	59.2	39.8	29.2	13.3
>= 1500	57.6	17.2	41.4	65.8	86.8	95.2	97.9	97.3	80.0	48.6	30.8	22.5	10.3
>= 1800	53.6	13.4	36.9	60.5	85.1	93.1	97.3	95.1	73.8	39.7	25.1	18.1	8.5
>= 2200	49.8	10.4	32.3	56.8	80.9	90.2	96.3	92.8	65.8	32.2	20.5	15.3	7.1
>= 2800	44.3	7.8	24.4	50.2	74.5	86.1	93.5	86.3	55.8	22.4	16.1	11.3	5.5
>= 3400	39.0	6.5	20.9	41.8	66.5	80.8	88.1	76.3	49.3	16.3	12.4	8.9	3.5
>= 4200	32.9	5.1	13.6	35.1	55.7	73.6	79.4	65.1	40.8	11.8	8.7	6.3	2.2
>= 5200	26.7	4.1	8.8	28.0	43.5	62.7	69.7	53.5	32.1	8.6	6.2	4.2	1.3
>= 6400	20.7	3.2	6.8	23.1	34.4	47.2	56.2	41.8	24.4	4.7	4.0	3.1	.8
>= 8000	15.7	2.4	3.8	17.2	27.4	36.6	42.8	32.6	20.0	3.2	1.4	1.2	.8
>= 9800	12.0	1.2	2.9	14.2	20.7	27.3	34.4	24.3	15.5	2.1	.6	.8	.6
>= 12000	9.3	.9	2.0	11.4	16.5	20.2	29.0	18.0	12.5	1.5	.2	.4	.2
>= 15000	6.7	.4	1.0	8.4	11.6	14.4	21.8	13.3	8.6	1.1		.4	.1
>= 19000	4.5	.2	.8	5.7	7.6	10.2	15.6	8.0	5.8	.3		.1	.1
>= 23000	2.9	.2	.3	3.4	4.3	6.6	12.2	4.4	3.4	.3		.1	
>= 28000	2.0	.1	.3	1.7	2.5	4.8	9.4	2.8	1.7	.1			
>= 35000	1.2		.3	.6	1.1	3.2	6.2	1.7	1.2	.1			
>= 43000	.8		.3	.2	.7	2.5	4.4	.8	.7				
>= 54000	.3		.1		.6	.8	1.8	.3	.2				
>= 66000	.1				.3	.4	.8		.2				
>= 82000					.1		.1						

