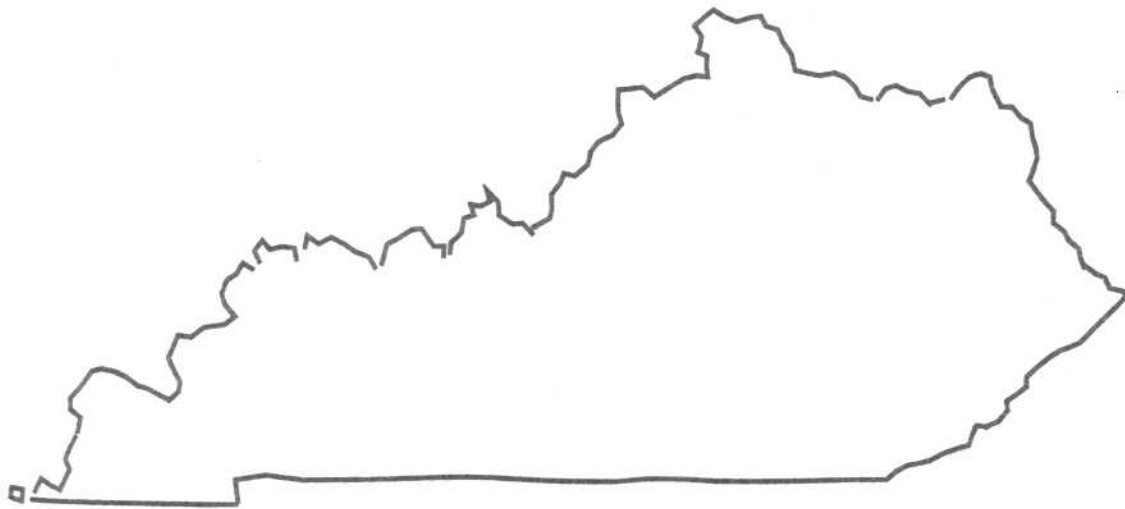


Water Resources Data Kentucky Water Year 1998

Water-Data Report KY-98-1



U.S. Department of the Interior
U.S. Geological Survey



Prepared in cooperation with the
Commonwealth of Kentucky
and with other agencies

CALENDAR FOR WATER YEAR 1998

1997

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
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							30													

1998

JANUARY							FEBRUARY							MARCH						
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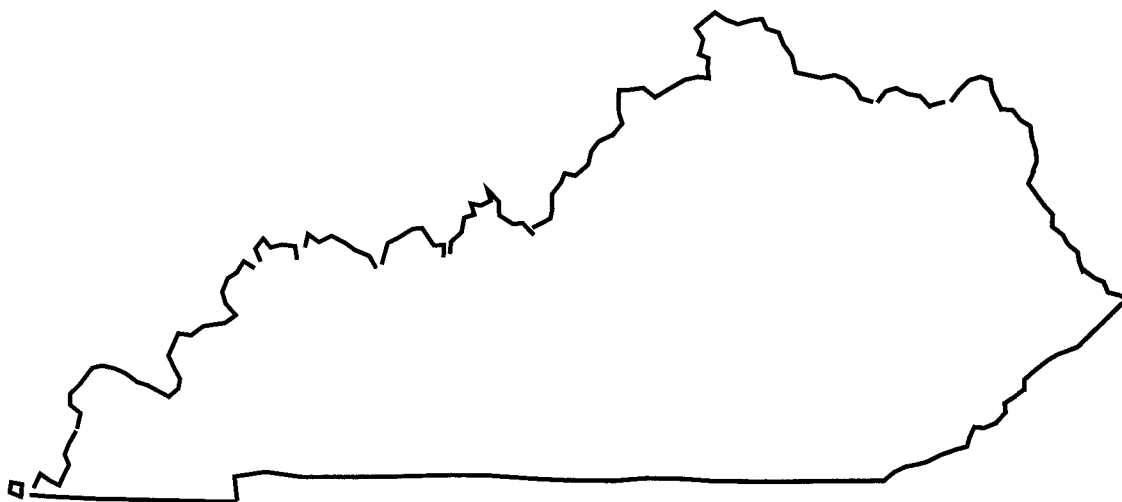
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							30	31												

U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Kentucky Water Year 1998

By D.L. McClain, F.D. Byrd, and A.C. Brown

Water-Data Report KY-98-1



Prepared in cooperation with the
Commonwealth of Kentucky and with other agencies



U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Charles G. Groat, Director

For additional information write to:

District Chief, Water Resources Division
U.S. Geological Survey
9818 Bluegrass Parkway
Louisville, Kentucky 40299-1906

PREFACE

This volume of the annual hydrologic data report of Kentucky is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Survey policy and established guidelines. Most of the data were collected, computed, and processed from the District and field offices.

The data were collected, computed, and processed by the following personnel:

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This report was prepared in cooperation with the Commonwealth of Kentucky and with other agencies under the general supervision of Dennis L. McClain, Supervisory Hydrologic Technician, and Harry C. Rollins, District Chief, Kentucky.

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**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
	STATION NUMBER
OHIO RIVER BASIN	
Ohio River:	
BIG SANDY RIVER BASIN	
Levisa Fork (head of Big Sandy River):	
Grapevine Creek near Phyllis (d)	03207965 41
Levisa Fork at Pikeville (d)	03209500 42
Johns Creek near Meta (d)	03210000 43
Levisa Fork at Paintsville (d)	03212500 44
LITTLE SANDY RIVER BASIN	
Little Sandy River at Grayson (d)	03216500 45
Ohio River at Greenup Dam (d)	03216600 46
TYGARTS CREEK BASIN	
Tygarts Creek near Greenup (d)	03217000 52
KINNICONICK CREEK BASIN	
Kinniconick Creek at Tannery (d)	03237250 53
LICKING RIVER BASIN	
Fox Creek:	
Rock Lick Creek above Unnamed Tributary near Sharkey (d)	03250310 54
Rock Lick Creek at State Highway 158 near Sharkey (d)	03250322 55
North Fork Licking River near Mt. Olivet (d)	03251200 56
South Fork Licking River:	
Hinkston Creek near Carlisle (d)	03252300 57
Licking River at Catawba (d)	03253500 58
Ohio River at Markland Dam (d)	03277200 59
KENTUCKY RIVER BASIN	
North Fork Kentucky River (head of Kentucky River):	
Leatherwood Creek at Daisy (d)	03277400 60
North Fork Kentucky River at Jackson (d)	03280000 61
Cutshin Creek at Wooton (d)	03280700 62
Middle Fork Kentucky River at Tallega (d)	03281000 63
Kentucky River:	
Red Bird River (head of South Fork Kentucky River) near Big Creek (d)	03281040 64
Goose Creek at Manchester (d)	03281100 65
South Fork Kentucky River at Booneville (d)	03281500 66
Kentucky River at lock 14, at Heidelberg (d)	03282000 67
Sturgeon Creek at Cressmont (d)	03282040 68
Red River near Hazel Green (d)	03282500 69
Red River at Clay City (d)	03283500 70
Kentucky River at lock 10, near Winchester (d)	03284000 71
Hickman Creek:	
East Hickman Creek at Andover Village (d)	03284520 72
East Hickman Creek Tributary near Lexington (d)	03284525 73
East Hickman Creek near East Hickman (d)	03284530 74
West Hickman Creek near East Hickman (d)	03284555 75
Dix River near Danville (d)	03285000 76
Kentucky River at lock 7, near High Bridge (d)	03286500 77
Kentucky River at lock 6, near Salvisa (d)	03287000 78
Kentucky River at lock 4, at Frankfort (d)	03287500 79
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North Elkhorn Creek at Bryant Road (d)	03287580 80
North Elkhorn Creek at Winchester Road (d)	03287590 81
North Elkhorn Creek at Bryan Road (d)	03287600 82
North Elkhorn Creek near Georgetown (d)	03288000 83
North Elkhorn Creek at Georgetown (d)	03288100 84
Royal Spring at Georgetown (d)	03288110 85
South Elkhorn Creek at Fort Spring (d)	03289000 86

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME--Continued**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
	STATION NUMBER
OHIO RIVER BASIN--Continued	
Ohio River--Continued	
KENTUCKY RIVER --Continued	
Elkhorn Creek--continued	
Town Branch at Yarnallton (d)	03299200 87
South Elkhorn Creek near Midway (d)	03289300 88
Elkhorn Creek near Frankfort (d)	03289500 89
Kentucky River at lock 2, at Lockport (d)	03290500 90
Eagle Creek at Glencoe (d)	03291500 91
HARRODS CREEK BASIN	
Harrods Creek near Prospect (c)	03292473 92
GOOSE CREEK BASIN	
Goose Creek at Old Westport Road near St. Matthews (d, c)	03292474 93
Goose Creek at U.S. Hwy 42 near Glenview Acres (c)	03292475 95
Little Goose Creek near Harrods Creek (c)	03292480 96
BEARGRASS CREEK BASIN	
South Fork Beargrass Creek at Louisville (d,c)	03292500 97
South Fork Beargrass Creek at Eastern Parkway (c)	03292530 103
South Fork Beargrass Creek at Winter Avenue at Louisville (c)	03292550 108
Middle Fork Beargrass Creek at Louisville (d,c)	03293000 113
Middle Fork Beargrass Creek at Scenic Loop at Louisville (c)	03293200 117
Middle Fork Beargrass Creek at Lexington Road (c)	03293500 120
Muddy Fork at Mockingbird Valley Road at Louisville (c)	03293530 123
Ohio River at Louisville (d)	03294500 124
MILL CREEK BASIN	
Mill Creek Cutoff near Louisville (c)	03294550 125
Mill Creek at Orell Road near Louisville (c)	03294570 126
SALT RIVER BASIN	
Salt River at Glensboro (d)	03295400 127
Bullskin Creek near Simpsonville (d)	03295702 128
Brashears Creek at Taylorsville (d)	03295890 129
Floyds Fork:	
Floyds Fork near Pewee Valley (d)	03297900 130
Long Run near Fisherville (c)	03297980 131
Floyds Fork at Fisherville (d,c)	03298000 132
Pope Lick at Pope Lick Road near Middletown (c)	03298100 134
Chenoweth Run at Ruckriegal Parkway (c)	03298135 135
Chenoweth Run at Gelhaus Lane near Fern Creek (d, c)	03298150 150
Floyds Fork near Mount Washington (c)	03298200 165
Cedar Creek at Fairmount Road near Mt. Washington, Ky. (d,c)	03298242 166
Cedar Creek at Thixton Road near Louisville (c)	03298250 168
Pennsylvania Run at Mt. Washington Road near Louisville (c)	03298300 169
Salt River at Shepherdsville (d)	03298500 170
Long Lick near Clermont (d)	03298550 171
Rolling Fork:	
Beech Fork at Maud (d)	03300400 172
Beech Fork at Bardstown	03301000 173
Rolling Fork near Boston (d)	03301500 174
Wilson Creek at Harrison Fork Road near Deatsville (c)	03301575 175
Pond Creek:	
Southern Ditch:	
Southern Ditch at Minors Lane near Okolona (c)	03301880 176
Northern Ditch:	
Fern Creek at Old Bardstown Road at Louisville (d,c)	03301900 177
Northern Ditch at Okolona (d,c)	03301940 179
Spring Ditch at Private Drive near Okolona (c)	03301950 181
Pond Creek near Louisville (d,c)	03302000 182
Pond Creek at Pendleton Road near Louisville (c)	03302030 184

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME--Continued**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
STATION NUMBER	
OHIO RIVER BASIN--Continued	
Ohio River--Continued	
OTTER CREEK BASIN	
Otter Creek at Otter Creek Park near Rock Haven, Ky. (c)	03302110 185
Ohio River at Cannelton Dam (d,c)	03303280 186
GREEN RIVER BASIN	
Green River:	
Russell Creek near Columbia (d)	03307000 193
Green River at Munfordville (d)	03308500 194
Nolin River at White Mills (d)	03310300 195
Nolin River at Kyrock (d)	03311000 196
Beaver Creek at Hwy 31 E near Glasgow (d)	03312765 197
Barren River:	
West Fork Drakes Creek near Franklin (d)	03313700 198
Green River at Paradise (d)	03316500 199
GREEN RIVER BASIN--Continued	
Green River at lock 2, at Calhoun (d)	03320000 200
Pond River near Apex (d)	03320500 201
Pond River near Madisonville (g)	03321060 202
WABASH RIVER BASIN	
Wabash River at New Harmony, IN (c)	03378500 204
TRADEWATER RIVER BASIN	
Tradewater River at Olney (d)	03383000 210
Ohio River at Smithland Dam	03399800 211
CUMBERLAND RIVER BASIN	
Martins Fork Lake at Martins Fork Dam near Smith (c,t)	03400798 216
Martins Fork near Smith (d,c,t)	03400800 237
Cumberland River near Harlan (d)	03401000 244
Yellow Creek near Middlesboro (d)	03402000 245
Cumberland River at Pine St. Bridge at Pineville, KY (d)	03402900 246
Cumberland River at Barbourville (d)	03403500 247
Clear Fork at Saxton (d)	03403910 248
Cumberland River at Williamsburg (d)	03404000 249
Laurel River:	
Lynn Camp Creek at Corbin (d)	03404900 250
Rockcastle River at Billows (d)	03406500 251
South Fork Cumberland River near Stearns (d)	03410500 252
Beaver Creek near Monticello (d)	03413200 253
Little River near Cadiz (d)	03438000 255
TENNESSEE RIVER BASIN	
Tennessee River at Hwy 60, near Paducah, Ky (c)	03609750 256
Clarks River at Almo (d)	03610200 261
MASSAC CREEK BASIN	
Massac Creek near Paducah (d)	03611260 262
Ohio River at Metropolis, IL (d)	03611500 263
BAYOU CREEK BASIN	
Bayou Creek:	
Bayou Creek near Heath (d)	03611800 264
Bayou Creek near Grahamville (d)	03611850 265
Little Bayou Creek near Grahamville (d)	03611900 266
Ohio River at lock and dam 53, near Grand Chain, IL (c)	03612500 267
LOWER MISSISSIPPI RIVER BASIN	
BAYOU DE CHIEN BASIN	
Bayou De Chien near Clinton (d)	07024000 273

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED GROUND-WATER LEVELS

	Page
<u>GRAVES COUNTY</u>	
Well 365210088391301 (Viola)	278
<u>HARDIN COUNTY</u>	
Well 374035085525401 Local number OW-1-82	279
Well 374046085523501 Local number OW-1-81	280
<u>JEFFERSON COUNTY</u>	
Well 381441085452701 Local number 45-14-71, (A-2).	281
Well 381442085444801 (Metro United Way)	282
Well 381445085460201 (9th & Broadway QW).	282
Well 381447085454001 Local number 45-14-66, (CJ&T #5).	282
Well 381501085445601 (UL Med.)	283
Well 381503085453301 Local number 45-15-36, (Ky. Towers).	283
Well 381504085443202 Local number CP-7A	283
Well 381517085455501 Local number 86-6.	284
Well 381518085453402 Local number 86-11	285
Well 381522085445201 (LSM)	286
Well 381538085453001 Local Number 86-7	286

PRECIPITATION STATION, BY COUNTY FOR WHICH RECORD IS PUBLISHED

<u>ROWAN COUNTY, KENTUCKY</u>	
390706083324900	287

INTRODUCTION

Water resources data for the 1998 water year for Kentucky consist of records of stage, discharge, and water quality of streams and lakes; and water levels of wells. This report includes daily discharge records for 96 stream-gaging stations. It also includes water-quality data for 37 stations sampled at regular intervals. Ground-water levels are published for 5 recording and 9 partial record sites. Precipitation data at a regular interval are published for 1 site. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurement and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kentucky.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers titled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers titled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1944 to 1973 in a series of water-supply papers titled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year and continuing through water year 1998, streamflow data have been released by the U.S. Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report KY 98-1." These reports are for sale to the public for a nominal fee by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (502) 493-1900.

COOPERATION

The U.S. Geological Survey and organizations of the Commonwealth of Kentucky have had cooperative agreements for the systematic collection of streamflow records since 1938, for ground-water records since 1943, and for water-quality records since 1949. Organizations that assisted in collecting data through cooperative agreements with the Survey are

Ohio River Valley Water Sanitation Commission, Alan Vicory, Executive Director,
Kentucky Cabinet for Health Services, John H. Morse, Secretary,
Kentucky Geological Survey, Dr. Donald C. Haney, Director and State Geologist,
Kentucky Natural Resources and Environmental Protection Cabinet, James E. Bickford, Secretary,
Kentucky River Authority, Hugh Archer, Executive Director,
Kentuckiana Regional Planning and Development Agency, Jack L. Scriber, Executive Director,
Bullitt County, John D. Harper, Judge/Executive,
Jefferson County, David L. Armstrong, Judge/Executive,
Lexington-Fayette Urban County Government, Sandra M. Varellas, Judge/Executive,
City of Bardstown, Dr. Harry Spalding, Mayor,
City of Carrollton, William J. Welty, Sr., Mayor,

City of Elizabethtown, Patricia V. Durbin, Mayor,
 City of Georgetown, Warren Powers, Mayor,
 City of Glasgow, Charles B. Honeycutt, Mayor,
 City of Lewisburg, Gwyneth McKinney, Mayor,
 City of Louisville, Jerry E. Abramson, Mayor,
 City of Owingsville, Rawleigh M. Havens, Mayor,
 City of Simpsonville, Steve Eden, Mayor,
 Kentucky Heritage Resource Conservation & Development Council, John Overing, RC&D Coordinator,
 University of Louisville, Dr. John Schumaker, President,
 Water Resources Research Institute, Dr. Lyle Sendlein, and
 Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers: the U.S. Environmental
 Protection Agency, Region IV--Atlanta; and the U.S. Navy.
 Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Monthly and annual mean streamflow for the 1998 water year and the period of record are shown in figure 1 for three representative streamflow-gaging stations in Kentucky.

Based on flow data collected at 23 surface-water gaging stations across Kentucky, annual peak flows during the 1998 water year had recurrence intervals ranging from less than two years to greater than twenty five years. The twenty five year recurrence interval occurred in the South-central part of the State in the Cumberland River Basin. Two sites in the Kentucky River Basin exceeded the ten year recurrence interval. Low flow recurrence intervals remained at the two year recurrence interval across the State except for one site in the Salt River Basin which exceeded the ten year recurrence interval (table 1).

No major flooding occurred in the State during the 1998 water year. Mean stream flows across the State ranged from twenty seven percent below to sixteen percent above the long term average.

Quality of Water

Water-quality data were collected primarily within the National Stream Quality Accounting Network (NASQAN) program. During water year 1998, five NASQAN stations were operated including Ohio River at Greenup Dam near Greenup, Kentucky (03216600), Ohio River at Cannelton Dam, Kentucky (03303280), Wabash River at New Harmony, Indiana (03378500), Tennessee River at Highway 60 near Paducah, Kentucky (03609750), and Ohio River at Dam 53 near Grand Chain, Illinois (03612500).

Three types of quality control (QC) samples ---concurrent replicates, field matrix spikes, and equipment blanks---are utilized to evaluate the results of collected NASQAN environmental samples. Concurrent replicates are two samples taken as closely together, in time and space, as possible. Concurrent replicate data provides a measure of sampling precision. At least two concurrent replicates are taken each water year at each NASQAN station.

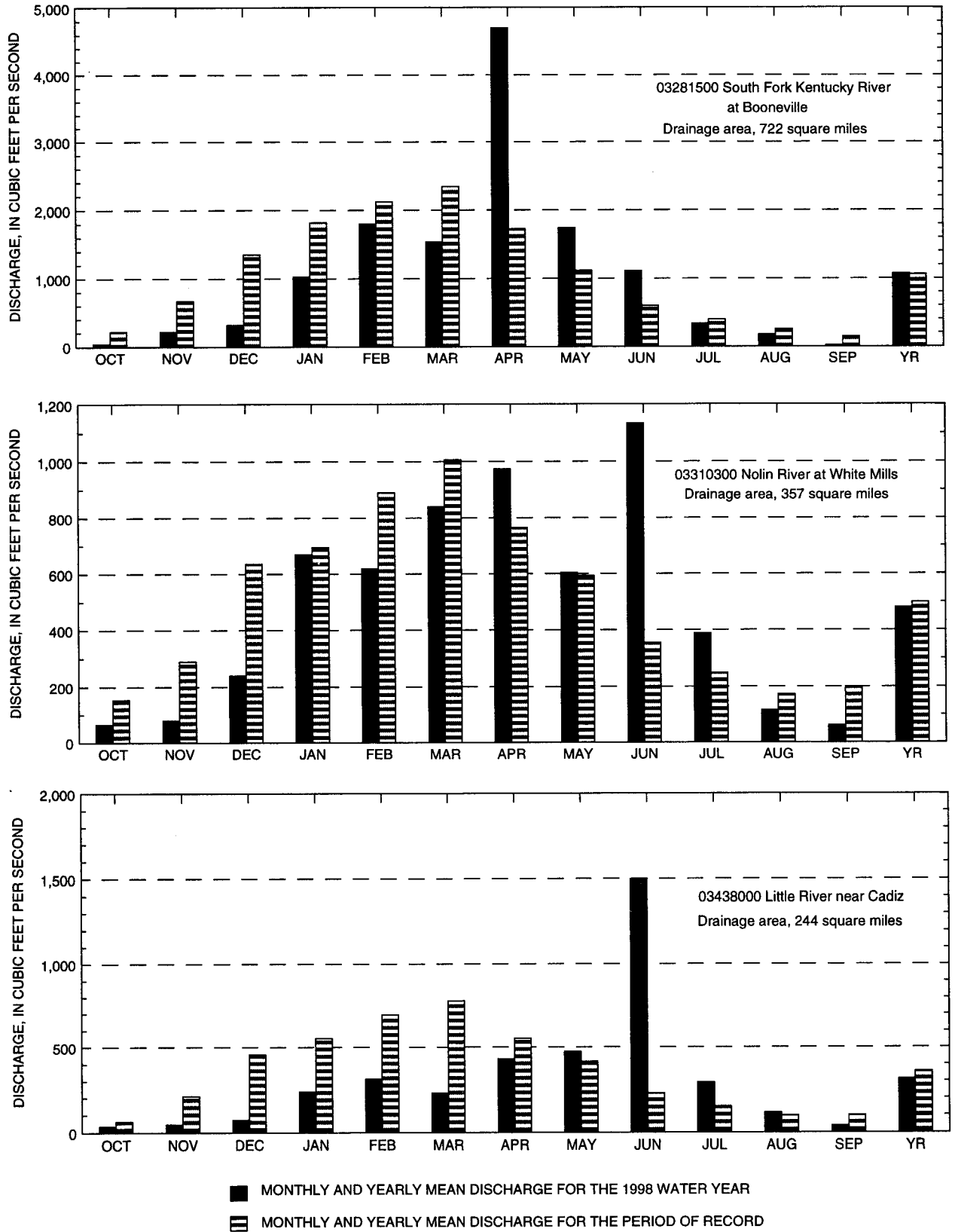


Figure 1. Mean discharge during 1998 water year and period of record for three representative gaging stations.

Field matrix spikes are used to evaluate the matrix effect on specific constituents. A spike is an addition of a known quantity of one or more compounds of interest to the sample prior to analysis. For the NASQAN program, one field pesticide matrix spike is performed in the early summer at each station every water year.

Equipment blanks are used to assess the potential contamination levels associated with cleaning procedures, shipping and handling procedures, as well as laboratory contamination. At least one set of blank samples is processed in the District laboratory for each sampling device every year prior to the collection of any environmental sample. Equipment blanks are also taken in the field, and thereby represent the same aspects of sample collection, field processing, transportation, and laboratory handling as the environmental sample. A statistical summary of the aggregated equipment blank inorganic results for selected constituents for the sampling period October 1995 through September 1998 is presented in table 2. Constituents with concentrations below the QC-MDL were not included in table 2, including antimony, barium, cadmium, iron, molybdenum, nickel, and silver. For purposes of generating a statistical summary, censored data results were set to each constituent's detection limit.

Acceptable concentrations for constituents from equipment blanks are either less than or no greater than two times the QC method detection limit (MDL). A second level criteria for those exceeding the QC-MDL is set at less than or equal to half the minimum reporting level limit (MRL) established for the environmental sample analysis.

Ground-Water Levels

Most currently monitored observation wells tap the alluvial aquifer underlying Downtown Louisville. Two observation wells are in or near the well field of Elizabethtown, in Hardin County, Kentucky, and are used to monitor water levels in the karst aquifer used for water supply by the city (fig. 6).

Ground-water levels in the alluvial aquifer underlying Louisville and Western Jefferson County respond to rainfall, pumpage, river stage, and natural flow to the Ohio River. In general, after reaching record high water levels caused by the flood of March 1997, ground water levels have returned to pre-flood conditions.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

Louisville and Jefferson County Metropolitan Sewer District (MSD) Sampling Network is a network of 27 surface-water-quality sites in Jefferson County, including a control site in Bernheim Forest in Bullitt County and Otter Creek Park in Meade County. The program is a cooperative effort between the U.S. Geological Survey and MSD to (1) determine the current status of water quality in the major streams in Jefferson County, (2) identify problem stream segments and whether they are impacted by point or nonpoint sources of pollution, and (3) obtain streamflow information on these streams. The 27 sites are sampled monthly for 9 months per year. At six of the sites, continuous-record streamflow is determined.

Table 1. Mean, maximum, and minimum streamflow for water year 1998 and recurrence intervals at selected stations.

Station number	Length of record (years)	Mean		Maximum		Minimum	
		Daily streamflow (ft ³ /s)	Percent of average	Peak streamflow (ft ³ /s)	Recurrence interval (years)	Daily streamflow (ft ³ /s)	Recurrence interval (years)
<u>TYGARTS CREEK BASIN</u>							
03217000	58	325	104	5200	<2	0.33	>2
<u>KINNICONICK CREEK BASIN</u>							
03237250	7	368	116	12700		0.12	
<u>LICKING RIVER BASIN</u>							
03251200	7	317	93	5910		.0	
<u>KENTUCKY RIVER BASIN</u>							
03280700	41	93.7	99	8650	>5	2.7	<2
03281040	26	260	92	20400	>10	2.5	<2
03281100	34	267	100	17300	<10	2.3	<2
03281500	65	1077	101	25000	<2	5.9	>2
03282500	43	85.9	97	1380	<2	0.20	>2
03283500	61	527	105	7230	<2	15	<2
03285000	56	542	113	15300	>2	0.72	<2
<u>BEARGRASS CREEK BASIN</u>							
03293000	54	26.6	104	948	<2	0.29	>2
<u>SALT RIVER BASIN</u>							
03298000	54	190	104	4870	<2	0.05	<2
03300400	26	691	106	12300	<2	0.51	>10
03301500	60	1967	107	17700	<2	6.1	>2
<u>GREEN RIVER BASIN</u>							
03307000	59	292	100	8140	<2	10	<2
03310300	39	481	96	4680	<2	53	<2
03320500	58	200	73	4770	<2	0.22	<2
<u>CUMBERLAND RIVER BASIN</u>							
03404900	25	99.4	110	6820	>25	1.1	=2
03406500	62	1063	112	21200	<2	14	<2
03410500	56	2056	115	41400	<2	28	>2
03438000	58	313	88	12900	>5	29	<2
<u>MASSAC CREEK BASIN</u>							
03611260	27	15.2	86	2840	>2	0.46	<2
<u>BAYOU DE CHIEN BASIN</u>							
07024000	53	104	100	3970	>2	19	<2

Table 2: Statistical summary for selected inorganic constituents from 21 equipment blank samples collected at NASQAN stations from October 1995 through September 1998.

[Constituents are in micrograms per liter except for calcium, sodium, and silica which are in milligrams per liter. SD, standard deviation; MDL, minimum detection limit; MRL, minimum reporting level]

Constituent	Mean	LCI	UCI	SD	MDL	MRL
Aluminum	0.345	0.118	0.300	0.300	0.610	0.300
Boron	2.318	1.537	2.000	2.000	3.794	2.00
Calcium	0.040	0.102	0.002	0.006	0.098	0.002
Chromium	0.203	0.015	0.200	0.200	0.200	0.200
Copper	0.468	0.685	0.200	0.200	2.300	0.200
Lead	0.325	0.113	0.300	0.300	0.300	0.300
Manganese	0.112	0.040	0.100	0.100	0.140	0.100
Silica	0.028	0.023	0.020	0.020	0.081	0.020
Sodium	0.046	0.060	0.025	0.025	0.210	0.030
Zinc	1.626	2.055	0.500	0.750	3.680	0.500

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 40 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1998 water year that began October 1, 1997, and ended September 30, 1998. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, and water-quality data for surface-water gaging stations. The locations of the stations and wells where the data were collected are shown in figures 3-7. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in the near future.

Station Identification Numbers

Each data station, whether stream site or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells, and in Kentucky for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 03208000, which appears just to the left of the station name, includes the two-digit Part number "03" plus the six-digit downstream-order number "208000." The Part number designates the major river basin; for example, Part "03" is the Ohio River Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig.2).

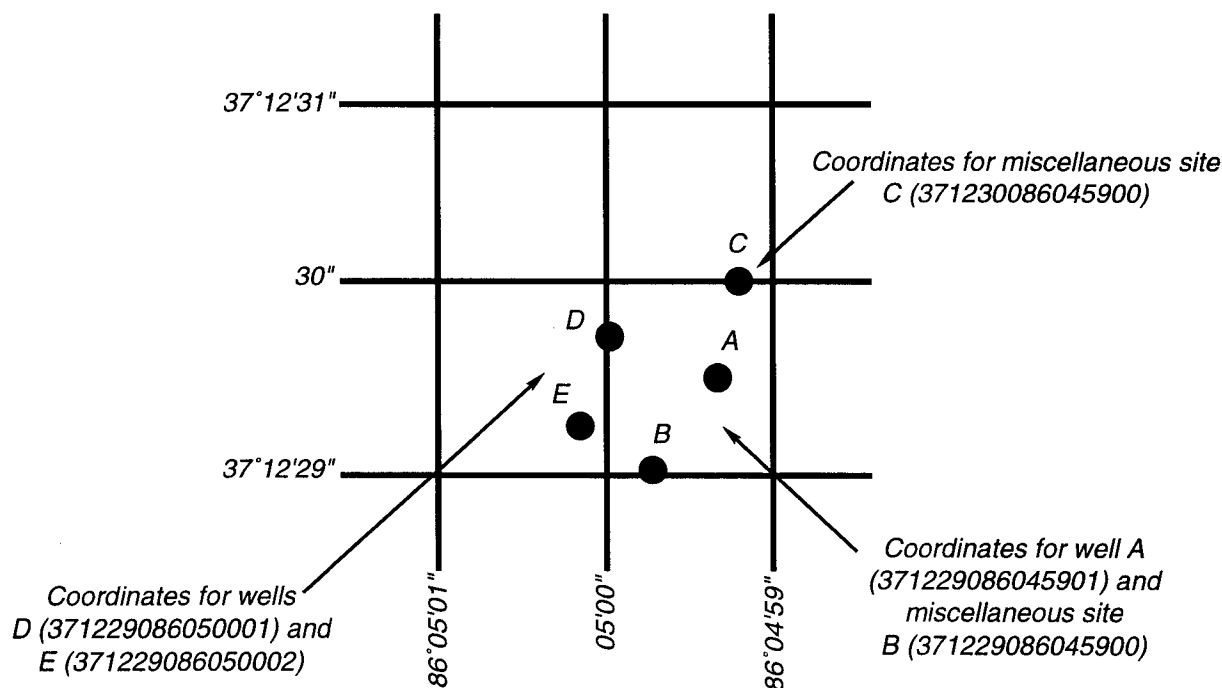


FIGURE 2.—SYSTEM FOR NUMBERING WELLS, SPRINGS, AND MISCELLANEOUS SITES (LATITUDE AND LONGITUDE).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record.

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records."

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage."

Continuous records of stage are obtained with data-collection platforms which transmit stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record,

discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consists of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that included statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the referenced place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available vary from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN"); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area included large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below

those figures. The designated period will be expressed as "FOR WATER YEARS __- __, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period as appropriate. The designated period selected, "WATER YEARS __- __," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climactic year (April 1–March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic).

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Kentucky District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the office whose address is given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape or recorded electronically. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 4 and 5.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on-site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Kentucky District.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Kentucky District whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Kentucky District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

Laboratory Measurements

Sediment samples, samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

The following remark codes may appear with the water-quality data in this section:

PRINTED

OUTPUT

REMARK	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blanks.

Dissolved Trace-Element Concentrations

NOTE.-- Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently

produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE.-- Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Records of Ground-Water Levels

Water-level data from selected observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes. Locations of observation wells in Kentucky are shown in figures 6 and 7.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on) and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Precipitation Quality

The precipitation-quality data presented in this report represent analyses of time-composite samples, most often for a collection period of one week. This is in contrast to most of the published surface-water quality data which represent samples taken of specific times.

On-Site Measurements and Sample Collection

Precipitation samples are collected with wet/dry collectors. The wet/dry collector is the preferred precipitation sampler and consists of a bucket which is open only during periods of wet (rainfall, snow, etc.) precipitation. During dry periods the sample bucket is covered, thus excluding dry-fall precipitation from the sample.

National Trends Network (NTN) stations are equipped with weighing-bucket rain gages, which graphically record rainfall as well as count rainfall events. The other commonly-used recording gage consists of a rainfall catchment pipe and a float-driven digital recorder which periodically records the water-level in the pipe.

Time-composite wet-precipitation samples are collected and brought back to the laboratory and weighed. Rainfall quantity is estimated from the sample weight. A temperature-density correction can be applied if desired but normally this correction results in a very small change in the estimated quantity of rainfall. An estimation of the sampler efficiency is made by computing the ratio of rainfall amount collected in the sample bucket to that measured by the

recording rain gage. This collector efficiency ratio is an important indicator of possible collector malfunction. For example, a ratio substantially less than one indicates that the wet/dry collector was not opening properly and thus, excluding rainfall.

After weighing the sample, a small portion is removed for measurement of pH, specific conductance, and, in some instances, titratable acidity. The pH and specific conductance are both determined electrometrically according to methods described in the National Atmospheric Deposition Program "NADP Instruction Manual: Site Operation." The remainder of the sample is then used for laboratory chemical analyses. This portion of the sample is shipped to the laboratory raw and untreated. In the case of NTN operation, the original bucket is resealed and mailed to the Illinois State Water Survey Central Analytical Laboratory (CAL) for analysis. In all other instances, sample portions are preserved, treated, and analyzed according to specific project requirements.

Data Presentation

Records of precipitation quality are published following the "records of ground-water" section of this report. As with records of daily water discharge and surface-water quality, precipitation-quality records consist of two parts, a station header and a data table. The station header contains the descriptive information pertinent to the establishment, location, and operation of the site. Records are presented alphabetically by county and, within each county, by latitude, longitude, and sequence number. As with ground-water wells, the primary site identifier used for precipitation-quality stations in this report is the 15-digit composite of these three numbers. The following text presents a clarification of the subheadings which follow the station identification number and station name.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published precipitation-quality records for the station. Periods of record are presented separately for each type of sample collected at the site (in this report, wet precipitation, dry precipitation, and fog).

INSTRUMENTATION.--In this section, an abbreviated-style listing of the data-recording and sample-collection equipment permanently housed at the site is presented.

REMARKS.--This section is reserved for comments pertaining to unusual or extraordinary circumstances or to qualifying information which must be used accurately interpret the data presented for the site. More general comments which may pertain to several or all of the sites are presented in the "EXPLANATION OF RECORDS" section in the introductory part of the report.

COOPERATION.--Chemical-quality data were provided by National Atmospheric Deposition Program.

ACCESS TO USGS DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at <http://www.water.usgs.gov>.

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division Districts Offices (See address on the back of the title page).

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section.

Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the over all data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collect in this district are:

Field blank- a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank- a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank- a blank solution that is processed through all equipment used for collection and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank- a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank- a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank- a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank- a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are: Sequential samples- a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample- a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing analysis.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35C plus or minus 1.0C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5C plus or minus 0.2C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35C plus or minus 1.0C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria which produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic invertebrates are invertebrate animals inhabiting the bottoms of lakes, streams, and other water bodies. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 105 C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing-record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.
3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage.

This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Extractable organic halides (EOX) are organic compounds which contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried stream bottom sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the stream bottom sediments.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide.

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Low tide is the minimum height reached by each falling tide.

Mean high tide is the average of all high tides over a specified period.

Mean low tide is the average of all low tides over a specified period.

Mean water level is the average of all tides over a specified period.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (mg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, mg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Microsiemens per centimeter (mS/cm, US/CM) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. It is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic-invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification Size (mm) Method of analysis

Clay 0.00024 - 0.004 Sedimentation

Silt .004 - .062 Sedimentation

Sand .062 - 2.0 Sedimentation/sieve

Gravel 2.0 - 64.0 Sieve

The partial-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m²/time)] for periphyton and macrophytes and [mg C/(m³/time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O₂/(m²/time)] for periphyton and macrophytes and [mg O₂/(m³/time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Suspended total residue at 105 Deg. C concentration is the concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). A small aliquot of the sample is used for the analysis.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization or organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Synoptic Studies Short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom:Animal

Phylum:Arthropoda

Order:Ephemeroptera

Family:Ephemeridae

Genus:Hexagenia

Species:Hexagenia Limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Volatile Organic Compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are man-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI Book 1, Chapter D2. 1976. 24 pages.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI Book 2, Chapter D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI Book 2, Chapter E2. 1990. 150 pages.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI Book 2, Chapter F1. 1989. 97 pages.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI Book 3, Chapter A6. 1968. 13 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS—Continued

- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI Book 3, Chapter A21. 1995. 56 pages.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI Book 3, Chapter B5. 1987. 15 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS—Continued

- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI Book 3, Chapter B7. 1992. 190 pages.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS–TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI Book 3, Chapter C3. 1972. 66 pages.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A2. 1968. 15 pages.

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI Book 4, Chapter B3. 1973. 15 pages.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI Book 4, Chapter D1. 1970. 17 pages.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greenson, editors: USGS–TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI Book 5, Chapter A6. 1982. 181 pages.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI Book 5, Chapter C1. 1969. 58 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS—Continued

Book 6. Modeling Techniques

Section A. Ground Water

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI Book 6, Chapter A4. 1992. 108 pages.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI Book 6, Chapter A5, 1993. 243 pages.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1996. 125 pages.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI Book 7, Chapter C3. 1981. 110 pages.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI Book 8, Chapter A2. 1983. 57 pages.

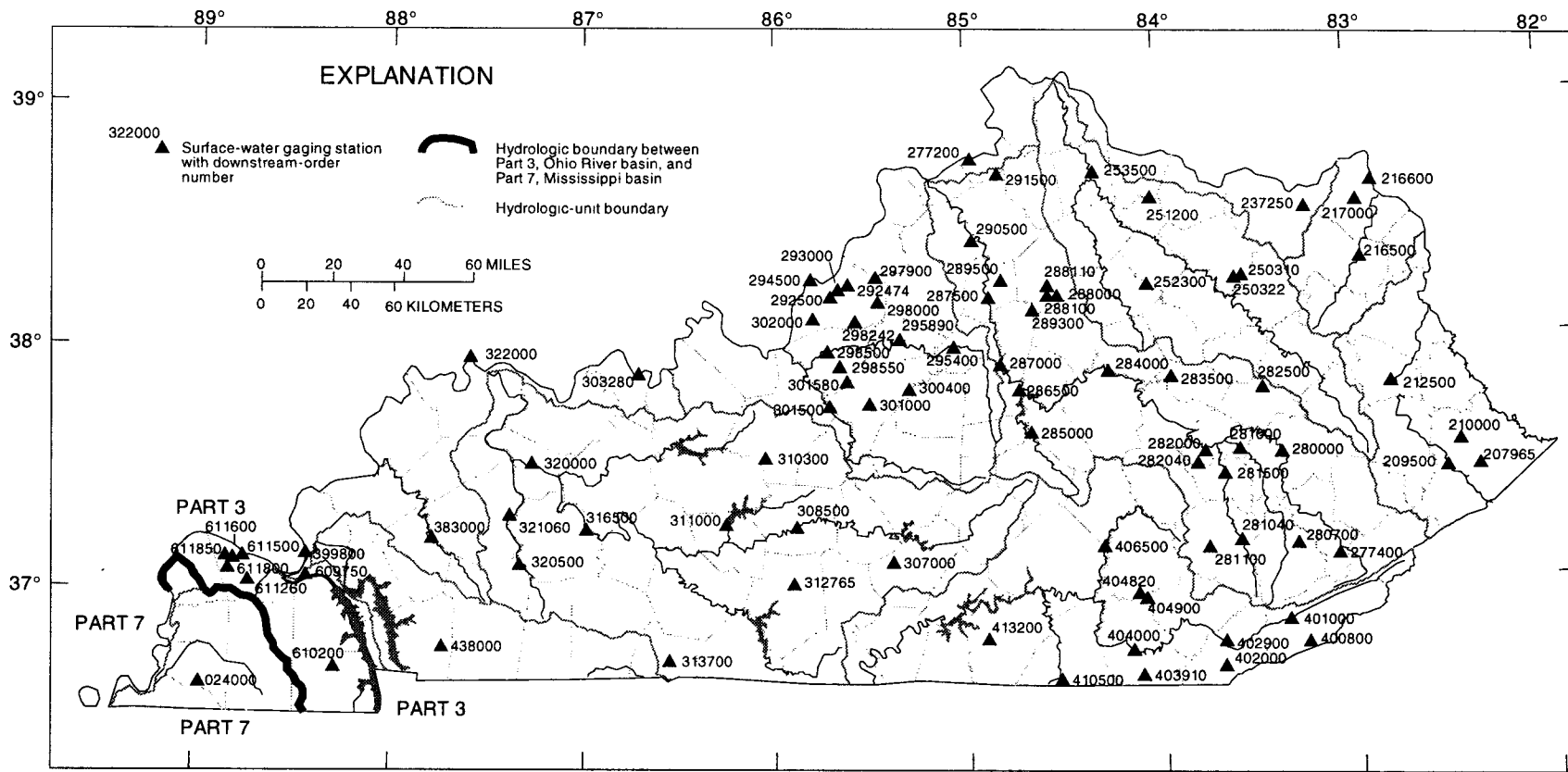
Section B. Instruments for Measurement of Discharge

- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI Book 8, Chapter B2. 1968. 15 pages.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI Book 9, Chapter A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D.N. Myers and F.D. Wilde: USGS–TWRI Book 9, Chapter A7. 1997. 49 pages.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI Book 9, Chapter A8. 1998. 48 pages.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI Book 9, Chapter A9. 1998. 60 pages.



WATER RESOURCES DATA - KENTUCKY, 1998

Figure 3. Location of gaging stations in Kentucky.

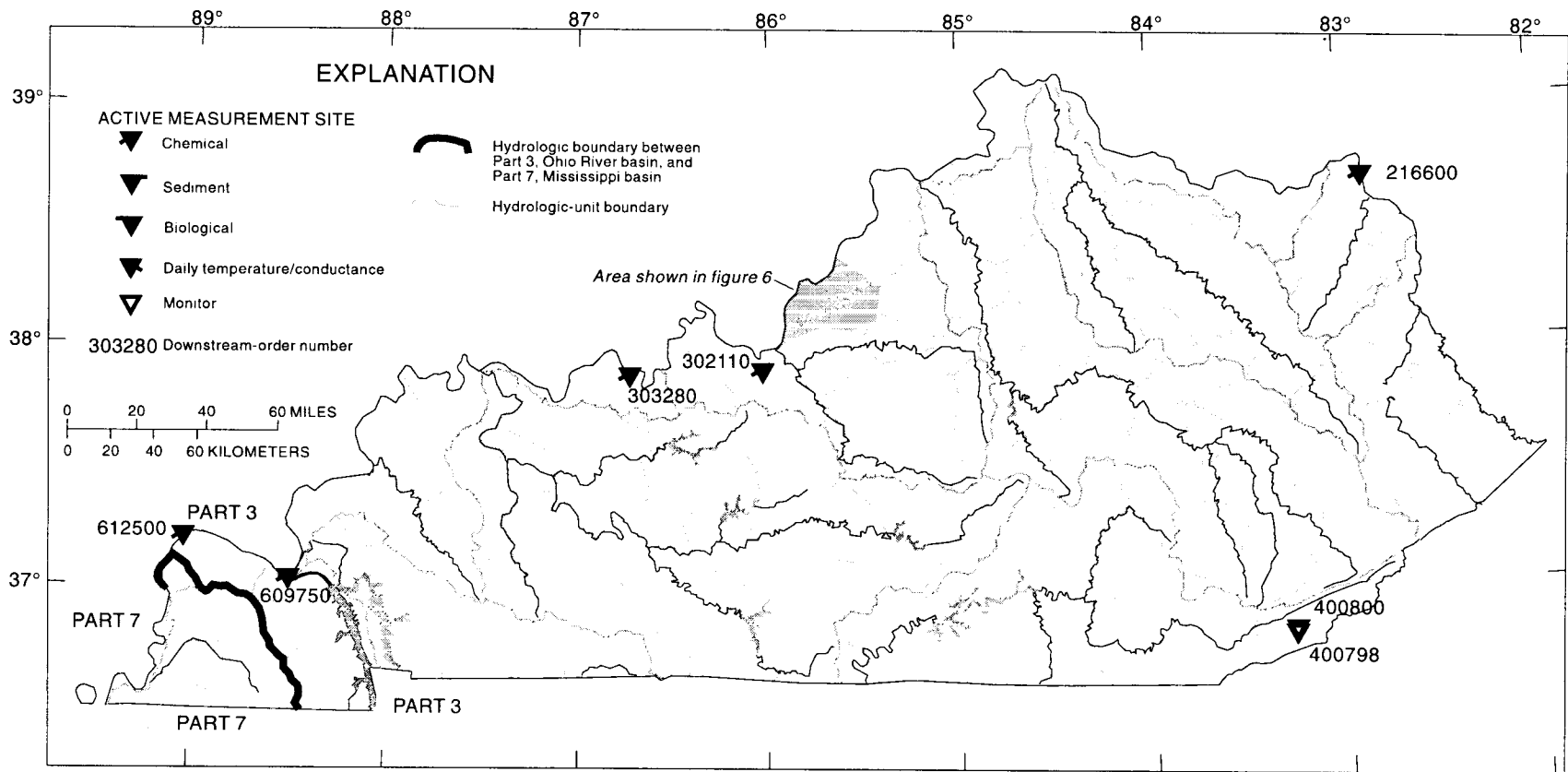
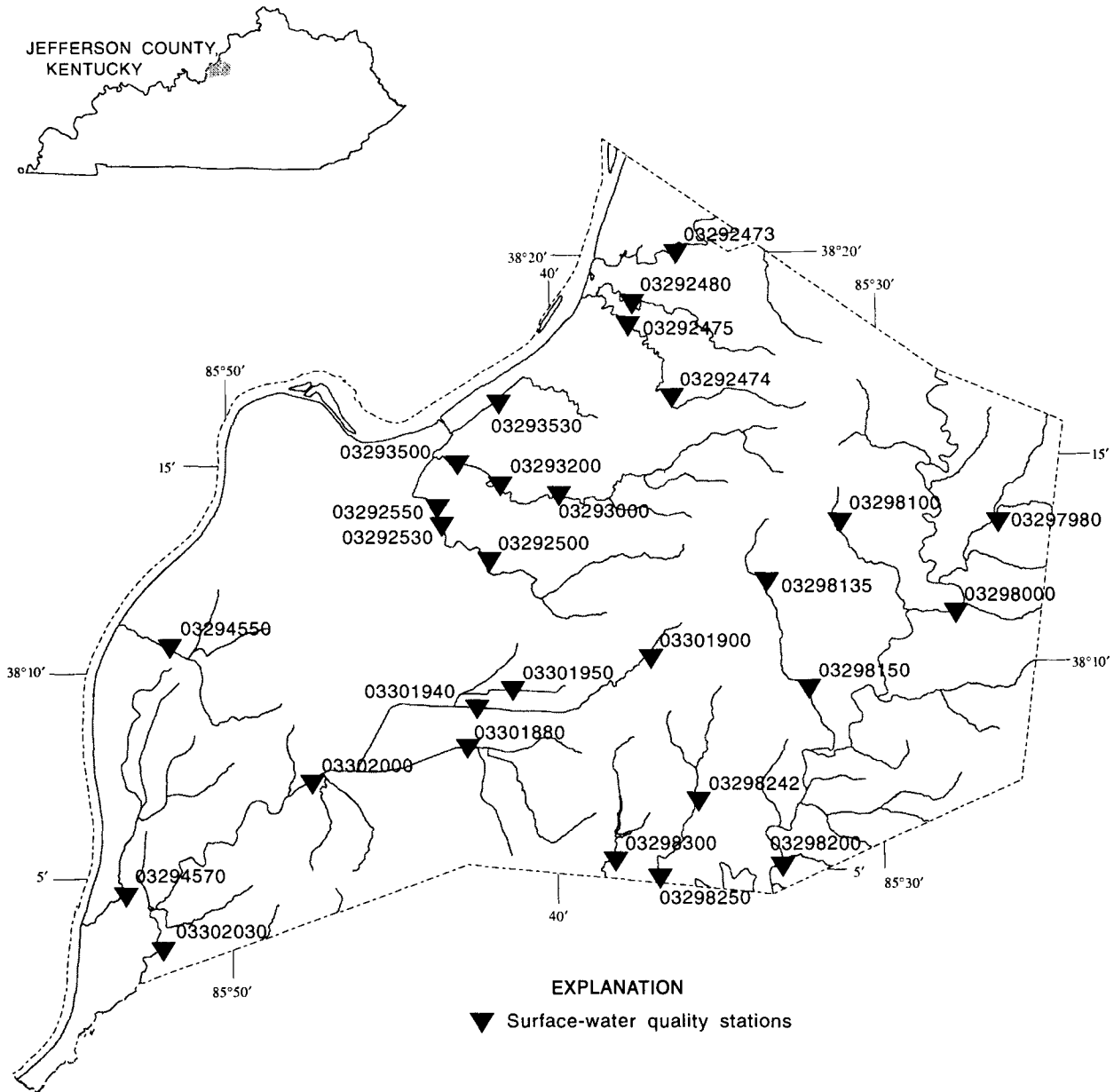


Figure 4. Location of surface-water quality stations in Kentucky.

WATER RESOURCES DATA - KENTUCKY, 1998



Base from U.S. Geological Survey digital data, 1:100,000, 1983
Universal Transverse Mercator projection, Zone 16

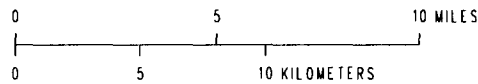


Figure 5. Location of surface-water quality stations in Jefferson County, for the MSD Sampling Network.

BIG SANDY RIVER BASIN

03207965 GRAPEVINE CREEK NEAR PHYLLIS, KY

LOCATION.--Lat 37°25'57", long 82°21'14", Pike County, Hydrologic Unit 05070202, on right bank at the Grapevine Recreation area, 1.3 mi downstream from Dicks Fork, 1.3 mi southwest of Phyllis, and at mile 1.1.

DRAINAGE AREA.--6.20 mi².

PERIOD OF RECORD.--October 1973 to September 1982, April 1989 to September 1992, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 780 ft above sea level from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Apr. 7, 1977 peak is due to backwater.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	11	.79	8.9	7.5	9.4	8.7	7.5	6.8	2.2	1.3
2	1.4	2.9	2.1	.84	6.8	7.3	7.5	9.6	6.2	5.3	2.0	1.3
3	1.4	2.0	1.4	1.8	11	7.3	7.6	8.9	6.1	4.8	1.9	1.2
4	1.4	2.3	1.5	2.5	27	7.2	13	9.8	8.0	4.0	1.9	1.2
5	1.4	2.1	1.6	2.9	25	10	13	13	8.3	4.1	2.0	1.2
6	1.4	2.0	1.2	2.6	21	11	13	12	5.9	3.7	1.8	1.2
7	1.4	2.0	.94	4.6	20	10	11	14	4.9	2.8	1.7	1.2
8	1.3	2.5	1.1	8.8	22	9.6	11	24	4.5	11	1.7	3.9
9	1.3	2.7	3.6	6.7	24	30	11	19	6.9	6.0	3.1	1.3
10	1.5	2.4	8.8	3.9	26	29	18	17	273	4.2	4.1	1.2
11	1.7	2.3	3.6	3.2	24	16	22	14	73	3.5	2.9	1.2
12	1.7	2.2	2.1	3.6	20	15	19	12	38	3.3	2.1	1.2
13	1.6	1.8	1.4	3.3	15	12	16	9.6	80	3.0	2.1	1.1
14	1.8	3.1	1.2	3.3	12	11	15	7.7	33	3.2	2.4	1.1
15	1.6	2.5	1.3	4.9	9.1	7.4	13	6.2	29	3.1	19	1.1
16	1.5	2.4	1.2	5.6	8.0	6.2	22	5.1	19	3.0	5.9	1.0
17	1.6	2.1	.82	5.3	9.7	6.4	243	4.8	13	2.8	9.8	1.0
18	1.6	1.7	.87	4.5	10	18	35	4.1	10	2.8	4.0	1.1
19	1.5	1.3	.72	4.7	7.7	34	221	3.7	7.9	2.8	2.7	3.3
20	1.4	1.6	.65	4.1	7.8	69	79	5.4	6.3	2.5	2.2	1.6
21	1.2	2.5	.64	3.9	7.8	56	30	25	5.9	2.5	2.0	1.9
22	1.2	2.4	.87	5.2	7.6	27	20	11	7.2	3.3	1.6	1.9
23	1.2	1.8	.66	8.9	13	20	16	117	10	4.4	1.6	1.8
24	1.4	1.5	.99	10	17	14	12	223	8.8	3.8	1.5	1.7
25	1.5	1.3	.89	8.5	15	12	9.8	44	7.9	2.6	1.5	1.8
26	2.2	1.3	.78	6.2	12	10	8.2	26	6.0	2.5	1.5	1.8
27	1.7	1.2	1.2	11	9.6	8.8	6.7	22	5.3	2.2	1.5	1.8
28	1.3	1.2	1.4	43	7.7	7.6	5.5	21	4.7	2.2	1.3	1.3
29	1.3	1.3	1.3	25	---	6.6	6.1	16	5.4	2.1	1.3	1.6
30	1.0	2.7	1.5	17	---	5.9	6.3	12	8.2	2.0	1.4	1.7
31	.82	---	1.7	12	---	5.6	---	9.0	---	4.3	1.3	---
TOTAL	44.62	60.5	59.03	228.63	404.7	497.4	920.1	734.6	709.9	114.6	92.0	46.0
MEAN	1.44	2.02	1.90	7.38	14.5	16.0	30.7	23.7	23.7	3.70	2.97	1.53
MAX	2.2	3.1	11	43	27	69	243	223	273	11	19	3.9
MIN	.82	1.2	.64	.79	6.8	5.6	5.5	3.7	4.5	2.0	1.3	1.0
CFSM	.23	.33	.31	1.19	2.33	2.59	4.95	3.82	3.82	.60	.48	.25
IN.	.27	.36	.35	1.37	2.43	2.98	5.52	4.41	4.26	.69	.55	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1998, BY WATER YEAR (WY)

MEAN	4.13	6.90	8.43	14.8	13.6	18.6	13.3	11.7	8.27	2.71	2.62	2.05
MAX	28.0	31.0	18.8	42.6	34.0	53.6	30.7	47.7	23.7	10.4	10.6	5.75
(WY)	1990	1974	1979	1974	1990	1975	1998	1989	1998	1979	1989	1989
MIN	.32	.27	.98	1.44	4.08	7.12	4.62	.71	.64	.32	.31	.38
(WY)	1992	1982	1982	1981	1992	1977	1982	1976	1980	1991	1981	1981

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1974 - 1998

ANNUAL TOTAL	2270.09	3912.08		
ANNUAL MEAN	6.22	10.7	8.63	
HIGHEST ANNUAL MEAN			17.2	1974
LOWEST ANNUAL MEAN			5.30	1992
HIGHEST DAILY MEAN	256	Mar 3	832	Oct 1 1982
LOWEST DAILY MEAN	.64	Dec 21	.01	Aug 19 1982
ANNUAL SEVEN-DAY MINIMUM	.75	Dec 17	.04	Sep 22 1981
INSTANTANEOUS PEAK FLOW			878	Jun 10 1974
INSTANTANEOUS PEAK STAGE			2.60	Jun 10 1977
INSTANTANEOUS LOW FLOW				.01 Aug 19 1982
ANNUAL RUNOFF (CFSM)	1.00	1.73	1.39	
ANNUAL RUNOFF (INCHES)	13.62	23.47	18.91	
10 PERCENT EXCEEDS	13	20	18	
50 PERCENT EXCEEDS	3.2	4.1	3.2	
90 PERCENT EXCEEDS	1.2	1.2	.40	

BIG SANDY RIVER BASIN

03209500 LEVISA FORK AT PIKEVILLE, KY

LOCATION.--Lat 37°27'51", long 82°31'35", Pike County, Hydrologic Unit 05070203, on right bank 20 ft downstream from bridge on State Highway 1426, 0.75 mi downstream from Lanks Branch, 1.0 mi south of Pikeville, 1.5 mi upstream from Harolds Branch, and at mile 117.3.

DRAINAGE AREA.--1,232 mi².

PERIOD OF RECORD.--October 1937 to current year. Gage-height records collected in this vicinity since 1907 are contained in reports of National Weather Service.

REVISED RECORDS.--WRD KY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 631.98 ft above sea level. Prior to Sept. 23, 1944, nonrecording gage at site 2.3 mi downstream at datum 2.65 ft higher. Sept. 23, 1944 to Sept. 30, 1952, water-stage recorder 2.3 mi downstream at datum 1.65 ft higher. Oct. 1, 1952 to Sept. 30, 1979, at site 2.1 mi downstream at same datum.

REMARKS.--Estimated daily discharges: Aug. 9. Records good. Flow regulated since October 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680) and since March 1965 by John W. Flannagan Lake (station 03208990).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	224	1080	292	2990	1900	1290	2010	1410	1500	1300	225
2	280	265	990	275	2820	1960	1150	1940	1270	1330	721	213
3	258	311	603	288	2490	1630	1120	2010	1150	1010	532	204
4	261	468	423	373	10100	1370	2280	2310	2150	767	461	194
5	488	790	398	507	9220	1380	3890	2720	2990	665	428	199
6	512	687	391	737	6030	1460	2430	2650	3310	612	397	211
7	407	353	356	836	4320	1450	1790	2390	2330	600	292	214
8	467	298	332	2520	3780	1460	1490	4140	1590	770	269	225
9	304	337	308	3570	4540	1730	1520	5190	1370	1330	340	218
10	248	359	328	2070	5370	2400	2110	5070	11000	1270	444	205
11	301	502	429	1380	5500	2460	2320	5560	10600	1020	563	202
12	518	529	524	1280	7160	1960	2050	4720	10600	678	635	200
13	514	525	458	874	5640	1680	2310	3370	8670	437	614	198
14	290	515	389	692	3460	1570	2220	2420	7420	429	435	193
15	327	476	442	704	2590	1490	1760	1840	5510	502	357	192
16	393	477	304	719	2220	1400	2820	1600	3350	485	609	192
17	374	481	286	720	2440	1310	19800	1360	2340	593	1540	195
18	321	543	278	742	3670	1550	9990	1120	1820	720	1920	196
19	492	457	262	752	3580	8350	14800	1020	1400	623	1130	211
20	473	314	254	993	2800	9700	12900	902	1290	613	804	201
21	320	324	251	1330	2250	13200	11500	1670	1120	565	637	211
22	420	504	255	981	2110	10700	11500	1690	1220	493	489	227
23	416	601	200	1050	2410	7160	11400	4040	2570	570	359	226
24	386	609	202	1390	3740	5120	10400	10900	2960	781	334	197
25	451	793	220	1540	4020	3120	7500	8560	3820	667	288	183
26	641	657	206	1710	2960	2570	6460	6050	2620	437	280	192
27	608	528	223	1610	2450	2070	4780	4680	1690	406	254	201
28	395	514	252	3140	1990	1970	3120	3940	1230	367	239	201
29	384	471	264	5270	---	1750	1730	3010	1140	353	232	202
30	320	473	390	4990	---	1420	1810	2160	1000	332	236	293
31	265	---	616	3550	---	1420	---	1510	---	457	232	---
TOTAL	12142	14385	11914	46885	112650	98710	160240	102552	100940	21382	17371	6221
MEAN	392	480	384	1512	4023	3184	5341	3308	3365	690	560	207
MAX	641	793	1080	5270	10100	13200	19800	10900	11000	1500	1920	293
MIN	248	224	200	275	1990	1310	1120	902	1000	332	232	183

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	829	1153	1617	2370	2891	3022	2337	2070	1060	580	477	464																			
MAX	3939	3991	5385	6861	6371	8081	7646	6067	3492	1855	1022	1607																			
(WY)	1990	1978	1973	1974	1994	1975	1977	1984	1979	1979	1971	1989																			
MIN	158	353	300	278	814	529	388	349	210	200	203	168																			
(WY)	1970	1970	1981	1981	1992	1988	1986	1976	1988	1988	1969	1969																			

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1969 - 1998

ANNUAL TOTAL	455439	705392		
ANNUAL MEAN	1248	1933	1566	
HIGHEST ANNUAL MEAN			2459	1979
LOWEST ANNUAL MEAN			522	1988
HIGHEST DAILY MEAN	14200	Mar 7	19800	Apr 17
LOWEST DAILY MEAN	190	Sep 8	183	Sep 25
ANNUAL SEVEN-DAY MINIMUM	197	Sep 3	195	Sep 12
INSTANTANEOUS PEAK FLOW			22700	Apr 17
INSTANTANEOUS PEAK STAGE			32.52	Apr 17
INSTANTANEOUS LOW FLOW			183	Sep 25
10 PERCENT EXCEEDS	2490	5020	3630	
50 PERCENT EXCEEDS	724	793	778	
90 PERCENT EXCEEDS	262	232	234	

BIG SANDY RIVER BASIN

03210000 JOHNS CREEK NEAR META, KY

LOCATION.--Lat 37°34'01", long 82°27'29", Pike County, Hydrologic Unit 05070203, on left bank 10 ft downstream from bridge on U.S. Highway 119, 1,100 ft downstream from Ford Branch, 0.7 mi upstream from Raccoon Creek, 1.2 mi southwest of Meta, and at mile 42.7.

DRAINAGE AREA.--56.3 mi².

PERIOD OF RECORD.--April 1941 to September 1993, October 1994 to current year.

REVISED RECORDS.--WSP 1705: Drainage area. WRD KY-76-1: 1975. WDR KY-87-1: 1986.

GAGE.--Water-stage recorder. Datum of gage is 715.66 ft above sea level. See WDR KY-90-1 for history of changes prior to Dec. 21, 1965.

REMARKS.--Estimated daily discharges: May 1 and Aug. 9. Record fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1939 reached a stage of 15.6 ft, from floodmark, present datum, at site 600 ft upstream, discharge, 4,500 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	4.5	94	12	62	79	64	100	56	90	22	7.6
2	4.6	14	27	13	46	88	57	140	45	60	20	7.6
3	4.1	13	16	15	45	103	56	113	40	47	17	8.1
4	3.7	10	14	30	190	98	119	110	55	42	14	8.4
5	3.9	9.2	13	31	223	118	140	128	47	39	14	8.9
6	4.0	8.4	11	22	183	120	115	123	43	37	13	9.2
7	3.5	7.5	9.6	27	152	104	92	109	37	34	13	8.7
8	3.3	9.6	9.1	56	171	99	85	132	34	65	12	19
9	3.2	12	8.8	56	235	207	85	128	44	42	15	11
10	3.5	12	13	38	300	197	168	109	1390	35	17	9.9
11	4.2	9.0	15	31	312	133	261	103	477	33	22	8.1
12	4.6	6.6	13	28	236	99	176	86	394	29	14	7.7
13	5.2	6.9	11	26	155	82	133	77	394	27	13	6.6
14	5.3	11	9.5	21	117	72	108	63	268	23	22	6.9
15	6.8	14	8.8	29	91	58	90	58	286	23	23	6.8
16	25	12	8.0	38	78	50	168	51	195	26	28	5.9
17	5.3	11	7.4	37	79	43	1430	44	132	24	44	5.1
18	5.3	9.3	6.9	36	92	61	423	33	97	22	19	6.0
19	5.5	7.8	6.9	33	90	197	1470	33	78	25	14	20
20	5.9	7.0	6.6	31	90	324	751	33	66	24	11	9.0
21	5.7	9.7	7.0	27	91	396	327	122	59	20	9.7	8.2
22	5.5	21	11	28	86	227	232	69	65	39	10	9.3
23	5.4	16	8.7	53	122	159	184	672	175	31	9.9	11
24	5.3	13	8.7	68	214	123	143	613	128	36	9.2	7.2
25	6.6	8.5	15	63	167	100	121	308	172	22	10	8.7
26	10	7.0	13	47	122	83	103	156	97	20	9.0	9.8
27	16	6.5	14	54	97	70	91	129	69	18	8.6	11
28	8.0	6.4	15	289	79	63	85	132	57	17	10	11
29	6.0	6.4	13	217	---	56	76	101	58	16	9.5	10
30	5.4	15	13	132	---	51	75	76	90	17	10	8.9
31	4.6	---	13	93	---	47	---	61	---	36	8.3	---
TOTAL	190.9	304.3	440.0	1681	3925	3707	7428	4212	5148	1019	471.2	275.6
MEAN	6.16	10.1	14.2	54.2	140	120	248	136	172	32.9	15.2	9.19
MAX	25	21	94	289	312	396	1470	672	1390	90	44	20
MIN	3.2	4.5	6.6	12	45	43	56	33	34	16	8.3	5.1
CFSM	.11	.18	.25	.96	2.49	2.12	4.40	2.41	3.05	.58	.27	.16
IN.	.13	.20	.29	1.11	2.59	2.45	4.91	2.78	3.40	.67	.31	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	17.9	38.3	75.3	108	139	165	118	74.4	39.4	25.3	17.0	15.8
MAX	175	213	319	413	338	489	356	271	193	136	155	153
(WY)	1990	1974	1973	1974	1972	1955	1948	1984	1979	1956	1942	1966
MIN	.000	.23	.95	6.57	17.5	36.0	15.8	7.33	1.99	.42	.35	.000
(WY)	1954	1954	1966	1966	1954	1988	1963	1941	1969	1944	1943	1943

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1941 - 1998	
ANNUAL TOTAL	19914.0		28802.0			
ANNUAL MEAN	54.6		78.9		69.4	
HIGHEST ANNUAL MEAN					135	
LOWEST ANNUAL MEAN					24.5	
HIGHEST DAILY MEAN	1790		1470		3340	
LOWEST DAILY MEAN	3.2		3.2		.00	
ANNUAL SEVEN-DAY MINIMUM	3.6		3.6		.00	
INSTANTANEOUS PEAK FLOW			2630		7380	
INSTANTANEOUS PEAK STAGE			15.05		19.62	
INSTANTANEOUS LOW FLOW			3.2		.00	
ANNUAL RUNOFF (CFSM)	.97		1.40		1.23	
ANNUAL RUNOFF (INCHES)	13.16		19.03		16.75	
10 PERCENT EXCEEDS	109		173		157	
50 PERCENT EXCEEDS	31		31		23	
90 PERCENT EXCEEDS	6.9		6.7		2.0	

BIG SANDY RIVER BASIN

03212500 LEVISA FORK AT PAINTSVILLE, KY

LOCATION.--Lat 37°48'55", long 82°47'30", Johnson County, Hydrologic Unit 05070203, on left bank 700 ft downstream from bridge on State Highway 40 at Paintsville, 900 ft downstream from Paint Creek, and at mile 65.2.

DRAINAGE AREA.--2,144 mi².

PERIOD OF RECORD.--June 1915 to September 1916, October 1916 to November 1920 (gage heights only), and October 1928 to current year. Monthly discharge only for October to December 1928, published in WSP 1305. Published. (as "at Thelma" prior to 1928.)

REVISED RECORDS.--WSP 953: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.84 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 19, 1954.

REMARKS.--Estimated daily discharges: Oct. 17-20, Oct. 30 to Nov. 5, Jan. 11-13, and Aug. 9. Records good except for periods of estimated record, which are fair. Flow regulated since October 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680), since March 1965 by John W. Flannagan Lake (station 03208990), and since May 1950 by Dewey Lake (station 03211000).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1862 reached a stage of 46.6 ft, from levels to floodmark by U.S. Army Corps of Engineers

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	400	1310	822	4150	3130	2250	4650	2270	3790	980	371
2	407	370	1800	579	3510	3290	2000	6100	2160	3720	1470	356
3	370	470	1410	541	3110	3320	1860	5120	1850	2760	976	347
4	362	590	951	584	5640	2850	3660	5010	1980	1880	804	332
5	355	750	688	694	13200	2730	6230	5460	3070	1760	716	321
6	543	964	644	900	11200	2660	5450	4810	3820	1540	660	315
7	569	809	618	1540	8030	2700	3850	4440	3590	1230	611	327
8	461	585	583	3210	6560	2740	3100	5080	2550	1210	499	372
9	575	460	590	5630	7300	3570	3160	7230	2150	1610	600	353
10	455	463	604	4590	9370	4260	3920	7190	7210	1870	786	341
11	367	499	666	3100	10500	4500	4770	6850	17100	1660	761	321
12	408	636	735	2500	10200	4050	4490	6830	15600	1390	811	312
13	589	681	773	2000	10000	3250	4210	5540	14900	1060	837	306
14	593	783	690	1350	6480	2740	4350	4160	13500	816	1230	302
15	390	871	598	1250	4790	2530	3540	3130	11800	800	1280	286
16	393	792	627	1380	4060	2290	3620	2540	9340	839	841	283
17	445	671	511	1420	3540	2100	14200	2180	6920	808	1120	283
18	410	666	484	1370	4740	2240	21900	1850	4690	900	2210	284
19	400	719	467	1370	5800	5820	25400	1600	2690	3240	2000	293
20	585	667	449	1400	4900	11800	29600	1460	2250	2350	1300	329
21	529	575	436	1800	3920	14400	24100	2620	2000	2220	956	422
22	383	720	439	2160	3420	15800	17900	3340	1780	1540	802	460
23	453	816	450	2200	3860	12100	17200	6580	3520	1130	674	351
24	471	918	418	2390	5260	8170	16300	13400	4270	1180	538	328
25	459	887	444	2560	6400	5780	13600	16000	5330	1220	499	301
26	616	973	453	2520	5550	4260	11300	11800	4970	1090	456	280
27	870	802	472	2550	4270	3500	9700	8890	3350	839	432	278
28	724	689	544	2930	3420	2990	7120	7210	2230	705	410	283
29	556	672	569	5300	---	2820	4890	5390	2650	643	395	281
30	530	690	567	6120	---	2580	3120	3760	3240	653	387	307
31	470	---	624	5620	---	2250	---	2700	---	1010	377	---
TOTAL	15219	20588	20614	72380	173180	147220	276790	172920	162780	47463	26418	9725
MEAN	491	686	665	2335	6185	4749	9226	5578	5426	1531	852	324
MAX	870	973	1800	6120	13200	15800	29600	16000	17100	3790	2210	460
MIN	355	370	418	541	3110	2100	1860	1460	1780	643	377	278

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
MEAN	1155	1860	2816	4007	4997	5278	4179	3501	1797	904	780	705									
MAX (WY)	6560	4908	8870	12030	11000	13160	10040	9665	5426	2384	1837	2054									
MIN (WY)	1990	1978	1973	1974	1994	1975	1987	1984	1998	1979	1977	1989									
MEAN	181	447	570	435	1467	963	594	519	278	257	291	239									
MIN (WY)	1970	1970	1981	1981	1988	1988	1986	1976	1988	1988	1969	1969									

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1969 - 1998	
ANNUAL TOTAL	785467		1145297			
ANNUAL MEAN	2152		3138		2653	
HIGHEST ANNUAL MEAN					4234	
LOWEST ANNUAL MEAN					830	
HIGHEST DAILY MEAN	22400		29600		42000	
LOWEST DAILY MEAN	355		278		98	
ANNUAL SEVEN-DAY MINIMUM	389		291		122	
INSTANTANEOUS PEAK FLOW			29900		69700	
INSTANTANEOUS PEAK STAGE			30.36		45.92	
INSTANTANEOUS LOW FLOW			278		98	
10 PERCENT EXCEEDS	5050		7210		6360	
50 PERCENT EXCEEDS	1220		1540		1280	
90 PERCENT EXCEEDS	439		389		377	

LITTLE SANDY RIVER BASIN

03216500 LITTLE SANDY RIVER AT GRAYSON, KY

LOCATION.--Lat 38°19'48", long 82°56'22", Carter County, Hydrologic Unit 05090104, on left bank 0.3 mi upstream from bridge on U.S. Highway 60, 0.5 mi downstream from Town Branch, 0.5 mi east of Grayson, and at mile 38.1.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1964, published as "near Grayson."

REVISED RECORDS.--WSP 1435: 1939(M), 1943(M), 1948(P). WSP 1725: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 557.95 ft above sea level. Prior to Aug. 11, 1939, nonrecording gage and Aug. 11, 1939 to Jan. 29, 1965, water-stage recorder at site 1.6 mi downstream at same datum. Apr. 6, 1948 to Jan. 29, 1965, supplementary nonrecording gage 800 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated since March 1968 by Grayson Lake (station 03216300).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	43	628	100	138	527	180	1850	211	3260	507	38
2	32	44	691	90	150	597	145	1830	316	2720	170	38
3	32	58	487	87	204	777	127	1590	277	2540	80	35
4	32	157	106	87	241	517	570	1270	196	2050	69	32
5	33	175	85	87	749	553	717	812	129	1100	64	32
6	34	171	101	484	779	618	438	507	118	544	60	32
7	32	150	91	2210	707	573	337	474	108	373	52	31
8	39	69	84	3820	783	617	294	1220	76	397	48	31
9	132	68	64	3360	1180	1580	509	1260	99	502	46	30
10	125	81	85	2420	2190	1870	967	715	802	175	46	31
11	117	140	158	1950	3630	1270	851	429	1780	96	50	31
12	113	132	100	1370	4260	864	546	401	1930	80	49	31
13	109	124	91	999	3110	823	421	393	3070	72	50	30
14	111	132	85	567	3070	500	352	356	2310	68	47	31
15	132	136	80	374	3100	456	302	299	2120	65	46	30
16	126	133	76	525	2900	435	870	194	1160	65	48	29
17	112	126	53	463	2910	457	2300	125	651	83	48	29
18	106	118	45	436	2610	366	1750	110	297	159	48	29
19	104	113	43	408	2200	609	3290	98	271	119	46	29
20	109	110	42	396	1320	645	3540	100	255	993	43	29
21	143	110	41	399	855	828	2990	510	148	1200	42	32
22	90	118	43	372	758	647	2920	1500	179	412	41	30
23	90	129	46	345	716	626	2690	1540	112	480	40	29
24	88	125	50	507	775	763	1970	2770	161	575	39	29
25	54	141	90	423	770	538	817	2960	350	225	38	28
26	54	133	117	474	554	482	724	2170	275	145	37	28
27	64	127	100	773	520	378	715	1630	212	84	37	27
28	104	120	96	506	502	249	490	823	101	69	36	27
29	93	115	117	227	---	226	381	280	657	65	35	27
30	48	175	431	201	---	230	714	227	3590	71	39	27
31	42	---	380	153	---	301	---	198	---	298	37	---
TOTAL	2533	3573	4706	24613	41681	19922	32917	28641	21961	19085	2038	912
MEAN	81.7	119	152	794	1489	643	1097	924	732	616	65.7	30.4
MAX	143	175	691	3820	4260	1870	3540	2960	3590	3260	507	38
MIN	32	43	41	87	138	226	127	98	76	65	35	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
MEAN	171	350	642	751	942	1035	688	663	310	175	109	121										
MAX	733	993	2630	1954	2886	3226	2291	2116	928	841	382	585										
(WY)	1990	1987	1979	1974	1989	1997	1972	1996	1974	1971	1979	1979										
MIN	30.1	28.4	53.6	45.2	249	133	113	62.1	39.1	37.5	34.7	30.4										
(WY)	1981	1982	1982	1981	1969	1969	1986	1976	1988	1969	1988	1998										

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1969 - 1998	
ANNUAL TOTAL	190792		202582			
ANNUAL MEAN	523		555		494	
HIGHEST ANNUAL MEAN					838	
LOWEST ANNUAL MEAN					116	
HIGHEST DAILY MEAN	14600		4260		14600	
LOWEST DAILY MEAN	32		27		5.8	
ANNUAL SEVEN-DAY MINIMUM	33		28		18	
INSTANTANEOUS PEAK FLOW			4760		24500	
INSTANTANEOUS PEAK STAGE			18.32		30.57	
INSTANTANEOUS LOW FLOW					1.5	
10 PERCENT EXCEEDS	1330		1840		1420	
50 PERCENT EXCEEDS	133		175		177	
90 PERCENT EXCEEDS	41		36		40	

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM NEAR GREENUP, KY

LOCATION.--Lat 38°38'48", long 82°51'38", Greenup County, Hydrologic Unit 05090103, at left bank at downstream end of lock guidewall in lower pool at Greenup locks, 1.1 mi upstream from Grays Branch, 4.7 mi downstream from Little Sandy River, 5.0 mi north of Greenup, and at mile 341.5.

DRAINAGE AREA.--62,000 mi², approximately.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 472.43 ft above sea level or 472.97 ft Ohio River Datum. Record of Greenup Dam headwater, tailwater, gate openings and lockages used to determine discharge from Oct. 1, 1968 to Sept. 30, 1981. Auxiliary water-stage recorder is located at Portsmouth, Ohio, 14.1 mi downstream, established Oct. 1, 1981 and used in slope rating computation from Oct. 1, 1981 to Sept. 30, 1983. Datum of gage is 470.43 ft above sea level or 470.99 ft Ohio River Datum. Since Oct. 1, 1983, discharge has been computed using the Branch Flow Model. Stage record for this model is obtained from the Greenup Dam Tailwater and Portsmouth, Ohio gages.

REMARKS.--No estimated daily discharges. Records fair except for those below 20,000 ft³/s, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from the station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44800	24700	78600	62100	112000	130000	71700	144000	40200	354000	23300	13200
2	18600	19000	81200	44600	101000	131000	76500	182000	49800	300000	13600	17800
3	35000	26200	91200	45700	81900	137000	70100	249000	40100	153000	16700	15900
4	25100	30400	78800	46200	88100	134000	78600	290000	45800	115000	12500	15300
5	24400	44700	73200	53000	152000	122000	94100	280000	24100	88400	15100	8800
6	24400	37100	61500	79100	202000	113000	87200	236000	33900	67300	17900	8360
7	15800	30200	69600	103000	206000	102000	71600	222000	33500	55700	7690	8740
8	21700	65400	58600	183000	177000	97200	70800	206000	21500	56400	21600	26200
9	11500	85600	57900	264000	147000	114000	63500	241000	32000	75200	7220	12700
10	15900	96000	53500	349000	139000	163000	104000	281000	31200	56700	13900	13400
11	24100	79500	60300	375000	146000	189000	145000	244000	47800	56000	24700	22000
12	8310	77400	87000	375000	161000	190000	165000	179000	90000	49300	19800	12700
13	12300	67600	99400	338000	166000	158000	150000	147000	103000	41300	26400	12100
14	16600	59700	97100	280000	154000	122000	125000	129000	132000	34400	22000	23300
15	13600	79500	77600	180000	133000	106000	105000	118000	173000	33700	16600	6600
16	13600	81000	63700	157000	115000	94300	109000	102000	205000	26200	12800	19200
17	9020	77500	53800	149000	100000	69400	144000	73300	207000	25900	33400	9900
18	9900	62200	43200	143000	125000	67300	200000	68500	192000	22900	30200	7690
19	14300	55500	48200	131000	204000	101000	261000	71300	135000	36000	43000	9750
20	11800	51300	32200	114000	294000	133000	302000	57900	116000	38800	34200	11800
21	11800	38200	38700	108000	304000	198000	328000	56300	124000	33100	23500	23100
22	11800	46200	28300	95300	270000	273000	340000	48900	122000	24300	21600	12900
23	13400	51000	32100	93100	205000	310000	325000	48800	90500	35100	16200	14500
24	13600	60400	34500	107000	196000	305000	301000	58400	64600	26900	15300	14100
25	15800	64000	45800	125000	207000	268000	223000	78700	56500	25200	33100	7270
26	17600	65300	52400	128000	191000	168000	161000	92300	43800	27600	23300	17600
27	10800	56000	62500	117000	154000	124000	141000	59800	52100	23700	21000	15700
28	21200	50400	69400	109000	126000	109000	169000	62400	124000	23400	25000	9130
29	18700	61800	67300	123000	---	94900	164000	62200	242000	12900	15800	15600
30	18700	74300	63400	143000	---	94800	139000	52900	350000	18000	25300	16800
31	23700	---	58100	131000	---	84200	---	44800	---	29200	17000	---
TOTAL	547830	1718100	1919100	4751100	4657000	4502100	4785100	4186500	3022400	1965600	649710	422140
MEAN	17670	57270	61910	153300	166300	145200	159500	135000	100700	63410	20960	14070
MAX	44800	96000	99400	375000	304000	310000	340000	290000	350000	354000	43000	26200
MIN	8310	19000	28300	44600	81900	67300	63500	44800	21500	12900	7220	6600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		
MEAN	40650	72250	114100	120700	146300	167000	142400	107800	68350	45550	36810	33340																				
MAX	111300	208600	252700	242700	259100	268600	258400	276700	174000	100700	113600	86310																				
(WY)	1980	1986	1973	1974	1994	1994	1994	1996	1981	1972	1980	1979																				
MIN	11310	21910	38500	27170	66240	53550	52660	36610	13440	13060	11270	12000																				
(WY)	1992	1992	1990	1977	1978	1969	1986	1976	1988	1988	1988	1985																				

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1969 - 1998

ANNUAL TOTAL	28558830	33126680	
ANNUAL MEAN	78240	90760	
HIGHEST ANNUAL MEAN			120100
LOWEST ANNUAL MEAN			49760
HIGHEST DAILY MEAN	520000	Mar 5	375000
LOWEST DAILY MEAN	7370	Sep 20	6600
ANNUAL SEVEN-DAY MINIMUM	11700	Oct 17	11700
INSTANTANEOUS PEAK FLOW			400000
INSTANTANEOUS PEAK STAGE			50.16
10 PERCENT EXCEEDS	158000		205000
50 PERCENT EXCEEDS	61800		63700
90 PERCENT EXCEEDS	15000		14000
			90990
			120100
			1996
			1988
			540000
			Jan 12
			1974
			4810
			Jul 24
			1993
			9050
			Oct 17
			1988
			520000
			Jan 11
			1997
			62.19
			Mar 4
			1997
			205000
			64000
			17800

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to September 1986, 1997 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURES: October 1974 to September 1981.