STATION 03215000 BIG SANDY RIVER AT LOUISA, KY. 1939-1977 HISTORICAL 33

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 44	100	100	100	100	100	100	100	100	100	100	100	100	100
>= 55	99.9	99.4	100	100	100	100	100	100	100	100	100	100	100
>= 69	99.7	98.2	99.8	99.4	100	100	100	100	100	100	100	100	99.5
>= 87	99.1	94.7	98.0	98.5	100	100	100	100	100	100	100	100	97.7
>= 110	98.2	91.1	95.4	97.6	100	100	100	100	100	100	100	99.8	94.7
>= 140	96.9	86.9	91.9	96.7	100	100	100	100	100	100	100	98.3	89.0
>= 170	95.6	81.1	89.7	95.7	99.9	99.7	100	100	100	100	99.8	95.9	85.1
>= 220	93.2	75.5	84.2	93.2	98.0	99.6	100	100	99.9	99.8	98.9	91.4	78.3
>= 270	90.8	68.0	81.5	90.2	97.2	99.4	100	100	99.8	99.4	96.8	86.7	71.7
>= 340	87.0	57.7	75.0	87.2	95.1	99.4	100	100	99.7	97.5	92.1	78.7	62.8
>= 430	82.8	48.6	66.9	84.7	93.7	99.2	100	99.8	99.0	95.0	85.3	71.5	50.6
>= 540	78.0	39.5	60.4	81.2	92.0	98.9	100	99.8	97.8	88.2	75.4	62.9	41.1
>= 680	73.1	33.0	53.5	77.3	90.8	97.6	99.9	99.2	96.7	80.1	66.2	53.4	31.7
>= 850	68.2	26.4	48.6	73.8	89.7	95.6	99.7	98.8	93.9	69.4	56.4	43.8	23.7
>= 1100	62.5	20.2	42.3	68.1	86.7	93.4	99.3	98.3	88.0	60.3	45.8	33.1	16.6
>= 1300	59.1	16.7	38.6	65.6	85.2	92.2	98.3	97.0	83.3	53.3	40.4	28.3	13.7
>= 1700	53.2	12.2	33.9	60.0	82.5	89.0	96.3	94.4	72.5	40.5	29.2	20.6	9.9
>= 2100	48.8	9.2	29.4	54.0	79.3	85.6	95.0	91.0	63.8	32.1	23.8	17.0	7.7
>= 2700	43.0	6.6	22.5	47.9	72.2	79.9	91.6	85.1	53.0	23.2	18.0	3.2	5.7
>= 3400	37.1	5.3	18.6	40.1	62.3	74.3	84.8	73.7	45.5	16.8	13.3	9.2	3.9
>= 4200	31.0	3.9	12.6	33.7	51.9	67.0	76.4	60.2	36.8	12.6	9.7	7.1	2.7
>= 5300	24.6	3.0	8.0	26.4	40.5	56.6	65.1	48.2	27.0	8.6	6.9	4.8	1.7
>= 6700	18.6	2.2	6.0	20.6	31.1	42.9	51.9	36.0	20.1	5.5	3.7	3.3	1.3
>= 8400	13.8	1.3	3.1	15.2	25.0	32.7	39.5	25.5	16.1	3.7	2.0	1.9	.9
>= 11000	9.8	.6	2.0	11.1	18.2	23.2	29.3	17.2	11.5	2.3	1.1	1.3	.5
>= 13000	7.6	.5	.9	8.6	14.2	18.5	23.8	13.0	8.7	1.8	.7	.9	.4
>= 17000	5.0	.3	.6	5.7	10.2	12.0	16.3	8.3	5.5	.8	.4	.6	.1
>= 21000	3.2	.1	.3	3.6	5.9	7.9	11.6	4.5	3.1	.3	.3	.3	
>= 26000	2.1		.2	2.0	3.7	5.6	8.8	2.8	1.9	.1			
>= 33000	1.7		.2	.6	1.9	3.6	6.2	1.9	.9				
>= 41000	.7		.2	.2	.9	2.5	3.8	1.0	.5				
>= 52000	.3				.6	1.4	1.9	.4	.1				
>= 65000	.1				.3	.7	.6		.1				