REMARKS.--Flow regulated by Ohio River system of locks, dams, and reservoirs.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
NOV												
25...	1600	ENVIRONMENTAL	60300	329	7.2	7.1	11	11.3	95	110	29	
DEC												
18...	1530	ENVIRONMENTAL	48000	262	7.7	4.8	5.0	--	--	110	30	
18...	1540	REPLICATE	--	262	7.7	--	5.3	--	--	110	30	
JAN												
14...	1500	ENVIRONMENTAL	217000	220	6.9	6.8	68	11.3	94	77	21	
FEB												
10...	1700	ENVIRONMENTAL	191000	206	7.4	4.8	34	12.5	99	73	19	
MAR												
11...	1530	ENVIRONMENTAL	190000	267	7.4	7.1	16	11.3	94	93	25	
APR												
21...	1420	ENVIRONMENTAL	332000	208	7.3	13.0	65	8.8	85	82	22	
29...	1600	ENVIRONMENTAL	164000	263	7.2	14.5	24	8.4	84	95	26	
29...	1603	SPIKE	--	--	--	--	--	--	--	--	--	
MAY												
20...	1630	ENVIRONMENTAL	54200	299	7.3	21.7	3.1	7.1	82	110	30	
27...	1538	ENVIRONMENTAL	94800	267	7.2	21.7	21	8.6	100	91	23	
JUN												
09...	1500	ENVIRONMENTAL	33700	354	7.2	21.7	4.7	7.7	89	120	31	
23...	1200	ENVIRONMENTAL	85400	395	7.3	23.9	20	7.6	92	130	36	
23...	1210	REPLICATE	--	--	--	--	18	--	--	140	36	
JUL												
08...	1700	ENVIRONMENTAL	70900	284	7.1	25.8	15	6.9	87	100	29	
AUG												
12...	1700	ENVIRONMENTAL	22800	414	7.7	29.5	2.5	6.3	84	150	39	
27...	1700	ENVIRONMENTAL	23600	440	7.4	28.9	3.1	7.6	101	140	36	
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV												
25...	8.3	17	2.6	53	43	19	67	.12	4.7	181	1.2	1.1
DEC												
18...	9.1	18	2.2	53	44	21	65	.14	4.9	193	1.2	1.2
18...	9.1	18	2.3	--	--	20	65	.15	4.9	191	1.2	1.2
JAN												
14...	5.6	9.7	2.4	34	28	13	40	<.10	5.7	135	1.8	1.1
FEB												
10...	5.8	9.7	1.6	25	20	12	41	<.10	5.8	127	1.2	.75
MAR												
11...	7.4	12	1.7	48	39	13	55	.11	5.3	157	.93	.94
APR												
21...	6.7	8.6	1.7	43	35	9.1	45	.15	5.8	135	1.1	.80
29...	7.4	11	1.8	48	40	12	55	.17	5.3	163	1.2	.97
29...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
20...	9.0	12	1.9	60	49	12	61	.14	6.0	179	.84	--
27...	7.9	11	1.9	52	42	10	57	.14	5.4	158	.82	.73
JUN												
09...	10	17	2.0	61	50	16	72	.10	4.1	202	.89	.88
23...	11	19	2.6	61	50	20	84	.13	4.6	232	1.6	1.5
23...	11	19	2.6	--	--	21	84	.12	4.6	242	1.6	1.5
JUL												
08...	7.7	12	2.8	52	42	12	53	.14	6.3	169	1.3	1.3
AUG												
12...	13	23	3.1	63	55	20	86	.21	4.3	250	.90	.91
27...	12	28	2.8	85	70	26	81	.19	2.6	246	5.5	5.4

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV												
25...	.28	.19	<.010	.894	.029	--	.21	.31	.034	<.010	.03	.04
DEC												
18...	.20	.19	.018	.930	.058	.912	.25	.25	.018	<.010	.03	.07
18...	.21	.17	.016	.939	.066	.923	.24	.27	.028	.016	.04	.08
JAN												
14...	--	--	.010	.902	<.020	.892	.18	.90	.307	<.010	.00	--
FEB												
10...	.50	.08	<.010	.608	.057	--	.14	.56	.075	<.010	.01	.07
MAR												
11...	--	--	.031	.744	<.020	.713	.19	.19	<.010	<.010	.00	--
APR												
21...	.39	.11	.108	.635	.052	.527	.16	.44	.099	.010	.02	.07
29...	.43	.15	.017	.785	.030	.768	.18	.46	.108	<.010	--	.04
29...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
20...	.05	--	.024	.718	.078	.694	<.10	.13	<.010	<.010	.02	.10
27...	.16	.06	.028	.545	.121	.517	.18	.28	.157	<.010	.02	.16
JUN												
09...	.13	.12	.026	.644	.117	.618	.24	.25	.014	.015	.04	.15
23...	.34	.15	.037	1.25	.044	1.22	.20	.38	.066	.019	.06	.06
23...	.29	.14	.036	1.28	.047	1.25	.19	.33	.072	.018	.08	.06
JUL												
08...	.23	.20	.027	1.07	.035	1.05	.23	.27	.109	<.010	.00	.05
AUG												
12...	.13	.14	.031	.590	.176	.559	.32	.31	.021	.015	.03	.23
27...	.25	.12	.041	5.17	.060	5.13	.18	.31	.029	.013	.08	.08

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
25...	--	--	.011	7.7	<1.0	<1	37	<1.0	37	<1.0	<1.0
DEC											
18...	4.0	.06	.011	9.6	<1.0	<1	35	<1.0	34	<1.0	<1.0
18...	4.1	.05	.012	10	<1.0	<1	36	<1.0	34	<1.0	<1.0
JAN											
14...	3.9	.03	.001	9.8	<1.0	<1	30	<1.0	24	<1.0	1.0
FEB											
10...	--	--	.003	8.2	<1.0	<1	32	<1.0	21	<1.0	<1.0
MAR											
11...	3.2	.10	.001	11	<1.0	<1	34	<1.0	25	<1.0	<1.0
APR											
21...	2.3	.35	.005	9.8	<1.0	<1	32	<1.0	23	<1.0	1.0
29...	3.4	.06	<.001	13	<1.0	<1	33	<1.0	29	<1.0	<1.0
29...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	3.1	.08	.008	13	<1.0	<1	39	<1.0	26	<1.0	<1.0
27...	2.3	.09	.007	9.4	<1.0	<1	34	<1.0	21	<1.0	<1.0
JUN											
09...	2.7	.09	.013	19	<1.0	<1	44	<1.0	34	<1.0	<1.0
23...	5.4	.12	.018	9.2	<1.0	<1	47	<1.0	47	<1.0	<1.0
23...	5.5	.12	.027	8.6	<1.0	<1	48	<1.0	47	<1.0	<1.0
JUL											
08...	4.6	.09	.001	8.4	<1.0	<1	40	<1.0	37	<1.0	<1.0
AUG											
12...	2.5	.10	.010	11	<1.0	<1	51	<1.0	53	<1.0	1.2
27...	23	.13	.026	9.1	<1.0	<1	53	<1.0	53	<1.0	<1.0

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
25...	<1.0	1.7	17	<1.0	6	16	1.8	2.4	<1	<1.0	159
DEC											
18...	<1.0	1.3	23	<1.0	5	25	2.0	2.8	<1	<1.0	168
18...	<1.0	1.1	32	<1.0	5	25	1.9	2.5	<1	<1.0	167
JAN											
14...	<1.0	1.5	28	<1.0	5	15	<1.0	2.1	<1	<1.0	101
FEB											
10...	<1.0	1.1	25	<1.0	<4	37	<1.0	1.6	<1	<1.0	112
MAR											
11...	<1.0	1.2	12	<1.0	6	29	<1.0	2.6	<1	<1.0	143
APR											
21...	<1.0	1.5	15	<1.0	5	11	<1.0	1.5	<1	<1.0	129
29...	<1.0	1.2	11	<1.0	4	2.8	1.0	1.6	<1	<1.0	139
29...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	<1.0	1.7	<10	<1.0	6	18	1.2	1.8	<1	<1.0	169
27...	<1.0	2.3	11	<1.0	6	8.5	1.1	1.3	<1	<1.0	164
JUN											
09...	<1.0	1.7	<10	<1.0	8	37	1.8	1.5	<1	<1.0	223
23...	<1.0	1.7	<10	<1.0	7	1.4	3.0	1.4	<1	<1.0	222
23...	<1.0	1.7	<10	<1.0	8	<1.0	3.0	1.5	<1	<1.0	218
JUL											
08...	<1.0	2.5	<10	<1.0	6	3.0	1.8	1.5	<1	<1.0	158
AUG											
12...	<1.0	2.1	<10	<1.0	8	14	2.8	1.6	<1	<1.0	261
27...	<1.0	1.9	<10	<1.0	9	9.2	4.1	1.3	<1	<1.0	232

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV											
25...	<6	5.1	<1.0	2.7	.90	<.002	<.0020	.036	<.0020	<.0020	<.0040
DEC											
18...	<10	2.5	<1.0	2.1	.50	<.002	<.0020	.032	<.0020	<.0020	E.0040
18...	<10	1.8	<1.0	2.1	.50	<.002	<.0020	.032	<.0020	<.0020	.0049
JAN											
14...	<10	2.7	<1.0	3.2	3.6	<.002	<.0020	.026	<.0230	<.0020	<.0040
FEB											
10...	<10	7.6	<1.0	1.9	1.0	<.002	<.0020	.011	<.0020	<.0020	<.0040
MAR											
11...	<10	5.7	<1.0	4.6	.80	<.002	<.0020	.010	<.0020	<.0020	<.0040
APR											
21...	<10	1.4	<1.0	2.6	1.7	<.002	.0084	.041	<.0020	<.0020	E.0030
29...	<10	1.0	<1.0	2.5	--	<.002	.0042	.039	<.0020	<.0020	E.0018
29...	--	--	--	--	--	.115	.120	.148	.0942	.103	.0966
MAY											
20...	<10	1.6	<1.0	2.8	.30	<.002	.0143	.126	<.0020	<.0020	<.0040
27...	<10	1.8	<1.0	2.1	.90	E.002	.0068	.068	<.0020	<.0020	E.0035
JUN											
09...	<10	1.3	<1.0	2.4	.40	<.002	.0083	.089	<.0020	<.0020	<.0040
23...	<10	1.5	<1.0	2.5	.90	.014	.0494	.704	<.0020	<.0020	<.0040
23...	<10	<1.0	<1.0	2.2	.80	.012	.0523	.545	<.0020	<.0020	<.0040
JUL											
08...	<10	1.0	<1.0	4.6	1.0	.012	.0327	.509	<.0020	<.0020	.0049
AUG											
12...	<10	1.5	<1.0	16	.40	<.002	.0094	.128	<.0020	<.0020	<.0040
27...	<10	1.1	<1.0	4.9	.40	<.002	<.0020	.077	<.0020	<.0020	<.0040

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DEETHYL										
	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV											
25...	<.0040	E.0066	<.002	<.001	<.0030	<.004	<.005	<.004	.014	<.0060	<.004
DEC											
18...	<.0040	E.0131	<.002	<.001	<.0030	<.004	<.005	<.004	.014	<.0060	<.004
18...	<.0040	E.0138	E.002	<.001	<.0030	<.004	<.005	<.004	.013	<.0060	<.004
JAN											
14...	<.0040	E.0135	<.002	<.001	<.0030	<.004	<.005	<.004	.017	<.0060	<.004
FEB											
10...	<.0040	E.0037	<.002	<.001	<.0030	<.004	<.005	<.004	<.002	<.0060	<.004
MAR											
11...	<.0040	E.0063	<.002	<.001	<.0030	<.004	<.005	<.004	.005	<.0060	<.004
APR											
21...	.0079	E.0096	.005	<.001	<.0030	<.004	<.005	.013	.032	<.0060	<.004
29...	.0102	E.0073	<.002	<.001	<.0030	<.004	<.005	<.004	.020	<.0060	<.004
29...	.114	E.0369	.102	.091	.0954	.105	.097	.087	.135	.0613	.111
MAY											
20...	.0232	E.0105	<.002	<.001	<.0030	<.004	<.005	.007	.066	<.0060	<.004
27...	.0083	E.0117	.004	<.001	<.0030	<.004	<.005	<.004	.019	<.0060	<.004
JUN											
09...	E.0202	E.0111	<.002	<.001	<.0030	<.004	<.005	<.004	.032	<.0060	<.004
23...	.109	E.0680	.005	<.001	<.0030	<.004	<.005	<.004	.350	<.0060	<.004
23...	.107	E.0657	.008	<.001	<.0030	<.004	<.005	<.004	.347	<.0060	<.004
JUL											
08...	.0454	E.0641	.008	<.001	<.0030	<.004	<.005	<.004	.300	<.0060	<.004
AUG											
12...	.0136	E.0218	<.002	<.001	<.0030	<.004	<.005	<.004	.055	<.0060	<.004
27...	<.0040	E.0173	<.002	<.001	<.0030	<.004	<.005	<.004	.025	<.0060	<.004

DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2, 6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
	NOV										
25...	<.0070	E.0065	.0091	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DEC											
18...	<.0070	<.0180	.0074	<.0020	E.0246	<.0100	<.0020	<.0030	<.0170	<.0040	<.0040
18...	<.0070	<.0180	.0056	<.0020	E.0253	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JAN											
14...	<.0070	<.0180	.0083	<.0020	E.0142	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
10...	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
11...	<.0070	<.0180	<.0050	<.0020	E.0103	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
21...	<.0070	E.0059	.0147	<.0020	E.0098	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
29...	<.0070	E.0052	.0126	<.0020	E.0026	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
29...	.117	.106	.122	.0922	E.136	E.117	.104	.0984	.0877	.101	.104
MAY											
20...	<.0070	E.0083	.0276	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
27...	<.0070	E.0055	.0176	<.0020	E.0168	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JUN											
09...	<.0070	E.0084	.0227	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
23...	<.0070	.0278	.103	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
23...	<.0070	.0223	.0808	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JUL											
08...	<.0070	E.0168	.0846	<.0020	<.0030	<.0030	E.0012	<.0030	<.0170	<.0040	<.0040
AUG											
12...	<.0070	E.0114	.0229	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
27...	<.0070	.0201	.0156	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	ETHO- PROP WATER FLTRD 0.7 U	EPTC WATER FLTRD 0.7 U	LIN- URON WATER FLTRD 0.7 U	METHYL AZIN- PHOS WAT FLT 0.7 U	METHYL PARA- THION WAT FLT 0.7 U	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	PEB- ULATE WATER FILTRD 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U	PHORATE WATER FLTRD 0.7 U	PRON- AMIDE WATER FLTRD 0.7 U
	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82668)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	GF, REC (UG/L) (82676)
NOV 25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC 18...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC 18...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JAN 14...	<.0030	.0093	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB 10...	<.0030	<.0020	<.0020	<.500	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR 11...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR 21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR 29...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR 29...	.110	.0993	.136	E.149	.107	.102	.0934	.102	.0105	.0669	.0993
MAY 20...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY 27...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 09...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL 08...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG 12...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG 27...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DATE	PRO- PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- FLUR- ALIN WAT FLT 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 25...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	21	3420	98
DEC 18...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	10	1300	99
DEC 18...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	11	--	98
JAN 14...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	259	152000	93
FEB 10...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	74	38200	90
MAR 11...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	66	33900	75
APR 21...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	268	240000	77
APR 29...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	80	35400	89
APR 29...	.108	.0971	.130	E.0731	.0810	.0978	.0974	.114	--	--	--
MAY 20...	<.0040	<.0130	E.0063	<.0070	<.0130	<.0010	<.0020	<.0020	7	1020	99
MAY 27...	<.0040	<.0130	.0216	<.0070	<.0130	<.0010	<.0020	<.0020	43	11000	100
JUN 09...	<.0040	<.0130	E.0088	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
JUN 23...	<.0040	<.0130	E.0074	<.0070	<.0130	<.0010	<.0020	<.0020	85	19600	99
JUN 23...	<.0040	<.0130	E.0065	<.0070	<.0130	<.0010	<.0020	<.0020	48	--	98
JUL 08...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	55	10500	100
AUG 12...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	42	2590	100
AUG 27...	<.0040	<.0130	.0111	<.0070	<.0130	<.0010	<.0020	<.0020	47	2990	99

TYGARTS CREEK BASIN

03217000 TYGARTS CREEK NEAR GREENUP, KY

LOCATION.--Lat 38°33'51", long 82°57'08", Greenup County, Hydrologic Unit 05090103, on downstream side of center pier of bridge on State Highway 7, 100 ft downstream from Lick Run, 0.4 mi upstream from White Oak Creek, 6.5 mi west of Greenup, and at mile 28.1.

DRAINAGE AREA.--242 mi².

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 1113: 1942-43, 1945-46. WSP 1625: 1958. WSP 1725: Drainage area. WRD KY 79-1: 1948(P), 1950(M), 1952(M), 1962(M), 1967(P), 1970(M), 1972-76(M), 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 547.14 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair except for daily discharges below 10 ft³/s, which are poor. Occasional diversion at low flow caused by withdrawal of water for cooling purposes by gas transmission plant above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	1.3	150	48	122	422	176	4310	85	215	234	2.0
2	.68	.94	245	38	111	455	209	2610	80	135	124	1.6
3	.67	.78	129	30	102	356	205	990	79	94	78	1.9
4	.65	.73	78	26	108	293	262	733	70	71	53	1.7
5	.63	.70	51	27	156	285	349	598	65	62	40	1.5
6	.61	.73	37	39	237	331	310	397	60	57	32	1.4
7	.59	.76	29	603	273	316	261	350	55	48	26	1.4
8	.59	.79	22	4530	366	354	238	1520	49	46	22	1.3
9	.57	.82	17	2540	567	1380	398	1240	49	47	21	1.3
10	.61	1.1	17	1000	976	1310	793	646	438	49	23	1.3
11	.62	.96	55	519	2060	655	963	414	1630	42	20	1.2
12	.65	.93	108	372	4470	474	510	309	4080	34	23	1.2
13	.78	4.0	101	464	3940	380	378	238	1960	28	31	1.2
14	.99	29	69	416	1850	339	319	191	1390	24	26	1.2
15	.86	15	49	328	1250	295	279	155	3230	89	21	1.2
16	.90	17	35	345	1070	255	1460	129	1070	51	18	1.2
17	.87	20	26	354	1590	230	2620	109	612	46	16	1.2
18	.87	27	20	315	1740	240	1090	92	315	49	15	1.1
19	.87	22	15	295	1460	441	1710	79	259	41	16	1.1
20	.89	18	12	251	818	450	1920	69	220	93	13	1.1
21	.91	15	8.7	211	559	905	886	73	154	325	13	1.1
22	.92	15	9.4	181	426	719	558	452	124	180	11	1.1
23	.92	15	15	307	359	478	429	202	509	160	11	1.1
24	.98	69	31	707	334	373	362	949	235	195	12	1.1
25	.99	48	102	489	302	313	287	989	340	104	10	1.1
26	1.0	30	199	342	261	275	237	572	173	68	11	1.1
27	1.1	20	168	268	239	246	339	306	120	49	7.1	1.1
28	1.1	14	122	222	230	224	411	231	92	39	5.2	.86
29	1.1	11	94	189	---	204	302	172	75	32	3.7	.33
30	1.2	13	76	161	---	186	1760	131	104	30	3.1	.36
31	1.3	---	61	139	---	172	---	102	---	244	3.3	---
TOTAL	26.10	412.54	2151.1	15756	25976	13356	20021	19358	17722	2747	942.4	36.35
MEAN	.84	13.8	69.4	508	928	431	667	624	591	88.6	30.4	1.21
MAX	1.3	69	245	4530	4470	1380	2620	4310	4080	325	234	2.0
MIN	.57	.70	8.7	26	102	172	176	69	49	24	3.1	.33
CFSM	.00	.06	.29	2.10	3.83	1.78	2.76	2.58	2.44	.37	.13	.01
IN.	.00	.06	.33	2.42	3.99	2.05	3.08	2.98	2.72	.42	.14	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

	1940	1954	1979	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MEAN	57.4	155	387	488	614	702	519	395	182	116	81.4	67.2							
MAX	509	869	1954	1665	1953	2092	1513	1309	994	645	445	1031							
(WY)	1976	1987	1979	1950	1989	1997	1972	1996	1961	1960	1979	1950							
MIN	.35	.70	3.23	31.1	20.7	80.8	90.9	27.6	5.13	5.39	2.09	1.21							
(WY)	1954	1954	1954	1977	1954	1941	1941	1941	1988	1964	1944	1998							

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1940 - 1998

ANNUAL TOTAL	120066.64	118504.49	
ANNUAL MEAN	329	325	
HIGHEST ANNUAL MEAN			589
LOWEST ANNUAL MEAN			67.5
HIGHEST DAILY MEAN	25800	Mar 2	25800
LOWEST DAILY MEAN	.57	Oct 9	.00
ANNUAL SEVEN-DAY MINIMUM	.60	Oct 5	.00
INSTANTANEOUS PEAK FLOW			5200
INSTANTANEOUS PEAK STAGE			16.06
INSTANTANEOUS LOW FLOW			23.65
ANNUAL RUNOFF (CFSM)	1.36	1.34	.00
ANNUAL RUNOFF (INCHES)	18.46	18.22	17.55
10 PERCENT EXCEEDS	618	894	703
50 PERCENT EXCEEDS	99	92	94
90 PERCENT EXCEEDS	.99	.99	5.1

KINNICONICK CREEK BASIN

03237250 KINNICONICK CREEK AT TANNERY, KY

LOCATION.--Lat 38°32'36", long 83°13'29", Lewis County, Hydrologic Unit 05090201, near right bank on downstream side of bridge on County Highway 1149, 0.35 mi upstream from Trace Creek, 0.5 mi west of Tannery, and 10.2 mi upstream from mouth.

DRAINAGE AREA.--201 mi²

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 535.34 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 10 to Nov. 30, Jan. 11 to Feb. 25, May 14-21, and May 27 to June 9. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.90	161	41	170	338	188	4890	800	74	227	6.1
2	.20	1.0	172	31	165	358	398	1620	400	68	112	5.3
3	.18	1.0	105	23	160	305	287	816	210	48	64	4.6
4	.16	.90	76	19	180	249	265	596	160	33	40	4.2
5	.15	.80	56	18	210	247	311	446	130	24	26	4.0
6	.14	.90	42	54	280	280	274	333	90	18	19	3.9
7	.14	1.2	34	1250	290	291	233	271	80	16	15	4.0
8	.13	1.3	28	7300	400	300	242	1100	70	15	12	3.7
9	.12	1.6	23	3040	800	1420	633	934	160	16	9.9	4.1
10	.26	1.7	23	1280	1800	1160	1110	606	1140	14	9.8	4.3
11	.28	1.5	28	500	3500	657	914	408	4170	13	8.7	4.4
12	.33	1.4	74	380	7200	462	557	296	5920	11	8.7	4.3
13	.34	1.3	86	480	6000	350	388	215	2300	10	8.5	4.1
14	.40	1.2	71	400	400	292	314	750	1110	624	8.4	4.1
15	.38	1.3	58	340	1500	230	261	500	2890	492	10	4.1
16	.50	1.3	47	280	800	184	2560	300	877	185	8.7	4.1
17	.42	1.2	36	250	700	162	2570	220	463	132	9.2	4.1
18	.34	1.2	28	240	1500	154	1060	180	293	100	55	4.2
19	.29	1.7	22	220	1000	200	1430	160	332	65	129	4.2
20	.20	1.7	19	210	700	280	1280	130	254	745	97	4.3
21	.22	2.0	15	200	500	776	749	100	167	657	40	5.6
22	.21	8.5	14	200	350	661	521	191	196	300	21	3.7
23	.18	7.0	14	400	300	504	418	229	473	178	14	3.2
24	.40	4.0	23	500	260	376	342	735	435	117	10	3.1
25	.70	4.5	60	440	230	291	275	1090	328	78	8.2	2.9
26	1.1	3.5	169	380	201	245	221	566	206	53	7.4	2.5
27	.75	2.5	138	300	188	207	369	350	134	36	14	2.3
28	.80	2.0	99	275	178	185	512	260	93	26	20	2.2
29	1.2	1.8	76	230	---	168	368	190	68	20	12	2.1
30	1.9	5.0	59	200	---	148	3240	150	60	31	8.9	2.0
31	1.2	---	49	180	---	131	---	275	---	453	7.0	---
TOTAL	13.85	65.90	1905	19661	29962	11611	22290	18907	24009	4652	1040.4	115.7
MEAN	.45	2.20	61.5	634	1070	375	743	610	800	150	33.6	3.86
MAX	1.9	8.5	172	7300	7200	1420	3240	4890	5920	745	227	6.1
MIN	.12	.80	14	18	160	131	188	100	60	10	7.0	2.0
CFSM	.00	.01	.31	3.16	5.32	1.86	3.70	3.03	3.98	.75	.17	.02
IN.	.00	.01	.35	3.64	5.55	2.15	4.13	3.50	4.44	.86	.19	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	33.4	126	259	580	531	851	471	511	280	88.5	60.7	7.73
MAX	130	340	468	1025	1070	2242	743	1187	800	161	189	23.0
(WY)	1996	1994	1997	1994	1998	1997	1998	1996	1998	1996	1995	1995
MIN	.45	2.20	61.5	295	293	345	124	64.8	15.6	37.2	4.61	1.06
(WY)	1998	1998	1998	1992	1995	1995	1997	1993	1994	1993	1997	1997

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR	FOR 2000 WATER YEAR	FOR 2001 WATER YEAR	FOR 2002 WATER YEAR	FOR 2003 WATER YEAR
ANNUAL TOTAL	129109.02	134232.85					
ANNUAL MEAN	354	368					
HIGHEST ANNUAL MEAN							1997
LOWEST ANNUAL MEAN							1992
HIGHEST DAILY MEAN	20000	Mar 2	7300	Jan 8	20000	Mar 2	1997
LOWEST DAILY MEAN	.12	Oct 9	.12	Oct 9	.12	Oct 9	1997
ANNUAL SEVEN-DAY MINIMUM	.15	Oct 3	.15	Oct 3	.15	Oct 3	1997
INSTANTANEOUS PEAK FLOW			12700	Jun 12	45600	Mar 2	1997
INSTANTANEOUS PEAK STAGE			18.56	Jun 12	28.04	Mar 2	1997
ANNUAL RUNOFF (CFSM)	1.76		1.83		1.57		
ANNUAL RUNOFF (INCHES)	23.89		24.84		21.37		
10 PERCENT EXCEEDS	600		800		750		
50 PERCENT EXCEEDS	62		129		104		
90 PERCENT EXCEEDS	.39		1.2		2.0		

LICKING RIVER BASIN

03250310 ROCK LICK CREEK ABOVE UNNAMED TRIBUTARY NEAR SHARKEY, KY

LOCATION.--Lat 38°15'04", long 83°33'58", Fleming County, Hydrologic Unit 05100101, on right bank, 1.1 miles above Drip Springs, 1.3 miles north of Sharkey, and 2.7 mi above mouth.

DRAINAGE AREA.--1.66 mi²

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 720 ft above mean sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.03	1.2	.15	.81	1.8	6.4	18	2.7	1.2	.08	.03
2	.00	.03	.30	.18	.74	1.3	2.2	4.6	.84	.74	.07	.03
3	.00	.03	.20	.28	.71	1.2	1.6	2.7	.63	.54	.06	.02
4	.00	.03	.18	.22	1.1	1.7	2.0	3.2	.56	.46	.06	.02
5	.00	.03	.16	.20	1.4	3.1	1.6	2.5	.51	.41	.05	.02
6	.00	.03	.15	.80	1.7	1.7	1.3	1.6	.47	.38	.05	.01
7	.00	.03	.14	51	2.3	1.3	1.1	7.2	.41	.40	.04	.01
8	.00	.04	.13	10	3.0	2.3	1.1	7.4	.39	.57	.04	.01
9	.00	.04	.12	4.4	4.3	13	1.6	2.9	.87	.44	.05	.01
10	.00	.04	.85	2.4	7.1	3.1	4.4	1.9	1.2	.37	.05	.01
11	.00	.04	.38	1.6	21	2.0	2.3	1.4	.98	.32	.05	.01
12	.00	.04	.23	2.5	10	1.5	1.6	1.2	2.2	.28	.05	.01
13	.00	.04	.20	2.2	4.5	1.3	1.3	.96	5.0	.26	.05	.01
14	.01	.05	.17	1.5	2.8	1.2	1.2	.83	1.6	.27	.05	.00
15	.01	.06	.16	1.8	2.0	.98	1.1	.74	1.0	.26	.05	.00
16	.01	.06	.15	1.9	2.5	.89	16	.67	1.2	.43	.05	.00
17	.01	.06	.14	1.8	3.0	.82	6.1	.62	.99	.47	.05	.00
18	.01	.05	.13	1.8	7.2	1.6	2.9	.56	.70	.34	.05	.00
19	.01	.06	.13	1.4	3.2	2.0	11	.51	.61	.36	.04	.01
20	.01	.05	.12	1.2	2.4	4.9	3.4	.52	.51	18	.04	.01
21	.01	.06	.12	1.1	2.1	3.7	2.2	1.6	.45	1.6	.04	.02
22	.01	.09	.29	1.1	1.6	2.5	4.0	.75	1.1	2.7	.04	.01
23	.01	.08	.26	5.5	1.5	1.8	3.2	31	2.1	1.1	.04	.01
24	.01	.08	1.1	2.6	1.3	1.4	2.1	5.6	.86	.32	.04	.01
25	.01	.07	1.3	1.8	1.1	1.2	1.6	2.6	.61	.18	.04	.01
26	.02	.07	.39	1.4	.95	1.1	1.3	1.5	.50	.11	.04	.01
27	.02	.06	.26	1.2	.90	1.0	1.3	1.1	.43	.08	.03	.01
28	.03	.06	.22	1.1	1.6	.97	1.1	.86	.36	.07	.07	.01
29	.03	.05	.20	1.1	---	.95	1.4	.69	4.3	.07	.05	.01
30	.03	3.0	.18	.98	---	.89	33	.58	4.8	.17	.04	.01
31	.02	---	.17	.88	---	.83	---	.72	---	.11	.03	---
TOTAL	0.27	4.46	9.73	106.09	92.81	64.03	121.4	107.01	38.88	33.01	1.49	0.33
MEAN	.009	.15	.31	3.42	3.31	2.07	4.05	3.45	1.30	1.06	.048	.011
MAX	.03	3.0	1.3	51	21	13	33	31	5.0	18	.08	.03
MIN	.00	.03	.12	.15	.71	.82	1.1	.51	.36	.07	.03	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

	1996	1997	1997	1998	1997	1997	1998	1998	1997	1998	1996	1998
MEAN	.067	.53	1.56	3.07	3.58	5.50	2.54	2.53	2.79	.83	.42	.36
MAX	.13	.92	2.80	3.42	3.84	8.93	4.05	3.45	4.28	1.06	1.09	1.06
(WY)	1997	1997	1997	1998	1997	1997	1998	1998	1997	1998	1996	1996
MIN	.009	.15	.31	2.71	3.31	2.07	1.03	1.61	1.30	.59	.048	.011
(WY)	1998	1998	1998	1997	1998	1998	1997	1997	1998	1997	1998	1998

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1996 - 1998

ANNUAL TOTAL	714.66	579.51	
ANNUAL MEAN	1.96	1.59	
HIGHEST ANNUAL MEAN			1.92
LOWEST ANNUAL MEAN			2.24
HIGHEST DAILY MEAN			1.59
LOWEST DAILY MEAN			
HIGHEST DAILY MEAN	134	Mar 1	134
LOWEST DAILY MEAN	.00	Sep 15	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 15	.00
INSTANTANEOUS PEAK FLOW			459
INSTANTANEOUS PEAK STAGE			5.19
10 PERCENT EXCEEDS	3.3		3.0
50 PERCENT EXCEEDS	.59		.50
90 PERCENT EXCEEDS	.01		.01

LICKING RIVER BASIN

03250322 ROCK LICK CREEK AT HIGHWAY 158 NEAR SHARKEY, KY

LOCATION.--Lat 38°14'50", long 83°35'22", Fleming County, Hydrologic Unit 05100101, on downstream side of bridge, 0.53 miles downstream from Drip Spring, 1.1 miles above mouth, and 1.9 miles northwest of Sharkey.

DRAINAGE AREA.--4.2 mi².

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 645.451 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30 and Aug. 9, 15-18. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.16	10	1.0	2.1	4.8	20	66	6.3	3.1	.85	.03
2	.00	.52	3.5	1.4	2.0	3.7	6.0	17	2.5	1.9	.56	.01
3	.00	.48	2.3	2.3	1.8	3.3	4.4	13	2.0	1.4	.42	.00
4	.00	.26	1.8	1.8	3.0	4.8	5.3	15	1.9	1.4	.36	.00
5	.00	.20	1.3	1.8	4.0	9.5	4.3	9.2	1.7	.98	.32	.00
6	.00	.20	1.0	5.7	4.8	4.6	3.7	5.4	1.4	.82	.29	.00
7	.00	.18	.79	232	5.9	3.9	3.3	30	1.2	1.4	.26	.00
8	.00	.59	.67	78	7.8	7.6	3.6	23	1.1	1.8	.24	.00
9	.00	.36	.64	17	13	52	4.7	8.8	3.3	1.1	.69	.00
10	.00	.20	6.3	7.8	26	13	12	5.5	3.8	.77	.45	.00
11	.00	.17	3.6	5.2	90	8.1	5.8	4.2	2.8	.55	.29	.00
12	.00	.16	2.6	8.0	43	5.4	4.3	3.5	6.8	.45	.26	.00
13	.00	.17	1.9	6.5	18	4.7	3.8	2.9	17	.39	.24	.00
14	.50	.93	1.5	4.6	11	4.3	3.6	2.4	4.1	.70	.23	.00
15	.17	.30	1.1	6.0	6.7	3.7	3.4	2.0	3.1	.49	.19	.00
16	.14	.24	.86	5.8	9.6	3.4	68	1.7	4.8	2.5	.16	.00
17	.13	.22	.71	5.6	12	3.2	26	1.5	3.1	1.4	.12	.00
18	.13	.20	.62	5.0	29	5.9	15	1.2	2.2	.81	.13	.00
19	.13	.17	.56	4.3	12	6.0	43	1.0	1.9	1.1	.19	.00
20	.13	.17	.51	3.8	8.5	16	15	1.3	1.5	130	.11	.00
21	.12	1.3	.47	3.5	6.6	12	9.6	5.1	1.3	5.8	.08	1.8
22	.12	1.3	3.2	4.0	4.8	8.0	19	1.6	4.1	25	.07	.16
23	.10	.70	2.4	19	4.6	5.5	13	160	4.8	7.0	.06	.08
24	.32	.63	7.9	7.7	4.0	4.6	6.5	21	2.2	3.2	.05	.06
25	.36	.54	9.7	5.0	3.4	4.1	4.6	8.6	1.5	2.1	.05	.05
26	.50	.49	3.8	4.1	3.0	3.7	3.9	4.6	1.1	1.4	.05	.04
27	.36	.44	2.8	3.6	2.9	3.4	4.0	3.9	.86	1.0	.03	.01
28	.19	.42	2.2	3.2	4.7	3.2	3.1	3.0	.68	.74	.01	.01
29	.16	.40	1.8	2.9	---	2.8	3.8	2.5	14	.57	.01	.00
30	.15	17	1.6	2.7	---	2.6	164	2.1	17	3.7	.01	.00
31	.15	---	1.2	2.3	---	2.5	---	4.5	---	1.9	.02	---
TOTAL	3.86	29.10	79.33	461.6	344.2	220.3	486.7	431.5	120.04	205.47	6.80	2.25
MEAN	.12	.97	2.56	14.9	12.3	7.11	16.2	13.9	4.00	6.63	.22	.075
MAX	.50	17	10	232	90	52	164	160	17	130	.85	1.8
MIN	.00	.16	.47	1.0	1.8	2.5	3.1	1.0	.68	.39	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
MEAN	.23	2.88	6.29	12.4	9.94	12.3	9.55	9.81	9.66	4.36	.67	.12
MAX	.33	4.79	10.0	14.9	12.3	17.5	16.2	13.9	15.3	6.63	1.12	.17
(WY)	1997	1997	1997	1998	1998	1997	1998	1998	1997	1998	1997	1997
MIN	.12	.97	2.56	9.93	7.59	7.11	2.87	5.70	4.00	2.10	.22	.075
(WY)	1998	1998	1998	1997	1997	1998	1997	1997	1998	1997	1998	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	2003.09		2391.15			
ANNUAL MEAN	5.49		6.55		6.50	
HIGHEST ANNUAL MEAN					6.55	
LOWEST ANNUAL MEAN					6.45	
HIGHEST DAILY MEAN	190	Mar 1	232	Jan 7	232	Jan 7 1998
LOWEST DAILY MEAN	.00	Sep 21	.00	Oct 1	.00	Sep 21 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 21	.00	Oct 1	.00	Sep 21 1997
INSTANTANEOUS PEAK FLOW			1160		1160	
INSTANTANEOUS PEAK STAGE			6.90		10.71	
10 PERCENT EXCEEDS	12		12		13	
50 PERCENT EXCEEDS	1.8		1.9		2.2	
90 PERCENT EXCEEDS	.13		.01		.11	

LICKING RIVER BASIN

03251200 NORTH FORK LICKING RIVER NEAR MOUNT OLIVET, KY

LOCATION.--Lat 38°35'41", long 84°01'13", Bracken County, Hydrologic Unit 05100101, on right bank, downstream side of bridge on State Highway 875, 4 mi northeast of Mt. Olivet, and at mile 26.1.

DRAINAGE AREA.--226 mi²

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 622.46 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 9-13, Mar. 10-12, and May 2-5. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.00	18	26	71	118	132	4550	106	45	60	1.7
2	.09	.00	30	23	63	116	112	2500	84	41	55	1.6
3	.08	.04	41	19	58	114	134	1700	68	38	34	1.3
4	.07	.11	21	17	55	98	100	800	58	30	25	1.1
5	.06	.12	10	14	63	92	83	400	53	24	19	.99
6	.03	.12	6.0	223	80	90	78	280	51	19	14	.93
7	.01	.12	5.0	1150	92	104	74	243	46	13	11	.92
8	.03	.15	4.1	3060	133	101	66	479	42	34	8.6	.92
9	.01	.16	3.8	3570	188	350	331	544	95	26	7.4	.87
10	.00	.16	10	1470	345	760	465	380	226	14	6.4	.88
11	.00	.17	37	413	841	500	413	268	2510	9.6	5.6	.83
12	.00	.16	46	247	3080	370	295	188	5530	6.9	5.5	.79
13	.00	.16	50	176	4330	277	179	140	5470	5.3	7.9	.84
14	.01	.32	30	164	3110	219	174	1950	3830	360	8.3	.82
15	.01	.36	21	181	1440	176	152	389	1570	145	6.5	.75
16	.01	.36	14	149	972	136	1070	186	710	52	5.1	.70
17	.00	.39	9.7	145	1180	113	2990	121	548	44	4.1	.84
18	.00	.33	6.6	147	1600	104	2670	90	347	35	3.2	.90
19	.00	.43	5.7	151	2010	106	1040	73	456	27	2.8	.79
20	.00	.47	4.7	142	1060	205	1110	64	273	1810	2.5	.70
21	.00	.65	4.1	113	616	370	758	63	152	1710	2.3	1.3
22	.00	1.1	4.8	96	457	563	532	90	118	768	2.2	47
23	.00	1.2	12	165	356	535	543	602	286	1270	2.1	8.3
24	.00	1.1	15	385	283	373	448	849	200	341	5.1	3.8
25	.05	1.0	130	426	217	259	331	1230	201	144	4.7	2.0
26	.04	1.0	171	268	174	203	232	920	119	83	3.7	1.4
27	.14	1.2	132	185	151	166	249	601	78	60	2.9	1.0
28	.11	.95	79	141	132	139	285	720	59	48	2.3	.85
29	.10	1.1	55	116	---	116	275	428	47	40	2.2	.77
30	.09	5.0	43	96	---	99	3140	243	48	34	2.1	.95
31	.09	---	35	82	---	86	---	149	---	42	2.1	---
TOTAL	1.11	18.43	1054.5	13560	23157	7058	18461	21240	23381	7318.8	323.6	86.54
MEAN	.036	.61	34.0	437	827	228	615	685	779	236	10.4	2.88
MAX	.14	5.0	171	3570	4330	760	3140	4550	5530	1810	60	47
MIN	.00	.00	3.8	14	55	86	66	63	42	5.3	2.1	.70
CFSM	.00	.00	.15	1.94	3.66	1.01	2.72	3.03	3.45	1.04	.05	.01
IN.	.00	.00	.17	2.23	3.81	1.16	3.04	3.50	3.85	1.20	.05	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

MEAN	11.7	147	379	678	521	788	403	576	347	127	52.7	18.8
MAX	31.4	454	857	1165	827	1796	676	1524	779	296	123	62.7
(WY)	1994	1994	1997	1994	1998	1997	1994	1996	1998	1992	1995	1991
MIN	.036	.61	34.0	369	284	228	118	87.4	4.41	5.45	2.49	.25
(WY)	1998	1998	1998	1992	1995	1998	1997	1993	1991	1995	1997	1997

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1991 - 1998

ANNUAL TOTAL	125738.27	115659.98	
ANNUAL MEAN	344	317	340
HIGHEST ANNUAL MEAN			440
LOWEST ANNUAL MEAN			233
HIGHEST DAILY MEAN	12400	Mar 2	12400
LOWEST DAILY MEAN	.00	Oct 10	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 17	.00
INSTANTANEOUS PEAK FLOW		5910	13500
INSTANTANEOUS PEAK STAGE		22.04	34.71
INSTANTANEOUS LOW FLOW			.24
ANNUAL RUNOFF (CFSM)	1.52	1.40	1.51
ANNUAL RUNOFF (INCHES)	20.70	19.04	20.46
10 PERCENT EXCEEDS	696	781	835
50 PERCENT EXCEEDS	49	58	82
90 PERCENT EXCEEDS	.11	.12	1.7

LICKING RIVER BASIN

03252300 HINKSTON CREEK NEAR CARLISLE, KY

LOCATION.--Lat 38°14'33", long 84°03'18", Bourbon County, Hydrologic Unit 05100102, at upstream side of bridge on State Highway 13, 0.5 mi upstream from Taylors Creek, 5.0 mi south of Carlisle, and at mile 29.0.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--October 1991 to current year.

REVISED RECORDS.--WRD KY-93-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 764.88 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 18 and Aug. 29 to Sept. 20. Records good except for discharges below 10ft³/s and periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.6	161	40	76	104	98	2480	582	1540	45	4.9
2	1.1	3.1	135	36	68	93	127	991	180	309	37	4.6
3	.84	3.0	62	35	62	85	89	401	105	169	29	4.1
4	.61	2.9	42	36	70	79	111	280	83	113	24	3.9
5	.43	2.8	31	44	84	95	112	231	77	86	21	4.1
6	.47	3.1	22	866	93	104	88	183	78	69	19	3.9
7	.31	3.7	16	1560	116	91	74	297	68	55	17	3.6
8	.25	3.8	11	3230	141	103	70	642	56	49	15	3.3
9	.50	3.9	9.0	1670	177	1000	109	479	105	49	13	3.5
10	.61	3.7	65	435	319	849	206	302	265	40	14	3.3
11	.96	4.1	80	264	1220	375	199	226	535	30	17	3.2
12	1.2	3.7	81	211	3220	257	136	174	389	23	16	3.0
13	1.2	3.6	57	268	2580	202	107	145	1050	17	18	2.9
14	1.6	4.1	45	224	1000	174	95	530	614	448	21	2.8
15	1.5	4.0	33	188	547	144	84	211	275	348	18	2.7
16	1.4	4.1	26	213	453	120	707	131	183	125	41	2.6
17	1.9	4.1	21	201	486	107	966	103	132	299	33	2.5
18	1.9	4.3	17	204	816	104	452	83	98	166	22	2.4
19	1.7	5.1	14	184	637	113	914	71	82	89	19	3.0
20	1.5	4.2	11	158	413	486	875	66	75	1220	15	5.0
21	1.2	4.1	9.8	135	300	705	428	63	95	1580	13	29
22	1.5	4.1	25	122	229	535	569	68	178	816	9.8	28
23	1.3	5.3	44	262	194	363	673	1300	1490	399	8.1	11
24	1.2	59	67	398	168	254	409	1160	1140	207	7.9	6.2
25	1.5	36	225	267	141	192	268	835	336	138	7.0	5.3
26	1.5	25	179	190	123	163	194	339	198	100	7.0	4.6
27	1.8	20	109	153	115	138	160	218	132	78	6.3	3.8
28	2.5	17	78	131	109	119	137	161	96	64	6.1	3.1
29	2.3	16	63	113	---	103	117	123	103	53	5.9	2.5
30	2.8	31	53	98	---	91	1650	97	1660	46	5.6	2.0
31	2.5	---	46	85	---	81	---	156	---	53	5.2	---
TOTAL	41.38	291.4	1837.8	12021	13957	7429	10224	12546	10460	8778	535.9	164.8
MEAN	1.33	9.71	59.3	388	498	240	341	405	349	283	17.3	5.49
MAX	2.8	59	225	3230	3220	1000	1650	2480	1660	1580	45	29
MIN	.25	2.6	9.0	35	62	79	70	63	56	17	5.2	2.0
CFSM	.01	.06	.38	2.52	3.24	1.56	2.21	2.63	2.26	1.84	.11	.04
IN.	.01	.07	.44	2.90	3.37	1.79	2.47	3.03	2.53	2.12	.13	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	23.4	116	234	465	346	551	212	358	207	73.0	56.1	15.5
MAX	48.2	302	453	675	526	1210	436	875	652	283	121	56.5
(WY)	1994	1994	1997	1994	1994	1997	1994	1996	1997	1998	1993	1996
MIN	1.33	9.71	59.3	166	168	240	83.6	41.3	38.3	17.2	4.29	1.83
(WY)	1998	1998	1998	1992	1996	1998	1997	1992	1992	1993	1997	1997

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1992 - 1998

	1997 CALENDAR YEAR	1998 WATER YEAR	1992 - 1998
ANNUAL TOTAL	90400.37	78286.28	
ANNUAL MEAN	248	214	221
HIGHEST ANNUAL MEAN			304
LOWEST ANNUAL MEAN			128
HIGHEST DAILY MEAN	7520	3230	7520
LOWEST DAILY MEAN	.25	.25	.25
ANNUAL SEVEN-DAY MINIMUM	.45	.45	.45
INSTANTANEOUS PEAK FLOW		3440	7800
INSTANTANEOUS PEAK STAGE		21.36	37.00
ANNUAL RUNOFF (CFSM)	1.61	1.39	1.44
ANNUAL RUNOFF (INCHES)	21.84	18.91	19.54
10 PERCENT EXCEEDS	459	556	531
50 PERCENT EXCEEDS	43	81	72
90 PERCENT EXCEEDS	1.6	2.7	3.9

LICKING RIVER BASIN

03253500 LICKING RIVER AT CATAWBA, KY

LOCATION.--Lat 38°42'31", long 84°18'38", Pendleton County, Hydrologic Unit 05100101, on right bank 1 mi southeast of Catawba, 1.5 mi upstream from Kincaid Creek, 2.3 mi north of Falmouth, and at mile 48.0.

DRAINAGE AREA.--3,300 mi.²

PERIOD OF RECORD.--January 1914 to July 1920 (January 1914 to July 1915 and October 1917 to July 1920, gage heights only), July 1928 to current year. Published as "at Falmouth" 1914-16. Gage-height records collected in this vicinity since 1887 are published in reports of the National Weather Service.

REVISED RECORDS.--WSP 853: 1937. WSP 1003: 1943. WSP 1385: 1942. WSP 1705: Drainage.

GAGE.--Water-stage recorder. Datum of gage is 500.01 ft above sea level (levels by U.S. Army Corps of Engineers). Jan. 1, 1914 to July 31, 1916, nonrecording gage at site 3.8 mi upstream at datum 12.2 ft higher. July 14, 1916 to July 5, 1920, nonrecording gage at site 1.4 mi downstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 30 and Aug. 9. Records good except for periods of estimated record, which are fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	292	625	923	2060	4580	1740	29500	4560	14200	774	174
2	269	294	1570	857	1930	4700	1900	27400	6780	12000	800	145
3	267	293	1850	800	1680	4690	2310	19400	5310	5110	841	131
4	267	288	1430	743	1340	4480	2150	10600	4330	3900	757	118
5	267	287	1020	710	1420	4340	1960	7060	3950	4140	645	115
6	267	287	809	3150	1600	4530	1910	7250	3230	3880	567	114
7	262	287	695	11700	1850	4680	1930	8200	1850	3790	520	109
8	262	292	622	30600	2360	4690	1600	12700	1100	4030	465	102
9	259	292	567	31400	3270	9300	3310	13200	1550	3750	674	99
10	256	294	943	24200	4720	13700	4370	11300	3300	3590	884	97
11	256	297	1690	13700	11200	13500	4190	7840	11000	3440	557	95
12	256	297	1250	6590	31900	8550	5170	6560	16800	2660	340	95
13	261	557	1310	5090	37500	6500	5090	5760	18400	1530	292	97
14	262	871	1140	5480	30300	5820	4700	10600	17000	3750	276	98
15	262	861	932	6070	17400	5270	4700	9520	12300	5010	255	97
16	262	858	797	5710	10600	4430	13800	6600	6900	3060	232	99
17	264	858	702	5630	10400	3250	26300	4990	5470	1660	218	99
18	263	855	637	5550	12800	2510	19100	4420	4720	1330	211	100
19	210	851	586	5430	13000	2390	14700	4090	5120	1540	236	104
20	162	851	547	5230	12000	5740	14000	3920	4750	21100	208	106
21	232	844	522	4900	9690	8320	14000	4030	3510	32900	184	106
22	256	736	547	4560	8010	9490	11700	4820	3710	24500	168	149
23	256	692	772	4170	6930	7500	14300	11900	12900	9710	164	188
24	269	693	838	4910	6200	5360	12900	19100	14400	4910	185	220
25	291	576	2460	5930	5700	3960	9670	18300	8730	3660	199	197
26	299	443	3030	5110	5290	3180	7550	13400	4320	2710	194	174
27	303	394	2780	3820	4960	2700	6720	7620	2440	2140	189	165
28	299	372	2030	3140	4720	2360	6250	6350	1610	1650	186	160
29	282	396	1470	2740	---	2100	6080	5810	1230	1090	185	206
30	283	430	1180	2460	---	1890	22800	5080	1750	946	185	276
31	292	---	1030	2240	---	1730	---	4540	---	832	185	---
TOTAL	8168	15638	36381	213543	260830	166240	246900	311860	193020	188518	11776	4035
MEAN	263	521	1174	6888	9315	5363	8230	10060	6434	6081	380	135
MAX	303	871	3030	31400	37500	13700	26300	29500	18400	32900	884	276
MIN	162	287	522	710	1340	1730	1600	3920	1100	832	164	95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1998, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	1399	2871	5925	6914	7732	8606	5984	5186	3337	1652	1191	1449														
MAX (WY)	7178	6516	18500	15110	21140	21310	11920	16660	11230	6962	4630	12860														
MIN (WY)	1976	1987	1979	1974	1989	1997	1975	1983	1997	1979	1974	1979														
MIN (WY)	263	298	1092	420	2321	1247	666	371	134	291	103	110														
MIN (WY)	1998	1988	1981	1981	1977	1983	1986	1976	1988	1984	1986	1995														

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1974 - 1998	
ANNUAL TOTAL	1791321		1656909			
ANNUAL MEAN	4908		4539		4339	
HIGHEST ANNUAL MEAN					7730	
LOWEST ANNUAL MEAN					2006	
HIGHEST DAILY MEAN	104000		37500		104000	
LOWEST DAILY MEAN	148		95		25	
ANNUAL SEVEN-DAY MINIMUM	153		97		38	
INSTANTANEOUS PEAK FLOW			38200		110000	
INSTANTANEOUS PEAK STAGE			27.88		57.57	
INSTANTANEOUS LOW FLOW					2.5	
10 PERCENT EXCEEDS	11000		12800		10800	
50 PERCENT EXCEEDS	1700		2030		1800	
90 PERCENT EXCEEDS	264		192		254	

OHIO RIVER MAIN STEM

03277200 OHIO RIVER AT MARKLAND DAM NR WARSAW, KY

LOCATION.--Lat 38°46'29", long 84°57'52", Gallatin County, Hydrologic Unit 05090203, at left end of Markland Dam, 0.4 mi upstream from Stephens Creek, 3.4 mi west of Warsaw, and at mile 531.5.

DRAINAGE AREA.--83,170 mi², approximately.

PERIOD OF RECORD.--May 1970 to current year.

REVISED RECORDS.--WDR KY-88-1: 1987.

GAGE.--Gate opening and water-stage recorders on left bank. Turbine recorders in powerplant on right bank. Datum of headwater gage 0.5 mi upstream is 443 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 35 ft lower.

REMARKS.--No estimated daily discharges. Records fair except for those below 20,000 ft³/s, which are poor. Daily discharge computed from head, gate openings, turbine flow, and tailwater rating. Flow regulated by Ohio River system f locks, dams, and reservoirs upstream from station.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 26, 1937, reached a stage of 76.1 ft (tailwater gage).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48500	25500	83400	72000	152000	158000	89500	292000	47900	348000	29200	9920
2	29800	23000	91800	63100	125000	156000	88000	276000	53300	350000	18300	18600
3	21300	22600	94000	44800	109000	158000	92400	277000	51400	322000	18800	16400
4	28700	36500	93800	46800	93100	169000	86700	303000	59200	233000	20800	15900
5	21800	48800	86600	57600	106000	167000	96200	317000	35600	154000	10200	10700
6	22000	54300	78300	74500	170000	151000	107000	314000	40600	123000	23000	7100
7	22500	38700	75900	131000	220000	136000	98300	297000	42100	89500	12600	9650
8	15600	49900	81500	266000	227000	120000	105000	319000	31500	78900	15200	16300
9	17300	82000	69400	312000	208000	151000	120000	309000	38800	80800	25400	23900
10	9500	100000	69600	344000	183000	180000	167000	308000	63800	91100	17100	8140
11	24500	96500	74100	363000	190000	222000	191000	315000	113000	69200	28700	21100
12	13800	85600	87000	361000	252000	236000	205000	291000	208000	62300	19600	15400
13	5000	84400	105000	360000	267000	226000	210000	242000	227000	52600	28500	8110
14	11500	80300	110000	369000	260000	192000	190000	200000	219000	41600	22900	20400
15	18100	76400	102000	320000	225000	156000	164000	177000	247000	50300	22600	6060
16	13300	91100	83200	241000	190000	129000	262000	159000	301000	38900	12100	8580
17	10000	89900	67700	206000	164000	108000	301000	126000	317000	36900	22100	15200
18	8010	84900	54300	187000	155000	89400	287000	99200	303000	25000	38300	6120
19	10600	69800	46000	177000	207000	100000	295000	86400	282000	31200	36900	9780
20	15700	67100	46400	162000	268000	152000	318000	90300	225000	128000	41700	13100
21	9740	57700	45600	138000	316000	196000	327000	73700	172000	95700	17400	21000
22	13500	46400	38400	127000	313000	262000	333000	71800	168000	74600	27300	27200
23	11800	57200	29000	113000	284000	315000	341000	80600	191000	56200	10700	14400
24	12600	61500	44000	115000	248000	332000	345000	104000	149000	63800	17700	16700
25	16000	75000	60100	132000	238000	325000	332000	112000	99200	33000	25600	7140
26	23000	70600	69300	153000	240000	286000	284000	126000	77900	42200	32100	14400
27	9090	70000	75400	153000	219000	215000	226000	123000	55800	28000	19400	22000
28	22100	61500	79700	141000	182000	164000	200000	88000	86700	32200	20600	8350
29	23000	57900	86300	131000	---	134000	214000	76100	160000	19000	20200	9260
30	22100	76400	80700	148000	---	113000	279000	79700	284000	21900	19700	21200
31	21800	---	77200	162000	---	107000	---	55500	---	32800	28100	---
TOTAL	552240	1941500	2285700	5670800	5811100	5605400	6354100	5788300	4349800	2905700	702800	422110
MEAN	17810	64720	73730	182900	207500	180800	211800	186700	145000	93730	22670	14070
MAX	48500	100000	110000	369000	316000	332000	345000	319000	317000	350000	41700	27200
MIN	5000	22600	29000	44800	93100	89400	86700	55500	31500	19000	10200	6060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	50040	88610	146300	151300	179200	214800	180900	142400	93930	60270	45580	40240																		
MAX	144100	230600	288700	289900	291300	338500	292200	370100	219100	109500	146200	143800																		
(WY)	1980	1986	1973	1974	1975	1997	1972	1996	1981	1972	1980	1979																		
MIN	13910	26500	42150	34060	77100	98440	61160	43510	16250	18530	13060	14070																		
(WY)	1992	1992	1990	1977	1992	1990	1986	1976	1988	1988	1988	1998																		

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1970 - 1998
ANNUAL TOTAL	38929590	42389550	
ANNUAL MEAN	106700	116100	116100
HIGHEST ANNUAL MEAN			157300
LOWEST ANNUAL MEAN			60450
HIGHEST DAILY MEAN	579000	Mar 6	579000
LOWEST DAILY MEAN	5000	Oct 13	4320
ANNUAL SEVEN-DAY MINIMUM	10900	Oct 13	7310
INSTANTANEOUS PEAK FLOW			582000
INSTANTANEOUS PEAK STAGE		43.07	60.72
10 PERCENT EXCEEDS	241000	289000	262000
50 PERCENT EXCEEDS	82700	84400	81700
90 PERCENT EXCEEDS	16700	15500	21600

KENTUCKY RIVER BASIN

03277400 LEATHERWOOD CREEK AT DAISY, KY

LOCATION.--Lat 37°06'48", long 83°05'33", Perry County, on right bank on downstream side of bridge, at mouth of Hicks Branch, at Daisy, 0.6 mi upstream from Little Leatherwood Creek, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--40.9 mi², includes that of Hicks Branch.

PERIOD OF RECORD.--October 1964 to September 1974, October 1991 to September 1998 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 938.64 ft above sea level.

REMARKS.--Estimated daily discharges: Apr. 23 to May 2, May 5-9, and May 12-19. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.4	49	10	40	40	114	210	31	21	31	8.6
2	4.0	6.3	17	11	32	41	97	180	25	25	23	8.2
3	3.6	9.0	12	14	58	41	82	240	32	27	19	7.8
4	3.7	15	12	26	179	39	195	250	199	21	16	7.1
5	4.3	7.3	14	19	122	39	168	195	170	30	15	6.8
6	4.8	4.9	13	15	97	38	118	150	129	19	14	6.1
7	3.4	6.8	12	24	93	38	91	130	84	15	13	8.1
8	2.8	10	10	57	126	39	81	110	63	76	12	8.8
9	2.2	15	10	41	184	69	89	98	128	57	14	6.5
10	2.2	9.4	32	27	221	62	153	253	121	29	17	5.2
11	3.4	6.9	21	22	207	55	161	225	94	20	35	4.8
12	4.1	6.0	14	18	155	50	124	160	93	17	18	4.6
13	5.1	6.3	12	16	104	45	98	130	159	16	15	5.2
14	7.2	10	12	14	77	42	89	95	111	16	36	4.7
15	8.8	12	9.6	17	60	36	74	76	106	15	35	4.9
16	4.6	9.6	7.3	22	55	38	409	62	75	15	65	4.3
17	4.0	7.5	7.0	21	71	37	1300	54	59	16	87	4.4
18	3.8	4.7	6.9	22	144	150	489	46	48	14	38	3.9
19	4.5	4.3	7.0	29	103	260	2720	39	47	146	59	4.3
20	4.3	3.7	6.2	33	82	220	593	35	38	152	27	4.6
21	3.1	22	6.7	27	68	194	304	36	38	50	20	4.3
22	2.8	36	10	25	57	137	256	35	35	29	18	5.5
23	2.5	16	8.7	38	61	104	210	187	58	26	16	4.8
24	2.7	11	7.1	49	59	85	180	100	34	24	14	3.8
25	4.5	7.3	12	42	54	77	150	65	28	21	14	3.7
26	7.2	6.6	10	33	50	66	110	108	24	20	12	4.2
27	12	7.1	13	35	46	60	94	79	20	19	12	3.7
28	8.2	6.9	14	75	40	56	80	62	20	17	11	3.2
29	4.3	6.7	12	85	---	52	68	48	18	17	10	3.9
30	3.3	9.9	12	71	---	46	84	38	22	16	9.6	5.4
31	2.8	---	12	54	---	41	---	37	---	113	8.9	---
TOTAL	137.5	287.6	401.5	992	2645	2297	8781	3533	2109	1099	734.5	161.4
MEAN	4.44	9.59	13.0	32.0	94.5	74.1	293	114	70.3	35.5	23.7	5.38
MAX	12	36	49	85	221	260	2720	253	199	152	87	8.8
MIN	2.2	3.4	6.2	10	32	36	68	35	18	14	8.9	3.2
CFSM	.11	.23	.32	.78	2.31	1.81	7.16	2.79	1.72	.87	.58	.13
IN.	.13	.26	.37	.90	2.41	2.09	7.99	3.21	1.92	1.00	.67	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1998, BY WATER YEAR (WY)

MEAN	16.4	34.9	73.8	93.9	93.0	141	114	77.2	35.3	19.2	17.8	11.9
MAX	65.1	135	182	256	241	259	293	182	149	102	47.2	59.2
(WY)	1965	1974	1973	1974	1994	1973	1998	1971	1974	1973	1992	1974
MIN	3.29	3.23	1.75	4.06	22.2	32.0	42.9	12.4	4.06	1.19	2.50	1.59
(WY)	1966	1966	1966	1966	1968	1966	1995	1969	1966	1970	1970	1969

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1965 - 1998

ANNUAL TOTAL	20287.4	23178.5	
ANNUAL MEAN	55.6	63.5	60.4
HIGHEST ANNUAL MEAN			108
LOWEST ANNUAL MEAN			22.7
HIGHEST DAILY MEAN	1850	Mar 3	2720
LOWEST DAILY MEAN	2.2	Oct 9	2.2
ANNUAL SEVEN-DAY MINIMUM	3.3	Oct 6	3.3
INSTANTANEOUS PEAK FLOW			3830
INSTANTANEOUS PEAK STAGE			9.48
INSTANTANEOUS LOW FLOW			
ANNUAL RUNOFF (CFSM)	1.36	1.55	1.48
ANNUAL RUNOFF (INCHES)	18.45	21.08	20.07
10 PERCENT EXCEEDS	112	150	132
50 PERCENT EXCEEDS	31	26	22
90 PERCENT EXCEEDS	4.8	4.5	3.1

KENTUCKY RIVER BASIN

03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY

LOCATION.--Lat 37°32'46", long 83°22'21", Breathitt County, Hydrologic Unit 05100201, on left bank at city water plant on Armory Drive at Jackson, 2.8 mi downstream from Quicksand Creek, and at mile 305.0.

DRAINAGE AREA.--1,101 mi².

PERIOD OF RECORD.--June 1928 to September 1931, December 1936 to February 1937, April 1938 to current year. Gage-height records collected at same site during periods 1904-07, 1921-31, and February to December 1934 (above 8.0 ft only), January 1935 to September 1976 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 853: 1929(M). WSP 1335: 1928(M), 1929, 1931(M). WSP 1435: 1954-55. WSP 1505: 1948. WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft above sea level. See WDR KY-90-1 for history of changes prior to Aug. 22, 1980.

REMARKS.--Estimated daily discharges: July 3-5 and Aug. 9. Records good except for periods of estimated record, which are fair. Small diversions by city of Jackson waterworks. Flow regulated by Carr Fork Lake (station 03277446) beginning January 1976.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	146	436	307	1100	1380	1060	3880	963	1540	750	209
2	146	164	779	299	892	1300	1710	4830	817	1050	771	200
3	139	205	548	311	764	1260	1660	3770	714	860	497	187
4	121	235	411	428	1200	1250	3810	3850	2250	700	376	184
5	115	244	385	555	3160	1220	5140	4190	3090	680	312	174
6	111	253	394	602	3120	1200	3880	3380	2800	739	271	168
7	110	216	357	765	2750	1190	2820	2810	2220	637	247	165
8	107	204	316	1970	2660	1220	2260	3800	1720	776	230	164
9	107	189	289	2380	3630	2000	2130	4080	1390	3090	234	150
10	102	232	336	1720	4770	2440	2370	3710	3030	1790	875	141
11	117	243	508	1120	5200	2050	2970	4270	5000	1100	835	137
12	160	232	590	841	4440	1720	3040	3960	3460	807	653	136
13	135	217	506	698	3280	1480	2490	3030	3640	596	475	132
14	147	253	392	593	2440	1330	2050	2340	3630	732	400	127
15	137	352	325	558	1910	1190	1800	1780	2970	772	624	128
16	128	346	281	672	1600	1060	3280	1410	2630	602	643	128
17	111	304	249	709	1480	988	17200	1190	1970	547	1320	124
18	110	268	223	718	1960	1030	19400	1040	1470	518	1980	120
19	122	235	219	698	2440	3350	22500	896	1060	518	1390	125
20	122	215	210	688	2280	4400	27100	799	993	1460	1040	145
21	121	227	205	690	2040	4730	16000	954	829	1940	678	217
22	121	428	197	663	1790	4070	7030	1010	1100	1250	486	313
23	130	564	207	1020	1720	3130	5340	2110	3000	1010	408	265
24	122	491	214	1510	1950	2450	4510	6010	2270	716	357	200
25	122	353	237	1390	1950	2000	3740	3990	1510	592	313	190
26	172	283	268	1180	1780	1760	3160	2370	1320	485	279	175
27	249	250	274	999	1620	1520	2810	2030	982	419	259	159
28	243	224	287	1010	1480	1340	2520	1770	757	367	237	150
29	192	206	305	1230	---	1230	2290	1460	956	330	226	151
30	180	212	306	1570	---	1120	2260	1140	1500	306	228	149
31	162	---	314	1360	---	1040	---	921	---	540	225	---
TOTAL	4307	7991	10568	29254	65406	57448	178330	82780	60041	27469	17619	5013
MEAN	139	266	341	944	2336	1853	5944	2670	2001	886	568	167
MAX	249	564	779	2380	5200	4730	27100	6010	5000	3090	1980	313
MIN	102	146	197	299	764	988	1060	799	714	306	225	120
CFSM	.13	.24	.31	.86	2.12	1.68	5.40	2.43	1.82	.80	.52	.15
IN.	.15	.27	.36	.99	2.21	1.94	6.03	2.80	2.03	.93	.60	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1998, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	524	943	1651	2002	2638	2767	2371	1938	1091	481	424	305											
MAX	4189	3019	4649	5168	6392	7268	5944	7189	4166	1200	945	1154											
(WY)	1990	1986	1992	1979	1994	1994	1998	1984	1989	1992	1977	1989											
MIN	92.8	152	196	155	790	541	452	614	136	90.2	85.6	83.0											
(WY)	1981	1982	1981	1981	1988	1988	1986	1977	1988	1988	1988	1983											

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1977 - 1998	
ANNUAL TOTAL	440360		546226			
ANNUAL MEAN	1206		1497		1422	
HIGHEST ANNUAL MEAN					2570	
LOWEST ANNUAL MEAN					477	
HIGHEST DAILY MEAN	21300	Mar 4	27100	Apr 20	52200	May 8 1984
LOWEST DAILY MEAN	92	Sep 18	102	Oct 10	26	Aug 20 1988
ANNUAL SEVEN-DAY MINIMUM	110	Oct 5	110	Oct 5	30	Aug 16 1988
INSTANTANEOUS PEAK FLOW			27400		53500	Jan 30 1957
INSTANTANEOUS PEAK STAGE			33.28		43.10	Feb 4 1939
INSTANTANEOUS LOW FLOW					.00	Oct 16 1930
ANNUAL RUNOFF (CFSM)	1.10		1.36		1.29	
ANNUAL RUNOFF (INCHES)	14.88		18.46		17.54	
10 PERCENT EXCEEDS	2830		3360		3200	
50 PERCENT EXCEEDS	578		765		671	
90 PERCENT EXCEEDS	141		148		130	

KENTUCKY RIVER BASIN

03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY

LOCATION.--Lat 37°33'18", long 83°35'38", Lee County, Hydrologic Unit 05100202, on left bank 100 ft downstream of bridge on State Highway 708, 150 ft upstream from Lynam Creek, 0.5 mi southwest of Tallega, 8.3 mi upstream from confluence with North Fork, and at mile 8.3.

DRAINAGE AREA.--537 mi².

PERIOD OF RECORD.--October 1930 to March 1932, October 1939 to current year.

REVISED RECORDS.--WSP 1113: 1931, 1940. WSP 1385: 1931-32, 1948, drainage area. WSP 1505: 1946(M), 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 642.13 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges Aug. 9. Records good except for period of estimated record, which is fair. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	132	418	162	485	608	376	4470	361	706	143	58
2	55	137	375	161	328	455	295	4660	372	385	148	52
3	41	152	304	177	338	434	627	4340	387	326	218	51
4	34	153	354	219	562	410	2080	4320	782	278	215	51
5	53	149	354	296	792	403	1610	4360	1660	292	151	51
6	55	141	344	519	1430	391	2060	4100	2350	259	81	50
7	55	140	339	1040	1730	293	2270	3990	1200	235	76	50
8	55	141	217	1880	1800	345	2160	4130	933	290	75	49
9	55	155	175	1220	2220	861	1780	4050	926	2630	75	48
10	56	158	200	1390	3040	969	1400	3880	2190	903	79	48
11	58	147	265	1010	3350	1560	1320	3780	3050	448	83	49
12	64	141	226	406	3300	1550	1220	3670	2160	303	77	48
13	60	137	278	482	2930	1010	1420	3100	1450	201	74	48
14	59	159	305	325	2590	661	1380	1900	2120	137	76	48
15	60	197	221	321	1080	613	1110	1290	1800	138	100	47
16	66	172	174	342	939	496	1920	782	1570	155	247	47
17	159	154	173	310	924	465	4870	555	1020	154	442	47
18	197	144	169	328	1030	478	4220	369	735	147	920	49
19	197	251	165	337	1480	694	6790	334	570	147	393	78
20	197	188	164	331	1910	2650	5180	269	528	235	234	82
21	197	224	162	420	1760	3500	4160	261	342	1010	188	83
22	197	472	163	283	979	3320	4030	236	314	879	185	116
23	197	379	162	740	402	3100	4170	991	1480	313	183	84
24	172	432	162	1010	934	2230	4180	2670	1170	268	154	78
25	134	433	176	1040	916	1810	4230	1270	772	253	92	78
26	138	423	174	739	756	1420	4130	511	498	174	85	78
27	169	413	146	646	907	927	4030	428	310	111	72	77
28	141	316	134	411	676	771	3960	876	264	107	70	76
29	135	281	171	468	---	621	4080	702	1180	104	70	77
30	135	297	175	462	---	593	4100	391	1310	115	71	79
31	134	---	171	544	---	577	---	336	---	170	69	---
TOTAL	3380	6818	7016	18019	39588	34215	85158	67021	33804	11873	5146	1877
MEAN	109	227	226	581	1414	1104	2839	2162	1127	383	166	62.6
MAX	197	472	418	1880	3350	3500	6790	4660	3050	2630	920	116
MIN	34	132	134	161	328	293	295	236	264	104	69	47
CFSM	.20	.42	.42	1.08	2.63	2.06	5.29	4.03	2.10	.71	.31	.12
IN.	.23	.47	.49	1.25	2.74	2.37	5.90	4.64	2.34	.82	.36	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

MEAN	322	600	958	1300	1467	1699	1197	966	499	219	176	174
MAX	2225	1715	2826	3320	3634	3672	3280	2762	2599	687	623	784
(WY)	1990	1978	1973	1974	1994	1994	1994	1971	1989	1992	1992	1989
MIN	47.5	148	45.5	56.8	270	241	98.7	57.9	49.1	43.6	45.0	45.9
(WY)	1989	1961	1966	1981	1968	1988	1986	1986	1988	1988	1988	1987

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1961 - 1998
ANNUAL TOTAL	269446	313915	
ANNUAL MEAN	738	860	795
HIGHEST ANNUAL MEAN			1492
LOWEST ANNUAL MEAN			267
HIGHEST DAILY MEAN	5160	Mar 3	10300
LOWEST DAILY MEAN	34	Oct 4	11
ANNUAL SEVEN-DAY MINIMUM	50	Oct 1	12
INSTANTANEOUS PEAK FLOW		7700	Apr 19
INSTANTANEOUS PEAK STAGE		23.18	Apr 19
INSTANTANEOUS LOW FLOW			43.33
ANNUAL RUNOFF (CFSM)	1.37	1.60	.10
ANNUAL RUNOFF (INCHES)	18.67	21.75	1.48
10 PERCENT EXCEEDS	2630	2660	2550
50 PERCENT EXCEEDS	207	334	305
90 PERCENT EXCEEDS	56	70	66

KENTUCKY RIVER BASIN

03281040 RED BIRD RIVER NEAR BIG CREEK, KY

LOCATION.--Lat 37°10'43", long 83°35'35" Clay County, Hydrologic Unit 05100203, on right bank adjacent to State Highway 66, 0.1 mi upstream from Fish Trap Branch, 0.6 mi downstream from Britton Branch, 1.2 mi downstream from Big Creek, 1.7 mi northwest of Big Creek, and at mile 58.9.

DRAINAGE AREA.--155 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 815.74 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 2 to Nov. 15, Jan. 24, Feb. 10, Mar.9, 20-21, Apr. 4, 5, 16-24, and May 1-5. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of 1947 and 1957 reached a stage of 29.27 ft and 27.60 ft, respectively, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	5.0	101	30	105	147	346	2700	68	94	66	3.8
2	5.4	6.2	92	31	96	139	342	1100	52	72	31	3.5
3	4.9	8.1	63	51	147	131	350	740	49	85	17	3.3
4	4.3	12	62	133	587	126	1200	850	375	73	11	3.4
5	4.0	12	65	122	506	120	840	800	482	151	7.9	3.4
6	6.4	11	65	101	416	117	561	581	335	80	5.4	3.6
7	8.3	13	51	183	410	118	401	555	193	55	4.3	3.7
8	12	22	42	423	543	153	385	504	126	103	5.2	3.8
9	15	28	44	361	814	800	381	505	503	81	8.0	8.5
10	30	23	150	197	1200	598	586	643	665	56	45	9.9
11	44	18	134	134	862	403	658	799	485	39	117	4.8
12	9.5	15	83	107	711	293	549	624	361	28	47	3.5
13	3.6	18	55	90	502	241	415	423	731	34	23	3.6
14	4.2	95	41	71	363	211	360	292	625	33	222	4.1
15	5.1	97	29	87	275	173	285	212	819	26	280	4.7
16	6.5	56	23	108	243	170	2400	163	569	26	106	5.5
17	5.2	34	18	110	275	162	9850	133	298	31	450	6.9
18	4.1	22	15	110	601	445	1860	107	177	24	195	8.6
19	3.7	16	13	121	544	744	7000	92	162	20	102	9.9
20	3.4	15	11	123	447	2000	1720	93	114	76	58	9.9
21	3.0	72	9.6	118	346	1400	740	96	144	65	37	11
22	2.6	196	17	137	281	850	1370	85	281	30	26	14
23	2.5	98	26	393	261	642	1240	230	399	24	19	11
24	3.0	57	22	410	222	507	750	167	198	34	15	11
25	3.5	37	33	275	182	400	544	139	125	24	12	11
26	7.8	30	35	204	169	314	401	238	93	14	8.7	10
27	7.0	25	41	169	166	269	366	161	72	11	7.7	9.8
28	6.4	18	43	163	153	239	345	125	56	9.3	5.7	10
29	8.1	16	38	143	---	207	301	98	232	7.0	4.7	16
30	6.6	21	41	131	---	181	441	80	155	21	4.4	17
31	5.6	---	40	116	---	175	---	68	---	103	4.2	---
TOTAL	243.0	1096.3	1502.6	4952	11427	12475	36987	13403	8944	1529.3	1945.2	229.2
MEAN	7.84	36.5	48.5	160	408	402	1233	432	298	49.3	62.7	7.64
MAX	44	196	150	423	1200	2000	9850	2700	819	151	450	17
MIN	2.5	5.0	9.6	30	96	117	285	68	49	7.0	4.2	3.3
CFSM	.05	.24	.31	1.03	2.63	2.60	7.95	2.79	1.92	.32	.40	.05
IN.	.06	.26	.36	1.19	2.74	2.99	8.88	3.22	2.15	.37	.47	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1998, BY WATER YEAR (WY)

	MEAN	86.2	234	377	456	509	607	452	347	176	80.3	50.8	38.1
MAX	758	796	1180	1150	1244	1678	1233	1176	998	351	192	138	
(WY)	1990	1978	1991	1974	1994	1975	1998	1984	1989	1992	1990	1979	
MIN	3.93	7.84	37.5	19.0	164	99.6	60.9	41.2	10.3	5.28	2.51	1.81	
(WY)	1979	1988	1981	1981	1988	1988	1986	1988	1988	1988	1988	1983	

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1973 - 1998

ANNUAL TOTAL		82872.5		94733.6									
ANNUAL MEAN		227		260						283			
HIGHEST ANNUAL MEAN										513			1994
LOWEST ANNUAL MEAN										92.2			1988
HIGHEST DAILY MEAN		6620		Mar 3		9850		Apr 17		16200			May 7 1984
LOWEST DAILY MEAN		2.5		Oct 23		2.5		Oct 23		.20			Oct 4 1983
ANNUAL SEVEN-DAY MINIMUM		3.1		Oct 19		3.1		Oct 19		.52			Sep 5 1995
INSTANTANEOUS PEAK FLOW						20400		Apr 17		28500			Oct 17 1989
INSTANTANEOUS PEAK STAGE						18.38		Apr 17		21.14			Oct 17 1989
INSTANTANEOUS LOW FLOW										.20			Oct 4 1983
ANNUAL RUNOFF (CFSM)		1.46				1.67				1.83			
ANNUAL RUNOFF (INCHES)		19.89				22.74				24.84			
10 PERCENT EXCEEDS		542				591				612			
50 PERCENT EXCEEDS		95				93				98			
90 PERCENT EXCEEDS		6.4				5.5				7.3			

KENTUCKY RIVER BASIN

03281100 GOOSE CREEK AT MANCHESTER, KY

LOCATION.--Lat 37°09'07", long 83°45'37", Clay County, Hydrologic Unit 05100203, on left bank on downstream side of Second Street bridge at Manchester, 0.9 mi upstream from Little Goose Creek, and at mile 21.7.

DRAINAGE AREA.--163 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 819.37 ft above sea level. Prior to September 15, 1975, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 26 to Jan. 4. Records good except for period of estimated record, which is poor.

EXTREMES OUTSIDE PERIOD OF RECORD.---Flood of June 28, 1947, Jan. 29, 1957, and Mar. 12, 1963, reached a stage of 40.6 ft, discharge, 38,000 ft³/s, 37.3 ft, discharge, 29,800 ft³/s, and 33.5 ft, discharge, 21,500 ft³/s, respectively, present site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.1	110	40	84	140	287	2810	44	62	54	6.2
2	4.2	6.3	100	44	77	129	288	1150	38	51	29	5.7
3	3.9	8.5	70	65	123	118	328	706	39	63	20	5.2
4	3.7	12	68	170	516	110	1280	872	264	64	15	4.7
5	3.5	12	70	146	521	100	867	855	429	116	12	4.3
6	4.2	12	70	162	445	93	502	567	285	66	10	5.1
7	7.3	13	56	453	437	90	361	542	166	47	8.8	5.0
8	9.9	22	53	743	569	131	309	478	109	124	32	4.2
9	13	27	58	574	1060	1000	278	446	427	96	31	4.1
10	30	25	170	346	1360	648	336	509	577	62	47	4.2
11	52	20	150	240	1120	415	365	676	357	46	53	5.2
12	7.0	15	90	185	666	318	319	531	262	36	35	5.2
13	3.2	18	60	152	446	264	274	373	636	32	22	5.5
14	3.9	96	45	116	345	231	258	273	522	56	58	4.7
15	4.7	106	34	124	277	192	217	199	967	43	208	7.2
16	6.3	59	26	140	245	187	2960	151	558	34	75	7.9
17	4.7	39	20	145	272	179	12100	119	291	35	318	7.6
18	3.8	30	17	146	476	437	1870	94	178	31	161	6.8
19	3.4	25	15	161	465	835	7520	76	144	25	78	8.0
20	3.2	21	13	164	397	2190	1760	68	109	30	49	7.1
21	2.8	96	11	159	326	1370	798	63	123	27	35	8.0
22	2.3	227	19	176	272	845	1440	62	270	23	26	7.8
23	2.3	117	29	557	259	604	1260	104	482	22	21	6.1
24	2.8	67	25	577	218	438	691	102	243	33	17	5.2
25	3.2	42	35	358	184	354	465	110	148	25	14	5.4
26	8.4	34	40	260	167	290	356	168	102	18	12	5.3
27	7.5	29	46	205	162	246	388	115	77	15	10	4.9
28	6.8	23	50	174	150	218	470	90	60	13	9.0	4.9
29	8.7	20	48	142	---	190	404	68	53	11	8.3	5.4
30	6.6	24	51	118	---	167	486	55	74	31	7.6	4.1
31	5.4	---	49	97	---	153	---	47	---	60	7.0	---
TOTAL	233.6	1250.9	1698	7139	11639	12682	39237	12479	8034	1397	1482.7	171.0
MEAN	7.54	41.7	54.8	230	416	409	1308	403	268	45.1	47.8	5.70
MAX	52	227	170	743	1360	2190	12100	2810	967	124	318	8.0
MIN	2.3	5.1	11	40	77	90	217	47	38	11	7.0	4.1
CFSM	.05	.26	.34	1.41	2.55	2.51	8.02	2.47	1.64	.28	.29	.03
IN.	.05	.29	.39	1.63	2.66	2.89	8.95	2.85	1.83	.32	.34	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1998, BY WATER YEAR (WY)

MEAN	86.6	204	373	443	488	541	441	311	157	93.9	51.0	43.7
MAX	600	646	1229	1205	1196	1665	1308	1158	975	381	178	185
(WY)	1990	1978	1991	1974	1972	1975	1998	1984	1989	1965	1977	1979
MIN	2.13	11.4	28.3	22.9	70.5	111	50.8	29.3	6.48	2.03	3.72	2.11
(WY)	1970	1988	1966	1981	1968	1969	1986	1965	1988	1966	1988	1965

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1965 - 1998	
ANNUAL TOTAL	76659.5		97443.2			
ANNUAL MEAN	210		267		268	
HIGHEST ANNUAL MEAN					456	
LOWEST ANNUAL MEAN					107	
HIGHEST DAILY MEAN	5430		Mar 3		13700	
LOWEST DAILY MEAN	2.3		Oct 22		.00	
ANNUAL SEVEN-DAY MINIMUM	2.9		Oct 19		.16	
INSTANTANEOUS PEAK FLOW			17300		Apr 17	
INSTANTANEOUS PEAK STAGE			30.89		Apr 17	
INSTANTANEOUS LOW FLOW					32.85	
ANNUAL RUNOFF (CFSM)	1.29		1.64		.00	
ANNUAL RUNOFF (INCHES)	17.50		22.24		1.65	
10 PERCENT EXCEEDS	486		562		22.37	
50 PERCENT EXCEEDS	84		76		578	
90 PERCENT EXCEEDS	5.5		5.4		92	
					6.3	

KENTUCKY RIVER BASIN

03282000 KENTUCKY RIVER AT LOCK 14, AT HEIDELBERG, KY

LOCATION.--Lat 37°33'19", long 83°46'06", Lee County, Hydrologic Unit 05100204, on right bank 200 ft upstream from lock 14 at Heidelberg, 0.3 mi upstream from Sturgeon Creek, and at mile 249.2.

DRAINAGE AREA.--2,657 mi².

PERIOD OF RECORD.--October 1925 to September 1931, December 1936 to February 1937, July 1938 to current year. Gage-height records collected in this vicinity since 1902 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1937, 1939(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 626.66 ft above sea level, Ohio River datum. Prior to September 2, 1939, nonrecording gage at lock 14 at same datum.

REMARKS.--Estimated daily discharges: Oct. 7-14, May 21, 25, 28-31, and Aug. 9. Records good above 1,000 ft³/s, fair between 1,000 ft³/s and 150 ft³/s, and poor below 150 ft³/s and for periods of estimated record. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	340	735	818	2510	3310	2730	13500	1860	5270	963	314
2	184	330	824	788	2070	2960	3080	22600	1800	3060	1180	286
3	178	335	949	820	1770	2710	3870	16500	1600	2490	1160	267
4	168	412	1090	1010	2280	2550	8570	14700	2610	1840	842	249
5	150	467	1150	1350	5090	2470	14700	17100	6060	1620	670	236
6	150	470	1080	2040	7410	2370	11900	14200	8040	1740	511	232
7	145	475	1040	3960	7390	2230	8820	11600	5750	1530	435	222
8	140	480	899	12000	7310	2300	7160	13700	4230	1640	395	209
9	130	493	736	8590	9720	4700	7100	13600	3740	5670	380	193
10	130	527	698	6920	15900	8410	7360	12300	7620	5240	374	179
11	140	535	706	4840	19800	7070	7770	11700	13200	2730	1090	166
12	160	546	710	3150	19400	5720	7640	12500	11200	1830	1090	154
13	170	533	720	2430	13100	4490	6840	10000	9820	1350	940	150
14	175	552	1270	2010	9200	3600	5840	6930	10100	1040	733	151
15	160	787	1060	1800	6060	3140	4970	4940	9000	1220	663	145
16	159	990	818	2040	4670	2720	8380	3640	8720	1210	1200	145
17	179	889	712	2160	4210	2460	32200	2800	6030	1040	1910	150
18	303	699	651	2150	4850	2410	42600	2310	4070	949	3100	149
19	330	617	597	2110	6760	3860	47000	1940	2990	974	3000	166
20	330	609	557	2050	7380	11600	53100	1710	2460	1370	2030	191
21	330	496	525	2040	6660	19400	39600	1700	2090	3160	1440	258
22	330	490	511	1960	5260	16000	28100	1850	1720	3310	1040	359
23	330	507	517	2860	4300	11900	21300	3200	4980	2210	804	475
24	330	536	531	5810	4390	8700	16900	10200	6150	1560	682	395
25	285	1120	616	5480	4530	6580	13500	7500	4140	1200	559	303
26	266	1090	703	4160	4010	5430	11100	5410	2830	981	485	267
27	379	934	772	3280	3860	4350	9700	3950	2220	766	428	253
28	465	799	762	2710	3530	3670	8870	3600	1660	665	382	234
29	453	668	822	2550	---	3200	8630	3000	2740	593	358	218
30	395	670	867	2730	---	2900	8560	2400	7000	561	339	234
31	362	---	857	2820	---	2660	---	1900	---	714	331	---
TOTAL	7590	18396	24485	99436	193420	165870	457890	252980	156430	59533	29514	6950
MEAN	245	613	790	3208	6908	5351	15260	8161	5214	1920	952	232
MAX	465	1120	1270	12000	19800	19400	53100	22600	13200	5670	3100	475
MIN	130	330	511	788	1770	2230	2730	1700	1600	561	331	145
CFSM	.09	.23	.30	1.21	2.60	2.01	5.74	3.07	1.96	.72	.36	.09
IN.	.11	.26	.34	1.39	2.71	2.32	6.41	3.54	2.19	.83	.41	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1998, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		
MEAN	1424	2855	5007	5882	7358	7833	6224	5124	2783	1147	968	761												
MAX	10380	7006	14850	14010	16710	18260	15260	16010	10380	3320	3006	3680												
(WY)	1990	1978	1991	1994	1994	1994	1998	1984	1989	1992	1977	1989												
MIN	242	431	582	362	2345	1791	855	910	247	206	154	170												
(WY)	1989	1988	1981	1981	1988	1988	1986	1986	1988	1988	1988	1984												

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1977 - 1998	
ANNUAL TOTAL	1286752		1472494			
ANNUAL MEAN	3525		4034		3930	
HIGHEST ANNUAL MEAN					6973	
LOWEST ANNUAL MEAN					1461	
HIGHEST DAILY MEAN	48500	Mar 4	53100	Apr 20	85900	May 8 1984
LOWEST DAILY MEAN	130	Oct 9	130	Oct 9	45	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	141	Oct 5	141	Oct 5	53	Jul 4 1988
INSTANTANEOUS PEAK FLOW			53900	Apr 20	120000	Feb 4 1939
INSTANTANEOUS PEAK STAGE			22.42	Apr 20	35.60	Feb 4 1939
INSTANTANEOUS LOW FLOW					4.0	Oct 20 1930
ANNUAL RUNOFF (CFSM)	1.33		1.52		1.48	
ANNUAL RUNOFF (INCHES)	18.02		20.62		20.10	
10 PERCENT EXCEEDS	9060		10100		9900	
50 PERCENT EXCEEDS	1240		1830		1700	
90 PERCENT EXCEEDS	230		244		292	

KENTUCKY RIVER BASIN

03282040 STURGEON CREEK AT CRESSMONT, KY

LOCATION.--Lat 37°30'02", long 83°48'37", Lee County, Hydrologic Unit 05100204, on right bank 30 ft downstream of bridge on State Highway 597, 0.2 mi southeast of Cressmont, 0.2 mi upstream from Elkhorn Branch, and 0.5 mi downstream from Granny Dismal Creek.

DRAINAGE AREA.-- 77.3 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 704.53 ft above sea level.

REMARKS.--Estimated daily discharges: Feb. 11, 12 and Apr. 16-19. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	5.4	147	35	50	102	174	883	41	39	11	2.4
2	1.9	11	88	36	45	98	140	421	26	22	8.5	2.1
3	2.4	16	66	51	50	89	157	278	62	18	6.5	1.8
4	2.9	26	59	67	115	86	637	617	296	16	5.6	1.6
5	3.0	21	50	70	116	81	323	526	376	17	4.5	1.8
6	3.2	18	42	297	126	74	219	289	233	15	4.0	2.0
7	3.1	20	37	1180	147	71	161	308	134	12	3.7	1.6
8	2.9	32	33	832	210	113	152	301	90	200	3.8	1.2
9	3.5	39	39	324	447	625	261	243	435	108	5.6	1.0
10	13	31	132	194	622	312	274	207	541	53	6.5	.95
11	12	23	113	140	1050	215	229	202	416	32	6.6	.88
12	5.5	18	81	116	940	161	181	144	356	20	5.0	.85
13	5.1	16	62	98	459	133	146	111	380	30	4.1	.77
14	5.5	91	49	79	290	116	134	85	254	46	5.0	.75
15	13	85	40	120	209	95	116	64	476	25	7.3	.67
16	11	51	35	127	182	86	1100	51	220	19	5.4	.61
17	10	35	32	122	218	78	3500	42	128	19	71	.59
18	8.6	27	26	109	342	92	660	32	86	15	17	.55
19	11	22	23	107	333	101	1800	25	83	36	20	1.1
20	10	19	20	93	271	807	591	25	57	129	8.9	1.0
21	8.3	57	19	83	205	490	339	28	57	57	6.0	4.7
22	6.1	117	23	103	164	319	551	27	63	145	4.8	5.7
23	6.8	73	23	344	179	230	366	206	105	100	4.1	2.5
24	7.1	49	26	280	146	172	255	111	66	48	3.7	1.5
25	7.9	37	42	189	129	147	183	72	43	28	3.6	1.1
26	43	32	41	142	119	122	142	63	32	18	3.4	.93
27	44	26	46	116	113	106	118	60	23	14	2.9	.82
28	15	21	46	97	110	94	96	48	17	12	2.7	.89
29	9.1	19	46	81	---	82	82	37	15	9.7	2.8	.99
30	6.4	40	47	69	---	73	137	29	55	8.7	2.9	1.4
31	5.0	---	41	58	---	70	---	23	---	13	2.8	---
TOTAL	288.3	1077.4	1574	5759	7387	5440	13224	5558	5166	1324.4	249.7	44.75
MEAN	9.30	35.9	50.8	186	264	175	441	179	172	42.7	8.05	1.49
MAX	44	117	147	1180	1050	807	3500	883	541	200	71	5.7
MIN	1.9	5.4	19	35	45	70	82	23	15	8.7	2.7	.55
CFSM	.12	.46	.66	2.40	3.41	2.27	5.70	2.32	2.23	.55	.10	.02
IN.	.14	.52	.76	2.77	3.55	2.62	6.36	2.67	2.49	.64	.12	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	39.4	99.0	124	246	215	315	215	168	127	20.1	16.6	18.2
MAX	108	246	193	403	484	540	441	345	304	42.7	29.3	59.5
(WY)	1997	1997	1994	1994	1994	1994	1998	1995	1997	1998	1994	1996
MIN	6.54	21.2	50.8	139	92.0	122	49.6	26.1	19.1	4.06	4.05	1.49
(WY)	1995	1995	1998	1993	1997	1995	1997	1993	1994	1995	1997	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1993 - 1998
ANNUAL TOTAL	39451.74	47092.55	
ANNUAL MEAN	108	129	133
HIGHEST ANNUAL MEAN			195
LOWEST ANNUAL MEAN			96.9
HIGHEST DAILY MEAN	4230	3500	4230
LOWEST DAILY MEAN	.61	.55	.35
ANNUAL SEVEN-DAY MINIMUM	.83	.68	.48
INSTANTANEOUS PEAK FLOW			8200
INSTANTANEOUS PEAK STAGE			14.75
ANNUAL RUNOFF (CFSM)	1.40	1.67	1.72
ANNUAL RUNOFF (INCHES)	18.99	22.66	23.41
10 PERCENT EXCEEDS	200	315	309
50 PERCENT EXCEEDS	42	50	56
90 PERCENT EXCEEDS	3.1	2.9	3.7

KENTUCKY RIVER BASIN

03282500 RED RIVER NEAR HAZEL GREEN, KY

LOCATION.--Lat 37°48'44", long 83°27'50", Wolfe County, Hydrologic Unit 05100204, on right bank 600 ft upstream from Buck Creek, 0.3 mi downstream from Chapel Branch, 2.7 mi northwest of Hazel Green, and at mile 72.7.

DRAINAGE AREA.--65.8 mi².

PERIOD OF RECORD.--April 1954 to current year.