STATION 03215500 ELAINE CREEK AT YATESVILLE, KY. 1916-1975

MONTHLY DURATIONS FOR PERIOD OF RECORD

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	PERCENT OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 0.0	100	100	100	100	100	100	100	100	100	100	100	100	100
>= 0.1	100	100	100	100	100	100	100	100	100	100	100	100	100
>= 0.2	99.9	100	100	100	100	100	100	100	100	100	100	100	99.3
>= 0.3	99.9	100	100	100	100	100	100	100	100	100	100	100	98.9
>= 0.4	99.8	99.9	100	100	100	100	100	100	100	100	100	100	98.3
>= 0.6	99.6	99.2	99.9	100	100	100	100	100	100	100	100	100	96.7
>= 0.8	99.3	97.3	93.9	100	100	100	100	100	100	100	100	100	95.4
>= 1.2	98.5	93.1	97.1	99.4	100	100	100	100	100	100	100	99.4	93.4
>= 1.6	97.6	88.2	94.8	98.5	100	100	100	100	100	99.8	99.8	98.8	92.0
>= 2.3	95.9	81.5	91.5	97.0	99.6	100	100	100	100	99.8	99.7	97.4	84.8
>= 3.3	92.4	72.0	86.2	93.8	98.4	99.7	100	100	100	99.6	98.3	90.8	71.9
>= 4.7	89.5	61.7	84.0	91.6	96.8	99.7	100	100	100	99.5	96.0	84.7	62.8
>= 6.7	85.6	52.8	78.6	90.0	95.5	99.6	100	100	99.4	97.9	91.6	72.5	52.4
>= 9.5	80.9	43.3	72.6	87.6	95.3	99.	100	100	98.9	92.4	81.1	61.7	42.7
>= 14.0	75.6	35.6	61.3	82.8	94.5	99.4	100	100	98.5	85.5	71.0	49.0	35.9
>= 19.0	70.3	27.8	52.8	78.5	93.3	98.1	99.8	100	96.9	76.7	60.2	38.9	28.5
>= 27.0	64.5	20.8	42.1	74.1	91.3	95.8	99.1	100	93.5	65.5	49.3	31.0	20.4
>= 39.0	58.3	14.1	33.9	67.1	88.6	93.1	99.0	99.5	85.8	52.4	38.0	23.2	14.9
>= 55.0	52.8	9.3	29.5	59.3	85.2	90.4	97.8	96.7	74.7	40.6	30.9	18.5	10.6
>= 78.0	47.5	6.6	25.3	51.9	90.1	87.2	93.6	91.5	65.1	31.1	24.5	14.9	8.2
>= 110.0	40.9	4.8	19.8	44.5	69.4	80.1	89.8	80.7	52.7	22.0	18.9	11.8	6.0
>= 160.0	33.0	3.5	14.6	35.7	55.1	71.0	79.8	63.1	39.4	14.9	14.9	9.0	4.3
>= 220.0	26.1	3.0	10.6	28.7	42.8	59.2	67.8	48.9	28.7	10.7	11.8	6.0	3.5
>= 320.0	18.9	1.7	7.0	20.3	31.8	45.6	50.2	34.5	20.3	6.9	7.4	4.2	2.6
>= 450.0	13.2	.8	4.4	14.4	22.0	31.3	37.7	23.7	14.0	4.6	5.4	2.8	1.5
>= 640.0	8.6	.6	2.7	9.8	14.6	19.8	23.3	15.8	8.9	2.9	4.2	1.9	.8
>= 910.0	5.5	.5	2.0	5.6	9.7	12.2	15.2	9.5	5.9	2.0	2.7	1.6	.7
>= 1300.0	3.3	.2	.7	3.7	5.7	7.1	9.1	6.4	3.0	1.6	1.4	1.0	.5
>= 1800.0	2.2	.1	.5	2.8	3.7	4.7	5.8	4.5	1.9	1.3	.9	.6	.4
>= 2600.0	1.1	.1	.2	1.4	1.4	3.0	3.6	2.2	.9	.7		.3	.2
>= 3700.0	.6			.7	1.1	1.5	2.0	.8	.5	.3		.3	.1
>= 5300.0	.2			.3	.2	.9	.6	.1	.1	.1		.1	
>= 7500.0						.3	.1						
>= 11000.0													

STATION 03216000 OHIO RIVER AT ASHLAND, KY. 1939-1975 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 3760	99.7	100	100	100	100	100	100	100	100	95.9	100	100	100
>= 4400	99.7	99.3	100	100	100	100	100	100	100	95.9	100	100	100
>= 5100	99.7	99.3	100	100	100	100	100	100	100	95.9	100	99.8	99.8
>= 5900	99.6	97.3	100	100	100	100	100	100	100	95.9	100	99.6	99.5
>= 6900	99.3	95.3	100	100	100	100	100	100	100	95.9	100	97.6	96.8
>= 8100	98.5	89.6	100	100	100	100	100	100	100	95.9	100	95.3	89.7
>= 9400	97.7	81.9	99.6	99.8	100	100	100	100	100	95.9	99.6	93.1	83.3
>= 11000	96.2	72.7	98.1	99.6	100	100	100	100	100	95.9	97.3	86.7	72.5
>= 13000	94.2	60.8	94.1	98.9	99.5	100	100	100	100	95.7	94.3	80.4	56.8
>= 15000	91.7	45.9	88.9	97.4	99.5	99.9	100	100	99.7	95.6	89.1	73.3	44.2
>= 17000	90.2	37.5	86.0	96.7	98.7	99.7	100	100	99.1	94.0	85.9	67.7	41.8
>= 20000	87.9	29.3	80.3	95.2	96.5	98.8	100	100	98.8	90.7	81.1	59.1	37.6
>= 23000	85.5	24.8	74.6	93.8	93.3	98.1	100	99.9	97.8	87.4	75.6	50.8	33.4
>= 27000	82.9	19.9	67.3	91.0	92.0	96.8	99.2	99.9	97.1	84.3	67.4	45.2	28.5
>= 32000	79.2	16.6	57.4	85.1	89.7	91.9	98.9	99.4	95.1	81.5	59.7	39.4	21.1
>= 37000	75.1	14.1	50.7	80.3	85.5	89.3	97.0	98.3	91.9	72.6	49.2	32.3	17.7
>= 43000	70.3	10.9	44.6	74.6	78.3	86.8	95.9	96.6	82.2	66.7	40.8	27.7	15.5
>= 50000	66.3	9.7	40.9	68.1	73.5	84.0	94.9	93.9	77.7	60.7	32.6	20.9	14.0
>= 59000	60.8	7.4	35.6	61.9	67.4	78.0	93.1	88.7	70.3	48.0	27.3	17.0	10.3
>= 68000	56.3	6.0	32.5	55.7	61.8	73.8	90.2	86.0	62.4	41.8	21.2	13.1	9.8
>= 80000	50.7	4.2	28.3	47.8	57.1	67.6	84.7	81.4	54.2	34.9	14.5	9.5	8.8
>= 93000	45.1	2.7	24.5	42.0	50.2	60.6	77.6	74.9	46.7	29.0	11.8	6.2	7.6
>= 110000	39.0	1.0	17.4	34.4	44.7	55.5	71.4	65.1	38.6	23.0	8.0	4.3	5.7
>= 130000	31.4		11.0	25.6	37.8	48.2	61.7	52.3	27.7	14.9	5.4	3.4	3.4
>= 150000	24.4		5.5	18.6	28.7	39.3	51.9	41.4	19.2	11.7	3.7	2.5	1.7
>= 170000	19.0		1.9	13.3	22.7	32.4	41.2	33.5	13.5	8.3	2.7	1.5	.9
>= 200000	12.9		.5	9.0	14.7	21.8	31.0	22.8	7.5	5.5	1.0	.8	.7
>= 230000	8.7		.5	6.0	9.6	13.7	24.2	14.2	5.2	3.3	.4		
>= 270000	5.8		.5	4.0	5.5	9.0	17.9	8.7	3.6	1.9			
>= 310000	3.8		.3	2.9	3.6	5.0	12.4	5.4	2.5	.8			
>= 370000	1.9		.1	1.4	1.9	2.0	7.0	2.0	1.4	.5			
>= 430000	.9			1.0	1.0	.8	3.5	.9	.5				
>= 500000	.2				.5	.2	1.0	.4					