REVISED RECORDS.--WRD KY 72-1: 1971.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 870.11 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1-7 and Oct. 25 to Nov. 17. Records fair except for daily discharges below 2.0 ft³/s and periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	1.8	114	20	49	127	70	393	37	379	13	2.5
2	2.1	1.9	65	23	47	124	70	411	30	144	9.0	2.0
3	1.9	2.1	40	33	44	113	63	264	22	81	7.2	1.7
4	1.7	2.5	36	49	53	99	116	210	25	60	6.0	1.4
5	1.5	2.8	29	47	65	106	173	177	39	55	5.6	1.3
6	1.4	2.9	25	137	74	99	135	129	35	40	5.1	.98
7	1.2	3.1	20	489	79	96	116	167	25	33	4.7	1.1
8	1.1	3.4	18	759	102	106	113	252	21	35	4.4	.97
9	1.5	3.5	17	422	210	276	220	184	41	34	4.0	.52
10	1.5	3.7	26	234	407	250	414	151	91	24	4.7	.35
11	1.2	3.9	38	144	658	160	343	137	63	20	7.8	.31
12	1.1	4.1	34	115	970	130	214	106	287	16	7.8	.34
13	1.2	3.9	28	95	391	112	149	81	565	13	8.4	.35
14	1.2	3.8	23	75	205	98	124	65	334	12	7.1	.39
15	1.3	6.0	19	81	134	82	104	51	171	12	8.3	.33
16	1.6	10	17	96	127	71	240	41	100	13	11	.29
17	1.7	13	16	92	124	64	1010	37	64	13	34	.26
18	1.5	9.1	15	89	249	64	508	30	46	12	26	.26
19	1.4	7.6	13	82	246	77	1070	25	45	27	11	.20
20	1.6	6.8	12	76	196	91	795	28	46	67	7.5	.22
21	1.9	14	11	67	153	170	397	82	32	46	5.2	.60
22	1.8	57	13	62	130	164	304	55	89	27	3.8	5.0
23	1.7	35	14	129	141	138	250	215	373	44	3.2	5.3
24	1.9	23	15	183	143	122	186	272	123	26	2.9	3.1
25	2.0	17	30	144	131	102	145	136	65	17	2.3	2.6
26	2.3	15	31	114	124	91	117	94	44	13	2.0	2.5
27	3.0	13	30	94	113	79	98	73	34	11	1.8	2.0
28	3.9	11	31	80	111	73	77	59	26	9.7	1.5	1.6
29	3.1	10	28	69	---	67	69	46	177	8.4	1.7	1.1
30	2.4	14	27	60	---	61	102	38	510	8.3	2.3	1.0
31	2.0	---	25	53	---	56	---	32	---	14	2.5	---
TOTAL	56.2	304.9	860	4213	5476	3468	7792	4041	3560	1314.4	221.8	40.57
MEAN	1.81	10.2	27.7	136	196	112	260	130	119	42.4	7.15	1.35
MAX	3.9	57	114	759	970	276	1070	411	565	379	34	5.3
MIN	1.1	1.8	11	20	44	56	63	25	21	8.3	1.5	.20
CFSM	.03	.15	.42	2.07	2.97	1.70	3.95	1.98	1.80	.64	.11	.02
IN.	.03	.17	.49	2.38	3.10	1.96	4.41	2.28	2.01	.74	.13	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1998, BY WATER YEAR (WY)

	1990	1986	1979	1974	1989	1955	1972	1983	1997	1981	1974	1974
MEAN	16.9	51.9	115	132	179	196	157	100	47.3	30.3	24.6	14.3
MAX	138	227	555	357	555	523	472	318	351	157	141	180
(WY)	1990	1986	1979	1974	1989	1955	1972	1983	1997	1981	1974	1974
MIN	.22	.54	2.76	17.5	27.6	49.1	16.6	13.9	1.19	1.52	.27	.17
(WY)	1964	1956	1964	1981	1968	1969	1986	1986	1988	1970	1957	1955

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1954 - 1998	
ANNUAL TOTAL	35502.6		31347.87			
ANNUAL MEAN	97.3		85.9		88.7	
HIGHEST ANNUAL MEAN					153	
LOWEST ANNUAL MEAN					39.6	
HIGHEST DAILY MEAN	1710		1070		6170	
LOWEST DAILY MEAN	1.1		.20		.00	
ANNUAL SEVEN-DAY MINIMUM	1.3		.28		.00	
INSTANTANEOUS PEAK FLOW			1380		9080	
INSTANTANEOUS PEAK STAGE			6.27		22.12	
INSTANTANEOUS LOW FLOW					.53	
ANNUAL RUNOFF (CFSM)	1.48		1.31		1.35	
ANNUAL RUNOFF (INCHES)	20.07		17.72		18.31	
10 PERCENT EXCEEDS	214		212		202	
50 PERCENT EXCEEDS	36		35		30	
90 PERCENT EXCEEDS	2.8		1.6		1.5	

KENTUCKY RIVER BASIN

03283500 RED RIVER AT CLAY CITY, KY

LOCATION.--Lat 37°51'53", long 83°56'01", Powell County, Hydrologic Unit 05100204, on right bank 25 ft upstream from bridge on State Highway 15, 0.1 mi downstream from Skinner Branch, 0.4 mi upstream from Brush Creek, 0.5 mi west of Clay City, and at mile 21.6.

DRAINAGE AREA.--362 mi².

PERIOD OF RECORD.--October 1930 to March 1932, April 1938 to current year. Monthly discharge only for October 1930, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-32. WSP 1385: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 600.47 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Aug. 14, 1939, nonrecording gages, Aug. 14, 1939, to Aug. 13, 1975, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Apr. 1-23 and June 23-28. Records good except for periods of estimated record, which are poor. Flow diversions by Clay City Water Plant, which can be significant during low-flow periods.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	292	132	223	527	443	2150	270	5310	110	25
2	20	29	312	129	203	520	417	2710	220	2120	93	24
3	19	31	249	141	189	473	398	1520	166	894	77	23
4	19	39	179	197	250	427	510	1440	162	602	65	22
5	18	41	154	254	406	497	800	1680	246	503	58	22
6	17	42	136	306	421	495	600	1140	263	396	52	21
7	17	46	115	2510	443	445	520	1140	208	296	48	21
8	16	50	100	5700	569	472	500	2220	164	328	45	20
9	16	51	91	5120	874	1870	900	1700	289	363	43	19
10	15	51	161	1400	1560	1810	1500	1150	663	260	47	17
11	17	52	222	837	2990	1070	1300	1010	830	198	61	16
12	16	59	210	615	4510	786	900	782	1020	159	58	16
13	16	50	171	537	4560	624	700	590	2610	133	50	17
14	19	48	141	430	1900	531	600	465	2250	119	47	16
15	19	58	120	405	1180	457	500	369	1150	111	44	16
16	20	75	103	526	942	380	900	297	808	119	45	16
17	24	87	90	495	974	340	4100	254	510	155	45	16
18	23	67	81	471	1530	382	2100	218	351	124	92	27
19	21	54	76	425	1600	600	4500	186	307	233	106	19
20	19	47	71	382	1190	1060	3700	172	312	1220	77	17
21	18	45	67	333	972	1340	2500	224	254	1120	54	16
22	17	71	72	303	798	1180	2000	306	210	524	45	16
23	17	161	81	611	748	927	1500	513	2000	399	39	31
24	17	152	122	940	827	735	1170	1340	1050	326	36	35
25	18	107	240	758	731	595	905	928	600	226	33	28
26	26	83	231	566	626	511	718	565	400	166	31	23
27	53	69	206	451	554	439	601	436	300	135	29	21
28	69	61	193	381	508	385	489	336	240	117	27	18
29	52	56	174	329	---	346	410	277	738	103	27	16
30	38	143	164	286	---	308	808	228	4340	94	26	17
31	31	---	156	252	---	282	---	203	---	102	26	---
TOTAL	729	1952	4780	26222	32278	20814	36989	26549	22931	16955	1636	611
MEAN	23.5	65.1	154	846	1153	671	1233	856	764	547	52.8	20.4
MAX	69	161	312	5700	4560	1870	4500	2710	4340	5310	110	35
MIN	15	27	67	129	189	282	398	172	162	94	26	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1998, BY WATER YEAR (WY)

	87.7	276	614	787	1014	1089	834	545	308	266	179	107
MEAN	87.7	276	614	787	1014	1089	834	545	308	266	179	107
MAX	928	1220	3036	2634	3564	3048	2406	1943	2246	1845	1179	1185
(WY)	1990	1987	1979	1950	1989	1955	1972	1995	1997	1938	1938	1974
MIN	4.41	9.75	19.7	43.2	127	258	110	54.6	23.9	5.01	18.2	6.15
(WY)	1964	1954	1954	1931	1954	1969	1986	1941	1988	1944	1957	1984

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1931 - 1998	
ANNUAL TOTAL	244131		192446			
ANNUAL MEAN	669		527		502	
HIGHEST ANNUAL MEAN					884	
LOWEST ANNUAL MEAN					158	
HIGHEST DAILY MEAN	12900		Mar 2		26100	
LOWEST DAILY MEAN	15		Oct 10		1.2	
ANNUAL SEVEN-DAY MINIMUM	16		Oct 7		2.0	
INSTANTANEOUS PEAK FLOW			7230		28800	
INSTANTANEOUS PEAK STAGE			16.30		26.75	
INSTANTANEOUS LOW FLOW					1.2	
10 PERCENT EXCEEDS	1420		1320		1200	
50 PERCENT EXCEEDS	238		231		185	
90 PERCENT EXCEEDS	30		20		22	

KENTUCKY RIVER BASIN

03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY

LOCATION.--Lat 37°53'41", long 84°15'44", Madison County, Hydrologic Unit 05100205, on left bank at lock 10, 0.9 mi downstream from Otter Creek, 8.0 mi southwest of Winchester, and at mile 176.4.

DRAINAGE AREA.--3,955 mi².

PERIOD OF RECORD.--October 1907 to current year.

REVISED RECORDS.--WSP 1275: 1908-52. 1955: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 557.37 ft above sea level (Ohio River datum). Feb. 2, 1940 to Aug. 10, 1943, water-stage recorder 1.1 mi upstream at different datum. Aug. 11, 1943 to June 12, 1978, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Mar. 30 and Aug. 9. Records fair. Flow regulated since January 1976 by Carr Fork Lake (station 03277446), since December 1960 by Buckhorn Lake (station 03280800).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	375	1520	1320	3290	4710	4290	17900	3070	13200	998	362
2	285	367	1850	1230	2930	4450	4810	23700	2690	9640	1100	350
3	259	368	2220	1200	2520	4050	4800	22400	2380	4950	1300	332
4	226	410	2120	1320	2590	3730	6630	17600	2640	3610	1240	308
5	215	495	1830	1640	3890	3650	13900	19400	5500	2990	992	282
6	203	582	1600	2430	6800	3620	14400	18000	8540	2500	809	256
7	196	600	1450	11700	8150	3420	11500	16100	8140	2700	651	246
8	196	628	1340	28800	8470	3410	9360	18300	5750	3140	556	244
9	205	649	1200	21000	9900	8610	9640	17600	5620	3690	505	240
10	184	665	1370	13300	15500	12200	11800	15300	8940	6270	505	229
11	196	681	1800	8180	24100	11000	12100	14300	15700	4570	617	208
12	190	680	2160	5750	30300	8730	10700	13800	16000	2890	1030	177
13	162	679	2210	4480	24800	7050	9330	12500	17700	2100	1150	160
14	140	681	1960	3690	17100	5700	8000	11400	15700	2330	1040	164
15	163	767	1690	3180	11300	4820	6890	7230	14000	1870	898	175
16	179	997	1400	3340	7970	4200	10400	5400	11700	2150	820	171
17	180	1150	1130	3510	6950	3700	25700	4180	9260	2260	1350	160
18	203	1050	989	3500	8220	3600	36900	3360	6330	1640	2170	158
19	258	882	896	3360	9800	4530	48100	2790	5190	1810	3240	164
20	295	800	825	3210	10200	11300	51800	2480	4290	9090	2760	160
21	303	779	772	3010	9570	20000	52900	2430	3820	6170	2000	179
22	308	859	796	2900	8160	20400	50700	2440	4430	5800	1440	236
23	299	1520	831	3930	6760	16000	35100	8720	11400	5980	1040	321
24	319	1990	950	6730	6090	12400	21500	15400	9520	3390	847	421
25	321	1840	1720	7880	6130	9440	16600	15100	6960	2330	728	428
26	313	1550	1630	6540	5730	7650	13700	10400	4760	1750	617	359
27	344	1280	1490	5120	5240	6390	11700	6560	3440	1410	532	292
28	442	1110	1460	4250	4970	5300	10400	5230	2680	1140	460	270
29	510	971	1390	3580	---	4640	9590	4660	3130	965	404	259
30	477	1280	1410	3360	---	4110	12200	3860	12000	872	374	266
31	410	---	1400	3410	---	3700	---	3080	---	1020	363	---
TOTAL	8282	26685	45409	176850	267430	226510	545440	341620	231280	114227	32536	7577
MEAN	267	890	1465	5705	9551	7307	18180	11020	7709	3685	1050	253
MAX	510	1990	2220	28800	30300	20400	52900	23700	17700	13200	3240	428
MIN	140	367	772	1200	2520	3410	4290	2430	2380	872	363	158

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

MEAN	1573	3470	7145	8785	10190	12340	9558	6823	3585	1743	1499	1192
MAX	12850	10270	23400	25490	25060	27650	26100	19600	15220	4640	4916	6676
(WY)	1990	1987	1979	1974	1989	1975	1972	1984	1997	1992	1992	1974
MIN	177	372	416	446	2011	3125	1177	1031	265	292	258	175
(WY)	1970	1964	1966	1981	1968	1988	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1961 - 1998	
ANNUAL TOTAL	2169435		2023846			
ANNUAL MEAN	5944		5545		5637	
HIGHEST ANNUAL MEAN					9815	
LOWEST ANNUAL MEAN					2228	
HIGHEST DAILY MEAN	63500		52900		99100	
LOWEST DAILY MEAN	140		140		116	
ANNUAL SEVEN-DAY MINIMUM	173		165		122	
INSTANTANEOUS PEAK FLOW			53300		101000	
INSTANTANEOUS PEAK STAGE			23.00		40.15	
10 PERCENT EXCEEDS	15100		14300		14300	
50 PERCENT EXCEEDS	2060		2760		2440	
90 PERCENT EXCEEDS	300		268		344	

KENTUCKY RIVER BASIN

03284520 EAST HICKMAN CREEK AT ANDOVER VILLAGE NEAR CADENTOWN, KY

LOCATION.--Lat 37°59'50", long 82°24'40", Fayette County, Hydrologic Unit 05100205, on right wingwall, downstream side of culvert in Andover Village, 1.3 mi southwest of Cadentown, 1.6 mi west of intersection of Todds Road and Walnut Hill-Chilesbug Road, and at mile 12.4.

DRAINAGE AREA.--1.58 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 980 ft above sea level from topographic map.

REMARKS.--Estimated daily discharges: Jan. 7, Feb. 5-10, May 23-26, and June 23. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.44	5.8	.65	1.3	1.1	2.7	13	2.9	10	.27	.06
2	.06	.77	1.7	.64	1.3	1.1	1.1	6.3	1.3	5.1	.18	.05
3	.06	.28	1.1	.69	1.3	1.0	.88	4.2	.89	4.2	.12	.05
4	.05	.26	1.1	.67	2.2	1.3	1.1	2.8	1.7	3.5	.08	.05
5	.05	.44	.78	4.4	2.0	1.4	.81	2.0	1.9	2.7	.07	.04
6	.05	.94	.57	24	2.0	1.0	.71	1.6	1.1	2.1	.07	.04
7	.06	.76	.45	50	2.3	.90	.65	19	.73	3.0	.07	.03
8	.06	1.1	.39	19	2.5	4.0	4.6	11	.64	2.3	.07	.03
9	.06	.52	.41	10	3.2	15	4.4	6.0	6.0	1.5	.09	.03
10	.08	.28	7.0	6.1	4.4	5.4	4.8	3.7	13	1.2	.12	.02
11	.09	.21	2.2	3.7	24	3.2	2.5	2.4	6.6	1.1	.11	.01
12	.10	.16	1.3	6.5	25	2.4	1.8	1.7	12	1.0	.11	.01
13	.13	.29	.92	5.0	13	2.0	1.4	1.4	15	1.3	.11	.02
14	.43	2.2	.68	3.7	8.1	1.7	1.9	1.4	6.9	4.2	.14	.02
15	.14	.57	.58	3.3	5.4	1.4	1.4	1.0	8.4	1.9	.13	.01
16	.10	.33	.50	2.7	4.6	1.2	30	.83	3.5	6.6	.14	.02
17	.09	.26	.45	2.5	5.3	1.2	11	.67	2.3	2.6	.12	.01
18	.09	.23	.39	2.1	7.6	1.3	6.6	.57	1.8	1.8	.11	.02
19	.08	.22	.34	1.9	5.0	1.1	13	.50	3.5	1.6	.08	.01
20	.06	.22	.31	1.6	3.8	12	6.1	2.1	1.4	59	.08	.00
21	.06	2.0	.37	1.5	2.9	7.1	3.9	1.3	10	14	.09	1.4
22	.05	2.2	2.7	2.5	2.4	4.7	8.1	1.5	4.1	6.0	.07	.09
23	.05	.52	.78	5.6	2.1	3.1	5.2	10	9.5	3.2	.07	.06
24	.72	.30	4.6	4.1	1.8	2.2	3.3	7.0	4.8	2.0	.06	.06
25	.57	.22	4.0	2.9	1.5	2.2	2.4	4.0	2.6	2.0	.08	.06
26	1.5	.21	2.1	2.3	1.3	2.0	1.9	2.4	1.8	1.1	.09	.05
27	.97	.32	1.5	2.0	1.4	1.4	2.9	1.9	1.4	.76	.06	.05
28	.30	.27	1.2	1.7	1.3	1.4	1.5	1.4	1.1	.65	.06	.05
29	.18	.28	1.1	1.5	---	1.3	4.5	1.2	36	.52	.06	.03
30	.13	11	1.0	1.5	---	.91	29	.98	39	.78	.07	.04
31	.11	---	.79	1.5	---	1.3	---	6.0	---	.42	.06	---
TOTAL	6.54	27.80	47.11	176.25	139.0	87.31	160.15	119.85	201.86	148.13	3.04	2.42
MEAN	.21	.93	1.52	5.69	4.96	2.82	5.34	3.87	6.73	4.78	.098	.081
MAX	1.5	11	7.0	50	25	15	30	19	39	59	.27	1.4
MIN	.05	.16	.31	.64	1.3	.90	.65	.50	.64	.42	.06	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

MEAN	.21	.93	1.52	5.69	4.96	2.82	5.34	3.87	6.73	4.78	.098	.081
MAX	.21	.93	1.52	5.69	4.96	2.82	5.34	3.87	6.73	4.78	.098	.081
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.21	.93	1.52	5.69	4.96	2.82	5.34	3.87	6.73	4.78	.098	.081
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	1119.46
ANNUAL MEAN	3.07
HIGHEST DAILY MEAN	59 Jul 20
LOWEST DAILY MEAN	.00 Sep 20
ANNUAL SEVEN-DAY MINIMUM	.01 Sep 14
INSTANTANEOUS PEAK FLOW	205 Jul 20
INSTANTANEOUS PEAK STAGE	4.63 Jul 20
10 PERCENT EXCEEDS	6.7
50 PERCENT EXCEEDS	1.3
90 PERCENT EXCEEDS	.06

KENTUCKY RIVER BASIN

03284525 EAST HICKMAN CREEK TRIBUTARY NEAR LEXINGTON, KY

LOCATION.--Lat 37°59'18", long 82°24'40", Fayette County, Hydrologic Unit 05100205, on left bank, downstream side of bridge on Walnut Hill-Chilesburg Road, 0.8 mi northeast of Athens Road (#418), 0.9 mi southwest of Todds Road (1927), and 6.5 mi southeast of Lexington.

DRAINAGE AREA.--0.96 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 980 ft above sea level from topographic map.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, Mar. 9-30, and Aug. 16 to Sept. 30. Records fair except for discharges below .10 ft³/s and periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.16	.40	.14	.56	.62	1.3	12	1.7	3.5	.13	.08
2	.09	.19	.20	.15	.45	.61	.66	5.4	.85	2.0	.11	.08
3	.08	.17	.17	.14	.43	.51	.56	3.6	.42	1.3	.10	.08
4	.08	.17	.16	.13	.84	.47	.57	2.8	.42	.83	.10	.08
5	.07	.15	.14	.39	1.4	.47	.44	2.3	.43	.50	.09	.07
6	.08	.14	.13	6.8	1.2	.44	.39	2.0	.34	.38	.09	.07
7	.08	.15	.11	21	1.2	.42	.36	9.3	.29	.40	.09	.07
8	.08	.16	.11	14	1.4	1.2	1.0	7.2	.27	.44	.09	.07
9	.08	.15	.11	7.3	1.8	3.5	1.3	4.2	1.0	.32	.09	.07
10	.09	.13	.58	4.8	2.6	2.5	1.5	2.9	4.5	.29	.09	.07
11	.11	.12	.32	3.6	15	1.6	1.1	2.2	3.2	.25	.09	.07
12	.09	.11	.25	3.9	21	1.1	.85	1.8	4.1	.23	.08	.05
13	.10	.12	.21	3.5	8.6	.73	.62	1.5	4.4	.25	.08	.04
14	.14	.18	.18	2.9	5.1	.60	.65	1.2	3.6	.55	.09	.03
15	.14	.16	.16	2.6	3.7	.54	.49	.86	5.5	.34	.09	.02
16	.13	.15	.15	2.3	3.2	.48	16	.60	2.6	.81	.10	.01
17	.13	.14	.14	2.1	2.9	.44	9.2	.42	1.7	.40	.10	.00
18	.13	.13	.13	1.8	3.4	.41	5.1	.35	1.3	.31	.10	.00
19	.12	.12	.12	1.7	3.2	.37	8.3	.32	1.2	.28	.09	.00
20	.10	.12	.10	1.4	2.8	6.0	5.0	.40	.77	23	.09	.00
21	.10	.16	.10	1.2	2.3	4.0	3.5	.43	2.9	7.5	.09	.10
22	.10	.22	.19	1.4	2.0	3.0	4.4	.40	2.1	2.8	.09	.05
23	.10	.17	.17	3.2	1.8	1.7	3.7	5.8	3.7	1.3	.08	.02
24	.13	.15	.50	3.0	1.5	1.2	3.0	3.0	2.3	.53	.08	.01
25	.18	.14	.77	2.4	1.3	.72	2.5	2.1	1.4	.33	.08	.01
26	.19	.14	.36	2.0	1.1	.58	2.1	1.5	.87	.25	.08	.01
27	.20	.13	.29	1.7	.99	.48	2.1	1.1	.58	.20	.08	.00
28	.17	.13	.23	1.4	.82	.43	1.7	.63	.45	.17	.08	.00
29	.15	.13	.21	1.1	---	.39	2.1	.42	5.2	.15	.09	.00
30	.14	.70	.19	.84	---	.35	18	.35	9.4	.16	.08	.00
31	.13	---	.15	.62	---	.61	---	1.8	---	.15	.08	---
TOTAL	3.60	4.99	7.03	99.51	92.59	36.47	98.49	78.88	67.49	49.92	2.80	1.16
MEAN	.12	.17	.23	3.21	3.31	1.18	3.28	2.54	2.25	1.61	.090	.039
MAX	.20	.70	.77	21	21	6.0	18	12	9.4	23	.13	.10
MIN	.07	.11	.10	.13	.43	.35	.36	.32	.27	.15	.08	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	.12	.17	.23	3.21	3.31	1.18	3.28	2.54	2.25	1.61	.090	.039
MAX	.12	.17	.23	3.21	3.31	1.18	3.28	2.54	2.25	1.61	.090	.039
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.12	.17	.23	3.21	3.31	1.18	3.28	2.54	2.25	1.61	.090	.039
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	542.93
ANNUAL MEAN	1.49
HIGHEST DAILY MEAN	23 Jul 20
LOWEST DAILY MEAN	.00 Sep 17
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 24
INSTANTANEOUS PEAK FLOW	113 Jul 20
INSTANTANEOUS PEAK STAGE	3.72 Jul 20
10 PERCENT EXCEEDS	3.6
50 PERCENT EXCEEDS	.40
90 PERCENT EXCEEDS	.08

KENTUCKY RIVER BASIN

03284530 EAST HICKMAN CREEK NEAR EAST HICKMAN, KY

LOCATION.--Lat 37°56'59", long 84°27'19", Fayette County, Hydrologic Unit 05100205, on right bank, downstream side of bridge on Delong Road, 1.0 mi north of intersection with Walnut Hill Road, 1.6 mi south of intersection with Armstrong Mill Road, 2.0 mi north of East Hickman, and at mile 7.6.

DRAINAGE AREA.--15.1 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 913.491 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30 to Dec. 4 and Sept. 14-20, 23-30. Records fair except for discharges below .50 ft³/s and for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	2.4	32	6.3	6.6	6.8	8.4	98	17	58	3.1	.25
2	.27	5.5	9.0	6.2	6.3	6.2	4.4	43	8.5	25	2.4	.25
3	.24	3.4	5.4	6.2	5.9	6.0	3.9	25	6.2	9.8	2.2	.10
4	.24	3.3	3.7	5.9	12	5.9	4.1	16	7.8	6.2	1.9	.45
5	.23	2.7	2.4	10	8.6	6.6	3.5	10	7.8	4.9	1.7	1.7
6	.19	2.6	1.8	49	8.6	5.6	3.3	8.3	5.9	4.0	1.6	1.9
7	.20	3.0	1.5	170	9.4	5.6	3.2	56	4.5	5.3	1.5	1.7
8	.22	3.5	1.4	76	10	11	7.8	68	4.0	6.9	1.4	1.2
9	.15	3.7	1.5	58	13	47	8.8	36	15	3.7	1.6	1.4
10	.09	3.2	20	41	17	23	9.5	22	38	3.0	1.5	.45
11	.12	2.8	12	27	140	19	5.8	12	25	2.3	1.3	.77
12	.07	2.5	9.4	32	244	13	4.7	9.0	33	1.9	1.0	.24
13	.01	2.3	7.9	31	95	8.9	4.2	7.4	37	2.3	.97	.14
14	1.3	9.5	6.9	22	52	7.5	5.1	6.3	25	13	1.6	.10
15	.89	4.5	6.2	18	33	6.5	4.2	5.4	58	5.8	1.3	.10
16	.51	3.4	5.6	17	27	5.9	118	4.8	28	11	1.0	.10
17	.50	2.9	5.2	13	22	5.1	88	4.2	15	7.2	.91	.08
18	.52	2.6	4.8	11	28	5.2	39	3.7	9.5	4.8	.88	.08
19	.54	2.3	4.5	11	26	4.7	66	3.4	9.1	3.8	.77	.07
20	.53	2.2	4.2	9.7	21	36	39	7.6	6.5	512	.54	.07
21	.58	4.8	4.1	8.9	17	47	20	5.6	42	106	.54	6.6
22	.51	9.6	7.8	9.8	15	34	21	5.2	28	34	.67	3.9
23	.57	3.9	6.2	19	14	23	15	51	58	17	.71	1.2
24	2.2	2.6	12	20	10	15	11	25	28	8.5	.63	.60
25	4.0	2.0	18	16	8.6	12	8.8	16	12	6.3	.48	.35
26	4.1	1.7	13	13	8.1	8.5	7.8	10	8.1	4.7	.39	.15
27	4.7	1.6	11	11	8.1	6.7	8.7	8.2	6.3	4.1	.32	.50
28	2.5	1.5	9.0	9.7	7.6	5.7	6.4	6.5	4.9	3.4	.36	.20
29	1.8	1.2	8.2	8.3	---	5.0	9.4	5.3	139	3.0	.43	.09
30	1.5	10	7.6	7.6	---	4.5	102	4.5	304	6.4	.55	.06
31	1.4	---	6.8	7.1	---	4.3	---	20	---	5.3	.45	---
TOTAL	30.93	107.2	249.1	750.7	873.8	401.2	641.0	603.4	991.1	889.6	34.70	24.80
MEAN	1.00	3.57	8.04	24.2	31.2	12.9	21.4	19.5	33.0	28.7	1.12	.83
MAX	4.7	10	32	170	244	47	118	98	304	512	3.1	6.6
MIN	.01	1.2	1.4	5.9	5.9	4.3	3.2	3.4	4.0	1.9	.32	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	1.00	3.57	8.04	24.2	31.2	12.9	21.4	19.5	33.0	28.7	1.12	.83
MAX	1.00	3.57	8.04	24.2	31.2	12.9	21.4	19.5	33.0	28.7	1.12	.83
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	1.00	3.57	8.04	24.2	31.2	12.9	21.4	19.5	33.0	28.7	1.12	.83
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	5597.53
ANNUAL MEAN	15.3
HIGHEST DAILY MEAN	512 Jul 20
LOWEST DAILY MEAN	.01 Oct 13
ANNUAL SEVEN-DAY MINIMUM	.09 Sep 14
INSTANTANEOUS PEAK FLOW	1000 Jul 20
INSTANTANEOUS PEAK STAGE	5.25 Jul 20
10 PERCENT EXCEEDS	33
50 PERCENT EXCEEDS	5.9
90 PERCENT EXCEEDS	.45

KENTUCKY RIVER BASIN

03284555 WEST HICKMAN CREEK NEAR EAST HICKMAN, KY

LOCATION.--Lat 37°56'04", long 84°30'08", Jessamine County, Hydrologic Unit 05100205, on center pier, downstream side of bridge on Ash Grove Pike (#1980), 0.7 mi northwest of intersection with Mackey Road, 1.9 mi northwest of East Hickman, 2.4 mi southeast of Nicholasville Road (US 27); and at mile 28.3.

DRAINAGE AREA.--20.5 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 868.402 ft above sea level.

REMARKS.--No estimated daily discharges. Record fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	46	107	38	33	39	87	231	117	191	46	29
2	22	52	72	37	30	37	51	133	72	119	42	27
3	22	40	55	37	29	35	47	101	58	86	39	27
4	23	41	59	36	38	39	49	87	75	69	38	26
5	23	31	48	83	49	42	45	73	73	59	37	24
6	22	30	41	313	62	36	42	64	58	51	39	23
7	25	32	36	610	68	37	41	358	49	67	37	26
8	22	39	32	339	76	76	89	201	47	76	40	24
9	23	34	33	195	94	265	98	129	128	52	42	24
10	20	33	155	123	128	104	114	97	211	45	42	23
11	22	27	83	92	398	77	73	80	113	42	34	23
12	22	27	61	119	365	66	61	65	187	39	35	25
13	22	28	52	95	207	58	56	59	203	39	36	25
14	37	76	45	77	134	53	67	56	128	122	49	26
15	26	45	40	70	101	47	59	49	202	61	37	24
16	24	36	36	62	90	42	495	47	92	93	37	24
17	23	32	33	61	91	40	224	44	71	64	35	25
18	24	30	31	54	111	43	137	40	60	49	34	24
19	24	29	30	50	86	41	223	40	71	44	32	25
20	24	27	30	46	73	189	128	75	55	893	30	25
21	23	45	29	41	65	124	99	64	265	251	29	53
22	24	82	68	52	58	100	106	63	167	152	30	29
23	23	48	42	102	52	78	84	356	359	109	33	25
24	36	40	95	74	46	66	72	186	119	84	31	23
25	43	37	102	62	41	67	65	113	87	69	30	23
26	57	32	68	54	39	58	59	87	70	58	30	23
27	64	31	59	48	43	53	72	79	60	53	29	24
28	39	27	51	43	42	52	53	70	53	47	28	23
29	34	29	46	39	---	48	69	53	323	45	29	23
30	30	57	45	36	---	45	434	51	466	75	30	23
31	30	---	40	35	---	44	---	189	---	66	27	---
TOTAL	875	1163	1724	3123	2649	2101	3299	3340	4039	3270	1087	768
MEAN	28.2	38.8	55.6	101	94.6	67.8	110	108	135	105	35.1	25.6
MAX	64	82	155	610	398	265	495	358	466	893	49	53
MIN	20	27	29	35	29	35	41	40	47	39	27	23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

MEAN	28.2	38.8	55.6	101	94.6	67.8	110	108	135	105	35.1	25.6
MAX	28.2	38.8	55.6	101	94.6	67.8	110	108	135	105	35.1	25.6
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	28.2	38.8	55.6	101	94.6	67.8	110	108	135	105	35.1	25.6
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	27438	
ANNUAL MEAN	75.2	
HIGHEST DAILY MEAN	893	Jul 20
LOWEST DAILY MEAN	20	Oct 10
ANNUAL SEVEN-DAY MINIMUM	22	Oct 6
INSTANTANEOUS PEAK FLOW	3040	Jul 20
INSTANTANEOUS PEAK STAGE	7.43	Jul 20
10 PERCENT EXCEEDS	131	
50 PERCENT EXCEEDS	49	
90 PERCENT EXCEEDS	25	

KENTUCKY RIVER BASIN

03285000 DIX RIVER NEAR DANVILLE, KY

LOCATION.--Lat 37°38'31", long 84°39'39", Garrard County, Hydrologic Unit 05100205, on right bank 50 ft downstream from bridge on State Highway 52, 1.4 mi downstream from Hanging Fork, 6 mi east of Danville, and mile 34.6.

DRAINAGE AREA.--318 mi².

PERIOD OF RECORD.--May to August 1905 (gage heights only), October 1942 to current year. Published as "Dicks River," 1905.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.10 ft above sea level. Prior to Dec. 21, 1942, nonrecording gage at same site and datum. May to August 1905, nonrecording gage at site 6 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 11-14, Dec. 30-31, Feb. 5-6, Sept. 3-20 and 30. Records good except for period of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	1280	188	186	236	583	3630	384	186	28	3.2
2	9.1	16	576	179	171	218	574	1610	270	139	27	3.1
3	7.6	13	338	183	157	198	344	871	143	105	22	2.5
4	6.8	13	278	188	193	184	1150	726	461	100	19	2.3
5	6.3	25	243	183	220	175	885	1370	1990	124	16	2.2
6	5.6	27	198	555	290	165	525	677	1360	135	14	2.0
7	5.1	30	164	5610	457	156	385	1240	550	99	11	1.8
8	4.1	38	138	10900	585	191	355	2640	337	182	9.1	1.7
9	3.3	46	127	2780	745	3850	526	1010	597	453	8.0	1.6
10	2.6	43	941	998	1610	1650	735	707	2600	205	7.4	1.4
11	2.1	38	831	692	5440	757	630	557	6080	124	7.0	1.3
12	1.4	34	467	544	9360	537	435	437	2490	88	7.9	1.2
13	1.0	31	313	500	2640	430	339	319	3480	70	7.7	1.1
14	2.4	38	233	411	1300	363	292	247	1390	93	8.9	1.0
15	3.2	181	178	399	866	301	302	198	4810	185	16	.95
16	6.3	119	145	544	735	255	3700	163	1520	303	19	.85
17	13	87	124	471	724	241	7530	135	709	525	17	.72
18	10	71	109	423	821	231	2020	113	449	274	12	.72
19	8.2	58	92	375	862	577	5460	94	853	165	10	2.2
20	7.0	48	81	334	745	3960	2870	84	846	131	9.8	1.8
21	6.3	46	74	290	607	3770	1100	89	587	127	9.3	3.6
22	5.3	206	111	264	492	1770	941	98	787	102	8.3	8.1
23	4.3	205	221	684	435	982	1070	129	2510	83	7.3	19
24	4.1	156	242	988	404	687	721	184	1110	65	6.0	17
25	4.1	114	916	643	337	528	528	154	572	53	4.8	13
26	5.4	89	598	479	290	497	424	107	372	43	4.4	9.5
27	24	74	417	391	266	394	403	101	262	36	4.1	6.4
28	64	61	351	330	252	328	453	119	195	32	3.8	4.0
29	34	52	306	281	---	276	348	97	155	28	3.7	2.8
30	22	336	265	242	---	236	1460	78	195	26	3.5	2.2
31	16	---	228	211	---	208	---	64	---	27	3.3	---
TOTAL	304.6	2310	10585	31260	31190	24351	37088	18048	38064	4308	335.3	119.24
MEAN	9.83	77.0	341	1008	1114	786	1236	582	1269	139	10.8	3.97
MAX	64	336	1280	10900	9360	3960	7530	3630	6080	525	28	19
MIN	1.0	13	74	179	157	156	292	64	143	26	3.3	.72
CFSM	.03	.24	1.07	3.17	3.50	2.47	3.89	1.83	3.99	.44	.03	.01
IN.	.04	.27	1.24	3.66	3.65	2.85	4.34	2.11	4.45	.50	.04	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1998, BY WATER YEAR (WY)

MEAN	101	310	675	799	993	1021	680	468	286	178	93.2	159
MAX	1323	1471	3656	3140	4129	3059	2736	2618	1732	1692	527	3430
(WY)	1980	1987	1979	1950	1989	1997	1972	1983	1997	1996	1958	1979
MIN	.000	.030	.69	17.0	72.1	174	57.2	51.8	8.83	.31	.93	.013
(WY)	1953	1954	1954	1981	1954	1983	1986	1976	1988	1944	1952	1953

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1943 - 1998
ANNUAL TOTAL	232153.7	197963.14	
ANNUAL MEAN	636	542	478
HIGHEST ANNUAL MEAN			1184
LOWEST ANNUAL MEAN			119
HIGHEST DAILY MEAN	16100	Mar 2	35100
LOWEST DAILY MEAN	1.0	Oct 13	.00
ANNUAL SEVEN-DAY MINIMUM	2.3	Oct 9	.00
INSTANTANEOUS PEAK FLOW			52400
INSTANTANEOUS PEAK STAGE		11.35	Jan 8
INSTANTANEOUS LOW FLOW			21.81
ANNUAL RUNOFF (CFSM)	2.00	1.71	1.3
ANNUAL RUNOFF (INCHES)	27.16	23.16	1.50
10 PERCENT EXCEEDS	1110	1130	20.41
50 PERCENT EXCEEDS	142	186	1080
90 PERCENT EXCEEDS	10	4.1	126
			3.0

KENTUCKY RIVER BASIN

03286500 KENTUCKY RIVER AT LOCK 7 AT HIGH BRIDGE, KY

LOCATION.--Lat 37°48'53", long 37°43'26", Jessamine County, Hydrologic Unit 05100205, on right bank at Lock 7, 0.45 mi northwest of High Bridge, 1.2 mi downstream from Dix River, 3.8 mi upstream of U.S. Highway 68 bridge, and at mile 117.

DRAINAGE AREA.--5,036 mi².

PERIOD OF RECORD.--October 1901 to September 1924 (gage-heights only), monthly discharge October 1924 to September 1927, December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 503.92 ft above sea level, Kentucky River datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Sept. 30. Record fair above 1,000 ft³/s and poor below. Daily discharges determined by drainage area factors to Lock 6 and Lock 10 records. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	880	402	1970	1740	3820	5350	4820	23000	3660	16300	1190	307
2	510	442	2070	1470	3540	5200	5500	26900	3450	13300	1340	347
3	294	530	2360	1400	3280	5150	5400	28100	2900	8000	1520	367
4	247	466	2350	1460	3330	4560	6650	22800	2910	4660	1610	469
5	242	525	2080	1840	4370	4170	12800	22000	5400	3650	1350	680
6	234	500	1900	3090	6700	3970	16100	21600	9000	3070	980	755
7	226	655	1880	11000	9450	3820	14000	19200	9700	3260	930	720
8	221	570	1620	36700	9750	3750	11400	22400	7800	3650	880	271
9	226	645	1420	31000	11000	9100	11000	22000	6950	4350	760	224
10	214	755	1520	19800	16200	15000	13100	19300	10200	6100	670	284
11	222	730	2160	12400	26100	14400	14000	16900	17100	5800	795	785
12	219	680	2380	8800	40500	12000	12800	16400	19600	3940	1030	505
13	201	740	2460	6950	35000	9800	11500	15200	22200	2680	1110	260
14	199	720	2280	5750	24600	7600	10100	13600	21000	2780	1370	305
15	211	730	2160	4910	16300	6150	8550	9750	19500	2910	1180	745
16	226	950	1900	4730	11600	5300	11300	6950	16800	2550	1090	690
17	249	1210	1420	4890	9550	4580	27600	5200	13100	3350	1300	755
18	199	1150	1280	4910	9950	4140	40600	4050	9600	2950	1950	575
19	221	1080	1210	4800	11800	4820	52000	3350	7450	2600	2920	540
20	258	955	905	4560	12500	10200	59000	3150	6800	9000	3040	380
21	351	890	885	4300	12200	22700	59000	2770	5900	12800	2480	254
22	341	875	970	4140	10900	25600	57500	2720	7500	7650	1880	281
23	262	1390	1130	4880	9250	21500	48000	8600	13700	7400	1440	600
24	297	1950	1240	7150	8200	16600	30700	19900	13600	5300	1040	865
25	343	2010	2050	8900	7900	12900	21600	19700	10600	3300	940	800
26	379	1770	2520	8500	7600	10500	17300	14300	7700	2370	790	910
27	411	1530	2020	7400	7050	8850	14700	9450	5650	1900	750	755
28	480	1320	1810	5950	5800	7550	13100	6850	4360	1570	505	333
29	620	1150	1830	4430	---	6450	11900	5650	4100	1340	575	275
30	550	1440	2070	3990	---	4940	14400	4730	10700	1130	402	314
31	515	---	2030	3900	---	4360	---	3790	---	1230	550	---
TOTAL	10048	28760	55880	235740	338240	281010	636420	420310	298930	150890	38367	15351
MEAN	324	959	1803	7605	12080	9065	21210	13560	9964	4867	1238	512
MAX	880	2010	2520	36700	40500	25600	59000	28100	22200	16300	3040	910
MIN	199	402	885	1400	3280	3750	4820	2720	2900	1130	402	224

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	1557	4013	6888	12600	13160	19280	12550	11100	7471	2274	1527	945
MAX	3052	9309	12670	22370	26380	29500	21390	22020	18360	4867	2946	2020
(WY)	1994	1997	1994	1994	1994	1997	1994	1995	1997	1998	1993	1996
MIN	324	959	1803	7605	8727	9065	5046	2835	1426	883	770	382
(WY)	1998	1998	1998	1998	1996	1998	1997	1993	1994	1995	1997	1995

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1993 - 1998	
ANNUAL TOTAL	2625796		2509946			
ANNUAL MEAN	7194		6877		7756	
HIGHEST ANNUAL MEAN					11250	
LOWEST ANNUAL MEAN					5964	
HIGHEST DAILY MEAN	87900		59000		87900	
LOWEST DAILY MEAN	195		199		137	
ANNUAL SEVEN-DAY MINIMUM	213		213		163	
INSTANTANEOUS PEAK FLOW			58700		92800	
INSTANTANEOUS PEAK STAGE			25.38		37.90	
10 PERCENT EXCEEDS	18500		17200		19700	
50 PERCENT EXCEEDS	2270		3350		3560	
90 PERCENT EXCEEDS	381		374		606	

KENTUCKY RIVER BASIN

03287000 KENTUCKY RIVER AT LOCK 6, NEAR SALVISA, KY

LOCATION.--Lat 37°55'32", long 84°49'17", Woodford County, Hydrologic Unit 05100205, on right bank at lock 6, 1.5 mi upstream from Clear Creek, 2.1 mi east of Salvisa, and at mile 96.2.

DRAINAGE AREA.--5,102 mi², of which about 101 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1925 to current year. Prior to October 1953, published as "at lock 6, at Warwick."

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1932, 1933-34(M), 1935, 1937, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.90 ft Kentucky River datum. Prior to November 1934, nonrecording gage at same site and datum. Auxiliary water-stage recorder at lock 5, 14 mi downstream. Prior to Sept. 30, 1981, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Aug. 9. Records good above 1000 ft³/s, fair below and for period of estimated record. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	366	2170	1930	3790	5200	4620	25300	3730	17200	1210	188
2	689	456	1980	1490	3660	5200	5340	26400	3760	15400	1380	283
3	284	634	2110	1390	3620	5590	5220	30400	3010	10300	1520	345
4	229	452	2210	1360	3630	4770	5520	25200	2730	5110	1780	580
5	232	474	2020	1750	4190	4070	9160	21700	4340	3810	1540	1040
6	230	319	1920	3340	5450	3710	15400	22600	7980	3210	1010	1220
7	223	611	2070	8270	9390	3640	14500	19800	9920	3350	1100	1160
8	213	400	1670	39700	9560	3500	11900	23600	8860	3630	1110	256
9	211	526	1420	37500	10300	8030	10800	23500	7320	4380	932	166
10	213	733	1420	24000	14100	15700	12500	20800	9940	4820	754	300
11	215	667	2210	15300	23900	15900	13800	17200	15800	6310	868	1330
12	216	562	2230	10900	45700	13700	13100	16800	20500	4510	834	809
13	213	682	2320	8740	41000	11400	12100	15900	23600	2910	867	333
14	235	639	2270	7200	29300	8500	11000	14000	23700	2830	1520	420
15	231	565	2340	6120	19500	6720	9190	11300	22700	3640	1310	1290
16	243	729	2160	5570	13900	5660	10400	7760	20000	2590	1210	1190
17	289	1070	1520	5690	11000	4840	25200	5650	15400	4060	1020	1330
18	159	1070	1390	5750	10300	4060	38200	4280	11800	4000	1350	970
19	138	1120	1360	5700	12000	4330	47500	3530	8840	3090	2040	896
20	170	976	848	5380	13100	7190	57300	3390	8610	7390	2850	576
21	346	868	864	5100	13100	22000	55800	2700	7310	18500	2630	299
22	321	752	1010	4910	12200	27300	55700	2580	9820	8580	2070	286
23	173	991	1290	5170	10600	24300	52500	6960	13900	7780	1670	826
24	220	1560	1360	6440	9290	18700	36500	21700	16100	6680	1090	1240
25	309	1870	2090	8610	8660	14800	23900	21800	13000	3890	1030	1100
26	392	1730	3140	9340	8540	12100	18700	16500	9860	2700	859	1410
27	420	1560	2300	8870	7970	10300	15900	11300	7260	2150	876	1170
28	441	1340	1910	6990	5830	8930	14100	7590	5610	1800	471	350
29	641	1150	2040	4680	---	7440	12700	5860	4550	1560	682	245
30	539	1370	2500	4060	---	5080	14600	4950	7120	1230	367	317
31	553	---	2420	3820	---	4380	---	3990	---	1270	676	---
TOTAL	10398	26242	58562	265070	363580	297040	633150	445040	327070	168680	38626	21925
MEAN	335	875	1889	8551	12990	9582	21110	14360	10900	5441	1246	731
MAX	1410	1870	3140	39700	45700	27300	57300	30400	23700	18500	2850	1410
MIN	138	319	848	1360	3620	3500	4620	2580	2730	1230	367	166

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

MEAN	1966	4224	9083	11000	12650	15300	11780	8495	4616	2201	1938	1716
MAX	13680	12450	31030	31910	34850	33640	35920	26910	18890	5441	6238	10860
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1997	1998	1992	1974
MIN	312	493	525	502	2655	3769	1491	1127	362	533	277	229
(WY)	1981	1988	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1961 - 1998

ANNUAL TOTAL	2708620	2655383	
ANNUAL MEAN	7421	7275	7055
HIGHEST ANNUAL MEAN			11050
LOWEST ANNUAL MEAN			2826
HIGHEST DAILY MEAN	85900	Mar 5	57300
LOWEST DAILY MEAN	138	Oct 19	138
ANNUAL SEVEN-DAY MINIMUM	209	Oct 14	209
INSTANTANEOUS PEAK FLOW			59300
INSTANTANEOUS PEAK STAGE			23.35
10 PERCENT EXCEEDS	18400		19600
50 PERCENT EXCEEDS	2240		3640
90 PERCENT EXCEEDS	355		360

KENTUCKY RIVER BASIN

03287500 KENTUCKY RIVER AT LOCK 4, AT FRANKFORT, KY

LOCATION.--Lat 38°12'06", long 84°52'54", Franklin County, Hydrologic Unit 05100205, on left bank at downstream side of Broadway Street Bridge at Frankfort, 300 ft upstream from Benson Creek, 0.8 mi upstream from lock 4, and at mile 65.8. Records include flow of Benson Creek.

DRAINAGE AREA.--5,411 mi², (includes that of Benson Creek), of which about 120 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1905 to July 1906 (gage heights only), October 1925 to current year. Monthly discharge only October 1930 to February 1931, October, November 1931, and May to September 1932, published in WSP 1305. Gage-height records collected in this vicinity September 1887 to December 1889, January to May 1893, and since April 1901 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1113: 1941-42. WSP 1385: 1926-27, 1929(M), 1932-33, 1935-37, 1938(M), drainage area. WSP 1555: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 462.10 ft above sea level. See WDR KY-90-1 for history of changes prior to Jan. 28, 1982.

REMARKS.--Estimated daily discharges: May 27, 28, Aug. 9. Record good above 1,000 ft³/s and fair below and for periods of estimated record. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	499	2870	2250	3870	5730	4980	28600	5140	17300	1250	349
2	753	492	2380	1770	3700	5620	5900	27600	4400	15900	1470	303
3	370	612	2360	1650	3620	6060	5860	30600	3450	10600	1520	406
4	289	538	2450	1610	3850	5270	6100	26000	3110	5810	1870	593
5	262	489	2270	1940	4350	4490	8990	22000	4610	4190	1620	1470
6	253	451	2120	5560	5730	4090	15500	22800	7830	3670	927	1760
7	236	537	2240	12900	9310	3990	14900	21800	9680	3710	885	1860
8	221	536	1880	40900	9810	3920	12000	25400	8840	4110	987	580
9	215	524	1590	39100	10500	10200	11500	24400	7740	4690	775	227
10	211	685	2460	26200	14800	16800	12900	21700	9850	5160	563	211
11	212	686	2940	16600	27300	16600	14100	17900	16200	6630	774	1740
12	212	601	2700	11500	47900	14100	13400	17300	21200	5040	633	1250
13	221	702	2660	9420	43700	11500	12100	16300	24500	3270	666	552
14	246	760	2580	7960	31800	8860	11400	13900	24500	3300	1560	394
15	220	651	2560	6960	21100	7130	9550	11400	23400	4260	1270	1910
16	224	720	2430	6400	14900	6260	16300	7900	20900	3120	1130	1680
17	257	1010	1810	6410	11600	5360	29700	6090	16000	4380	964	2270
18	250	1080	1540	6450	11100	4550	37700	4640	11900	4530	1290	1850
19	191	1130	1540	6390	12400	4560	46500	3790	9030	3500	2340	1270
20	205	970	957	6010	13500	8720	55100	3750	8660	20300	3600	1030
21	299	919	890	5640	13500	22700	57000	3020	9850	23100	3570	900
22	360	894	1200	5330	12400	27900	57300	2900	11600	9870	2750	700
23	289	1010	1620	5880	10900	25100	54300	10200	16700	8270	2040	908
24	280	1570	1890	7150	9500	19500	38500	22900	17600	7590	1310	2140
25	369	2000	3440	8770	8810	15300	24800	22900	13500	4720	943	1700
26	427	1910	3940	9510	8650	12300	19400	17400	10200	3230	932	2460
27	462	1760	2960	9130	8150	10400	16500	12000	7640	2500	947	1810
28	458	1490	2310	7560	6450	9010	14400	8000	6150	2040	781	891
29	563	1240	2300	5220	---	7680	12700	6420	5060	1760	655	344
30	572	1800	2860	4250	---	5610	19000	5460	7640	1460	636	329
31	562	---	2760	3950	---	4780	---	5090	---	1830	785	---
TOTAL	11069	28266	70507	290370	383200	314090	658380	470160	346880	199840	41443	33887
MEAN	357	942	2274	9367	13690	10130	21950	15170	11560	6446	1337	1130
MAX	1380	2000	3940	40900	47900	27900	57300	30600	24500	23100	3600	2460
MIN	191	451	890	1610	3620	3920	4980	2900	3110	1460	563	211

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

MEAN	2074	4519	9617	11580	13240	16170	12240	8894	4881	2378	2079	1850
MAX	13240	13700	33220	33500	35680	34760	36690	28200	20840	6446	6433	10980
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1997	1998	1992	1974
MIN	289	542	566	540	2885	4175	1518	1142	417	568	336	269
(WY)	1981	1966	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1961 - 1998
ANNUAL TOTAL	2979465	2848092	
ANNUAL MEAN	8163	7803	7434
HIGHEST ANNUAL MEAN			11860
LOWEST ANNUAL MEAN			3183
HIGHEST DAILY MEAN	92700	Mar 3	116000
LOWEST DAILY MEAN	191	Oct 19	93
ANNUAL SEVEN-DAY MINIMUM	218	Oct 7	128
INSTANTANEOUS PEAK FLOW		57500	118000
INSTANTANEOUS PEAK STAGE		24.21	48.47
10 PERCENT EXCEEDS	20100	21100	18400
50 PERCENT EXCEEDS	2570	3990	3380
90 PERCENT EXCEEDS	451	491	546

KENTUCKY RIVER BASIN

03287580 NORTH ELKHORN CREEK AT BRYANT ROAD NEAR CADENTOWN, KY

LOCATION.--Lat 38°01'42", long 84°24'07", Fayette County, Hydrologic Unit 05100205, on right bank, downstream side of bridge on Bryant Road, 0.7 miles northeast of intersection with I-75, 1.6 miles southeast of intersection of US 60 (Winchester Road), 1.8 miles northeast of Cadentown, and at mile 90.3.

DRAINAGE AREA.--2.20 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 942.109 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 29 to Jan. 4, Feb. 5-9, Aug. 9, and Sept. 14-21, 28-30. Record fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.28	2.2	1.3	1.5	2.3	2.5	17	3.9	16	.58	.00
2	.00	.36	.88	1.2	1.4	2.2	1.1	9.2	1.4	9.3	.39	.00
3	.00	.39	.48	1.1	1.4	2.1	.90	6.5	.54	5.5	.26	.00
4	.00	.38	.36	1.0	1.9	2.1	.86	5.3	.59	3.5	.17	.00
5	.00	.35	.27	1.1	2.2	1.5	.67	4.4	.86	2.2	.14	.00
6	.00	.33	.23	13	2.5	.73	.63	3.5	.74	1.5	.12	.00
7	.00	.34	.19	50	2.7	.73	.60	15	.55	1.2	.13	.00
8	.00	.40	.16	27	3.0	1.4	2.5	16	.46	1.8	.11	.00
9	.00	.42	.15	12	3.2	13	6.3	9.0	3.2	1.1	.10	.00
10	.00	.39	1.7	8.0	4.5	7.9	7.2	6.6	11	.73	.10	.00
11	.00	.32	.91	5.7	24	5.8	5.2	5.0	9.4	.52	.07	.00
12	.00	.26	.62	6.8	41	4.7	3.9	3.8	10	.39	.05	.00
13	.00	.28	.54	7.4	19	4.0	3.2	2.3	12	.37	.04	.00
14	.00	.69	.44	5.8	11	3.6	3.2	3.3	7.0	1.8	.05	.00
15	.02	.57	.37	4.7	8.1	3.2	2.8	2.2	5.5	2.0	.06	.00
16	.01	.46	.29	3.7	6.9	2.9	28	1.5	3.6	3.8	.05	.00
17	.00	.37	.25	3.3	6.6	2.8	15	1.0	1.8	3.9	.05	.00
18	.01	.32	.21	3.1	8.7	2.8	8.3	.74	.75	2.1	.03	.00
19	.01	.28	.19	3.0	7.3	2.5	13	.60	2.0	1.4	.02	.00
20	.00	.25	.17	2.7	6.0	8.0	8.9	.82	1.2	89	.01	.00
21	.00	.41	.17	2.4	4.8	7.7	7.2	1.4	5.1	19	.00	2.0
22	.00	.86	.49	2.7	4.1	6.8	9.5	1.2	5.3	9.8	.00	.21
23	.00	.60	1.7	6.4	3.8	5.6	7.9	16	12	6.0	.00	.07
24	.08	.47	3.9	5.4	3.2	4.6	6.0	12	7.0	3.4	.00	.01
25	.23	.41	6.7	3.9	3.0	4.4	4.6	6.6	4.2	1.3	.00	.00
26	.48	.36	4.2	3.2	2.9	3.9	3.9	4.4	1.9	.95	.00	.00
27	.55	.33	2.9	2.9	3.8	3.4	3.6	3.3	.71	.88	.00	.00
28	.33	.31	2.1	2.4	2.9	3.2	2.9	1.8	.58	.72	.00	.00
29	.24	.30	1.8	2.1	---	2.9	3.2	.75	59	.61	.00	.00
30	.20	3.4	1.5	1.9	---	1.8	22	.60	56	.65	.00	.00
31	.20	---	1.4	1.7	---	1.2	---	1.5	---	.77	.00	---
TOTAL	2.36	14.89	37.47	196.9	191.4	119.76	185.56	163.31	228.28	192.19	2.53	2.29
MEAN	.076	.50	1.21	6.35	6.84	3.86	6.19	5.27	7.61	6.20	.082	.076
MAX	.55	3.4	6.7	50	41	13	28	17	59	89	.58	2.0
MIN	.00	.25	.15	1.0	1.4	.73	.60	.60	.46	.37	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	.076	.50	1.21	6.35	6.84	3.86	6.19	5.27	7.61	6.20	.082	.076
MAX	.076	.50	1.21	6.35	6.84	3.86	6.19	5.27	7.61	6.20	.082	.076
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.076	.50	1.21	6.35	6.84	3.86	6.19	5.27	7.61	6.20	.082	.076
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	1336.94
ANNUAL MEAN	3.66
HIGHEST DAILY MEAN	89 Jul 20
LOWEST DAILY MEAN	.00 Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1
INSTANTANEOUS PEAK FLOW	281 Jun 29
INSTANTANEOUS PEAK STAGE	5.11 Jun 29
10 PERCENT EXCEEDS	8.2
50 PERCENT EXCEEDS	1.3
90 PERCENT EXCEEDS	.00

KENTUCKY RIVER BASIN

03287590 NORTH ELKHORN CREEK AT WINCHESTER ROAD AT LEXINGTON, KY

LOCATION.--Lat 38°02'54", long 84°24'40", Fayette County, Hydrologic Unit 05100205, on right bank, downstream side of culvert on Winchester Road (US 60), 0.5 miles east of I-75, 0.8 miles west of intersection with Bryant Road (1425), 2.2 miles east of Lexington, and at mile 89.1.

DRAINAGE AREA.--4.05 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 921.258 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 29 to Jan. 3, June 29 to July 7, and Aug. 9. Records fair except for discharges below 5.0 ft³/s and for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	1.2	5.6	2.2	2.7	3.6	6.3	34	7.3	32	.70	.07
2	.02	1.6	2.2	2.0	2.7	3.5	2.6	17	3.2	19	.46	.05
3	.02	1.3	1.6	1.9	2.5	3.3	2.2	11	1.7	12	.36	.04
4	.02	1.4	2.1	1.8	3.5	3.6	2.4	8.6	3.0	8.2	.29	.03
5	.00	.68	1.2	5.2	4.5	3.2	1.8	6.7	2.9	4.5	.42	.02
6	.00	.37	.87	34	5.0	1.8	1.6	5.4	1.9	3.0	.33	.01
7	.00	.58	.68	102	5.3	1.7	1.4	40	1.3	2.7	.18	.00
8	.00	2.9	.53	54	5.9	5.0	5.1	33	1.1	6.0	.21	.00
9	.00	1.9	.59	25	7.4	32	10	18	10	3.5	.26	.00
10	.00	1.3	9.3	15	11	15	12	12	19	3.6	.30	.00
11	.00	1.2	3.3	10	62	9.3	7.0	8.5	16	2.5	.28	.00
12	.00	.95	2.0	14	73	6.7	4.8	6.4	22	1.1	.27	.00
13	.00	3.1	1.4	13	34	5.5	3.8	5.5	26	1.6	.25	.00
14	.28	3.7	1.1	9.6	21	4.7	5.2	7.3	13	8.3	.49	.00
15	.10	1.5	.87	8.7	15	3.8	3.5	4.6	10	4.7	.17	.00
16	.10	1.1	.72	7.3	13	3.4	65	3.5	6.1	10	.15	.00
17	.10	.74	.55	6.9	13	3.3	29	2.6	3.8	6.8	.18	.00
18	.07	.54	.50	6.1	18	3.5	16	2.0	2.2	3.8	.15	.00
19	.05	.41	.42	5.9	14	3.2	29	1.6	5.9	3.0	.14	.00
20	.04	.38	.42	5.6	11	22	17	3.5	2.9	357	.10	.00
21	.03	4.2	.42	5.3	8.2	17	13	4.5	13	35	.26	5.8
22	.03	3.9	2.4	5.8	6.6	13	19	3.4	11	18	.19	.64
23	.03	1.5	2.3	12	5.8	9.0	15	41	34	11	.15	.42
24	1.5	.91	8.2	9.2	4.9	6.7	11	23	13	6.4	.09	.38
25	.89	.69	9.9	6.6	4.2	6.5	7.7	12	7.4	2.8	.05	.25
26	3.8	.72	5.6	5.4	4.2	5.3	6.1	7.2	4.2	1.8	.04	.15
27	1.8	.67	4.3	4.5	5.6	4.5	6.3	5.6	2.3	1.4	.03	.12
28	.66	.65	3.5	3.8	4.3	4.0	4.4	3.7	1.7	1.1	.02	.09
29	.33	.66	3.0	3.5	---	3.7	6.4	2.2	130	.86	.03	.07
30	.23	11	2.7	3.1	---	3.1	55	1.7	82	2.2	.15	.06
31	.17	---	2.5	2.8	---	2.4	---	7.0	---	1.4	.12	---
TOTAL	10.30	51.75	80.77	392.2	368.3	213.3	369.6	342.5	457.9	575.26	6.82	8.20
MEAN	.33	1.73	2.61	12.7	13.2	6.88	12.3	11.0	15.3	18.6	.22	.27
MAX	3.8	11	9.9	102	73	32	65	41	130	357	.70	5.8
MIN	.00	.37	.42	1.8	2.5	1.7	1.4	1.6	1.1	.86	.02	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	.33	1.73	2.61	12.7	13.2	6.88	12.3	11.0	15.3	18.6	.22	.27
MAX	.33	1.73	2.61	12.7	13.2	6.88	12.3	11.0	15.3	18.6	.22	.27
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.33	1.73	2.61	12.7	13.2	6.88	12.3	11.0	15.3	18.6	.22	.27
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	2876.90
ANNUAL MEAN	7.88
HIGHEST DAILY MEAN	357 Jul 20
LOWEST DAILY MEAN	.00 Oct 5
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 5
INSTANTANEOUS PEAK FLOW	1640 Jul 20
INSTANTANEOUS PEAK STAGE	6.78 Jul 20
10 PERCENT EXCEEDS	16
50 PERCENT EXCEEDS	3.0
90 PERCENT EXCEEDS	.04

KENTUCKY RIVER BASIN

03287600 NORTH ELKHORN CREEK AT BRYAN STATION ROAD AT MONTROSE, KY

LOCATION.--Lat 38°04'35", long 84°24'48", Fayette County, Hydrologic Unit 05100205, on right bank, downstream side of bridge on Bryan Station Road (Highway 57), 100 ft southwest of intersection of Briar Hill Road (highway 1970) and Bryan Station Road (Highway 57), 0.5 miles Northwest of Montrose, and at mile 86.0.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 892.042 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, Aug. 9, 17 to Sept. 21, and Sept. 24-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	2.1	25	8.0	8.8	9.7	26	174	26	134	4.3	.12
2	.16	8.7	9.9	7.6	8.0	8.6	9.9	81	8.6	66	3.2	.07
3	.14	6.3	7.0	7.5	7.3	8.2	8.0	54	4.8	37	2.6	.06
4	.12	4.3	8.7	7.0	8.7	9.1	9.9	38	8.5	26	2.2	.04
5	.10	2.9	6.6	25	17	11	6.9	27	11	18	1.8	.03
6	.07	2.4	4.7	199	19	6.7	5.8	22	6.0	12	1.8	.02
7	.04	2.7	4.0	618	20	6.4	5.1	212	3.5	9.6	1.9	.01
8	.00	5.2	3.7	268	24	19	17	140	2.7	18	2.0	.00
9	.00	4.5	3.9	115	33	171	31	78	36	8.1	1.9	.00
10	.00	3.6	59	71	56	69	41	53	60	6.2	1.6	.00
11	.00	3.1	19	47	348	44	20	35	46	4.8	1.2	.00
12	.00	2.5	11	61	512	32	14	24	93	3.3	.95	.00
13	.00	8.1	8.3	58	188	25	11	36	124	3.1	.77	.00
14	.90	13	6.8	43	107	20	16	74	50	26	2.2	.00
15	.40	6.5	5.9	35	72	16	11	28	38	13	1.4	.00
16	.20	5.0	5.1	27	60	14	329	19	19	26	.89	.00
17	.24	3.7	4.6	25	58	13	122	14	11	18	.75	.00
18	.16	3.1	4.1	21	87	13	68	11	7.1	9.2	.60	.00
19	.12	2.8	3.8	20	61	11	134	8.8	24	7.9	.54	.00
20	.09	2.7	3.7	17	46	97	80	17	9.0	1830	.42	.00
21	.07	10	3.7	15	32	84	54	18	68	146	.60	13
22	.06	13	19	17	25	65	95	14	60	68	.40	1.9
23	.04	6.7	9.0	64	22	45	74	148	137	40	.30	.63
24	3.7	5.0	35	48	17	31	52	75	62	24	.17	.31
25	2.4	4.0	51	32	14	27	36	35	33	15	.10	.24
26	15	4.4	23	24	13	21	27	20	20	10	.07	.20
27	4.0	4.8	17	20	15	17	29	16	12	8.5	.04	.17
28	1.3	5.0	12	17	12	15	18	10	8.5	6.7	.03	.14
29	.97	4.9	11	14	---	12	23	6.6	1730	5.6	.04	.08
30	.74	42	10	12	---	10	337	5.0	821	12	.20	.06
31	.62	---	8.4	10	---	8.8	---	24	---	8.1	.15	---
TOTAL	31.82	193.0	403.9	1953.1	1890.8	939.5	1710.6	1517.4	3539.7	2620.1	35.12	17.08
MEAN	1.03	6.43	13.0	63.0	67.5	30.3	57.0	48.9	118	84.5	1.13	.57
MAX	15	42	59	618	512	171	337	212	1730	1830	4.3	13
MIN	.00	2.1	3.7	7.0	7.3	6.4	5.1	5.0	2.7	3.1	.03	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	1.03	6.43	13.0	63.0	67.5	30.3	57.0	48.9	118	84.5	1.13	.57
MAX	1.03	6.43	13.0	63.0	67.5	30.3	57.0	48.9	118	84.5	1.13	.57
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	1.03	6.43	13.0	63.0	67.5	30.3	57.0	48.9	118	84.5	1.13	.57
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	14852.12
ANNUAL MEAN	40.7
HIGHEST DAILY MEAN	1830 Jul 20
LOWEST DAILY MEAN	.00 Oct 8
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 8
INSTANTANEOUS PEAK FLOW	7900 Jun 29
INSTANTANEOUS PEAK STAGE	10.23 Jun 29
10 PERCENT EXCEEDS	71
50 PERCENT EXCEEDS	10
90 PERCENT EXCEEDS	.09

KENTUCKY RIVER BASIN

03288000 NORTH ELKHORN CREEK NEAR GEORGETOWN, KY

LOCATION.--Lat 38°12'20", long 84°30'49", Scott County, Hydrologic Unit 05100205, on left bank at upstream side of bridge on Crumbaugh Lane, 1.7 mi downstream from Miller Run, 2.5 mi east of Georgetown, 2.7 mi upstream from Lanes Run at mile 58.3.

DRAINAGE AREA.--119 mi², of which about 8 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1949 to August 1984; October 1988 to current year. Monthly discharge only October 1949 to March 1950, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 796.49 ft above sea level. Prior to Sept. 18, 1952, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 12-Jan. 22. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1948 reached a stage of about 22 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	5.1	208	54	76	75	92	1480	511	1460	64	4.2
2	2.1	5.8	94	47	69	65	91	644	205	501	45	4.2
3	1.7	5.3	49	49	61	61	65	404	110	309	37	4.1
4	1.7	7.1	38	48	69	57	67	334	84	192	31	3.4
5	1.5	11	32	52	77	59	62	266	76	135	26	3.4
6	1.3	7.7	25	500	88	57	53	190	73	93	22	3.3
7	1.1	6.2	19	1300	83	50	46	293	58	72	20	3.1
8	1.1	5.7	17	2500	88	57	45	863	45	71	18	2.6
9	1.1	5.3	15	900	104	563	106	516	102	66	19	2.4
10	1.1	4.3	70	600	166	504	161	367	264	48	26	2.2
11	1.0	4.2	220	350	731	338	150	241	337	38	52	2.2
12	.99	4.5	100	280	3170	262	100	185	261	32	31	2.1
13	.96	4.7	60	350	1670	206	80	159	678	27	20	1.8
14	2.1	12	47	280	896	155	77	325	519	37	17	2.2
15	2.4	22	39	220	633	117	76	245	329	91	16	3.0
16	1.3	22	32	180	501	96	737	145	212	63	14	2.5
17	.91	14	27	160	429	86	1170	102	124	77	14	2.4
18	.65	9.2	23	140	450	80	460	78	85	65	13	2.6
19	.62	7.0	20	120	422	76	595	64	70	46	12	4.8
20	.62	5.7	19	110	348	218	606	60	80	4170	10	3.6
21	.62	5.7	18	105	279	533	423	61	324	4460	8.9	4.1
22	.62	12	37	100	214	458	573	57	614	731	8.3	5.9
23	.62	27	74	187	178	364	610	268	1430	450	7.6	3.8
24	1.1	25	100	305	142	281	424	603	660	299	6.7	13
25	4.7	16	330	247	115	210	309	555	356	193	5.8	11
26	3.8	11	280	198	97	176	234	319	215	127	5.5	8.0
27	16	8.2	200	165	91	136	210	221	131	95	4.8	5.7
28	31	6.6	150	139	85	111	165	154	90	79	4.8	4.5
29	15	6.0	110	118	---	94	126	105	206	65	4.8	4.7
30	9.6	20	80	101	---	81	944	81	3870	65	4.3	4.6
31	6.7	---	62	87	---	73	---	143	---	89	4.0	---
TOTAL	116.71	306.3	2595	9992	11332	5699	8857	9528	12119	14246	572.5	125.4
MEAN	3.76	10.2	83.7	322	405	184	295	307	404	460	18.5	4.18
MAX	31	27	330	2500	3170	563	1170	1480	3870	4460	64	13
MIN	.62	4.2	15	47	61	50	45	57	45	27	4.0	1.8
CFSM	.03	.09	.75	2.90	3.65	1.66	2.66	2.77	3.64	4.14	.17	.04
IN.	.04	.10	.87	3.35	3.80	1.91	2.97	3.19	4.06	4.77	.19	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1998, BY WATER YEAR (WY)

	1950	1954	1958	1962	1966	1970	1974	1978	1982	1986	1990	1994	1998
MEAN	33.5	89.4	256	293	352	399	233	192	112	64.0	47.3	43.7	
MAX	312	347	1028	798	1169	1187	746	881	630	460	375	702	
(WY)	1976	1980	1979	1951	1989	1997	1972	1983	1997	1998	1974	1979	
MIN	.000	.000	.28	11.5	24.8	39.8	45.6	14.3	4.41	1.59	.41	.000	
(WY)	1954	1954	1954	1981	1954	1983	1955	1976	1954	1951	1983	1953	

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1950 - 1998

ANNUAL TOTAL	95061.71	75488.91											
ANNUAL MEAN	260	207								175			
HIGHEST ANNUAL MEAN										319			1979
LOWEST ANNUAL MEAN										28.0			1954
HIGHEST DAILY MEAN	8400	Mar 2								8400	Mar 2		1997
LOWEST DAILY MEAN	.62	Oct 19								.00	Sep 11		1951
ANNUAL SEVEN-DAY MINIMUM	.67	Oct 17								.00	Sep 11		1951
INSTANTANEOUS PEAK FLOW										7480	Jul 20		1997
INSTANTANEOUS PEAK STAGE										18.85	Jul 20		1997
ANNUAL RUNOFF (CFSM)	2.35									1.86			1.58
ANNUAL RUNOFF (INCHES)	31.86									25.30			21.45
10 PERCENT EXCEEDS	579									502			429
50 PERCENT EXCEEDS	40									73			49
90 PERCENT EXCEEDS	3.6									3.2			3.4

KENTUCKY RIVER BASIN

03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY

LOCATION.--Lat 38°13'10", long 84°33'47", Scott County, Hydrologic Unit 05100205, on right bank, 300 ft upstream of bridge on Highway 25, 0.4 mi downstream from Dry Run, and at mile 33.4.

DRAINAGE AREA.--147 mi², of which about 8 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 803.40 ft above sea level, from topographic map. Prior to Oct. 1, 1994 at datum 3.40 ft. lower.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	24	232	78	103	123	142	1710	745	1600	99	14
2	7.5	29	142	67	95	106	139	874	283	567	68	15
3	7.5	28	77	68	87	97	103	559	177	342	53	17
4	7.4	28	65	67	104	93	108	397	143	239	44	15
5	7.3	34	52	72	116	98	103	300	130	190	38	13
6	7.0	33	41	558	138	94	98	234	122	142	33	12
7	5.5	28	32	1620	132	80	88	428	100	121	30	12
8	4.9	29	27	2850	142	97	85	1010	79	124	40	11
9	5.6	29	24	1090	164	659	189	652	222	113	93	9.7
10	6.0	26	165	688	242	613	267	458	413	86	62	10
11	6.0	24	255	476	919	401	249	343	480	69	82	11
12	5.5	24	156	379	3530	304	190	259	348	55	56	11
13	5.1	29	106	401	1970	247	160	208	833	45	35	9.7
14	8.8	80	82	352	1110	217	165	324	628	76	29	9.3
15	8.9	59	66	302	785	181	163	278	393	145	26	10
16	7.8	68	54	258	613	156	1010	185	271	116	23	11
17	7.5	50	44	227	526	142	1720	143	191	118	23	12
18	7.5	36	37	209	581	133	632	116	156	109	23	11
19	6.8	29	32	188	516	126	728	92	145	80	25	12
20	5.8	24	29	169	414	330	724	93	145	5290	23	12
21	5.8	25	26	148	341	639	498	90	629	4790	20	18
22	6.6	72	44	139	276	556	615	85	928	853	17	20
23	7.3	79	89	204	243	432	718	359	1730	521	16	14
24	10	86	122	328	215	331	487	739	832	349	16	13
25	29	65	375	278	183	265	352	676	452	240	16	15
26	18	52	339	234	157	229	270	398	286	198	16	15
27	28	41	233	209	147	194	250	286	207	163	15	13
28	67	31	177	184	138	164	215	220	152	137	13	13
29	53	30	138	156	---	143	176	161	251	116	12	12
30	38	61	119	135	---	125	1060	127	3590	185	12	13
31	28	---	97	117	---	113	---	282	---	169	13	---
TOTAL	427.0	1253	3477	12251	13987	7488	11704	12086	15061	17348	1071	383.7
MEAN	13.8	41.8	112	395	500	242	390	390	502	560	34.5	12.8
MAX	67	86	375	2850	3530	659	1720	1710	3590	5290	99	20
MIN	4.9	24	24	67	87	80	85	85	79	45	12	9.3
CFSM	.09	.28	.76	2.69	3.40	1.64	2.65	2.65	3.42	3.81	.24	.09
IN.	.11	.32	.88	3.10	3.54	1.89	2.96	3.06	3.81	4.39	.27	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998
MEAN	38.8	168	264	471	417	648
MAX	71.2	398	564	631	552	1574
(WY)	1994	1994	1997	1994	1997	1997
MIN	12.8	34.9	112	333	211	242
(WY)	1995	1995	1998	1993	1996	1998

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1993 - 1998

ANNUAL TOTAL	115100.5	96536.7		
ANNUAL MEAN	315	264	280	
HIGHEST ANNUAL MEAN			371	1997
LOWEST ANNUAL MEAN			209	1995
HIGHEST DAILY MEAN	11000	Mar 3	5290	Jul 20
LOWEST DAILY MEAN	4.9	Oct 8	4.9	Oct 8
ANNUAL SEVEN-DAY MINIMUM	5.5	Oct 7	5.5	Oct 7
INSTANTANEOUS PEAK FLOW			9270	Jul 20
INSTANTANEOUS PEAK STAGE			12.63	Jul 20
ANNUAL RUNOFF (CFSM)	2.15		1.80	
ANNUAL RUNOFF (INCHES)	29.13		24.43	
10 PERCENT EXCEEDS	698		620	632
50 PERCENT EXCEEDS	63		117	103
90 PERCENT EXCEEDS	9.9		12	11

KENTUCKY RIVER BASIN

03288110 ROYAL SPRINGS AT GEORGETOWN, KY

LOCATION.--Lat 38°12'34", long 84°33'43", Scott County, Hydrologic Unit 05100205, at Georgetown Water Plant, 200 ft downstream from dam, and 0.64 mi upstream from mouth.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, 30, 31, Feb. 4-8, and Aug. 8, 9. Records good 10 ft³/s to 200 ft³/s and poor below 10 ft³/s, above

200 ft³/s, and for periods of estimated record. Flow regulated by Georgetown Water Plant.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	5.0	43	20	21	30	35	84	47	69	29	.99
2	.05	9.2	27	19	20	27	24	70	29	60	25	.54
3	.10	12	21	18	18	24	20	59	22	54	19	.09
4	.00	9.0	20	16	18	22	20	54	20	48	15	.00
5	.00	8.2	16	18	17	22	18	47	21	41	12	.00
6	.00	7.3	13	59	16	21	16	41	19	34	9.3	.00
7	.00	6.1	11	91	15	19	14	50	15	35	8.4	.00
8	.00	6.1	9.0	101	20	24	18	59	12	34	33	.00
9	.00	6.5	8.5	80	29	57	32	55	29	30	40	.00
10	.00	6.3	40	68	38	55	35	52	33	27	24	.00
11	.00	5.7	38	60	76	52	28	45	37	26	19	.00
12	.00	3.8	30	56	115	49	23	40	45	24	14	.00
13	.00	4.1	26	54	99	45	20	36	64	20	11	.03
14	.12	15	21	51	83	39	24	34	58	32	9.7	.00
15	1.2	9.5	18	50	71	35	21	31	50	26	8.6	.00
16	.77	7.1	16	48	66	31	64	30	40	21	8.0	.00
17	.28	5.6	14	45	62	27	74	27	34	19	6.8	.00
18	.12	3.9	12	41	61	26	64	25	28	15	7.0	.00
19	.07	2.9	11	38	57	25	69	21	32	13	6.1	.00
20	.00	2.5	11	34	55	46	64	20	24	166	5.4	.00
21	.00	6.4	9.5	31	53	55	60	17	51	105	5.0	1.9
22	.00	20	21	29	50	56	59	16	90	77	4.9	2.0
23	.00	12	17	39	46	54	52	46	97	66	3.6	1.5
24	2.7	9.1	26	38	43	49	46	67	71	60	2.1	.67
25	5.8	6.9	54	36	41	45	42	60	55	50	2.1	.21
26	12	5.9	50	34	39	40	38	45	43	43	2.2	.00
27	24	5.5	41	32	37	35	38	37	37	38	1.4	.00
28	10	4.6	33	30	34	31	33	29	31	35	1.4	.00
29	6.4	3.8	29	28	---	27	30	24	55	34	2.1	.00
30	4.5	15	24	26	---	23	75	19	84	34	2.6	.00
31	5.0	---	22	23	---	22	---	28	---	32	1.1	---
TOTAL	73.44	225.0	732.0	1313	1300	1113	1156	1268	1273	1368	338.8	7.93
MEAN	2.37	7.50	23.6	42.4	46.4	35.9	38.5	40.9	42.4	44.1	10.9	.26
MAX	24	20	54	101	115	57	75	84	97	166	40	2.0
MIN	.00	2.5	8.5	16	15	19	14	16	12	13	1.1	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
MEAN	6.43	19.0	31.5	41.3	39.7	50.7	34.1	36.4	34.4	13.8	9.67	4.35
MAX	9.63	35.9	48.3	49.0	52.5	77.5	47.5	55.9	65.1	44.1	13.0	12.7
(WY)	1997	1994	1997	1996	1994	1997	1994	1996	1997	1998	1993	1996
MIN	2.37	6.15	22.0	33.5	29.4	35.9	17.5	15.0	3.04	1.21	6.67	.26
(WY)	1998	1995	1996	1997	1996	1998	1995	1993	1994	1995	1997	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1993 - 1998
ANNUAL TOTAL	9590.29	10168.17	
ANNUAL MEAN	26.3	27.9	27.3
HIGHEST ANNUAL MEAN			30.5
LOWEST ANNUAL MEAN			21.2
HIGHEST DAILY MEAN	313	166	313
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		360	2240
INSTANTANEOUS PEAK STAGE		4.84	7.30
10 PERCENT EXCEEDS	60	59	58
50 PERCENT EXCEEDS	16	24	22
90 PERCENT EXCEEDS	1.4	.04	1.8

KENTUCKY RIVER BASIN

03289000 SOUTH ELKHORN CREEK AT FORT SPRING, KY

LOCATION.--Lat 38°02'35", long 84°37'35", Fayette County, Hydrologic Unit 05100205, on downstream side of bridge on Fort Spring Road at U.S. Highway 60 at Fort Spring, 1.7 mi upstream from Shannon Run, 6.5 mi west of Lexington, and at mile 42.6.

DRAINAGE AREA.--24.0 mi², of which about 3.0 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1950 to September 1992, October 1997 to September 1998.

REVISED RECORDS.--WSP 1275: 1951-52. WSP 1505: Drainage area. WSP 1625: 1951-52 (P).

GAGE.--Water-stage recorder. Datum of gage is 834.25 ft above sea level. Prior to Aug. 12, 1952, and Feb. 18 to Nov. 16, 1965, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 17, 18, 24, 25, 27, 30, Dec. 1, 5-9, 13-20, Dec. 26-Jan. 1, Jan. 10, 11, 13, 14, 17-21, June 29, 30, and Aug. 9. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	7.2	64	21	14	18	45	230	114	103	18	3.5
2	3.0	16	35	19	13	16	24	110	43	61	14	3.3
3	2.8	13	25	19	11	16	19	72	29	43	12	3.3
4	2.5	9.2	26	18	15	15	18	51	33	35	11	3.2
5	2.3	6.6	19	30	18	17	15	40	31	28	9.6	3.0
6	1.9	5.5	16	189	21	14	14	35	24	24	8.8	3.1
7	1.7	6.2	14	369	24	14	13	225	18	29	8.1	2.7
8	1.6	7.9	13	289	27	24	31	168	15	38	7.7	2.5
9	1.5	7.3	12	146	33	143	36	91	35	24	9.7	3.6
10	1.4	5.7	96	97	50	69	44	64	87	20	9.4	4.5
11	1.6	4.6	57	64	296	50	32	48	66	17	7.7	4.7
12	1.6	3.7	39	68	411	39	25	37	113	17	6.8	4.9
13	1.2	8.1	31	58	228	33	21	30	137	29	6.3	5.2
14	8.6	31	25	49	137	29	27	26	77	152	11	5.1
15	4.2	16	22	46	94	25	21	22	91	54	8.2	5.4
16	2.2	11	18	37	76	22	347	18	54	45	6.2	6.0
17	1.8	8.5	17	34	65	20	168	16	38	37	5.3	5.8
18	1.5	6.6	15	30	69	20	89	14	30	28	4.7	6.5
19	1.3	5.7	14	27	55	19	128	12	41	24	4.1	6.7
20	1.2	4.7	13	25	48	112	88	24	26	712	3.3	6.6
21	.98	15	10	22	42	88	64	22	162	294	3.4	30
22	1.1	32	31	21	36	68	59	20	149	139	3.3	9.9
23	1.1	18	23	43	33	54	44	171	255	86	3.5	5.6
24	8.4	13	42	39	29	44	35	89	112	51	3.1	4.0
25	12	9.3	87	34	25	40	30	53	67	37	3.1	3.4
26	39	7.6	53	30	23	34	27	38	46	28	3.0	3.0
27	28	6.6	36	27	24	29	32	31	34	23	3.2	2.6
28	13	5.3	32	24	21	25	23	24	28	19	3.3	2.4
29	7.8	4.8	28	21	---	22	23	20	60	17	3.7	3.6
30	5.4	4.6	25	18	---	20	311	17	450	26	4.0	2.7
31	4.1	---	22	16	---	18	---	130	---	25	3.8	---
TOTAL	168.08	300.7	960	1930	1938	1157	1853	1948	2465	2265	209.3	156.8
MEAN	5.42	10.0	31.0	62.3	69.2	37.3	61.8	62.8	82.2	73.1	6.75	5.23
MAX	39	32	96	369	411	143	347	230	450	712	18	30
MIN	.98	3.7	10	16	11	14	13	12	15	17	3.0	2.4
CFSM	.26	.47	1.46	2.94	3.26	1.76	2.91	2.96	3.88	3.45	.32	.25
IN.	.29	.53	1.68	3.39	3.40	2.03	3.25	3.42	4.33	3.97	.37	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1998, BY WATER YEAR (WY)

	MEAN	8.47	21.2	51.3	50.8	65.2	69.3	44.6	33.3	20.7	16.2	11.7	9.38
MAX	57.0	64.0	198	159	227	172	145	156	83.2	97.0	68.0	81.4	
(WY)	1976	1980	1979	1951	1989	1964	1972	1983	1960	1958	1974	1979	
MIN	.000	.087	.86	4.43	6.48	11.0	10.3	3.92	1.14	.66	.006	.020	
(WY)	1954	1954	1954	1981	1954	1954	1971	1952	1954	1951	1965	1953	

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1950 - 1998

ANNUAL TOTAL	15350.88		
ANNUAL MEAN	42.1	33.3	
HIGHEST ANNUAL MEAN		62.1	1989
LOWEST ANNUAL MEAN		6.75	1954
HIGHEST DAILY MEAN	712	1310	Feb 15 1989
LOWEST DAILY MEAN	.98	.00	Aug 6 1951
ANNUAL SEVEN-DAY MINIMUM	1.3	.00	Aug 19 1951
INSTANTANEOUS PEAK FLOW	2040	2280	Feb 15 1989
INSTANTANEOUS PEAK STAGE	9.11	12.13	Sep 21 1979
INSTANTANEOUS LOW FLOW		.00	Aug 6 1951
ANNUAL RUNOFF (CFSM)	1.98	1.57	
ANNUAL RUNOFF (INCHES)	26.94	21.35	
10 PERCENT EXCEEDS	92	81	
50 PERCENT EXCEEDS	22	12	
90 PERCENT EXCEEDS	3.3	1.4	

KENTUCKY RIVER BASIN

03289200 TOWN BRANCH AT YARNALLTON ROAD AT YARNALLTON, KY

LOCATION.--Lat 38°06'13", long 84°35'17", Fayette County, Hydrologic Unit 05100205, on left bank, downstream side of bridge on Yarnallton Road (1977), 0.2 mi southwest of Yarnallton, 0.5 mi southwest of Leestown Road (Hwy 421), 1.1 northwest of Old Frankfort Pike (Hwy 1681), and at mile 4.3.

DRAINAGE AREA.--30.0 mi².

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Elevation of gage is 830 ft above sea level (from topographic map).

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, and Aug. 9. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	39	110	38	45	55	127	346	240	392	59	55
2	28	47	74	39	46	54	70	231	165	250	51	56
3	28	48	58	36	43	52	64	179	146	181	51	54
4	26	37	66	33	50	56	64	150	168	145	50	54
5	24	33	48	76	55	61	55	131	173	119	47	51
6	27	28	38	251	67	51	53	128	148	104	47	49
7	29	29	33	518	76	48	53	309	133	101	46	47
8	27	37	32	419	81	78	92	242	133	126	44	50
9	27	27	34	260	100	237	108	185	225	97	50	48
10	30	27	165	177	129	135	117	158	187	89	56	47
11	25	26	91	137	432	110	81	141	167	80	52	47
12	23	24	71	147	566	96	71	129	289	74	49	45
13	27	55	56	126	361	86	69	123	338	75	47	43
14	60	68	45	106	249	76	95	129	230	197	63	45
15	34	41	42	99	185	66	78	118	218	119	51	45
16	31	33	37	92	163	63	381	118	179	112	47	45
17	29	30	34	88	151	60	216	114	166	95	51	42
18	26	28	31	76	160	61	160	116	160	85	53	43
19	24	25	29	72	126	56	224	118	240	82	54	41
20	26	22	25	67	112	186	168	166	162	1960	53	40
21	24	61	22	61	97	141	142	158	379	472	52	143
22	30	71	87	65	87	121	156	153	337	285	51	64
23	25	43	44	108	83	105	123	372	461	196	51	52
24	68	37	93	83	76	93	109	229	288	136	56	46
25	50	31	145	75	68	92	99	172	228	103	57	45
26	143	28	92	73	65	81	93	153	197	84	58	45
27	73	21	74	68	70	72	108	147	179	76	56	43
28	47	19	61	63	62	65	91	138	166	70	56	46
29	34	17	56	59	---	59	108	135	1460	62	55	44
30	28	45	53	55	---	59	444	132	964	113	54	47
31	25	---	45	50	---	56	---	284	---	82	56	---
TOTAL	1130	1077	1891	3617	3805	2631	3819	5404	8526	6162	1623	1522
MEAN	36.5	35.9	61.0	117	136	84.9	127	174	284	199	52.4	50.7
MAX	143	71	165	518	566	237	444	372	1460	1960	63	143
MIN	23	17	22	33	43	48	53	114	133	62	44	40
CFSM	.09	.09	.15	.29	.34	.21	.32	.43	.71	.49	.13	.13
IN.	.10	.10	.17	.33	.35	.24	.35	.50	.79	.57	.15	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

MEAN	36.5	35.9	61.0	117	136	84.9	127	174	284	199	52.4	50.7
MAX	36.5	35.9	61.0	117	136	84.9	127	174	284	199	52.4	50.7
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	36.5	35.9	61.0	117	136	84.9	127	174	284	199	52.4	50.7
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	41207	
ANNUAL MEAN	113	
HIGHEST DAILY MEAN	1960	Jul 20
LOWEST DAILY MEAN	17	Nov 29
ANNUAL SEVEN-DAY MINIMUM	26	Oct 17
INSTANTANEOUS PEAK FLOW	6750	Jun 29
INSTANTANEOUS PEAK STAGE	9.12	Jun 29
ANNUAL RUNOFF (CFSM)	.28	
ANNUAL RUNOFF (INCHES)	3.80	
10 PERCENT EXCEEDS	224	
50 PERCENT EXCEEDS	69	
90 PERCENT EXCEEDS	30	

KENTUCKY RIVER BASIN

03289300 SOUTH ELKHORN CREEK NEAR MIDWAY, KY

LOCATION.--Lat 38°08'27", long 84°38'43", Scott County, Hydrologic Unit 05100205, on right bank, 5 ft upstream from bridge on U.S. Route 62/42, 2.2 mi southeast of Midway, 6.5 mi downstream from Town Branch, and at mile 27.6.