STATION 03216350 LITTLE SANDY RIVER BELOW GRAYSON DAM, NEAR LEON, KY. 1969-1978 REGULATED

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)	DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>= 6.0	99.8	100	100	98.7	99.0	100	100	100	100	100	100	100	100
>= 7.2	99.8	99.4	100	98.7	99.0	100	100	100	100	100	100	100	100
>= 8.7	99.8	99.4	100	98.7	99.0	100	100	100	100	100	100	100	100
>= 10.0	99.7	99.4	99.7	98.7	99.0	100	100	100	100	100	100	100	100
>= 13.0	99.6	98.7	99.7	98.4	99.0	100	100	100	100	100	100	100	100
>= 15.0	99.4	98.4	99.3	96.5	99.0	100	100	100	100	99.3	100	100	100
>= 18.0	97.5	96.1	96.0	93.2	98.7	99.3	100	91.7	97.7	98.3	100	98.4	100
>= 22.0	92.7	93.9	92.7	88.4	90.0	95.0	95.8	90.3	97.1	91.7	87.1	90.6	100
>= 27.0	85.9	90.3	88.7	79.4	89.4	95.0	95.8	83.7	96.1	83.3	79.4	65.5	85.3
>= 32.0	75.0	88.1	83.3	77.7	87.4	95.0	93.2	73.7	81.9	52.3	48.4	42.3	78.0
>= 38.0	67.3	80.3	78.7	76.8	85.5	94.7	90.3	62.3	80.6	42.3	26.8	33.9	57.3
>= 46.0	62.0	77.7	78.0	73.5	76.1	90.4	88.1	56.3	75.5	23.7	19.7	31.3	55.3
>= 56.0	59.1	76.1	77.7	67.7	75.2	88.3	83.9	54.3	66.5	22.3	18.4	30.6	50.3
>= 67.0	55.8	69.4	75.7	63.5	71.6	86.9	80.3	53.7	62.9	21.0	14.8	27.4	44.3
>= 81.0	52.2	58.7	72.0	60.6	71.6	84.4	78.1	50.0	59.4	17.3	14.2	24.2	37.3
>= 97.0	47.7	51.9	55.0	52.6	69.0	84.4	74.2	47.3	57.7	15.3	13.5	24.2	29.0
>= 120.0	41.8	36.1	47.7	48.4	62.6	73.8	66.8	44.3	52.6	14.0	13.2	19.7	24.3
>= 140.0	36.6	27.7	39.7	47.1	59.4	72.0	63.2	38.3	45.2	10.7	11.9	11.3	14.7
>= 170.0	32.1	19.7	31.7	42.6	51.6	66.3	61.3	35.3	41.9	8.7	6.8	9.0	12.0
>= 200.0	29.6	16.5	28.3	40.6	48.4	63.8	56.5	31.7	39.0	8.0	6.1	7.4	10.7
>= 250.0	24.1	11.3	21.7	33.5	41.0	46.1	46.5	29.7	35.5	6.3	5.5	5.8	7.7
>= 300.0	21.6	9.0	18.3	30.6	36.5	42.6	42.9	28.0	29.7	6.0	5.2	4.8	6.3
>= 360.0	17.9	4.2	14.0	24.5	32.6	34.8	34.2	26.3	27.1	5.7	4.2	2.9	5.0
>= 430.0	15.9	3.5	13.6	20.3	29.6	29.4	31.9	25.0	24.5	5.0	3.5	1.9	3.0
>= 520.0	13.7	3.5	10.6	17.4	24.1	25.5	29.3	23.3	21.2	3.0	3.2	.9	3.0
>= 620.0	11.5	2.5	6.0	14.1	21.5	23.7	24.1	20.6	18.0	2.3	2.9	.3	1.6
>= 750.0	9.6	1.9	4.3	10.6	20.0	21.6	20.6	17.6	14.5	1.6	2.5		1.3
>= 900.0	7.2	1.9	1.6	8.3	13.2	17.3	14.1	15.3	10.9	1.3	1.9		1.3
>= 1100.0	5.3	1.2	1.3	7.0	8.0	12.0	10.3	13.6	7.0	1.3	1.9		
>= 1300.0	3.9	1.2	1.0	6.4	4.5	7.0	8.3	12.0	4.5	1.0	1.9		
>= 1600.0	2.4	.9	.3	2.9	3.5	2.4	4.8	8.3	3.5	1.0	1.9		
>= 1900.0	1.7		.3	2.2	1.5	1.4	3.8	5.6	2.9	1.0	1.6		
>= 2300.0	.7			.6	1.6	.3	2.9	2.0	.9	.3	.6		
>= 2800.0					.3								

STATION 03216350 LITTLE SANDY RIVER BELOW GRAYSON DAM, NEAR LEON, KY. 1967-1978 HISTORICAL

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	1.1	99.7	100	100	98.9	99.2	100	100	100	100	98.9	100	100	100
>=	1.5	99.7	100	100	98.9	98.9	100	100	100	100	98.9	100	99.2	100
>=	2.0	99.4	100	100	98.9	98.9	100	100	100	100	98.6	100	97.6	98.9
>=	2.5	99.3	100	100	98.9	98.9	100	100	100	100	98.6	100	97	98.3
>=	3.2	99.0	99.2	100	98.9	98.9	100	100	100	100	98.6	100	96.8	96.1
>=	4.1	98.6	97.0	100	98.9	98.9	100	100	100	100	98.6	99.7	96.5	93.9
>=	5.2	98.5	97.0	100	98.9	98.9	100	100	100	100	98.6	99.2	96.2	93.3
>=	6.7	98.0	93.5	100	98.9	98.9	100	100	100	100	98.6	98.1	95.2	92.5
>=	8.6	97.5	92.5	98.6	98.9	98.9	100	100	100	100	98.3	97.6	94.6	91.1
>=	11.0	96.9	91.1	97.2	98.9	98.9	100	100	100	100	98.3	94.6	93.0	90.6
>=	14.0	96.1	90.1	95.8	97.3	98.9	100	100	100	100	96.9	92.2	92.5	90.3
>=	18.0	94.0	87.4	92.5	94.4	98.7	99.1	100	93.1	98.1	95.0	90.6	90.9	88.9
>=	23.0	88.4	82.3	88.3	87.9	91.4	95.0	94.4	91.9	97.3	88.3	76.6	80.4	87.2
>=	29.0	79.9	79.3	84.2	82.0	90.1	93.8	93.5	85.8	96.8	65.6	57.0	60.8	71.4
>=	38.0	66.3	69.0	75.6	80.6	87.6	92.0	89.0	68.6	82.3	43.9	24.7	34.4	48.6
>=	48.0	60.0	67.2	73.1	76.6	79.3	87	85.8	63.3	75.3	26.9	16.4	26.6	44.2
>=	61.0	56.8	65.1	70.3	72.0	76.3	84.7	81.7	61.7	65.1	24.7	15.3	25.3	40.8
>=	78.0	52.3	56.5	66.7	66.1	70.4	81.7	79.6	58.3	60.8	21.7	12.4	21.0	34.7
>=	100.0	45.5	43.5	47.8	55.6	66.1	79.9	74.7	54.4	55.4	16.1	11.3	19.9	23.3
>=	130.0	37.7	26.9	38.9	49.5	56.5	71.7	67.5	47.2	46.2	13.3	10.5	12.9	13.3
>=	160.0	33.2	18.8	31.7	46.0	50.3	66.7	65.1	42.5	43.0	9.4	7.8	7.8	10.8
>=	210.0	27.7	12.6	25.8	39.0	44.4	53.1	57.3	35.3	39.0	8.1	5.1	5.6	8.1
>=	270.0	22.3	8.9	18.3	31.7	33.3	39.2	50.0	31.4	34.1	6.4	4.3	4.8	6.1
>=	340.0	18.2	4.8	13.0	26.0	29.3	32.1	41.1	28.6	27.9	5.8	3.7	3.2	4.1
>=	440.0	15.0	3.2	11.1	20.4	24.4	25.0	33.8	26.3	24.7	4.7	2.9	1.6	2.5
>=	560.0	12.3	2.9	8.3	15.3	19.0	20.6	29.3	23.0	20.6	3.3	2.6	.5	2.2
>=	720.0	9.6	1.6	3.8	10.7	16.6	18.5	23.9	18.3	16.1	2.5	2.1		1.1
>=	920.0	6.9	1.3	1.6	8.0	10.7	13.5	17.7	14.1	11.8	1.6	1.6		1.1
>=	1200.0	4.6	1.0	.8	6.7	5.1	7.0	13.4	11.6	6.7	1.6	1.6		
>=	1500.0	3.0	1.0	.2	3.2	3.2	2.0	9.4	8.3	5.9	1.3	1.6		
>=	1900.0	1.9		.2	2.4	1.6	1.1	6.4	5.0	4.0	1.3	1.3		
>=	2500.0	.5			.5	1.0		2.9	.5	1.0				
>=	3100.0	.1						.8	.2	.5				
>=	4000.0							.2		.2				