DRAINAGE AREA.--105 mi² of which about 21 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--September 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 790 ft above sae level.

REMARKS.--Estimated daily discharges: Oct. 1-10. Records fair except for period of estimated record, which is poor. Water is diverted from the Kentucky River for use by the city of Lexington and is discharged into Town Branch at a site 17 mi above gage. Discharge partially regulated by low-head turbine, 1 mile upstream, since October 1989. Regulation does not effect peak discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	35	403	100	74	117	204	1060	683	842	127	19
2	21	73	262	91	69	108	141	590	266	467	102	13
3	20	100	166	88	63	103	119	413	181	321	89	19
4	18	84	132	81	74	98	113	311	158	240	77	20
5	17	66	135	80	86	111	102	249	164	193	69	11
6	21	54	108	544	86	96	92	205	144	158	62	13
7	27	43	92	964	108	87	87	373	110	135	55	11
8	24	44	77	1740	123	117	118	636	95	173	43	19
9	22	56	72	783	142	459	180	400	165	129	86	17
10	20	51	73	505	201	371	187	310	210	105	78	16
11	18	46	348	373	629	281	158	254	249	88	60	11
12	16	42	222	332	2130	235	131	211	332	73	53	10
13	24	41	154	308	1220	202	114	177	484	64	44	12
14	57	104	128	257	727	178	140	161	377	271	40	19
15	58	121	110	231	515	154	119	136	323	256	53	14
16	47	84	97	209	418	139	666	119	246	174	41	13
17	29	70	85	182	357	129	656	104	188	157	39	18
18	17	60	76	163	364	123	399	93	153	122	40	16
19	19	53	67	147	302	121	473	82	190	103	31	9.9
20	36	46	57	134	264	303	421	116	147	2790	34	12
21	28	38	52	119	230	393	337	136	355	3940	31	82
22	25	114	129	110	202	343	318	92	421	774	11	94
23	22	138	113	185	187	292	256	370	881	522	18	36
24	14	97	131	188	169	250	215	380	555	356	35	27
25	111	80	391	172	151	221	181	254	360	268	22	23
26	71	58	287	157	138	200	162	193	261	214	19	17
27	233	55	217	144	139	174	174	160	200	180	17	15
28	110	42	176	127	130	154	144	134	159	157	18	17
29	85	32	152	113	---	138	129	114	300	134	14	15
30	43	36	141	101	---	127	666	97	2730	135	18	15
31	39	---	119	86	---	119	---	91	---	197	22	---
TOTAL	1314	1963	4772	8814	9298	5943	7202	8021	11087	13738	1448	633.9
MEAN	42.4	65.4	154	284	332	192	240	259	370	443	46.7	21.1
MAX	233	138	403	1740	2130	459	666	1060	2730	3940	127	94
MIN	14	32	52	80	63	87	87	82	95	64	11	9.9
CFSM	.40	.62	1.47	2.71	3.16	1.83	2.29	2.46	3.52	4.22	.44	.20
IN.	.47	.70	1.69	3.12	3.29	2.11	2.55	2.84	3.93	4.87	.51	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1998, BY WATER YEAR (WY)

MEAN	65.8	137	241	248	296	317	188	227	190	109	69.9	56.1
MAX	151	307	673	405	1030	1165	366	718	606	443	255	108
(WY)	1991	1994	1991	1996	1989	1997	1984	1983	1997	1998	1992	1992
MIN	31.2	51.9	86.5	50.4	114	60.1	61.0	58.9	39.5	35.8	32.5	21.1
(WY)	1995	1995	1990	1986	1993	1983	1986	1988	1988	1983	1983	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1982 - 1998
ANNUAL TOTAL	90570	74233.9	
ANNUAL MEAN	248	203	178
HIGHEST ANNUAL MEAN			276
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	10700	3940	10700
LOWEST DAILY MEAN	14	9.9	3.1
ANNUAL SEVEN-DAY MINIMUM	20	14	14
INSTANTANEOUS PEAK FLOW		7510	12300
INSTANTANEOUS PEAK STAGE		21.29	26.37
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	2.36	1.94	1.70
ANNUAL RUNOFF (INCHES)	32.09	26.30	23.05
10 PERCENT EXCEEDS	483	395	365
50 PERCENT EXCEEDS	91	121	93
90 PERCENT EXCEEDS	31	19	33

KENTUCKY RIVER BASIN

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY

LOCATION.--Lat 38°26'20", long 84°57'48", Henry County, Hydrologic Unit 05100205, on left bank at lock 2 at Lockport, 0.1 mi downstream from Sixmile Creek and at mile 31.0.

DRAINAGE AREA.--6,180 mi², of which about 196 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1305. Monthly discharge only for June to January 1931, published in WSP 1305; figures of daily discharge published in WSP 698 are unreliable.

REVISED RECORDS.--WSP 1385: 1926-29, 1932, 1934-37, 1945. WSP 1555: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 433.36 ft above sea level. Prior to August 29, 1975, nonrecording gage at same site and datum. Auxiliary nonrecording gage at lock 3, 11.0 mi upstream.

REMARKS.--Estimated daily discharges: Nov. 30, Jan. 13, Apr. 21-23, July 26-29, and Aug. 9. Records fair except for periods of estimated record which are poor. Flow regulated by Carr Fork Lake beginning January 1976 (station 03277446), Buckhorn Lake beginning December 1960 (station 03280800), Herrington Lake beginning November 1925 (station 03286000), and by hydroelectric plant at lock 7.

COOPERATION.--Auxiliary gage readings furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 DAILY MEAN VALUES

Table with 13 columns: DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. Rows include daily values from day 1 to 31, plus summary rows for TOTAL, MEAN, MAX, and MIN.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

Table with 13 columns for months (OCT to SEP) and 4 rows for MEAN, MAX, MIN, and (WY).

SUMMARY STATISTICS

Table comparing statistics for 'FOR 1997 CALENDAR YEAR', 'FOR 1998 WATER YEAR', and 'WATER YEARS 1961 - 1998'. Rows include ANNUAL TOTAL, ANNUAL MEAN, HIGHEST ANNUAL MEAN, LOWEST ANNUAL MEAN, HIGHEST DAILY MEAN, LOWEST DAILY MEAN, ANNUAL SEVEN-DAY MINIMUM, INSTANTANEOUS PEAK FLOW, INSTANTANEOUS PEAK STAGE, and 10, 50, and 90 PERCENT EXCEEDS.

KENTUCKY RIVER BASIN

03291500 EAGLE CREEK AT GLENCOE, KY

LOCATION.--Lat 38°42'18", long 84°49'26", Owen County, Hydrologic Unit 05100205, on left bank 600 ft upstream from bridge on U.S. Highway 127, 0.6 mi south of Glencoe, 5.8 mi downstream from Termile Creek, and at mile 21.6.

DRAINAGE AREA.--437 mi².

PERIOD OF RECORD.--April 1915 - September 1918, October 1918 - December 1920 (gage heights only), May 1928 - September 1931, June 1938 - September 1977, December 1988 to current year. Monthly discharge only for May 1915, June 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1916-17, 1920(M). WSP 1555: Drainage area. WSP 1908: 1939-40(M), 1943(M), 1945(M), 1948(P), 1950(M), 1956- 57(P), 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 508.52 ft above sea level. Prior Oct. 1, 1950, nonrecording gages at same site and datum. Oct. 1, 1950 to Oct. 19, 1960, nonrecording gage 600 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	6.1	712	72	96	152	263	6410	1660	568	52	12
2	.39	6.7	415	62	88	137	287	1810	1010	301	42	8.6
3	.37	7.5	178	56	82	126	226	1020	276	157	47	8.3
4	.34	7.2	97	53	80	118	197	635	163	112	54	7.8
5	.40	7.3	83	52	101	120	252	476	120	92	39	6.6
6	.50	6.8	73	2800	133	119	234	365	108	66	30	5.7
7	.56	5.8	49	6460	147	110	187	1400	99	56	24	6.8
8	.55	5.5	39	10800	165	149	205	3940	88	464	20	6.2
9	.52	5.4	34	2420	237	4160	1860	1460	1730	223	79	5.1
10	.47	5.3	510	1240	777	1470	2160	833	2770	98	621	4.4
11	.44	5.4	1510	610	4260	692	1190	619	5550	70	325	4.4
12	.35	7.6	516	375	4570	397	533	405	2760	51	134	4.2
13	.32	8.5	209	294	2720	303	332	301	4320	36	80	3.8
14	.44	11	127	250	1440	261	273	1080	1980	127	54	3.8
15	.37	12	91	222	949	223	1690	261	1380	1830	43	3.5
16	.30	20	69	206	680	192	10700	191	984	846	41	3.2
17	.26	14	56	181	743	173	9580	161	454	356	34	3.0
18	.24	12	47	161	1290	181	2400	126	276	185	29	2.9
19	.21	10	42	141	1520	210	2550	104	1640	115	27	3.0
20	.20	9.2	37	127	742	3990	2050	99	676	7840	23	2.8
21	.17	17	34	119	545	3850	911	98	423	8030	20	2.7
22	.15	24	130	116	424	1850	1040	90	1770	1010	17	3.3
23	.13	24	586	156	333	1090	1510	2230	11100	397	15	3.0
24	.17	32	547	246	279	619	986	2620	4560	280	13	3.0
25	.30	28	2510	255	235	418	585	1280	766	176	12	2.9
26	.39	23	1070	225	202	332	420	655	356	125	13	2.7
27	.56	19	388	177	185	272	498	334	226	97	12	2.5
28	.75	19	208	151	169	234	523	477	160	75	11	2.2
29	1.7	23	139	134	---	202	807	319	123	61	12	2.2
30	4.1	49	108	120	---	178	10700	186	161	52	12	1.6
31	5.7	---	88	107	---	161	---	136	---	58	14	---
TOTAL	21.77	431.3	10702	28388	23192	22489	55149	30121	47689	23954	1949	132.2
MEAN	.70	14.4	345	916	828	725	1838	972	1590	773	62.9	4.41
MAX	5.7	49	2510	10800	4570	4160	10700	6410	11100	8030	621	12
MIN	.13	5.3	34	52	80	110	187	90	88	36	11	1.6
CFSM	.00	.03	.79	2.10	1.90	1.66	4.21	2.22	3.64	1.77	.14	.01
IN.	.00	.04	.91	2.42	1.97	1.91	4.69	2.56	4.06	2.04	.17	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1998, BY WATER YEAR (WY)

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	105	342	649	953	1082	1314	946	682	474	246	124	104																																																																							
MAX	1005	1641	1874	3170	3295	5197	2910	3190	2673	1016	755	1355																																																																							
(WY)	1976	1973	1952	1950	1956	1964	1948	1996	1997	1957	1977	1965																																																																							
MIN	.000	.000	.000	2.85	44.6	120	131	25.5	1.56	.14	.000	.000																																																																							
(WY)	1931	1931	1931	1931	1954	1941	1976	1930	1930	1930	1930	1930																																																																							

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1916 - 1998
ANNUAL TOTAL	253705.02	244218.27	
ANNUAL MEAN	695	669	581
HIGHEST ANNUAL MEAN			1059
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	34000	Mar 2	11100 Jun 23
LOWEST DAILY MEAN	.03	Aug 7	.13 Oct 23
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 6	.18 Oct 18
INSTANTANEOUS PEAK FLOW			19100 Apr 16
INSTANTANEOUS PEAK STAGE			16.67 Apr 16
INSTANTANEOUS LOW FLOW			29.08 Mar 2 1997
ANNUAL RUNOFF (CFSM)	1.59	1.53	1.1
ANNUAL RUNOFF (INCHES)	21.60	20.79	18.07
10 PERCENT EXCEEDS	1280	1750	1310
50 PERCENT EXCEEDS	119	133	99
90 PERCENT EXCEEDS	.40	2.9	1.2

HARRODS CREEK BASIN

03292473 HARRODS CREEK NEAR PROSPECT, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'06", long 85°36'09", Jefferson County, Hydrologic Unit 05140101, at site off Hunting Creek Drive, 0.9 mi above Wolf Creek, and at mile 3.0.

DRAINAGE AREA.--92.1 mi².

PERIOD OF RECORD.--March 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC					
09...	0835	556	7.8	3.0	12.8
JAN					
21...	0835	495	8.2	3.4	12.7
FEB					
23...	0855	435	8.5	8.0	12.7
MAR					
17...	0845	500	8.4	7.0	11.1
APR					
21...	0900	439	7.9	12.5	9.5
MAY					
19...	0830	483	7.9	22.0	9.3
JUN					
17...	0830	470	8.0	21.0	8.8
JUL					
20...	0900	536	7.8	26.5	7.1
AUG					
17...	0850	555	7.6	23.5	6.0

GOOSE CREEK BASIN

03292474 GOOSE CREEK AT OLD WESTPORT ROAD NR ST. MATTHEWS, KY

LOCATION.--Lat 38°16'33", long 85°36'22", Jefferson County, Hydrologic Unit 05140101, on downstream side of bridge on Westport Road, left bank, 1.2 mile northeast of St. Matthews, 5.0 miles above Little Goose Creek, and at mile 5.5

DRAINAGE AREA.--6.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage.

REMARKS.--No estimated daily discharges. Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	7.0	11	2.7	2.9	5.0	9.0	20	4.9	23	7.9	.71
2	.29	3.6	5.1	2.6	3.0	4.7	6.2	13	3.7	15	6.0	.70
3	.25	2.5	5.7	2.5	2.8	4.5	5.9	13	3.1	11	5.0	.62
4	.20	1.7	5.4	2.4	3.0	4.4	6.8	11	3.9	10	4.2	.59
5	.16	1.3	3.9	3.1	3.7	4.3	5.4	8.6	3.7	8.2	3.7	.57
6	.14	1.1	3.2	19	4.3	4.0	5.0	7.4	3.1	6.7	3.9	.58
7	.14	1.2	2.8	56	4.8	3.9	4.8	11	2.7	14	7.8	.61
8	.17	1.3	2.5	52	5.7	24	4.9	8.4	2.6	14	35	.72
9	.23	1.4	2.6	24	6.6	38	6.8	7.1	5.3	7.1	15	1.2
10	.22	1.3	14	16	9.2	15	5.9	6.2	19	5.6	7.0	.54
11	.21	1.2	5.9	12	39	11	4.7	5.5	21	4.8	5.0	.36
12	.18	1.2	4.2	11	34	9.9	4.3	4.7	21	4.2	3.9	.54
13	.48	5.2	3.6	9.8	23	8.9	4.2	4.1	27	4.6	3.2	.42
14	1.6	5.3	3.2	8.0	18	7.6	8.2	3.7	16	4.8	2.8	.37
15	.63	2.9	2.7	7.4	14	6.5	8.8	3.4	13	33	2.4	.44
16	.45	2.2	2.5	6.5	16	5.7	62	3.1	10	16	2.1	.58
17	.36	1.7	2.4	5.7	17	5.4	24	2.9	8.3	10	1.9	.62
18	.30	1.6	2.2	4.9	18	6.5	17	2.7	7.1	7.4	1.8	.67
19	.30	1.6	2.1	4.5	14	5.8	30	2.4	11	5.9	1.7	.70
20	.30	1.5	1.9	4.2	13	51	19	5.5	6.2	29	1.4	.55
21	.28	4.5	1.9	3.8	11	27	16	3.2	36	13	1.2	.72
22	.28	4.5	5.3	4.0	9.6	19	13	8.5	16	9.6	1.1	.70
23	.27	2.8	3.8	4.9	8.9	15	11	75	40	7.6	1.0	.45
24	1.5	2.1	12	4.4	7.7	12	10	18	19	6.2	1.1	.36
25	1.9	1.8	11	4.1	6.6	11	8.8	12	14	5.1	1.0	.39
26	1.8	1.7	7.1	3.8	6.0	10	8.1	9.3	11	4.5	1.7	.37
27	1.5	1.6	5.6	3.8	6.4	8.7	10	9.0	8.9	4.1	1.1	.24
28	1.0	1.5	4.4	3.7	5.5	8.1	6.8	6.8	7.3	3.8	.91	.22
29	.93	1.5	4.0	3.6	---	6.9	12	5.8	30	3.6	1.1	.18
30	.68	23	3.8	3.4	---	6.0	40	5.1	68	32	.90	.19
31	.67	---	3.1	3.1	---	7.4	---	5.9	---	16	.79	---
TOTAL	17.75	91.8	148.9	296.9	313.7	357.2	378.6	302.3	442.8	339.8	133.60	15.91
MEAN	.57	3.06	4.80	9.58	11.2	11.5	12.6	9.75	14.8	11.0	4.31	.53
MAX	1.9	23	14	56	39	51	62	75	68	33	35	1.2
MIN	.14	1.1	1.9	2.4	2.8	3.9	4.2	2.4	2.6	3.6	.79	.18
CFSM	.10	.51	.80	1.60	1.87	1.92	2.10	1.63	2.46	1.83	.72	.09
IN.	.11	.57	.92	1.84	1.94	2.21	2.35	1.87	2.75	2.11	.83	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MEAN	1.68	3.43	13.3	10.9	11.0	44.3	8.66	10.1	20.5	6.42	4.27	.58
MAX	2.79	3.80	21.8	12.2	11.2	77.1	12.6	10.5	26.3	11.0	4.31	.63
(WY)	1997	1997	1997	1997	1998	1997	1998	1997	1997	1998	1998	1997
MIN	.57	3.06	4.80	9.58	10.8	11.5	4.71	9.75	14.8	1.88	4.23	.53
(WY)	1998	1998	1998	1998	1997	1998	1997	1998	1998	1997	1997	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1997 - 1998
ANNUAL TOTAL	4792.16	2839.26	
ANNUAL MEAN	13.1	7.78	11.3
HIGHEST ANNUAL MEAN			14.8
LOWEST ANNUAL MEAN			7.78
HIGHEST DAILY MEAN	800	75	800
LOWEST DAILY MEAN	.12	.14	.12
ANNUAL SEVEN-DAY MINIMUM	.18	.18	.18
INSTANTANEOUS PEAK FLOW		380	3530
INSTANTANEOUS PEAK STAGE		3.70	5.93
ANNUAL RUNOFF (CFSM)	2.19	1.30	1.88
ANNUAL RUNOFF (INCHES)	29.71	17.60	25.59
10 PERCENT EXCEEDS	21	18	21
50 PERCENT EXCEEDS	4.2	4.7	4.9
90 PERCENT EXCEEDS	.45	.56	.66

GOOSE CREEK BASIN

03292474 GOOSE CREEK AT OLD WESTPORT ROAD NEAR ST. MATTHEWS, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
09...	1300	2.5	581	8.4	6.5	13.9
JAN						
21...	1230	3.9	525	8.4	5.5	13.8
FEB						
23...	1225	8.8	482	8.7	9.0	13.8
MAR						
17...	1225	5.4	536	8.4	11.0	12.8
APR						
21...	1155	16	456	8.0	12.5	11.2
MAY						
19...	1205	2.5	523	8.1	20.0	9.8
JUN						
17...	1145	8.2	462	8.4	20.0	11.0
JUL						
20...	1320	43	229	7.4	21.5	7.6
AUG						
17...	1310	2.0	550	8.1	23.5	10.5

GOOSE CREEK BASIN

03292475 GOOSE CREEK AT U.S. HWY 42 NEAR GLENVIEW ACRES, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'12", long 85°37'41", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42, 1.7 mi above Little Goose Creek, and at mile 2.1.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
09...	1110	3.0	579	8.2	4.0	11.8
JAN						
21...	1055	4.9	547	8.4	4.0	13.4
FEB						
23...	1115	13	516	8.7	8.0	13.9
MAR						
17...	1115	7.0	539	8.9	9.0	16.2
APR						
21...	1050	24	487	8.0	12.0	10.1
MAY						
19...	1045	3.7	543	8.1	18.5	8.6
JUN						
17...	1040	9.5	489	8.3	19.0	8.9
JUL						
20...	1230	166	335	8.0	22.0	8.2
AUG						
17...	1135	2.9	550	8.2	22.0	8.3

GOOSE CREEK BASIN

03292480 LITTLE GOOSE CREEK NEAR HARRODS CREEK, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'45", long 85°37'33", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42 and at mile 1.8.

DRAINAGE AREA.--5.8 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
09...	1000	3.0	593	8.3	4.5	12.8
JAN						
21...	0950	3.6	588	8.3	4.0	12.8
FEB						
23...	0945	8.4	601	8.4	--	11.9
MAR						
17...	0955	4.7	584	8.4	8.0	12.5
APR						
21...	0950	16	533	8.0	11.5	10.2
MAY						
19...	0950	2.9	580	8.1	17.5	9.0
JUN						
17...	0930	8.4	490	8.2	18.0	9.0
JUL						
20...	1000	46	450	8.1	22.0	7.9
AUG						
17...	1025	2.3	601	8.1	21.5	8.2

BEARGRASS CREEK BASIN

03292500 SOUTH FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION.--Lat 38°12'41", long 85°42'09", Jefferson County, Hydrologic Unit 05140101, on right bank, 10 ft downstream of Trevilian Way Bridge at Louisville, 4.9 mi upstream from Middle Fork Beargrass, and at mile 6.5.

DRAINAGE AREA.--17.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1940, August 1944 to September 1953, October 1954 to September 1983 (High water records only, October 1962 to June 1970), and June 1988 to current year. Monthly discharge only for October to December 1939, published in WSP 1305.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 445.60 ft, Louisville city datum. Prior to Oct. 29, 1953, at datum 5.00 ft higher. Oct. 29, 1953, to June 24, 1970, at datum 3.00 ft higher. Prior to April 8, 1994, gage located 125 ft upstream at same datum.

REMARKS.--No estimated daily discharges: Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1943 reached a stage of 18.1 ft, present datum, from information furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	55	46	6.1	5.9	7.3	34	76	27	19	16	3.5
2	1.2	11	14	6.1	6.3	6.7	11	41	12	13	11	3.4
3	1.2	6.6	29	6.2	6.7	6.6	13	37	9.9	10	8.1	3.5
4	1.3	5.2	20	6.8	8.3	7.1	24	25	19	13	6.9	3.7
5	1.6	3.8	9.8	17	16	7.2	11	19	20	8.5	6.2	3.6
6	1.7	4.4	7.5	125	20	5.7	9.3	15	11	7.7	18	3.3
7	2.0	4.6	6.0	263	26	6.1	8.7	33	8.2	146	63	3.9
8	2.1	5.0	5.6	221	26	73	10	20	8.0	77	51	6.4
9	2.3	5.1	6.0	58	29	166	35	15	35	18	38	6.7
10	2.4	6.3	79	30	38	25	14	13	376	12	12	6.5
11	2.7	6.7	15	20	169	16	9.7	11	133	9.6	9.2	6.2
12	2.5	8.0	10	18	109	12	8.8	9.9	90	8.4	7.3	6.1
13	13	52	15	17	49	10	8.0	8.9	143	8.0	6.6	6.3
14	23	23	7.8	11	30	9.1	36	8.4	58	11	5.7	6.3
15	3.8	6.7	6.2	10	21	7.9	31	7.9	37	127	5.4	6.2
16	2.8	5.5	5.9	8.7	42	7.1	337	7.6	25	27	5.2	6.1
17	2.8	4.9	6.6	8.9	33	6.9	100	6.5	19	16	4.6	7.3
18	2.8	6.4	6.7	7.5	29	16	42	6.2	16	11	4.4	8.3
19	2.7	6.0	7.6	6.9	17	7.9	125	5.9	44	9.3	4.7	9.5
20	5.0	5.7	8.2	6.2	16	245	45	26	17	57	4.5	9.8
21	6.6	25	9.4	5.8	13	74	32	7.9	148	13	4.3	22
22	10	14	38	6.9	11	39	31	56	72	9.3	4.5	12
23	12	5.8	11	13	11	27	20	235	113	8.2	4.3	3.5
24	26	4.4	79	7.9	9.0	20	16	43	39	7.1	4.6	3.1
25	10	4.2	42	7.0	8.3	27	14	27	25	6.2	4.9	3.0
26	9.3	5.2	16	5.3	7.8	18	13	18	18	5.4	18	3.4
27	7.3	5.3	12	5.1	12	15	46	31	15	5.1	4.0	3.3
28	7.3	5.7	9.2	4.8	8.2	13	14	15	12	4.8	3.5	5.4
29	7.9	6.6	8.9	4.4	---	12	70	12	46	4.6	14	5.7
30	8.4	156	9.3	4.3	---	11	216	11	83	204	4.2	7.1
31	10	---	7.0	4.3	---	20	---	55	---	53	3.7	---
TOTAL	193.6	464.1	553.7	922.2	777.5	924.6	1384.5	903.2	1679.1	929.2	357.8	185.1
MEAN	6.25	15.5	17.9	29.7	27.8	29.8	46.2	29.1	56.0	30.0	11.5	6.17
MAX	26	156	79	263	169	245	337	235	376	204	63	22
MIN	1.2	3.8	5.6	4.3	5.9	5.7	8.0	5.9	8.0	4.6	3.5	3.0
CFSM	.36	.90	1.04	1.73	1.61	1.73	2.68	1.69	3.25	1.74	.67	.36
IN.	.42	1.00	1.20	1.99	1.68	2.00	2.99	1.95	3.63	2.01	.77	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	7.47	13.9	23.4	31.2	39.4	45.1	32.5	28.8	20.1	15.9	10.3	7.56
MAX	46.7	53.9	73.6	125	107	201	95.3	103	78.3	126	54.7	86.3
(WY)	1978	1974	1979	1950	1989	1997	1948	1961	1950	1973	1974	1979
MIN	.30	.84	1.32	.71	8.52	6.41	3.13	5.51	1.11	.89	.23	.000
(WY)	1953	1953	1977	1940	1953	1983	1976	1962	1959	1956	1952	1953

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1940 - 1998

ANNUAL TOTAL	13732.36	9274.6	
ANNUAL MEAN	37.6	25.4	23.1
HIGHEST ANNUAL MEAN			41.6
LOWEST ANNUAL MEAN			9.35
HIGHEST DAILY MEAN	1960	Mar 2	376
LOWEST DAILY MEAN	.49	Sep 28	1.2
ANNUAL SEVEN-DAY MINIMUM	.91	Sep 25	1.6
INSTANTANEOUS PEAK FLOW			2100
INSTANTANEOUS PEAK STAGE			14.60
INSTANTANEOUS LOW FLOW			17.81
ANNUAL RUNOFF (CFSM)	2.19	1.48	.00
ANNUAL RUNOFF (INCHES)	29.70	20.06	1.34
10 PERCENT EXCEEDS	60	55	18.23
50 PERCENT EXCEEDS	10	9.9	49
90 PERCENT EXCEEDS	3.1	4.3	7.6
			.90

BEARGRASS CREEK BASIN

03292500 SOUTH FORK BEARGRASS CREEK AT TREVILIAN WAY AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992, July 1995 to October 1995.

pH: May 1988 to September 1992, July 1995 to October 1995.

WATER TEMPERATURE: May 1988 to September 1992, July 1995 to October 1995.

DISSOLVED OXYGEN: May 1988 to September 1992, July 1995 to October 1995.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1920 microsiemens, Sept. 26, 1995; minimum, 122 microsiemens, May 16, 1990.

pH: Maximum, 9.5 units, Aug. 10, 1988; minimum, 4.9 units, Mar. 6-7, 1991.

WATER TEMPERATURE: Maximum, 33.6°C, Aug. 17, 1988; minimum, 0.0°C, Dec. 21, 29, 30, 1989.

DISSOLVED OXYGEN: Maximum, 16.2 mg/L, Mar. 1, 1989; minimum, 2.1 mg/L, Aug. 9, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
02...	0850	14	1160	7.6	8.0	10.1
JAN						
06...	0820	328	426	7.3	12.5	8.4
FEB						
10...	0845	25	944	7.7	6.5	10.0
MAR						
03...	0840	6.5	591	7.8	6.0	11.5
APR						
07...	0850	8.8	702	7.5	13.5	8.5
MAY						
05...	0825	20	578	7.6	13.5	7.5
JUN						
09...	0830	64	319	7.6	17.0	8.0
JUL						
07...	0825	6.0	506	7.6	25.5	5.0
AUG						
04...	0830	8.4	579	7.6	24.5	5.9

BEARGRASS CREEK BASIN

03292550 SOUTH FORK BEARGRASS CREEK AT WINTER AVENUE AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'04", long 85°45'50", Jefferson County, Hydrologic Unit 05140101, on left bank of floodwall, 100 ft. upstream of Winter Avenue, 1.4 mi above Middle Fork Beargrass Creek, and at mile 3.3.

DRAINAGE AREA.--22.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in-cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1995 to October 1995.

pH: July 1995 to October 1995.

WATER TEMPERATURE: July 1995 to October 1995.

DISSOLVED OXYGEN: July 1995 to October 1995.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1410 microsiemens, Oct. 1, 1995; minimum, 77 microsiemens, Oct. 5, 1995.

pH: Maximum, 8.6 units, Aug. 30, 1995; minimum, 6.8 units, Aug. 1, 1995.

WATER TEMPERATURE: Maximum, 29.8° C, July 31, 1995; minimum, 8.9° C, Oct. 19, 1995.

DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Aug. 28, 1995; minimum, 2.1 mg/L, July 16, 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
02...	1120	17	726	7.7	9.0	10.4
JAN						
06...	1310	186	350	7.7	12.5	9.3
FEB						
10...	1050	25	1020	7.8	7.0	12.0
MAR						
03...	1055	8.9	632	8.0	7.0	12.5
APR						
07...	1055	10	638	7.4	13.5	9.0
MAY						
05...	1050	22	622	7.8	15.5	8.9
JUN						
09...	1020	68	501	7.5	17.5	6.7
JUL						
07...	0945	13	554	7.4	23.5	4.0
AUG						
04...	1025	11	601	7.6	23.5	6.7

BEARGRASS CREEK BASIN

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION.--Lat 38°14'14", long 85°39'53", Jefferson County, Hydrologic Unit 05140101, on right bank 75 ft downstream from bridge on Old Cannons Lane at Louisville, 1.7 mi downstream from Weicher Creek, 5.4 mi upstream from mouth and 7.0 mi upstream from Ohio River.

DRAINAGE AREA.--18.9 mi², of which about 0.5 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1625: 1945(M), 1948(M), 1950(P), 1951-52(M), 1954-55(M), 1957(M), drainage area. WRD KY 72-1: 1950(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.70 ft, Louisville city datum. See WDR KY-90-1 for history of changes prior to July 26, 1971.

REMARKS.--Estimated daily discharges: Oct. 7-11, Oct. 17 to Nov. 20, Nov. 23-29, Dec. 2-9, 11-21, Dec. 26 to Jan 5, Jan. 10-22, Jan. 24 to Feb. 9, and May 8 to June 25. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1943 reached a stage of 9.1 ft, present site and datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	47	55	6.5	6.1	9.2	34	78	30	38	24	3.7
2	.70	15	18	6.2	6.6	8.6	13	48	10	23	16	3.4
3	.60	8.0	31	5.9	7.1	8.2	13	41	7.9	17	12	3.4
4	.55	6.0	23	5.7	10	8.0	19	34	21	17	9.9	3.2
5	.57	4.5	12	15	17	8.3	11	24	20	14	8.7	3.1
6	.44	4.7	8.8	108	21	7.3	10	19	10	10	12	3.1
7	.40	5.0	5.8	228	29	7.2	9.1	45	8.6	65	46	3.3
8	.37	5.4	3.8	238	28	52	9.4	24	7.5	80	89	4.0
9	.34	6.0	17	76	30	211	26	15	6.0	20	70	3.4
10	.32	6.8	75	40	40	42	15	13	350	14	24	3.6
11	.30	7.1	20	24	159	28	11	12	140	10	16	3.3
12	.29	10	11	20	105	21	8.9	10	110	9.7	12	3.5
13	3.7	51	16	18	57	16	8.2	9.0	145	8.6	9.6	3.4
14	18	32	8.2	15	39	13	31	8.1	62	13	8.8	3.2
15	4.2	10	7.0	12	29	11	27	7.2	41	165	7.8	4.1
16	3.2	6.2	6.1	11	41	10	288	6.4	29	51	7.2	4.0
17	3.1	5.1	6.9	9.8	42	9.7	88	5.6	22	28	6.3	4.3
18	3.0	6.5	7.0	8.8	48	19	45	5.0	17	19	6.1	4.8
19	2.9	6.3	8.0	7.5	30	12	108	4.4	46	15	5.7	5.4
20	6.0	6.0	8.3	6.7	25	250	48	25	22	72	5.1	5.3
21	7.0	22	10	6.0	20	87	35	6.8	140	25	5.0	8.8
22	11	17	36	6.7	16	51	27	50	92	16	4.7	5.3
23	13	7.0	12	14	14	37	21	220	130	12	4.7	3.6
24	25	5.0	64	9.0	12	28	16	70	70	11	4.1	3.1
25	14	4.6	51	7.3	11	30	13	30	37	9.7	4.8	3.6
26	10	5.3	20	6.1	10	21	12	15	22	8.4	15	3.8
27	7.9	5.4	13	5.6	14	16	43	29	17	7.8	5.8	3.3
28	7.5	5.9	10	5.2	10	14	13	14	14	7.3	4.7	3.1
29	8.2	7.3	9.1	5.0	---	13	54	9.0	48	6.9	6.5	2.9
30	9.0	121	9.4	4.9	---	11	184	7.2	139	172	4.6	2.7
31	12	---	7.6	4.8	---	16	---	69	---	67	3.5	---
TOTAL	174.38	449.1	590.0	936.7	876.8	1075.5	1240.6	953.7	1814.0	1032.4	459.6	115.7
MEAN	5.63	15.0	19.0	30.2	31.3	34.7	41.4	30.8	60.5	33.3	14.8	3.86
MAX	25	121	75	238	159	250	288	220	350	172	89	8.8
MIN	.29	4.5	3.8	4.8	6.1	7.2	8.2	4.4	6.0	6.9	3.5	2.7
CFSM	.31	.81	1.03	1.64	1.70	1.89	2.25	1.67	3.29	1.81	.81	.21
IN.	.35	.91	1.19	1.89	1.77	2.17	2.51	1.93	3.67	2.09	.93	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1998, BY WATER YEAR (WY)

MEAN	8.47	16.5	27.1	33.5	42.5	51.2	38.5	30.9	20.9	16.7	11.3	9.36
MAX	40.7	54.7	88.9	148	119	195	143	114	83.5	109	42.1	105
(WY)	1978	1974	1979	1950	1956	1964	1970	1961	1950	1973	1978	1979
MIN	.15	.71	1.90	3.31	3.44	4.20	5.27	3.04	.93	.37	.63	.033
(WY)	1954	1954	1954	1981	1954	1954	1954	1954	1954	1954	1953	1953

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1944 - 1998
ANNUAL TOTAL	13029.01	9718.48	
ANNUAL MEAN	35.7	26.6	25.5
HIGHEST ANNUAL MEAN			49.2
LOWEST ANNUAL MEAN			3.76
HIGHEST DAILY MEAN	1750	Mar 1	2000
LOWEST DAILY MEAN	.29	Oct 12	.00
ANNUAL SEVEN-DAY MINIMUM	.35	Oct 6	.00
INSTANTANEOUS PEAK FLOW		948	Mar 9
INSTANTANEOUS PEAK STAGE		5.33	Mar 9
INSTANTANEOUS LOW FLOW			8.70
ANNUAL RUNOFF (CFSM)	1.94	1.45	.00
ANNUAL RUNOFF (INCHES)	26.34	19.65	18.84
10 PERCENT EXCEEDS	60	64	53
50 PERCENT EXCEEDS	12	11	10
90 PERCENT EXCEEDS	1.8	3.7	1.9

BEARGRASS CREEK BASIN

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1988 to September 1992, July 1996 to October 1996.

pH: April 1988 to September 1992, July 1996 to October 1996.

WATER TEMPERATURE: April 1988 to September 1992, July 1996 to October 1996.

DISSOLVED OXYGEN: April 1988 to September 1992, July 1996 to October 1996.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1260 microsiemens, Feb. 9, 1988; minimum, 74 microsiemens, July 19, 1989.

pH: Maximum, 9.7 units, Apr. 19, 1989; minimum, 5.6 units, July 19, 1989.

WATER TEMPERATURE: Maximum, 35.4°C, August 16, 1988; minimum, 1.8°C, Dec. 10-13, 1988.

DISSOLVED OXYGEN: Maximum, 25.1 mg/L, Apr. 28, 1992; minimum, 0.4 mg/L, Oct. 26, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
01...	1050	41	569	7.6	11.0	10.2
JAN						
05...	1140	5.8	646	8.2	11.0	12.1
FEB						
09...	1150	25	1260	8.2	7.5	13.5
MAR						
02...	1200	8.5	632	8.2	8.5	14.5
APR						
06...	1155	10	594	8.1	15.5	14.6
MAY						
04...	1025	36	543	7.9	13.5	9.5
JUN						
08...	1020	6.6	577	8.1	17.0	10.4
JUL						
06...	1015	10	533	8.0	21.5	8.8
AUG						
03...	1035	12	597	8.0	21.0	9.1

BEARGRASS CREEK BASIN

03293200 MIDDLE FORK BEARGRASS CREEK AT SCENIC LOOP AT LOUISVILLE, KY

(Formerly published as AT BEALS BRANCH ROAD)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'32", long 85°41'57", Jefferson County, Hydrologic Unit 05140101, at bridge on Scenic Loop Road and at mile 1.9.

DRAINAGE AREA.--22.7 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1996 to September 1996.

pH: July 1996 to September 1996.

WATER TEMPERATURE: July 1996 to September 1996.

DISSOLVED OXYGEN: July 1996 to September 1996.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 662 microsiemens, Sept. 14-15, 1996; minimum, 86 microsiemens, Aug. 8, 1996.

pH: Maximum, 8.1 units, Aug. 2, 1996; minimum, 7.0 units, July 9-10, 1996.

WATER TEMPERATURE: Maximum, 27.0° C, Aug. 20, 1996; minimum, 15.6° C, Sept. 15, 1996.

DISSOLVED OXYGEN: Maximum, 9.0 mg/L, Sept. 19, 1996; minimum, 1.2 mg/L, Sept. 5, 1996.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
01...	1255	43	576	7.9	11.0	10.2
JAN						
05...	1030	6.0	538	8.0	9.5	8.7
FEB						
09...	1045	33	1050	8.0	6.0	11.5
MAR						
02...	1030	8.8	648	8.0	7.0	10.4
APR						
06...	1045	12	606	7.7	10.5	8.8
MAY						
04...	1230	40	540	8.0	14.0	9.7
JUN						
08...	1250	6.7	555	7.9	17.0	8.2
JUL						
06...	1140	11	539	7.9	22.5	5.9
AUG						
03...	1220	14	597	7.9	22.0	7.3

BEARGRASS CREEK BASIN

03293530 MUDDY FORK AT MOCKINGBIRD VALLEY ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'35", long 85°41'37", Jefferson County, Hydrologic Unit 05140101, at culvert on Mockingbird Valley Road and at mile 1.5.

DRAINAGE AREA.--6.2 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
01...	0850	11	700	7.7	--	9.2
JAN						
05...	0900	1.8	754	8.0	8.5	10.5
FEB						
09...	0900	6.8	1000	8.0	4.5	12.2
MAR						
02...	0845	2.8	732	8.1	6.5	13.5
APR						
06...	0900	4.6	722	8.0	8.5	11.2
MAY						
04...	0915	10	696	7.7	13.0	8.8
JUN						
08...	0845	2.2	624	8.0	15.5	8.7
JUL						
06...	0900	3.6	686	8.1	20.0	8.0
AUG						
03...	0900	5.2	677	7.7	18.5	8.6

OHIO RIVER MAIN STEM

03294500 OHIO RIVER AT LOUISVILLE, KY

LOCATION.--Lat 38°16'49", long 85°47'57", Jefferson County, Hydrologic Unit 05140101, on left bank at downstream end of lock guide wall in lower pool at McAlpine Locks, at Louisville, 5.3 mi downstream from Beargrass Creek, and at mile 607.3.

DRAINAGE AREA.--91,170 mi², approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1935 monthly discharge only, published in WSP 1305. Gage-height records collected in this vicinity since 1871 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 893: 1939.

GAGE.--Water-stage recorder. Datum of gage is 373.18 ft above sea level or 374.00 ft Ohio River datum. Prior to Oct. 1, 1939, and Oct. 1, 1943 to Sept. 30, 1946, various combinations of gages near Louisville were used. Oct. 1, 1939 to Sept. 30, 1943, water-stage recorders at Louisville and Kosmosdale, downstream from McAlpine Dam (4 mi and 20.1 mi, respectively), were used to determine discharge. Oct. 1, 1946 to Sept. 30, 1961, nonrecording gage at site 0.3 mi upstream at same datum. Oct. 1, 1952 to Sept. 30, 1970, upper nonrecording gage at dam 43, 25.9 mi downstream used as an auxiliary gage. Since Oct. 1, 1970, auxiliary water-stage recorder at Kosmosdale, 19.8 mi downstream. Datum of auxiliary gage is 372.75 ft above sea level or 373.67 ft above Ohio River Dam.

REMARKS.--Estimated daily discharges: Nov. 8-10, 12-16, 19, 20, 23-27, Nov. 29 to Dec. 5, 15, 20, Dec. 26 to Jan. 1, 3, 17-22, Feb. 8-10, 13-19, 22-24, March 6-8, 13-17, 21, 25-29, Apr. 18-26, May 1-4, 8, 9, 11-16, June 10-19, 21, 27, July 3, and Sept. 9-14, 18, 25. Records fair except for those below 20,000 ft³/s, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45800	26800	86700	74800	165000	183000	105000	328000	74000	330000	40500	14900
2	38400	27000	95200	69000	139000	133000	95000	308000	64600	384000	14000	7890
3	21800	25700	96900	46700	119000	164000	100000	311000	68500	337000	24400	21300
4	37600	31600	96700	50600	97900	174000	95700	334000	55400	307000	30400	18300
5	27700	43000	89400	50800	118000	173000	108000	353000	60600	212000	15700	15800
6	28800	49800	77800	60500	151000	156000	116000	358000	40400	144000	19100	12700
7	26000	36700	67400	126000	212000	140000	120000	343000	61900	108000	22800	15400
8	20700	50000	60600	255000	238000	124000	120000	348000	59800	89000	22300	17600
9	21400	82800	64800	338000	219000	163000	130000	338000	50200	80500	24200	24300
10	18100	101000	61600	377000	198000	196000	169000	350000	73800	104000	20200	8380
11	13400	98300	67000	399000	208000	229000	208000	336000	129000	86800	33500	21800
12	14000	86500	76000	411000	276000	253000	227000	311000	231000	55500	12000	16400
13	18200	85300	109000	414000	322000	240000	238000	260000	254000	58000	29500	8850
14	18900	81300	116000	401000	303000	203000	231000	216000	248000	32800	33100	20800
15	24400	77400	105000	356000	252000	164000	242000	191000	273000	24800	24800	10600
16	16200	92100	88700	286000	209000	136000	247000	168000	326000	40100	22900	8320
17	21400	90600	68700	213000	179000	114000	350000	152000	336000	50700	16900	16200
18	10900	84400	59600	194000	169000	99500	327000	115000	317000	32600	43700	7350
19	16500	71100	54200	184000	221000	110000	344000	90300	293000	31700	37400	10000
20	18100	68300	47800	169000	251000	143000	375000	96000	204000	106000	34200	13700
21	18600	55200	41700	144000	302000	202000	387000	84700	186000	175000	19000	20700
22	15600	43000	51100	133000	327000	260000	395000	70500	205000	127000	33600	24800
23	18900	58400	38500	120000	297000	316000	400000	82800	249000	78800	21700	9290
24	18900	63000	34200	118000	259000	354000	398000	102000	236000	75200	24500	18000
25	18400	77100	66800	131000	265000	343000	371000	150000	158000	49000	20100	8240
26	24100	72700	74400	153000	263000	300000	307000	132000	81800	49500	42600	10700
27	16600	71900	79700	164000	247000	227000	241000	94200	65400	37600	20100	23300
28	24100	63400	82900	153000	220000	174000	244000	87200	81000	36100	20800	12300
29	30200	59300	89100	156000	---	143000	230000	98400	146000	32500	31000	7420
30	23200	78700	84000	141000	---	101000	277000	83900	234000	27600	16300	19900
31	16400	---	80400	163000	---	119000	---	85300	---	41700	32600	---
TOTAL	683300	1952400	2311900	6051400	6226900	5836500	7197700	6377300	4862400	3380400	803900	445240
MEAN	22040	65080	74580	195200	222400	188300	239900	205700	162100	109000	25930	14840
MAX	45800	101000	116000	414000	327000	354000	400000	358000	336000	384000	43700	24800
MIN	10900	25700	34200	46700	97900	99500	95000	70500	40400	27600	12000	7350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

MEAN	37650	69750	123500	167400	194600	245100	204900	145500	86500	56260	44020	33040
MAX	153500	245900	321300	595800	430400	524300	403300	392900	234400	163400	151300	166600
(WY)	1980	1986	1973	1937	1939	1945	1948	1996	1981	1958	1958	1979
MIN	4377	6660	14090	21630	38010	69350	66480	29350	16400	8035	4924	6005
(WY)	1931	1931	1931	1931	1934	1969	1986	1941	1988	1930	1930	1930

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1929 - 1998
ANNUAL TOTAL	42467130	46129340	
ANNUAL MEAN	116300	126400	117000
HIGHEST ANNUAL MEAN			176700
LOWEST ANNUAL MEAN			57390
HIGHEST DAILY MEAN	716000	Mar 6	414000
LOWEST DAILY MEAN	3050	Aug 8	7350
ANNUAL SEVEN-DAY MINIMUM	15000	Sep 2	11700
INSTANTANEOUS PEAK FLOW			1110000
INSTANTANEOUS PEAK STAGE		47.78	Jan 13
10 PERCENT EXCEEDS	266000		281000
50 PERCENT EXCEEDS	84400		73100
90 PERCENT EXCEEDS	18800		16900

MILL CREEK BASIN

03294550 MILL CREEK CUTOFF NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992.

pH: May 1988 to September 1992.

WATER TEMPERATURE: May 1988 to September 1992.

DISSOLVED OXYGEN: May 1988 to September 1992.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,062 microsiemens, June 23, 1988; minimum, 76 microsiemens, Aug. 8, 1992.

pH: Maximum, 11.3 units, July 28, 29, 1989; minimum, 4.8 units, Sept. 12, 1988.

WATER TEMPERATURE: Maximum, 34.4°C, Sept. 21, 1989; minimum, 0.6°C, Dec. 28, 1990, Jan. 15, 16, 1992.

DISSOLVED OXYGEN: Maximum, 24.5 mg/L, Aug. 16, 1989; minimum, 0.3 mg/L, July 5, 23, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
11...	1240	4.5	408	7.5	5.5	10.0
JAN						
15...	0950	2.4	581	7.2	6.5	9.2
FEB						
24...	1210	2.1	605	8.1	9.0	13.4
MAR						
09...	0855	49	208	7.3	10.0	9.3
APR						
08...	1230	2.2	605	7.6	19.0	12.6
MAY						
06...	1155	2.4	552	7.7	19.0	8.4
JUN						
10...	0850	4.0	274	7.1	21.0	5.2
JUL						
08...	0920	34	178	7.3	24.0	5.8
AUG						
05...	1230	1.0	681	7.5	25.0	14.0

MILL CREEK BASIN

03294570 MILL CREEK AT ORELL ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'41", long 85°53'24", Jefferson County, Hydrologic Unit 05140101, at bridge on Orell Road, and at mile 1.5.

DRAINAGE AREA.-- 13.5 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
11...	1035	6.8	419	7.8	5.5	10.7
JAN						
07...	1250	149	232	7.5	12.5	9.1
FEB						
24...	1040	3.6	500	8.3	6.5	13.5
MAR						
09...	1020	84	149	7.0	11.0	8.5
APR						
08...	1130	3.5	458	7.8	16.0	11.3
JUN						
10...	1025	6.7	425	7.6	21.5	6.6
JUL						
08...	1110	165	122	7.0	24.0	4.5
AUG						
05...	1030	2.5	587	7.8	24.5	6.5

SALT RIVER BASIN

03295400 SALT RIVER AT GLENSBORO, KY

LOCATION.--Lat 38°00'07", long 85°03'38", Anderson County, Hydrologic Unit 05140102, on left bank 5 ft downstream from bridge on Highway 53 at Glensboro, 0.9 mi upstream from Timber Creek, 2.0 mi downstream from Indian Creek, and at mile 82.5.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--May 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 30, March 6-10, and Aug. 9, 10. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	17	449	97	110	121	151	2500	145	552	181	7.1
2	3.4	22	245	86	101	358	141	894	172	249	104	6.6
3	2.9	22	150	89	93	101	136	500	153	164	73	5.8
4	2.1	18	107	96	107	96	117	339	113	125	55	5.2
5	1.8	16	89	101	132	94	105	260	637	172	43	5.5
6	1.5	13	72	790	181	115	105	217	609	181	34	5.2
7	1.3	12	61	2770	154	105	101	924	325	250	33	4.2
8	1.4	13	50	3290	211	300	128	1110	202	921	28	2.9
9	2.4	15	44	1040	303	1400	303	573	233	380	26	2.1
10	2.4	15	555	595	546	1050	517	395	1040	261	27	1.9
11	2.7	13	453	398	2310	359	322	297	1400	160	28	1.9
12	3.4	12	253	328	4370	265	224	236	976	112	23	1.9
13	3.4	13	165	375	1410	221	174	196	1690	88	20	2.3
14	4.5	62	125	333	741	196	188	168	1100	83	20	2.4
15	3.6	66	98	278	482	168	170	146	1370	93	255	2.5
16	5.9	35	79	242	389	146	2160	130	801	153	233	2.5
17	4.2	45	66	220	399	133	2120	109	437	113	115	2.4
18	3.3	38	58	201	642	130	811	91	286	237	65	3.0
19	2.8	28	51	189	470	124	967	79	288	146	50	5.3
20	3.0	21	45	172	370	956	862	80	234	7070	78	5.5
21	3.4	20	40	158	306	1250	501	132	1270	2530	47	556
22	3.1	96	95	148	263	688	349	119	805	653	32	310
23	2.8	79	130	284	230	445	275	1680	2130	369	25	105
24	4.8	40	255	393	201	323	229	1940	957	255	19	61
25	10	49	566	295	176	269	189	1040	462	185	16	34
26	12	34	409	238	156	239	166	482	287	139	16	21
27	7.2	24	249	202	148	199	179	330	208	109	12	15
28	9.4	19	182	177	135	173	307	242	156	91	9.8	11
29	26	16	150	157	---	151	207	188	128	77	9.6	9.5
30	34	80	134	138	---	130	2190	153	321	125	9.2	8.7
31	21	---	115	124	---	119	---	126	---	327	8.3	---
TOTAL	191.6	953	5540	14004	15136	10424	14394	15676	18935	16370	1694.9	1207.4
MEAN	6.18	31.8	179	452	541	336	480	506	631	528	54.7	40.2
MAX	34	96	566	3290	4370	1400	2190	2500	2130	7070	255	556
MIN	1.3	12	40	86	93	94	101	79	113	77	8.3	1.9
CFSM	.04	.18	1.04	2.63	3.14	1.95	2.79	2.94	3.67	3.07	.32	.23
IN.	.04	.21	1.20	3.03	3.27	2.25	3.11	3.39	4.10	3.54	.37	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1998, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	64.4	172	391	485	450	634	233	372	342	171	62.8	57.0
MAX	262	359	1360	675	642	1845	480	925	926	528	137	241
(WY)	1991	1994	1991	1994	1991	1997	1998	1995	1997	1998	1992	1996
MIN	6.13	11.4	123	344	149	99.9	71.4	118	23.6	6.72	4.64	5.61
(WY)	1995	1992	1990	1993	1996	1990	1997	1991	1994	1993	1997	1997

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1989 - 1998	
ANNUAL TOTAL	126655.41		114525.9			
ANNUAL MEAN	347		314		286	
HIGHEST ANNUAL MEAN					403	
LOWEST ANNUAL MEAN					181	
HIGHEST DAILY MEAN	16400		7070		16400	
LOWEST DAILY MEAN	.80		1.3		.80	
ANNUAL SEVEN-DAY MINIMUM	1.2		1.8		1.2	
INSTANTANEOUS PEAK FLOW			20100		22000	
INSTANTANEOUS PEAK STAGE			12.56		12.91	
ANNUAL RUNOFF (CFSM)	2.02		1.82		1.66	
ANNUAL RUNOFF (INCHES)	27.39		24.77		22.58	
10 PERCENT EXCEEDS	671		803		622	
50 PERCENT EXCEEDS	62		135		95	
90 PERCENT EXCEEDS	2.8		5.2		6.5	

SALT RIVER BASIN

03295702 BULLSKIN CREEK NEAR SIMPSONVILLE, KY

LOCATION.--Lat 38°13'07", long 85°18'07", Shelby County, Hydrologic Unit 05140102, at center span on the downstream side of bridge on Highway 60, 2.6 miles east of Simpsonville, 2.6 miles below Fox Run, and at mile 21.7.

DRAINAGE AREA.--54.8 mi².

PERIOD OF RECORD.--May 1998 to Sept. 1998.

GAGE.--Water-stage recorder. Datum of gage is 680 ft above sea level (from topographic map).

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR MAY 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	377	544	153	39	.65
2	---	---	---	---	---	---	---	173	93	75	21	.74
3	---	---	---	---	---	---	---	165	48	45	14	.61
4	---	---	---	---	---	---	---	184	35	53	11	.01
5	---	---	---	---	---	---	---	127	36	87	8.3	.00
6	---	---	---	---	---	---	---	87	34	36	6.9	.00
7	---	---	---	---	---	---	---	209	22	27	13	.00
8	---	---	---	---	---	---	---	225	17	75	12	.00
9	---	---	---	---	---	---	---	168	98	44	9.0	.00
10	---	---	---	---	---	---	---	123	733	26	8.6	.00
11	---	---	---	---	---	---	---	87	815	18	7.6	.00
12	---	---	---	---	---	---	---	63	267	13	5.7	.00
13	---	---	---	---	---	---	---	47	380	10	4.0	.00
14	---	---	---	---	---	---	---	37	166	10	3.2	.00
15	---	---	---	---	---	---	---	29	131	76	2.7	.00
16	---	---	---	---	---	---	---	24	98	144	2.5	.00
17	---	---	---	---	---	---	---	19	63	63	2.0	.00
18	---	---	---	---	---	---	---	15	42	35	1.7	.00
19	---	---	---	---	---	---	---	12	80	26	1.6	.00
20	---	---	---	---	---	---	---	14	61	162	.96	.00
21	---	---	---	---	---	---	---	16	591	122	.87	.00
22	---	---	---	---	---	---	---	14	1420	55	.68	.00
23	---	---	---	---	---	---	---	635	1740	38	.52	.00
24	---	---	---	---	---	---	---	355	336	26	.03	.00
25	---	---	---	---	---	---	---	151	153	18	.00	.00
26	---	---	---	---	---	---	---	88	91	13	.00	.00
27	---	---	---	---	---	---	---	71	56	10	.00	.00
28	---	---	---	---	---	---	---	51	37	8.3	.00	.00
29	---	---	---	---	---	---	---	38	46	6.9	.00	.00
30	---	---	---	---	---	---	---	28	567	86	.00	.00
31	---	---	---	---	---	---	---	120	---	116	.11	---
TOTAL	---	---	---	---	---	---	---	3752	8800	1677.2	176.97	2.01

SALT RIVER BASIN

03295890 BRASHEARS CREEK AT TAYLORSVILLE, KY

LOCATION.--Lat 38°02'13", long 85°20'27", Spencer County, Hydrologic Unit 05140102, on left bank at downstream side of bridge on State Highway 155, at the north edge of Taylorsville, 1.2 mi upstream from Salt River, and at mile 1.2.

DRAINAGE AREA.--259 mi²

PERIOD OF RECORD.--July 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 466.85 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 30 to Jan. 2, Jan. 6-9, Feb. 22-26, July 7, 8, 15, 20, 21, 30, Aug. 9, and 25-27. Records good except those for estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	7.2	114	98	112	188	199	2790	979	1110	461	17
2	1.4	8.3	119	90	103	163	193	1350	556	493	240	19
3	1.3	10	84	88	95	146	152	832	306	312	159	18
4	1.1	13	68	92	102	138	145	619	204	225	116	20
5	.73	14	59	98	113	131	132	530	170	376	91	19
6	.50	16	55	104	188	124	117	373	160	286	73	16
7	.42	21	50	215	224	115	102	374	135	2600	60	15
8	.38	21	45	900	211	137	102	757	99	1500	57	13
9	.25	22	42	3800	224	2120	369	618	96	588	58	11
10	.07	24	74	1210	315	1400	339	501	288	345	60	9.3
11	.00	26	174	792	1870	795	295	395	3600	222	57	7.7
12	.00	27	175	607	5430	553	222	304	1210	154	49	7.1
13	.00	31	119	505	2500	428	179	235	1150	119	43	6.3
14	.02	37	92	411	1480	356	209	186	852	104	35	5.5
15	.00	45	77	351	955	288	256	151	576	600	27	5.1
16	.00	32	68	304	736	233	2310	124	416	920	23	4.5
17	.00	24	62	256	679	206	5390	103	302	551	20	4.2
18	.00	21	57	225	867	213	1820	84	212	341	18	4.1
19	.00	19	54	199	805	237	1310	70	202	223	16	3.9
20	.00	19	51	178	662	2370	1150	67	300	1000	14	3.7
21	.00	21	49	157	549	3070	795	83	1560	1900	13	9.3
22	.00	23	58	147	470	1470	574	76	1910	460	11	138
23	.00	25	76	182	380	911	434	1220	5310	283	11	46
24	.03	33	184	256	330	624	336	2050	2340	211	12	28
25	.05	39	1100	250	285	479	262	1010	1100	155	13	19
26	.02	36	577	224	260	398	218	573	633	116	15	14
27	.25	32	308	203	235	314	229	415	414	92	17	11
28	1.5	29	211	181	217	259	226	341	286	78	22	10
29	2.7	27	162	161	---	218	180	249	211	66	22	8.8
30	5.6	59	130	144	---	186	2280	188	1330	1500	21	9.0
31	6.8	---	110	126	---	165	---	152	---	1180	19	---
TOTAL	24.82	761.5	4604	12554	20397	18435	20525	16820	26907	18110	1853	502.5
MEAN	.80	25.4	149	405	728	595	684	543	897	584	59.8	16.8
MAX	6.8	59	1100	3800	5430	3070	5390	2790	5310	2600	461	138
MIN	.00	7.2	42	88	95	115	102	67	96	66	11	3.7
CFSM	.00	.10	.57	1.56	2.81	2.30	2.64	2.09	3.46	2.26	.23	.06
IN.	.00	.11	.66	1.80	2.93	2.65	2.95	2.42	3.86	2.60	.27	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1998, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	37.5	188	472	540	753	730	458	497	330	107	52.2	19.2						
MAX	240	586	1806	1036	1984	3025	841	1912	1318	584	291	136						
(WY)	1991	1986	1991	1996	1989	1997	1996	1983	1997	1998	1992	1996						
MIN	.012	3.97	116	47.0	212	80.5	48.4	47.1	1.90	4.44	.030	.001						
(WY)	1989	1988	1990	1986	1992	1983	1986	1986	1988	1994	1983	1983						

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1981 - 1998
ANNUAL TOTAL	198594.22	141493.82	
ANNUAL MEAN	544	388	
HIGHEST ANNUAL MEAN			347
LOWEST ANNUAL MEAN			642
HIGHEST DAILY MEAN	39600	5430	201
LOWEST DAILY MEAN	.00	.00	39600
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		8340	44800
INSTANTANEOUS PEAK STAGE		17.04	31.54
INSTANTANEOUS LOW FLOW			.08
ANNUAL RUNOFF (CFSM)	2.10	1.50	1.34
ANNUAL RUNOFF (INCHES)	28.52	20.32	18.22
10 PERCENT EXCEEDS	1030	1100	837
50 PERCENT EXCEEDS	78	147	93
90 PERCENT EXCEEDS	1.8	5.6	1.6

SALT RIVER BASIN

03297900 FLOYDS FORK NEAR PEWEE VALLEY, KY

LOCATION.--Lat 38°17'07", long 85°28'03", Oldham County, Hydrologic Unit 05140102, on left bank at downstream side of bridge on State Highway 362, 2.0 mi south of PeWee Valley, 2.2 mi downstream from Curry's Fork, and at mile 44.3.

DRAINAGE AREA.--79.9 mi².

PERIOD OF RECORD.--June 1991 to current year.

REVISED RECORDS.--WRD KY-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 599.892 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1-5, 10-12, Nov. 30, and Aug. 9. Records fair except for discharges below 5.0 ft³/s and periods of estimated record, which are poor. March 2, 1997 peak estimated.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	6.5	122	39	36	59	96	414	459	128	31	7.3
2	1.2	10	53	34	33	55	81	196	83	67	15	7.2
3	.80	16	35	40	30	53	71	431	51	47	12	7.1
4	.50	13	47	40	32	52	79	149	42	36	11	7.0
5	.30	11	38	40	45	54	76	101	44	50	10	7.2
6	.32	8.5	24	1100	51	51	68	78	41	30	9.8	7.3
7	1.3	7.1	17	1490	63	49	65	162	25	24	74	7.3
8	1.6	7.0	13	1630	69	68	63	147	16	108	35	7.1
9	1.8	7.4	12	323	81	1100	100	120	366	53	17	7.1
10	1.7	7.4	174	147	124	250	117	94	436	30	15	7.0
11	1.5	6.1	80	102	1490	141	97	75	584	18	18	6.9
12	1.2	6.0	51	86	1140	113	82	63	332	14	12	6.8
13	1.9	10	37	84	322	98	75	54	560	13	10	6.8
14	2.5	62	27	75	170	90	92	45	146	12	9.7	6.8
15	2.8	34	22	71	121	78	102	38	216	90	9.1	6.8
16	3.5	13	18	65	120	72	2030	31	159	121	8.7	6.8
17	3.1	8.2	16	60	136	70	639	24	89	57	8.5	6.5
18	2.8	7.0	13	57	313	86	157	17	62	34	8.4	6.6
19	2.7	6.3	12	53	168	91	488	13	155	23	8.1	7.6
20	2.6	5.9	9.9	49	127	1530	185	26	84	500	7.8	8.3
21	2.6	8.0	8.7	46	106	585	112	24	723	168	7.7	8.9
22	2.7	38	47	44	92	277	88	22	464	70	7.6	13
23	2.7	25	70	63	85	172	75	1150	1350	67	7.6	13
24	3.1	11	191	66	76	135	64	341	246	44	7.6	9.7
25	4.2	7.4	389	60	69	117	55	123	112	28	7.6	8.6
26	6.7	6.2	98	55	65	107	52	79	72	17	7.5	8.1
27	12	5.9	69	52	68	97	87	67	52	14	7.4	8.0
28	10	5.7	56	48	64	90	63	54	37	13	7.4	7.8
29	6.0	5.1	48	45	---	83	241	41	188	12	7.3	7.7
30	5.1	129	46	41	---	78	1600	30	736	33	7.3	8.1
31	4.4	---	41	38	---	74	---	106	---	64	7.3	---
TOTAL	96.42	493.7	1884.6	6143	5296	5975	7200	4315	7930	1985	412.4	234.4
MEAN	3.11	16.5	60.8	198	189	193	240	139	264	64.0	13.3	7.81
MAX	12	129	389	1630	1490	1530	2030	1150	1350	500	74	13
MIN	.30	5.1	8.7	34	30	49	52	13	16	12	7.3	6.5
CFSM	.04	.21	.76	2.48	2.37	2.41	3.00	1.74	3.31	.80	.17	.10
IN.	.04	.23	.88	2.86	2.47	2.78	3.35	2.01	3.69	.92	.19	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	12.4	50.9	122	222	149	306	153	173
MAX	26.3	118	331	320	202	958	306	398
(WY)	1994	1994	1997	1996	1993	1997	1996	1995
MIN	3.01	3.14	38.8	127	43.3	103	37.3	26.5
(WY)	1995	1992	1993	1992	1992	1995	1995	1991

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1991 - 1998
ANNUAL TOTAL	60810.03	41965.52	
ANNUAL MEAN	167	115	121
HIGHEST ANNUAL MEAN			198
LOWEST ANNUAL MEAN			79.5
HIGHEST DAILY MEAN	10500	2030	10500
LOWEST DAILY MEAN	.30	.30	.11
ANNUAL SEVEN-DAY MINIMUM	.57	.86	.17
INSTANTANEOUS PEAK FLOW		4590	18800
INSTANTANEOUS PEAK STAGE		15.95	28.60
ANNUAL RUNOFF (CFSM)	2.09	1.44	1.51
ANNUAL RUNOFF (INCHES)	28.31	19.54	20.49
10 PERCENT EXCEEDS	236	204	224
50 PERCENT EXCEEDS	35	45	31
90 PERCENT EXCEEDS	1.7	6.4	1.6

SALT RIVER BASIN

03297980 LONG RUN NEAR FISHERVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'10", long 85°26'56", Jefferson County, Hydrologic Unit 05140102, at bridge on State Highway 1531, 0.7 mi below South Long Run and at mile 2.4.

DRAINAGE AREA.-- 22.5 mi².

PERIOD OF RECORD.--August 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
08...	1040	2.0	486	8.0	1.5	13.9
JAN						
20...	1020	9.4	455	8.2	1.5	13.3
FEB						
19...	1030	46	427	8.0	7.0	11.9
MAR						
16...	1020	13	477	8.3	5.5	13.2
APR						
20...	1000	66	415	7.8	9.0	10.9
MAY						
18...	1015	3.8	428	8.0	19.5	9.0
JUN						
18...	1210	7.6	418	8.4	23.5	10.9
JUL						
21...	1020	48	376	7.9	23.5	7.7
AUG						
12...	1010	4.2	458	8.1	23.0	8.8

SALT RIVER BASIN

03298000 FLOYDS FORK AT FISHERVILLE, KY

LOCATION.--Lat 38°11'18", long 85°27'37", Jefferson County, Hydrologic Unit 05140102, on left bank on downstream side of bridge on former State Highway 155, at Fisherville, 0.2 mi downstream from Brush Run, 1.4 mi upstream from Pope Lick, and at mile 32.7.

DRAINAGE AREA.--138 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year. Monthly discharge only for August 1944, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1946. WSP 1909: 1945(P), 1948(P), 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 542.60 ft above sea level, from benchmark elevation supplied by Park Aerial Survey.

REMARKS.--No estimated daily discharges. Records fair except for discharges below 2.0 ft³/s, which are poor. Diversions by local golf course for irrigation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 16.8 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	2.3	306	52	51	71	99	934	576	415	81	.56
2	3.0	26	88	49	49	66	88	389	149	165	47	.24
3	1.4	10	58	53	46	62	72	675	83	96	31	.05
4	.63	8.4	76	55	48	61	74	339	67	85	21	.16
5	.55	9.5	62	61	63	62	74	215	69	89	15	.18
6	.71	4.9	45	1890	79	60	66	146	70	71	9.0	.25
7	.61	2.7	33	2070	88	57	61	261	55	65	224	.08
8	.33	2.7	26	2680	106	90	60	347	44	214	117	.23
9	.17	1.6	23	707	140	1690	119	234	269	116	113	.77
10	.44	1.3	405	340	245	502	139	175	649	71	52	.46
11	.95	1.3	211	204	1960	241	115	130	1280	50	44	.32
12	.69	1.1	98	153	2070	161	86	98	603	39	34	.31
13	.63	2.4	74	141	690	130	76	81	806	32	23	.53
14	1.4	48	60	120	367	111	87	69	341	30	15	.68
15	10	45	51	105	224	92	92	58	393	201	7.7	.52
16	3.5	24	46	94	212	82	3000	49	280	337	4.4	.54
17	1.6	12	41	86	241	79	1280	41	168	131	2.9	.55
18	1.4	4.3	37	81	540	97	429	34	103	77	2.3	.48
19	.81	2.9	34	76	338	113	808	28	248	56	2.2	.66
20	.26	2.2	31	71	226	2230	474	46	202	695	1.8	.78
21	.44	2.8	28	65	173	1130	256	44	1130	470	1.5	1.8
22	1.1	24	77	63	139	511	179	49	936	140	.77	3.3
23	.93	37	130	90	121	282	138	1690	2250	98	.46	2.9
24	.59	25	288	100	101	190	107	765	603	76	.59	1.3
25	8.3	14	772	88	88	151	89	315	268	53	1.2	.89
26	8.9	7.3	222	80	81	129	82	171	148	38	9.5	.73
27	2.7	6.7	118	75	83	104	134	157	97	29	7.5	.82
28	3.6	4.1	87	70	80	93	113	110	76	23	1.7	1.2
29	1.2	8.7	74	66	---	85	215	84	110	17	1.5	.67
30	3.6	191	70	61	---	78	2300	66	1400	206	1.2	.30
31	2.4	---	62	55	---	73	---	62	---	203	.94	---
TOTAL	67.24	533.2	3733	9901	8649	8883	10912	7862	13473	4388	874.16	22.26
MEAN	2.17	17.8	120	319	309	287	364	254	449	142	28.2	.74
MAX	10	191	772	2680	2070	2230	3000	1690	2250	695	224	3.3
MIN	.17	1.1	23	49	46	57	60	28	44	17	.46	.05
CFSM	.02	.13	.87	2.31	2.24	2.08	2.64	1.84	3.25	1.03	.20	.01
IN.	.02	.14	1.01	2.67	2.33	2.39	2.94	2.12	3.63	1.18	.24	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1998, BY WATER YEAR (WY)

MEAN	32.8	106	232	294	362	408	283	215	129	64.7	45.2	39.6
MAX	423	485	1025	1252	990	1639	1021	971	622	331	290	1020
(WY)	1978	1974	1991	1950	1956	1997	1970	1983	1997	1973	1979	1979
MIN	.000	.000	.000	3.54	12.4	40.3	34.0	12.2	.90	1.73	.048	.000
(WY)	1949	1954	1954	1977	1954	1954	1959	1965	1988	1954	1962	1948

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1944 - 1998

ANNUAL TOTAL		103560.76		69297.86								
ANNUAL MEAN		284		190						183		
HIGHEST ANNUAL MEAN										382		1979
LOWEST ANNUAL MEAN										29.0		1954
HIGHEST DAILY MEAN		20000	Mar 2	3000	Apr 16				20000	Mar 2	1997	
LOWEST DAILY MEAN		.17	Oct 9	.05	Sep 3				.00	Sep 7	1945	
ANNUAL SEVEN-DAY MINIMUM		.49	Oct 4	.17	Sep 2				.00	Sep 7	1945	
INSTANTANEOUS PEAK FLOW				4870	Apr 16				42100	Mar 2	1997	
INSTANTANEOUS PEAK STAGE				9.32	Apr 16				17.39	Mar 2	1997	
INSTANTANEOUS LOW FLOW									.00	Sep 7	1945	
ANNUAL RUNOFF (CFSM)		2.06		1.38					1.33			
ANNUAL RUNOFF (INCHES)		27.92		18.68					18.06			
10 PERCENT EXCEEDS		422		421					370			
50 PERCENT EXCEEDS		56		70					35			
90 PERCENT EXCEEDS		1.5		.77					.40			

SALT RIVER BASIN

03298000 FLOYDS FORK AT FISHERVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
08...	1200	24	517	7.8	2.0	13.7
JAN						
20...	1150	67	524	8.2	3.0	13.9
FEB						
19...	1130	304	462	8.0	8.0	11.9
MAR						
16...	1140	82	515	8.5	7.5	15.4
APR						
20...	1120	458	408	7.5	10.5	10.3
MAY						
18...	1135	34	503	7.9	22.5	8.3
JUN						
18...	0945	101	472	8.1	22.0	7.2
JUL						
21...	1130	342	325	7.8	24.0	7.0
AUG						
12...	1130	32	476	7.8	25.0	5.9

SALT RIVER BASIN

03298100 POPE LICK AT POPE LICK ROAD NEAR MIDDLETOWN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'09", long 85°31'07", Jefferson County, Hydrologic Unit 05140102, at culvert on Pope Lick Road, and at mile 3.2.

DRAINAGE AREA.-- 2.9 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
08...	0900	1.2	721	7.8	3.5	11.2
JAN						
20...	0900	1.3	701	7.9	2.5	11.6
FEB						
19...	0835	7.5	679	7.9	8.5	10.3
MAR						
16...	0850	2.6	721	8.1	6.0	11.5
APR						
20...	0850	11	579	7.5	10.0	9.8
MAY						
18...	0850	1.2	618	7.6	17.0	7.2
JUN						
18...	0855	1.3	602	7.9	20.0	7.3
JUL						
21...	0830	5.8	540	7.7	22.0	7.4
AUG						
12...	0850	1.6	624	7.8	22.0	7.1

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY NEAR JEFFERSONTOWN, KY

LOCATION.--Lat 38°11'41", long 85°33'26", Jefferson County, Hydrologic Unit 05140102, on right downstream bank at bridge on Ruckriegal Parkway, 500 feet south of Penion Drive.

DRAINAGE AREA.--5.47 mi².

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--January 16, 1996 to February 26, 1998(discontinued).

GAGE.--Water-stage recorder.

REMARKS.--1996: Estimated daily discharges: Feb. 1-7. Records good except for period of estimated record which is poor.

1997: Estimated daily discharges: Jan. 12-20. Records good except for period of estimated record which is poor.

1998: No estimated daily discharges: Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	3.5	5.3	48	14	7.8	1.1	1.7	.63
2	---	---	---	---	3.0	4.5	14	10	20	27	3.4	.61
3	---	---	---	---	2.6	3.5	10	9.1	9.2	6.4	1.8	.83
4	---	---	---	---	2.4	3.1	10	78	6.7	1.9	1.2	.70
5	---	---	---	---	2.0	10	7.7	56	5.5	1.2	1.0	2.5
6	---	---	---	---	1.8	62	6.4	21	13	.97	.92	2.7
7	---	---	---	---	1.6	18	5.6	13	15	19	.85	5.5
8	---	---	---	---	5.6	9.4	5.1	67	74	8.4	11	.95
9	---	---	---	---	6.9	7.2	4.6	15	24	2.6	2.8	16
10	---	---	---	---	3.7	6.2	4.2	91	66	1.4	1.1	2.8
11	---	---	---	---	3.1	5.5	3.9	82	53	1.3	1.9	.96
12	---	---	---	---	2.6	4.8	3.6	17	43	1.2	1.8	.70
13	---	---	---	---	2.4	4.3	17	12	13	5.9	.98	.67
14	---	---	---	---	2.4	3.7	8.1	8.8	14	40	.82	.63
15	---	---	---	---	2.4	33	7.4	67	8.1	56	.76	.43
16	---	---	---	19	1.9	14	6.6	13	4.9	5.4	.73	39
17	---	---	---	15	1.7	12	4.5	10	3.8	3.8	.68	4.9
18	---	---	---	102	1.7	7.4	4.1	7.4	7.7	2.2	.66	1.4
19	---	---	---	29	19	115	5.9	5.8	4.6	3.0	.63	1.1
20	---	---	---	9.4	50	48	71	5.0	2.9	1.7	4.5	.89
21	---	---	---	7.0	11	23	10	4.4	2.4	28	16	17
22	---	---	---	6.0	12	21	63	3.9	2.3	7.7	2.2	4.8
23	---	---	---	121	8.5	17	69	3.5	2.1	2.9	2.9	1.5
24	---	---	---	79	6.6	14	16	5.8	2.7	2.0	4.6	1.1
25	---	---	---	13	5.8	17	11	6.1	2.0	1.6	1.4	.98
26	---	---	---	11	6.8	11	24	83	1.7	1.5	1.0	.92
27	---	---	---	9.1	28	9.1	8.9	97	1.6	1.3	.98	80
28	---	---	---	6.4	14	17	30	210	1.4	1.2	.99	57
29	---	---	---	5.7	6.5	16	98	41	1.2	60	.85	7.5
30	---	---	---	4.7	---	8.9	29	14	1.1	8.3	.76	3.4
31	---	---	---	4.0	---	23	---	10	---	2.8	.67	---
TOTAL	---	---	---	---	219.5	553.9	606.6	1080.8	414.7	307.77	71.58	258.10
MEAN	---	---	---	---	7.57	17.9	20.2	34.9	13.8	9.93	2.31	8.60
MAX	---	---	---	---	50	115	98	210	74	60	16	80
MIN	---	---	---	---	1.6	3.1	3.6	3.5	1.1	.97	.63	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MEAN	---	---	---	---	7.57	17.9	20.2	34.9	13.8	9.93	2.31	8.60
MAX	---	---	---	---	7.57	17.9	20.2	34.9	13.8	9.93	2.31	8.60
(WY)	---	---	---	---	1996	1996	1996	1996	1996	1996	1996	1996
MIN	---	---	---	---	7.57	17.9	20.2	34.9	13.8	9.93	2.31	8.60
(WY)	---	---	---	---	1996	1996	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS

WATER YEARS 1995 - 1996

HIGHEST DAILY MEAN	210	May 28 1996
LOWEST DAILY MEAN	.43	Sep 15 1996
ANNUAL SEVEN-DAY MINIMUM	.72	Aug 29 1996
INSTANTANEOUS PEAK FLOW	2870	May 28 1996
INSTANTANEOUS PEAK STAGE	8.43	May 28 1996
10 PERCENT EXCEEDS	50	
50 PERCENT EXCEEDS	5.8	
90 PERCENT EXCEEDS	.98	

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY NEAR JEFFERSONTOWN, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	.95	85	6.4	6.6	868	8.4	9.4	45	3.1	.90	.43
2	1.9	.81	12	6.1	5.6	386	7.7	20	10	2.3	.91	.39
3	1.7	.82	8.9	5.9	8.4	133	6.7	62	6.7	1.8	2.4	7.5
4	1.5	.78	7.2	5.5	89	32	6.2	6.8	5.0	1.6	1.7	.70
5	1.3	.83	14	34	16	22	8.2	4.2	4.4	1.5	.92	.48
6	1.2	6.8	9.7	6.1	10	16	6.3	4.3	4.7	1.3	.84	.41
7	1.1	31	7.4	3.7	8.2	13	5.3	2.2	9.7	1.2	.83	.38
8	1.1	22	6.2	3.1	11	11	4.9	47	90	1.0	1.5	.35
9	3.0	14	5.7	4.7	7.4	25	4.5	9.0	14	.92	85	218
10	2.9	7.2	5.5	3.6	6.4	16	4.4	4.7	8.2	.83	9.3	19
11	1.3	5.5	5.3	3.0	5.4	11	4.3	3.2	6.4	.78	2.3	4.0
12	.86	4.5	72	2.8	4.8	8.9	11	2.5	5.4	.78	6.7	2.0
13	.77	3.9	13	2.5	7.4	15	4.8	2.0	68	.77	2.6	1.4
14	.78	3.5	8.8	2.2	11	20	4.0	1.8	87	.73	1.5	1.1
15	.73	3.4	7.4	11	6.8	10	3.5	1.7	13	.65	11	.89
16	.76	3.3	65	8.4	5.2	8.4	4.4	1.4	124	.55	2.3	.84
17	1.3	5.4	129	6.8	4.2	8.0	4.2	1.3	29	.46	1.2	.80
18	41	7.1	17	5.6	4.0	181	3.4	1.3	201	.50	1.0	.75
19	3.2	4.5	11	4.8	3.7	31	11	4.7	19	.50	2.8	.67
20	1.3	3.8	9.0	4.0	3.7	16	4.8	5.7	10	.44	8.8	.90
21	.89	8.2	7.8	3.5	4.6	12	18	1.4	79	.43	1.7	.67
22	.75	5.9	7.4	30	3.5	10	6.5	1.2	13	.43	1.1	.64
23	6.1	4.4	28	10	2.8	8.4	5.0	.99	7.5	14	.87	.67
24	1.1	4.1	93	47	2.5	7.3	4.2	44	5.6	3.2	.84	5.6
25	.83	64	14	17	2.4	20	3.6	35	4.4	.70	1.3	1.0
26	6.2	18	9.7	8.5	19	14	3.2	20	9.3	.51	.82	.71
27	2.1	9.1	8.5	117	14	8.3	10	5.6	3.4	.59	.71	.59
28	3.3	6.8	7.7	38	20	40	5.2	4.2	2.6	.97	.58	.57
29	1.5	6.1	7.3	13	---	25	2.4	56	6.6	1.1	---	.61
30	1.3	37	6.7	9.1	---	12	2.2	8.5	9.0	.99	.43	.54
31	1.1	---	6.9	7.9	---	11	---	14	---	.95	.44	---
TOTAL	95.17	293.69	696.1	431.2	293.6	1999.3	178.3	386.09	900.9	45.58	153.83	272.59
MEAN	3.07	9.79	22.5	13.9	10.5	64.5	5.94	12.5	30.0	1.47	4.96	9.09
MAX	41	64	129	117	89	868	18	62	201	14	85	218
MIN	.73	.78	5.3	2.2	2.4	7.3	2.2	.99	2.6	.43	.43	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	3.07	9.79	22.5	13.9	10.5	41.2	13.1	23.7	21.9	5.70	3.64	8.84
MAX	3.07	9.79	22.5	13.9	10.5	64.5	20.2	34.9	30.0	9.93	4.96	9.09
(WY)	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1997	1997
MIN	3.07	9.79	22.5	13.9	10.5	17.9	5.94	12.5	13.8	1.47	2.31	8.60
(WY)	1997	1997	1997	1997	1997	1996	1997	1997	1996	1997	1996	1996

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	5746.35		
ANNUAL MEAN	15.7	15.7	
HIGHEST ANNUAL MEAN		15.7	1997
LOWEST ANNUAL MEAN		15.7	1997
HIGHEST DAILY MEAN	868	868	Mar 1 1997
LOWEST DAILY MEAN	.35	.35	Sep 8 1997
ANNUAL SEVEN-DAY MINIMUM	.47	.47	Jul 16 1997
INSTANTANEOUS PEAK FLOW	4680	4680	Mar 1 1997
INSTANTANEOUS PEAK STAGE	9.33	9.33	Mar 1 1997
10 PERCENT EXCEEDS	29	37	
50 PERCENT EXCEEDS	4.9	5.5	
90 PERCENT EXCEEDS	.76	.82	

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY NEAR JEFFERSONTOWN, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	18	14	2.1	1.7	---	---	---	---	---	---	---
2	.50	4.4	5.1	2.2	1.7	---	---	---	---	---	---	---
3	.50	3.2	18	1.9	1.5	---	---	---	---	---	---	---
4	.49	2.0	8.7	1.7	2.0	---	---	---	---	---	---	---
5	.44	1.4	4.6	12	5.9	---	---	---	---	---	---	---
6	.43	1.3	3.0	94	8.6	---	---	---	---	---	---	---
7	.42	1.3	2.1	150	12	---	---	---	---	---	---	---
8	.42	1.2	1.8	58	13	---	---	---	---	---	---	---
9	.39	1.1	2.7	16	15	---	---	---	---	---	---	---
10	.43	1.0	52	9.1	26	---	---	---	---	---	---	---
11	.41	.94	7.0	6.5	99	---	---	---	---	---	---	---
12	.44	.85	4.2	7.1	28	---	---	---	---	---	---	---
13	3.3	29	3.0	6.8	14	---	---	---	---	---	---	---
14	6.6	9.1	2.1	4.6	9.5	---	---	---	---	---	---	---
15	1.0	3.2	1.7	3.9	7.6	---	---	---	---	---	---	---
16	.73	2.0	1.7	3.3	17	---	---	---	---	---	---	---
17	.72	1.4	1.6	3.8	19	---	---	---	---	---	---	---
18	.66	1.2	1.6	2.8	15	---	---	---	---	---	---	---
19	.63	1.1	1.5	2.6	8.8	---	---	---	---	---	---	---
20	.57	1.1	1.2	2.0	7.6	---	---	---	---	---	---	---
21	.48	11	1.8	1.9	6.1	---	---	---	---	---	---	---
22	.65	6.1	23	3.7	5.2	---	---	---	---	---	---	---
23	.83	2.1	4.9	8.2	5.0	---	---	---	---	---	---	---
24	12	1.5	59	3.9	4.0	---	---	---	---	---	---	---
25	3.7	1.2	17	2.9	3.4	---	---	---	---	---	---	---
26	4.6	1.1	7.0	2.5	3.1	---	---	---	---	---	---	---
27	2.1	1.0	5.0	2.4	---	---	---	---	---	---	---	---
28	1.2	.96	3.7	2.4	---	---	---	---	---	---	---	---
29	1.1	.98	3.9	2.3	---	---	---	---	---	---	---	---
30	.93	78	4.0	2.1	---	---	---	---	---	---	---	---
31	.85	---	2.4	1.7	---	---	---	---	---	---	---	---
TOTAL	48.02	188.73	269.3	424.4	---	---	---	---	---	---	---	---
MEAN	1.55	6.29	8.69	13.7	---	---	---	---	---	---	---	---
MAX	12	78	59	150	---	---	---	---	---	---	---	---
MIN	.39	.85	1.2	1.7	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1998, BY WATER YEAR (WY)

	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998
MEAN	2.31	8.04	15.6	13.8	10.5	41.2	13.1	23.7	21.9	5.70	3.64	8.84
MAX	3.07	9.79	22.5	13.9	10.5	64.5	20.2	34.9	30.0	9.93	4.96	9.09
(WY)	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1997	1997
MIN	1.55	6.29	8.69	13.7	10.5	17.9	5.94	12.5	13.8	1.47	2.31	8.60
(WY)	1998	1998	1998	1998	1997	1996	1997	1997	1996	1997	1996	1996

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

WATER YEARS 1995 - 1998

ANNUAL TOTAL	5167.44		
ANNUAL MEAN	14.2		15.7
HIGHEST ANNUAL MEAN			15.7
LOWEST ANNUAL MEAN			15.7
HIGHEST DAILY MEAN	868	Mar 1	868
LOWEST DAILY MEAN	.35	Sep 8	.35
ANNUAL SEVEN-DAY MINIMUM	.42	Oct 5	.42
INSTANTANEOUS PEAK FLOW			4680
INSTANTANEOUS PEAK STAGE			9.33
10 PERCENT EXCEEDS	21		30
50 PERCENT EXCEEDS	4.0		4.7
90 PERCENT EXCEEDS	.60		.79

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

WATER-QUALITY RECORDS

LOCATION.-- Lat 38°11'41", long 85°33'26", Jefferson County, Hydrologic Unit 05140102, on right downstream wingwall at bridge on Ruckriegel Parkway.

DRAINAGE AREA.--5.47 mi².

PERIOD OF DAILY RECORD.--January 1996 to October 1997.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2580 microsiemens, Jan. 9, 1997; minimum, 73 microsiemens, March 1-2, 1997.

pH: Maximum, 8.8 units, April 17-18, 1996; minimum, 7.0, May 28, 1996.

WATER TEMPERATURE: Maximum, 28.3° C, July 28, 1997; minimum, 0.0° C, Feb. 1-7, 1996.

DISSOLVED OXYGEN: Maximum, 21.9 mg/L, Feb. 3, 1996; minimum, 3.2 mg/L, Aug. 4, 1997.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	895	822	868
18	---	---	---	---	---	---	---	---	---	898	236	727
19	---	---	---	---	---	---	---	---	---	692	340	609
20	---	---	---	---	---	---	---	---	---	738	692	727
21	---	---	---	---	---	---	---	---	---	742	732	738
22	---	---	---	---	---	---	---	---	---	764	733	744
23	---	---	---	---	---	---	---	---	---	784	244	491
24	---	---	---	---	---	---	---	---	---	450	244	368
25	---	---	---	---	---	---	---	---	---	510	450	487
26	---	---	---	---	---	---	---	---	---	547	510	521
27	---	---	---	---	---	---	---	---	---	553	539	545
28	---	---	---	---	---	---	---	---	---	545	539	543
29	---	---	---	---	---	---	---	---	---	547	544	545
30	---	---	---	---	---	---	---	---	---	546	537	541
31	---	---	---	---	---	---	---	---	---	537	532	534
MONTH	---	---	---	---	---	---	---	---	---	898	236	599

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	688	670	680	740	733	736	518	129	388	628	612	623
2	694	669	685	744	738	740	600	518	563	631	618	625
3	697	668	686	738	731	734	632	600	623	632	601	622
4	694	665	684	731	703	720	635	630	632	650	543	636
5	693	668	683	714	703	709	637	279	531	543	169	385
6	693	662	681	709	268	496	616	378	520	622	505	564
7	694	666	682	501	187	399	646	616	633	640	622	632
8	694	669	684	530	257	440	654	646	649	646	636	640
9	676	432	523	564	297	465	656	646	652	2580	639	1220
10	557	473	512	685	564	633	662	649	656	1800	1130	1420
11	550	466	505	707	685	699	665	652	660	2130	1140	1600
12	619	550	598	717	702	709	667	160	386	1140	919	1030
13	665	619	651	717	708	713	590	483	544	922	844	890
14	674	651	666	722	701	711	639	590	623	871	756	823
15	678	660	672	722	693	704	649	636	642	1160	728	791
16	688	669	681	708	698	703	650	151	467	864	787	832
17	689	565	680	712	504	678	495	148	327	894	839	868
18	574	162	347	566	462	495	588	495	544	859	781	826
19	599	476	524	651	566	614	594	569	585	868	755	778
20	680	599	652	668	641	655	605	594	599	1070	852	965
21	696	680	691	674	332	515	607	601	603	903	809	858
22	714	678	700	619	425	521	955	606	699	1040	611	795
23	678	290	406	666	619	652	759	166	647	893	841	866
24	622	478	567	687	666	681	510	140	380	903	407	660
25	663	622	652	690	135	461	586	510	547	726	583	680
26	695	354	556	562	355	478	598	586	593	743	716	734
27	618	388	517	658	562	603	613	598	602	797	233	458
28	652	550	608	673	658	667	620	607	613	586	299	501
29	673	568	628	675	640	671	625	609	618	641	586	619
30	717	673	703	644	211	368	622	613	619	647	629	636
31	734	717	726	---	---	---	625	616	622	660	647	650
MONTH	734	162	620	744	135	612	955	129	573	2580	169	782
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	665	653	658	221	73	149	588	567	575	557	234	421
2	672	661	667	514	73	376	590	569	584	618	240	546
3	699	491	659	520	146	362	611	590	600	535	148	392
4	577	231	398	546	467	504	611	586	601	620	535	586
5	616	499	570	540	478	528	618	491	557	640	620	628
6	638	616	623	566	514	551	609	550	583	633	547	590
7	642	588	628	578	566	570	622	593	610	648	617	636
8	1350	573	799	586	574	578	620	591	608	663	173	489
9	773	718	745	585	244	506	618	596	609	597	435	541
10	723	712	717	554	320	480	623	598	612	630	597	611
11	716	704	712	583	554	569	624	582	607	642	626	631
12	717	710	713	601	583	592	610	270	446	649	628	641
13	2140	666	826	604	290	548	612	462	564	655	629	644
14	2030	865	1210	572	320	456	627	597	615	658	628	644
15	865	789	809	617	572	601	629	589	612	657	627	644
16	794	758	771	627	617	620	628	570	607	644	616	633
17	759	737	749	629	620	625	583	537	551	667	626	650
18	744	710	731	629	104	320	608	576	593	664	628	648
19	731	717	726	525	312	461	591	289	415	682	316	615
20	734	694	719	552	525	539	589	471	549	576	294	430
21	731	671	708	568	552	559	611	201	424	654	576	637
22	752	722	735	572	563	568	609	501	566	671	649	661
23	741	711	730	577	568	572	629	589	612	678	643	662
24	737	706	725	583	569	576	640	602	622	682	125	576
25	737	714	728	587	258	513	643	612	626	501	200	385
26	746	271	636	567	294	472	654	616	635	547	237	400
27	694	480	632	606	567	585	644	280	505	619	547	592
28	724	195	683	611	250	452	604	359	510	640	549	628
29	---	---	---	520	272	430	640	604	631	549	175	368
30	---	---	---	549	506	532	663	557	649	602	517	570
31	---	---	---	567	520	541	---	---	---	602	383	514
MONTH	2140	195	715	629	73	508	663	201	576	682	125	568

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	534	265	402	608	398	531	659	638	648	709	685	691
2	586	534	571	632	608	623	654	642	649	699	671	685
3	615	566	595	647	615	634	656	369	624	680	208	383
4	627	615	623	654	622	640	454	328	379	536	401	477
5	629	615	624	651	614	637	597	454	534	608	536	573
6	615	542	592	646	612	632	632	597	615	646	608	625
7	600	309	481	653	613	637	653	629	638	660	641	650
8	496	149	324	652	624	643	663	575	642	665	647	654
9	570	430	520	677	638	660	575	82	386	665	143	274
10	599	570	586	690	662	674	559	309	442	702	251	451
11	614	598	602	681	664	673	644	559	620	665	585	633
12	624	605	614	686	660	670	669	327	527	686	664	675
13	628	119	475	681	660	667	602	401	527	696	686	692
14	490	153	350	665	653	662	628	601	615	715	691	706
15	564	490	538	653	625	640	635	225	434	718	688	707
16	576	90	456	655	628	639	600	418	539	713	687	701
17	523	272	448	661	644	651	643	600	632	719	685	705
18	439	92	296	---	---	---	669	634	656	724	704	715
19	544	439	508	---	---	---	673	453	636	712	697	705
20	567	544	557	---	---	---	505	258	388	829	692	749
21	573	108	456	---	---	---	608	505	574	741	707	717
22	566	402	516	---	---	---	657	587	643	767	727	744
23	585	566	575	---	---	---	677	637	662	734	693	716
24	612	584	592	479	234	362	681	617	663	693	320	434
25	651	609	619	624	479	578	659	620	642	610	449	546
26	655	278	473	653	623	639	664	618	634	688	610	661
27	632	562	607	660	554	649	691	658	681	763	681	716
28	658	613	638	701	528	628	706	676	694	792	750	767
29	666	318	566	652	629	640	707	689	699	791	739	771
30	527	282	410	665	643	649	710	691	699	789	754	775
31	---	---	---	666	647	656	701	690	696	---	---	---
MONTH	666	90	520	701	234	629	710	82	594	829	143	643
YEAR	2580	73	611									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	8.0	7.6	7.7
18	---	---	---	---	---	---	---	---	---	8.2	7.5	7.8
19	---	---	---	---	---	---	---	---	---	7.8	7.5	7.7
20	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
21	---	---	---	---	---	---	---	---	---	8.1	7.8	8.0
22	---	---	---	---	---	---	---	---	---	8.2	7.8	8.0
23	---	---	---	---	---	---	---	---	---	7.8	7.6	7.7
24	---	---	---	---	---	---	---	---	---	7.6	7.5	7.6
25	---	---	---	---	---	---	---	---	---	7.8	7.6	7.7
26	---	---	---	---	---	---	---	---	---	7.8	7.7	7.7
27	---	---	---	---	---	---	---	---	---	7.9	7.7	7.8
28	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
29	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
30	---	---	---	---	---	---	---	---	---	8.1	7.8	7.9
31	---	---	---	---	---	---	---	---	---	8.1	7.9	8.0
MONTH	---	---	---	---	---	---	---	---	---	8.2	7.5	7.8

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.5	7.7	7.6	7.5	7.6	7.6	7.3	7.5	8.4	8.1	8.2
2	8.0	7.7	7.8	7.7	7.5	7.6	7.8	7.6	7.7	8.3	8.1	8.2
3	8.1	7.8	7.9	7.7	7.6	7.6	7.9	7.7	7.8	8.5	8.1	8.3
4	8.0	7.8	7.9	7.7	7.6	7.6	7.9	7.8	7.8	8.3	8.0	8.1
5	8.0	7.8	7.9	7.7	7.5	7.6	7.9	7.5	7.7	8.0	7.7	7.8
6	8.0	7.7	7.9	7.6	7.2	7.4	7.8	7.5	7.7	8.1	7.8	8.0
7	7.9	7.7	7.8	7.4	7.1	7.2	7.9	7.6	7.8	8.2	8.0	8.0
8	7.9	7.7	7.8	7.4	7.1	7.2	8.0	7.7	7.8	8.2	8.0	8.1
9	7.9	7.6	7.7	7.3	7.1	7.2	8.1	7.8	7.9	8.1	7.9	8.0
10	8.0	7.5	7.7	7.4	7.3	7.3	8.1	7.8	7.9	8.2	7.9	8.0
11	7.9	7.5	7.7	7.6	7.3	7.4	8.1	7.8	7.9	8.2	7.9	8.0
12	7.9	7.6	7.7	7.7	7.3	7.5	7.8	7.5	7.6	8.2	8.0	8.1
13	7.8	7.7	7.7	7.6	7.2	7.5	8.0	7.7	7.8	8.2	8.0	8.1
14	7.8	7.6	7.7	7.7	7.3	7.4	8.1	7.8	7.9	8.2	8.0	8.1
15	7.8	7.6	7.7	7.8	7.3	7.6	8.2	7.9	8.0	8.2	7.8	8.0
16	7.7	7.6	7.6	7.8	7.6	7.7	8.0	7.7	7.9	8.0	7.7	7.8
17	7.7	7.6	7.6	7.6	7.4	7.5	7.8	7.6	7.7	8.1	7.9	8.0
18	7.6	7.2	7.3	7.6	7.3	7.4	8.0	7.8	7.9	8.2	8.0	8.0
19	7.4	7.3	7.3	7.8	7.4	7.6	8.2	7.9	8.0	8.2	8.0	8.1
20	7.6	7.4	7.4	7.8	7.5	7.7	8.2	8.0	8.1	8.1	7.9	8.0
21	7.5	7.4	7.5	7.7	7.4	7.5	8.3	8.1	8.1	8.1	7.9	8.0
22	7.9	7.4	7.6	7.9	7.4	7.6	8.2	8.1	8.1	8.0	7.6	7.8
23	7.8	7.4	7.5	8.0	7.8	7.9	8.3	7.9	8.1	7.8	7.6	7.7
24	7.6	7.3	7.5	8.0	7.8	7.9	8.0	7.7	7.8	7.8	7.6	7.7
25	7.7	7.4	7.5	7.9	7.5	7.7	8.0	7.8	7.9	7.8	7.6	7.7
26	7.7	7.3	7.4	7.6	7.5	7.6	8.1	7.9	8.0	7.9	7.7	7.8
27	7.5	7.3	7.4	7.8	7.6	7.7	8.1	8.0	8.0	7.8	7.7	7.8
28	7.5	7.3	7.4	7.9	7.7	7.8	8.2	8.0	8.1	7.8	7.6	7.7
29	7.7	7.4	7.5	7.9	7.7	7.8	8.3	8.0	8.1	7.9	7.7	7.8
30	7.6	7.4	7.5	7.7	7.4	7.5	8.3	8.0	8.1	8.0	7.8	7.9
31	7.6	7.5	7.5	---	---	---	8.3	8.1	8.2	8.1	7.8	7.9
MONTH	8.1	7.2	7.6	8.0	7.1	7.6	8.3	7.3	7.9	8.5	7.6	8.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.8	7.9	8.0	7.4	7.5	8.3	8.0	8.1	7.8	7.5	7.6
2	8.1	7.8	7.9	7.6	7.3	7.4	8.3	8.0	8.1	7.9	7.5	7.7
3	8.2	7.5	7.9	7.7	7.5	7.6	8.3	8.0	8.1	7.8	7.5	7.6
4	7.6	7.4	7.5	7.7	7.6	7.7	8.4	8.0	8.2	7.7	7.5	7.6
5	7.7	7.5	7.6	7.8	7.7	7.7	8.1	7.8	7.9	7.8	7.6	7.7
6	7.8	7.5	7.6	7.8	7.7	7.8	8.3	7.8	8.0	7.7	7.5	7.6
7	7.9	7.6	7.7	7.9	7.8	7.9	8.3	7.8	8.0	7.8	7.5	7.6
8	7.9	7.5	7.7	8.0	7.8	7.9	8.3	7.8	8.0	7.7	7.4	7.5
9	8.1	7.7	7.9	7.9	7.7	7.8	8.2	7.8	8.0	7.5	7.2	7.4
10	8.2	7.8	8.0	7.9	7.7	7.8	8.1	7.8	7.9	7.6	7.2	7.4
11	8.3	8.0	8.1	8.0	7.9	8.0	8.0	7.7	7.8	7.8	7.3	7.5
12	8.3	8.1	8.2	8.1	8.0	8.0	7.7	7.4	7.6	7.8	7.4	7.6
13	8.4	7.8	8.1	8.2	7.7	8.0	7.9	7.4	7.7	7.8	7.4	7.6
14	8.2	7.8	7.9	7.9	7.7	7.8	8.2	7.6	7.9	7.9	7.4	7.6
15	8.3	7.9	8.0	8.2	7.9	8.0	8.2	7.7	8.0	7.9	7.4	7.6
16	8.3	7.9	8.1	8.2	7.9	8.1	8.2	7.7	8.0	8.0	7.4	7.7
17	8.4	8.0	8.1	8.2	7.9	8.1	8.2	7.7	7.9	7.9	7.5	7.7
18	8.4	8.0	8.2	8.0	7.5	7.7	8.4	7.8	8.1	8.0	7.5	7.7
19	8.2	7.9	8.0	7.9	7.6	7.8	8.3	7.8	8.0	7.7	7.2	7.5
20	8.4	7.8	8.0	8.0	7.8	7.9	8.6	7.8	8.1	7.6	7.2	7.4
21	8.2	7.8	8.0	8.1	7.9	8.0	8.4	7.9	8.1	7.7	7.3	7.5
22	8.4	7.8	8.1	8.2	7.9	8.0	8.7	7.9	8.2	8.0	7.4	7.6
23	8.6	8.0	8.3	8.2	7.9	8.1	8.6	7.9	8.2	8.1	7.5	7.8
24	8.6	8.1	8.3	8.3	8.0	8.1	8.4	7.9	8.2	8.0	7.3	7.7
25	8.6	8.1	8.4	8.4	7.9	8.1	8.3	7.8	8.1	7.5	7.3	7.4
26	8.3	8.0	8.2	8.3	7.9	8.1	8.2	7.8	8.0	7.5	7.3	7.4
27	8.2	7.7	8.0	8.4	8.0	8.2	8.0	7.6	7.7	7.7	7.5	7.6
28	8.2	7.7	7.9	8.1	7.9	8.0	8.1	7.5	7.8	7.7	7.6	7.6
29	---	---	---	8.0	7.8	7.9	8.1	7.6	7.9	7.6	7.4	7.5
30	---	---	---	8.1	7.9	8.0	8.1	7.7	7.9	7.7	7.5	7.6
31	---	---	---	8.3	7.9	8.1	---	---	---	7.6	7.5	7.5
MONTH	8.6	7.4	8.0	8.4	7.3	7.9	8.7	7.4	8.0	8.1	7.2	7.6

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.4	7.5	7.8	7.4	7.6	7.9	7.7	7.8	7.9	7.8	7.9
2	7.9	7.6	7.8	7.9	7.5	7.7	7.9	7.7	7.8	7.9	7.8	7.9
3	8.0	7.7	7.8	8.0	7.6	7.7	7.9	7.4	7.7	7.8	7.5	7.6
4	8.0	7.8	7.9	8.0	7.6	7.8	7.4	7.2	7.3	7.7	7.6	7.6
5	8.1	7.8	7.9	8.1	7.7	7.8	7.6	7.3	7.4	7.8	7.7	7.8
6	8.0	7.8	7.9	8.0	7.7	7.9	7.7	7.5	7.6	7.9	7.8	7.8
7	7.8	7.6	7.7	8.0	7.7	7.8	7.8	7.5	7.7	7.8	7.8	7.8
8	7.7	7.5	7.6	7.9	7.6	7.8	7.8	7.6	7.7	7.8	7.8	7.8
9	7.7	7.5	7.6	7.9	7.6	7.8	7.8	7.4	7.5	8.1	7.3	7.6
10	7.8	7.6	7.7	7.9	7.6	7.8	7.5	7.4	7.5	7.6	7.4	7.5
11	7.9	7.6	7.7	7.9	7.6	7.8	7.7	7.5	7.6	7.8	7.6	7.7
12	8.0	7.6	7.8	7.9	7.6	7.8	7.7	7.3	7.5	7.9	7.7	7.8
13	8.0	7.2	7.6	7.9	7.6	7.8	7.6	7.3	7.5	7.9	7.8	7.8
14	7.4	7.2	7.3	7.9	7.6	7.8	7.8	7.5	7.6	7.9	7.8	7.8
15	7.6	7.3	7.5	7.8	7.6	7.8	7.7	7.4	7.6	7.9	7.7	7.8
16	7.6	7.2	7.5	7.8	7.6	7.7	7.9	7.5	7.7	7.9	7.7	7.8
17	7.5	7.2	7.4	7.8	7.6	7.7	7.9	7.7	7.8	7.9	7.7	7.8
18	7.5	7.2	7.4	---	---	---	7.9	7.8	7.9	7.8	7.7	7.8
19	7.6	7.4	7.5	---	---	---	7.9	7.6	7.8	7.8	7.7	7.8
20	7.7	7.6	7.6	---	---	---	7.7	7.4	7.6	7.8	7.6	7.8
21	7.8	7.3	7.6	---	---	---	8.0	7.6	7.8	7.8	7.7	7.8
22	7.7	7.4	7.5	---	---	---	8.0	7.7	7.9	7.8	7.7	7.8
23	8.0	7.5	7.7	---	---	---	8.0	7.8	7.9	7.8	7.7	7.7
24	8.1	7.7	7.9	7.8	7.3	7.5	8.0	7.8	7.9	7.8	7.5	7.7
25	8.2	7.7	7.9	7.9	7.6	7.8	8.1	7.7	7.9	7.8	7.6	7.7
26	7.9	7.5	7.7	7.9	7.7	7.8	8.0	7.7	7.9	7.8	7.7	7.7
27	8.1	7.6	7.8	7.9	7.7	7.8	8.0	7.7	7.9	7.8	7.7	7.8
28	8.1	7.7	7.8	7.9	7.7	7.8	7.9	7.7	7.8	7.8	7.7	7.7
29	7.9	7.4	7.6	7.8	7.7	7.8	7.9	7.8	7.8	7.7	7.6	7.6
30	7.6	7.4	7.4	7.9	7.7	7.8	7.9	7.8	7.9	7.7	7.6	7.6
31	---	---	---	7.9	7.7	7.8	7.9	7.8	7.9	---	---	---
MONTH	8.2	7.2	7.7	8.1	7.3	7.8	8.1	7.2	7.7	8.1	7.3	7.7
YEAR	8.7	7.1	7.8									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	1.0	.0	8.4	3.1
2	---	---	---	---	---	---	---	---	.3	.0	7.0	4.3
3	---	---	---	---	---	---	---	---	.3	.0	6.0	.9
4	---	---	---	---	---	---	---	---	.3	.0	8.4	1.7
5	---	---	---	---	---	---	---	---	.3	.0	10.4	7.0
6	---	---	---	---	---	---	---	---	.3	.0	10.1	7.5
7	---	---	---	---	---	---	---	---	.5	.0	7.5	3.9
8	---	---	---	---	---	---	---	---	4.4	.5	4.7	2.0
9	---	---	---	---	---	---	---	---	8.0	3.0	5.7	1.4
10	---	---	---	---	---	---	---	---	11.0	3.8	8.5	1.9
11	---	---	---	---	---	---	---	---	9.1	4.1	10.2	2.8
12	---	---	---	---	---	---	---	---	4.6	2.8	11.3	3.8
13	---	---	---	---	---	---	---	---	5.8	2.2	12.6	5.6
14	---	---	---	---	---	---	---	---	7.2	3.8	15.1	9.3
15	---	---	---	---	---	---	---	---	5.9	3.9	13.3	9.9
16	---	---	---	---	---	---	---	---	3.9	1.6	10.0	8.1
17	---	---	---	---	---	---	10.9	8.1	3.5	.3	13.1	8.4
18	---	---	---	---	---	---	12.1	7.9	4.9	.2	12.6	7.4
19	---	---	---	---	---	---	7.9	3.3	5.8	2.8	9.4	4.3
20	---	---	---	---	---	---	5.6	2.9	8.9	5.7	5.7	4.6
21	---	---	---	---	---	---	7.2	4.2	10.7	6.9	7.3	5.1
22	---	---	---	---	---	---	7.3	4.1	12.0	8.5	10.5	4.2
23	---	---	---	---	---	---	7.0	4.7	14.0	9.7	11.7	4.8
24	---	---	---	---	---	---	6.8	5.0	12.9	8.1	14.1	7.3
25	---	---	---	---	---	---	6.9	3.8	10.5	7.0	13.2	8.0
26	---	---	---	---	---	---	8.0	5.0	11.9	9.8	11.1	5.1
27	---	---	---	---	---	---	8.1	3.4	14.5	10.8	10.6	4.5
28	---	---	---	---	---	---	5.3	2.0	12.7	5.8	8.6	7.4
29	---	---	---	---	---	---	8.1	4.4	7.6	3.8	10.4	8.0
30	---	---	---	---	---	---	5.8	2.4	---	---	13.6	9.2
31	---	---	---	---	---	---	3.1	.4	---	---	12.2	9.6
MONTH	---	---	---	---	---	---	12.1	.4	14.5	.0	15.1	.9

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGEAL PARKWAY AT JEFFERSONTOWN, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.7	7.3	16.8	11.0	19.2	16.0	26.6	24.6	22.8	19.0	23.8	21.2
2	13.8	6.9	18.3	11.2	17.8	16.6	25.9	22.4	23.6	19.8	24.3	22.0
3	---	---	20.9	14.2	21.2	16.6	23.7	19.9	25.3	19.9	23.3	22.2
4	---	---	18.3	10.9	19.2	15.8	23.7	18.4	25.7	21.2	23.2	22.3
5	9.2	7.1	21.0	15.0	21.6	14.8	23.9	19.1	26.2	22.6	24.4	22.1
6	12.3	6.1	17.6	15.4	21.1	17.0	24.9	19.9	26.9	24.0	24.7	21.9
7	11.5	5.4	17.6	14.6	20.8	18.2	25.8	22.2	27.0	25.0	24.6	21.7
8	9.4	7.1	18.9	16.3	19.7	17.1	24.2	21.6	26.9	23.4	24.8	21.0
9	9.4	4.8	20.9	15.4	19.5	16.6	24.3	20.9	24.9	21.3	24.7	21.9
10	14.0	4.6	21.2	16.4	20.6	16.5	23.4	19.6	23.9	20.5	24.6	21.4
11	16.6	6.9	18.9	13.8	19.1	16.7	23.0	19.7	23.5	21.0	23.9	20.4
12	20.1	11.5	15.6	12.1	20.1	16.9	25.0	20.9	23.4	20.6	23.5	20.2
13	17.1	12.1	13.3	11.6	20.5	16.7	24.9	22.8	23.6	20.9	20.2	17.4
14	14.1	10.3	17.0	9.9	22.8	17.3	25.0	21.1	24.0	21.5	17.7	15.4
15	13.4	9.9	15.7	13.8	23.5	18.3	23.1	21.0	23.9	22.3	17.5	15.2
16	13.3	8.1	18.0	15.0	23.1	18.6	25.9	19.8	24.0	22.3	19.8	17.1
17	16.9	7.2	21.9	15.4	24.6	18.9	25.5	20.6	23.8	22.3	19.2	17.6
18	18.5	10.2	23.8	17.0	23.6	19.9	26.4	22.7	24.6	22.3	19.9	16.2
19	18.8	14.2	24.7	18.4	24.6	20.2	25.6	23.3	25.9	23.5	20.2	15.6
20	17.0	13.9	24.5	19.2	24.1	19.6	25.1	22.6	26.4	23.8	20.4	15.8
21	19.5	12.2	22.0	19.5	25.9	19.7	25.8	21.1	24.6	23.2	20.2	17.6
22	18.8	14.2	22.6	16.8	25.8	20.7	24.2	21.2	26.6	22.1	20.6	16.3
23	15.5	11.5	22.9	16.7	26.6	21.5	25.1	20.0	27.4	23.3	20.7	16.0
24	16.9	9.8	25.7	19.1	25.5	21.7	26.3	20.6	24.2	22.6	20.2	18.2
25	17.4	12.4	23.5	18.6	23.5	20.3	25.0	21.7	24.5	19.7	18.2	15.6
26	14.8	10.9	21.5	18.7	22.5	18.5	24.2	20.3	24.1	20.6	19.6	16.4
27	17.0	8.8	19.9	18.5	23.9	18.0	24.0	20.5	24.1	22.6	19.7	18.6
28	14.1	11.9	19.8	17.1	25.2	20.0	23.8	21.0	23.5	20.9	18.6	15.7
29	16.5	11.9	---	---	25.7	21.8	23.9	21.3	23.7	22.1	19.0	14.9
30	14.4	11.1	---	---	26.4	23.0	22.0	20.6	23.9	22.0	19.8	14.7
31	---	---	20.1	14.2	---	---	24.3	20.6	23.6	21.0	---	---
MONTH	20.1	4.6	25.7	9.9	26.6	14.8	26.6	18.4	27.4	19.0	24.8	14.7
YEAR	27.4	.0										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.9	16.0	12.8	11.3	11.8	8.9	10.9	9.6	8.7	5.2	15.1	12.6
2	21.0	18.3	11.3	8.9	10.0	7.4	12.3	10.5	9.7	6.4	15.1	9.7
3	19.7	15.7	9.3	7.5	9.1	7.4	15.0	12.3	8.2	6.4	9.7	6.1
4	15.7	12.3	8.7	7.2	8.4	5.9	14.8	12.9	9.9	6.8	12.1	9.1
5	17.1	12.1	12.2	8.5	7.5	5.7	14.7	8.9	7.9	6.5	11.3	8.9
6	17.6	13.8	14.5	11.1	8.3	5.9	8.9	5.1	8.0	6.1	11.4	6.9
7	17.6	13.9	17.3	13.6	9.7	7.4	5.9	3.5	9.1	6.3	11.8	6.1
8	17.3	14.5	13.6	10.0	7.4	4.6	4.1	2.5	6.7	5.1	14.8	9.1
9	16.7	14.2	10.6	9.2	6.2	3.7	4.6	2.9	6.3	4.8	11.3	9.0
10	15.8	13.1	9.2	7.3	9.3	4.2	3.6	.4	6.4	4.7	13.4	8.2
11	14.9	11.8	7.4	5.9	12.6	9.3	.6	.3	6.4	4.6	14.1	7.4
12	15.1	11.1	7.7	4.9	12.1	10.5	.6	.3	5.6	3.8	13.7	8.2
13	16.2	12.6	7.0	5.7	10.7	8.3	.5	.2	3.8	2.2	10.7	8.4
14	17.9	14.3	6.8	5.3	9.7	6.7	.4	.2	5.7	3.5	12.0	6.7
15	18.1	15.7	6.4	3.4	10.3	6.9	1.3	.2	7.9	4.1	9.3	4.6
16	18.0	16.0	8.6	5.0	9.9	7.4	1.7	.2	6.3	3.8	10.4	3.9
17	18.9	15.4	11.2	8.0	8.0	6.9	.4	.2	8.4	2.4	8.2	6.6
18	18.6	13.6	11.3	8.7	7.7	5.2	.4	.2	11.0	4.8	9.5	7.8
19	14.2	11.3	9.2	7.1	5.2	2.6	.4	.2	10.2	8.2	13.2	8.1
20	13.5	10.0	8.7	7.1	3.8	1.6	1.5	.1	13.3	8.6	14.7	8.0
21	13.6	11.4	8.1	6.5	4.8	1.3	4.0	.8	13.5	11.6	16.6	8.9
22	16.5	13.6	7.1	5.4	7.0	4.5	6.3	4.0	11.7	5.4	13.8	10.1
23	16.3	12.3	7.7	4.1	10.7	7.0	6.7	4.3	9.8	3.3	12.8	7.5
24	14.2	11.9	9.9	7.2	10.1	5.5	5.7	2.0	9.7	4.8	12.9	6.9
25	13.7	11.9	10.4	8.6	6.4	4.9	6.2	3.2	9.9	4.6	13.1	9.9
26	15.5	12.7	9.9	6.8	7.3	4.9	4.0	2.5	10.1	6.4	14.7	8.7
27	17.5	15.5	8.0	5.4	9.3	7.2	5.4	2.3	12.9	9.8	16.1	8.0
28	18.0	16.2	8.0	4.9	13.2	9.3	5.7	3.8	13.9	7.8	14.5	10.8
29	16.6	14.6	8.0	4.5	13.6	10.2	6.4	2.8	---	---	13.7	11.2
30	16.9	15.7	11.1	8.0	10.2	8.2	6.8	3.3	---	---	11.8	9.6
31	15.7	12.6	---	---	10.9	9.5	8.5	4.6	---	---	14.0	8.1
MONTH	21.0	10.0	17.3	3.4	13.6	1.3	15.0	.1	13.9	2.2	16.6	3.9

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGEAL PARKWAY AT JEFFERSONTOWN, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.8	7.0	17.8	13.1	17.4	16.0	24.9	20.7	24.6	20.7	25.1	22.8
2	16.0	7.9	16.5	11.9	18.6	14.9	26.4	20.9	24.8	21.5	25.6	23.3
3	17.2	9.0	16.2	11.9	18.5	16.1	25.7	21.6	26.6	23.2	24.3	21.2
4	15.8	10.9	17.8	10.8	16.7	15.2	24.7	20.9	26.0	23.8	21.2	17.1
5	16.4	13.3	16.8	10.9	16.3	14.5	21.8	18.2	25.2	22.2	19.0	16.6
6	19.7	13.6	19.5	12.8	16.6	15.3	22.5	17.7	22.9	20.5	20.4	17.5
7	15.4	9.9	19.4	12.3	16.6	15.3	23.9	18.8	22.2	18.8	21.8	18.5
8	15.0	8.2	17.1	13.9	16.9	15.5	24.6	20.7	23.9	19.0	22.3	20.4
9	12.2	6.0	14.7	12.0	17.1	15.4	24.5	22.8	22.1	19.6	23.3	20.2
10	13.3	6.3	17.6	10.2	19.5	15.3	23.8	21.1	21.5	19.2	21.6	19.5
11	16.7	8.6	19.1	11.0	18.4	16.4	23.6	20.7	25.4	19.8	21.0	18.0
12	16.2	12.3	16.1	13.5	21.0	16.7	24.5	21.8	24.8	22.0	20.4	16.5
13	12.3	8.4	16.5	11.2	22.2	17.5	25.3	22.4	24.7	22.2	21.0	16.3
14	13.8	6.2	16.8	12.1	18.8	17.1	26.1	23.7	25.8	21.6	21.5	17.9
15	15.9	8.1	15.3	11.9	19.8	15.3	25.7	23.6	26.0	22.5	21.6	19.2
16	14.8	9.8	16.5	9.7	21.6	16.4	26.2	23.3	27.9	23.4	22.6	20.3
17	12.0	8.3	18.3	12.6	19.3	17.3	26.7	23.7	27.1	24.6	22.6	20.9
18	14.5	6.2	21.5	15.5	20.4	18.1	---	---	25.5	23.1	21.2	19.3
19	13.0	9.8	22.6	18.1	20.5	16.8	---	---	24.7	21.5	22.1	18.4
20	15.4	8.6	20.8	16.3	22.0	17.2	---	---	21.6	20.9	22.5	21.2
21	13.9	11.3	18.8	14.3	22.5	18.0	---	---	22.3	19.6	21.2	17.8
22	16.4	10.5	18.9	13.5	21.4	18.1	---	---	21.3	18.2	18.1	16.6
23	16.0	10.7	19.6	14.3	23.5	18.1	---	---	21.1	17.7	17.5	16.9
24	15.8	10.7	21.6	15.9	24.3	18.7	26.7	23.8	21.0	18.0	18.4	16.2
25	18.0	10.5	19.7	17.3	25.4	19.8	26.5	24.0	21.8	18.7	19.0	16.0
26	17.3	11.7	19.5	15.5	24.0	20.7	26.9	24.3	23.4	20.6	18.8	16.1
27	15.9	12.7	17.9	14.2	24.7	19.6	28.1	25.9	24.6	21.9	18.9	17.0
28	16.2	12.0	16.3	15.2	24.9	19.4	28.3	25.2	25.3	23.8	19.4	17.5
29	19.0	10.8	15.8	14.9	23.4	20.5	27.3	24.8	24.8	22.8	18.5	16.8
30	20.0	12.3	18.7	14.7	23.5	20.0	24.8	21.6	23.0	20.9	19.3	17.5
31	---	---	17.8	16.2	---	---	23.7	20.3	23.5	21.1	---	---
MONTH	20.0	6.0	22.6	9.7	25.4	14.5	28.3	17.7	27.9	17.7	25.6	16.0
YEAR	28.3	.1										

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	12.8	9.4	10.8
18	---	---	---	---	---	---	---	---	---	13.9	9.3	10.6
19	---	---	---	---	---	---	---	---	---	14.1	11.3	13.2
20	---	---	---	---	---	---	---	---	---	15.3	12.9	14.0
21	---	---	---	---	---	---	---	---	---	14.9	12.3	13.4
22	---	---	---	---	---	---	---	---	---	16.5	12.4	13.8
23	---	---	---	---	---	---	---	---	---	14.1	12.3	13.0
24	---	---	---	---	---	---	---	---	---	13.7	12.7	13.2
25	---	---	---	---	---	---	---	---	---	15.3	13.0	14.1
26	---	---	---	---	---	---	---	---	---	14.9	12.0	13.4
27	---	---	---	---	---	---	---	---	---	16.1	12.0	14.1
28	---	---	---	---	---	---	---	---	---	17.4	13.8	15.5
29	---	---	---	---	---	---	---	---	---	16.3	12.9	14.2
30	---	---	---	---	---	---	---	---	---	17.6	12.9	15.1
31	---	---	---	---	---	---	---	---	---	19.4	14.7	16.9
MONTH	---	---	---	---	---	---	---	---	---	19.4	9.3	13.7

SALT RIVER BASIN

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY AT JEFFERSONTOWN, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	8.9	10.0	---	---	---	11.1	8.3	10.1	13.7	9.9	11.2
2	13.4	8.8	10.6	---	---	---	12.7	9.5	11.6	12.3	9.6	10.6
3	12.0	6.3	10.0	---	---	---	13.2	9.7	11.6	14.1	9.1	10.7
4	11.6	6.0	9.4	---	---	---	14.4	10.0	12.6	11.9	9.0	9.9
5	12.3	6.4	10.0	11.5	9.4	10.5	13.5	10.7	12.0	11.3	9.1	10.4
6	11.7	8.0	9.8	10.6	8.3	9.1	14.1	10.5	12.1	13.6	10.8	12.1
7	11.3	8.1	9.7	10.8	7.5	9.1	13.5	9.2	11.3	14.5	12.2	13.1
8	11.8	8.1	9.7	11.1	8.7	9.7	14.1	9.3	12.1	15.4	12.6	13.8
9	11.4	7.4	9.5	10.5	8.4	9.4	15.5	10.6	13.0	13.3	11.3	12.5
10	10.2	7.2	8.7	9.9	5.9	8.7	15.3	8.8	12.1	15.4	11.3	12.9
11	10.6	7.0	8.6	11.6	7.3	9.3	13.6	8.0	10.3	16.1	11.6	13.3
12	10.6	7.9	9.1	14.6	6.9	10.7	10.7	7.9	10.2	16.1	12.1	13.5
13	10.1	7.7	8.9	13.5	8.6	10.7	12.8	9.8	11.3	16.3	12.2	13.7
14	9.6	7.4	8.5	15.0	7.8	11.4	13.4	10.3	11.9	16.2	12.3	13.6
15	9.0	7.0	8.0	16.2	7.5	12.9	15.0	10.0	12.4	15.2	11.7	13.0
16	9.0	6.7	7.9	16.3	10.6	13.4	12.5	9.4	11.5	13.7	11.4	12.3
17	10.0	6.5	8.1	13.7	10.7	11.9	12.2	10.5	11.7	14.8	11.6	12.7
18	9.1	6.1	7.8	15.4	10.0	12.2	13.5	9.7	11.6	15.3	12.0	13.2
19	7.7	3.7	6.6	17.7	9.9	13.5	13.4	11.2	12.2	14.2	11.9	12.7
20	8.3	3.5	5.8	18.0	9.8	13.8	14.9	11.4	13.0	15.8	11.9	13.3
21	7.3	3.8	5.4	14.1	9.7	12.3	15.3	10.7	13.4	15.4	11.6	13.3
22	11.1	3.8	6.7	13.2	9.7	11.1	12.4	10.1	11.2	11.9	10.6	11.2
23	8.8	4.9	7.1	14.5	9.7	12.1	12.0	9.3	10.4	12.4	10.5	11.2
24	---	---	---	13.9	8.7	10.9	11.2	10.0	10.7	12.5	10.4	11.3
25	---	---	---	11.2	9.1	10.3	12.5	11.2	11.7	12.2	10.8	11.4
26	---	---	---	12.1	8.4	10.9	12.7	10.6	11.5	13.5	11.4	12.2
27	---	---	---	13.8	9.5	12.1	12.1	10.3	11.0	12.5	10.5	11.5
28	---	---	---	14.2	10.0	12.2	12.1	8.9	10.4	12.9	11.5	12.3
29	---	---	---	15.1	10.0	12.5	12.1	8.9	10.1	13.5	11.5	12.4
30	---	---	---	11.5	8.5	10.6	13.5	10.0	11.2	13.5	10.9	12.2
31	---	---	---	---	---	---	12.6	10.0	10.7	13.5	10.3	11.7
MONTH	13.4	3.5	8.5	18.0	5.9	11.2	15.5	7.9	11.5	16.3	9.0	12.2
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.9	10.4	11.7	9.9	9.3	9.7	13.3	10.2	11.5	12.2	7.3	9.2
2	13.9	10.0	11.6	9.8	8.6	9.0	13.6	10.1	11.4	12.8	7.2	9.3
3	15.0	10.2	12.0	11.3	8.7	9.6	13.5	9.5	11.5	9.9	8.5	9.3
4	12.3	9.3	10.8	9.3	8.7	9.0	11.1	5.6	8.8	12.0	8.6	10.4
5	11.9	10.6	11.1	9.6	8.9	9.1	8.6	5.2	6.5	13.0	8.4	10.4
6	13.0	10.7	11.5	10.7	9.6	10.1	9.6	5.1	6.8	12.1	7.9	9.7
7	14.3	10.8	11.9	11.4	9.8	10.6	15.1	5.6	9.9	13.5	7.3	10.0
8	14.4	11.9	12.9	10.8	9.5	10.1	15.6	9.5	12.1	9.4	7.2	8.3
9	14.9	11.9	13.0	11.2	9.6	10.5	15.5	9.9	12.5	11.0	8.5	9.6
10	14.9	12.0	13.1	11.7	10.3	10.8	15.9	10.5	12.8	12.1	8.6	10.2
11	15.3	11.9	13.1	12.2	10.4	11.2	14.9	9.0	11.8	12.7	8.3	10.3
12	14.2	11.9	12.8	12.8	10.6	11.7	11.1	7.4	8.9	13.3	8.0	10.1
13	16.0	12.6	13.9	14.0	11.0	12.4	14.1	7.9	10.5	13.5	8.5	10.8
14	14.0	12.3	12.9	11.5	9.6	10.3	15.9	9.8	12.4	13.8	8.4	10.7
15	15.3	12.1	13.3	12.6	9.5	10.9	16.2	8.8	11.9	13.6	8.0	10.7
16	15.6	12.4	13.6	12.6	9.1	10.7	15.5	8.2	10.9	14.8	8.9	11.4
17	16.4	11.5	13.9	12.2	9.1	10.3	15.9	7.8	11.3	13.6	8.1	10.4
18	15.9	10.4	12.9	12.1	9.0	10.8	16.7	9.4	12.6	13.5	7.3	10.0
19	14.1	10.2	11.4	11.4	9.5	10.6	12.4	8.4	10.4	12.0	5.7	8.0
20	15.4	9.3	11.8	10.9	8.8	9.9	16.9	8.1	11.8	10.3	6.4	8.2
21	12.7	8.9	10.2	10.9	8.2	9.5	12.2	7.6	10.0	10.4	4.9	7.5
22	15.5	8.9	12.0	11.1	8.3	9.6	16.4	8.0	11.3	12.0	6.2	8.9
23	17.3	11.8	14.1	12.0	9.3	10.5	16.9	7.6	11.6	12.8	6.8	9.5
24	17.7	11.6	14.3	12.7	9.3	10.8	15.9	7.8	11.5	11.8	6.6	8.8
25	18.0	12.5	14.7	11.4	9.3	10.2	15.6	7.9	11.2	9.4	8.0	8.6
26	15.8	10.8	12.6	12.0	9.5	10.6	15.1	7.5	10.8	9.4	8.3	8.9
27	11.6	8.5	10.2	12.6	9.1	10.8	9.2	6.9	8.1	11.0	8.5	9.7
28	12.6	7.9	9.8	11.1	9.0	9.9	14.0	7.8	10.2	9.8	8.4	9.0
29	---	---	---	11.0	9.5	10.2	15.1	7.6	10.7	10.0	8.6	9.5
30	---	---	---	11.8	9.6	10.5	14.5	7.1	10.1	10.7	8.8	9.8
31	---	---	---	12.9	10.1	11.4	---	---	---	9.7	8.6	9.0
MONTH	18.0	7.9	12.4	14.0	8.2	10.4	16.9	5.1	10.7	14.8	4.9	9.6

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	3.7	149	12	19	1590	17	18	112	11	3.5	4.3
2	7.5	3.5	24	12	17	570	15	22	40	8.8	3.4	4.4
3	6.5	3.1	16	11	19	253	14	139	24	8.0	3.7	11
4	5.9	3.1	13	10	191	74	15	23	19	7.2	5.7	4.8
5	4.9	3.1	22	53	51	55	16	17	16	6.5	3.8	4.5
6	4.5	7.9	17	17	30	41	15	15	17	6.2	3.4	3.9
7	4.5	38	13	14	24	33	11	12	27	6.1	3.3	3.9
8	4.5	26	11	12	27	28	9.8	84	200	5.6	3.9	4.4
9	6.2	20	10	14	22	40	9.2	29	63	5.5	94	234
10	6.0	11	9.7	12	19	42	9.2	17	29	5.1	17	32
11	4.8	8.4	9.6	10	17	28	9.2	14	20	5.1	7.7	9.6
12	3.8	7.2	127	8.5	16	22	17	12	17	4.7	11	7.2
13	3.3	6.6	26	7.5	19	26	10	12	207	4.4	7.7	6.1
14	3.3	6.0	17	7.0	28	35	9.3	11	235	4.7	6.5	5.3
15	3.0	5.9	14	20	21	20	8.9	10	58	4.6	15	5.2
16	2.8	5.6	98	17	18	18	9.3	9.7	290	4.3	6.9	5.0
17	2.9	6.5	295	12	16	17	9.8	9.2	118	4.2	5.6	4.9
18	49	9.4	40	10.5	16	375	8.8	9.0	338	4.5	5.2	4.8
19	7.1	6.8	23	10	15	90	18	13	58	4.1	6.3	4.7
20	4.5	6.2	17	9.8	14	41	10	18	27	3.9	14	5.4
21	3.8	9.7	14	9.7	15	27	28	10	133	4.0	7.0	4.8
22	3.5	7.7	14	74	13	20	12	9.8	36	4.1	5.7	4.2
23	9.0	6.3	34	30	12	16	9.9	8.9	20	13	4.8	4.2
24	4.2	5.9	229	107	12	14	9.0	64	15	8.3	4.5	8.4
25	3.6	89	31	51	11	30	8.0	80	12	4.5	5.8	5.8
26	8.5	33	22	24	34	31	7.3	42	18	4.0	5.1	4.8
27	7.0	15	19	221	30	16	17	16	11	3.9	4.9	4.3
28	7.4	11	17	110	36	51	15	14	9.3	4.7	4.8	3.8
29	6.1	9.4	15	36	---	55	9.8	98	14	4.0	4.6	4.4
30	5.0	59	14	25	---	24	8.7	25	18	3.8	4.2	3.8
31	4.2	---	13	22	---	21	---	33	---	3.6	4.0	---
TOTAL	205.6	434.0	1373.3	989.0	762	3703	366.2	894.6	2201.3	172.4	283.0	413.9
MEAN	6.63	14.5	44.3	31.9	27.2	119	12.2	28.9	73.4	5.56	9.13	13.8
MAX	49	89	295	221	191	1590	28	139	338	13	94	234
MIN	2.8	3.1	9.6	7.0	11	14	7.3	8.9	9.3	3.6	3.3	3.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
MEAN	6.63	14.5	44.3	39.4	24.3	82.4	35.5	52.1	51.1	10.3	7.84	14.3
MAX	6.63	14.5	44.3	65.1	27.2	119	58.8	75.3	73.4	15.1	9.13	14.8
(WY)	1997	1997	1996	1996	1997	1997	1996	1996	1997	1996	1997	1996
MIN	6.63	14.5	44.3	31.9	21.5	45.4	12.2	28.9	28.7	5.56	6.55	13.8
(WY)	1997	1997	1997	1997	1996	1996	1997	1997	1996	1997	1996	1997

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1996 - 1997

ANNUAL TOTAL	11798.3	
ANNUAL MEAN	32.3	33.2
HIGHEST ANNUAL MEAN		34.5
LOWEST ANNUAL MEAN		32.3
HIGHEST DAILY MEAN	1590	1590
LOWEST DAILY MEAN	2.8	2.8
ANNUAL SEVEN-DAY MINIMUM	3.4	3.4
INSTANTANEOUS PEAK FLOW	4810	4810
INSTANTANEOUS PEAK STAGE	14.72	14.72
10 PERCENT EXCEEDS	56	74
50 PERCENT EXCEEDS	12	13
90 PERCENT EXCEEDS	4.2	4.5

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	16	34	9.2	7.1	9.5	31	69	19	15	9.1	4.0
2	3.5	7.6	15	8.5	7.2	9.1	19	33	12	10	6.5	3.9
3	3.4	5.8	27	8.1	6.9	9.2	11	29	9.6	8.2	5.9	3.9
4	2.9	5.0	21	7.8	8.0	9.4	15	22	16	11	5.4	3.6
5	2.4	4.2	13	20	12	9.6	11.5	17	20	9.3	5.1	3.5
6	2.2	4.3	11	241	16	8.7	10	14	12	7.5	6.2	3.4
7	2.6	4.3	10	273	20	8.4	8.6	40	9.3	136	68	3.6
8	3.0	4.2	10	148	24	86	10.5	22	9.6	50	52	4.2
9	2.9	3.9	11	44	28	132	14	17	37	17	27	3.6
10	3.2	4.2	84	24	45	30	12	14	105	12	12	3.4
11	3.0	4.0	18	18	227	19	10	12	53	10	8.9	3.6
12	2.9	4.1	11	18	110	16	8.8	11	54	9.0	7.5	3.3
13	4.5	28	9.0	17	49	14	8.0	9.4	81	8.8	6.7	3.4
14	9.7	14	8.0	14	31	12	20	8.9	36	11	6.3	3.4
15	3.2	6.7	7.5	13	25	11	68	8.8	27	88	5.8	3.8
16	2.8	5.4	7.0	11	40	9.9	191	8.0	18	20	5.5	3.8
17	2.8	4.8	6.8	11	43	10	92	7.2	14	12	5.4	3.9
18	2.6	4.4	6.6	10	44	23	37	6.9	12	8.7	5.2	4.2
19	2.6	4.5	6.7	9.9	27	13	67	6.5	35	7.5	5.0	4.2
20	3.1	4.2	6.1	9.1	21	298	51	22	13	31	4.6	4.0
21	3.0	12	5.7	8.6	16	78	34	8.0	128	11	4.4	4.9
22	3.1	11	35	9.6	14	38	26	56	58	7.8	4.2	5.4
23	3.2	6.5	12	17	14	25	21	236	103	7.0	4.1	4.6
24	11	5.4	88	11	12	19	18	45	29	6.4	4.3	4.6
25	7.0	4.9	41	9.9	11	26	14	25	18	5.6	4.5	4.6
26	6.0	4.7	16	9.3	11	18	13	17	14	5.1	8.0	4.5
27	4.8	4.3	12	8.8	13	15	36	35	12	5.4	4.7	4.3
28	3.5	4.1	10	8.4	10	14	15	16	10	5.1	4.3	4.5
29	3.2	4.3	10	8.2	---	13	109	13	14	4.8	5.7	5.2
30	3.1	105	11	7.6	---	12	218	11	54	60	4.2	6.4
31	3.2	---	8.8	7.3	---	18	---	35	---	25	4.1	---
TOTAL	118.0	301.8	572.2	1020.3	892.2	1013.8	1199.4	874.7	1032.5	625.2	310.6	123.7
MEAN	3.81	10.1	18.5	32.9	31.9	32.7	40.0	28.2	34.4	20.2	10.0	4.12
MAX	11	105	88	273	227	298	218	236	128	136	68	6.4
MIN	2.2	3.9	5.7	7.3	6.9	8.4	8.0	6.5	9.3	4.8	4.1	3.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998
MEAN	5.22	12.3	31.4	36.6	26.8	65.9	37.0	44.1	45.5	13.6	8.56	10.9
MAX	6.63	14.5	44.3	65.1	31.9	119	58.8	75.3	73.4	20.2	10.0	14.8
(WY)	1997	1997	1997	1996	1998	1997	1996	1996	1998	1998	1998	1996
MIN	3.81	10.1	18.5	31.9	21.5	32.7	12.2	28.2	28.7	5.56	6.55	4.12
(WY)	1998	1998	1998	1997	1996	1998	1997	1998	1996	1997	1996	1998

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1996 - 1998

ANNUAL TOTAL	10777.4	8084.4	
ANNUAL MEAN	29.5	22.1	29.1
HIGHEST ANNUAL MEAN			34.5
LOWEST ANNUAL MEAN			22.1
HIGHEST DAILY MEAN	1590	Mar 1	1590
LOWEST DAILY MEAN	2.2	Oct 6	2.2
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 4	2.7
INSTANTANEOUS PEAK FLOW			1320
INSTANTANEOUS PEAK STAGE			8.21
10 PERCENT EXCEEDS	51		62
50 PERCENT EXCEEDS	10		11
90 PERCENT EXCEEDS	3.9		4.2

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'36", long 85°32'32", Jefferson County, Hydrologic Unit 05140102, at bridge on Gelhaus Lane, 100 ft above Razor Branch, and at mile 2.3.

DRAINAGE AREA.--11.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1996 to October 1997.

pH: January 1996 to October 1997.

WATER TEMPERATURE: January 1996 to October 1997.

DISSOLVED OXYGEN: January 1996 to October 1997.

EXTREMES OF PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1440 microsiemens, Feb. 14, 1997; minimum, 68 microsiemens, July 29, 1996.

pH: Maximum, 10.3 units, April 12, 1996; minimum, 7.1 units, Feb. 6, 1996, Sept. 7-8, 1996, and May 23, 1997.

WATER TEMPERATURE: Maximum, 32.3° C, July 27, 1997; minimum, 0.0° C, Jan. 31, 1996, Feb. 1, 2, 5-7, 1996, and Jan. 15-19, 1997.

DISSOLVED OXYGEN: Maximum, 20.6 mg/L, March 4, 1996; minimum, 3.2 mg/L, Sept. 8, 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
03...	1205	13	668	8.3	9.5	12.7
JAN						
08...	1030	133	409	7.9	12.0	9.7
FEB						
17...	1220	39	565	8.6	10.0	12.6
MAR						
05...	1200	9.4	622	9.0	7.0	17.6
APR						
22...	0940	22	571	8.0	12.5	10.8
MAY						
14...	1155	9.4	610	8.7	23.5	14.6
JUN						
11...	1025	41	476	8.0	20.5	8.7
JUL						
09...	0840	18	571	8.3	24.0	8.9
AUG						
13...	1205	8.0	619	8.8	21.0	12.4

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	518	199	399
25	---	---	---	---	---	---	---	---	---	582	518	553
26	---	---	---	---	---	---	---	---	---	614	577	588
27	---	---	---	---	---	---	---	---	---	627	606	617
28	---	---	---	---	---	---	---	---	---	633	619	625
29	---	---	---	---	---	---	---	---	---	640	621	630
30	---	---	---	---	---	---	---	---	---	638	623	629
31	---	---	---	---	---	---	---	---	---	633	625	629
MONTH	---	---	---	---	---	---	---	---	---	640	199	584
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	640	626	633	651	618	635	512	394	454	576	532	560
2	669	632	641	645	614	632	568	512	540	594	547	570
3	702	664	683	641	609	630	1380	556	672	604	538	572
4	716	652	689	647	600	627	630	565	604	578	177	412
5	655	599	632	665	466	640	621	567	599	530	250	453
6	661	618	638	510	292	412	636	595	618	529	345	467
7	638	623	632	1220	490	721	644	605	623	555	520	532
8	701	626	644	889	655	706	652	615	634	568	208	450
9	765	586	669	661	624	638	652	607	632	555	476	515
10	726	708	718	633	612	624	663	602	635	560	185	481
11	725	711	719	631	597	618	667	604	634	487	183	389
12	742	700	714	634	594	619	675	583	631	539	487	514
13	750	725	735	646	592	622	677	276	575	563	537	543
14	750	719	735	650	598	632	590	422	530	600	549	565
15	736	711	727	652	484	587	607	544	588	599	207	443
16	738	721	731	705	531	614	634	544	583	619	564	592
17	733	718	727	633	547	592	663	591	618	624	590	609
18	727	693	710	644	599	625	672	589	630	624	596	611
19	741	555	693	648	267	430	672	536	606	627	597	613
20	604	363	509	708	471	575	612	205	426	619	600	610
21	651	604	623	587	573	578	583	514	537	625	603	617
22	676	625	649	577	511	556	600	202	483	623	589	608
23	685	647	673	541	515	532	468	278	405	625	586	605
24	689	649	672	557	533	540	555	468	515	622	551	606
25	682	640	669	561	518	545	612	543	564	581	420	505
26	686	659	677	570	554	561	607	370	499	582	176	376
27	697	289	587	575	565	570	622	554	574	503	182	376
28	592	400	529	580	519	568	649	400	572	500	118	404
29	651	591	621	584	448	520	568	377	479	483	226	411
30	---	---	---	602	582	590	575	454	535	535	483	512
31	---	---	---	589	437	557	---	---	---	556	535	541
MONTH	765	289	665	1220	267	590	1380	202	567	627	118	518

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	575	556	565	535	438	500	657	617	632	710	620	671
2	580	348	496	551	162	429	662	578	644	711	611	667
3	581	513	554	487	210	389	646	521	558	712	664	687
4	601	574	585	514	449	487	704	601	638	714	664	691
5	630	601	613	546	415	489	737	632	683	712	661	690
6	623	324	595	498	385	452	740	666	711	694	414	497
7	520	307	455	572	185	499	737	670	712	602	316	503
8	546	248	431	550	185	436	729	256	571	611	405	514
9	519	385	473	639	541	575	585	372	507	611	244	402
10	551	205	450	699	614	648	627	582	597	604	341	490
11	489	308	408	708	640	680	628	606	620	670	588	621
12	521	284	452	712	634	679	628	540	586	706	649	673
13	565	521	541	719	377	662	612	590	604	714	668	694
14	585	551	570	566	189	436	650	578	604	753	689	712
15	603	351	522	535	169	406	663	612	639	769	704	735
16	637	599	612	622	535	577	676	638	655	762	191	436
17	642	594	626	672	622	645	676	637	658	573	472	525
18	657	449	614	670	571	628	674	617	650	652	573	613
19	629	464	560	677	625	660	662	609	640	688	637	655
20	667	584	630	684	609	649	660	389	619	687	642	670
21	648	538	603	689	154	558	479	187	390	684	231	541
22	615	543	582	561	273	472	589	397	509	536	392	485
23	611	546	580	642	561	589	633	578	600	619	536	568
24	613	522	574	707	642	667	631	434	497	641	618	628
25	628	567	603	747	668	705	636	555	581	668	609	637
26	643	570	614	770	691	732	660	598	627	679	614	652
27	661	562	625	799	708	755	670	629	656	678	103	359
28	645	519	597	812	737	776	696	622	658	491	231	347
29	606	505	562	812	68	597	699	640	674	575	491	534
30	576	454	526	482	331	438	708	646	685	642	575	606
31	---	---	---	617	482	557	705	640	683	---	---	---
MONTH	667	205	554	812	68	573	740	187	616	769	103	583
YEAR	1380	68	583									

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	666	641	652	758	703	734	488	328	423	626	598	615
2	671	650	665	742	685	716	547	488	519	631	609	621
3	679	651	669	726	682	708	582	542	565	644	609	631
4	686	653	671	725	680	706	598	582	587	670	627	647
5	690	642	670	744	679	714	598	506	575	641	256	459
6	690	627	667	742	444	611	597	515	551	624	545	577
7	682	622	659	578	281	491	630	597	614	641	618	631
8	685	635	668	566	312	497	746	630	699	656	639	646
9	683	580	636	596	336	515	712	644	669	1410	634	809
10	608	574	596	665	596	629	719	669	705	1290	876	980
11	629	555	590	684	659	670	702	655	676	1200	945	1090
12	649	592	622	701	676	686	669	214	417	945	793	865
13	663	597	635	704	678	698	561	473	523	796	745	774
14	670	608	645	701	672	691	604	561	582	782	723	751
15	679	612	654	712	677	694	618	587	604	900	579	717
16	693	624	659	710	661	692	620	211	496	771	696	724
17	693	637	668	706	660	684	457	186	318	780	727	753
18	646	209	412	664	560	594	546	457	504	770	718	743
19	597	513	551	664	606	632	568	544	552	720	690	704
20	644	597	615	679	629	658	581	566	571	774	707	744
21	661	632	643	674	503	603	589	580	584	768	732	742
22	669	624	654	627	550	583	691	586	608	752	545	654
23	655	409	519	682	622	646	684	275	607	729	632	709
24	656	569	601	696	647	676	481	181	369	724	428	576
25	673	632	654	696	239	506	537	481	509	627	489	581
26	677	444	601	523	404	465	565	537	548	645	621	631
27	635	485	566	569	516	546	585	565	573	646	260	445
28	648	598	629	596	569	585	594	561	581	534	293	449
29	679	629	651	610	595	600	599	571	590	579	534	557
30	718	662	687	600	394	479	613	585	599	609	578	590
31	760	680	710	---	---	---	620	598	612	623	607	613
MONTH	760	209	630	758	239	624	746	181	559	1410	256	678

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
MONTH	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	7.8	8.0	8.7	7.7	8.1	8.5	8.1	8.2	8.6	7.8	8.1
2	8.2	7.7	7.9	8.7	7.7	8.1	8.7	8.2	8.4	9.0	7.8	8.3
3	8.0	7.5	7.7	8.9	7.7	8.2	9.4	8.2	8.6	9.1	7.8	8.3
4	7.8	7.4	7.5	9.2	7.7	8.3	9.3	8.2	8.6	8.4	7.7	8.0
5	7.7	7.2	7.4	8.4	7.7	8.0	9.3	8.2	8.7	8.7	7.8	8.1
6	8.0	7.1	7.4	7.9	7.7	7.7	9.5	8.3	8.8	8.4	7.8	8.1
7	7.7	7.3	7.4	8.3	7.7	7.9	9.6	8.3	8.9	8.7	8.0	8.3
8	7.8	7.4	7.5	8.5	7.7	8.0	9.6	8.3	8.9	8.2	8.0	8.1
9	8.1	7.3	7.6	8.5	7.8	8.1	9.8	8.3	9.0	8.7	8.1	8.3
10	8.3	7.3	7.7	8.8	7.8	8.2	10.0	8.2	9.0	9.3	8.1	8.5
11	8.2	7.5	7.7	8.9	7.9	8.3	10.1	8.2	9.1	8.5	8.3	8.4
12	8.4	7.5	7.9	9.0	7.9	8.3	10.3	8.1	9.1	9.0	8.4	8.7
13	8.5	7.6	7.9	9.4	7.8	8.4	9.5	8.0	8.6	9.0	8.3	8.6
14	8.6	7.6	7.9	9.4	7.8	8.5	9.5	8.0	8.6	9.3	8.3	8.7
15	8.6	7.6	8.0	8.5	7.8	8.0	9.1	8.1	8.4	8.3	8.0	8.2
16	8.6	7.6	8.0	8.9	7.9	8.3	9.7	8.1	8.8	8.6	8.1	8.3
17	8.6	7.7	8.1	9.1	7.9	8.3	9.8	8.1	8.9	8.8	8.0	8.3
18	8.8	7.8	8.2	9.2	8.0	8.5	9.8	8.1	8.9	8.8	8.0	8.3
19	8.3	7.7	7.9	8.0	7.8	7.9	9.4	8.0	8.6	8.8	7.8	8.2
20	8.3	7.7	7.9	8.0	7.8	7.9	8.2	7.9	8.0	8.7	7.8	8.2
21	8.7	7.9	8.2	8.1	7.8	7.9	8.7	7.9	8.2	8.7	7.7	8.1
22	8.5	7.6	7.9	8.2	7.8	8.0	8.7	7.9	8.1	8.9	7.8	8.3
23	8.6	7.6	7.9	8.1	7.8	7.9	8.0	7.8	7.9	8.9	7.7	8.2
24	8.8	7.6	8.0	8.4	7.9	8.1	8.3	7.8	8.0	8.7	7.6	8.1
25	8.8	7.6	8.0	8.3	7.9	8.0	9.2	8.0	8.3	8.1	7.3	7.6
26	8.4	7.5	7.8	8.3	7.9	8.1	8.9	7.7	8.3	7.8	7.4	7.6
27	8.9	7.5	7.9	8.4	8.0	8.1	9.3	7.7	8.4	7.7	7.4	7.5
28	8.4	7.6	7.9	8.3	8.0	8.1	8.5	8.0	8.2	7.7	7.3	7.5
29	8.6	7.7	8.0	8.3	8.0	8.1	8.4	8.1	8.3	7.6	7.3	7.5
30	---	---	---	8.4	8.0	8.2	8.6	7.9	8.3	7.8	7.6	7.7
31	---	---	---	8.5	8.1	8.2	---	---	---	8.0	7.7	7.8
MONTH	8.9	7.1	7.8	9.4	7.7	8.1	10.3	7.7	8.5	9.3	7.3	8.1

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.7	7.9	9.3	7.6	8.4	8.7	7.8	8.2	9.1	7.4	8.1
2	7.9	7.7	7.8	9.2	7.4	8.0	8.7	7.8	8.2	9.3	7.4	8.2
3	8.2	7.8	7.9	8.4	7.3	7.8	8.9	7.7	8.2	8.8	7.3	7.9
4	8.2	7.8	8.0	8.8	7.6	8.2	9.0	7.7	8.3	8.9	7.3	7.9
5	8.3	7.8	8.0	8.9	7.6	8.2	9.0	7.7	8.3	8.9	7.2	7.9
6	8.4	7.8	8.0	9.1	7.6	8.3	9.0	7.7	8.3	8.8	7.2	7.8
7	8.0	7.7	7.8	9.1	7.5	8.1	8.9	7.7	8.2	8.2	7.1	7.4
8	7.9	7.7	7.8	8.5	7.6	8.0	8.9	7.6	8.0	8.8	7.1	7.8
9	8.0	7.7	7.9	8.9	7.8	8.3	8.2	7.6	7.9	8.3	7.2	7.6
10	8.1	7.7	7.9	9.0	7.7	8.3	8.6	7.8	8.1	8.5	7.3	7.8
11	7.9	7.7	7.8	9.1	7.7	8.4	8.7	7.8	8.2	8.7	7.4	7.9
12	8.0	7.8	7.9	9.2	7.7	8.4	8.7	7.9	8.2	8.8	7.4	8.0
13	8.2	7.8	8.0	9.1	7.7	8.3	8.6	7.8	8.2	8.8	7.5	8.0
14	8.4	7.8	8.1	8.9	7.4	8.0	8.8	7.9	8.3	9.0	7.5	8.0
15	8.4	7.7	8.0	8.3	7.7	7.9	8.8	7.8	8.2	9.2	7.5	8.2
16	8.7	7.8	8.2	8.7	7.9	8.2	8.8	7.8	8.2	8.2	7.6	7.8
17	8.9	7.9	8.3	8.8	7.8	8.2	8.9	7.9	8.3	8.7	7.8	8.1
18	8.9	7.8	8.3	9.0	7.8	8.3	9.2	7.9	8.5	8.9	7.8	8.2
19	9.0	7.7	8.3	8.9	7.8	8.2	9.1	8.0	8.5	9.0	7.8	8.3
20	9.0	7.8	8.4	9.0	7.8	8.3	9.3	8.0	8.5	9.2	7.9	8.4
21	9.2	7.8	8.4	9.1	7.7	8.2	8.7	7.8	8.1	8.3	7.7	7.9
22	9.3	7.8	8.5	8.3	7.7	8.0	9.0	7.8	8.3	8.6	7.7	8.1
23	9.3	7.9	8.6	8.8	7.8	8.2	9.0	7.7	8.2	8.9	7.8	8.2
24	9.2	7.8	8.4	8.8	7.8	8.3	8.7	7.8	8.1	8.9	7.7	8.2
25	9.2	7.9	8.5	8.9	7.8	8.3	8.8	7.6	8.1	9.1	7.8	8.3
26	9.3	7.7	8.4	9.0	7.8	8.3	9.0	7.6	8.2	9.3	7.8	8.4
27	9.3	7.7	8.4	9.0	7.7	8.3	9.0	7.6	8.2	8.1	7.8	7.9
28	9.4	7.6	8.4	9.0	7.7	8.2	9.1	7.6	8.3	8.2	7.8	7.9
29	9.3	7.6	8.4	8.8	7.7	8.0	9.2	7.5	8.3	8.5	8.0	8.2
30	9.4	7.6	8.5	8.2	7.8	8.0	9.1	7.4	8.2	8.6	8.0	8.2
31	---	---	---	8.6	7.8	8.1	9.0	7.4	8.1	---	---	---
MONTH	9.4	7.6	8.2	9.3	7.3	8.2	9.3	7.4	8.2	9.3	7.1	8.0
YEAR	10.3	7.1	8.2									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	7.8	8.1	8.7	7.8	8.2	7.8	7.5	7.6	9.0	8.1	8.4
2	8.7	7.8	8.1	8.7	7.8	8.2	8.1	7.7	7.8	8.8	8.1	8.3
3	8.8	7.8	8.1	8.7	7.8	8.2	8.2	7.7	7.9	9.1	8.0	8.4
4	8.8	7.7	8.1	8.8	7.6	8.2	8.3	7.6	7.9	8.7	7.9	8.1
5	8.9	7.7	8.2	9.0	7.5	8.1	8.0	7.5	7.7	8.5	7.9	8.1
6	9.0	7.7	8.2	8.2	7.5	7.7	8.3	7.5	7.8	8.6	7.9	8.1
7	9.0	7.7	8.2	8.5	7.5	7.8	8.5	7.7	7.9	8.5	7.9	8.1
8	9.1	7.6	8.2	8.4	7.5	7.9	8.4	7.7	8.0	8.4	7.8	8.0
9	8.8	7.6	8.0	8.1	7.5	7.8	8.7	7.8	8.1	8.1	7.8	7.9
10	8.8	7.5	8.0	8.3	7.8	8.0	8.8	7.8	8.1	8.4	7.8	8.0
11	9.0	7.6	8.2	8.4	7.8	8.0	8.7	7.8	8.1	8.3	7.7	7.9
12	9.1	7.6	8.2	8.5	7.7	8.0	7.9	7.6	7.7	8.3	7.7	7.9
13	9.1	7.6	8.2	8.6	7.8	8.0	8.5	7.9	8.1	8.3	7.8	8.0
14	9.1	7.5	8.2	8.6	7.8	8.1	8.7	7.9	8.2	8.3	7.7	7.9
15	9.1	7.5	8.2	8.7	7.8	8.1	8.8	7.9	8.2	8.3	7.6	7.9
16	9.1	7.5	8.2	8.9	7.8	8.2	8.3	7.8	8.0	8.3	7.6	7.9
17	9.1	7.5	8.1	8.7	7.9	8.2	8.0	7.7	7.8	8.3	7.7	7.9
18	7.9	7.4	7.6	8.9	8.0	8.3	8.4	8.0	8.1	8.3	7.7	7.9
19	8.3	7.5	7.8	9.0	7.9	8.3	8.5	8.0	8.2	8.3	7.8	7.9
20	8.4	7.7	8.0	9.1	7.9	8.4	8.6	8.0	8.2	8.5	7.8	8.0
21	8.4	7.7	8.0	8.6	8.0	8.2	8.7	8.1	8.3	8.6	7.7	8.0
22	8.7	7.6	8.0	9.0	7.8	8.2	8.6	8.1	8.2	7.8	7.7	7.7
23	8.4	7.6	7.9	9.2	7.8	8.3	8.9	8.0	8.3	8.3	7.7	7.9
24	8.8	7.6	8.1	9.1	7.8	8.2	8.2	7.8	8.0	7.8	7.7	7.8
25	8.7	7.6	8.1	7.9	7.6	7.7	8.5	8.0	8.2	8.2	7.7	7.9
26	8.4	7.6	7.8	8.2	7.7	7.9	8.6	8.1	8.2	8.2	7.8	8.0
27	8.7	7.7	8.0	8.4	7.8	8.0	8.5	8.1	8.2	7.9	7.6	7.7
28	8.5	7.7	8.0	8.5	7.8	8.1	8.9	8.1	8.3	8.0	7.6	7.8
29	8.6	7.7	8.0	8.6	7.8	8.1	9.0	8.1	8.4	8.1	7.8	7.9
30	8.8	7.7	8.1	7.8	7.6	7.7	8.9	8.1	8.4	8.1	7.7	7.9
31	8.8	7.8	8.2	---	---	---	9.0	8.1	8.4	8.1	7.7	7.9
MONTH	9.1	7.4	8.1	9.2	7.5	8.1	9.0	7.5	8.1	9.1	7.6	8.0

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	18.0	14.2	15.5
MONTH	---	---	---	---	---	---	---	---	---	18.0	14.2	15.5
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.9	14.6	15.7	18.0	11.4	14.0	12.6	9.7	10.7	13.8	8.9	11.1
2	18.0	14.3	15.7	18.0	11.8	13.9	14.0	9.3	11.3	14.6	8.4	11.2
3	18.2	14.6	15.9	20.3	12.1	15.6	17.3	9.6	12.9	15.9	7.5	11.0
4	18.7	14.4	15.7	20.6	10.9	15.3	15.8	9.3	11.5	11.2	8.0	10.0
5	18.3	13.8	15.4	14.5	9.9	11.5	16.2	10.6	12.9	12.6	8.1	9.8
6	19.2	13.9	15.4	12.3	10.5	11.3	17.5	10.7	13.5	11.5	9.0	10.0
7	14.9	13.2	14.0	16.3	11.7	13.7	17.7	10.1	13.4	12.8	8.8	10.3
8	14.8	12.3	13.2	18.2	13.2	15.5	17.3	10.1	13.2	9.4	8.8	8.9
9	15.5	12.0	13.6	18.9	13.4	15.7	18.7	10.4	14.0	12.3	8.3	10.1
10	16.0	10.2	12.9	19.4	12.7	15.6	19.3	9.1	13.7	14.3	8.4	10.6
11	15.9	10.8	13.0	19.5	11.9	15.2	19.3	7.7	12.8	10.4	9.1	9.7
12	16.9	12.8	14.3	19.0	10.4	14.3	19.1	6.5	11.6	12.6	9.3	10.8
13	17.5	11.8	14.2	19.5	9.3	13.3	14.7	6.5	9.6	13.3	9.4	10.9
14	16.8	11.2	13.3	18.7	8.2	12.1	16.6	8.2	11.5	14.3	8.5	11.4
15	17.0	11.2	13.6	12.3	8.4	10.0	15.4	8.2	10.4	9.9	8.6	9.1
16	18.4	12.3	14.7	15.7	10.1	12.0	18.3	8.8	12.5	11.3	7.7	9.3
17	18.9	12.3	14.8	16.4	9.6	11.9	19.5	7.6	12.7	12.4	7.2	9.3
18	19.2	12.2	14.7	17.8	9.7	12.7	18.6	5.9	11.4	12.5	6.6	9.2
19	15.8	11.6	12.8	12.1	9.8	11.3	15.0	5.8	9.4	12.4	6.1	8.7
20	12.5	10.9	11.7	13.1	11.5	12.2	11.1	5.7	8.7	12.4	6.0	8.6
21	13.8	9.9	11.7	14.5	11.3	12.4	15.0	7.6	10.8	13.0	6.2	8.6
22	14.3	9.4	10.8	14.6	10.8	12.4	15.1	7.6	9.7	13.6	6.4	9.5
23	14.8	8.4	10.8	14.5	10.1	12.1	10.0	8.7	9.3	14.0	5.7	9.3
24	16.5	8.9	11.9	14.4	9.3	11.4	13.2	8.8	10.8	12.9	5.3	8.5
25	17.5	9.4	12.4	13.4	9.5	10.9	---	---	---	11.4	6.0	8.0
26	15.4	9.0	10.6	14.6	10.5	12.2	---	---	---	8.6	6.2	8.0
27	16.4	9.0	10.8	15.1	10.2	12.4	17.2	10.0	13.2	8.9	8.2	8.4
28	14.3	9.4	11.7	13.0	10.0	11.1	14.1	10.0	11.8	9.1	8.0	8.6
29	16.7	11.7	13.7	12.6	9.6	10.8	12.7	11.6	12.2	9.0	8.3	8.8
30	---	---	---	13.4	9.3	10.9	14.8	10.3	12.4	9.9	8.9	9.4
31	---	---	---	13.6	9.5	10.7	---	---	---	10.3	8.9	9.7
MONTH	19.2	8.4	13.4	20.6	8.2	12.7	19.5	5.7	11.7	15.9	5.3	9.6

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.2	8.8	9.6	14.4	4.2	8.0	11.2	7.0	8.6	13.9	7.0	9.4
2	9.7	8.9	9.2	13.9	4.4	7.5	12.2	7.0	8.6	14.4	7.2	9.6
3	10.3	8.6	9.3	10.4	6.4	8.0	12.4	6.1	8.9	12.7	7.4	9.0
4	10.8	8.7	9.7	12.4	6.2	9.1	13.9	6.0	9.2	12.9	7.7	9.3
5	11.0	8.4	9.7	13.6	5.9	9.2	13.3	5.8	9.0	12.9	7.6	9.6
6	11.0	8.2	9.2	14.9	5.4	9.5	8.9	3.9	6.8	12.7	6.4	9.3
7	9.7	8.3	8.8	15.6	5.4	8.6	8.8	4.0	5.9	12.3	6.5	8.0
8	9.3	8.4	8.7	9.4	6.2	7.7	8.5	4.2	5.6	12.9	6.4	8.9
9	9.7	8.5	8.9	11.6	6.1	8.3	7.2	5.2	6.0	10.4	6.5	8.3
10	10.2	8.4	9.0	13.0	6.1	8.9	7.8	5.3	6.3	10.5	6.6	8.2
11	9.0	8.4	8.8	13.3	5.6	9.2	8.3	5.4	6.5	11.2	6.4	8.4
12	9.4	8.2	8.8	13.6	5.0	8.7	8.3	5.8	6.7	11.7	6.7	8.5
13	9.9	8.1	9.0	13.3	5.0	8.0	8.6	5.8	6.9	12.1	7.1	8.8
14	10.5	7.7	9.1	12.5	5.4	7.8	9.3	5.9	7.3	13.6	7.1	9.5
15	10.7	7.3	8.8	9.3	7.0	7.9	9.5	6.1	7.4	14.5	6.8	9.4
16	11.8	7.2	8.9	11.0	6.4	8.5	9.8	6.4	7.5	9.3	7.0	8.1
17	12.6	6.7	9.3	12.4	6.4	8.7	10.5	6.5	7.9	11.9	7.7	9.2
18	12.5	6.7	8.9	12.7	5.8	8.6	10.5	6.4	8.0	12.8	8.2	10.1
19	12.7	6.3	8.7	13.3	5.8	7.9	10.0	6.4	8.0	13.7	8.0	10.3
20	13.2	6.1	9.1	13.3	5.8	8.6	10.8	6.8	8.3	14.3	7.5	10.4
21	13.9	5.6	9.1	14.6	6.1	8.5	9.8	7.3	8.0	10.5	7.5	8.6
22	13.1	5.3	8.7	9.5	7.0	7.9	10.0	6.4	8.4	12.0	8.1	9.7
23	13.2	4.9	8.5	11.6	6.6	8.7	10.2	6.4	8.0	13.5	7.7	10.0
24	12.8	5.0	7.7	12.3	6.1	8.7	9.9	7.0	8.0	12.6	7.6	9.3
25	13.5	5.4	8.6	12.9	6.3	8.7	11.2	7.0	8.8	13.8	8.0	10.3
26	14.2	5.6	9.2	12.8	6.2	8.9	11.6	7.0	8.9	14.1	7.2	9.9
27	14.3	5.2	9.2	13.4	5.9	8.9	11.8	7.1	8.8	9.9	7.3	8.9
28	14.4	4.7	8.8	13.3	5.8	8.5	12.1	6.9	9.1	10.8	9.4	9.9
29	14.4	4.4	8.6	12.2	5.9	7.9	12.3	7.0	8.9	11.9	9.2	10.4
30	14.8	4.2	8.4	9.0	7.1	7.9	12.4	7.1	9.0	12.6	8.7	10.3
31	---	---	---	10.4	7.0	8.3	12.9	7.2	9.2	---	---	---
MONTH	14.8	4.2	8.9	15.6	4.2	8.4	13.9	3.9	7.9	14.5	6.4	9.3
YEAR	20.6	3.9	10.2									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.5	7.7	9.8	14.7	9.6	11.2	12.8	11.4	12.2	15.0	9.7	11.3
2	12.7	7.4	9.2	16.1	9.7	12.2	14.8	12.8	13.5	12.6	9.2	10.4
3	14.3	7.7	10.2	16.4	10.8	12.7	14.2	12.2	13.2	15.7	8.5	10.8
4	14.7	8.4	10.7	---	---	---	15.0	12.4	13.4	12.9	8.3	9.5
5	15.7	7.8	10.9	---	---	---	14.2	12.5	13.2	12.0	8.5	10.2
6	16.8	7.5	10.7	---	---	---	14.2	11.4	12.7	14.0	10.4	11.9
7	15.8	7.2	10.5	---	---	---	14.9	11.3	12.3	14.9	11.6	12.7
8	16.0	7.2	10.3	---	---	---	15.1	11.6	12.8	15.3	11.8	13.1
9	14.7	7.3	9.7	---	---	---	15.5	11.2	12.6	13.1	10.9	11.8
10	14.3	7.9	9.9	---	---	---	15.3	9.8	11.9	14.6	9.9	12.2
11	16.1	8.2	11.1	---	---	---	13.5	9.2	10.4	14.9	9.9	12.2
12	17.4	7.8	11.2	---	---	---	10.5	9.2	10.0	15.2	10.1	12.3
13	18.1	7.3	10.9	---	---	---	13.4	10.5	11.3	15.3	12.0	13.0
14	16.7	6.6	10.3	---	---	---	14.5	10.7	12.0	15.7	11.9	13.0
15	16.7	6.3	9.9	---	---	---	15.3	10.2	11.9	15.4	11.7	12.8
16	16.7	6.5	9.9	---	---	---	12.2	10.2	10.9	13.0	9.1	11.7
17	16.4	5.8	9.3	---	---	---	11.2	10.8	11.0	13.2	6.6	9.6
18	10.9	6.2	9.2	---	---	---	13.0	11.0	11.8	14.2	10.3	11.7
19	12.8	9.3	10.6	---	---	---	14.2	11.7	12.8	13.8	10.8	11.7
20	14.0	9.1	11.1	---	---	---	15.1	12.6	13.5	13.4	10.1	11.2
21	13.4	8.7	10.5	---	---	---	15.2	11.9	13.4	13.4	9.2	11.1
22	14.6	7.9	10.1	---	---	---	13.9	11.1	12.0	12.7	8.9	10.9
23	13.1	8.2	10.3	17.0	10.5	12.7	14.4	10.0	11.5	13.1	10.9	11.9
24	14.9	5.8	10.7	15.6	10.1	11.6	12.3	10.6	11.5	13.6	10.9	12.1
25	15.2	8.9	10.8	11.2	10.1	10.7	13.9	12.1	12.6	13.3	11.7	12.3
26	13.0	8.9	9.8	13.2	10.8	12.0	14.2	11.4	12.4	13.4	11.0	12.2
27	13.5	8.2	9.8	14.6	12.2	13.1	13.2	10.8	11.6	13.7	10.7	12.3
28	12.9	8.2	9.6	15.3	12.5	13.5	13.3	9.8	11.0	14.1	13.0	13.4
29	13.5	7.9	9.9	15.9	12.1	13.6	14.3	9.7	11.0	14.0	12.2	13.1
30	14.3	7.9	10.1	12.5	11.8	12.2	14.5	10.1	11.4	14.0	12.4	13.0
31	15.3	8.9	11.3	---	---	---	13.8	9.9	10.9	14.4	12.0	13.0
MONTH	18.1	5.8	10.3	17.0	9.6	12.3	15.5	9.2	12.0	15.7	6.6	11.9

SALT RIVER BASIN

03298200 FLOYDS FORK NEAR MOUNT WASHINGTON, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'07", long 85°33'18", Jefferson County, Hydrologic Unit 05140102, at bridge on U.S. Highway 31E, 0.2 mi below Old Mans Run, and at mile 18.7.

DRAINAGE AREA.--213 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
03...	1040	101	452	7.9	7.0	11.2
JAN						
08...	1225	4080	264	7.8	11.5	10.1
FEB						
17...	0845	421	417	8.2	10.5	10.7
MAR						
05...	1045	96	525	8.5	5.0	12.6
APR						
22...	1125	317	471	7.9	12.5	9.8
MAY						
14...	1035	124	523	8.0	21.0	8.0
JUN						
11...	1205	1610	231	7.8	20.0	7.3
JUL						
09...	1245	228	451	8.0	24.5	7.1
AUG						
13...	1030	60	512	8.0	23.5	7.0

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY

LOCATION.--Lat 38°06'43", long 85°35'49", Jefferson County, Hydrologic Unit 05140101, on downstream side of bridge on Fairmount Road, 5.2 miles northwest of Mt. Washington and at mile 10.9

DRAINAGE AREA.--7.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 585.450 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	4.2	24	4.2	5.4	8.3	13	53	9.3	4.1	12	2.4
2	1.9	5.9	7.1	4.2	5.2	7.8	7.4	28	5.5	3.3	7.5	2.5
3	1.8	5.2	9.3	4.1	5.0	7.5	6.8	19	4.5	3.0	5.5	2.5
4	1.8	4.3	11	3.9	5.6	7.4	11	15	7.1	3.9	4.3	2.6
5	1.8	2.8	5.4	8.9	7.6	7.5	8.1	12	9.9	3.0	4.6	2.6
6	1.8	2.9	3.9	228	11	6.9	6.8	10	7.2	2.7	11	2.4
7	1.7	3.4	3.3	193	13	7.1	6.2	14	5.0	258	128	2.6
8	1.7	2.9	3.0	145	18	40	8.6	14	4.5	48	62	2.6
9	1.9	2.9	3.1	39	23	143	15	12	11	14	24	2.4
10	2.1	2.8	45	22	35	21	9.9	9.9	201	7.9	13	2.5
11	2.2	2.7	11	16	176	15	7.5	8.5	47	5.9	9.8	2.3
12	2.3	2.5	6.7	15	90	12	6.2	7.3	37	5.1	7.6	2.4
13	3.6	8.5	5.2	15	37	11	5.7	6.2	72	4.7	6.0	2.4
14	5.6	9.5	4.3	12	23	11	14	5.4	22	4.6	5.3	2.4
15	3.2	3.9	3.8	11	17	9.5	15	5.0	18	40	4.3	2.4
16	3.1	3.4	3.4	9.5	24	8.8	260	4.8	11	18	4.1	2.5
17	3.3	2.7	3.1	9.2	23	8.7	57	4.6	7.8	10	3.7	2.6
18	3.1	2.5	2.8	8.6	26	15	23	4.3	5.8	7.3	3.3	2.7
19	3.0	2.4	2.6	8.1	18	11	58	4.1	11	5.8	3.1	2.8
20	3.1	2.2	2.7	7.2	16	230	23	7.9	6.4	33	3.1	3.6
21	2.7	4.4	2.8	6.6	14	53	16	11	34	11	3.0	5.1
22	2.5	9.0	16	6.8	12	25	13	15	15	7.0	2.8	6.6
23	2.5	4.4	9.2	13	11	16	10	139	45	5.2	2.7	3.0
24	4.3	3.3	54	9.9	10	12	8.6	22	14	4.8	2.6	2.4
25	4.9	2.8	31	8.6	9.2	14	7.4	13	8.6	3.7	2.6	2.5
26	4.0	2.7	13	7.7	8.8	12	6.9	9.7	6.0	3.3	3.1	2.8
27	3.7	2.6	8.8	7.2	9.6	10	11	13	4.6	3.5	2.7	2.5
28	3.3	2.5	6.4	6.6	8.9	9.2	6.7	8.5	3.8	3.3	2.6	2.4
29	2.9	2.5	5.8	6.3	---	7.8	48	6.3	3.5	3.1	2.8	2.2
30	2.6	87	5.4	5.8	---	7.1	142	5.4	9.0	52	2.7	2.4
31	2.4	---	4.3	5.6	---	6.9	---	7.9	---	60	2.5	---
TOTAL	86.8	198.8	317.4	848.0	662.3	761.5	831.8	495.8	646.5	639.2	352.3	83.1
MEAN	2.80	6.63	10.2	27.4	23.7	24.6	27.7	16.0	21.5	20.6	11.4	2.77
MAX	5.6	87	54	228	176	230	260	139	201	258	128	6.6
MIN	1.7	2.2	2.6	3.9	5.0	6.9	5.7	4.1	3.5	2.7	2.5	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

MEAN	6.66	9.98	16.5	25.0	18.9	41.8	20.9	32.1	17.2	7.43	8.41	3.72
MAX	12.1	20.5	35.0	37.2	23.7	122	34.3	78.7	36.8	20.6	16.6	9.24
(WY)	1994	1994	1997	1994	1998	1997	1994	1996	1997	1998	1993	1996
MIN	1.89	5.09	10.2	15.6	12.8	11.7	6.11	13.0	3.23	1.81	2.40	1.26
(WY)	1995	1995	1998	1995	1995	1995	1997	1994	1995	1994	1994	1994

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1993 - 1998

ANNUAL TOTAL	7699.2	5923.5		
ANNUAL MEAN	21.1	16.2		
HIGHEST ANNUAL MEAN				17.7
LOWEST ANNUAL MEAN				23.8
HIGHEST DAILY MEAN				1997
LOWEST DAILY MEAN	1940	Mar 1	260	Apr 16
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 7	1.7	Oct 7
INSTANTANEOUS PEAK FLOW	1.8	Oct 2	1.8	Oct 2
INSTANTANEOUS PEAK STAGE			1620	Jun 10
10 PERCENT EXCEEDS	30		6.39	Jun 10
50 PERCENT EXCEEDS	5.5			33
90 PERCENT EXCEEDS	2.3			6.1
				1.9

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MOUNT WASHINGTON, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1992 to current year

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
10...	1230	30	523	7.9	8.5	10.8
JAN						
14...	1225	12	634	8.2	7.0	13.6
FEB						
18...	1055	27	578	8.1	8.5	11.7
MAR						
10...	1130	19	577	8.2	7.0	13.0
APR						
15...	1050	7.8	669	7.8	14.0	9.7
MAY						
13...	1030	6.3	693	7.7	20.5	8.3
JUN						
16...	1200	11	618	8.1	19.0	8.7
JUL						
14...	1220	5.0	695	8.0	22.0	7.3
AUG						
11...	1135	10	634	7.9	23.0	8.5

SALT RIVER BASIN

03298250 CEDAR CREEK AT THIXTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'45", long 85°36'58", Jefferson County, Hydrologic Unit 05140102, at culvert on Thixton Road, 4.2 mi above Pennsylvania Run, and at mile 7.4.

DRAINAGE AREA.--11.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
10...	1030	51	390	7.9	7.5	10.9
JAN						
14...	1040	14	539	8.3	4.5	13.6
FEB						
18...	0945	34	533	8.0	8.5	10.7
MAR						
10...	1015	31	535	8.3	6.0	13.5
APR						
15...	0940	11	585	7.8	13.5	9.7
MAY						
13...	0900	6.6	650	7.8	7.5	8.8
JUN						
16...	1035	17	565	8.2	19.0	9.6
JUL						
14...	1045	5.1	461	8.0	21.0	7.8
AUG						
11...	1005	11	614	8.0	22.5	8.5

SALT RIVER BASIN

03298300 PENNSYLVANIA RUN AT MOUNT WASHINGTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'15", long 85°38'33", Jefferson County, Hydrologic Unit 05140102, at bridge on Mt. Washington Road, and at mile 1.9.

DRAINAGE AREA.--6.4 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
10...	0840	28	422	7.6	6.5	11.0
JAN						
14...	0840	9.1	371	7.6	5.5	10.7
FEB						
18...	0845	19	443	7.4	7.5	11.0
MAR						
10...	0850	16	471	7.6	7.5	11.4
APR						
15...	0830	7.0	490	7.2	13.5	7.8
JUN						
16...	0845	9.9	424	7.6	20.5	5.3
JUL						
14...	0840	3.7	482	7.5	23.0	4.3
AUG						
11...	0850	7.9	390	7.5	24.5	6.2

SALT RIVER BASIN

03298500 SALT RIVER AT SHEPHERDSVILLE, KY

LOCATION.--Lat 37°59'06", long 85°43'03", Bullitt County, Hydrologic Unit 05140102, on downstream side of bridge on State Highway 61 at Shepherdsville, 500 ft downstream from Louisville and Nashville Railroad bridge, 2.6 mi downstream from Floyds Fork, and at mile 22.9.