STATION 03216400 LITTLE SANDY RIVER AT LEON, KY. 1962-1967 NO REGULATION

MONTHLY DURATIONS FOR PERIOD OF RECORD

PERCENT

CLASS CUBIC FEET PER SECOND (FT3/S)		DURATION FOR PERIOD OF RECORD PERCENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
>=	1.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
>=	2.1	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.7
>=	2.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.8
>=	3.5	98.3	94.1	97.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.2
>=	4.5	96.3	88.7	92.8	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	75.6
>=	5.8	92.9	78.5	80.6	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.2	65.0
>=	7.5	88.9	62.4	76.1	89.8	98.4	100.0	100.0	100.0	100.0	97.8	100.0	87.1	55.0
>=	9.7	86.0	58.1	74.4	86.6	97.8	100.0	100.0	100.0	100.0	94.4	91.4	80.6	48.9
>=	13.0	81.7	52.7	71.1	85.5	97.8	100.0	100.0	100.0	100.0	86.7	77.4	69.9	40.6
>=	16.0	78.5	44.1	69.4	84.9	97.8	100.0	100.0	100.0	100.0	80.0	68.3	64.0	35.0
>=	21.0	73.7	40.3	66.7	83.9	97.3	100.0	100.0	100.0	99.5	60.6	57.0	51.1	29.4
>=	27.0	67.7	33.9	61.7	79.0	97.3	100.0	100.0	100.0	91.4	41.7	47.3	38.7	22.8
>=	35.0	60.8	26.3	51.7	73.1	95.2	100.0	99.5	100.0	81.7	26.7	36.6	26.3	15.0
>=	45.0	57.1	20.4	46.7	67.2	93.5	97.6	99.5	100.0	76.9	19.4	31.7	19.9	13.9
>=	59.0	52.3	17.7	38.9	59.1	87.6	94.1	99.5	97.2	68.8	12.8	26.3	15.6	11.7
>=	76.0	46.8	12.9	31.1	51.6	80.1	92.3	99.5	89.4	57.5	8.3	21.0	10.8	9.4
>=	98.0	42.4	9.7	25.6	48.4	73.7	90.5	96.8	81.7	46.8	5.6	16.1	8.1	8.3
>=	130.0	36.9	7.5	21.7	44.1	62.4	84.6	92.5	71.1	37.1	1.1	12.4	4.8	6.1
>=	160.0	33.4	6.5	19.4	40.3	52.7	80.5	88.2	65.0	31.2	.6	9.1	4.8	5.0
>=	210.0	29.1	4.3	16.1	35.5	43.0	70.4	84.4	60.6	25.3		7.0	1.6	3.3
>=	280.0	23.1	3.2	9.4	31.7	30.1	48.5	75.3	52.2	21.5		5.4	.5	.6
>=	360.0	18.9	2.2	6.1	26.3	22.0	39.1	68.8	42.2	17.2		3.8		.6
>=	460.0	14.9	1.6	2.8	21.0	16.7	29.6	56.5	34.4	12.9		3.2		.6
>=	600.0	11.1	.5	2.2	16.1	13.4	21.8	41.9	25.5	10.7		2.1		
>=	770.0	8.7	.5	.5	13.4	8.0	15.3	34.9	20.0	10.2		1.6		
>=	1000.0	6.4		.5	10.2	5.3	11.2	26.3	16.1	7.5				
>=	1300.0	4.4			7.5	3.7	5.9	17.2	12.2	6.4				
>=	1700.0	3.2			3.2	1.6	5.9	14.5	9.4	4.8				
>=	2200.0	2.3			1.6	1.0	3.5	12.3	5.5	4.3				
>=	2800.0	1.5			.5	.5	2.9	7.5	2.7	3.7				
>=	3600.0	1.0					2.3	6.4	2.2	1.0				
>=	4700.0	.3					1.7	2.1		.5				
>=	6100.0	.1					1.1	.5						
>=	7800.0						1.1							