DRAINAGE AREA.--1,197 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 893: 1937(M). WSP 1435: 1955: WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 406.58 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 16, 1969.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, 31, Jan. 1, and Aug. 9. Records fair except for periods of estimated record, which are poor. Flow regulated since January 1983 by Taylorsville Lake (station 03295597). Diversions for water supply by Shepherdsville and other municipalities.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 26, 1937, reached a stage of 47.3 ft, from floodmark (backwater from Ohio River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	49	1300	1300	594	759	1150	8940	4420	3970	2170	48
2	22	53	673	694	526	704	1100	4980	2000	3010	1490	44
3	23	57	626	567	475	667	939	4180	769	2510	787	42
4	23	93	1210	568	478	641	964	3700	825	1610	457	41
5	23	79	1330	595	550	626	935	3980	1140	976	364	38
6	23	66	643	4240	623	540	843	3770	805	809	295	39
7	23	63	363	8390	988	480	777	3440	765	2440	1280	39
8	74	59	247	15700	1290	582	696	3720	670	4680	589	37
9	22	56	227	10500	1220	7580	2600	3280	799	2870	555	36
10	21	58	1350	4570	1750	4780	2470	3330	1360	2550	524	36
11	20	56	1340	3700	5780	3160	2580	2400	5850	1810	387	38
12	20	54	1130	3710	15000	2860	2330	1250	3460	667	309	315
13	22	59	1020	3730	7970	2640	2030	688	7660	443	252	247
14	33	161	883	3460	4920	2410	1560	520	4010	393	211	66
15	44	214	805	3540	4670	1820	1550	457	5020	1040	161	40
16	53	167	755	3320	4620	1300	9030	407	4010	2610	134	37
17	41	172	544	2550	4150	905	16100	315	3980	1800	117	37
18	36	122	349	2080	4370	940	6760	250	3380	1270	103	37
19	36	101	287	1910	4270	1030	4890	222	2830	699	93	37
20	37	88	236	959	4080	6810	5440	252	2850	884	83	39
21	35	90	224	747	3960	11200	4420	2270	4440	2730	75	673
22	33	152	385	708	2900	4350	3780	902	5270	2420	71	484
23	33	183	690	881	1950	3980	3260	6100	9490	2750	67	192
24	40	138	1150	1030	1200	3640	2760	6260	7320	2610	62	100
25	58	144	4070	1000	1010	3050	2700	2950	3580	2460	59	65
26	75	121	590	914	902	3260	3160	1890	3200	2350	58	52
27	64	128	1400	1130	865	1670	3080	2210	2880	2210	53	47
28	57	118	1000	1110	831	1380	2090	2420	2690	857	57	44
29	54	109	1070	782	---	1020	1540	2430	2500	425	63	41
30	52	200	1220	672	---	903	8120	2230	4090	2470	59	40
31	50	---	1500	628	---	845	---	2810	---	2940	54	---
TOTAL	1170	3210	28617	85685	81942	76532	99654	82553	102063	61263	11039	3031
MEAN	37.7	107	923	2764	2927	2469	3322	2663	3402	1976	356	101
MAX	75	214	4070	15700	15000	11200	16100	8940	9490	4680	2170	673
MIN	20	49	224	567	475	480	696	222	670	393	53	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1998, BY WATER YEAR (WY)

MEAN	266	1017	2085	2600	3908	3484	2203	2045	1625	575	289	196
MAX	1166	2206	6329	5728	12370	11410	3506	5768	5192	1976	1018	583
(WY)	1991	1994	1991	1991	1989	1997	1989	1995	1997	1998	1992	1996
MIN	25.9	55.5	258	335	996	1113	377	216	38.9	63.6	40.0	46.6
(WY)	1989	1988	1990	1986	1992	1990	1986	1985	1988	1994	1988	1993

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1984 - 1998

ANNUAL TOTAL	860398											
ANNUAL MEAN	2357											
HIGHEST ANNUAL MEAN										1679		
LOWEST ANNUAL MEAN										2809		1997
HIGHEST DAILY MEAN	65600									995		1986
LOWEST DAILY MEAN	20									65600		Mar 2 1997
ANNUAL SEVEN-DAY MINIMUM	23									7.7		Jul 1 1988
INSTANTANEOUS PEAK FLOW										9.3		Jun 26 1988
INSTANTANEOUS PEAK STAGE												Mar 10 1964
10 PERCENT EXCEEDS	5190						18.44			41.50		Mar 11 1964
50 PERCENT EXCEEDS	590						4300			4210		
90 PERCENT EXCEEDS	36						845			569		
							41			46		

SALT RIVER BASIN
03298550 LONG LICK NEAR CLERMONT, KY

LOCATION.--Lat 37°55'40", long 85°39'13", Bullitt County, Hydrologic Unit 05140102, downstream side of bridge at Jim Beam Distillery, at Clermont, and 10.8 mi upstream from mouth.

DRAINAGE AREA.-- 7.91 mi².

PERIOD OF RECORD.--April 1, 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 450 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 1, and May 21, 23-27. Records poor. Peak for year obtained from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.19	3.5	2.2	1.4	2.8	60	95	24	.13	.05	.07
2	.23	.17	2.1	2.8	1.4	1.6	9.1	39	.80	.08	.06	.07
3	.25	.09	2.3	3.8	1.2	1.4	5.7	15	.42	.05	.05	.08
4	.10	.12	2.4	4.4	1.6	1.3	6.9	7.4	5.7	.05	.03	.10
5	.05	.12	2.5	5.5	2.0	1.1	5.3	5.3	14	.06	.03	.08
6	.08	.19	2.6	66	2.8	1.5	2.8	3.9	2.8	.04	.04	.05
7	.10	.78	2.5	103	4.3	2.2	3.5	22	.73	.19	.07	.05
8	.18	.48	2.8	93	7.4	56	17	12	.19	.30	.08	.12
9	.13	.14	2.9	13	22	145	144	6.6	7.8	.05	.06	.14
10	.11	.12	31	6.9	54	37	33	3.8	26	.04	.09	.15
11	.03	.12	3.0	4.7	184	11	13	1.5	3.7	.02	.09	.16
12	.02	.22	2.5	5.1	119	6.7	7.2	1.4	1.5	.02	.08	.10
13	.06	.89	1.9	7.3	60	5.0	3.4	1.4	163	.03	.06	.07
14	.06	.61	1.5	4.2	22	4.6	51	1.2	60	.05	.07	.08
15	.02	.80	1.6	3.1	9.5	3.7	22	1.0	120	2.1	.11	.10
16	.02	.81	1.9	3.0	15	1.9	301	1.1	4.0	.38	.05	.18
17	.02	.62	1.9	2.9	25	2.0	111	1.0	.69	.09	.05	.30
18	.02	.61	1.8	2.2	22	11	39	.69	.29	.08	.04	.27
19	.02	.70	1.4	1.3	11	10	78	.72	.24	.06	.04	.13
20	.02	.67	1.3	1.3	5.4	236	33	2.3	.27	.07	.03	.07
21	.04	1.0	1.4	1.1	6.6	104	14	340	4.8	.07	.03	.38
22	.10	.94	4.8	1.0	4.5	50	9.8	113	.29	.04	.03	.10
23	.06	.98	2.6	1.8	2.9	15	6.9	72	5.9	.05	.02	.10
24	.16	1.1	49	2.8	2.7	9.9	4.4	5.7	.40	.08	.03	.10
25	.14	1.1	56	2.6	2.0	7.7	3.8	2.8	.14	.04	.03	.14
26	.23	.91	6.0	1.5	1.6	11	3.1	2.3	.10	.05	.07	.12
27	.13	1.5	2.4	1.3	2.4	5.7	3.1	1.7	.10	.04	.07	.11
28	.11	1.5	3.9	1.1	2.6	4.8	2.8	.73	.07	.05	.06	.11
29	.13	1.8	5.3	.97	---	3.7	25	.47	.06	.04	.09	.11
30	.13	2.3	3.5	.93	---	1.4	246	.47	.85	.07	.07	.11
31	.12	---	2.8	1.2	---	3.3	---	40	---	.06	.08	---
TOTAL	3.05	21.58	211.1	352.00	596.3	758.3	1264.8	801.48	448.84	4.48	1.76	3.75
MEAN	.098	.72	6.81	11.4	21.3	24.5	42.2	25.9	15.0	.14	.057	.13
MAX	.25	2.3	56	103	184	236	301	340	163	2.1	.11	.38
MIN	.02	.09	1.3	.93	1.2	1.1	2.8	.47	.06	.02	.02	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998
MEAN	2.06	3.43	7.53	19.1	17.4	37.8	21.0
MAX	4.92	9.13	16.3	29.2	25.8	101	42.2
(WY)	1996	1994	1997	1996	1994	1997	1995
MIN	.098	.68	1.78	8.87	10.2	11.5	8.16
(WY)	1998	1995	1993	1993	1996	1995	1997

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1992 - 1998

ANNUAL TOTAL	6525.11	4467.44	
ANNUAL MEAN	17.9	12.2	12.8
HIGHEST ANNUAL MEAN			19.1
LOWEST ANNUAL MEAN			8.63
HIGHEST DAILY MEAN	680	340	680
LOWEST DAILY MEAN	.02	.02	.02
ANNUAL SEVEN-DAY MINIMUM	.02	.02	.02
INSTANTANEOUS PEAK FLOW		1890	2790
INSTANTANEOUS PEAK STAGE		9.24	11.38
10 PERCENT EXCEEDS	44	25	28
50 PERCENT EXCEEDS	2.3	1.3	1.8
90 PERCENT EXCEEDS	.12	.05	.15

SALT RIVER BASIN

03300400 BEECH FORK AT MAUD, KY

LOCATION.--Lat 37°49'58", long 85°17'46", Nelson County, Hydrologic Unit 05140103, on right bank on downstream side of bridge on State Highway 55, 100 ft upstream from Nealy Run, 0.8 mi north of Maud, 1.7 mi downstream from Chaplin River, and at mile 48.1.

DRAINAGE AREA.--436 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30 to Dec 1, Dec. 30 to Jan. 1, Feb. 6, and Aug. 8, 9. Records good except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.88	300	170	184	275	274	7760	1160	1420	312	4.2
2	1.1	1.2	800	154	168	248	296	2580	659	553	153	3.6
3	.95	1.5	392	148	156	230	297	1030	401	325	100	2.7
4	.90	1.5	229	144	171	219	259	711	1020	303	72	2.3
5	.82	1.5	164	164	209	209	244	552	2920	520	56	2.1
6	.77	1.8	147	1760	230	198	241	448	2200	311	45	2.1
7	.77	2.2	127	4330	270	192	230	749	887	338	39	1.9
8	.76	2.6	108	10400	350	229	430	2620	513	2770	35	1.8
9	.64	2.8	92	3450	621	3620	910	1060	703	1500	32	1.8
10	.62	2.8	661	1120	1430	2040	864	695	3360	563	28	1.8
11	.61	2.8	1950	708	5040	793	653	553	4730	299	22	1.8
12	.55	2.8	701	538	10500	555	474	444	2440	203	24	1.8
13	.54	3.1	349	583	4460	453	362	364	6490	152	27	1.8
14	1.0	7.4	242	614	1390	400	388	304	3390	125	21	1.7
15	1.1	8.8	184	517	882	352	430	262	4610	117	16	1.6
16	.94	12	149	440	717	305	5980	230	2150	131	51	1.5
17	.81	25	121	380	817	277	8530	201	768	753	156	1.5
18	.77	32	103	334	1430	266	2430	175	483	677	90	1.5
19	.65	24	89	310	1190	260	1650	154	355	311	64	1.3
20	.62	18	78	293	894	2950	2100	145	290	2890	43	1.3
21	.55	15	70	268	708	5490	1080	242	521	6680	31	5.1
22	.53	16	81	248	593	1790	755	236	1300	844	24	115
23	.51	24	154	330	518	973	686	1860	3950	405	21	229
24	.54	95	342	652	460	684	609	5980	2270	280	19	97
25	.89	59	1560	553	397	540	478	2250	675	205	16	53
26	.95	46	1120	414	343	463	405	581	402	158	12	39
27	.96	41	518	339	317	410	664	413	284	126	9.0	32
28	.93	31	346	294	300	355	861	321	216	103	6.5	23
29	.87	24	275	261	---	314	499	264	282	86	5.9	15
30	.81	100	220	231	---	283	4000	219	3090	148	5.3	11
31	.77	---	195	205	---	257	---	211	---	398	4.8	---
TOTAL	24.33	605.68	11867	30352	34745	25630	37079	33614	52519	23694	1540.5	659.2
MEAN	.78	20.2	383	979	1241	827	1236	1084	1751	764	49.7	22.0
MAX	1.1	100	1950	10400	10500	5490	8530	7760	6490	6680	312	229
MIN	.51	.88	70	144	156	192	230	145	216	86	4.8	1.3
CFSM	.00	.05	.88	2.25	2.85	1.90	2.83	2.49	4.02	1.75	.11	.05
IN.	.00	.05	1.01	2.59	2.96	2.19	3.16	2.87	4.48	2.02	.13	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1998, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
MEAN	170	522	1056	976	1197	1256	771	698	532	219	172	245				
MAX	1042	1699	3691	2461	5071	4663	2022	2359	2499	764	939	2284				
(WY)	1976	1989	1979	1974	1989	1997	1979	1995	1997	1998	1978	1979				
MIN	.011	.24	111	16.2	203	134	103	43.6	3.32	2.45	.87	.43				
(WY)	1988	1988	1981	1981	1980	1983	1986	1976	1988	1975	1986	1987				

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1973 - 1998

ANNUAL TOTAL	316111.48	252329.71	
ANNUAL MEAN	866	691	649
HIGHEST ANNUAL MEAN			1243
LOWEST ANNUAL MEAN			308
HIGHEST DAILY MEAN	39800	Mar 2	39800
LOWEST DAILY MEAN	.51	Oct 23	.00
ANNUAL SEVEN-DAY MINIMUM	.60	Oct 18	.00
INSTANTANEOUS PEAK FLOW			12300
INSTANTANEOUS PEAK STAGE			18.49
ANNUAL RUNOFF (CFSM)	1.99		1.59
ANNUAL RUNOFF (INCHES)	26.97		21.53
10 PERCENT EXCEEDS	1600		1900
50 PERCENT EXCEEDS	142		248
90 PERCENT EXCEEDS	.96		1.5
			5.2

SALT RIVER BASIN
03301000 BEECH FORK AT BARDSTOWN, KY

LOCATION.--Lat 37°47'49", long 85°28'51", Nelson County, near center of span on downstream side of bridge on U.S. Highway 31E, 0.1 mile downstream from Rowan Creek, 1 mile southwest of Bardstown, and mile 20.7.

DRAINAGE AREA.--669 mi².

PERIOD OF RECORD.--October 1939 to September 1974; converted to a crest-stage partial-record station. Monthly discharge only for October, November 1939, published in WSP 1305. October 1997 to current year.

REVISIONS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 439.3 ft above mean sea level.

REMARKS.--Estimated daily discharges; Oct. 1 to Nov. 7, 30, Dec. 1, Jan., 6-9, June 4, and Aug. 8, 9. Records fair except for periods of estimated record which are poor. At times during periods of low flow, city of Bardstown diverts entire flow above station for municipal water supply. Some of this water is returned to stream by sewer outfall 300 ft above gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.6	965	383	399	519	544	10200	2380	2140	643	3.3
2	3.1	3.6	1270	369	341	482	500	5910	1240	973	373	3.0
3	2.8	4.6	734	316	291	446	500	1600	755	645	185	2.8
4	2.6	4.6	533	297	327	418	500	1080	1780	523	111	2.6
5	2.4	4.6	404	325	464	382	442	863	4170	654	67	2.4
6	2.4	5.4	260	1770	527	334	392	725	3410	619	47	2.1
7	2.3	7.1	200	5500	574	371	371	1050	1520	475	37	1.8
8	2.2	6.8	153	13100	662	603	491	2640	899	2450	30	1.6
9	1.9	6.8	136	6200	931	5140	1150	1650	1620	1670	45	1.5
10	1.8	7.7	1490	2490	1860	4010	995	1000	2700	1030	48	1.4
11	1.7	7.1	2190	1260	6490	1310	877	834	5330	592	34	1.4
12	1.6	5.6	1140	1040	14200	899	682	708	3760	429	27	1.4
13	1.5	6.0	666	1060	10400	757	581	617	8900	262	20	1.4
14	3.0	27	521	1060	2830	683	604	546	7420	189	19	1.4
15	3.4	61	398	950	1320	616	730	483	6730	259	18	1.3
16	2.8	46	276	833	1110	569	7620	413	4290	668	14	1.5
17	2.4	28	203	745	1150	536	14800	323	1390	882	14	1.6
18	2.2	15	153	682	2050	514	6990	247	906	1040	100	1.8
19	2.0	15	123	641	1700	497	2320	188	717	643	61	1.9
20	1.9	25	102	606	1330	4540	2780	162	608	1330	40	1.8
21	1.7	24	88	571	1070	8840	1640	824	900	8110	22	126
22	1.6	51	298	546	921	3730	1140	729	1390	2330	14	13
23	1.6	78	331	723	828	1510	951	1440	3730	748	9.7	145
24	1.6	49	681	888	745	1060	912	8650	3730	565	6.4	224
25	2.8	72	1990	918	673	872	762	5060	1200	436	5.3	86
26	2.9	61	1830	750	614	758	674	1040	758	287	6.1	42
27	3.0	40	978	655	585	679	669	756	593	196	4.9	23
28	2.8	33	701	595	555	621	1120	627	490	144	4.2	15
29	2.6	30	591	547	---	571	766	536	389	106	4.2	10
30	2.4	220	538	504	---	524	2690	461	3250	820	4.0	7.8
31	2.4	---	482	452	---	488	---	486	---	681	3.7	---
TOTAL	72.8	947.5	20425	46776	54947	43279	55193	51848	76955	31896	2017.5	729.8
MEAN	2.35	31.6	659	1509	1962	1396	1840	1673	2565	1029	65.1	24.3
MAX	3.4	220	2190	13100	14200	8840	14800	10200	8900	8110	643	224
MIN	1.5	2.6	88	297	291	334	371	162	389	106	3.7	1.3
CFSM	.00	.05	.98	2.26	2.93	2.09	2.75	2.50	3.83	1.54	.10	.04
IN.	.00	.05	1.14	2.60	3.06	2.41	3.07	2.88	4.28	1.77	.11	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	105	539	1124	1657	1860	2014	1422	877	603	500	204	165
MAX	1973	2682	3631	7384	5269	6277	6321	3372	2565	2946	1115	2206
(WY)	1963	1958	1952	1950	1956	1964	1972	1967	1998	1958	1974	1974
MIN	.27	.70	1.40	42.7	123	153	145	46.1	22.2	1.36	4.13	.39
(WY)	1954	1964	1944	1944	1954	1941	1963	1941	1948	1954	1943	1953

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1940 - 1998

ANNUAL TOTAL	385086.6		
ANNUAL MEAN	1055		
HIGHEST ANNUAL MEAN		921	
LOWEST ANNUAL MEAN		1733	1950
HIGHEST DAILY MEAN	14800	245	1941
LOWEST DAILY MEAN	1.3	32200	Mar 5 1964
ANNUAL SEVEN-DAY MINIMUM	1.4	.00	Sep 29 1948
INSTANTANEOUS PEAK FLOW	16000	.03	Sep 28 1948
INSTANTANEOUS PEAK STAGE	29.20	33900	Mar 5 1964
ANNUAL RUNOFF (CFSM)	1.58	43.50	Mar 5 1964
ANNUAL RUNOFF (INCHES)	21.41	1.38	
10 PERCENT EXCEEDS	2470	18.71	
50 PERCENT EXCEEDS	504	2090	
90 PERCENT EXCEEDS	2.6	201	
		5.6	

SALT RIVER BASIN

03301500 ROLLING FORK NEAR BOSTON, KY

LOCATION.--Lat 37°46'02", long 85°42'14", Nelson County, Hydrologic Unit 05140103, on downstream side of bridge on U.S. Hwy 62 and State Hwy 61, 0.4 mi downstream from Beech Fork, 2.3 mi southwest of Boston, and at mile 19.8.

DRAINAGE AREA.--1,299 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.42 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1971.

REMARKS.--Estimated daily discharges: Nov. 3, 6-10, Jan. 13-16, Feb. 15-17, March 30 to Apr. 9, and Aug. 9. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 55.2 ft, former site, from floodmarks (backwater from Ohio River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 DAILY MEAN VALUES

Table with 13 columns (DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP) and 32 rows of daily mean discharge values. Includes summary statistics at the bottom.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

Summary table with 13 columns (WY, MEAN, MAX, MIN) and 4 rows (MEAN, MAX, MIN, WY) showing monthly mean discharge statistics.

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1939 - 1998

Summary statistics table with 4 columns (Category, 1997 Calendar Year, 1998 Water Year, 1939-1998) containing annual totals, means, and extreme values.

SALT RIVER BASIN

03301575 WILSON CREEK AT HARRISON FORK ROAD NEAR DEATSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°52'10", long 85°35'58", Nelson County, Hydrologic Unit 05140103, Bernheim State Forest, at Harrison Fork Road ford, 300 ft upstream from Harrison Fork, 2.9 mi southwest of Deatsville, 5.4 mi southeast of Clermont, and at mile 13.6.

DRAINAGE AREA.--5.7 mi².

PERIOD OF RECORD.--October 1990 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
15...	0930	.87	521	8.0	.5	13.0
JAN						
13...	1210	8.6	408	8.4	7.0	13.4
FEB						
25...	0855	3.5	424	8.2	4.5	13.5
MAR						
11...	0910	7.5	406	8.4	2.5	13.9
APR						
23...	0900	9.0	410	8.0	10.0	11.0
MAY						
12...	0900	4.5	466	8.2	15.0	9.0
JUN						
24...	0930	9.4	425	8.0	20.5	7.9
JUL						
22...	0930	1.2	520	7.5	23.0	5.7
AUG						
18...	0900	.30	475	7.7	21.5	6.7

SALT RIVER BASIN

03301880 SOUTHERN DITCH AT MINORS LANE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'04", long 85°42'34", Jefferson County, Hydrologic Unit 05140102, at bridge on Minors Lane, 0.2 mi below Mud Creek, and at mile 4.2.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
04...	1050	12	527	7.8	8.5	9.1
JAN						
12...	1115	23	604	7.9	8.0	10.9
FEB						
11...	1115	146	497	7.7	6.0	11.9
MAR						
04...	1045	5.0	633	8.2	5.0	12.7
APR						
13...	0900	5.5	534	7.7	14.5	7.7
MAY						
11...	1030	8.0	527	8.0	17.5	8.5
JUN						
15...	1055	20	475	7.8	19.5	7.1
JUL						
13...	1045	4.0	596	7.8	24.5	5.1
AUG						
10...	1035	18	537	7.6	22.0	6.2

SALT RIVER BASIN

03301900 FERN CREEK AT OLD BARDSTOWN ROAD AT LOUISVILLE, KY

LOCATION.--Lat 38°10'32", long 85°36'55", Jefferson County, Hydrologic Unit 05140102, on right upstream wingwall, at bridge on Old Bardstown Road, and at mile 3.2.

DRAINAGE AREA.--3.5 mi².

PERIOD OF RECORD.--February 1991 to October 1995. September 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage 572.812 ft.

REMARKS.--Estimated daily discharges: October 1 to November 12, August 22-25, and September 4-7, 22-30. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	4.5	12	3.4	2.8	3.4	5.8	23	4.1	3.0	5.5	1.1
2	.80	2.8	6.8	3.2	2.6	3.1	3.7	17	3.0	2.3	3.9	1.1
3	.64	1.7	7.6	3.1	2.3	3.2	3.6	14	2.1	1.9	3.1	1.1
4	.52	1.3	6.3	3.0	2.8	3.1	4.6	12	3.0	2.3	2.7	1.1
5	.44	.70	4.4	5.4	3.7	2.9	3.5	9.4	3.6	2.0	2.5	1.0
6	.40	.80	3.5	32	4.6	2.8	3.1	7.9	2.6	1.7	3.0	.98
7	.60	1.0	3.1	52	5.5	2.9	2.9	9.6	2.1	31	9.8	.96
8	.90	1.3	2.7	34	6.9	26	7.0	8.0	1.9	13	11	1.1
9	.76	2.0	2.7	20	8.7	26	11	6.8	6.8	6.0	7.3	.99
10	.64	1.2	16	15	13	12	6.3	6.3	38	3.9	4.8	.91
11	.54	.90	6.7	12	36	8.6	4.7	6.0	15	2.8	3.6	.88
12	.45	.70	4.8	11	23	7.0	4.0	5.5	13	2.3	2.9	.95
13	2.5	7.5	4.0	9.9	15	6.1	3.6	4.9	19	2.1	2.4	.96
14	1.8	3.0	3.5	8.4	11	5.6	7.3	4.1	11	2.5	2.1	.89
15	1.3	1.7	3.0	7.7	9.0	4.7	8.6	3.6	8.4	18	1.9	.84
16	1.0	1.4	2.7	6.7	11	4.1	72	3.5	6.4	8.5	1.8	.81
17	.90	1.2	2.5	6.3	10	4.0	25	2.9	4.6	5.2	1.7	.83
18	.76	1.2	2.3	5.3	9.7	6.4	16	2.6	3.5	3.9	1.6	.92
19	.66	1.2	2.1	4.8	7.5	4.5	25	2.4	6.9	2.9	1.4	.95
20	.58	1.1	2.1	4.2	7.3	50	16	5.6	3.6	8.0	1.3	.84
21	.52	2.9	2.3	3.9	6.3	23	13	3.8	24	3.6	1.3	.97
22	.49	3.0	7.9	4.2	5.6	16	11	9.3	9.7	2.8	1.4	1.2
23	1.0	1.8	4.4	5.1	5.1	12	9.1	40	15	2.5	1.3	.91
24	1.6	1.3	17	4.5	4.3	9.9	7.6	12	8.1	2.1	1.3	.72
25	2.6	1.2	14	4.0	4.0	10	6.6	8.5	5.8	2.0	1.5	.92
26	1.6	1.1	8.5	3.7	4.0	7.9	6.7	6.2	4.3	1.8	1.5	.81
27	1.0	1.1	6.4	3.5	4.2	6.6	9.3	8.7	3.5	1.8	1.1	.73
28	.82	.98	5.2	3.3	3.6	6.0	6.1	5.2	2.8	1.6	1.2	.68
29	.66	1.0	4.9	3.1	---	4.8	17	3.9	3.4	1.7	1.5	.64
30	.60	25	4.3	2.9	---	4.1	36	3.3	7.5	15	1.3	.60
31	8.4	---	3.8	2.8	---	5.0	---	6.6	---	12	1.1	---
TOTAL	36.44	76.58	177.5	288.4	229.5	291.7	356.1	262.6	242.7	170.2	88.8	27.39
MEAN	1.18	2.55	5.73	9.30	8.20	9.41	11.9	8.47	8.09	5.49	2.86	.91
MAX	8.4	25	17	52	36	50	72	40	38	31	11	1.2
MIN	.40	.70	2.1	2.8	2.3	2.8	2.9	2.4	1.9	1.6	1.1	.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1998, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	6.41	8.39	8.58	12.4	19.1	10.3	13.3	10.2	9.50	5.19	2.71	2.19
MAX	21.0	20.7	21.5	22.2	27.7	20.2	21.6	21.4	20.2	7.58	3.17	4.20
(WY)	1995	1995	1995	1995	1989	1995	1995	1990	1995	1989	1990	1990
MIN	1.18	2.55	2.05	8.44	8.20	5.34	8.02	2.94	1.30	2.94	2.23	.91
(WY)	1998	1998	1990	1990	1998	1990	1990	1988	1988	1990	1989	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1988 - 1998

ANNUAL TOTAL	2247.91		
ANNUAL MEAN	6.16	7.48	
HIGHEST ANNUAL MEAN		8.39	1989
LOWEST ANNUAL MEAN		6.16	1998
HIGHEST DAILY MEAN	72	160	Apr 4 1989
LOWEST DAILY MEAN	.40	.39	Nov 14 1989
ANNUAL SEVEN-DAY MINIMUM	.61	.61	Oct 3 1997
INSTANTANEOUS PEAK FLOW	467	737	Jun 4 1993
INSTANTANEOUS PEAK STAGE	3.20	3.80	Jun 4 1993
10 PERCENT EXCEEDS	13	21	
50 PERCENT EXCEEDS	3.6	4.3	
90 PERCENT EXCEEDS	.91	1.1	

SALT RIVER BASIN

03301900 FERN CREEK AT OLD BARDSTOWN ROAD AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

LOCATION.-- Lat 38°10'32", long 85°36'55", Jefferson County, Hydrologic Unit 05140102, at bridge on Old Bardstown Road, and at mile 3.2.

DRAINAGE AREA.--3.5 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC 03...	0820	4.6	694	7.6	9.5	10.0
JAN 08...	0835	36	508	7.7	12.5	9.8
FEB 17...	1045	10	634	8.1	10.0	10.0
MAR 05...	0840	3.2	675	8.3	6.0	14.2
APR 22...	0830	11	615	7.7	12.0	8.9
MAY 14...	0850	4.3	680	7.7	17.5	8.3
JUN 11...	0830	15	545	7.7	18.0	8.5
JUL 09...	1055	6.9	613	7.9	21.0	7.7
AUG 13...	0840	2.4	697	7.9	21.0	7.7

SALT RIVER BASIN

03301940 NORTHERN DITCH AT OKOLONA, KY

LOCATION.--Lat 38°09'01", long 85°41'37", Jefferson County, Hydrologic Unit 05140102, at bridge on Preston Highway, 0.1 mi above Spring Ditch, and at mile 5.1.

DRAINAGE AREA.--11.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1992 to Oct. 1995, Sept. 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage 447.32 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 12 to April 2. Record good except for period of estimated record, which is poor. The record is rated poor due to the orifice being covered and the wire weight gage and orifice being in different pools. The wire weight gage was relocated on April 2, 1998.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.9	33	8.9	9.3	18	22	67	14	9.4	9.6	3.5
2	1.6	3.1	14	8.5	9.2	17	12	46	7.7	7.3	6.2	3.6
3	1.6	2.0	15	8.1	8.3	16	11	34	6.4	6.5	5.2	3.4
4	1.6	1.7	18	7.8	9.7	14	17	26	10	7.9	4.5	3.4
5	1.6	2.0	11	12	14	12	12	21	12	6.7	4.2	3.4
6	1.6	2.0	8.9	112	16	11	11	18	8.5	5.9	5.5	3.3
7	1.6	1.9	8.1	160	20	11	9.3	25	6.3	164	33	3.3
8	1.6	1.9	7.3	135	22	35	15	20	6.2	72	58	3.1
9	1.7	2.3	7.3	57	24	100	32	15	21	20	31	3.2
10	1.8	2.0	43	36	33	29	17	13	95	13	14	3.0
11	1.7	1.7	16	28	129	19	12	12	61	9.1	9.0	3.0
12	1.7	1.6	12	27	92	16	11	11	46	7.8	6.8	3.1
13	2.3	8.2	9.8	24	55	14	9.6	8.9	73	6.9	5.9	3.3
14	6.4	12	9.1	22	41	13	23	8.0	35	7.2	5.4	3.3
15	2.8	3.0	8.0	20	33	11	17	7.4	27	51	5.1	3.2
16	1.9	2.5	7.3	19	40	11	229	6.9	19	23	4.9	3.1
17	1.7	2.3	7.0	18	37	11	92	6.2	13	12	4.9	3.1
18	1.7	2.1	6.8	16	39	15	49	5.7	10	8.4	4.4	3.2
19	1.8	2.0	6.4	16	31	10	82	5.1	22	6.5	4.1	3.4
20	1.9	1.9	6.5	14	29	143	49	12	12	30	3.8	3.3
21	2.1	3.6	8.0	13	27	72	35	7.7	72	9.8	3.9	3.9
22	1.9	6.3	24	14	26	45	30	17	38	6.0	3.8	14
23	1.5	3.4	14	18	26	32	24	118	62	4.9	3.8	4.7
24	5.4	2.7	51	14	24	25	19	29	27	4.0	3.8	3.9
25	5.5	2.2	49	13	22	25	16	21	17	3.3	3.5	3.9
26	3.2	2.2	23	13	19	20	14	14	12	2.9	6.0	3.9
27	3.2	2.0	17	12	20	18	23	20	9.6	2.8	4.0	3.6
28	2.2	2.1	11	12	18	16	13	12	8.3	2.5	3.6	3.7
29	2.4	2.2	11	11	---	13	42	9.3	7.6	2.8	4.4	3.6
30	3.9	67	10	11	---	12	121	7.9	26	29	4.1	3.5
31	5.2	---	8.8	9.5	---	13	---	12	---	43	3.7	---
TOTAL	76.6	152.8	481.3	889.8	873.5	817	1068.9	636.1	784.6	585.6	270.1	113.9
MEAN	2.47	5.09	15.5	28.7	31.2	26.4	35.6	20.5	26.2	18.9	8.71	3.80
MAX	6.4	67	51	160	129	143	229	118	95	164	58	14
MIN	1.5	1.6	6.4	7.8	8.3	10	9.3	5.1	6.2	2.5	3.5	3.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1998	1998	1998	1998	1998
MEAN	3.60	5.09	16.4	28.7	31.2	21.0	22.6	20.5	26.2	12.9	13.0	6.35
MAX	4.73	5.09	21.3	28.7	31.2	26.4	35.6	20.5	26.2	18.9	17.3	8.90
(WY)	1995	1998	1994	1998	1998	1998	1998	1998	1998	1998	1995	1995
MIN	2.47	5.09	12.3	28.7	31.2	15.7	9.59	20.5	26.2	6.83	8.71	3.80
(WY)	1998	1998	1995	1998	1998	1995	1995	1998	1998	1995	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1992 - 1998

ANNUAL TOTAL	6750.2		
ANNUAL MEAN	18.5	18.5	
HIGHEST ANNUAL MEAN		18.5	1998
LOWEST ANNUAL MEAN		18.5	1998
HIGHEST DAILY MEAN		608	May 18 1995
LOWEST DAILY MEAN	1.5		Oct 1 1997
ANNUAL SEVEN-DAY MINIMUM	1.6		Oct 1 1997
INSTANTANEOUS PEAK FLOW	746		Jun 10 1997
INSTANTANEOUS PEAK STAGE	8.22		Jun 10 1974
10 PERCENT EXCEEDS	41		Jul 6 1974
50 PERCENT EXCEEDS	10		Jul 6 1974
90 PERCENT EXCEEDS	2.2		Jul 6 1974

SALT RIVER BASIN

03301940 NORTHERN DITCH AT OKOLONA, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'01", long 85°41'37", Jefferson County, Hydrologic Unit 05140102, at bridge on Preston Highway, 0.1 mi above Spring Ditch, and at mile 5.1.

DRAINAGE AREA.-- 11.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
04...	0900	17	409	7.7	8.5	10.5
JAN						
12...	0905	25	570	7.9	8.1	11.3
FEB						
11...	0900	106	533	7.5	6.1	11.7
MAR						
04...	0900	7.9	638	8.2	5.0	13.7
APR						
13...	1055	9.5	584	8.4	14.5	17.2
MAY						
11...	0855	11	554	8.7	17.0	16.6
JUN						
15...	0910	27	510	8.0	19.0	8.6
JUL						
13...	0910	6.9	582	8.0	23.5	8.2
AUG						
10...	0905	14	480	7.5	22.5	8.8

SALT RIVER BASIN

03301950 SPRING DITCH AT PRIVATE DRIVE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'27", long 85°40'57", Jefferson County, Hydrologic Unit 05140102, at bridge on Private Drive, and at mile 1.0.

DRAINAGE AREA.--1.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
02...	1250	1.8	756	7.6	12.5	10.9
JAN						
06...	1105	23	256	7.4	12.0	9.4
FEB						
10...	1215	7.2	567	8.1	8.5	15.6
MAR						
03...	1200	1.2	654	8.6	7.0	20.0
APR						
07...	1235	1.2	493	8.1	14.0	20.7
MAY						
05...	1210	3.3	549	8.0	20.5	14.6
JUN						
09...	1143	8.7	202	7.5	17.5	7.8
JUL						
07...	1230	63	75	7.7	24.5	6.7
AUG						
04...	1220	1.6	433	8.3	25.0	13.5

SALT RIVER BASIN

03302000 POND CREEK NEAR LOUISVILLE, KY

LOCATION.--Lat 38°07'11", long 85°47'45", Jefferson County, Hydrologic Unit 05140102, on upstream side of bridge on Manslick Rd, right bank, 0.4 mi south of Third Street Rd, 0.6 mi downstream from Bee Lick Creek, 1.5 mi downstream from confluence of Northern and Southern Ditches, 2.4 mi south of Louisville city limits, and at mile 15.4.

DRAINAGE AREA.--64.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 430.38 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 16, 1962.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of about 23 ft present datum, backwater from Ohio River, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	60	188	18	17	30	118	339	279	34	65	11
2	5.6	27	51	18	17	27	44	157	46	23	37	10
3	5.6	13	69	16	16	26	43	116	25	17	26	10
4	5.7	10	101	16	18	27	114	88	72	54	23	10
5	5.4	9.4	35	36	42	27	59	63	87	28	19	10
6	5.6	10	22	646	69	21	42	49	46	16	22	10
7	4.8	11	17	818	98	21	33	92	25	1010	237	11
8	4.9	9.1	15	1120	121	160	41	85	21	915	178	11
9	6.4	8.5	15	221	149	902	155	61	101	141	337	10
10	6.6	8.8	246	128	201	150	70	44	160	81	95	10
11	6.3	7.3	68	90	834	88	45	35	278	52	52	11
12	6.2	6.6	38	84	600	61	34	28	190	33	34	12
13	14	66	25	84	206	51	28	24	742	25	25	11
14	63	104	20	56	134	45	138	21	166	37	23	11
15	11	24	16	46	96	36	112	18	109	279	20	11
16	7.7	15	14	40	170	29	1540	17	66	136	18	11
17	6.3	11	13	39	159	29	743	14	42	61	17	12
18	5.7	9.4	12	34	175	74	184	13	29	36	15	11
19	5.5	9.0	11	28	102	49	477	12	71	25	14	16
20	5.8	7.9	10	25	85	1070	179	90	32	191	13	10
21	5.9	45	10	23	69	425	117	67	340	66	13	30
22	6.5	57	137	28	56	173	170	117	473	30	12	82
23	5.6	25	55	67	55	113	100	780	642	23	12	15
24	42	14	261	38	45	82	69	144	133	19	11	10
25	37	11	207	29	39	95	53	84	72	15	12	9.3
26	21	9.2	78	25	34	70	46	57	45	13	25	8.9
27	15	9.1	51	24	48	53	123	93	29	12	14	8.5
28	9.0	8.6	35	23	37	46	54	44	22	12	12	7.9
29	8.0	8.8	29	22	---	40	175	28	19	11	30	8.9
30	8.4	370	30	21	---	33	1020	22	141	243	13	9.9
31	12	---	22	19	---	34	---	185	---	284	11	---
TOTAL	357.7	984.7	1901	3882	3692	4087	6126	2987	4503	3922	1435	409.4
MEAN	11.5	32.8	61.3	125	132	132	204	96.4	150	127	46.3	13.6
MAX	63	370	261	1120	834	1070	1540	780	742	1010	337	82
MIN	4.8	6.6	10	16	16	21	28	12	19	11	11	7.9
CFSM	.18	.51	.96	1.96	2.06	2.06	3.19	1.51	2.35	1.98	.72	.21
IN.	.21	.57	1.10	2.26	2.15	2.38	3.56	1.74	2.62	2.28	.83	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1998, BY WATER YEAR (WY)

MEAN	27.9	58.8	98.1	130	158	191	135	113	69.1	47.9	35.5	32.1
MAX	117	256	310	614	454	814	551	505	328	282	186	399
(WY)	1976	1974	1979	1950	1989	1997	1970	1983	1997	1973	1992	1979
MIN	1.76	2.60	4.48	8.52	10.1	11.4	22.0	10.6	4.54	2.96	.78	1.15
(WY)	1947	1945	1954	1977	1954	1954	1954	1954	1954	1952	1945	1945

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1944 - 1998

ANNUAL TOTAL	53533.6	34286.8										
ANNUAL MEAN	147	93.9								91.1		
HIGHEST ANNUAL MEAN										159		1950
LOWEST ANNUAL MEAN										11.4		1954
HIGHEST DAILY MEAN	7200	Mar 2					1540	Apr 16	7200	Mar 2	1997	
LOWEST DAILY MEAN	4.8	Oct 7					4.8	Oct 7	.10	Sep 3	1945	
ANNUAL SEVEN-DAY MINIMUM	5.4	Oct 2					5.4	Oct 2	.19	Sep 17	1945	
INSTANTANEOUS PEAK FLOW							2780	Apr 16	8020	Mar 9	1964	
INSTANTANEOUS PEAK STAGE							16.95	Apr 16	25.74	Mar 2	1997	
INSTANTANEOUS LOW FLOW									.10	Sep 3	1945	
ANNUAL RUNOFF (CFSM)	2.29						1.47			1.42		
ANNUAL RUNOFF (INCHES)	31.12						19.93			19.34		
10 PERCENT EXCEEDS	248						189			190		
50 PERCENT EXCEEDS	35						33			26		
90 PERCENT EXCEEDS	6.6						9.1			5.8		

SALT RIVER BASIN

03302000 POND CREEK NEAR LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992.

pH: May 1988 to September 1992.

WATER TEMPERATURE: May 1988 to September 1992.

DISSOLVED OXYGEN: June 1988 to September 1991.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1200 microsiemens, Nov. 4, 1988; minimum, 129 microsiemens, Mar. 6, 1989.

pH: Maximum, 10.1 units, Apr. 16, 17, 18, 1991; minimum, 4.5 units, Oct. 18, 1990.

WATER TEMPERATURE: Maximum, 34.0°C, July 15-17 and Aug. 2, 4, and 16, 1988; minimum, 0.0°C, Jan. 22, 23, 1991, and Dec. 19, 1991.

DISSOLVED OXYGEN: Maximum, 20.1 mg/L, June 30, 1991; minimum, 0.7 mg/L, July 3, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
04...	1220	75	495	7.8	7.5	9.2
JAN						
12...	1315	94	579	7.9	7.5	10.4
FEB						
11...	1245	930	378	7.6	4.0	11.6
MAR						
04...	1215	25	692	8.2	5.0	11.1
APR						
13...	1240	28	591	7.7	15.5	7.7
MAY						
11...	1230	36	582	7.9	19.0	7.2
JUN						
15...	1240	100	448	7.7	21.0	6.2
JUL						
13...	1150	25	539	7.8	25.0	5.2
AUG						
10...	1225	87	454	7.7	24.5	5.5

SALT RIVER BASIN

03302030 POND CREEK AT PENDLETON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°03'15", long 85°52'18", Jefferson County, Hydrologic Unit 05140102, at bridge on Pendleton Road, 1.3 mi above Brier Creek and at mile 7.1.

DRAINAGE AREA.--80.3 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
11...	0910	83	469	7.7	5.8	10.7
JAN						
07...	0910	342	407	7.7	12.3	8.4
FEB						
24...	0910	55	636	8.0	6.9	10.4
MAR						
09...	1220	1130	250	7.4	11.2	8.0
APR						
08...	0905	38	530	7.5	15.5	8.0
MAY						
06...	0900	69	511	7.8	16.2	7.6
JUN						
10...	1155	68	364	7.6	20.6	6.7
AUG						
05...	0900	23	558	7.8	25.3	6.4

OTTER CREEK BASIN

03302110 OTTER CREEK AT OTTER CREEK PARK NEAR ROCK HAVEN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°56'37", long 86°01'47", Mead County, Hydrologic Unit 05140104, 1.4 mi east of Rock Haven, and at mile 3.3.

DRAINAGE AREA.--99.2 mi².

PERIOD OF RECORD.--January 1993 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC						
15...	1220	34	424	8.4	3.8	13.4
JAN						
13...	0945	168	410	8.1	9.8	10.9
FEB						
25...	1150	91	432	8.5	10.1	14.1
MAR						
11...	1155	155	381	8.3	6.8	12.3
APR						
23...	1120	216	409	8.0	13.7	10.8
MAY						
12...	1145	120	420	8.1	17.6	12.5
JUN						
24...	1200	424	309	7.9	18.0	8.9
JUL						
22...	1220	55	479	8.2	22.1	9.8
AUG						
18...	1200	28	505	8.1	22.4	9.6

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY

LOCATION.--Lat 37°53'58", long 86°42'20", Hancock County, Hydrologic Unit 05140201, at Cannelton Dam, 0.7 mi upstream from Indian Creek, 3.3 mi upstream from Lead Creek, and at mile 720.8.

DRAINAGE AREA.--97,000 mi², approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Gate opening and water-stage recorders. Datum of headwater gage 0.4 mi upstream is 374.0 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 26.0 ft lower.

REMARKS.--No estimated daily discharges. Records fair except for those below 20,000 ft³/s, which are poor. Daily discharge computed from head, gate openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58400	32500	106000	83700	174000	215000	131000	307000	103000	277000	57900	20400
2	57800	34900	107000	80600	167000	180000	117000	345000	93900	311000	38700	11300
3	16500	35700	112000	74900	144000	173000	115000	341000	96900	341000	21900	31800
4	54200	37100	119000	59800	125000	175000	121000	332000	79400	345000	42900	20200
5	33600	52500	113000	63700	114000	178000	117000	328000	91700	267000	16600	19300
6	25100	65200	100000	81200	141000	178000	129000	335000	63100	198000	21600	7390
7	32500	56000	90800	129000	186000	171000	137000	340000	81800	153000	39000	9170
8	28400	43900	86000	226000	230000	160000	137000	335000	75300	134000	30400	29300
9	19300	75200	86900	304000	244000	168000	143000	340000	64200	110000	49400	31700
10	19600	103000	75600	324000	247000	207000	166000	345000	104000	104000	37800	15100
11	20600	111000	87500	367000	229000	228000	198000	334000	121000	108000	37100	19500
12	31300	107000	92600	392000	267000	250000	223000	329000	195000	93400	47500	31500
13	3650	91300	112000	408000	302000	258000	236000	314000	260000	85000	33900	9250
14	13000	94900	126000	414000	321000	257000	241000	276000	273000	71500	45500	26000
15	33300	82400	130000	407000	323000	234000	232000	260000	274000	69100	30500	16800
16	18500	86700	115000	371000	280000	186000	251000	209000	283000	85100	27200	6680
17	14800	105000	92600	283000	253000	158000	324000	179000	295000	66200	18200	28100
18	7670	103000	74800	239000	211000	134000	349000	149000	262000	54200	54800	13800
19	12700	90400	63100	206000	201000	127000	358000	118000	269000	38000	50700	9340
20	21100	69300	55400	187000	231000	149000	356000	106000	283000	79900	55800	15500
21	19200	68700	54800	173000	271000	224000	370000	114000	267000	169000	42500	27600
22	11800	58000	58900	157000	294000	263000	391000	99400	237000	163000	29600	35000
23	18000	51600	51700	145000	283000	285000	409000	112000	246000	116000	27700	14700
24	18100	72800	54000	135000	282000	296000	423000	153000	265000	85300	32300	24900
25	20400	77300	80800	139000	277000	330000	429000	167000	227000	80100	22300	17500
26	27600	89900	99000	158000	265000	340000	415000	175000	161000	60000	55000	8020
27	26500	84300	98800	171000	260000	315000	372000	170000	114000	55300	30500	34800
28	10300	79000	98800	176000	258000	271000	270000	152000	93800	42000	19600	21500
29	40500	71300	101000	164000	---	209000	248000	122000	129000	42300	39800	8370
30	34600	77000	104000	153000	---	163000	267000	109000	189000	28200	18200	25600
31	24100	---	94100	163000	---	137000	---	107000	---	57500	38900	---
TOTAL	773120	2206900	2841200	6434900	6580000	6619000	7675000	7102400	5297100	3889100	1113800	590120
MEAN	24940	73560	91650	207600	235000	213500	255800	229100	176600	125500	35930	19670
MAX	58400	111000	130000	414000	323000	340000	429000	345000	295000	345000	57900	35000
MIN	3650	32500	51700	59800	114000	127000	115000	99400	63100	28200	16600	6680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1998, BY WATER YEAR (WY)

MEAN	59260	96230	162000	169200	205500	242000	204700	166500	109300	69000	54180	43870
MAX	155800	222400	334000	368700	358600	443300	360400	415100	235400	125500	148200	186600
(WY)	1980	1986	1979	1991	1994	1997	1994	1996	1981	1998	1980	1979
MIN	13980	28150	54160	36500	94740	125500	72990	46020	16490	18760	13130	14920
(WY)	1992	1992	1990	1977	1992	1983	1986	1976	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1976 - 1998	
ANNUAL TOTAL	48761190		51122640			
ANNUAL MEAN	133600		140100			
HIGHEST ANNUAL MEAN					188900	1979
LOWEST ANNUAL MEAN					72150	1988
HIGHEST DAILY MEAN	735000	Mar 8	429000	Apr 25	735000	Mar 8 1997
LOWEST DAILY MEAN	3190	Sep 29	3650	Oct 13	3180	Aug 28 1995
ANNUAL SEVEN-DAY MINIMUM	14800	Oct 13	14800	Oct 13	7650	Jul 12 1988
INSTANTANEOUS PEAK FLOW					736000	Mar 8 1997
INSTANTANEOUS PEAK STAGE			39.56		52.42	Mar 8 1997
10 PERCENT EXCEEDS	285000		314000		287000	
50 PERCENT EXCEEDS	97100		107000		94600	
90 PERCENT EXCEEDS	20500		20400		23600	

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Samples are collected 2.0 mi² upstream from discharge station.

PERIOD OF RECORD.--Water years 1975 to 1986 and 1996 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1986 (discontinued).

WATER TEMPERATURES: October 1974 to September 1986 (discontinued).

REMARKS.-- Flow regulated by Ohio River system of locks, dams, and reservoirs.

COOPERATION.--Records of conductance and temperature collected on right bank at Cannelton Dam and furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 691 microsiemens, Nov. 14, 1978; minimum daily, 176 microsiemens, Dec. 15, 1978

WATER TEMPERATURES: Maximum daily, 30.0°C, July 23, 24, 1977, Aug. 5, 1982, several days in July and August, 1983; minimum daily, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV											
24...	1500	ENVIRONMENTAL	77300	536	7.4	9.8	3.3	10.9	97	160	44
DEC											
22...	1300	ENVIRONMENTAL	64100	365	7.6	5.7	2.5	12.2	99	130	35
JAN											
16...	1330	ENVIRONMENTAL	371000	333	7.8	6.8	98	--	--	110	31
FEB											
12...	1330	ENVIRONMENTAL	264000	282	7.6	4.4	54	11.6	91	100	28
12...	1340	REPLICATE	--	--	--	--	53	--	--	100	28
MAR											
10...	1315	ENVIRONMENTAL	207000	299	7.6	7.6	21	11.0	92	110	30
APR											
08...	1330	ENVIRONMENTAL	142000	321	7.6	12.9	12	9.5	92	130	34
28...	1300	ENVIRONMENTAL	240000	261	7.4	13.4	48	9.0	87	100	29
MAY											
19...	1300	ENVIRONMENTAL	137000	286	7.3	19.8	15	7.6	0	120	31
19...	1303	SPIKE	--	--	--	--	--	--	--	--	--
JUN											
04...	1300	ENVIRONMENTAL	78400	335	7.3	23.4	11	7.6	91	140	39
04...	1310	REPLICATE	--	--	--	--	9.7	--	--	140	39
11...	1320	ENVIRONMENTAL	121000	346	7.4	22.0	13	7.2	84	130	36
30...	1320	ENVIRONMENTAL	202000	231	7.3	25.8	40	8.1	102	140	39
JUL											
07...	1220	ENVIRONMENTAL	146000	231	7.0	24.4	120	7.6	93	92	27
AUG											
11...	1300	ENVIRONMENTAL	36000	335	7.6	28.1	1.3	7.6	99	140	40
26...	1230	ENVIRONMENTAL	59000	426	7.9	29.2	6.1	7.5	101	160	42

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
NOV												
24...	13	35	3.3	84	69	38	110	.22	1.8	298	1.3	1.3
DEC												
22...	10	20	2.6	70	58	23	69	.16	4.7	217	1.4	1.4
JAN												
16...	7.5	13	2.5	54	44	19	47	.14	5.4	177	2.4	1.4
FEB												
12...	7.9	15	2.0	48	39	19	50	<.10	5.3	173	1.6	1.1
12...	7.8	15	1.9	--	--	19	50	<.10	5.3	174	1.5	1.1
MAR												
10...	8.4	12	1.8	73	60	14	52	.13	5.5	173	1.3	1.3
APR												
08...	9.8	14	1.9	82	68	17	56	.10	5.1	196	1.5	1.4
28...	7.6	8.1	1.9	73	60	11	41	<.10	5.8	161	1.5	1.1
MAY												
19...	9.0	8.8	2.0	77	63	10	45	.10	6.2	170	1.3	1.1
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	9.9	11	2.6	97	79	13	51	.14	5.4	199	1.6	1.5
04...	10	11	2.5	--	--	12	50	.14	5.4	198	1.6	1.5
11...	10	11	2.3	94	77	12	48	.13	5.7	198	1.4	1.4
30...	9.1	9.7	2.8	92	75	12	42	.17	5.4	193	2.2	1.9
JUL												
07...	6.1	6.5	2.7	62	51	7.5	29	.14	5.2	136	1.7	1.3
AUG												
11...	9.4	10	4.1	89	73	14	34	.19	5.2	202	1.9	1.9
26...	13	18	3.3	71	66	21	60	.22	1.6	234	1.7	1.5

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV												
24...	.26	.24	.015	1.00	.072	.987	.31	.34	.036	.023	.12	.09
DEC												
22...	.22	.20	.021	1.13	.064	1.11	.26	.29	.021	.017	.09	.08
JAN												
16...	--	--	.023	1.27	<.020	1.25	.17	1.1	.412	<.010	.05	--
FEB												
12...	.63	.13	<.010	.896	.066	--	.19	.70	.187	.013	.05	.08
12...	.51	.12	<.010	.902	.064	--	.18	.57	.169	.010	.04	.08
MAR												
10...	--	--	.052	1.07	<.020	1.02	.21	.23	.022	.011	.01	--
APR												
08...	.18	.13	.021	1.24	.071	1.22	.20	.25	.047	.032	.06	.09
28...	.58	.18	.027	.935	.023	.908	.21	.61	.159	.010	.01	.03
MAY												
19...	.18	.02	.088	1.02	.086	.928	.10	.27	.060	.019	.07	.11
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	.27	.17	.058	1.30	.049	1.24	.22	.32	.049	.053	.13	.06
04...	.23	.17	.059	1.31	.049	1.25	.22	.28	.053	.033	.13	.06
11...	.25	.21	.060	1.13	.065	1.07	.28	.31	.074	.040	.14	.08
30...	--	--	.025	1.63	<.020	1.61	.22	.59	.279	.055	.20	--
JUL												
07...	.58	.21	<.010	1.07	.041	--	.25	.62	.215	.026	.07	.05
AUG												
11...	.23	.25	.078	1.60	.072	1.52	.32	.30	.099	.098	--	.09
26...	--	--	.063	1.27	<.020	1.20	.20	.44	.040	<.010	.03	--

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
24...	4.4	.05	.038	3.3	<1.0	<1	49	<1.0	71	<1.0	<1.0
DEC											
22...	4.9	.07	.028	5.4	<1.0	<1	35	<1.0	40	<1.0	<1.0
JAN											
16...	5.5	.08	.015	7.0	<1.0	<1	37	<1.0	30	<1.0	1.4
FEB											
12...	--	--	.016	6.6	<1.0	<1	30	<1.0	27	<1.0	<1.0
12...	--	--	.013	6.5	<1.0	<1	30	<1.0	25	<1.0	1.0
MAR											
10...	4.5	.17	.002	8.9	<1.0	<1	32	<1.0	26	<1.0	<1.0
APR											
08...	5.4	.07	.019	10	<1.0	<1	37	<1.0	31	<1.0	1.2
28...	4.0	.09	.004	7.9	<1.0	<1	30	<1.0	25	<1.0	1.1
MAY											
19...	4.1	.29	.022	10	<1.0	<1	35	<1.0	28	<1.0	1.1
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	5.5	.19	.044	7.0	<1.0	<1	36	<1.0	34	<1.0	<1.0
04...	5.5	.19	.042	7.4	<1.0	<1	37	<1.0	36	<1.0	<1.0
11...	4.7	.20	.047	9.3	<1.0	<1	36	<1.0	38	<1.0	1.4
30...	7.1	.08	.066	9.2	<1.0	<1	34	<1.0	35	<1.0	1.3
JUL											
07...	--	--	.023	11	<1.0	<1	33	<1.0	35	<1.0	1.0
AUG											
11...	6.7	.26	<.001	7.8	<1.0	<1	36	<1.0	51	<1.0	1.4
26...	5.3	.21	.009	9.2	<1.0	1	46	<1.0	65	<1.0	1.1
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
24...	<1.0	3.5	<3.0	<1.0	11	4.9	4.9	2.1	<1	<1.0	276
DEC											
22...	<1.0	2.2	19	<1.0	6	5.4	2.4	2.2	<1	<1.0	215
JAN											
16...	<1.0	1.7	17	<1.0	5	3.1	1.5	2.1	<1	<1.0	172
FEB											
12...	<1.0	<1.0	14	<1.0	5	2.1	1.0	1.3	<1	<1.0	154
12...	<1.0	<1.0	12	<1.0	5	1.9	1.0	1.3	<1	<1.0	154
MAR											
10...	<1.0	1.5	<10	<1.0	7	3.8	1.5	1.6	<1	<1.0	176
APR											
08...	<1.0	1.1	<10	<1.0	5	5.7	1.8	1.6	<1	<1.0	206
28...	<1.0	3.3	<10	<1.0	<4	1.6	1.1	1.4	<1	<1.0	158
MAY											
19...	<1.0	1.9	<10	<1.0	5	1.7	1.4	1.4	<1	<1.0	191
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	<1.0	1.6	<10	<1.0	5	1.1	1.9	1.3	<1	<1.0	197
04...	<1.0	1.8	<10	<1.0	6	1.0	1.9	1.4	<1	<1.0	197
11...	<1.0	1.8	<10	<1.0	6	1.0	1.8	1.3	<1	<1.0	208
30...	<1.0	2.0	<10	<1.0	<4	<1.0	2.0	1.3	<1	<1.0	193
JUL											
07...	<1.0	2.3	<10	<1.0	<4	<1.0	1.5	1.4	<1	<1.0	140
AUG											
11...	<1.0	2.6	<10	<1.0	<4	1.8	2.7	1.7	<1	<1.0	185
26...	<1.0	2.5	<10	<1.0	6	<1.0	4.6	1.9	<1	<1.0	266

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV											
24...	<6	1.7	<1.0	--	.50	--	--	--	--	--	--
DEC											
22...	<10	26	<1.0	2.3	.40	<.002	<.0020	.078	<.0020	<.0020	.0052
JAN											
16...	<10	1.4	<1.0	3.3	5.0	<.002	.0087	.067	<.0300	<.0020	<.0040
FEB											
12...	<10	2.7	<1.0	2.4	1.8	<.002	<.0020	.032	<.0020	<.0020	<.0040
12...	<10	2.0	<1.0	2.1	2.3	<.002	<.0020	.030	<.0020	<.0020	<.0040
MAR											
10...	<10	4.0	<1.0	3.0	1.0	<.002	<.0020	.033	<.0020	<.0020	<.0040
APR											
08...	<10	2.2	<1.0	2.0	.70	<.002	<.0020	.042	<.0020	<.0020	E.0034
28...	<10	<1.0	<1.0	3.0	--	E.004	.0149	.125	<.0020	<.0020	E.0025
MAY											
19...	<10	2.3	<1.0	2.9	.30	.008	.0473	.374	<.0020	<.0020	<.0040
19...	--	--	--	--	--	.135	.170	.503	.102	.121	.0997
JUN											
04...	<10	1.0	<1.0	2.6	.40	.055	.186	1.49	<.0020	<.0020	.0122
04...	<10	<1.0	<1.0	2.8	.50	.056	.192	1.48	<.0020	<.0020	.0134
11...	<10	1.2	<1.0	3.8	.30	.018	.102	.799	<.0020	<.0020	<.0040
30...	<10	1.0	<1.0	3.2	1.9	.034	E.134	1.30	<.0020	<.0020	<.0040
JUL											
07...	<10	<1.0	<1.0	4.0	3.4	.014	.0506	.696	<.0020	<.0020	.0049
AUG											
11...	<10	1.8	<1.0	15	.70	.030	.0361	.634	<.0020	<.0020	<.0040
26...	<10	<1.0	<1.0	5.5	.50	<.002	.0202	.499	<.0020	<.0020	<.0040

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BENZIN WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
22...	<.0040	E.0186	<.002	<.001	<.0030	<.004	<.005	<.004	.029	<.0060	<.004
JAN											
16...	.0286	E.0270	<.002	<.001	<.0030	<.004	<.005	<.004	.043	E.0019	<.004
FEB											
12...	<.0040	E.0090	<.002	<.001	<.0030	<.004	<.005	<.004	.016	<.0060	<.004
12...	<.0040	E.0095	<.002	<.001	<.0030	<.004	<.005	<.004	.017	<.0060	<.004
MAR											
10...	.0124	E.0146	<.002	<.001	<.0030	<.004	<.005	<.004	.019	<.0060	<.004
APR											
08...	.0115	E.0178	<.002	<.001	<.0030	<.004	<.005	<.004	.023	<.0060	<.004
28...	.0245	E.0136	.006	<.001	<.0030	<.004	<.005	.020	.100	<.0060	<.004
MAY											
19...	.0522	E.0219	<.002	<.001	<.0030	<.004	<.005	.020	.230	<.0060	<.004
19...	.160	E.0713	.114	.089	.103	.124	.111	.115	.350	.0675	.124
JUN											
04...	.280	E.0525	.008	<.001	<.0030	<.004	<.005	.016	.365	<.0060	<.004
04...	.306	E.0578	.008	<.001	<.0030	<.004	<.005	.017	.380	<.0060	<.004
11...	.183	E.0448	E.005	<.001	<.0030	<.004	<.005	<.004	.234	<.0060	<.004
30...	.294	E.174	.005	<.001	<.0030	<.004	<.005	.026	.787	<.0060	<.004
JUL											
07...	.0735	E.0705	.007	<.001	<.0030	<.004	<.005	<.004	.373	E.0019	<.004
AUG											
11...	.165	E.0945	.011	<.001	<.0030	<.004	<.005	.009	.365	<.0060	<.004
26...	.0756	E.105	<.002	<.001	<.0030	<.004	<.005	<.004	.243	<.0060	<.004

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
NOV											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
22...	<.0070	E.0071	.0130	<.0020	E.0098	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JAN											
16...	<.0070	<.0180	.0129	<.0020	E.0156	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
12...	<.0070	<.0180	.0051	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
12...	<.0070	<.0180	E.0034	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
10...	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
08...	<.0070	E.0047	.0092	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
28...	<.0070	E.0062	.0247	<.0020	E.0036	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAY											
19...	<.0070	E.0095	.0495	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
19...	.138	.133	.169	.0986	E.117	E.130	.112	.119	.0818	.116	.0988
JUN											
04...	<.0070	E.0160	.151	<.0020	E.0202	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
04...	<.0070	E.0155	.161	<.0020	E.0207	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
11...	<.0070	E.0116	.118	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
30...	<.0070	.0133	.203	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	E.0029
JUL											
07...	<.0070	E.0110	.112	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
AUG											
11...	<.0070	.0277	.0747	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
26...	<.0070	.0687	.0597	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DATE	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	FRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
NOV											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
22...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JAN											
16...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB											
12...	<.0030	<.0020	<.0020	<.200	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
12...	<.0030	<.0020	<.0020	<.300	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR											
10...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR											
08...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
28...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY											
19...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
19...	.107	.115	.130	E.174	.115	.109	.107	.110	.0098	.0774	.111
JUN											
04...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
04...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
11...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
30...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL											
07...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG											
11...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
26...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 24...	--	--	--	--	--	--	--	--	10	2090	98
DEC 22...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	3	519	98
JAN 16...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	389	390000	88
FEB 12...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	171	122000	92
12...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	173	--	95
MAR 10...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	72	40200	94
APR 08...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	29	11100	98
28...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	148	95900	94
MAY 19...	<.0040	<.0130	E.0077	<.0070	<.0130	<.0010	<.0020	<.0020	32	11800	100
19...	.122	.125	.140	E.111	.0724	.0975	.107	.114	--	--	--
JUN 04...	<.0040	<.0130	E.0097	<.0070	<.0130	<.0010	<.0020	<.0020	16	3390	100
04...	<.0040	<.0130	E.0093	<.0070	<.0130	<.0010	<.0020	<.0020	17	--	99
11...	<.0040	<.0130	.0135	<.0070	<.0130	<.0010	<.0020	<.0020	23	7510	99
30...	<.0040	<.0130	.0102	<.0070	<.0130	<.0010	<.0020	<.0020	128	69800	99
JUL 07...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	230	90700	100
AUG 11...	<.0040	<.0130	E.0067	<.0070	<.0130	<.0010	<.0020	<.0020	32	3110	100
26...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	24	3820	93

GREEN RIVER BASIN

03308500 GREEN RIVER AT MUNFORDVILLE, KY

LOCATION.--Lat 37°16'05", long 85°53'10", Hart County, Hydrologic Unit 05110001, on right bank at downstream side of pier of bridge on U.S. Highway 31W at Munfordsville, and at mile 225.9.

DRAINAGE AREA.--1,673 mi², of which about 180 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--February 1915 to December 1922, October 1927 to September 1931, December 1936 to February 1937 (in WSP 838), October 1937 to current year. Monthly discharge only October 1937 to March 1938, published in WSP 1305. Gage-height records collected at same site since 1924 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1555: 1916(M), drainage area. WSP 1909: 1937.

GAGE.--Water-stage recorder. Datum of gage is 451.70 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 29, 1940.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 2, 15-17, 22, 26-28, April 9-15, July 25-26, and Aug. 9. Records good except bot estimated periods, which are fair. Flow regulated by Green River Lake beginning February 1969 (station 03305990).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1913 reached a stage of 54.0 ft at former site, discharge, 67,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	1040	5220	2040	2860	4090	3830	13100	5510	5360	618	217
2	374	1080	3720	1860	2800	3970	4320	10100	10100	4820	657	219
3	371	1110	2930	1210	2760	3900	3900	7940	4090	4630	593	211
4	369	1110	2540	1310	2810	3840	5800	7450	2030	4540	515	208
5	365	1100	2370	1730	3670	3750	7070	7840	4610	3820	380	206
6	319	1100	2090	2710	4570	3520	4760	8250	8980	3690	339	204
7	299	1120	1350	6720	4530	3460	4050	8400	5820	3450	318	203
8	295	1130	1220	20200	5500	3350	3790	10600	4780	2910	314	201
9	266	1130	1160	18200	7030	9440	4460	9230	7460	2910	328	195
10	238	1130	1610	9270	8250	10100	4120	8260	14800	1960	341	189
11	237	1110	3700	8140	9130	8240	3930	8060	8170	1510	323	189
12	243	1090	2730	8060	9960	7680	3790	7780	4340	1090	301	189
13	247	1080	2570	7820	10100	7160	3700	7170	3890	1020	304	191
14	264	1160	2230	7720	9430	6740	3590	5450	6080	976	302	191
15	280	1250	2030	7880	9060	5630	3510	3750	8390	873	376	189
16	297	1280	1860	8020	8750	4800	3480	3300	8340	844	554	187
17	614	1220	1630	8020	9030	4770	20200	2450	5530	972	368	189
18	884	1160	958	7760	9310	4740	18500	1620	5620	1100	324	200
19	883	1110	837	7520	9970	4460	9600	1130	5800	939	293	239
20	872	1080	782	7260	9990	9740	9370	1020	4320	811	278	261
21	858	1090	747	7020	9490	18300	6890	899	3800	757	280	281
22	852	1200	762	6570	8960	12000	7220	818	5320	724	269	251
23	848	1300	863	5890	8530	8650	7780	792	6560	706	258	242
24	850	1300	1060	5320	7430	8250	7820	798	8600	776	248	215
25	866	1220	2220	5010	5600	8340	7330	803	7040	904	238	209
26	884	1180	2850	4450	4980	7970	6890	1460	6870	1030	232	201
27	930	1150	2140	4160	4280	7550	6630	2180	6880	1160	224	198
28	960	1110	1920	4010	4230	6670	7100	2750	6610	1110	222	194
29	996	1060	2390	3690	---	6400	6750	2380	6260	1050	216	191
30	957	2450	2340	3070	---	5630	7240	1910	5660	683	214	192
31	998	---	2210	2950	---	4190	---	867	---	540	214	---
TOTAL	18091	35650	63039	195590	193010	207330	197420	148557	192260	57665	10441	6252
MEAN	584	1188	2034	6309	6893	6688	6581	4792	6409	1860	337	208
MAX	998	2450	5220	20200	10100	18300	20200	13100	14800	5360	657	281
MIN	237	1040	747	1210	2760	3350	3480	792	2030	540	214	187

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	1390	2497	4228	4708	5368	4988	3713	3472	2463	1144	900	1301																		
MAX	5337	5187	12800	12130	10710	12040	8632	13250	7209	3132	3642	6104																		
(WY)	1976	1978	1979	1974	1991	1975	1994	1983	1997	1973	1977	1979																		
MIN	244	210	545	255	1952	1066	552	487	214	280	202	192																		
(WY)	1987	1972	1981	1981	1992	1983	1986	1988	1988	1993	1993	1983																		

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1970 - 1998	
ANNUAL TOTAL	1231764		1325305			
ANNUAL MEAN	3375		3631		3002	
HIGHEST ANNUAL MEAN					5285	
LOWEST ANNUAL MEAN					1348	
HIGHEST DAILY MEAN	40200	Mar 3	20200	Jan 8	62800	May 8 1984
LOWEST DAILY MEAN	220	Sep 18	187	Sep 16	157	Jul 8 1988
ANNUAL SEVEN-DAY MINIMUM	245	Sep 14	189	Sep 10	160	Jul 5 1988
INSTANTANEOUS PEAK FLOW			22400	Apr 17	76800	Mar 1 1962
INSTANTANEOUS PEAK STAGE			28.50	Apr 17	57.72	Mar 1 1962
INSTANTANEOUS LOW FLOW					157	Jul 8 1988
10 PERCENT EXCEEDS	7130		8360		7090	
50 PERCENT EXCEEDS	1820		2370		1590	
90 PERCENT EXCEEDS	320		243		292	

GREEN RIVER BASIN

03310300 NOLIN RIVER AT WHITE MILLS, KY

LOCATION.--Lat 37°33'03", long 86°02'43", Hardin County, Hydrologic Unit 05110001, on right bank, 0.8 mi southwest of White Mills, 1.6 mi downstream from bridge on State Highway 84, and at mile 78.7.

DRAINAGE AREA.--357 mi², of which about 120 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.08 ft above sea level. Prior to Jan. 8, 1960, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: May 5, 6, 24-25, June 14 to Aug 3. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	66	176	183	285	386	477	1300	1510	1180	265	75
2	63	65	207	163	273	358	467	1130	673	715	178	73
3	61	68	154	160	262	337	405	942	447	473	109	72
4	62	71	139	156	259	318	386	829	814	311	141	68
5	61	69	141	153	279	300	362	670	1480	210	138	68
6	60	71	134	305	285	282	328	560	1010	242	136	68
7	61	70	121	944	284	275	307	868	639	183	141	65
8	58	77	113	2750	298	462	303	1060	508	388	140	61
9	57	77	113	2190	359	2780	705	883	1000	820	144	61
10	56	74	523	1530	628	1370	525	763	981	459	160	60
11	55	69	603	1140	1060	896	415	689	1460	249	145	62
12	56	66	345	984	1560	712	357	619	1620	163	131	62
13	57	71	261	1010	1140	633	349	559	980	123	121	62
14	62	144	213	908	885	579	410	511	3160	100	115	61
15	73	130	181	820	742	515	3130	469	3220	98	111	59
16	76	108	157	761	715	472	4020	436	3080	204	106	58
17	73	86	137	681	842	461	1950	404	1760	553	103	57
18	69	77	121	603	971	477	1650	371	668	501	100	57
19	67	72	107	547	919	485	1370	347	443	327	97	61
20	70	67	95	497	833	2310	1140	335	327	218	93	64
21	66	66	86	455	752	3260	996	324	525	1430	92	66
22	63	81	142	427	657	1780	873	337	806	1560	90	63
23	63	97	206	438	614	1260	769	457	1490	322	88	61
24	67	93	244	466	560	1010	684	650	2360	200	86	59
25	71	83	749	423	501	855	618	850	1230	148	83	58
26	78	77	534	392	464	758	647	500	465	115	82	57
27	73	71	385	372	446	655	756	451	311	94	80	55
28	69	68	316	358	424	585	1090	363	237	80	79	54
29	66	67	270	343	---	532	2080	322	188	69	77	54
30	63	85	247	323	---	475	1660	299	630	200	75	53
31	63	---	217	302	---	435	---	455	---	300	75	---
TOTAL	2002	2386	7437	20784	17297	26013	29229	18753	34022	12035	3581	1854
MEAN	64.6	79.5	240	670	618	839	974	605	1134	388	116	61.8
MAX	78	144	749	2750	1560	3260	4020	1300	3220	1560	265	75
MIN	55	65	86	153	259	275	303	299	188	69	75	53
CFSM	.27	.34	1.01	2.83	2.61	3.54	4.11	2.55	4.79	1.64	.49	.26
IN.	.31	.37	1.17	3.26	2.71	4.08	4.59	2.94	5.34	1.89	.56	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1998, BY WATER YEAR (WY)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	154	290	636	695	891	1007	765	593	355	248	173	200	692	1206	2356	1603	3807	3353	2447	2715	1630	972	966	2258	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979			
MAX	37.0	48.6	44.7	55.5	156	228	200	131	71.9	83.2	55.5	46.3	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979			
MIN	37.0	48.6	44.7	55.5	156	228	200	131	71.9	83.2	55.5	46.3	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979			
(WY)	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979			
(WY)	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983	1978	1989	1979

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1960 - 1998
ANNUAL TOTAL	249822	175393	
ANNUAL MEAN	684	481	499
HIGHEST ANNUAL MEAN			971
LOWEST ANNUAL MEAN			283
HIGHEST DAILY MEAN	20000	4020	20000
LOWEST DAILY MEAN	55	53	32
ANNUAL SEVEN-DAY MINIMUM	57	56	33
INSTANTANEOUS PEAK FLOW		4680	24500
INSTANTANEOUS PEAK STAGE		16.03	36.46
INSTANTANEOUS LOW FLOW			31
ANNUAL RUNOFF (CFSM)	2.89	2.03	2.10
ANNUAL RUNOFF (INCHES)	39.21	27.53	28.60
10 PERCENT EXCEEDS	1400	1110	1080
50 PERCENT EXCEEDS	280	300	245
90 PERCENT EXCEEDS	67	63	61

GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY

LOCATION.--Lat 37°16'42", long 86°14'51", Edmonson County, Hydrologic Unit 05110001, in intake structure of Nolin River Dam on Nolin River, 0.3 mi upstream from Dismal Creek, 1.1 mi northeast of Kyrock, and at mile 7.8.

DRAINAGE AREA.--703 mi², of which about 223 mi² does not contribute directly to surface runoff. Area at site used Oct. 1, 1960, to Sept. 30, 1973, 707 mi².

PERIOD OF RECORD.--October 1930 to March 1932, July 1939 to September 1950, October 1960 to current year.

GAGE.--Water-stage recorder and outflow gate dials. Datum of gage 400 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--No estimated daily discharges. Water-discharge records not rated, see COOPERATION. Maximum gage height for period of record affected by backwater from the Green River. Flow regulated since March 1963 by Nolin Lake (station 03310900). Discharge records computed using gate openings.

COOPERATION.--Record of discharge furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1854, 26.35 ft, in January 1937, from floodmarks, at site and datum used in 1939-50.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	1560	137	482	476	560	241	563	534	3360	267	52
2	396	1550	160	482	476	707	242	568	536	2650	266	52
3	329	1540	365	482	476	553	243	1140	781	1430	266	52
4	263	1530	476	481	405	476	243	2040	1120	1120	266	52
5	263	1530	310	481	333	476	244	2610	1120	834	266	52
6	262	1520	238	482	334	476	189	2850	1120	267	266	52
7	262	1510	238	484	334	476	121	2940	1120	267	266	52
8	262	1500	238	367	334	477	73	2840	1310	446	266	52
9	262	1500	238	249	585	479	49	2830	318	535	266	52
10	262	1490	403	251	711	484	49	2820	272	535	266	52
11	262	1480	478	1190	974	1450	50	2810	273	535	266	52
12	262	1470	479	3160	1700	2400	50	2800	274	534	266	52
13	261	1170	479	4010	1880	2220	50	2790	1350	534	189	52
14	403	987	479	3970	1870	1730	50	2120	2240	534	131	52
15	812	983	480	3920	1870	1260	50	871	1040	534	131	151
16	1100	980	478	3390	1860	918	51	552	563	535	131	200
17	1100	976	478	2230	1260	734	52	552	1120	676	131	200
18	1090	972	477	1900	1230	481	53	552	732	1130	131	200
19	1090	969	477	1890	1410	312	53	643	54	1120	104	200
20	1090	964	476	1880	1610	207	289	552	54	1120	131	200
21	1090	960	476	1330	1670	216	1180	540	722	1120	76	239
22	1080	957	476	941	1860	224	1970	535	1140	1120	52	266
23	805	953	476	939	1250	229	3020	535	1150	1120	52	266
24	308	948	476	938	939	231	3390	535	1940	726	52	266
25	86	944	478	649	939	233	3370	536	2290	533	52	266
26	86	940	480	477	938	235	3350	889	2970	400	52	265
27	562	935	481	477	937	236	3340	1120	3430	266	52	265
28	1080	518	481	477	706	237	2640	1120	3410	266	52	265
29	1420	95	482	538	---	238	1660	898	3390	266	52	265
30	1570	95	482	601	---	239	841	533	3380	267	52	265
31	1560	---	482	476	---	240	---	533	---	267	52	---
TOTAL	20074	33526	12854	39624	29367	19434	27203	43217	39753	25047	4868	4507
MEAN	648	1118	415	1278	1049	627	907	1394	1325	808	157	150
MAX	1570	1560	482	4010	1880	2400	3390	2940	3430	3360	267	266
MIN	86	95	137	249	333	207	49	533	54	266	52	52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1998, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		
MEAN	925	1351	1264	1560	1613	1244	906	1099	883	523	293	519																									
MAX	4959	3393	4491	4852	4541	5533	4777	4161	4437	2009	1335	2266																									
(WY)	1980	1973	1978	1979	1985	1989	1975	1984	1983	1967	1967	1982																									
MIN	.000	452	1.50	122	91.4	203	.63	.39	.000	.000	.000	.000																									
(WY)	1976	1964	1985	1981	1992	1983	1966	1964	1964	1964	1964	1975																									

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1964 - 1998	
ANNUAL TOTAL	484597		299474			
ANNUAL MEAN	1328		820		1012	
HIGHEST ANNUAL MEAN					1880	
LOWEST ANNUAL MEAN					597	
HIGHEST DAILY MEAN	6910		4010		10300	
LOWEST DAILY MEAN	50		49		.00	
ANNUAL SEVEN-DAY MINIMUM	127		50		.00	
INSTANTANEOUS PEAK FLOW					22700	
INSTANTANEOUS PEAK STAGE			32.22		59.27	
10 PERCENT EXCEEDS	4570		1920		2600	
50 PERCENT EXCEEDS	533		482		478	
90 PERCENT EXCEEDS	200		54		54	

GREEN RIVER BASIN

03312765 BEAVER CREEK AT HWY 31 E NEAR GLASGOW, KY

LOCATION.--Lat 37°02'05", long 85°54'13", Barren County, Hydrologic Unit 05110002, on downstream side of bridge on U.S. Highway 31 E, 2.7 mi northeast of Glasgow, 8.3 mi upstream from Little Beaver Creek, and at mile 23.1.

DRAINAGE AREA.--49.6 mi².

PERIOD OF RECORD.--September 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 651.43 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 10 to Mar. 27 and Sept. 23-30. Records fair except for period of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.5	18	24	21	36	78	257	46	136	37	15
2	6.8	4.8	35	22	20	33	61	220	40	71	29	15
3	6.8	4.1	30	21	19	30	79	190	51	105	27	15
4	6.2	3.6	25	22	18	28	278	191	62	59	25	14
5	6.4	3.2	22	25	17	26	164	166	349	41	24	14
6	6.3	3.0	19	30	28	24	110	129	202	31	23	13
7	6.1	3.0	18	50	60	22	91	160	97	37	23	13
8	5.0	5.0	18	160	100	31	224	152	68	620	23	13
9	4.5	8.0	15	350	95	110	167	113	770	210	27	13
10	4.0	6.8	14	120	130	240	127	107	581	129	26	12
11	3.5	5.8	19	50	190	120	102	107	361	100	23	12
12	3.0	4.7	44	32	260	82	89	85	222	81	22	13
13	2.5	4.0	35	27	170	63	81	72	184	66	21	12
14	2.9	3.7	28	25	110	52	110	64	183	61	21	12
15	3.9	5.8	24	24	85	46	99	55	1080	56	25	12
16	5.2	11	20	30	80	41	1810	48	266	90	21	13
17	7.0	20	17	49	200	36	1690	41	139	80	20	16
18	9.0	16	15	40	400	34	518	37	75	56	19	19
19	10.8	12.8	14	37	1200	77	715	32	53	29	19	20
20	8.0	11	13	34	166	175	391	29	39	42	18	74
21	6.9	9.6	12	33	102	390	272	27	32	39	18	31
22	6.2	8.6	11	31	87	270	222	27	25	36	17	20
23	5.4	22	10	28	73	200	195	29	28	38	17	14
24	4.9	16	15	35	60	160	162	24	25	41	17	12
25	4.6	13	22	56	54	140	110	27	15	33	16	10
26	4.2	10	30	48	48	115	93	57	11	30	16	9.0
27	3.7	9.6	40	40	43	95	82	46	8.3	29	16	8.0
28	10	8.8	36	35	39	80	75	30	6.7	28	15	7.0
29	10.5	8.4	32	31	---	70	68	24	44	25	16	6.6
30	7.6	8.0	29	27	---	61	133	20	527	25	15	6.2
31	6.5	---	27	23	---	57	---	19	---	42	15	---
TOTAL	185.3	255.8	707	1559	3875	2944	8396	2585	5590.0	2466	651	463.8
MEAN	5.98	8.53	22.8	50.3	138	95.0	280	83.4	186	79.5	21.0	15.5
MAX	11	22	44	350	1200	390	1810	257	1080	620	37	74
MIN	2.5	3.0	10	21	17	22	61	19	6.7	25	15	6.2
CFSM	.12	.17	.46	1.01	2.79	1.91	5.64	1.68	3.76	1.60	.42	.31
IN.	.14	.19	.53	1.17	2.91	2.21	6.30	1.94	4.19	1.85	.49	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998
MEAN	17.1	51.2	106	143	180	257	144
MAX	39.6	169	246	206	489	477	307
(WY)	1997	1997	1997	1995	1994	1997	1994
MIN	5.98	8.53	22.8	50.3	78.8	95.0	49.4
(WY)	1998	1998	1998	1998	1992	1998	1994

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1992 - 1998

ANNUAL TOTAL	38062.1	29677.9		
ANNUAL MEAN	104	81.3	99.6	
HIGHEST ANNUAL MEAN			142	1994
LOWEST ANNUAL MEAN			49.7	1993
HIGHEST DAILY MEAN	2060	Mar 3	1810	Apr 16
LOWEST DAILY MEAN	2.5	Oct 13	2.5	Oct 13
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 9	3.5	Oct 9
INSTANTANEOUS PEAK FLOW			4490	Apr 16
INSTANTANEOUS PEAK STAGE			13.52	Apr 16
ANNUAL RUNOFF (CFSM)	2.10	1.64	15.10	Jun 18 1992
ANNUAL RUNOFF (INCHES)	28.55	22.26	2.01	
10 PERCENT EXCEEDS	217	183	214	
50 PERCENT EXCEEDS	30	29	36	
90 PERCENT EXCEEDS	6.3	6.8	7.4	

GREEN RIVER BASIN

03316500 GREEN RIVER AT PARADISE, KY

LOCATION.--Lat 37°15'50", long 86°58'40", Muhlenberg County, Hydrologic Unit 05110003, on left bank of reservation of Tennessee Valley Authority generating plant, 0.4 mi southeast of Paradise, 1.1 mi downstream from Jacobs Creek, 2.8 mi upstream from Pond Creek, and at mile 98.8.

DRAINAGE AREA.--6,183 mi², of which about 1,380 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1950 (published as "at Green River"), October 1959 to September 1960 (low-water records only), October 1960 to September 1981 and July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 363.19 ft above sea level (levels by Tennessee Valley Authority). See WDR KY-81-1 for history of changes prior to October 31, 1979. Auxiliary water-stage recorder on U.S. Highway 62 bridge at Rockport, 4.4 mi downstream.

REMARKS.--Estimated daily discharges: June 10-22. Records fair except for period of estimated record, which is poor. Peak stage for year effected by backwater. Flow regulated by Green River Lake beginning February 1969, Nolin River Lake beginning March 1963, and Barren River Lake beginning March 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	5110	4510	5180	5380	6680	5440	25700	6340	13900	2840	697
2	1850	5260	6250	4760	4980	5890	5430	28000	6610	13600	2490	648
3	1660	5300	7670	4550	4560	5680	5440	28000	11800	12300	2370	635
4	1570	5250	6760	4320	4270	5500	5850	24700	11600	10600	2270	563
5	1500	5260	5820	3980	4250	5190	7070	21600	9770	10100	2140	538
6	1450	5300	5180	4440	4750	4940	8840	19900	14400	9410	2020	560
7	1430	5300	4460	6720	5900	4510	7730	19600	18300	8340	1950	543
8	1370	5320	3700	14600	7160	4090	6070	20400	16100	9550	2080	561
9	1290	5400	3150	23100	8530	4860	6590	21300	16500	10900	2840	540
10	1280	5560	3380	27600	10500	7680	7900	20500	27000	10500	3440	529
11	1210	5580	5300	25800	12300	11700	7610	19200	30000	9260	3450	525
12	1110	5550	6460	18800	14100	12300	6370	19900	35000	7760	2920	527
13	1130	5580	6510	18100	15500	11900	5110	18200	38000	6720	2380	532
14	1190	5640	5780	17300	15900	11300	5160	16200	35000	6060	2100	505
15	1250	5450	5170	15700	14600	10400	6270	14600	37000	6600	1880	510
16	1440	5390	4490	14200	13900	9500	12200	12300	38000	7410	1710	542
17	2490	5280	3900	13900	15300	8470	27500	10400	30000	9950	1610	581
18	3720	5180	3530	13800	19300	7400	34000	9260	22000	10700	1600	628
19	4280	5090	3220	13700	21000	6670	36800	8180	18000	9050	1540	834
20	4480	5000	2870	12900	20100	8560	37600	7270	14000	7590	1380	716
21	4400	5000	2610	12300	18800	13200	35400	6640	13000	6700	1230	729
22	4450	5090	2620	11600	17700	18900	30100	6580	16000	6150	1120	780
23	4460	5140	2950	10900	16600	19200	24400	6830	16600	5440	1050	816
24	4220	5120	3290	9930	14400	13600	21200	6440	15000	5130	941	803
25	3510	5050	4640	9020	12300	10800	19400	6860	15200	5560	895	801
26	2790	5030	5910	8320	9900	9450	17700	8510	14600	5940	869	819
27	2440	4930	6630	7590	8510	8520	16500	9030	14100	5310	810	832
28	2280	4880	6390	7020	7640	7610	16000	9460	14100	4710	763	818
29	2950	4530	5760	6650	---	6810	15700	9640	13900	4240	762	831
30	4190	4060	5530	6440	---	6080	19100	9140	13900	3980	735	831
31	4870	---	5530	6030	---	5590	---	7640	---	3480	695	---
TOTAL	78210	155630	149970	359250	328130	272980	460480	451980	581820	246940	54880	19774
MEAN	2523	5188	4838	11590	11720	8806	15350	14580	19390	7966	1770	659
MAX	4870	5640	7670	27600	21000	19200	37600	28000	38000	13900	3450	834
MIN	1110	4060	2610	3980	4250	4090	5110	6440	6340	3480	695	505

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

MEAN	5192	8414	13920	16590	16370	18190	14320	10780	8520	4200	2834	3870
MAX	16950	19310	42250	36020	26410	41520	34210	25950	20190	8811	8743	22550
(WY)	1980	1980	1979	1974	1994	1997	1979	1995	1981	1973	1971	1979
MIN	2463	4030	2103	954	6083	6150	4441	2492	2024	1702	623	659
(WY)	1981	1972	1981	1981	1977	1981	1978	1976	1972	1993	1993	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1970 - 1998
ANNUAL TOTAL	4147781	3160044	
ANNUAL MEAN	11360	8658	10300
HIGHEST ANNUAL MEAN			18460
LOWEST ANNUAL MEAN			6044
HIGHEST DAILY MEAN	83800	Mar 7	83800 Mar 7 1997
LOWEST DAILY MEAN	939	Sep 18	277 Sep 13 1995
ANNUAL SEVEN-DAY MINIMUM	984	Sep 12	320 Sep 8 1995
INSTANTANEOUS PEAK FLOW		39000	107000 Mar 5 1962
INSTANTANEOUS PEAK STAGE		24.03	40.46 Mar 5 1962
INSTANTANEOUS LOW FLOW			250 Oct 23 1940
10 PERCENT EXCEEDS	25100	19200	23600
50 PERCENT EXCEEDS	6210	5940	6390
90 PERCENT EXCEEDS	1280	885	1410

GREEN RIVER BASIN

03320000 GREEN RIVER AT LOCK 2, AT CALHOUN, KY

LOCATION.--Lat 37°32'02", long 87°15'50", McLean County, Hydrologic Unit 05110005, 870 ft upstream from Lock and Dam 2, on right bank 0.2 mi downstream from bridge on State Highway 81 at Calhoun, 0.2 mi upstream from Long Falls Creek, and at mile 63.3.

DRAINAGE AREA.--7,566 mi², of which about 1,540 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1930 to current year. Prior to October 1958, published as "at Livermore."

REVISED RECORDS.--WSP 1385: 1939. WDR KY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 353.95 ft above sea level. Auxiliary water-stage recorder at Livermore, 8.0 mi upstream at datum 360.11 ft above sea level. See WDR KY-88-1 for history of changes prior to Sept. 30, 1958.

REMARKS.--Estimated daily discharges: Jan. 15-19, and May 2-8, Sept. 8-10. Records good except for discharges below 1000 ft³/s, and periods of estimated record which are fair. Flow regulated by Green River Lake beginning February 1969, Nolin Lake beginning March 1963, Barren River Lake beginning March 1964, and Rough River Lake, October 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	6140	5220	6290	6210	7930	6630	33700	7540	17100	3370	750
2	1910	6340	6940	5750	5600	6920	6740	37000	7090	16900	2900	711
3	1730	6420	8890	5440	5100	6540	6670	36000	12700	16000	2780	694
4	1640	6390	8020	5210	4650	6320	6940	34000	13800	14400	2650	624
5	1590	6370	6770	4770	4690	5980	8120	31000	11200	13100	2470	602
6	1530	6370	5960	5320	5160	5670	10500	28000	15500	11400	2350	617
7	1480	6380	5130	8450	6560	5280	9570	26000	19500	9960	2240	617
8	1430	6410	4300	17000	8100	4780	7500	27000	18200	11200	2390	620
9	1350	6510	3640	25800	9760	5260	7490	27700	18100	12400	3640	610
10	1300	6680	3740	31100	12200	8430	9220	27100	29100	12200	4080	600
11	1280	6730	5810	31200	15000	13600	9300	25500	34900	10900	4200	590
12	1220	6700	7460	25900	16900	14900	7980	26000	37800	9050	3560	592
13	1140	6730	7670	22500	18000	14600	6410	24700	40000	7830	2840	594
14	1160	6870	6800	21700	18800	13700	6290	21900	37200	7060	2400	588
15	1200	6640	6020	19000	18200	12700	7830	18700	38800	8140	2160	569
16	1380	6450	5230	18000	17300	11500	16100	15600	39900	9030	1960	556
17	2600	6480	4470	17000	18500	10400	31500	13300	35400	11400	1870	590
18	4420	6380	4090	16000	23400	9180	38500	11800	25700	12800	1890	680
19	5120	6250	3750	16000	26000	8170	41800	10100	19000	10900	1800	981
20	5400	6140	3190	15400	25800	11400	43500	8660	16000	8990	1570	839
21	5420	6070	2870	14600	24100	16500	43800	7750	15400	7870	1460	799
22	5400	6130	2880	13600	21800	22000	41800	7860	18200	7240	1370	815
23	5420	6230	3280	12500	19700	24600	36100	8160	19600	6380	1290	912
24	5150	6250	3830	11500	17600	18700	30600	7690	18400	5890	1200	923
25	4330	6220	5270	10400	15000	14100	27300	8150	18500	6220	1130	951
26	3330	6100	7060	9610	12100	11500	24400	10500	18200	6920	1040	996
27	2690	6030	7920	8710	10100	10500	22400	11100	17100	6200	965	942
28	2620	5860	7720	8120	9050	9060	21700	11500	17000	5520	911	952
29	3450	5480	6920	7620	---	8060	22400	11500	16900	4970	874	949
30	4960	4950	6570	7390	---	7250	26300	11200	17200	4650	832	960
31	5850	---	6530	7020	---	6650	---	9190	---	4180	770	---
TOTAL	89520	188700	173950	428900	395380	332180	585390	588360	653930	296800	64962	22223
MEAN	2888	6290	5611	13840	14120	10720	19510	18980	21800	9574	2096	741
MAX	5850	6870	8890	31200	26000	24600	43800	37000	40000	17100	4200	996
MIN	1140	4950	2870	4770	4650	4780	6290	7690	7090	4180	770	556

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1998, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	5583	10660	17020	19230	22630	20630	16130	13690	9334	4871	2927	4319																		
MAX	19100	22770	46530	41100	52100	53330	42430	50460	23850	12260	8763	27360																		
(WY)	1980	1980	1979	1974	1989	1997	1979	1983	1981	1989	1971	1979																		
MIN	2138	4874	2496	1223	7116	7479	2260	1706	541	1386	550	741																		
(WY)	1988	1972	1981	1981	1977	1981	1986	1988	1988	1988	1991	1998																		

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1970 - 1998	
ANNUAL TOTAL	5226423		3820295			
ANNUAL MEAN	14320		10470		12200	
HIGHEST ANNUAL MEAN					22070	
LOWEST ANNUAL MEAN					7249	
HIGHEST DAILY MEAN	85200	Mar 7	43800	Apr 21	85200	Mar 7 1997
LOWEST DAILY MEAN	983	Sep 17	556	Sep 16	291	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	1060	Sep 12	583	Sep 11	329	Jul 4 1988
INSTANTANEOUS PEAK FLOW			44200		208000	
INSTANTANEOUS PEAK STAGE			23.91		42.40	
INSTANTANEOUS LOW FLOW					280	
10 PERCENT EXCEEDS	36100		25600		30700	
50 PERCENT EXCEEDS	7540		6940		7610	
90 PERCENT EXCEEDS	1400		1090		1470	

GREEN RIVER BASIN

03320500 POND RIVER NEAR APEX, KY

LOCATION.--Lat 37°07'20", long 87°19'10", Muhlenberg County, Hydrologic Unit 05110006, on downstream side of right pier of bridge on State Highway 189, 1.1 mi downstream from Coal Creek, 2.1 mi northeast of Apex, 5.7 mi upstream from West Fork, and at mile 62.8.

DRAINAGE AREA.--194 mi².

PERIOD OF RECORD.--August 1940 to current year. October 1953 to September 1971, published as "East Fork Pond River near Apex."

REVISED RECORDS.--WSP 1083: 1942-46. WSP 1555: 1945-46(P), drainage area, WRD KY-93: 1989-91(P), WRD KY-96: 1989-96(P).

GAGE.--Water-stage recorder. Datum of gage is 384.53 ft above sea level. Prior to Aug. 21, 1942, nonrecording gage at same site. Prior to Oct. 1, 1974, at datum 6.11 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 1, Nov. 18 to Jan. 9, April 28-29, June 13-21 and Sept. 7-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	2.0	26	50	41	122	155	1350	44	109	14	1.5
2	.34	2.4	28	46	38	110	197	1120	37	91	27	1.6
3	.40	2.2	32	40	36	99	176	1020	29	67	19	1.6
4	.44	2.1	36	34	34	91	246	975	27	46	13	1.4
5	.40	2.2	42	32	38	82	263	836	435	31	6.9	1.2
6	.28	2.1	48	40	43	74	207	607	908	21	3.8	1.2
7	.24	2.0	42	100	49	81	166	566	606	15	4.3	.98
8	.22	1.9	40	800	75	72	144	743	324	19	5.4	.82
9	.24	1.7	38	700	148	84	270	564	2600	27	25	.70
10	.28	1.5	40	389	204	108	293	372	4510	32	39	.60
11	.30	1.5	54	201	227	103	227	256	3240	25	46	.50
12	.36	1.2	64	142	371	88	169	185	2020	18	113	.60
13	.46	1.4	58	127	314	79	130	139	1500	12	212	.70
14	.70	1.6	52	114	204	71	381	109	1100	9.2	142	.64
15	.60	1.9	48	102	148	63	620	89	1200	30	95	.60
16	.50	2.1	42	91	216	58	1490	74	900	183	65	.58
17	.44	2.3	40	82	1210	67	2340	62	700	194	43	.56
18	.38	2.6	38	74	1790	100	1740	50	500	138	27	.70
19	.34	3.0	36	67	1400	156	1400	39	400	95	16	.82
20	.42	3.6	36	61	1080	1050	1080	31	300	66	9.5	.80
21	.56	4.6	38	56	722	1070	786	27	210	43	6.3	.78
22	.52	6.0	40	54	467	784	693	27	166	27	5.1	.72
23	.42	10	48	80	301	495	584	26	126	20	4.9	.68
24	.46	20	58	113	204	292	420	25	99	15	4.7	.66
25	.54	22	76	111	159	196	273	33	78	9.8	4.2	.66
26	.90	21	88	92	137	174	195	48	60	5.8	3.4	.64
27	.80	20	90	78	133	148	182	78	46	5.0	2.5	.64
28	.74	27	86	69	131	129	300	91	34	4.8	2.0	.62
29	.70	26	80	61	---	115	460	76	26	4.6	1.9	.60
30	.80	25	70	52	---	104	918	63	68	4.6	1.8	.60
31	.90	---	60	46	---	94	---	47	---	5.5	1.7	---
TOTAL	15.06	222.9	1574	4104	9920	6359	16505	9728	22293	1373.3	964.4	24.70
MEAN	.49	7.43	50.8	132	354	205	550	314	743	44.3	31.1	.82
MAX	.90	27	90	800	1790	1070	2340	1350	4510	194	212	1.6
MIN	.22	1.2	26	32	34	58	130	25	26	4.6	1.7	.50
CFSM	.00	.04	.26	.68	1.83	1.06	2.84	1.62	3.83	.23	.16	.00
IN.	.00	.04	.30	.79	1.90	1.22	3.16	1.87	4.27	.26	.18	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	22.1	174	400	455	628	621	437	318	122	60.6	31.5	58.6
MAX	208	1430	2167	2024	3988	2519	1822	2607	900	440	239	988
(WY)	1986	1958	1979	1950	1989	1997	1979	1984	1969	1989	1984	1979
MIN	.000	.000	.000	3.56	42.6	35.2	39.2	6.46	1.37	.44	.19	.000
(WY)	1954	1954	1964	1981	1941	1941	1986	1941	1964	1964	1993	1953

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1941 - 1998

ANNUAL TOTAL	129008.32	73083.36	
ANNUAL MEAN	353	200	275
HIGHEST ANNUAL MEAN			643
LOWEST ANNUAL MEAN			59.8
HIGHEST DAILY MEAN	19700	Mar 2	4510
LOWEST DAILY MEAN	.22	Oct 8	.22
ANNUAL SEVEN-DAY MINIMUM	.27	Oct 6	.27
INSTANTANEOUS PEAK FLOW			4770
INSTANTANEOUS PEAK STAGE			18.29
ANNUAL RUNOFF (CFSM)	1.82		1.03
ANNUAL RUNOFF (INCHES)	24.74		14.01
10 PERCENT EXCEEDS	740		606
50 PERCENT EXCEEDS	55		47
90 PERCENT EXCEEDS	.73		.65

GREEN RIVER BASIN

03321060 POND RIVER NEAR MADISONVILLE, KY

LOCATION.--Lat 37°19'02", long 87°22'09", Hopkins County, Hydrologic Unit 05110006, on left bank 3 ft downstream from bridge on State Highway 70, 4.2 mi downstream from Flat Creek, 5.0 mi upstream from Earle Creek, 6.3 mi east of Madisonville, and at mile 25.9.

DRAINAGE AREA.--469 mi².

PERIOD OF RECORD.--July 1991 to September 1996 discharge records. October 1996 to September 1998 gage-height only.

GAGE.--Water-stage recorder. Datum of gage is 361.80 ft above sea level.

REMARKS.--Records fair.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.86	13.44	15.37	16.43	15.00	---	18.20	9.57	---	---	4.18	4.52
2	13.41	13.62	15.89	15.66	14.50	---	17.70	9.83	---	---	4.18	4.50
3	13.53	13.43	16.44	14.86	14.00	26.00	17.07	9.59	---	---	4.18	4.53
4	13.14	12.91	16.74	13.79	13.70	27.34	16.27	9.11	---	---	4.17	4.54
5	12.14	11.90	16.77	12.94	14.10	27.35	15.45	14.75	---	---	4.19	4.57
6	10.19	10.28	16.55	12.17	15.80	26.74	14.49	14.70	---	---	4.16	4.60
7	7.64	8.57	16.05	11.75	17.50	26.04	13.61	14.56	---	---	4.15	4.55
8	6.26	8.74	15.52	11.46	18.80	25.47	13.02	14.19	---	---	4.10	4.56
9	5.65	10.25	14.88	10.82	18.60	25.24	12.31	13.81	---	---	4.11	4.57
10	5.32	11.02	14.12	10.63	17.80	25.31	11.85	13.16	---	---	4.17	4.53
11	5.11	11.14	13.05	10.63	16.80	25.46	11.09	12.43	---	---	4.35	4.60
12	4.95	10.52	12.49	10.62	---	25.52	10.47	11.43	---	---	4.33	4.62
13	4.87	9.31	12.54	10.63	---	25.45	10.41	10.06	---	---	4.22	4.60
14	4.82	8.21	12.94	10.63	---	25.35	10.30	9.12	---	---	4.26	4.54
15	4.76	7.24	13.92	8.91	---	25.12	10.40	8.63	---	---	4.23	4.46
16	4.70	7.03	14.85	8.35	---	24.74	10.26	8.22	---	---	4.22	4.48
17	4.62	6.77	16.22	10.36	---	24.31	9.62	7.89	---	---	4.23	4.47
18	4.88	6.52	17.40	11.61	---	23.97	9.02	---	16.07	---	4.21	4.44
19	5.47	6.56	18.60	12.01	---	24.01	8.90	---	16.10	---	4.20	4.57
20	6.78	6.97	19.34	11.80	---	23.85	9.28	---	16.10	---	4.21	4.60
21	6.79	7.22	19.47	11.13	---	23.73	9.75	---	16.08	---	4.23	4.60
22	6.18	7.30	19.25	10.77	---	23.15	9.71	---	15.83	---	4.21	4.52
23	6.02	7.38	18.84	11.42	---	22.24	9.67	---	15.10	4.63	4.23	4.39
24	6.59	7.28	18.71	12.21	---	22.07	9.48	---	---	4.61	4.24	4.37
25	7.44	7.95	18.78	12.97	---	21.80	9.37	---	---	4.60	4.44	4.34
26	7.71	10.94	18.93	13.73	---	20.82	9.52	---	---	4.55	4.70	4.18
27	9.32	12.29	18.87	14.58	---	20.65	9.48	---	---	4.23	4.74	4.28
28	11.04	13.05	18.65	15.26	---	20.61	9.78	---	---	4.21	4.74	4.54
29	11.95	13.87	18.30	15.50	---	20.11	9.76	---	---	4.24	4.73	4.38
30	12.47	14.60	17.83	15.55	---	19.15	10.43	---	---	4.22	4.60	4.34
31	12.96	---	17.26	15.30	---	18.62	---	---	---	4.17	4.52	---
MEAN	8.05	9.88	16.60	12.40	---	---	11.56	---	---	---	4.30	4.49
MAX	13.53	14.60	19.47	16.43	---	---	18.20	---	---	---	4.74	4.62
MIN	4.62	6.52	12.49	8.35	---	---	8.90	---	---	---	4.10	4.18

GREEN RIVER BASIN

03321060 POND RIVER NEAR MADISONVILLE, KY--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.46	4.36	4.49	5.60	6.25	11.87	7.75	14.49	9.09	6.10	4.76	4.08
2	4.48	4.34	4.55	5.40	6.00	10.10	7.87	15.19	7.89	6.35	4.71	4.07
3	4.39	4.33	4.58	5.35	5.82	8.47	8.33	16.05	6.97	6.35	4.68	4.07
4	4.32	4.30	4.62	5.20	5.73	7.66	8.60	16.56	6.53	6.27	4.72	4.05
5	4.38	4.31	4.90	5.10	5.80	7.33	9.05	16.86	7.71	6.10	4.71	4.02
6	4.32	4.35	4.72	5.30	5.86	6.98	9.45	16.99	9.95	5.70	4.70	4.02
7	4.24	4.40	4.60	5.80	5.96	6.67	9.28	16.98	11.62	5.42	4.73	4.01
8	4.28	4.49	4.62	8.00	6.20	6.75	8.80	16.84	12.47	5.63	4.68	4.00
9	4.25	4.40	4.66	11.00	6.74	6.95	8.99	16.58	13.32	5.69	5.07	3.99
10	4.36	4.36	4.64	11.75	7.99	6.96	9.65	16.33	14.78	5.72	5.47	3.94
11	4.31	4.32	4.70	12.25	9.35	7.05	10.23	15.96	17.76	5.69	5.48	3.90
12	4.23	4.31	5.10	12.65	10.28	7.07	10.27	15.39	19.58	5.61	5.35	3.95
13	4.23	4.30	5.40	12.60	10.98	6.90	9.67	14.63	20.16	5.46	5.35	3.94
14	4.36	4.51	5.42	12.10	11.48	6.67	9.59	13.71	20.17	5.39	6.12	3.94
15	4.33	4.61	5.28	11.30	11.61	6.44	10.54	12.47	20.32	7.51	6.30	3.96
16	4.34	4.63	5.11	10.20	11.45	6.35	13.45	10.54	20.29	9.89	5.90	4.00
17	4.40	4.66	4.94	9.75	11.68	6.35	16.24	8.12	20.00	10.55	5.53	4.07
18	4.39	4.59	4.87	8.80	12.84	6.47	17.38	6.82	19.53	10.64	5.28	4.03
19	4.38	4.57	4.78	7.60	13.84	6.87	17.81	6.34	18.99	9.71	5.09	4.05
20	4.37	4.54	4.68	6.75	15.44	8.67	18.10	6.00	18.32	8.18	4.93	4.04
21	4.37	4.50	4.70	6.35	16.53	10.98	18.16	5.78	17.54	6.96	4.78	4.04
22	4.43	4.48	4.73	6.25	16.93	12.07	18.06	5.74	16.71	6.23	4.68	4.09
23	4.36	4.63	4.80	6.30	16.94	12.92	17.78	5.69	15.79	5.78	4.53	4.16
24	4.35	4.66	4.93	6.60	16.62	13.73	17.44	5.58	14.55	5.47	4.48	4.18
25	4.41	4.70	5.30	7.25	16.03	14.16	17.03	5.72	12.83	5.24	4.37	4.13
26	4.44	4.52	5.40	7.50	15.24	14.03	16.50	6.44	10.39	5.12	4.31	4.13
27	4.38	4.51	6.40	7.33	14.28	13.51	15.97	7.30	7.65	4.99	4.28	4.17
28	4.39	4.48	6.75	7.26	13.21	12.68	15.37	7.83	6.35	4.87	4.21	4.19
29	4.38	4.47	6.50	7.31	---	11.33	14.66	7.93	5.80	4.80	4.17	4.20
30	4.38	4.45	6.18	7.03	---	9.39	14.39	9.65	5.97	4.78	4.14	4.21
31	4.32	---	5.80	6.58	---	7.99	---	10.07	---	4.80	4.09	---
MEAN	4.36	4.47	5.10	8.01	10.97	9.08	12.88	11.31	13.63	6.35	4.89	4.05
MAX	4.48	4.70	6.75	12.65	16.94	14.16	18.16	16.99	20.32	10.64	6.30	4.21
MIN	4.23	4.30	4.49	5.10	5.73	6.35	7.75	5.58	5.80	4.78	4.09	3.90

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN

(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 66 at New Harmony, and at mile 51.5.

DRAINAGE AREA.--29,234 mi²

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1974 to 1986, 1997 to current water year.

SEDIMENT DISCHARGE: Partial record station--October 1974 to 1985

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 805 microsiemens Feb. 15, 1977; minimum, 200 micorsiemens Mar. 3, 1979.

WATER TEMPERATURE: Maximum, 32.0° C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV											
04...	1130	ENVIRONMENTAL	5000	697	8.2	10.2	8.0	10.7	95	290	74
DEC											
16...	1150	ENVIRONMENTAL	8400	667	8.2	4.1	8.2	12.9	98	280	74
JAN											
15...	1150	ENVIRONMENTAL	43500	423	7.9	4.1	76	11.2	97	180	50
FEB											
24...	1200	ENVIRONMENTAL	3700	546	8.0	8.0	32	11.2	97	240	61
MAR											
24...	1220	ENVIRONMENTAL	--	394	7.8	7.1	100	10.2	83	170	46
24...	1230	REPLICATE	--	--	--	--	85	--	--	170	45
APR											
06...	1240	ENVIRONMENTAL	--	455	7.7	12.9	43	8.8	84	200	52
21...	1220	ENVIRONMENTAL	120000	316	7.8	14.5	60	7.6	74	140	39
21...	1230	REPLICATE	--	--	--	--	51	--	--	140	39
MAY											
05...	1350	ENVIRONMENTAL	92000	336	7.6	16.5	46	8.7	90	150	40
20...	1200	ENVIRONMENTAL	39000	508	8.0	24.0	34	6.7	79	230	60
27...	1200	ENVIRONMENTAL	66000	370	7.6	20.5	100	6.0	66	160	43
JUN											
03...	1250	ENVIRONMENTAL	35500	501	7.8	24.0	46	5.8	70	230	60
23...	1310	ENVIRONMENTAL	170000	332	7.6	26.0	40	6.0	74	150	40
JUL											
21...	1200	ENVIRONMENTAL	30400	458	8.0	28.0	34	7.6	97	220	60
AUG											
11...	1200	ENVIRONMENTAL	56000	382	7.7	26.0	46	5.6	69	170	46
25...	1140	ENVIRONMENTAL	16500	475	8.4	27.5	15	9.7	123	210	54

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
NOV 04...	26	33	3.6	245	201	44	79	.25	3.5	419	2.3	1.6
DEC 16...	24	28	3.6	47	39	38	79	.23	5.2	417	3.4	3.1
JAN 15...	15	11	4.5	133	109	23	37	.23	7.1	279	6.1	5.4
FEB 24...	20	18	3.0	190	156	31	61	.13	5.6	316	4.9	4.3
MAR 24...	14	9.2	3.3	142	116	19	37	.19	6.4	234	5.4	4.7
24...	14	9.1	3.3	--	--	18	36	.23	6.4	238	5.4	4.8
APR 06...	17	9.8	3.2	168	138	20	39	.17	6.8	270	5.5	5.3
21...	11	6.5	3.2	126	103	11	30	.17	5.8	189	3.3	3.1
21...	11	6.4	3.2	--	--	11	30	.16	5.8	188	3.8	3.6
MAY 05...	12	7.6	3.7	120	98	13	32	.17	6.0	191	3.5	3.1
20...	19	11	2.9	208	170	20	45	.19	5.7	294	4.3	3.7
27...	13	7.7	3.4	140	115	13	33	.12	5.8	217	5.4	4.0
JUN 03...	19	11	3.5	195	160	21	41	.20	6.7	289	5.7	4.7
23...	11	5.5	4.8	108	89	11	20	.19	6.9	196	5.3	4.9
JUL 21...	18	11	3.7	203	166	20	38	.21	6.6	290	3.9	3.4
AUG 11...	13	11	3.6	141	114	16	35	.19	6.3	226	2.3	1.6
25...	18	14	3.3	195	160	20	39	.20	3.7	276	2.0	1.1
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV 04...	.78	.13	.031	1.38	.132	1.35	.27	.91	.130	.039	.10	.17
DEC 16...	--	--	<.010	2.80	<.020	--	.27	.58	.143	.079	.30	--
JAN 15...	--	--	.021	4.88	<.020	4.86	.50	1.2	.344	.081	.35	--
FEB 24...	--	--	<.010	3.98	<.020	--	.30	.97	.245	.065	.22	--
MAR 24...	1.1	.49	.019	4.21	.046	4.19	.53	1.1	.382	.103	.27	.06
24...	1.1	.47	.022	4.24	.048	4.22	.52	1.2	.373	.101	.27	.06
APR 06...	.76	.50	.035	4.72	.036	4.69	.54	.80	.251	.121	.32	.05
21...	.67	.42	.025	2.62	.031	2.60	.45	.70	.185	.075	.23	.04
21...	.60	.43	.025	3.12	.034	3.10	.46	.63	.157	.076	.22	.04
MAY 05...	.81	.44	.027	2.63	.034	2.61	.47	.85	.242	.065	.23	.04
20...	.90	.30	.032	3.38	.046	3.35	.34	.95	.235	.029	.20	.06
27...	1.7	.34	.114	3.55	.087	3.44	.43	1.8	.538	.076	.20	.11
JUN 03...	1.3	.31	.073	4.38	.044	4.30	.35	1.3	.360	.062	.23	.06
23...	.84	.45	.089	4.47	.021	4.38	.47	.86	.254	.106	.36	.03
JUL 21...	.77	.26	.010	3.07	.026	3.06	.28	.80	.212	.061	.28	.03
AUG 11...	.93	.20	.020	1.37	.040	1.35	.24	.97	.283	.083	.31	.05
25...	--	--	.010	.848	<.020	.838	.28	1.1	.159	.037	.11	--

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
04...	6.0	.10	.033	1.5	<1.0	1	55	<1.0	154	<1.0	3.1
DEC											
16...	--	--	.097	3.0	<1.0	1	51	<1.0	119	<1.0	2.7
JAN											
15...	22	.07	.114	5.2	<1.0	<1	41	<1.0	47	<1.0	3.2
FEB											
24...	--	--	.073	4.0	<1.0	<1	46	<1.0	59	<1.0	4.6
MAR											
24...	19	.06	.087	4.3	<1.0	<1	39	<1.0	32	<1.0	1.5
24...	19	.07	.087	4.2	<1.0	1	38	<1.0	33	<1.0	1.4
APR											
06...	21	.12	.105	3.9	<1.0	<1	44	<1.0	40	<1.0	1.5
21...	11	.08	.075	5.2	<1.0	<1	35	<1.0	40	<1.0	2.3
21...	14	.08	.073	4.2	<1.0	<1	35	<1.0	37	<1.0	2.3
MAY											
05...	12	.09	.076	4.8	<1.0	1	38	<1.0	40	<1.0	1.5
20...	15	.11	.066	4.7	<1.0	1	50	<1.0	63	<1.0	2.2
27...	15	.37	.066	5.5	<1.0	1	40	<1.0	39	<1.0	1.7
JUN											
03...	19	.24	.075	5.8	<1.0	<1	49	<1.0	63	<1.0	2.4
23...	19	.29	.119	5.5	<1.0	<1	39	<1.0	43	<1.0	1.3
JUL											
21...	14	.03	.092	5.0	<1.0	2	48	<1.0	66	<1.0	1.9
AUG											
11...	6.0	.07	.100	4.8	<1.0	1	40	<1.0	60	<1.0	1.6
25...	3.7	.03	.037	5.2	<1.0	2	43	<1.0	87	<1.0	1.5
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
04...	<1.0	1.3	<3.0	<1.0	6	2.1	7.7	2.8	<1	<1.0	297
DEC											
16...	<1.0	1.6	<10	<1.0	4	8.5	5.8	2.5	<1	<1.0	283
JAN											
15...	<1.0	2.1	28	<1.0	<4	1.5	2.7	2.1	<1	<1.0	145
FEB											
24...	<1.0	1.4	<10	<1.0	5	1.5	2.9	2.1	<1	<1.0	199
MAR											
24...	<1.0	1.5	13	<1.0	4	2.1	1.9	1.6	<1	<1.0	123
24...	<1.0	1.4	12	<1.0	<4	2.0	1.9	1.6	<1	<1.0	122
APR											
06...	<1.0	1.8	<10	<1.0	<4	1.8	2.5	1.6	<1	<1.0	146
21...	<1.0	1.7	16	<1.0	<4	2.2	1.7	1.5	<1	<1.0	107
21...	<1.0	1.6	14	<1.0	<4	2.0	1.7	1.5	<1	<1.0	106
MAY											
05...	<1.0	1.5	<10	<1.0	<4	2.1	1.5	1.6	<1	<1.0	106
20...	<1.0	1.6	<10	<1.0	<4	1.0	2.9	1.6	<1	<1.0	169
27...	<1.0	1.7	<10	<1.0	<4	<1.0	1.8	1.8	<1	<1.0	114
JUN											
03...	<1.0	1.9	<10	<1.0	<4	<1.0	3.2	1.7	<1	<1.0	157
23...	<1.0	1.9	<10	<1.0	<4	1.3	2.1	1.5	<1	<1.0	95
JUL											
21...	<1.0	1.8	<10	<1.0	<4	<1.0	3.8	1.6	<1	<1.0	188
AUG											
11...	<1.0	2.3	<10	<1.0	4	<1.0	3.5	2.0	<1	<1.0	132
25...	<1.0	1.9	<10	<1.0	5	1.0	4.6	1.6	<1	<1.0	185

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV 04...	<6	2.1	1.2	3.2	1.5	<.002	.0180	.529	<.0020	<.0020	<.0040
DEC 16...	<10	8.4	1.4	3.7	.80	.015	.0231	.341	<.0020	<.0020	.0072
JAN 15...	<10	2.5	<1.0	6.4	2.0	.023	.0305	.267	<.0020	<.0020	<.0040
FEB 24...	<10	2.0	1.1	3.6	1.5	.005	.0133	.210	<.0020	<.0020	<.0040
MAR 24...	<10	1.7	<1.0	5.3	3.4	.007	.0124	.207	<.0020	<.0020	<.0040
MAR 24...	<10	<1.0	<1.0	5.4	3.3	.005	.0123	.205	<.0020	<.0020	<.0040
APR 06...	<10	1.9	<1.0	4.6	1.8	.008	.0126	.314	<.0020	<.0020	E.0029
APR 21...	<10	3.4	<1.0	5.1	1.5	.012	.0928	.716	<.0020	<.0020	.0054
APR 21...	<10	1.9	<1.0	5.1	1.7	.012	.0877	.692	<.0020	<.0020	.0048
MAY 05...	<10	4.5	<1.0	4.6	1.5	.028	.949	4.11	<.0020	<.0020	<.0040
MAY 20...	<10	1.3	1.1	4.7	2.5	.021	.304	2.19	<.0020	<.0020	<.0040
MAY 27...	<10	<1.0	<1.0	4.2	4.8	--	--	--	--	--	--
JUN 03...	<10	2.8	<1.0	3.4	3.4	.248	1.84	10.2	<.0020	<.0020	E.0608
JUN 23...	<10	7.3	<1.0	4.4	1.4	.176	1.04	10.4	<.0020	<.0020	--
JUL 21...	<10	2.7	<1.0	3.7	2.9	.023	.199	1.55	<.0020	<.0020	<.0040
AUG 11...	<10	2.4	<1.0	4.4	3.1	.015	.0363	.491	<.0020	<.0020	<.0040
AUG 25...	<10	2.3	<1.0	3.6	2.9	.009	.0206	.489	<.0020	<.0020	<.0040

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV 04...	.190	E.0541	<.002	<.001	<.0030	<.004	<.005	<.004	.232	<.0060	<.004
DEC 16...	.178	E.0772	.007	<.001	<.0030	<.004	<.005	<.004	.151	<.0060	<.018
JAN 15...	.0488	E.102	<.002	<.001	<.0030	<.004	<.005	.009	.168	<.0060	<.004
FEB 24...	.0366	E.0677	<.002	<.001	<.0030	<.004	<.005	<.004	.078	<.0060	<.004
MAR 24...	.0516	E.0672	<.002	<.001	<.0030	<.004	<.005	.011	.299	<.0060	<.004
MAR 24...	.0511	E.0686	<.002	<.001	<.0030	<.004	<.005	.011	.300	<.0060	<.004
APR 06...	.0747	E.0697	E.002	<.001	<.0030	<.004	<.005	.005	.202	<.0060	<.004
APR 21...	.180	E.0415	E.004	<.001	<.0030	<.004	<.005	.026	.236	<.0060	<.004
APR 21...	.144	E.0339	E.004	<.001	<.0030	<.004	<.005	.023	.226	<.0060	<.004
MAY 05...	.963	E.107	<.002	<.001	<.0030	<.004	<.005	.098	1.77	<.0060	<.004
MAY 20...	.555	E.0983	<.002	<.001	<.0030	<.004	<.005	.031	1.01	<.0060	<.004
MAY 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	1.76	E.394	<.002	<.001	<.0030	<.004	<.005	.068	2.45	<.0060	<.004
JUN 23...	1.78	E.875	.012	<.001	<.0030	<.004	<.005	.096	5.10	<.0060	<.004
JUL 21...	.612	E.393	<.002	<.001	<.0030	<.004	<.005	.035	1.07	<.0060	<.004
AUG 11...	.104	E.109	<.002	<.001	<.0030	<.004	<.005	<.004	.297	<.0060	<.004
AUG 25...	.148	E.101	<.002	<.001	<.0030	<.004	<.005	<.004	.260	<.0060	<.004

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
NOV											
04...	<.0070	E.0140	.0361	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DEC											
16...	<.0070	E.0113	.0442	<.0020	E.0059	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JAN											
15...	<.0070	E.0144	.0224	<.0020	E.0037	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
24...	<.0070	E.0056	.0262	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
24...	<.0070	E.0067	.0432	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
24...	<.0070	E.0070	.0428	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
06...	<.0070	E.0045	.0490	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
21...	<.0070	E.0083	.287	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
21...	<.0070	E.0088	.268	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAY											
05...	<.0070	.0222	.897	<.0020	<.0030	<.0300	<.0020	<.0030	<.0170	<.0040	.0136
20...	<.0070	.0192	.160	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	<.0070	.0275	.688	<.0020	<.0030	E.0252	<.0020	<.0030	<.0170	<.0040	<.0040
23...	<.0070	.0351	.395	<.0020	<.0030	E.157	<.0020	<.0030	<.0170	<.0040	.0223
JUL											
21...	<.0070	.0191	.0946	<.0020	<.0030	E.0158	<.0020	<.0030	<.0170	<.0040	<.0040
AUG											
11...	<.0070	.0260	.0339	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
25...	<.0070	.0198	.0255	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040

DATE	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
NOV											
04...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC											
16...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JAN											
15...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB											
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR											
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR											
06...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY											
05...	<.0030	.0068	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
20...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL											
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG											
11...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV											
04...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	30	405	98
DEC											
16...	<.0040	<.0130	.0140	<.0070	<.0130	<.0010	.0054	<.0020	23	522	95
JAN											
15...	<.0040	<.0130	.0200	<.0070	<.0130	<.0010	<.0020	<.0020	245	28800	93
FEB											
24...	<.0040	<.0130	.0102	<.0070	<.0130	<.0010	<.0020	<.0020	271	2710	90
MAR											
24...	<.0040	<.0130	E.0089	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
24...	<.0040	<.0130	E.0087	<.0070	<.0130	<.0010	<.0020	<.0020	255	--	90
APR											
06...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	127	--	89
21...	<.0040	<.0130	E.0078	<.0070	<.0130	<.0010	<.0020	<.0020	107	34700	90
21...	<.0040	<.0130	E.0064	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
MAY											
05...	<.0040	<.0130	E.0075	<.0070	<.0130	<.0010	<.0020	<.0020	129	32000	89
20...	<.0040	<.0130	E.0095	<.0070	<.0130	<.0010	<.0020	<.0020	134	14100	98
27...	--	--	--	--	--	--	--	--	336	59900	96
JUN											
03...	<.0040	<.0130	E.0092	<.0070	<.0130	<.0010	<.0020	<.0020	263	25200	98
23...	<.0040	<.0130	.0119	<.0070	<.0130	<.0010	.0070	<.0020	105	48200	90
JUL											
21...	<.0040	<.0130	.0103	<.0070	<.0130	<.0010	<.0020	<.0020	159	13100	98
AUG											
11...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	178	26900	95
25...	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	73	3250	92

TRADEWATER RIVER BASIN

03383000 TRADEWATER RIVER AT OLNEY, KY

LOCATION.--Lat 37°13'26", long 87°46'53", Caldwell County, Hydrologic Unit 05140205, on left bank at downstream side of bridge on State Highway 1220 at Olney, 0.9 mi upstream from Cave Creek, 5.4 mi downstream from Flynn Creek, 9.5 mi northeast of Princeton, and at mile 72.7.

DRAINAGE AREA.--255 mi², of which about 9 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1940 to May 1984, March 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.80 ft above sea level. Prior to July 31, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 7 to Dec. 28, Feb. 20-22, Apr. 18-22, May 2-6, June 14-19, July 17-20, Aug. 8-9, and Sept. 20-30. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 19.27 ft, from floodmarks, discharge, 17,000 ft³/s, by slope-area measurement from U.S. Army Corp of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	1.9	24	43	37	106	127	1700	72	141	29	1.5
2	.54	1.8	27	40	33	92	156	1400	58	98	37	1.8
3	.53	1.8	30	34	29	81	157	1100	46	92	36	1.8
4	.56	1.8	33	30	27	75	169	900	37	68	27	2.0
5	.51	1.8	40	30	28	68	191	700	302	50	18	2.0
6	.34	2.4	46	34	32	63	176	600	708	39	13	1.9
7	.25	3.0	44	73	38	59	151	656	457	39	10	1.8
8	.24	4.0	40	308	51	58	136	889	223	73	12	1.4
9	.27	3.6	36	634	60	67	151	763	985	93	50	1.2
10	.30	3.0	38	382	75	77	245	493	2430	105	120	1.1
11	.35	2.6	50	177	98	84	199	322	2620	87	90	.82
12	.38	2.0	60	129	161	82	159	242	2880	65	56	.99
13	.57	2.7	56	114	232	70	137	200	3210	53	41	1.0
14	.88	4.0	50	106	202	63	549	170	2800	63	26	1.0
15	1.1	7.9	46	98	158	58	1210	149	3000	1160	20	.94
16	1.3	7.6	40	89	175	56	1580	131	2000	2100	19	.98
17	1.2	7.7	38	82	612	65	1920	112	1400	2000	15	.97
18	1.1	7.2	36	82	1440	94	1600	95	800	1700	11	1.2
19	.99	7.0	35	68	1530	114	1700	81	520	700	7.8	1.4
20	1.1	6.8	34	58	1200	426	1200	69	351	240	6.3	1.4
21	1.3	8.0	34	50	700	849	800	60	224	138	5.2	1.3
22	1.0	10	38	59	400	759	600	54	184	103	4.6	1.3
23	.84	20	44	68	260	440	414	51	151	77	3.9	1.2
24	1.0	24	53	83	190	263	283	49	128	59	3.6	1.2
25	1.2	22	70	96	156	194	226	105	107	49	3.2	1.1
26	1.8	20	82	95	136	163	195	202	89	38	3.0	1.1
27	1.8	20	83	80	122	142	187	184	70	32	2.7	1.1
28	1.5	24	81	67	115	126	404	173	56	26	2.3	1.0
29	1.5	24	71	57	---	113	510	139	44	26	2.1	1.0
30	1.4	23	59	49	---	100	1350	113	77	24	1.7	1.0
31	1.5	---	52	43	---	93	---	90	---	23	1.5	---
TOTAL	27.99	275.6	1470	3358	8297	5100	16882	11992	26029	9561	677.9	38.50
MEAN	.90	9.19	47.4	108	296	165	563	387	868	308	21.9	1.28
MAX	1.8	24	83	634	1530	849	1920	1700	3210	2100	120	2.0
MIN	.24	1.8	24	30	27	56	127	49	37	23	1.5	.82
CFSM	.00	.04	.19	.44	1.20	.67	2.29	1.57	3.53	1.25	.09	.01
IN.	.00	.04	.22	.51	1.25	.77	2.55	1.81	3.94	1.45	.10	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	29.6	210	446	560	738	782	597	397	155	89.8	37.1	51.1
MAX	324	2178	1963	2268	3529	2360	1851	1878	949	946	275	798
(WY)	1997	1958	1979	1950	1989	1997	1979	1983	1969	1989	1985	1950
MIN	.000	.000	.96	4.85	19.2	61.9	53.7	7.09	1.18	.003	.000	.000
(WY)	1941	1954	1964	1964	1964	1941	1986	1941	1944	1952	1952	1953

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1941 - 1998

ANNUAL TOTAL	150089.37	83708.99	
ANNUAL MEAN	411	229	335
HIGHEST ANNUAL MEAN			701
LOWEST ANNUAL MEAN			61.6
HIGHEST DAILY MEAN	8680	Mar 3	3210
LOWEST DAILY MEAN	.24	Oct 8	.24
ANNUAL SEVEN-DAY MINIMUM	.30	Oct 6	.30
INSTANTANEOUS PEAK FLOW			3240
INSTANTANEOUS PEAK STAGE			15.01
ANNUAL RUNOFF (CFSM)	1.67		.93
ANNUAL RUNOFF (INCHES)	22.70		12.66
10 PERCENT EXCEEDS	1000	700	1140
50 PERCENT EXCEEDS	82	58	62
90 PERCENT EXCEEDS	1.1	1.2	1.1

OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY

LOCATION.--Lat 37°09'30", long 88°25'34", Livingston County, Hydrologic Unit 05140203, 2400 ft below Smithland Dam, 1.1 mi upstream from Cumberland Island, 1.8 mi northwest of Smithland, and at mile 919.0

DRAINAGE AREA.--144,000 mi², approximately.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Gate opening, lockage and water-stage recorders. Datum of headwater gage is 311.94 ft above sea level. Datum of tailwater gage 0.8 mi downstream is 289.98 ft above sea level.

REMARKS.--1994: No estimated daily discharges. Records fair.

1995: No estimated daily discharges. Records fair.

1996: Estimated daily discharges: June 18. Records fair.

1997: Estimated daily discharges: Oct. 13-15, Dec. 1, 9-12, 19, 29, Feb. 25, 26, and Apr. 3-5. Records fair except for periods of estimated records, which are poor.

1998: Estimated daily discharges: Jan. 10, 19, Feb. 11, Mar. 12, 17, Apr. 1, 13, May 18, and June 13. Records fair except for periods of estimated records, which are poor. Daily discharge computed from tailwater elevation, head, gate openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109000	70400	310000	101000	541000	542000	574000	457000	99000	99300	95900	72800
2	98500	80500	320000	100000	553000	552000	576000	451000	63400	102000	71200	67000
3	94200	94400	331000	105000	552000	564000	581000	432000	73600	84300	50700	77200
4	94900	97100	321000	100000	556000	566000	581000	414000	80200	83400	44100	75600
5	90900	103000	344000	119000	564000	560000	586000	393000	59600	94000	51400	74900
6	73900	95200	352000	158000	567000	544000	596000	365000	42200	79400	63700	53300
7	63700	88900	385000	196000	561000	524000	600000	343000	66800	73700	69400	32800
8	70700	99100	402000	230000	548000	516000	596000	328000	69600	56800	74100	52200
9	56500	110000	412000	268000	522000	512000	587000	327000	64400	72100	89400	32200
10	57500	107000	423000	291000	486000	511000	574000	341000	62700	80700	71300	30300
11	51100	96800	436000	313000	464000	522000	569000	357000	62500	66000	40000	24700
12	56100	81800	443000	336000	464000	532000	587000	374000	56900	53700	48200	24500
13	60000	76100	440000	367000	483000	532000	604000	388000	50300	68900	38500	30000
14	57100	97400	429000	363000	506000	533000	609000	399000	53300	60900	19300	30300
15	57700	184000	403000	347000	532000	540000	603000	394000	53400	69400	47400	27000
16	64300	271000	316000	311000	548000	548000	599000	322000	77700	65500	62400	18000
17	65700	302000	276000	295000	556000	558000	575000	282000	85500	59900	83600	26000
18	65400	341000	234000	282000	560000	564000	572000	240000	93900	68600	86900	41000
19	65000	365000	206000	241000	559000	555000	594000	200000	99300	52000	103000	33500
20	65000	382000	187000	158000	562000	546000	623000	177000	76000	56500	118000	26600
21	128000	382000	173000	98300	558000	529000	638000	162000	78900	55200	151000	41300
22	142000	389000	169000	92400	545000	489000	645000	136000	87600	44700	166000	26200
23	142000	392000	171000	103000	531000	437000	648000	110000	65300	50500	172000	25300
24	147000	392000	157000	120000	523000	387000	646000	106000	66500	53200	143000	33800
25	144000	385000	153000	143000	535000	337000	638000	104000	66300	47500	131000	29900
26	127000	369000	154000	206000	550000	324000	630000	95300	68600	58300	114000	19300
27	124000	359000	138000	283000	548000	345000	612000	89900	81000	62600	102000	29300
28	86700	341000	124000	350000	539000	405000	579000	96200	90600	63900	80000	38700
29	106000	325000	119000	379000	---	477000	524000	108000	79700	56100	62200	41800
30	103000	314000	101000	458000	---	527000	477000	105000	76600	54200	61000	39000
31	76000	---	103000	516000	---	555000	---	94600	---	84100	74200	---
TOTAL	2742900	6790700	8532000	7429700	15013000	15633000	17823000	8191000	2151400	2077400	2584900	1174500
MEAN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
MAX	147000	392000	443000	516000	567000	566000	648000	457000	99300	102000	172000	77200
MIN	51100	70400	101000	92400	464000	324000	477000	89900	42200	44700	19300	18000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
MAX	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MIN	88480	226400	275200	239700	536200	504300	594100	264200	71710	67010	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	90143500
ANNUAL MEAN	247000
HIGHEST DAILY MEAN	648000
LOWEST DAILY MEAN	18000
ANNUAL SEVEN-DAY MINIMUM	25800
INSTANTANEOUS PEAK FLOW	648000
INSTANTANEOUS PEAK STAGE	45.29
10 PERCENT EXCEEDS	560000
50 PERCENT EXCEEDS	138000
90 PERCENT EXCEEDS	51300

OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33300	21400	117000	62300	238000	197000	85300	199000	571000	144000	42200	24600
2	39100	24300	122000	42700	216000	182000	95400	192000	547000	148000	29700	27500
3	41400	47800	113000	51200	189000	188000	76600	189000	520000	152000	35900	20200
4	44500	73000	89300	39400	168000	209000	66600	198000	497000	143000	44700	18100
5	38700	87500	84200	51300	169000	224000	59400	222000	472000	141000	53600	18400
6	45300	65200	100000	67300	168000	240000	64700	242000	449000	116000	77800	24300
7	35900	54300	109000	66500	171000	243000	67500	245000	406000	97200	137000	15200
8	21000	64000	127000	95900	173000	258000	69700	223000	279000	76600	164000	12900
9	30200	53500	158000	136000	162000	334000	78700	198000	243000	67300	184000	26800
10	26800	67800	185000	182000	120000	401000	83600	189000	217000	54700	199000	25600
11	30200	76300	207000	198000	106000	437000	89200	194000	189000	53500	208000	14300
12	30300	77900	215000	190000	102000	462000	89200	205000	197000	58000	198000	22600
13	26600	80800	241000	174000	91400	475000	116000	220000	196000	30200	181000	12800
14	19500	61600	265000	173000	94200	465000	133000	261000	200000	42400	160000	16900
15	19900	67500	269000	176000	98500	457000	152000	303000	229000	39900	136000	39100
16	24300	76800	259000	192000	169000	451000	156000	344000	251000	30900	84600	24100
17	38700	70400	227000	226000	232000	440000	157000	374000	249000	42600	66500	17500
18	32800	69500	194000	273000	272000	412000	148000	418000	211000	53000	71500	33000
19	30000	53300	168000	372000	313000	368000	145000	457000	113000	44700	62700	33000
20	28600	45200	148000	403000	336000	296000	144000	508000	89300	50900	45900	10300
21	32900	42000	136000	418000	355000	221000	209000	558000	97500	49200	53300	30000
22	32900	41400	132000	430000	376000	181000	211000	585000	99200	30400	48400	22600
23	30400	50000	117000	432000	377000	158000	240000	591000	88000	45000	53200	22100
24	27100	58400	109000	422000	354000	143000	261000	592000	76300	50800	30300	26300
25	32500	66100	84400	398000	265000	133000	264000	605000	97800	47500	22800	22500
26	24600	65900	84400	372000	232000	136000	256000	616000	111000	39100	28000	27900
27	26000	62700	76100	328000	211000	132000	264000	622000	99500	44500	45100	15100
28	28900	59800	66400	305000	207000	129000	266000	620000	111000	42000	18400	19000
29	41800	74600	59900	266000	---	117000	243000	609000	114000	75800	15300	19000
30	32900	93600	52400	243000	---	94800	208000	598000	120000	76400	38700	29800
31	26600	---	61300	243000	---	84800	---	586000	---	66000	22300	---
TOTAL	973700	1852600	4376400	7028600	5965100	8268600	4498900	11963000	7139600	2152600	2557900	671500
MEAN	31410	61750	141200	226700	213000	266700	150000	385900	238000	69440	82510	22380
MAX	45300	93600	269000	432000	377000	475000	266000	622000	571000	152000	208000	39100
MIN	19500	21400	52400	39400	91400	84800	59400	189000	76300	30200	15300	10300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1994	1995	1994	1995	1994	1995	1994	1995	1994	1995
MEAN	59950	144100	208200	233200	374600	385500	372000	325100	154900	68230	82950	30770
MAX	88480	226400	275200	239700	536200	504300	594100	385900	238000	69440	83380	39150
(WY)	1994	1994	1994	1994	1994	1994	1994	1995	1995	1995	1994	1994
MIN	31410	61750	141200	226700	213000	266700	150000	264200	71710	67010	82510	22380
(WY)	1995	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1994 - 1995

ANNUAL TOTAL	79280600	57448500		
ANNUAL MEAN	217200	157400		
HIGHEST ANNUAL MEAN			202200	
LOWEST ANNUAL MEAN			247000	1994
HIGHEST DAILY MEAN	648000	Apr 23	157400	1995
LOWEST DAILY MEAN	18000	Sep 16	648000	Apr 23 1994
ANNUAL SEVEN-DAY MINIMUM	25400	Oct 10	10300	Sep 20 1995
INSTANTANEOUS PEAK FLOW			18600	Sep 7 1995
INSTANTANEOUS PEAK STAGE			629000	May 27
10 PERCENT EXCEEDS	560000		44.08	May 27
50 PERCENT EXCEEDS	95900			45.29
90 PERCENT EXCEEDS	32700			Apr 23 1994
			535000	
			117000	
			32500	

OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25500	47300	77900	57800	575000	278000	404000	443000	472000	119000	105000	29200
2	22600	35700	97200	62100	570000	300000	375000	475000	481000	98800	149000	24400
3	30100	55800	110000	76100	564000	320000	368000	486000	484000	102000	184000	28100
4	19100	49900	101000	103000	548000	338000	375000	485000	471000	80600	200000	29800
5	32500	55400	91500	148000	532000	351000	385000	487000	458000	79600	198000	18000
6	61200	49800	77900	185000	509000	359000	389000	495000	440000	80100	168000	41300
7	85100	55700	78500	208000	465000	368000	383000	523000	419000	69300	110000	44700
8	95900	58600	70500	203000	394000	384000	361000	546000	396000	69300	96800	52400
9	94000	57900	72300	171000	217000	388000	327000	572000	384000	83300	77300	93600
10	80100	77600	64000	116000	190000	387000	275000	592000	387000	40500	85600	94500
11	61000	102000	64200	83800	197000	394000	210000	609000	402000	54600	74600	86500
12	45100	116000	61000	97800	222000	405000	179000	616000	418000	70800	80300	58900
13	42400	107000	41200	94100	263000	413000	169000	621000	431000	39100	63900	45600
14	28300	120000	35200	89500	293000	412000	149000	615000	439000	48500	84300	63800
15	20500	136000	38300	99300	308000	387000	134000	620000	439000	72400	89400	62300
16	47900	150000	52500	110000	301000	323000	124000	622000	434000	57900	102000	61000
17	60500	149000	60300	120000	267000	294000	122000	621000	421000	71000	127000	106000
18	53000	154000	82200	167000	219000	273000	146000	617000	375000	83600	122000	108000
19	35800	143000	125000	235000	176000	271000	179000	615000	293000	69600	91600	113000
20	35900	131000	185000	301000	149000	288000	231000	616000	258000	106000	62000	128000
21	26500	115000	237000	347000	147000	310000	261000	621000	239000	136000	50600	163000
22	33400	109000	267000	356000	169000	336000	294000	618000	240000	163000	38500	178000
23	36000	115000	288000	381000	197000	362000	314000	612000	249000	205000	30300	165000
24	29900	114000	296000	412000	218000	381000	344000	602000	257000	239000	61800	136000
25	38900	112000	290000	437000	242000	399000	360000	591000	257000	253000	41400	101000
26	47200	108000	224000	464000	253000	414000	376000	575000	234000	228000	52300	75500
27	30200	108000	127000	502000	258000	429000	375000	554000	202000	184000	54900	78700
28	47500	100000	96500	532000	262000	442000	368000	525000	176000	160000	41800	108000
29	41900	96400	78400	558000	263000	446000	385000	499000	172000	126000	39100	140000
30	33000	75300	73500	576000	---	436000	410000	482000	160000	93300	36000	167000
31	41600	---	70400	584000	---	422000	---	473000	---	106000	29200	---
TOTAL	1382600	2904400	3633500	7876500	8968000	11310000	8772000	17428000	10488000	3389300	2746700	2601300
MEAN	44600	96810	117200	254100	309200	364800	292400	562200	349600	109300	88600	86710
MAX	95900	154000	296000	584000	575000	446000	410000	622000	484000	253000	200000	178000
MIN	19100	35700	35200	57800	147000	271000	122000	443000	160000	39100	29200	18000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
MEAN	54830	128300	177900	240200	352300	378600	345500	404100	219800	81930	84830	49410	
MAX	88480	226400	275200	254100	536200	504300	594100	562200	349600	109300	88600	86710	
(WY)	1994	1994	1994	1996	1994	1994	1994	1996	1996	1996	1996	1996	
MIN	31410	61750	117200	226700	213000	266700	150000	264200	71710	67010	82510	22380	
(WY)	1995	1995	1996	1995	1995	1995	1995	1994	1994	1994	1995	1995	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	58166300	81500300		
ANNUAL MEAN	159400	222700		209000
HIGHEST ANNUAL MEAN				247000
LOWEST ANNUAL MEAN				157400
HIGHEST DAILY MEAN	622000	May 27	622000	May 16
LOWEST DAILY MEAN	10300	Sep 20	18000	Sep 5
ANNUAL SEVEN-DAY MINIMUM	18600	Sep 7	27800	Aug 30
INSTANTANEOUS PEAK FLOW			623000	May 13
INSTANTANEOUS PEAK STAGE			44.10	May 13
10 PERCENT EXCEEDS	385000		486000	526000
50 PERCENT EXCEEDS	111000		160000	132000
90 PERCENT EXCEEDS	29100		41900	36000

OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187000	99800	287000	287000	482000	408000	452000	139000	350000	157000	62400	33100
2	203000	102000	312000	264000	468000	503000	423000	159000	368000	139000	42300	30000
3	207000	105000	394000	256000	454000	578000	404000	213000	417000	144000	45200	29000
4	182000	98900	423000	237000	451000	641000	380000	234000	442000	149000	21600	23500
5	146000	82300	448000	220000	442000	695000	363000	256000	449000	165000	29100	26500
6	127000	82900	465000	219000	437000	743000	318000	247000	454000	158000	56100	33500
7	128000	123000	478000	211000	436000	766000	289000	218000	455000	142000	23500	22000
8	104000	133000	486000	220000	430000	787000	254000	202000	455000	91800	29800	14100
9	76500	132000	485000	225000	433000	804000	231000	194000	452000	85100	20300	29800
10	55800	153000	462000	218000	435000	819000	209000	194000	448000	62100	29700	30400
11	52900	205000	433000	202000	424000	829000	181000	202000	443000	76300	35600	22600
12	50200	245000	376000	193000	404000	831000	186000	186000	442000	73300	17100	44700
13	44400	273000	259000	178000	380000	830000	191000	183000	436000	74600	32900	36300
14	53000	293000	237000	169000	355000	829000	176000	183000	424000	45400	35700	36000
15	50000	298000	245000	145000	313000	823000	160000	160000	403000	64800	29800	23200
16	41500	286000	271000	115000	273000	812000	179000	136000	398000	58600	44600	24600
17	33200	251000	305000	122000	245000	796000	179000	135000	397000	47500	26900	32800
18	50400	215000	379000	124000	217000	778000	175000	122000	406000	38700	59200	28200
19	41900	182000	422000	122000	207000	763000	167000	118000	423000	22800	101000	21400
20	51000	157000	449000	124000	189000	744000	147000	127000	434000	56400	182000	30100
21	69900	149000	464000	120000	172000	732000	159000	126000	440000	35900	137000	24300
22	95300	147000	467000	120000	178000	723000	147000	128000	445000	20300	130000	41900
23	103000	156000	454000	185000	194000	706000	136000	150000	434000	41700	105000	36000
24	134000	151000	418000	219000	221000	687000	132000	168000	399000	56300	92800	17000
25	152000	173000	370000	233000	233000	671000	117000	163000	247000	55800	81200	32600
26	152000	207000	344000	266000	250000	649000	121000	177000	198000	39300	56100	19700
27	156000	229000	331000	308000	322000	627000	123000	171000	165000	53100	38700	15000
28	169000	251000	328000	326000	341000	595000	127000	197000	144000	44400	50600	44000
29	157000	254000	330000	409000	---	552000	135000	236000	152000	67700	53400	13900
30	140000	269000	325000	443000	---	518000	134000	269000	159000	67400	33200	27600
31	119000	---	308000	471000	---	488000	---	321000	---	86200	30200	---
TOTAL	3332000	5502900	11755000	6951000	9386000	21727000	6395000	5714000	11279000	2419500	1679000	843800
MEAN	107500	183400	379200	224200	335200	700900	213200	184300	376000	78050	54160	28130
MAX	207000	298000	486000	471000	482000	831000	452000	321000	455000	165000	137000	44700
MIN	33200	82300	237000	115000	172000	408000	117000	118000	144000	20300	17100	13900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

	1994	1995	1996	1997	1994	1995	1996	1997	1994	1995	1996	1997
MEAN	67990	142100	228200	236200	348100	459200	312400	349200	258800	80960	77170	44090
MAX	107500	226400	379200	254100	536200	700900	594100	562200	376000	109300	88600	86710
(WY)	1997	1994	1997	1996	1994	1997	1994	1996	1997	1996	1996	1996
MIN	31410	61750	117200	224200	213000	266700	150000	184300	71710	67010	54160	22380
(WY)	1995	1995	1996	1997	1995	1995	1995	1997	1994	1994	1997	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	94169700		86984200			
ANNUAL MEAN	257300		238300		216300	
HIGHEST ANNUAL MEAN					247000	
LOWEST ANNUAL MEAN					157400	
HIGHEST DAILY MEAN	622000	May 16	831000	Mar 12	831000	Mar 12 1997
LOWEST DAILY MEAN	18000	Sep 5	13900	Sep 29	10300	Sep 20 1995
ANNUAL SEVEN-DAY MINIMUM	27800	Aug 30	24300	Sep 24	18600	Sep 7 1995
INSTANTANEOUS PEAK FLOW			832000	Mar 12	832000	Mar 12 1997
INSTANTANEOUS PEAK STAGE			51.44	Mar 12	51.44	Mar 12 1997
10 PERCENT EXCEEDS	486000		467000		516000	
50 PERCENT EXCEEDS	229000		179000		149000	
90 PERCENT EXCEEDS	58600		33200		35800	

OHIO RIVER MAIN STEM

03399800 OHIO RIVER BELOW SMITHLAND DAM, SMITHLAND, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66400	37500	94800	103000	181000	327000	300000	558000	176000	357000	107000	35300
2	58900	41100	107000	98300	188000	281000	230000	551000	168000	365000	107000	14800
3	37500	41600	111000	98600	188000	239000	209000	550000	149000	369000	70800	37600
4	35600	42100	121000	81000	170000	211000	204000	553000	144000	367000	69500	36100
5	48000	42900	129000	74700	146000	199000	205000	555000	142000	369000	79300	28800
6	32600	61900	121000	77100	137000	204000	202000	554000	143000	373000	49000	33500
7	27400	64800	116000	112000	158000	202000	208000	557000	115000	342000	90500	22000
8	31600	60400	101000	178000	199000	195000	220000	559000	129000	290000	95800	37400
9	26800	59100	85700	251000	232000	183000	220000	560000	130000	227000	122000	25800
10	23500	89000	87100	340000	255000	189000	221000	558000	119000	198000	128000	29600
11	24600	102000	89200	411000	290000	223000	239000	556000	161000	194000	109000	19900
12	39000	117000	95500	440000	307000	280000	259000	554000	187000	201000	115000	39300
13	6870	116000	107000	448000	310000	321000	300000	549000	280000	180000	106000	24300
14	12800	102000	127000	458000	315000	338000	319000	539000	343000	167000	105000	19800
15	30400	92000	134000	467000	337000	343000	328000	517000	386000	164000	99800	32000
16	25000	84500	141000	469000	359000	339000	349000	488000	392000	176000	83400	19100
17	17700	91000	125000	463000	377000	300000	382000	460000	402000	173000	65300	23600
18	17100	102000	95900	450000	384000	238000	448000	400000	408000	143000	61500	24000
19	17200	100000	75100	400000	377000	203000	492000	316000	417000	115000	88900	14400
20	22700	94800	65500	319000	356000	201000	543000	236000	420000	96700	83500	23000
21	31300	74300	58500	275000	340000	235000	571000	189000	411000	143000	79100	24600
22	15800	70200	63900	230000	341000	288000	558000	171000	408000	195000	61800	41700
23	20600	63700	61600	199000	353000	353000	540000	188000	404000	206000	52000	31800
24	23000	59500	55800	177000	360000	380000	536000	193000	401000	163000	42300	24300
25	30700	76500	69400	165000	363000	403000	540000	229000	399000	125000	44200	31400
26	34200	86700	93400	165000	364000	418000	558000	242000	390000	118000	46700	13600
27	30100	90000	108000	180000	357000	421000	566000	255000	380000	116000	65700	22300
28	20000	87900	112000	192000	343000	425000	570000	256000	359000	102000	39000	23900
29	30500	84800	111000	195000	---	424000	568000	250000	333000	94700	36600	24600
30	41200	79700	108000	191000	---	409000	568000	207000	339000	86300	51200	18200
31	31900	---	114000	178000	---	379000	---	189000	---	94700	32000	---
TOTAL	910970	2315000	3084400	7885700	8087000	9151000	11453000	12539000	8635000	6310400	2386900	796700
MEAN	29390	77170	99500	254400	288800	295200	381800	404500	287800	203600	77000	26560
MAX	66400	117000	141000	469000	384000	425000	571000	560000	420000	373000	128000	41700
MIN	6870	37500	55800	74700	137000	183000	202000	171000	115000	86300	32000	13600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1998, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
MEAN	60270	129100	202500	239800	336300	426400	326300	360200	264600	105500	77130	40590			
MAX	107500	226400	379200	254400	536200	700900	594100	562200	376000	203600	88600	86710			
(WY)	1997	1994	1997	1998	1994	1997	1994	1996	1997	1998	1996	1996			
MIN	29390	61750	99500	224200	213000	266700	150000	184300	71710	67010	54160	22380			
(WY)	1998	1995	1998	1997	1995	1995	1995	1997	1994	1994	1997	1995			

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1994 - 1998	
ANNUAL TOTAL	72704670		73555070			
ANNUAL MEAN	199200		201500		213400	
HIGHEST ANNUAL MEAN					247000	
LOWEST ANNUAL MEAN					157400	
HIGHEST DAILY MEAN	831000	Mar 12	571000	Apr 21	831000	Mar 12 1997
LOWEST DAILY MEAN	6870	Oct 13	6870	Oct 13	6870	Oct 13 1997
ANNUAL SEVEN-DAY MINIMUM	18200	Oct 13	18200	Oct 13	18200	Oct 13 1997
INSTANTANEOUS PEAK FLOW			578000	Apr 21	832000	Mar 12 1997
INSTANTANEOUS PEAK STAGE			41.75	Apr 21	51.44	Mar 12 1997
10 PERCENT EXCEEDS	454000		443000		496000	
50 PERCENT EXCEEDS	126000		161000		149000	
90 PERCENT EXCEEDS	28000		30300		33200	

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

pH: October 1979 to current year.

WATER TEMPERATURE: October 1979 to current year.

DISSOLVED OXYGEN: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Four submersible pumps are located on Martins Fork Dam, at four different elevations referenced to sea level. Pump 1 is located near the bottom of the lake, at an elevation of 1,272 ft; pump 2 is at an elevation of 1,285 ft; pump 3 at an elevation of 1,298 ft; and pump 4 at an elevation of 1,308 ft, occasional operation. Each lake level is sampled once every four hours, or six times per day. A maximum and minimum value for PH ans a maximun, minimum, and mean value for temperature, specific conductance, and dissolved oxygen is determined for each level. The monitor was shut down Oct. 1- 10 and Nov. 13 to Mar. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	PUMP NUMBER 1											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	116	112	114	---	---	---	---	---	---
2	---	---	---	120	112	115	---	---	---	---	---	---
3	---	---	---	120	112	116	---	---	---	---	---	---
4	---	---	---	116	112	115	---	---	---	---	---	---
5	---	---	---	121	112	116	---	---	---	---	---	---
6	---	---	---	121	113	117	---	---	---	---	---	---
7	---	---	---	117	113	115	---	---	---	---	---	---
8	---	---	---	117	113	114	---	---	---	---	---	---
9	---	---	---	117	113	114	---	---	---	---	---	---
10	---	---	---	118	114	115	---	---	---	---	---	---
11	158	154	155	118	114	115	---	---	---	---	---	---
12	162	150	156	118	114	116	---	---	---	---	---	---
13	158	154	155	---	---	---	---	---	---	---	---	---
14	158	154	157	---	---	---	---	---	---	---	---	---
15	158	149	154	---	---	---	---	---	---	---	---	---
16	153	148	150	---	---	---	---	---	---	---	---	---
17	160	151	156	---	---	---	---	---	---	---	---	---
18	155	147	150	---	---	---	---	---	---	---	---	---
19	150	150	150	---	---	---	---	---	---	---	---	---
20	154	145	148	---	---	---	---	---	---	---	---	---
21	152	145	149	---	---	---	---	---	---	---	---	---
22	148	143	147	---	---	---	---	---	---	---	---	---
23	151	142	146	---	---	---	---	---	---	---	---	---
24	146	129	138	---	---	---	---	---	---	---	---	---
25	125	118	122	---	---	---	---	---	---	---	---	---
26	125	118	122	---	---	---	---	---	---	---	---	---
27	126	119	123	---	---	---	---	---	---	---	---	---
28	123	115	120	---	---	---	---	---	---	---	---	---
29	123	115	120	---	---	---	---	---	---	---	---	---
30	119	111	115	---	---	---	---	---	---	---	---	---
31	116	111	113	---	---	---	---	---	---	---	---	---
MONTH	162	111	140	121	112	115	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	120	112	115	---	---	---	---	---	---
2	---	---	---	120	116	117	---	---	---	---	---	---
3	---	---	---	120	112	117	---	---	---	---	---	---
4	---	---	---	120	112	117	---	---	---	---	---	---
5	---	---	---	121	116	117	---	---	---	---	---	---
6	---	---	---	121	113	117	---	---	---	---	---	---
7	---	---	---	117	113	114	---	---	---	---	---	---
8	---	---	---	117	113	115	---	---	---	---	---	---
9	---	---	---	117	113	116	---	---	---	---	---	---
10	---	---	---	118	114	115	---	---	---	---	---	---
11	146	142	143	118	114	116	---	---	---	---	---	---
12	146	142	144	118	114	117	---	---	---	---	---	---
13	146	142	144	---	---	---	---	---	---	---	---	---
14	146	142	143	---	---	---	---	---	---	---	---	---
15	142	137	140	---	---	---	---	---	---	---	---	---
16	152	132	138	---	---	---	---	---	---	---	---	---
17	140	131	136	---	---	---	---	---	---	---	---	---
18	131	130	131	---	---	---	---	---	---	---	---	---
19	130	126	127	---	---	---	---	---	---	---	---	---
20	126	125	125	---	---	---	---	---	---	---	---	---
21	125	124	124	---	---	---	---	---	---	---	---	---
22	124	120	123	---	---	---	---	---	---	---	---	---
23	120	119	120	---	---	---	---	---	---	---	---	---
24	122	118	120	---	---	---	---	---	---	---	---	---
25	122	118	120	---	---	---	---	---	---	---	---	---
26	123	118	121	---	---	---	---	---	---	---	---	---
27	126	119	123	---	---	---	---	---	---	---	---	---
28	123	115	118	---	---	---	---	---	---	---	---	---
29	123	115	121	---	---	---	---	---	---	---	---	---
30	123	119	120	---	---	---	---	---	---	---	---	---
31	116	111	114	---	---	---	---	---	---	---	---	---
MONTH	152	111	128	121	112	116	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	116	100	107	99	88	93
2	---	---	---	---	---	---	111	104	108	103	91	96
3	---	---	---	---	---	---	107	103	104	111	91	101
4	---	---	---	---	---	---	103	103	103	99	82	92
5	---	---	---	---	---	---	107	103	105	90	82	85
6	---	---	---	---	---	---	107	103	106	94	75	82
7	---	---	---	---	---	---	111	107	108	85	77	81
8	---	---	---	---	---	---	---	---	---	93	77	81
9	---	---	---	---	---	---	---	---	---	93	74	84
10	---	---	---	---	---	---	106	106	106	84	76	81
11	---	---	---	---	---	---	106	98	103	82	76	78
12	---	---	---	---	---	---	110	98	102	86	78	82
13	---	---	---	---	---	---	106	98	103	90	78	84
14	---	---	---	---	---	---	106	97	102	82	75	79
15	---	---	---	---	---	---	105	97	103	90	75	80
16	---	---	---	---	---	---	113	97	105	78	75	77
17	---	---	---	---	---	---	82	75	78	82	75	78
18	---	---	---	---	---	---	83	71	78	82	78	81
19	---	---	---	---	---	---	95	76	88	86	77	82
20	---	---	---	---	---	---	79	72	75	85	81	84
21	---	---	---	---	---	---	80	73	76	85	81	83
22	---	---	---	---	---	---	88	80	83	85	77	82
23	---	---	---	---	---	---	85	80	83	85	77	82
24	---	---	---	---	---	---	90	78	86	85	81	84
25	---	---	---	---	---	---	90	79	87	85	81	83
26	---	---	---	---	---	---	93	85	89	85	81	83
27	---	---	---	---	---	---	97	85	88	85	79	83
28	---	---	---	---	---	---	97	85	91	83	79	80
29	---	---	---	---	---	---	92	88	89	82	78	80
30	---	---	---	112	100	107	96	84	92	82	78	79
31	---	---	---	108	100	103	---	---	---	82	78	81
MONTH	---	---	---	112	100	105	116	71	95	111	74	83

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	82	78	79	90	84	87	95	87	90	118	114	116
2	81	77	78	88	83	85	91	87	90	118	114	117
3	81	73	78	87	83	84	94	86	90	113	109	110
4	81	77	79	87	83	85	94	86	90	113	109	111
5	81	77	80	87	82	85	95	90	91	114	110	112
6	80	76	77	86	82	83	95	87	91	114	110	112
7	80	76	77	86	82	83	100	88	94	114	110	113
8	80	76	77	85	81	82	96	92	93	119	110	115
9	80	75	77	89	81	85	---	---	---	119	115	117
10	79	71	75	89	81	84	97	93	95	122	115	118
11	78	74	75	84	80	82	98	94	96	119	119	119
12	78	74	77	88	80	82	98	94	97	123	119	121
13	86	74	78	84	79	82	99	95	98	127	120	122
14	78	74	75	87	79	82	104	95	101	131	126	128
15	82	74	78	87	83	86	104	100	103	130	119	124
16	90	78	82	87	82	84	105	96	102	130	122	125
17	82	78	79	86	78	83	109	97	102	126	122	125
18	86	78	82	90	82	86	109	101	104	130	126	127
19	82	78	81	89	81	83	110	106	107	130	122	127
20	86	82	83	91	81	84	110	102	107	130	126	128
21	86	82	83	92	88	91	114	102	107	134	126	130
22	86	82	85	95	91	92	110	106	107	138	126	130
23	86	82	84	95	87	90	110	106	108	134	126	129
24	86	82	85	94	87	91	106	106	106	130	130	130
25	86	82	85	94	86	90	114	110	111	---	---	---
26	86	82	85	94	90	91	114	106	110	---	---	---
27	90	82	86	93	89	90	114	106	110	---	---	---
28	90	82	87	93	89	92	118	110	111	139	135	136
29	90	82	85	93	88	90	114	110	111	140	136	139
30	90	86	87	88	88	88	114	110	112	145	137	141
31	---	---	---	95	88	91	118	110	113	---	---	---
MONTH	90	71	81	95	78	86	118	86	102	145	109	123
YEAR	152	71	99									

PUMP NUMBER 3

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	120	116	119	---	---	---	---	---	---
2	---	---	---	120	116	117	---	---	---	---	---	---
3	---	---	---	120	112	117	---	---	---	---	---	---
4	---	---	---	120	116	117	---	---	---	---	---	---
5	---	---	---	120	116	117	---	---	---	---	---	---
6	---	---	---	121	113	118	---	---	---	---	---	---
7	---	---	---	117	113	116	---	---	---	---	---	---
8	---	---	---	117	113	116	---	---	---	---	---	---
9	---	---	---	117	113	116	---	---	---	---	---	---
10	---	---	---	118	114	116	---	---	---	---	---	---
11	146	142	143	118	114	115	---	---	---	---	---	---
12	146	142	143	118	118	118	---	---	---	---	---	---
13	146	142	144	---	---	---	---	---	---	---	---	---
14	146	142	143	---	---	---	---	---	---	---	---	---
15	141	137	139	---	---	---	---	---	---	---	---	---
16	148	136	138	---	---	---	---	---	---	---	---	---
17	144	135	139	---	---	---	---	---	---	---	---	---
18	135	127	132	---	---	---	---	---	---	---	---	---
19	130	126	128	---	---	---	---	---	---	---	---	---
20	129	125	127	---	---	---	---	---	---	---	---	---
21	128	122	124	---	---	---	---	---	---	---	---	---
22	127	120	123	---	---	---	---	---	---	---	---	---
23	123	119	121	---	---	---	---	---	---	---	---	---
24	122	118	120	---	---	---	---	---	---	---	---	---
25	122	118	119	---	---	---	---	---	---	---	---	---
26	122	114	119	---	---	---	---	---	---	---	---	---
27	123	119	121	---	---	---	---	---	---	---	---	---
28	123	115	118	---	---	---	---	---	---	---	---	---
29	123	119	122	---	---	---	---	---	---	---	---	---
30	119	115	118	---	---	---	---	---	---	---	---	---
31	124	115	118	---	---	---	---	---	---	---	---	---
MONTH	148	114	129	121	112	117	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 4

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	---	---	7.5	7.4	7.3	7.2	7.2	7.2	7.1	7.0	7.0	6.9
2	---	---	7.6	7.4	7.3	7.2	7.3	7.2	7.0	6.9	6.9	6.8
3	---	---	7.5	7.4	7.3	7.1	7.3	7.2	6.9	6.9	6.9	6.8
4	---	---	7.4	7.2	7.1	7.0	7.3	7.3	7.1	6.9	6.9	6.9
5	---	---	7.4	6.8	7.1	7.0	7.5	7.3	7.0	7.0	6.9	6.9
6	---	---	7.3	7.2	7.1	7.0	7.3	7.3	7.0	7.0	7.0	6.9
7	---	---	7.4	7.1	7.0	7.0	7.3	7.2	7.0	7.0	7.0	7.0
8	---	---	7.4	7.3	7.0	7.0	7.4	7.2	7.1	7.0	7.0	6.9
9	---	---	7.4	7.3	7.0	7.0	7.5	7.3	---	---	6.9	6.9
10	---	---	7.4	7.3	7.0	6.9	7.4	7.3	7.0	7.0	6.9	6.9
11	---	---	7.3	7.0	7.1	7.0	7.4	7.3	6.9	6.7	6.9	6.7
12	---	---	7.4	7.1	7.1	7.0	7.3	7.2	6.8	6.7	7.0	6.7
13	---	---	7.4	7.2	7.1	7.0	7.4	7.3	6.9	6.6	7.0	6.8
14	---	---	7.4	7.2	7.1	7.0	7.3	7.3	6.8	6.8	7.0	6.7
15	---	---	7.5	7.2	7.1	7.0	7.4	7.3	7.0	6.8	7.0	6.9
16	---	---	7.3	7.2	7.2	7.2	7.3	7.3	7.0	6.9	7.0	6.9
17	---	---	7.3	7.2	7.3	7.1	7.3	7.3	7.0	6.9	7.0	6.9
18	---	---	7.4	7.2	7.3	7.1	7.4	7.3	7.0	7.0	7.0	6.9
19	---	---	7.3	7.2	7.2	7.2	7.3	7.3	---	---	6.9	6.7
20	---	---	7.5	7.2	7.3	7.1	7.3	7.1	---	---	6.7	6.6
21	---	---	7.4	7.2	7.2	7.1	7.1	7.1	---	---	6.9	6.6
22	---	---	7.3	7.2	7.2	7.1	7.2	7.0	---	---	6.9	6.8
23	---	---	7.2	7.2	7.2	7.1	7.2	7.1	---	---	6.8	6.7
24	---	---	7.3	7.2	7.2	7.1	7.2	7.2	---	---	6.8	6.8
25	---	---	7.3	7.2	7.1	7.1	7.2	7.2	---	---	---	---
26	---	---	7.2	7.2	7.2	7.1	7.3	7.1	7.1	7.1	---	---
27	7.0	6.9	7.3	7.2	7.2	7.2	7.3	7.2	7.1	7.0	---	---
28	7.2	6.9	7.4	7.2	7.2	7.2	7.2	7.2	7.0	7.0	---	---
29	7.4	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.0	---	---
30	7.5	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.0	7.0	---	---
31	---	---	7.2	7.2	---	---	7.2	7.1	7.0	7.0	---	---
MONTH	7.5	6.9	7.6	6.8	7.3	6.9	7.5	7.0	7.1	6.6	7.0	6.6
YEAR	7.6	6.6										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 1

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	15.9	15.7	15.8	---	---	---	---	---	---
2	---	---	---	15.9	15.7	15.8	---	---	---	---	---	---
3	---	---	---	15.7	15.7	15.7	---	---	---	---	---	---
4	---	---	---	15.5	15.1	15.3	---	---	---	---	---	---
5	---	---	---	15.1	14.7	14.9	---	---	---	---	---	---
6	---	---	---	14.7	14.3	14.5	---	---	---	---	---	---
7	---	---	---	14.5	14.3	14.3	---	---	---	---	---	---
8	---	---	---	14.3	14.1	14.1	---	---	---	---	---	---
9	---	---	---	14.1	13.9	14.0	---	---	---	---	---	---
10	---	---	---	13.9	13.9	13.9	---	---	---	---	---	---
11	16.6	16.4	16.5	13.9	13.5	13.7	---	---	---	---	---	---
12	16.8	16.4	16.6	13.7	13.5	13.6	---	---	---	---	---	---
13	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
14	16.6	16.6	16.6	---	---	---	---	---	---	---	---	---
15	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
16	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
17	16.6	16.4	16.5	---	---	---	---	---	---	---	---	---
18	16.6	16.4	16.5	---	---	---	---	---	---	---	---	---
19	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
20	16.8	16.6	16.6	---	---	---	---	---	---	---	---	---
21	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
22	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
23	16.8	16.6	16.7	---	---	---	---	---	---	---	---	---
24	17.0	16.8	16.9	---	---	---	---	---	---	---	---	---
25	17.4	17.0	17.1	---	---	---	---	---	---	---	---	---
26	17.0	16.8	17.0	---	---	---	---	---	---	---	---	---
27	17.0	16.8	16.9	---	---	---	---	---	---	---	---	---
28	17.0	16.6	16.8	---	---	---	---	---	---	---	---	---
29	16.4	16.3	16.4	---	---	---	---	---	---	---	---	---
30	16.3	15.9	16.1	---	---	---	---	---	---	---	---	---
31	16.1	15.7	15.9	---	---	---	---	---	---	---	---	---
MONTH	17.4	15.7	16.6	15.9	13.5	14.6	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	16.3	15.9	16.1	---	---	---	---	---	---			
2	---	---	---	16.3	16.1	16.1	---	---	---	---	---	---			
3	---	---	---	16.1	15.7	15.9	---	---	---	---	---	---			
4	---	---	---	15.7	15.5	15.6	---	---	---	---	---	---			
5	---	---	---	15.3	14.9	15.1	---	---	---	---	---	---			
6	---	---	---	14.9	14.7	14.8	---	---	---	---	---	---			
7	---	---	---	14.7	14.5	14.7	---	---	---	---	---	---			
8	---	---	---	14.5	14.5	14.5	---	---	---	---	---	---			
9	---	---	---	14.3	14.1	14.2	---	---	---	---	---	---			
10	---	---	---	14.1	14.1	14.1	---	---	---	---	---	---			
11	21.0	20.6	20.7	14.1	13.9	14.0	---	---	---	---	---	---			
12	21.0	20.4	20.7	13.9	13.7	13.8	---	---	---	---	---	---			
13	21.0	20.4	20.8	---	---	---	---	---	---	---	---	---			
14	21.0	20.6	20.8	---	---	---	---	---	---	---	---	---			
15	20.8	20.6	20.8	---	---	---	---	---	---	---	---	---			
16	20.6	20.2	20.4	---	---	---	---	---	---	---	---	---			
17	20.2	20.0	20.1	---	---	---	---	---	---	---	---	---			
18	19.8	19.6	19.6	---	---	---	---	---	---	---	---	---			
19	19.6	19.4	19.5	---	---	---	---	---	---	---	---	---			
20	19.4	19.2	19.3	---	---	---	---	---	---	---	---	---			
21	19.0	18.8	18.9	---	---	---	---	---	---	---	---	---			
22	18.8	18.4	18.6	---	---	---	---	---	---	---	---	---			
23	18.2	17.8	18.1	---	---	---	---	---	---	---	---	---			
24	17.8	17.6	17.7	---	---	---	---	---	---	---	---	---			
25	17.6	17.4	17.5	---	---	---	---	---	---	---	---	---			
26	17.4	17.2	17.3	---	---	---	---	---	---	---	---	---			
27	17.8	17.2	17.4	---	---	---	---	---	---	---	---	---			
28	17.4	17.0	17.1	---	---	---	---	---	---	---	---	---			
29	16.8	16.6	16.6	---	---	---	---	---	---	---	---	---			
30	16.4	16.3	16.4	---	---	---	---	---	---	---	---	---			
31	16.3	16.1	16.2	---	---	---	---	---	---	---	---	---			
MONTH	21.0	16.1	18.8	16.3	13.7	14.9	---	---	---	---	---	---			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	17.9	12.0	14.1	13.7	13.3	13.5			
2	---	---	---	---	---	---	16.6	13.2	14.9	14.1	13.5	13.7			
3	---	---	---	---	---	---	15.5	13.5	14.5	14.0	13.4	13.7			
4	---	---	---	---	---	---	14.1	12.7	13.4	14.0	13.8	13.9			
5	---	---	---	---	---	---	13.5	13.1	13.3	14.0	13.6	13.8			
6	---	---	---	---	---	---	13.3	12.9	13.0	14.2	13.4	13.8			
7	---	---	---	---	---	---	13.9	13.1	13.5	14.0	13.2	13.6			
8	---	---	---	---	---	---	---	---	---	14.0	13.4	13.6			
9	---	---	---	---	---	---	---	---	---	13.6	13.2	13.4			
10	---	---	---	---	---	---	14.2	14.0	14.1	13.8	13.2	13.6			
11	---	---	---	---	---	---	13.6	13.0	13.2	14.1	13.4	13.7			
12	---	---	---	---	---	---	13.6	12.6	13.0	14.1	13.7	13.9			
13	---	---	---	---	---	---	13.4	12.4	13.0	14.5	14.0	14.2			
14	---	---	---	---	---	---	15.1	12.5	13.2	14.6	14.2	14.4			
15	---	---	---	---	---	---	13.7	12.7	13.2	15.0	14.0	14.4			
16	---	---	---	---	---	---	14.3	12.9	13.6	14.4	14.2	14.2			
17	---	---	---	---	---	---	13.7	13.3	13.5	14.3	14.0	14.2			
18	---	---	---	---	---	---	13.3	13.0	13.2	14.7	14.1	14.3			
19	---	---	---	---	---	---	13.0	12.7	12.9	14.5	14.1	14.3			
20	---	---	---	---	---	---	12.6	12.4	12.5	14.5	14.3	14.4			
21	---	---	---	---	---	---	12.4	12.2	12.3	14.6	14.3	14.4			
22	---	---	---	---	---	---	12.5	12.0	12.3	14.6	14.4	14.5			
23	---	---	---	---	---	---	12.4	12.1	12.3	14.6	14.2	14.5			
24	---	---	---	---	---	---	12.7	11.9	12.4	14.8	14.4	14.6			
25	---	---	---	---	---	---	13.1	12.5	12.8	14.9	14.4	14.6			
26	---	---	---	---	---	---	13.1	12.7	12.9	14.9	14.5	14.7			
27	---	---	---	---	---	---	13.1	12.7	13.0	14.7	14.1	14.4			
28	---	---	---	---	---	---	13.1	12.9	13.0	14.5	14.1	14.3			
29	---	---	---	---	---	---	13.3	13.1	13.2	14.6	14.4	14.5			
30	---	---	---	14.4	11.6	13.0	13.5	13.1	13.2	14.6	14.4	14.5			
31	---	---	---	13.8	11.6	12.9	---	---	---	14.6	14.4	14.6			
MONTH	---	---	---	14.4	11.6	12.9	17.9	11.9	13.2	15.0	13.2	14.1			

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.9	14.5	14.7	17.1	16.3	16.8	19.0	18.4	18.7	21.0	20.2	20.7
2	15.3	14.7	14.9	17.0	16.6	16.8	19.0	18.4	18.7	21.0	20.6	20.7
3	14.9	14.7	14.7	17.2	16.6	16.8	19.0	18.4	18.7	21.2	20.8	21.0
4	15.2	14.8	15.0	17.0	16.4	16.8	19.2	18.2	18.8	21.0	20.8	20.9
5	15.2	14.8	15.0	17.2	16.6	17.0	18.8	18.6	18.7	21.2	20.6	20.9
6	15.2	14.8	15.0	17.6	16.6	17.2	19.4	18.4	18.9	20.8	20.6	20.7
7	15.3	15.1	15.2	17.6	16.8	17.2	19.2	18.4	18.9	21.7	20.0	20.9
8	15.3	15.1	15.1	17.6	17.0	17.3	19.4	18.8	19.1	21.4	20.2	20.8
9	15.5	15.1	15.3	17.4	16.8	17.3	---	---	---	1.4	20.6	21.0
10	15.8	15.2	15.5	17.6	17.0	17.5	19.2	18.8	19.1	21.5	20.8	21.2
11	15.4	14.9	15.2	17.8	17.2	17.5	19.4	19.0	19.2	21.4	20.8	21.1
12	15.5	14.7	15.1	18.0	17.2	17.6	19.6	18.8	19.2	21.4	21.0	21.3
13	16.6	14.9	15.4	18.2	17.6	17.7	19.4	19.0	19.2	21.5	21.0	21.3
14	15.7	14.9	15.2	18.0	17.4	17.7	20.0	18.8	19.4	21.9	20.6	21.3
15	15.8	15.0	15.4	18.0	17.6	17.8	19.4	19.2	19.3	22.1	20.8	21.4
16	15.6	15.2	15.5	18.0	17.6	17.9	19.6	19.0	19.4	21.9	20.8	21.3
17	16.4	15.4	15.7	18.4	18.0	18.1	19.8	19.4	19.6	21.9	21.0	21.4
18	16.0	15.8	15.9	18.2	17.6	18.0	20.0	19.2	19.7	21.7	21.2	21.5
19	16.4	15.8	16.1	18.6	17.6	18.2	20.0	19.4	19.7	21.9	21.2	21.6
20	16.2	15.8	16.0	18.6	17.8	18.3	20.4	19.2	19.9	21.9	21.4	21.5
21	16.4	15.6	16.1	18.4	17.8	18.1	20.4	19.6	19.9	21.9	21.2	21.5
22	16.5	15.7	16.1	18.8	17.8	18.2	20.4	19.8	20.1	22.3	21.2	21.8
23	16.8	16.3	16.5	18.8	17.8	18.3	20.8	19.8	20.2	22.1	21.0	21.7
24	16.5	16.1	16.4	19.0	18.2	18.5	20.4	20.0	20.2	21.9	21.5	21.7
25	17.0	16.1	16.5	18.4	18.0	18.3	20.8	20.0	20.5	---	---	---
26	16.6	16.5	16.6	18.8	18.0	18.4	21.2	20.0	20.5	---	---	---
27	17.0	16.3	16.6	19.0	18.2	18.5	21.0	20.2	20.5	---	---	---
28	17.1	16.6	16.8	18.6	18.2	18.5	20.8	20.2	20.6	21.9	21.4	21.7
29	17.1	16.7	16.9	18.8	18.2	18.6	20.8	20.4	20.7	22.1	20.8	21.6
30	17.3	16.2	16.9	19.0	18.2	18.6	20.8	20.6	20.7	22.3	21.7	21.8
31	---	---	---	18.8	18.4	18.6	21.0	20.6	20.7	---	---	---
MONTH	17.3	14.5	15.7	19.0	16.3	17.8	21.2	18.2	19.6	22.3	20.0	21.3
YEAR	22.3	11.6	17.0									

PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	16.4	16.3	16.4	---	---	---	---	---	---
2	---	---	---	16.4	16.1	16.3	---	---	---	---	---	---
3	---	---	---	16.1	15.9	16.0	---	---	---	---	---	---
4	---	---	---	15.9	15.5	15.6	---	---	---	---	---	---
5	---	---	---	16.1	15.3	15.6	---	---	---	---	---	---
6	---	---	---	15.1	14.7	14.9	---	---	---	---	---	---
7	---	---	---	14.9	14.7	14.8	---	---	---	---	---	---
8	---	---	---	14.7	14.5	14.6	---	---	---	---	---	---
9	---	---	---	14.5	14.3	14.4	---	---	---	---	---	---
10	---	---	---	14.5	14.1	14.3	---	---	---	---	---	---
11	22.1	21.7	21.9	14.1	14.1	14.1	---	---	---	---	---	---
12	22.5	22.1	22.2	13.9	13.7	13.8	---	---	---	---	---	---
13	23.1	22.1	22.7	---	---	---	---	---	---	---	---	---
14	22.9	21.5	22.0	---	---	---	---	---	---	---	---	---
15	21.5	21.0	21.2	---	---	---	---	---	---	---	---	---
16	21.5	20.4	20.8	---	---	---	---	---	---	---	---	---
17	20.4	20.2	20.2	---	---	---	---	---	---	---	---	---
18	19.8	19.6	19.7	---	---	---	---	---	---	---	---	---
19	20.0	19.6	19.7	---	---	---	---	---	---	---	---	---
20	19.8	19.2	19.4	---	---	---	---	---	---	---	---	---
21	19.2	19.0	19.1	---	---	---	---	---	---	---	---	---
22	19.0	18.6	18.8	---	---	---	---	---	---	---	---	---
23	19.2	18.0	18.3	---	---	---	---	---	---	---	---	---
24	18.0	17.8	17.9	---	---	---	---	---	---	---	---	---
25	18.8	17.6	18.1	---	---	---	---	---	---	---	---	---
26	18.0	17.4	17.8	---	---	---	---	---	---	---	---	---
27	18.2	17.4	17.9	---	---	---	---	---	---	---	---	---
28	17.8	17.0	17.3	---	---	---	---	---	---	---	---	---
29	18.0	16.6	17.1	---	---	---	---	---	---	---	---	---
30	16.8	16.4	16.6	---	---	---	---	---	---	---	---	---
31	17.4	16.4	16.8	---	---	---	---	---	---	---	---	---
MONTH	23.1	16.4	19.3	16.4	13.7	15.1	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	PUMP NUMBER 1								
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	7.0	6.1	6.6	---	---	---	---	---	---
2	---	---	---	6.2	5.6	6.0	---	---	---	---	---	---
3	---	---	---	7.9	5.5	7.3	---	---	---	---	---	---
4	---	---	---	7.8	7.7	7.8	---	---	---	---	---	---
5	---	---	---	7.9	7.6	7.8	---	---	---	---	---	---
6	---	---	---	7.8	7.6	7.7	---	---	---	---	---	---
7	---	---	---	7.7	7.2	7.5	---	---	---	---	---	---
8	---	---	---	7.5	6.8	7.2	---	---	---	---	---	---
9	---	---	---	7.4	7.2	7.3	---	---	---	---	---	---
10	---	---	---	7.4	7.1	7.2	---	---	---	---	---	---
11	.5	.4	.4	7.4	7.2	7.2	---	---	---	---	---	---
12	.5	.4	.5	7.1	7.1	7.1	---	---	---	---	---	---
13	.5	.4	.5	---	---	---	---	---	---	---	---	---
14	.5	.4	.5	---	---	---	---	---	---	---	---	---
15	.5	.5	.5	---	---	---	---	---	---	---	---	---
16	.6	.5	.5	---	---	---	---	---	---	---	---	---
17	.5	.5	.5	---	---	---	---	---	---	---	---	---
18	.5	.5	.5	---	---	---	---	---	---	---	---	---
19	.5	.4	.5	---	---	---	---	---	---	---	---	---
20	.5	.4	.5	---	---	---	---	---	---	---	---	---
21	.5	.4	.4	---	---	---	---	---	---	---	---	---
22	.5	.4	.5	---	---	---	---	---	---	---	---	---
23	.5	.3	.4	---	---	---	---	---	---	---	---	---
24	.7	.5	.6	---	---	---	---	---	---	---	---	---
25	5.6	2.1	3.3	---	---	---	---	---	---	---	---	---
26	4.8	1.5	3.2	---	---	---	---	---	---	---	---	---
27	5.4	1.9	3.5	---	---	---	---	---	---	---	---	---
28	7.1	3.3	5.8	---	---	---	---	---	---	---	---	---
29	7.2	6.7	6.9	---	---	---	---	---	---	---	---	---
30	7.1	6.7	7.0	---	---	---	---	---	---	---	---	---
31	7.2	6.7	7.0	---	---	---	---	---	---	---	---	---
MONTH	7.2	.3	2.1	7.9	5.5	7.2	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.3	9.7	10.0	8.7	8.5	8.6
2	---	---	---	---	---	---	9.7	9.6	9.6	9.1	8.5	8.6
3	---	---	---	---	---	---	9.9	9.1	9.6	8.7	8.1	8.5
4	---	---	---	---	---	---	9.0	8.8	8.9	8.7	8.1	8.3
5	---	---	---	---	---	---	8.8	8.7	8.7	8.5	8.0	8.2
6	---	---	---	---	---	---	8.7	8.6	8.7	8.7	8.1	8.4
7	---	---	---	---	---	---	8.7	8.5	8.6	8.6	8.2	8.3
8	---	---	---	---	---	---	8.8	8.7	8.7	8.3	8.0	8.2
9	---	---	---	---	---	---	8.7	8.6	8.7	7.9	7.6	7.7
10	---	---	---	---	---	---	8.8	8.6	8.7	7.6	7.0	7.3
11	---	---	---	---	---	---	8.6	8.6	8.6	7.3	6.8	7.0
12	---	---	---	---	---	---	8.8	8.6	8.7	8.1	6.7	7.3
13	---	---	---	---	---	---	8.8	8.7	8.8	9.0	7.6	8.1
14	---	---	---	---	---	---	8.9	8.7	8.8	8.2	7.6	7.9
15	---	---	---	---	---	---	9.0	8.8	8.8	7.8	7.5	7.6
16	---	---	---	---	---	---	9.0	8.8	8.9	7.3	6.7	7.0
17	---	---	---	---	---	---	12.3	8.9	10.2	6.7	5.9	6.3
18	---	---	---	---	---	---	11.1	9.2	10.5	6.2	5.7	5.9
19	---	---	---	---	---	---	12.1	10.7	11.5	5.7	5.3	5.5
20	---	---	---	---	---	---	11.6	11.4	11.5	5.3	5.0	5.1
21	---	---	---	---	---	---	11.4	10.8	11.1	4.9	4.4	4.6
22	---	---	---	---	---	---	11.3	10.6	11.0	4.4	4.0	4.2
23	---	---	---	---	---	---	10.8	9.8	10.4	4.2	3.3	3.9
24	---	---	---	---	---	---	10.3	9.0	9.6	3.9	3.3	3.6
25	---	---	---	---	---	---	9.6	9.0	9.3	3.5	2.7	3.1
26	---	---	---	---	---	---	9.7	9.1	9.3	3.4	2.5	3.1
27	---	---	---	---	---	---	9.3	8.9	9.1	3.2	2.2	2.8
28	---	---	---	---	---	---	9.3	8.8	9.0	2.9	2.1	2.5
29	---	---	---	---	---	---	9.3	8.9	9.1	2.5	2.4	2.4
30	---	---	---	11.1	9.9	10.6	9.1	8.5	8.8	2.4	2.0	2.2
31	---	---	---	10.5	9.9	10.2	---	---	---	2.6	1.7	2.2
MONTH	---	---	---	11.1	9.9	10.4	12.3	8.5	9.4	9.1	1.7	5.9

CUMBERLAND RIVER BASIN

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OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.7	1.3	1.8	.2	.2	.2	.0	.0	.0	.6	.4	.5
2	1.7	1.4	1.5	.2	.2	.2	.0	.0	.0	.5	.5	.5
3	2.0	1.0	1.4	.2	.2	.2	.0	.0	.0	.5	.4	.5
4	1.7	1.0	1.5	.2	.2	.2	.0	.0	.0	.6	.4	.5
5	1.3	.9	1.1	.2	.2	.2	.0	.0	.0	.5	.3	.4
6	2.4	.8	1.2	.2	.2	.2	.1	.0	.1	.3	.1	.2
7	1.4	.8	1.1	.2	.2	.2	.1	.1	.1	.2	.2	.2
8	1.1	.2	.6	.2	.2	.2	.1	.1	.1	.3	.1	.2
9	.5	.2	.3	.2	.2	.2	---	---	---	.3	.2	.2
10	.5	.2	.3	.2	.2	.2	.2	.2	.2	.3	.2	.2
11	.7	.2	.4	.2	.2	.2	.2	.2	.2	.3	.2	.2
12	.7	.3	.4	.2	.2	.2	.3	.3	.3	.4	.2	.3
13	.6	.3	.4	.2	.2	.2	.3	.3	.3	.4	.3	.4
14	.7	.3	.4	.2	.2	.2	.3	.3	.3	.3	.2	.3
15	.6	.3	.4	.2	.2	.2	.4	.4	.4	.4	.3	.3
16	.5	.3	.4	.2	.2	.2	.4	.4	.4	.3	.2	.3
17	.4	.2	.3	.2	.2	.2	.4	.4	.4	.3	.2	.2
18	.3	.2	.2	.2	.2	.2	.5	.5	.5	.3	.2	.3
19	.3	.2	.3	.2	.2	.2	---	---	---	.3	.2	.2
20	.2	.2	.2	.3	.2	.2	---	---	---	.3	.3	.3
21	.2	.2	.2	.2	.1	.1	---	---	---	.4	.3	.4
22	.3	.2	.2	.2	.1	.1	---	---	---	.4	.4	.4
23	.3	.2	.3	.2	.1	.1	---	---	---	.5	.4	.4
24	.3	.2	.2	.2	.0	.1	---	---	---	.5	.5	.5
25	.2	.2	.2	.1	.0	.0	---	---	---	---	---	---
26	.2	.2	.2	.1	.0	.0	---	---	---	---	---	---
27	.2	.2	.2	.0	.0	.0	.4	.3	.4	---	---	---
28	.2	.2	.2	.0	.0	.0	.4	.3	.4	.5	.3	.4
29	.2	.2	.2	.0	.0	.0	.5	.3	.4	.3	.2	.2
30	.2	.2	.2	.0	.0	.0	.5	.4	.4	.2	.1	.2
31	---	---	---	.0	.0	.0	.5	.4	.4	---	---	---
MONTH	2.7	.2	.5	.3	.0	.1	.5	.0	.2	.6	.1	.3
YEAR	12.3	.0	3.2									

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.7	7.1	7.4	---	---	---	---	---	---
2	---	---	---	8.1	7.1	7.6	---	---	---	---	---	---
3	---	---	---	8.4	7.9	8.1	---	---	---	---	---	---
4	---	---	---	8.5	8.1	8.3	---	---	---	---	---	---
5	---	---	---	8.6	8.3	8.4	---	---	---	---	---	---
6	---	---	---	8.3	8.2	8.3	---	---	---	---	---	---
7	---	---	---	8.3	7.8	8.2	---	---	---	---	---	---
8	---	---	---	8.0	7.7	7.9	---	---	---	---	---	---
9	---	---	---	8.2	7.8	8.0	---	---	---	---	---	---
10	---	---	---	8.2	7.8	8.0	---	---	---	---	---	---
11	3.1	1.6	2.1	8.1	7.9	8.0	---	---	---	---	---	---
12	2.7	.5	1.6	8.1	7.8	8.0	---	---	---	---	---	---
13	3.1	.6	1.9	---	---	---	---	---	---	---	---	---
14	2.4	.8	1.6	---	---	---	---	---	---	---	---	---
15	1.8	1.1	1.4	---	---	---	---	---	---	---	---	---
16	4.8	.8	3.4	---	---	---	---	---	---	---	---	---
17	5.0	4.5	4.8	---	---	---	---	---	---	---	---	---
18	5.3	4.5	4.9	---	---	---	---	---	---	---	---	---
19	5.4	4.4	5.0	---	---	---	---	---	---	---	---	---
20	5.2	4.6	4.9	---	---	---	---	---	---	---	---	---
21	5.2	4.5	4.9	---	---	---	---	---	---	---	---	---
22	5.5	4.6	4.9	---	---	---	---	---	---	---	---	---
23	5.8	5.2	5.5	---	---	---	---	---	---	---	---	---
24	6.0	5.7	5.9	---	---	---	---	---	---	---	---	---
25	6.4	5.9	6.2	---	---	---	---	---	---	---	---	---
26	6.5	5.9	6.2	---	---	---	---	---	---	---	---	---
27	6.6	5.4	5.6	---	---	---	---	---	---	---	---	---
28	7.4	5.8	6.7	---	---	---	---	---	---	---	---	---
29	7.3	7.1	7.2	---	---	---	---	---	---	---	---	---
30	7.4	7.2	7.3	---	---	---	---	---	---	---	---	---
31	7.4	7.3	7.4	---	---	---	---	---	---	---	---	---
MONTH	7.4	.5	4.7	8.6	7.1	8.0	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 3

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.1	7.0	7.6	---	---	---	---	---	---			
2	---	---	---	8.2	7.9	8.0	---	---	---	---	---	---			
3	---	---	---	8.4	7.9	8.1	---	---	---	---	---	---			
4	---	---	---	8.6	8.2	8.4	---	---	---	---	---	---			
5	---	---	---	8.8	8.3	8.5	---	---	---	---	---	---			
6	---	---	---	8.4	8.1	8.3	---	---	---	---	---	---			
7	---	---	---	8.3	8.1	8.2	---	---	---	---	---	---			
8	---	---	---	8.1	7.8	8.0	---	---	---	---	---	---			
9	---	---	---	8.1	8.0	8.0	---	---	---	---	---	---			
10	---	---	---	8.1	7.9	8.0	---	---	---	---	---	---			
11	6.5	4.9	5.9	8.1	7.9	8.0	---	---	---	---	---	---			
12	7.1	6.2	6.6	8.1	7.9	8.0	---	---	---	---	---	---			
13	6.7	5.6	6.4	---	---	---	---	---	---	---	---	---			
14	6.5	4.8	5.5	---	---	---	---	---	---	---	---	---			
15	5.6	4.7	5.2	---	---	---	---	---	---	---	---	---			
16	6.0	4.6	5.0	---	---	---	---	---	---	---	---	---			
17	5.1	4.9	5.0	---	---	---	---	---	---	---	---	---			
18	5.4	4.6	5.0	---	---	---	---	---	---	---	---	---			
19	5.6	4.8	5.2	---	---	---	---	---	---	---	---	---			
20	6.2	4.9	5.3	---	---	---	---	---	---	---	---	---			
21	5.4	4.7	5.1	---	---	---	---	---	---	---	---	---			
22	5.6	4.8	5.1	---	---	---	---	---	---	---	---	---			
23	6.1	5.4	5.6	---	---	---	---	---	---	---	---	---			
24	6.1	5.8	6.0	---	---	---	---	---	---	---	---	---			
25	7.0	6.0	6.5	---	---	---	---	---	---	---	---	---			
26	7.7	6.1	6.8	---	---	---	---	---	---	---	---	---			
27	7.8	7.2	7.5	---	---	---	---	---	---	---	---	---			
28	7.3	6.6	7.0	---	---	---	---	---	---	---	---	---			
29	7.7	7.3	7.4	---	---	---	---	---	---	---	---	---			
30	7.7	7.0	7.4	---	---	---	---	---	---	---	---	---			
31	8.1	7.4	7.8	---	---	---	---	---	---	---	---	---			
MONTH	8.1	4.6	6.1	8.8	7.0	8.1	---	---	---	---	---	---			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	9.3	8.9	9.2	8.9	8.7	8.8			
2	---	---	---	---	---	---	9.0	8.9	9.0	9.4	8.6	8.8			
3	---	---	---	---	---	---	9.4	8.6	9.0	8.7	8.5	8.6			
4	---	---	---	---	---	---	8.5	8.3	8.4	8.7	8.4	8.6			
5	---	---	---	---	---	---	8.5	8.4	8.4	8.9	8.5	8.7			
6	---	---	---	---	---	---	8.4	8.3	8.4	8.9	8.5	8.8			
7	---	---	---	---	---	---	8.8	8.3	8.5	9.0	8.7	8.9			
8	---	---	---	---	---	---	8.5	8.3	8.4	9.9	8.7	9.0			
9	---	---	---	---	---	---	8.5	8.3	8.4	9.6	8.7	9.0			
10	---	---	---	---	---	---	8.4	8.3	8.4	9.1	8.8	8.9			
11	---	---	---	---	---	---	8.4	8.3	8.3	10.1	8.8	9.2			
12	---	---	---	---	---	---	8.5	8.3	8.4	9.9	9.0	9.2			
13	---	---	---	---	---	---	8.4	8.3	8.4	9.4	9.0	9.2			
14	---	---	---	---	---	---	8.5	8.4	8.4	9.8	9.4	9.5			
15	---	---	---	---	---	---	8.6	8.4	8.5	10.0	9.4	9.6			
16	---	---	---	---	---	---	8.8	8.4	8.5	10.6	9.3	9.7			
17	---	---	---	---	---	---	13.1	8.5	10.7	10.2	9.2	9.7			
18	---	---	---	---	---	---	11.2	9.6	10.8	10.7	9.4	10.0			
19	---	---	---	---	---	---	11.6	11.1	11.4	10.6	9.1	9.8			
20	---	---	---	---	---	---	11.5	11.2	11.4	10.5	8.9	9.7			
21	---	---	---	---	---	---	11.3	10.9	11.1	10.6	9.5	9.8			
22	---	---	---	---	---	---	11.1	10.7	10.9	10.1	9.1	9.4			
23	---	---	---	---	---	---	10.7	10.3	10.6	9.7	8.7	9.4			
24	---	---	---	---	---	---	10.2	9.8	10.0	9.9	9.2	9.7			
25	---	---	---	---	---	---	9.9	9.5	9.7	10.3	9.0	9.5			
26	---	---	---	---	---	---	9.9	9.5	9.6	10.0	9.3	9.6			
27	---	---	---	---	---	---	9.5	9.3	9.4	10.1	9.2	9.8			
28	---	---	---	---	---	---	9.7	9.0	9.3	10.1	9.3	9.8			
29	---	---	---	---	---	---	9.3	8.9	9.1	10.9	9.4	10.0			
30	---	---	---	10.2	9.3	9.6	9.0	8.8	8.9	10.7	9.7	10.3			
31	---	---	---	10.0	9.1	9.4	---	---	---	10.7	8.3	10.0			
MONTH	---	---	---	10.2	9.1	9.5	13.1	8.3	9.3	10.9	8.3	9.4			

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.8	9.7	10.3	10.0	9.2	9.4	7.7	7.5	7.6	6.6	6.2	6.4
2	10.5	8.3	9.8	10.2	9.5	9.8	7.7	7.5	7.6	6.3	6.1	6.2
3	10.3	9.7	9.9	10.3	9.8	10.1	7.7	7.4	7.5	6.6	6.1	6.3
4	10.3	9.1	9.9	10.3	9.9	10.2	7.3	6.9	7.2	6.7	6.4	6.6
5	10.3	9.7	10.0	10.5	9.7	10.0	7.5	6.8	7.0	6.6	6.2	6.4
6	10.0	8.7	9.5	10.5	8.3	9.4	7.5	6.9	7.1	6.1	6.0	6.1
7	9.5	8.6	9.1	10.0	8.5	9.6	7.6	7.0	7.3	6.1	5.8	6.0
8	9.1	8.2	8.7	9.6	8.6	9.1	7.5	7.1	7.3	6.5	6.2	6.4
9	8.4	7.3	7.7	9.2	8.8	9.0	---	---	---	6.1	5.6	5.9
10	8.0	6.7	7.6	9.6	8.0	8.8	7.5	6.9	7.2	5.7	5.5	5.6
11	7.3	6.5	6.7	9.5	8.2	9.0	7.3	6.9	7.0	5.4	5.0	5.2
12	7.1	6.3	6.6	9.1	8.8	8.9	7.0	6.7	6.8	6.9	4.9	6.0
13	7.4	6.6	7.0	9.4	8.6	8.9	6.7	6.5	6.6	6.2	5.8	6.0
14	7.3	6.6	7.1	8.8	8.0	8.4	6.5	6.2	6.4	5.8	5.2	5.6
15	8.2	7.0	7.5	8.8	8.1	8.4	6.4	6.1	6.2	6.2	5.7	5.9
16	8.4	7.1	7.7	8.8	7.5	8.0	6.3	6.1	6.2	6.0	5.6	5.9
17	8.9	7.4	8.0	8.6	7.9	8.2	6.3	5.9	6.2	6.0	5.7	5.9
18	8.8	7.3	8.1	7.8	7.4	7.6	6.4	6.1	6.2	5.8	5.3	5.6
19	9.1	8.0	8.5	8.4	7.1	7.4	6.4	5.8	6.1	5.5	4.8	5.1
20	9.0	8.0	8.6	7.8	7.2	7.4	6.3	5.7	6.0	5.8	4.7	5.4
21	8.7	7.3	8.2	7.5	7.2	7.4	6.3	5.5	5.9	6.6	6.0	6.3
22	9.9	7.8	8.7	7.9	7.1	7.6	6.5	5.7	6.1	6.9	6.4	6.7
23	10.1	9.4	9.6	8.1	7.5	7.7	6.5	5.9	6.1	6.8	6.4	6.6
24	10.0	9.8	9.9	8.2	7.5	7.9	6.3	6.2	6.2	7.1	6.2	6.6
25	9.9	8.8	9.6	7.9	7.4	7.7	6.9	6.7	6.8	6.3	5.9	6.2
26	9.8	9.3	9.6	7.7	7.5	7.6	7.1	6.3	6.7	6.2	5.3	5.9
27	9.7	9.3	9.4	7.6	7.3	7.4	6.8	6.5	6.6	6.4	5.3	5.8
28	9.8	9.2	9.5	7.4	7.1	7.3	6.7	6.5	6.6	6.3	5.6	5.9
29	9.6	9.2	9.4	7.7	7.4	7.5	6.7	6.5	6.6	6.9	6.0	6.5
30	9.6	7.8	9.0	7.8	7.4	7.6	6.6	6.3	6.5	6.8	5.0	6.1
31	---	---	---	7.8	7.5	7.7	6.6	6.4	6.5	---	---	---
MONTH	10.8	6.3	8.7	10.5	7.1	8.4	7.7	5.5	6.7	7.1	4.7	6.0
YEAR	13.1	4.6	7.9									
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PUMP NUMBER 4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	10.2	9.9	10.0
2	---	---	---	---	---	---	---	---	---	10.2	9.6	9.9
3	---	---	---	---	---	---	---	---	---	9.9	9.6	9.8
4	---	---	---	---	---	---	---	---	---	10.0	9.5	9.8
5	---	---	---	---	---	---	---	---	---	9.9	8.6	9.3
6	---	---	---	---	---	---	---	---	---	9.7	9.5	9.6
7	---	---	---	---	---	---	---	---	---	9.9	9.6	9.7
8	---	---	---	---	---	---	---	---	---	9.6	9.4	9.5
9	---	---	---	---	---	---	---	---	---	10.7	9.4	9.7
10	---	---	---	---	---	---	---	---	---	10.7	9.5	9.9
11	---	---	---	---	---	---	---	---	---	10.7	9.6	10.0
12	---	---	---	---	---	---	---	---	---	10.5	9.7	10.1
13	---	---	---	---	---	---	---	---	---	10.3	9.8	10.2
14	---	---	---	---	---	---	---	---	---	10.6	9.8	10.2
15	---	---	---	---	---	---	---	---	---	10.1	9.4	9.6
16	---	---	---	---	---	---	---	---	---	10.5	8.5	9.6
17	---	---	---	---	---	---	---	---	---	10.5	8.5	9.5
18	---	---	---	---	---	---	---	---	---	9.1	8.4	8.8
19	---	---	---	---	---	---	---	---	---	9.3	8.5	8.8
20	---	---	---	---	---	---	---	---	---	9.5	8.3	8.7
21	---	---	---	---	---	---	---	---	---	8.9	8.4	8.6
22	---	---	---	---	---	---	---	---	---	8.4	8.2	8.3
23	---	---	---	---	---	---	---	---	---	8.3	8.2	8.2
24	---	---	---	---	---	---	---	---	---	8.3	8.2	8.2
25	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
26	---	---	---	---	---	---	---	---	---	8.5	8.1	8.3
27	---	---	---	---	---	---	9.4	9.3	9.3	8.4	8.3	8.4
28	---	---	---	---	---	---	9.8	9.2	9.6	8.7	7.9	8.2
29	---	---	---	---	---	---	10.4	9.5	9.9	8.1	7.8	8.0
30	---	---	---	---	---	---	10.6	9.8	10.1	8.0	7.6	7.9
31	---	---	---	---	---	---	---	---	---	7.9	7.6	7.8
MONTH	---	---	---	---	---	---	10.6	9.2	9.7	10.7	7.6	9.1

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY

LOCATION.--Lat 36°45'08", long 83°15'27", Harlan County, Hydrologic Unit 05130101, on left bank 150 ft downstream from State Highway 987 bridge, 0.3 mi downstream from Martins Fork Dam, 0.7 mi downstream from Crane Creek, 1.0 mi north of Smith, and at mile 15.3.

DRAINAGE AREA.--55.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1968-71, and annual maximums, water years 1968-70. April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,259.00 ft above sea level. July 25, 1967 to Apr. 9, 1971, crest-stage gage at site 30 ft downstream at same datum, and Apr. 10, 1971 to Sept. 30, 1977, water-stage recorder at site 0.8 mi downstream at same datum.

REMARKS.--Estimated daily discharges. Oct. 1-6, Nov. 28 to Dec. 1, Apr. 29 to May 11, July 17 to Aug. 16, Aug. 21-23, and Aug. 26 to Sept. 30. Records good except for period of estimated record, which are fair. Flow regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	15	48	169	59	113	225	17	51	10	10
2	11	11	16	33	168	59	198	225	17	36	10	10
3	11	30	39	20	168	59	112	225	17	21	10	10
4	11	55	54	20	174	59	19	360	19	21	10	10
5	11	55	22	61	203	59	19	370	55	21	10	10
6	11	54	22	109	226	60	94	410	94	21	10	11
7	10	33	22	109	223	60	182	390	94	21	10	10
8	9.6	18	22	167	221	60	219	290	107	21	10	12
9	9.6	18	21	211	219	96	219	210	120	22	10	10
10	9.6	18	59	211	218	137	219	210	128	22	10	10
11	9.7	18	109	210	217	158	222	225	141	21	10	10
12	10	36	93	206	217	193	223	327	123	21	10	10
13	10	60	67	204	192	162	165	405	86	21	11	10
14	11	52	66	153	159	105	119	384	88	22	14	10
15	11	34	44	96	158	104	131	273	120	22	13	10
16	11	34	19	72	157	103	167	127	180	21	19	10
17	11	34	19	47	158	103	411	125	177	17	66	10
18	11	33	16	47	159	107	620	124	129	14	98	10
19	11	33	11	47	159	156	1110	99	55	14	98	10
20	11	33	11	82	159	290	1510	60	27	12	71	10
21	11	33	11	119	159	347	1460	49	27	10	15	10
22	11	33	21	119	159	346	1390	27	28	10	15	10
23	12	33	31	106	159	343	1130	28	48	11	15	10
24	12	67	32	92	157	339	665	28	81	10	23	10
25	12	111	32	93	156	332	411	28	81	10	38	10
26	13	87	32	119	130	326	402	54	59	10	24	10
27	13	68	33	169	77	266	395	92	21	10	10	10
28	12	37	33	170	59	198	386	92	21	10	10	10
29	11	15	67	171	---	218	300	67	23	10	10	10
30	11	15	110	171	---	215	225	17	34	10	10	10
31	11	---	83	169	---	148	---	17	---	11	10	---
TOTAL	340.5	1169	1232	3651	4780	5267	12836	5563	2217	554	690	303
MEAN	11.0	39.0	39.7	118	171	170	428	179	73.9	17.9	22.3	10.1
MAX	13	111	110	211	226	347	1510	410	180	51	98	12
MIN	9.6	11	11	20	59	59	19	17	17	10	10	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1998, BY WATER YEAR (WY)

MEAN	55.9	111	149	175	198	190	117	136	71.9	25.5	27.4	26.7
MAX	181	226	452	357	402	342	428	322	267	75.3	117	117
(WY)	1990	1997	1992	1982	1990	1997	1998	1983	1989	1990	1996	1989
MIN	11.0	28.9	16.4	10.1	81.6	33.5	12.4	36.7	12.5	9.34	9.43	9.49
(WY)	1998	1981	1981	1981	1988	1988	1986	1987	1988	1988	1988	1984

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1980 - 1998

ANNUAL TOTAL	34760.5	38602.5	
ANNUAL MEAN	95.2	106	107
HIGHEST ANNUAL MEAN			139
LOWEST ANNUAL MEAN			58.0
HIGHEST DAILY MEAN	571	Mar 6	1510
LOWEST DAILY MEAN	9.6	Oct 8	9.6
ANNUAL SEVEN-DAY MINIMUM	9.8	Oct 7	9.8
INSTANTANEOUS PEAK FLOW			1520
INSTANTANEOUS PEAK STAGE			14.05
INSTANTANEOUS LOW FLOW			10
10 PERCENT EXCEEDS	269	224	288
50 PERCENT EXCEEDS	32	44	50
90 PERCENT EXCEEDS	11	10	11

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG.C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	134	133	134	131	124	129	115	111	114	90	86	90
2	137	133	134	130	126	129	114	110	112	98	90	91
3	137	132	137	130	123	129	118	110	113	102	90	96
4	144	136	141	123	119	119	122	114	118	94	90	93
5	140	136	138	133	119	127	118	118	118	90	86	87
6	136	131	135	133	129	130	124	113	119	98	82	88
7	135	124	130	133	129	133	113	109	112	94	90	92
8	139	120	132	133	125	131	113	105	110	98	90	94
9	138	123	129	133	122	127	113	109	111	102	98	98
10	138	130	133	122	122	122	117	112	113	102	98	99
11	141	110	129	125	118	121	112	104	108	106	94	99
12	122	110	119	118	114	117	112	100	105	102	90	95
13	126	122	122	118	118	118	112	100	106	98	90	95
14	137	122	127	118	118	118	108	100	106	102	94	96
15	137	121	128	122	118	120	116	103	109	102	94	97
16	144	125	135	125	122	122	111	103	106	106	94	99
17	132	125	128	125	122	125	107	75	92	106	98	103
18	125	117	118	125	122	123	90	78	83	110	98	104
19	117	113	115	125	122	122	98	78	92	110	102	107
20	117	113	113	125	102	117	82	75	79	114	102	107
21	113	109	110	122	114	120	82	78	79	110	102	108
22	139	113	123	125	110	119	86	82	86	122	110	112
23	143	116	127	129	102	120	86	82	86	122	110	114
24	127	116	120	125	114	117	90	82	85	118	110	116
25	127	116	120	118	110	113	90	82	86	125	118	121
26	124	116	121	122	106	112	90	86	88	---	---	---
27	135	116	127	122	106	114	90	86	87	122	114	115
28	127	116	124	122	110	114	90	86	87	118	114	116
29	---	---	---	118	110	114	90	86	89	114	102	111
30	---	---	---	115	111	114	90	86	89	106	98	103
31	---	---	---	115	111	114	---	---	---	106	102	104
MONTH	144	109	127	133	102	121	124	75	100	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	110	102	109	122	115	119	129	125	129	143	139	140
2	114	102	108	122	115	118	129	129	129	143	139	140
3	106	102	106	119	115	116	129	125	128	140	140	140
4	110	98	108	120	112	116	129	125	128	141	140	141
5	118	106	110	116	112	115	127	127	127	141	141	141
6	118	114	116	120	112	115	128	127	128	141	141	141
7	118	114	115	117	112	115	132	128	129	141	141	141
8	118	114	114	117	113	116	132	128	129	142	141	142
9	114	110	112	117	113	116	---	---	---	146	142	143
10	114	106	109	122	117	118	133	129	130	142	138	142
11	114	110	112	122	118	118	134	129	130	142	142	142
12	122	110	115	122	118	118	134	130	132	146	142	143
13	122	114	118	122	118	118	134	119	131	147	139	143
14	122	113	117	123	118	119	135	130	132	144	140	143
15	121	109	114	123	119	119	135	131	134	145	141	144
16	117	105	114	123	119	120	139	124	134	146	141	145
17	124	113	115	123	119	121	139	131	135	147	142	145
18	117	113	114	127	120	124	140	136	138	148	139	144
19	117	109	114	127	120	123	145	136	141	148	144	145
20	117	109	113	128	124	126	145	129	140	149	144	146
21	117	108	113	128	124	125	129	125	126	150	145	146
22	116	108	112	124	124	124	126	125	126	150	146	148
23	120	108	113	128	124	125	126	126	126	148	143	146
24	123	116	119	128	124	126	138	126	129	152	148	149
25	123	112	119	128	124	125	142	138	140	153	149	149
26	120	116	119	128	124	125	142	138	140	153	149	149
27	116	112	113	129	124	127	142	138	140	154	150	150
28	119	111	114	129	125	127	142	138	139	154	150	151
29	119	111	114	129	125	128	142	138	139	154	150	152
30	122	111	114	129	125	128	139	139	139	155	150	153
31	---	---	---	129	125	127	143	139	139	---	---	---
MONTH	124	98	113	129	112	121	---	---	---	155	138	145

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.6	20.8	21.9	16.5	16.0	16.2	---	---	---	5.2	4.2	4.7
2	23.2	20.6	21.4	16.8	15.1	15.8	---	---	---	5.6	4.6	4.9
3	23.5	20.4	21.5	15.5	14.9	15.2	---	---	---	6.1	4.6	5.1
4	23.7	20.5	21.8	14.9	14.2	14.6	---	---	---	5.9	4.8	5.2
5	23.8	21.0	22.1	15.0	13.8	14.3	---	---	---	6.1	5.0	5.3
6	23.9	21.0	22.0	14.0	13.7	13.8	---	---	---	5.9	5.4	5.6
7	23.9	21.0	22.0	14.3	13.5	13.8	---	---	---	6.0	5.7	5.8
8	23.9	21.2	22.1	13.7	13.0	13.4	---	---	---	---	---	---
9	23.9	21.2	22.3	13.4	13.0	13.1	---	---	---	---	---	---
10	22.7	21.5	22.0	13.4	12.6	12.9	7.3	6.5	6.8	7.2	6.6	6.8
11	24.5	21.7	22.6	12.7	12.1	12.4	6.7	6.5	6.7	7.2	6.8	6.9
12	24.1	21.7	22.6	12.1	11.9	12.1	6.5	6.3	6.4	7.2	7.0	7.2
13	24.3	21.4	22.5	12.5	11.9	12.2	6.5	6.1	6.3	7.6	6.8	7.3
14	22.3	20.2	21.5	12.3	11.7	12.1	6.1	5.7	5.9	7.4	6.8	7.0
15	22.7	19.8	20.8	11.7	11.0	11.4	6.2	5.3	5.6	7.4	6.8	7.1
16	22.3	19.2	20.4	11.1	10.4	10.8	6.2	4.9	5.5	7.4	7.2	7.3
17	20.0	19.6	19.7	11.0	10.0	10.3	6.2	4.9	5.5	7.4	7.0	7.2
18	21.7	19.2	20.2	10.8	9.6	10.1	6.4	4.9	5.4	7.6	7.0	7.2
19	21.2	19.2	20.1	10.9	9.9	10.3	6.8	4.5	5.4	7.4	7.0	7.3
20	21.2	18.8	19.6	11.1	9.7	10.2	7.0	4.9	5.7	7.3	6.7	6.9
21	19.4	18.4	18.9	12.2	9.9	10.8	6.6	5.3	5.9	7.3	6.7	7.0
22	19.8	16.8	18.4	11.6	11.2	11.4	6.8	6.0	6.3	7.3	7.1	7.2
23	19.4	16.3	17.5	11.6	10.9	11.2	6.4	6.0	6.2	7.3	7.1	7.2
24	18.0	16.6	17.3	11.1	10.1	10.6	6.7	6.0	6.4	7.1	6.7	6.9
25	20.0	17.4	18.4	10.7	9.9	10.2	6.7	6.5	6.7	6.7	6.5	6.6
26	18.5	17.7	18.1	10.7	10.1	10.4	7.1	6.5	6.7	7.1	6.3	6.7
27	17.9	16.0	16.8	10.9	9.9	10.3	6.7	6.1	6.4	6.9	6.3	6.7
28	17.8	15.1	16.3	11.4	9.9	10.7	6.5	5.7	6.1	6.5	5.9	6.3
29	18.4	15.3	16.3	---	---	---	6.3	5.7	5.9	6.6	5.9	6.3
30	18.1	15.3	16.1	---	---	---	5.7	5.4	5.5	6.6	5.9	6.4
31	17.9	15.0	16.1	---	---	---	5.4	4.8	5.1	6.6	6.0	6.4
MONTH	24.5	15.0	20.0	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.8	5.9	6.5	9.1	8.1	8.5	15.2	11.1	12.4	13.2	12.6	12.9
2	6.8	6.4	6.6	8.9	7.9	8.5	14.3	11.7	12.8	13.2	12.8	13.0
3	6.4	6.0	6.4	9.4	8.1	8.5	13.3	12.0	12.8	13.3	12.9	13.1
4	6.0	5.7	5.7	9.8	9.4	9.5	12.0	11.0	11.3	13.7	13.1	13.4
5	5.7	5.3	5.6	9.4	8.2	9.0	13.9	10.6	11.9	13.9	13.3	13.5
6	5.7	5.3	5.4	9.0	8.2	8.5	12.3	10.4	11.5	15.6	13.3	14.2
7	6.1	5.5	5.8	8.8	8.4	8.6	13.1	11.8	12.3	15.6	14.8	15.0
8	6.1	5.8	5.9	9.4	8.6	8.9	13.2	12.3	12.9	16.0	14.8	15.3
9	6.5	6.0	6.2	10.0	8.6	9.4	13.8	12.4	13.2	15.4	15.0	15.2
10	6.7	6.1	6.5	9.4	8.6	9.1	12.8	12.2	12.6	15.3	14.7	15.1
11	7.3	6.0	6.5	8.6	7.6	8.1	12.6	11.9	12.3	15.5	14.5	14.8
12	7.1	6.1	6.6	7.6	7.0	7.4	12.6	11.7	12.2	15.7	14.5	15.0
13	6.2	6.1	6.1	7.2	6.5	6.8	13.2	11.7	12.3	16.4	15.1	15.4
14	6.6	5.9	6.2	7.6	6.7	7.1	14.1	12.2	12.9	16.7	15.4	15.9
15	6.4	5.9	6.2	7.8	6.8	7.2	13.5	12.3	12.9	16.9	16.0	16.4
16	6.5	5.9	6.3	7.4	6.8	7.1	15.1	12.2	13.2	17.3	16.0	16.5
17	7.1	6.5	6.8	7.6	6.8	7.2	13.0	12.6	12.9	18.0	16.4	16.9
18	7.1	6.9	7.1	8.3	7.3	7.8	12.8	12.4	12.6	18.0	16.5	17.2
19	7.2	6.9	7.1	8.5	7.7	8.2	12.6	12.0	12.3	19.6	17.0	17.7
20	7.4	7.0	7.2	10.9	7.9	8.8	12.3	12.0	12.1	18.8	17.0	18.0
21	7.2	7.0	7.2	9.1	8.3	8.6	12.3	11.8	12.0	19.3	17.0	18.3
22	7.4	7.0	7.1	9.1	8.3	8.8	12.1	11.9	12.0	19.1	17.5	18.1
23	7.3	7.1	7.2	9.7	8.3	8.8	12.2	11.9	12.0	19.9	17.7	18.4
24	7.5	6.7	7.2	8.9	8.3	8.6	12.4	11.7	12.1	21.3	17.9	19.2
25	7.7	7.1	7.3	8.9	8.5	8.7	12.6	11.7	12.2	20.6	18.5	19.3
26	8.4	7.0	7.7	10.9	8.3	9.6	13.3	11.9	12.5	---	---	---
27	9.4	7.6	8.4	11.7	9.1	10.3	12.5	12.3	12.5	20.6	19.8	20.2
28	9.4	8.2	8.9	13.8	9.1	11.6	12.9	11.9	12.4	21.0	19.8	20.3
29	---	---	---	13.4	10.3	11.4	12.8	12.4	12.7	22.3	18.0	20.5
30	---	---	---	14.2	10.3	11.6	12.8	12.4	12.6	21.5	17.8	19.1
31	---	---	---	12.6	11.3	11.9	---	---	---	21.9	17.8	19.5
MONTH	9.4	5.3	6.7	14.2	6.5	8.8	15.2	10.4	12.4	---	---	---

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.4	18.2	19.3	24.3	22.9	23.4	26.4	22.8	24.2	27.9	24.6	25.9
2	22.1	17.8	19.4	24.9	22.1	23.5	27.6	22.7	24.5	27.8	24.4	25.6
3	21.5	18.4	19.5	25.3	21.7	22.9	27.6	22.7	24.6	26.7	24.1	25.0
4	19.6	18.4	19.0	24.7	21.9	22.8	27.6	22.5	24.6	27.4	23.7	25.2
5	22.5	18.4	20.0	24.7	22.1	23.1	26.8	22.9	24.5	27.5	24.1	25.4
6	20.8	19.8	20.3	25.6	22.2	23.3	27.2	23.1	24.7	27.5	24.4	25.3
7	20.8	19.8	20.1	24.6	22.2	23.1	27.4	22.9	24.8	27.3	24.2	25.4
8	20.4	19.8	19.9	24.2	22.4	23.0	27.6	23.3	25.1	26.6	23.0	24.9
9	20.0	19.6	19.7	24.6	22.4	23.2	---	---	---	25.8	22.4	23.7
10	20.4	19.4	19.8	25.4	22.6	23.6	26.8	23.7	24.9	26.0	22.0	23.5
11	20.8	19.4	19.9	24.6	22.6	23.4	26.8	23.7	24.9	26.1	22.2	23.7
12	21.4	19.8	20.3	26.0	22.2	23.7	27.6	23.7	25.0	26.5	22.5	23.9
13	21.5	20.0	20.6	25.6	22.8	23.8	27.4	23.5	25.0	26.6	22.7	24.2
14	21.2	20.2	20.5	24.0	22.8	23.3	25.1	23.7	24.1	26.7	22.9	24.4
15	22.1	20.2	20.9	25.2	22.8	23.6	25.5	23.7	24.4	26.8	22.7	24.4
16	23.1	20.4	21.1	24.7	22.7	23.4	24.9	23.7	24.0	26.6	23.4	24.6
17	21.7	20.8	21.2	25.9	22.7	24.0	26.3	23.5	24.7	26.7	23.3	24.6
18	22.5	21.2	21.7	26.6	23.1	24.4	26.3	25.3	25.7	26.5	23.5	24.7
19	22.7	20.6	21.7	26.8	23.5	24.5	26.3	25.5	25.8	26.8	23.6	24.7
20	22.7	20.2	21.2	26.4	23.1	24.3	27.6	22.9	25.6	27.1	23.8	25.0
21	21.7	20.4	20.8	27.9	23.0	24.7	25.5	21.9	23.4	26.1	24.1	24.7
22	23.1	20.2	21.4	26.5	23.2	24.4	25.6	22.2	23.4	26.4	24.4	25.0
23	23.5	20.2	21.7	25.3	23.3	24.3	25.8	22.4	23.6	26.7	23.1	24.6
24	23.7	22.5	23.0	26.5	23.5	24.6	26.0	22.4	24.2	25.7	22.7	23.8
25	24.3	22.7	23.3	26.6	23.3	24.6	27.3	25.6	26.2	25.5	22.5	23.6
26	25.5	22.9	23.7	26.3	23.1	24.5	28.0	25.1	26.4	26.3	22.9	24.1
27	24.9	21.7	22.8	25.5	23.3	24.3	28.4	24.5	26.0	25.9	22.5	23.9
28	24.7	21.5	22.7	26.9	23.6	24.9	28.4	24.7	26.0	26.1	23.3	24.1
29	23.3	21.5	22.3	27.3	23.6	24.9	28.0	24.5	25.8	25.9	23.1	24.0
30	24.1	21.0	22.6	25.4	23.6	24.3	28.2	24.9	25.9	26.1	23.3	24.3
31	---	---	---	25.6	23.2	24.4	28.1	24.6	25.9	---	---	---
MONTH	25.5	17.8	21.0	27.9	21.7	23.9	---	---	---	27.9	22.0	24.5

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.7	8.3	8.4	9.7	8.9	9.3	---	---	---	12.7	12.5	12.6
2	8.7	8.3	8.4	10.2	9.0	9.7	---	---	---	12.7	12.1	12.5
3	8.7	8.0	8.3	10.0	9.3	9.6	---	---	---	12.6	12.1	12.3
4	8.6	7.9	8.2	9.8	9.4	9.6	---	---	---	12.5	12.1	12.3
5	8.5	7.8	8.0	10.1	9.6	9.8	---	---	---	12.5	12.2	12.2
6	8.8	6.8	7.6	10.1	9.7	9.8	---	---	---	12.2	12.2	12.2
7	7.0	6.6	6.8	9.9	9.6	9.7	---	---	---	12.2	11.9	12.1
8	7.1	6.7	6.9	9.9	9.6	9.7	---	---	---	12.0	11.2	11.6
9	7.3	6.8	7.0	10.0	9.7	9.8	12.1	11.4	11.8	11.5	11.3	11.4
10	7.4	6.8	7.1	10.3	9.8	10.0	11.5	11.0	11.3	11.5	11.5	11.5
11	7.5	7.0	7.2	10.2	9.9	10.0	11.5	11.3	11.4	11.5	11.5	11.5
12	7.5	7.0	7.3	10.3	9.9	10.1	11.6	11.5	11.5	11.5	11.5	11.5
13	7.8	7.1	7.4	10.4	9.7	10.1	11.7	11.5	11.5	11.6	11.5	11.5
14	7.5	6.9	7.2	10.4	9.7	9.9	11.8	11.6	11.7	11.7	11.5	11.6
15	7.4	6.9	7.1	10.5	9.8	10.0	12.0	11.4	11.8	11.5	11.1	11.3
16	7.4	7.0	7.2	10.5	9.9	10.1	11.9	11.4	11.6	11.1	10.7	11.0
17	7.4	7.0	7.2	10.7	10.1	10.4	11.9	11.5	11.6	11.1	11.0	11.0
18	7.8	7.1	7.4	10.5	10.0	10.2	12.0	11.3	11.7	11.2	11.1	11.1
19	7.7	7.1	7.4	10.8	9.9	10.3	12.1	11.2	11.5	11.1	11.0	11.0
20	8.1	7.4	7.7	10.5	9.9	10.2	11.9	11.3	11.5	11.3	11.1	11.2
21	8.2	7.7	7.9	10.1	9.0	9.6	12.0	11.3	11.6	11.2	11.1	11.2
22	8.4	7.9	8.2	9.8	9.2	9.4	11.9	11.3	11.6	11.2	11.1	11.1
23	8.7	8.2	8.4	10.1	9.2	9.6	12.0	11.7	11.9	11.2	11.1	11.1
24	8.7	8.3	8.5	9.7	9.1	9.4	12.0	11.6	11.8	11.2	11.1	11.1
25	9.3	8.2	8.6	9.9	9.2	9.5	12.0	11.5	11.8	11.4	11.2	11.3
26	9.5	8.2	8.6	9.9	9.2	9.6	12.1	11.7	11.9	11.4	11.2	11.3
27	9.4	8.3	8.8	10.5	9.6	10.0	12.1	11.6	11.9	11.2	11.2	11.2
28	10.4	8.6	9.0	9.9	9.5	9.6	12.2	11.8	12.0	11.3	11.2	11.3
29	9.8	8.6	9.5	---	---	---	12.2	11.8	12.1	11.5	11.2	11.4
30	9.6	9.0	9.3	---	---	---	12.3	12.2	12.3	11.7	11.3	11.4
31	10.2	8.9	9.4	---	---	---	12.5	12.3	12.4	11.4	11.3	11.3
MONTH	10.4	6.6	7.9	---	---	---	---	---	---	12.7	10.7	11.5

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.4	11.3	11.4	11.0	10.7	10.9	10.4	9.6	10.1	10.1	9.9	10.0
2	11.5	11.3	11.4	11.0	10.7	10.9	10.3	9.8	10.1	10.0	9.8	10.0
3	11.5	11.3	11.4	11.0	10.7	10.8	10.0	9.4	9.7	9.9	9.7	9.8
4	11.4	11.2	11.4	10.8	10.7	10.8	9.8	9.3	9.6	9.8	9.6	9.7
5	11.6	11.3	11.4	11.0	10.7	10.9	10.0	9.7	9.8	9.7	9.7	9.7
6	11.7	11.5	11.6	11.0	10.8	10.9	10.1	9.7	9.9	9.9	9.7	9.8
7	11.7	11.5	11.6	11.0	10.8	10.9	10.1	9.8	10.0	9.8	9.7	9.8
8	11.7	11.6	11.7	10.9	10.6	10.8	10.2	10.0	10.1	9.7	9.5	9.6
9	11.8	11.7	11.7	10.7	10.5	10.6	10.2	9.8	10.0	9.7	9.7	9.7
10	11.7	11.6	11.6	10.9	10.7	10.8	10.1	9.9	10.0	9.7	9.6	9.7
11	11.7	11.4	11.6	11.0	10.8	10.9	10.3	10.0	10.1	10.1	9.7	9.9
12	11.6	11.4	11.5	11.2	11.0	11.1	10.4	10.1	10.3	10.0	9.7	9.9
13	11.4	11.3	11.4	11.4	11.2	11.3	10.4	10.2	10.3	9.9	9.6	9.8
14	11.4	11.2	11.3	11.5	11.3	11.4	10.4	10.1	10.3	9.7	9.5	9.7
15	11.6	11.1	11.4	11.6	11.3	11.5	10.2	10.1	10.2	9.6	9.4	9.6
16	11.3	11.1	11.2	11.6	11.5	11.5	10.2	9.6	10.0	9.6	9.3	9.5
17	11.2	11.1	11.2	11.6	11.4	11.5	10.2	9.9	10.0	9.6	9.2	9.4
18	11.2	11.2	11.2	11.4	11.2	11.3	10.2	10.0	10.1	9.4	9.2	9.3
19	11.2	11.2	11.2	11.3	11.1	11.2	10.7	9.8	10.4	9.4	9.0	9.2
20	11.3	11.1	11.2	11.2	10.5	11.0	10.7	10.7	10.7	9.4	9.0	9.2
21	11.3	11.1	11.2	11.1	10.8	11.0	10.8	10.7	10.7	9.3	8.7	9.0
22	11.2	11.0	11.1	11.0	10.8	10.9	10.8	10.7	10.7	9.0	8.7	8.8
23	11.2	10.9	11.0	11.0	10.8	10.9	10.7	10.4	10.6	8.9	8.7	8.8
24	11.2	11.0	11.1	11.0	11.0	11.0	10.4	10.1	10.3	8.9	8.5	8.7
25	11.2	11.1	11.1	11.0	11.0	11.0	10.3	10.2	10.2	8.9	8.5	8.7
26	11.2	11.0	11.1	11.1	10.8	10.9	10.3	10.0	10.1	---	---	---
27	11.1	10.7	10.9	10.9	10.5	10.7	10.1	10.0	10.1	8.8	8.5	8.6
28	11.0	10.7	10.8	10.8	10.1	10.4	10.1	10.0	10.1	8.6	8.3	8.5
29	---	---	---	10.6	10.1	10.5	10.2	10.0	10.1	8.6	8.0	8.4
30	---	---	---	10.5	10.1	10.4	10.1	10.0	10.1	8.3	7.9	8.1
31	---	---	---	10.5	10.2	10.3	---	---	---	8.2	7.7	7.9
MONTH	11.8	10.7	11.3	11.6	10.1	10.9	10.8	9.3	10.2	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	7.7	8.0	8.3	8.0	8.1	7.6	7.0	7.3	6.9	6.7	6.8
2	8.3	7.7	7.9	8.2	7.6	8.0	7.4	7.0	7.2	7.0	6.4	6.7
3	8.3	7.7	8.0	8.2	7.6	7.9	7.5	7.0	7.2	6.9	6.4	6.6
4	8.1	7.6	7.8	8.1	7.6	7.8	7.4	6.9	7.1	7.1	6.5	6.8
5	8.4	7.6	8.0	8.0	7.6	7.8	7.5	6.9	7.2	7.2	6.7	6.9
6	8.5	8.1	8.3	8.0	7.5	7.7	7.4	6.9	7.1	7.2	6.8	6.9
7	8.5	8.1	8.4	8.0	7.6	7.7	7.4	6.9	7.1	7.2	6.7	6.9
8	8.4	8.2	8.3	7.8	7.5	7.6	7.3	6.9	7.1	7.3	6.8	7.1
9	8.2	8.2	8.2	7.9	7.4	7.7	---	---	---	7.5	7.1	7.3
10	8.3	8.2	8.3	7.8	7.4	7.6	7.5	6.9	7.2	7.9	7.2	7.5
11	8.3	8.1	8.2	7.8	7.4	7.5	7.5	7.0	7.2	7.6	7.1	7.3
12	8.3	8.0	8.2	7.9	7.4	7.5	7.5	7.1	7.3	7.5	7.0	7.2
13	8.3	8.0	8.2	7.8	7.3	7.5	7.6	7.1	7.4	7.3	6.7	7.0
14	8.3	8.0	8.2	7.8	7.3	7.6	7.6	7.1	7.3	7.5	6.6	7.0
15	8.4	8.1	8.2	7.9	7.4	7.6	7.7	7.2	7.4	7.1	6.5	6.8
16	8.3	8.0	8.2	7.8	7.5	7.6	7.8	7.2	7.5	6.9	6.1	6.6
17	8.4	8.3	8.3	7.8	7.2	7.5	8.2	7.3	7.8	6.9	6.4	6.7
18	8.4	8.3	8.3	7.5	7.2	7.3	8.0	7.7	7.8	7.2	6.6	6.9
19	8.3	7.9	8.1	7.6	7.3	7.4	7.8	7.5	7.7	7.2	6.7	7.0
20	8.2	7.9	8.0	7.6	7.1	7.3	7.7	7.2	7.5	7.2	6.7	7.0
21	8.3	7.9	8.0	7.5	6.9	7.2	7.8	7.3	7.4	7.4	7.0	7.2
22	8.4	7.9	8.1	7.6	6.9	7.2	7.6	7.2	7.4	7.2	7.0	7.1
23	8.3	7.9	8.1	7.5	6.9	7.2	7.4	7.2	7.3	7.2	6.9	7.1
24	8.3	8.1	8.2	7.5	6.9	7.2	7.4	7.2	7.3	7.2	6.0	6.6
25	8.3	8.0	8.2	7.5	6.9	7.2	7.2	6.9	7.1	6.5	5.9	6.2
26	8.3	7.7	8.0	7.6	7.0	7.3	7.0	6.4	6.7	6.4	5.9	6.1
27	8.0	7.5	7.8	7.6	7.0	7.2	6.7	6.4	6.6	6.3	5.9	6.1
28	8.1	7.6	7.9	7.5	6.9	7.2	6.8	6.5	6.7	6.5	6.0	6.2
29	8.1	7.6	7.9	7.3	6.9	7.1	6.8	6.6	6.7	6.7	6.1	6.4
30	8.1	7.7	7.9	7.5	7.0	7.2	6.9	6.6	6.7	6.8	6.1	6.4
31	---	---	---	7.5	6.9	7.2	6.9	6.7	6.8	---	---	---
MONTH	8.5	7.5	8.1	8.3	6.9	7.5	---	---	---	7.9	5.9	6.8

CUMBERLAND RIVER BASIN

03401000 CUMBERLAND RIVER NEAR HARLAN, KY

LOCATION.--Lat 36°50'48", long 83°21'21", Harlan County, Hydrologic Unit 05130101, on left bank 10 ft downstream from bridge on State Highway 840 at Loyall, 1.6 mi upstream from Fourmile Branch, 1.8 mi west of Harlan, 2.3 mi downstream from confluence of Poor and Clover Forks, and at mile 691.9.

DRAINAGE AREA.--374 mi².

PERIOD OF RECORD.--March 1940 to current year.

REVISED RECORDS.--WSP 953: 1940(M). WSP 1173: 1947(M).

GAGE.--Water-stage recorder. Datum of gage is 1,140.10 ft above sea level. Prior to Nov. 4, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 15 to Feb. 11 and May 12 to Sept. 30. Records fair except for periods of estimated record, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	20	139	180	980	633	878	1020	580	310	180	77
2	24	33	252	165	800	599	1030	1130	400	280	185	74
3	20	55	164	157	860	583	920	1110	340	260	140	70
4	18	105	186	434	3500	559	2730	1500	480	250	105	69
5	17	112	147	540	2700	543	2530	1540	1400	300	90	67
6	17	105	122	575	1800	539	1280	1310	1300	250	80	65
7	18	100	101	702	1500	539	1080	1210	1000	190	77	63
8	17	66	88	3180	1600	602	1010	1120	700	185	72	66
9	16	79	115	1550	1800	1340	1160	1080	730	195	80	71
10	16	77	436	980	2200	1340	1550	2330	1400	230	90	75
11	20	71	672	784	2500	1030	2210	3350	1300	200	95	65
12	20	63	520	687	2900	910	1460	2100	1100	170	97	58
13	26	87	341	632	1500	815	1160	1700	1400	150	88	56
14	25	138	259	574	1120	703	1010	1400	1390	160	175	55
15	27	132	212	520	927	652	888	1050	1380	150	400	55
16	22	104	139	525	857	668	4030	780	1100	140	550	53
17	22	86	107	525	966	715	13800	620	850	135	1500	51
18	21	75	96	528	1490	1940	4680	580	670	130	850	49
19	22	67	83	600	1320	4820	16300	500	575	120	500	48
20	23	64	68	640	1130	3040	10100	400	500	105	360	49
21	23	128	64	630	999	3170	4830	370	430	135	280	51
22	22	365	131	600	902	1700	3890	350	460	130	200	51
23	21	245	155	800	908	1310	2980	550	470	120	175	52
24	20	149	155	1050	922	1160	1810	580	470	200	145	46
25	32	178	259	1400	901	1060	1280	480	490	200	130	51
26	81	181	235	950	838	985	1140	950	340	150	125	49
27	143	121	233	870	743	903	1090	700	300	125	120	48
28	75	108	227	1400	664	767	1040	580	260	105	100	46
29	41	54	198	1450	---	753	917	480	220	93	88	45
30	28	43	288	1300	---	714	811	410	300	88	80	44
31	23	---	294	1250	---	675	---	350	---	160	78	---
TOTAL	930	3211	6486	26178	39327	35767	89594	31630	22335	5416	7235	1719
MEAN	30.0	107	209	844	1405	1154	2986	1020	745	175	233	57.3
MAX	143	365	672	3180	3500	4820	16300	3350	1400	310	1500	77
MIN	16	20	64	157	664	539	811	350	220	88	72	44
CFSM	.08	.29	.56	2.26	3.76	3.08	7.99	2.73	1.99	.47	.62	.15
IN.	.09	.32	.65	2.60	3.91	3.56	8.91	3.15	2.22	.54	.72	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	179	467	912	1188	1341	1470	1060	754	401	308	220	127
MAX	1129	2004	2704	2767	3259	4148	2986	2003	1789	1414	1202	864
(WY)	1990	1978	1992	1974	1994	1963	1998	1984	1989	1941	1942	1989
MIN	9.00	25.8	43.6	63.5	105	334	211	119	76.0	21.4	40.0	14.3
(WY)	1954	1954	1966	1981	1941	1988	1986	1941	1948	1944	1951	1953

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1940 - 1998
ANNUAL TOTAL	228381	269828	
ANNUAL MEAN	626	739	699
HIGHEST ANNUAL MEAN			1130
LOWEST ANNUAL MEAN			293
HIGHEST DAILY MEAN	10000	Mar 3	16300
LOWEST DAILY MEAN	16	Oct 9	16
ANNUAL SEVEN-DAY MINIMUM	17	Oct 4	17
INSTANTANEOUS PEAK FLOW			21400
INSTANTANEOUS PEAK STAGE			17.64
INSTANTANEOUS LOW FLOW			16
ANNUAL RUNOFF (CFSM)	1.67		1.98
ANNUAL RUNOFF (INCHES)	22.72		26.84
10 PERCENT EXCEEDS	1500		1500
50 PERCENT EXCEEDS	310		341
90 PERCENT EXCEEDS	38		48

CUMBERLAND RIVER BASIN

03402000 YELLOW CREEK NEAR MIDDLESBORO, KY

LOCATION.--Lat 36°40'05", long 83°41'19", Bell County, Hydrologic Unit 05130101, on left bank 35 ft downstream from bridge on U.S. Highway 25E, 1.2 mi downstream from Browne Branch, 4.6 mi north of Middlesboro, and at mile 11.4.

DRAINAGE AREA.--60.6 mi². Area at site used prior to Oct. 1970, 58.2 mi² and at site used Oct. 1, 1970 to Sept. 30, 1973, 62.8 mi².

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 953: 1941(M). WSP 973: 1942(M). WSP 1436: Drainage area. WRD KY 1969: 1965(M), 1967(M).

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,097.99 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--Estimated daily discharges: Aug. 9. Records good. Occasional regulation from Fern Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.1	23	21	62	68	312	792	354	52	28	6.7
2	8.8	9.1	15	21	53	64	214	432	100	37	21	6.7
3	8.3	11	13	25	255	63	179	340	70	31	19	5.9
4	8.5	17	16	60	633	59	265	368	90	30	17	6.2
5	8.7	12	15	58	274	56	212	387	195	46	16	6.2
6	9.5	10	13	49	189	54	174	270	145	28	15	6.8
7	10	17	12	181	176	53	142	315	99	26	14	6.7
8	9.0	16	11	302	202	100	150	300	75	25	13	9.2
9	9.1	16	28	139	204	1040	341	309	167	86	14	7.4
10	11	12	98	89	234	349	381	1100	155	48	16	5.8
11	10	13	63	64	299	199	330	723	116	31	20	5.4
12	11	10	34	52	279	148	232	348	97	26	15	5.3
13	10	9.9	22	49	193	124	178	226	163	24	13	5.4
14	18	35	19	40	150	110	183	165	126	59	16	6.2
15	15	21	15	50	122	97	147	131	176	27	25	5.5
16	10	13	13	65	116	100	1040	111	119	23	149	5.3
17	9.8	11	12	65	186	96	2010	96	86	22	167	5.3
18	10	9.7	11	59	299	438	763	82	67	20	54	5.3
19	10	8.9	11	74	232	641	5660	72	60	18	33	5.3
20	11	8.4	10	63	181	1090	1420	66	52	18	24	5.9
21	11	51	11	56	144	589	499	61	67	18	18	7.1
22	11	80	58	61	121	307	511	57	61	19	15	8.5
23	12	28	30	197	111	217	379	64	72	38	13	7.0
24	13	17	50	192	98	171	278	58	44	61	13	6.1
25	19	13	67	123	84	147	210	51	35	36	11	5.9
26	49	11	42	92	77	125	169	100	32	24	9.7	5.7
27	36	10	52	96	75	110	185	57	30	20	9.3	5.5
28	9.5	9.7	40	127	68	101	177	49	28	19	8.8	6.3
29	6.7	9.0	33	106	---	89	149	42	31	17	7.6	6.0
30	6.0	17	32	90	---	82	177	39	73	21	7.3	5.7
31	5.6	---	27	74	---	75	---	37	---	59	7.3	---
TOTAL	386.5	511.8	896	2740	5117	6962	17067	7248	2985	1009	809.0	186.3
MEAN	12.5	17.1	28.9	88.4	183	225	569	234	99.5	32.5	26.1	6.21
MAX	49	80	98	302	633	1090	5660	1100	354	86	167	9.2
MIN	5.6	6.1	10	21	53	53	142	37	28	17	7.3	5.3
CFSM	.21	.28	.48	1.46	3.02	3.71	9.39	3.86	1.64	.54	.43	.10
IN.	.24	.31	.55	1.68	3.14	4.27	10.48	4.45	1.83	.62	.50	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

	MEAN	25.2	79.8	167	212	234	258	180	121	67.8	52.3	36.0	19.8
MAX	155	416	609	551	677	610	569	539	298	345	197	109	
(WY)	1978	1974	1991	1974	1991	1975	1998	1984	1989	1967	1942	1982	
MIN	3.05	5.35	7.34	14.4	14.9	47.6	34.9	17.2	13.8	4.26	6.00	3.02	
(WY)	1954	1941	1966	1981	1941	1988	1986	1941	1988	1944	1951	1954	

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1941 - 1998	
ANNUAL TOTAL	40032.6		45917.6			
ANNUAL MEAN	110		126		121	
HIGHEST ANNUAL MEAN					219	
LOWEST ANNUAL MEAN					49.5	
HIGHEST DAILY MEAN	3800		Mar 3		7000	
LOWEST DAILY MEAN	5.6		Oct 31		1.2	
ANNUAL SEVEN-DAY MINIMUM	7.6		Sep 2		1.6	
INSTANTANEOUS PEAK FLOW			7050		Apr 19	
INSTANTANEOUS PEAK STAGE			18.93		Apr 19	
INSTANTANEOUS LOW FLOW			5.3		Sep 12	
ANNUAL RUNOFF (CFSM)	1.81		2.08		1.99	
ANNUAL RUNOFF (INCHES)	24.57		28.19		27.03	
10 PERCENT EXCEEDS	216		278		257	
50 PERCENT EXCEEDS	52		49		46	
90 PERCENT EXCEEDS	9.0		8.4		7.8	

CUMBERLAND RIVER BASIN

03402900 CUMBERLAND RIVER AT PINE STREET BRIDGE AT PINEVILLE, KY

LOCATION.--Lat 36°45'47", long 83°41'31", Bell County, Hydrologic Unit 05130101, on pier near right bank on Pine St. bridge at Pineville, 0.2 mi downstream from Straight Creek, and at mile 654.4.

DRAINAGE AREA.--770 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 970.00 ft above sea level, Sandy Hook datum.

REMARKS.--Estimated daily discharges: Aug. 9. Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	93	189	434	1380	1050	2510	4880	1190	622	345	152
2	90	95	298	353	1180	991	2880	4610	798	558	357	142
3	82	100	350	359	1230	930	2310	3650	680	489	248	135
4	77	130	294	577	4950	889	3810	4790	946	487	205	130
5	74	165	326	833	3620	842	5060	5150	2710	629	183	129
6	71	169	289	841	2550	822	3260	3920	2560	465	164	124
7	70	162	249	1020	2250	815	2480	3240	1840	372	156	119
8	71	179	224	3850	2560	921	2130	3040	1360	338	144	122
9	69	175	258	3530	2750	4580	2590	3110	1450	374	160	135
10	67	163	624	2040	3500	3980	3680	5050	2830	463	187	150
11	77	170	1050	1450	3850	2560	4680	7800	2690	375	195	121
12	74	158	847	1160	4290	1990	3730	4930	2110	310	218	107
13	73	154	631	999	3370	1670	2800	3490	2890	277	192	101
14	73	177	471	882	2470	1440	2410	2690	2800	306	345	98
15	83	279	391	807	1930	1240	2090	2170	2790	275	806	101
16	84	239	333	819	1680	1170	4870	1680	2250	266	1100	95
17	78	193	270	839	1810	1270	18900	1360	1700	258	2980	92
18	74	169	236	842	3450	2230	11800	1190	1310	243	1620	91
19	75	159	218	905	3260	8190	25900	1070	1130	224	921	88
20	75	152	201	988	2620	7280	24400	923	975	210	692	89
21	74	222	184	982	2160	6960	11100	810	886	256	533	93
22	74	619	271	961	1810	4550	8220	772	939	252	366	92
23	74	577	353	1280	1670	3360	6740	870	953	226	291	94
24	75	370	355	2130	1650	2730	4820	1330	946	391	257	78
25	85	266	488	1900	1550	2330	3510	962	771	388	234	94
26	116	275	521	1460	1440	2080	2870	1960	689	271	218	88
27	234	262	481	1250	1320	1840	2570	1420	607	227	213	81
28	235	221	486	1830	1140	1580	2720	1150	492	204	191	79
29	165	202	423	1870	---	1400	2320	943	443	186	171	77
30	124	181	412	1720	---	1300	2140	818	614	176	159	81
31	104	---	485	1650	---	1200	---	698	---	297	154	---
TOTAL	2896	6476	12208	40561	67440	74190	179300	80476	44349	10415	14005	3178
MEAN	93.4	216	394	1308	2409	2393	5977	2596	1478	336	452	106
MAX	235	619	1050	3850	4950	8190	25900	7800	2890	629	2980	152
MIN	67	93	184	353	1140	815	2090	698	443	176	144	77
CFSM	.12	.28	.51	1.70	3.13	3.11	7.76	3.37	1.92	.44	.59	.14
IN.	.14	.31	.59	1.96	3.26	3.58	8.66	3.89	2.14	.50	.68	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1998, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998
MEAN	259	927	2284	2498	2746	3626	2549
MAX	670	3009	5204	4201	6720	5367	5977
(WY)	1997	1997	1992	1994	1994	1994	1995
MIN	93.4	216	394	1308	1020	2139	817
(WY)	1998	1998	1998	1998	1992	1992	1993

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	463870	535494		
ANNUAL MEAN	1271	1467		
HIGHEST ANNUAL MEAN			1564	1994
LOWEST ANNUAL MEAN			1104	1995
HIGHEST DAILY MEAN	21200	Mar 3	25900	Apr 19
LOWEST DAILY MEAN	67	Oct 10	67	Oct 10
ANNUAL SEVEN-DAY MINIMUM	71	Oct 4	71	Oct 4
INSTANTANEOUS PEAK FLOW			30200	Apr 19
INSTANTANEOUS PEAK STAGE			42.69	Apr 19
INSTANTANEOUS LOW FLOW			67	Oct 10
ANNUAL RUNOFF (CFSM)	1.65		1.91	2.03
ANNUAL RUNOFF (INCHES)	22.41		25.87	27.59
10 PERCENT EXCEEDS	2780		3500	3360
50 PERCENT EXCEEDS	639		629	781
90 PERCENT EXCEEDS	84		93	135

CUMBERLAND RIVER BASIN

03403500 CUMBERLAND RIVER AT BARBOURVILLE, KY

LOCATION.--Lat 36°51'45", long 83°53'31", Knox County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 11, at Barbourville, 0.4 mi upstream from Richland Creek, and at mile 635.2.

DRAINAGE AREA.--960 mi².

PERIOD OF RECORD.--October 1922 to September 1931, April 1948 to July 2, 1993, October 1995 to current year. Monthly discharge only April to June 1948, published in WSP 1306.

REVISED RECORDS.--WSP 603: 1923-24. WSP 1336: 1923(M). 1927, 1929, 1950-51. WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 942.97 ft above sea level. See WRD KY-90-1 for history of changes prior to Oct. 17, 1975.

REMARKS.--No estimated daily discharges. Records fair. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Diversion above station by city of Barbourville for municipal water supply.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	114	234	559	1620	1260	2370	7280	1270	750	468	155
2	94	110	293	480	1400	1220	3520	9240	982	657	416	150
3	88	110	423	434	1330	1150	2930	5690	762	521	309	144
4	78	131	376	574	4590	1090	3610	5580	896	545	245	136
5	72	167	375	941	5140	1010	6010	6800	2630	746	203	130
6	71	203	375	1020	3520	972	4450	5530	3310	590	178	128
7	69	205	313	1040	2950	956	3180	4090	2270	441	164	123
8	67	205	288	3230	3160	1030	2630	3850	1650	405	155	124
9	67	224	296	4630	3630	3960	2950	3720	1620	394	151	133
10	65	210	562	2820	4440	5770	3730	4500	3280	485	189	143
11	66	212	1180	1850	4880	3610	5040	9220	3760	452	225	144
12	71	207	1090	1460	4960	2600	4510	7350	2620	362	232	119
13	73	190	778	1250	4310	2120	3490	4540	3320	303	215	105
14	80	229	575	1100	3230	1850	2920	3400	4030	331	500	99
15	83	328	468	1000	2440	1590	2600	2660	3750	321	1430	96
16	91	332	405	990	2040	1460	3620	2090	3330	293	1070	95
17	94	268	344	1050	1990	1550	19800	1620	2230	292	3460	89
18	88	219	300	1030	3530	1860	23700	1390	1620	280	2530	85
19	82	189	282	1120	4070	8300	25900	1200	1340	265	1180	85
20	81	172	265	1260	3390	9800	34400	1060	1210	228	826	83
21	81	238	239	1240	2770	11300	29000	908	1180	227	642	83
22	83	707	285	1210	2240	7910	20000	853	1330	283	462	83
23	83	758	401	1450	2010	4810	14900	877	1150	254	330	84
24	84	509	427	2580	1950	3670	10100	1560	1150	315	290	85
25	85	362	495	2500	1810	3050	5720	1160	940	456	268	76
26	103	300	582	1870	1670	2640	3680	2170	805	331	233	88
27	197	305	579	1520	1540	2260	3200	1840	711	269	224	88
28	293	277	589	1890	1380	2020	3500	1380	592	230	212	83
29	232	245	557	2110	---	1760	3060	1110	501	201	187	77
30	166	224	529	1960	---	1620	2820	949	674	183	174	76
31	131	---	564	1880	---	1490	---	788	---	398	162	---
TOTAL	3116	7950	14469	48048	81990	95688	257340	104405	54913	11812	17330	3189
MEAN	101	265	467	1550	2928	3087	8578	3368	1830	381	559	106
MAX	293	758	1180	4630	5140	11300	34400	9240	4030	750	3460	155
MIN	65	110	234	434	1330	956	2370	788	501	183	151	76
CFSM	.10	.28	.49	1.61	3.05	3.22	8.94	3.51	1.91	.40	.58	.11
IN.	.12	.31	.56	1.86	3.18	3.71	9.97	4.05	2.13	.46	.67	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1998, BY WATER YEAR (WY)

	MEAN	398	1268	2410	3022	3352	3748	2746	2024	1034	621	424	296
MAX	3058	5231	9398	8182	7919	10470	8578	6782	5524	2346	1432	1894	
(WY)	1990	1974	1927	1974	1956	1963	1998	1984	1989	1967	1971	1989	
MIN	9.86	43.7	102	135	568	791	549	459	121	62.8	27.0	15.8	
(WY)	1954	1923	1966	1981	1954	1988	1986	1962	1930	1930	1925	1930	

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1923 - 1998	
ANNUAL TOTAL	583996		700250			
ANNUAL MEAN	1600		1918			
HIGHEST ANNUAL MEAN					1778	
LOWEST ANNUAL MEAN					3018	
HIGHEST DAILY MEAN	27900		Mar 4		824	
LOWEST DAILY MEAN	65		Oct 10		47200	
ANNUAL SEVEN-DAY MINIMUM	68		Oct 6		.50	
INSTANTANEOUS PEAK FLOW			34400		Apr 20	
INSTANTANEOUS PEAK STAGE			35300		Apr 20	
INSTANTANEOUS LOW FLOW			36.38		Apr 20	
ANNUAL RUNOFF (CFSM)	1.67		2.00		45.91	
ANNUAL RUNOFF (INCHES)	22.63		27.13		.20	
10 PERCENT EXCEEDS	3470		4180		56100	
50 PERCENT EXCEEDS	707		758		Apr 6 1977	
90 PERCENT EXCEEDS	85		93		Apr 6 1977	

CUMBERLAND RIVER BASIN

03403910 CLEAR FORK AT SAXTON, KY

LOCATION.--Lat 36°82'02" (corrected), long 84°06'42", Whitley County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 1804, at Saxton, 100 ft upstream from Louisville and Nashville Railroad bridge, 150 ft downstream from unnamed stream. 7.2 mi southeast of Williamsburg, and at mile 12.2.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--July 1968 to September 1990, October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 921.83 ft above sea level.

REMARKS.--Estimated daily discharges: Aug. 9. Records good except for period of estimated record, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	74	139	280	283	778	2820	1360	181	332	41
2	19	19	119	137	251	264	821	2680	904	130	148	39
3	17	22	82	152	426	247	672	1640	507	107	99	37
4	16	27	68	256	3650	230	1240	1510	388	99	77	36
5	16	29	65	355	1680	218	1080	1660	797	111	63	36
6	15	32	61	341	1070	202	855	1230	1040	98	54	35
7	15	34	48	564	897	198	695	1210	628	82	51	34
8	14	38	43	2950	942	276	618	1550	420	75	46	35
9	14	45	58	1090	1190	3180	1170	1270	587	105	49	32
10	15	44	274	606	1640	1890	1260	3580	1560	146	58	30
11	16	40	428	421	2020	1030	1110	5410	1360	94	76	26
12	17	37	246	334	2200	748	893	1960	858	75	76	26
13	17	34	171	286	1330	597	733	1210	694	68	54	26
14	26	56	131	240	939	526	749	863	541	66	54	24
15	29	147	113	238	710	452	739	658	636	68	173	23
16	34	89	100	347	612	423	2520	523	483	61	737	22
17	26	51	90	416	677	433	8230	446	341	58	1480	21
18	22	38	83	402	1440	641	3580	364	262	57	505	20
19	23	33	78	415	1200	2350	11200	307	222	52	258	20
20	21	30	72	425	928	4780	11900	272	210	50	168	20
21	19	46	70	382	740	4330	3780	248	192	47	124	20
22	19	376	113	350	591	1800	2160	224	214	51	101	19
23	19	267	187	545	538	1240	2170	217	184	65	86	18
24	17	135	171	955	467	952	1610	208	159	251	76	17
25	18	73	267	720	391	769	1180	188	134	247	68	17
26	34	51	255	527	347	648	918	276	133	132	62	17
27	125	44	223	426	334	554	798	235	126	89	58	16
28	65	38	209	462	307	491	879	199	109	71	53	16
29	37	34	186	409	---	436	706	173	97	63	48	16
30	28	36	187	368	---	387	759	152	241	56	46	17
31	22	---	174	321	---	349	---	138	---	271	43	---
TOTAL	795	1965	4446	15579	27797	30924	65803	33421	15387	3126	5323	756
MEAN	25.6	65.5	143	503	993	998	2193	1078	513	101	172	25.2
MAX	125	376	428	2950	3650	4780	11900	5410	1560	271	1480	41
MIN	14	19	43	137	251	198	618	138	97	47	43	16
CFSM	.08	.20	.43	1.52	3.00	3.01	6.63	3.26	1.55	.30	.52	.08
IN.	.09	.22	.50	1.75	3.12	3.48	7.40	3.76	1.73	.35	.60	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1998, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	187	483	681	932	948	1057	841	707	430	200	185	137																			
MAX	1472	1624	1824	2534	1418	3356	2193	2087	1923	659	557	707																			
(WY)	1990	1974	1973	1974	1990	1975	1998	1984	1989	1971	1985	1989																			
MIN	18.7	44.4	53.7	41.0	353	300	147	122	31.1	44.0	34.3	19.3																			
(WY)	1981	1988	1981	1981	1977	1988	1986	1985	1988	1970	1997	1980																			

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1968 - 1998	
ANNUAL TOTAL	195425		205322			
ANNUAL MEAN	535		563		565	
HIGHEST ANNUAL MEAN					894	1973
LOWEST ANNUAL MEAN					233	1988
HIGHEST DAILY MEAN	9260	Mar 4	11900	Apr 20	19400	May 28 1973
LOWEST DAILY MEAN	13	Sep 5	14	Oct 8	3.3	Aug 19 1988
ANNUAL SEVEN-DAY MINIMUM	15	Sep 2	15	Oct 4	6.7	Jul 5 1988
INSTANTANEOUS PEAK FLOW			14500	Apr 19	22800	Apr 5 1977
INSTANTANEOUS PEAK STAGE			33.01	Apr 19	41.51	Apr 5 1977
INSTANTANEOUS LOW FLOW					13	Sep 5 1997
ANNUAL RUNOFF (CFSM)	1.62		1.70		1.71	
ANNUAL RUNOFF (INCHES)	21.96		23.08		23.18	
10 PERCENT EXCEEDS	1250		1290		1200	
50 PERCENT EXCEEDS	232		198		267	
90 PERCENT EXCEEDS	19		22		38	

CUMBERLAND RIVER BASIN

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY

LOCATION.--Lat 36°44'36", long 84°09'22", Whitley County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 296E at Williamsburg, 2.0 mi downstream from Clear Fork, and at mile 590.4.

DRAINAGE AREA.--1,607 mi².

PERIOD OF RECORD.--October 1950 to current year. Gage-height records collected in this vicinity since 1908 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 891.52 ft above sea level. See WDR KY-90-1 for history of changes prior to June 26, 1990.

REMARKS.--Estimated daily discharges: Sept. 30. Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	187	495	828	2250	1870	2550	10200	3850	1040	1230	231
2	149	160	529	776	1930	1730	4420	14400	3270	970	816	221
3	145	147	542	704	1820	1630	4520	11500	1820	832	614	211
4	131	152	610	731	6620	1520	4600	8730	1530	703	483	195
5	121	162	590	1060	8820	1440	6430	9560	2740	727	374	185
6	112	190	581	1420	6660	1340	7210	9100	5220	906	314	179
7	105	233	585	1680	5020	1280	5210	7180	4250	736	274	170
8	100	265	504	5100	4720	1310	4020	6710	2970	594	246	180
9	96	271	468	6230	5590	4450	4110	5990	2590	617	244	170
10	95	300	662	5230	6780	9000	5010	6980	4730	708	276	174
11	95	299	1460	3330	7910	6930	6120	14000	5970	671	432	174
12	93	277	1780	2370	8380	4610	6630	12400	4800	593	460	188
13	89	268	1420	1890	7330	3540	5490	8510	4030	490	366	169
14	108	294	1050	1600	5640	2970	4450	5780	5220	479	349	149
15	116	422	805	1410	4240	2590	4080	4360	5460	519	1750	138
16	131	544	660	1450	3400	2240	5400	3480	5140	470	2630	133
17	132	500	572	1540	3060	2180	19300	2800	3890	432	4610	130
18	132	390	507	1590	4290	2330	22700	2280	2740	423	5310	125
19	127	323	433	1600	6020	6660	29000	1940	2080	384	2880	121
20	116	275	394	1800	5540	14000	35000	1670	1770	354	1550	118
21	110	324	367	1840	4530	18200	35500	1470	1810	322	1080	112
22	109	815	394	1770	3720	14200	32800	1290	2270	313	839	109
23	108	1360	538	1980	3190	9440	28200	1260	1860	400	652	110
24	106	1080	662	3250	2900	6330	22100	1480	1580	599	512	109
25	111	732	765	3940	2680	4920	14600	1980	1440	711	437	109
26	120	536	890	3280	2440	4120	7090	2030	1180	668	387	108
27	166	443	941	2540	2260	3560	5030	2860	1020	498	350	103
28	254	427	940	2250	2090	3110	4990	2170	902	392	327	106
29	342	385	918	2670	---	2720	4740	1680	771	340	305	105
30	297	349	875	2670	---	2410	4350	1380	841	303	272	103
31	223	---	837	2430	---	2190	---	1200	---	390	248	---
TOTAL	4293	12110	22774	70959	129830	144820	345650	166370	87744	17584	30617	4435
MEAN	138	404	735	2289	4637	4672	11520	5367	2925	567	988	148
MAX	342	1360	1780	6230	8820	18200	35500	14400	5970	1040	5310	231
MIN	89	147	367	704	1820	1280	2550	1200	771	303	244	103
CFSM	.09	.25	.46	1.42	2.89	2.91	7.17	3.34	1.82	.35	.61	.09
IN.	.10	.28	.53	1.64	3.01	3.35	8.00	3.85	2.03	.41	.71	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1998, BY WATER YEAR (WY)

	MEAN	623	1771	3683	4663	5240	6072	4380	2990	1597	936	683	463
MAX	4413	6552	9751	11860	13550	14670	11520	9572	8305	4906	2142	3280	
(WY)	1990	1978	1992	1974	1956	1963	1998	1984	1989	1967	1971	1989	
MIN	10.2	50.6	150	203	1190	1193	730	705	277	122	109	33.3	
(WY)	1954	1954	1966	1981	1968	1988	1986	1962	1988	1952	1954	1953	

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1951 - 1998

ANNUAL TOTAL	926107	1037186	
ANNUAL MEAN	2537	2842	
HIGHEST ANNUAL MEAN			2747
LOWEST ANNUAL MEAN			4390
HIGHEST DAILY MEAN	28400	Mar 6	1159
LOWEST DAILY MEAN	89	Oct 13	47600
ANNUAL SEVEN-DAY MINIMUM	96	Oct 7	6.1
INSTANTANEOUS PEAK FLOW			6.9
INSTANTANEOUS PEAK STAGE			36400
INSTANTANEOUS LOW FLOW			30.70
ANNUAL RUNOFF (CFSM)	1.58		1.77
ANNUAL RUNOFF (INCHES)	21.44		23.23
10 PERCENT EXCEEDS	5710	6640	6590
50 PERCENT EXCEEDS	1110	1180	1220
90 PERCENT EXCEEDS	132	132	164

CUMBERLAND RIVER BASIN

03404900 LYNN CAMP CREEK AT CORBIN, KY

LOCATION.--Lat 36°57'05", long 84°05'37", Whitley County, Hydrologic Unit 05130101, on left bank 40 ft downstream from bridge on State Highway 312, (East Masters Street) at Corbin, 0.8 mi downstream from East Fork Lynn Camp Creek, and at mile 3.9.

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--Annual maximums, water years 1957-73, October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,049.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Record good except for discharges below 2.0 ft³/s, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.4	59	41	35	46	154	732	140	28	61	11
2	4.0	10	47	40	33	44	81	417	44	19	27	10
3	3.0	11	37	54	50	42	78	287	33	16	18	7.3
4	2.7	10	46	62	211	40	243	348	216	17	13	6.8
5	2.3	8.5	49	57	173	38	138	315	308	27	9.7	5.9
6	1.9	10	47	105	142	35	96	189	142	17	7.5	6.9
7	1.7	18	38	341	142	33	73	242	76	15	6.1	9.3
8	1.8	16	34	454	183	42	62	210	52	100	4.7	24
9	1.6	16	48	161	332	271	65	172	222	46	10	17
10	2.1	14	153	95	391	150	77	234	260	29	12	9.2
11	2.1	12	90	71	320	95	63	276	119	21	9.8	7.1
12	2.2	12	58	59	225	74	51	171	78	12	8.1	5.8
13	2.3	13	47	53	148	63	46	119	355	7.7	5.7	5.2
14	15	97	40	47	108	56	66	87	169	54	348	5.9
15	12	50	34	53	82	49	56	67	244	23	348	7.9
16	7.3	29	29	60	71	49	834	52	123	21	103	8.3
17	5.1	21	28	55	76	54	4530	46	74	28	731	8.8
18	4.3	17	26	53	161	121	735	39	54	16	167	8.7
19	3.5	14	24	60	113	193	2020	34	51	9.8	72	7.9
20	3.7	12	23	58	91	686	720	30	45	19	46	7.8
21	3.8	74	24	51	75	500	288	27	149	20	32	8.3
22	3.8	110	41	58	65	242	404	30	109	75	25	5.6
23	3.8	52	36	198	72	159	451	109	75	117	22	2.8
24	5.0	38	43	150	62	113	239	83	52	40	19	2.4
25	6.0	30	59	96	53	90	163	38	40	26	15	2.0
26	9.7	26	44	73	48	75	122	97	34	18	13	1.8
27	12	23	49	62	46	61	134	48	29	13	12	1.7
28	9.4	20	50	55	45	54	160	36	25	11	11	1.1
29	6.8	18	46	49	---	49	102	28	25	8.8	9.2	1.3
30	5.6	23	49	43	---	44	132	23	61	12	7.5	1.3
31	4.2	---	48	39	---	41	---	24	---	185	8.7	---
TOTAL	153.8	809.9	1446	2853	3553	3609	12383	4610	3404	1051.3	2182.0	209.1
MEAN	4.96	27.0	46.6	92.0	127	116	413	149	113	33.9	70.4	6.97
MAX	15	110	153	454	391	686	4530	732	355	185	731	24
MIN	1.6	5.4	23	39	33	33	46	23	25	7.7	4.7	1.1
CFSM	.09	.50	.87	1.71	2.36	2.16	7.67	2.76	2.11	.63	1.31	.13
IN.	.11	.56	1.00	1.97	2.46	2.50	8.56	3.19	2.35	.73	1.51	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1998, BY WATER YEAR (WY)

MEAN	32.0	89.6	120	154	159	165	115	97.0	59.7	38.6	27.7	29.1
MAX	133	267	378	372	326	458	413	387	203	110	78.4	100
(WY)	1990	1974	1991	1974	1994	1975	1998	1983	1997	1978	1979	1982
MIN	1.35	10.8	10.4	5.13	56.9	41.9	16.5	9.47	2.38	2.11	2.50	1.89
(WY)	1981	1979	1981	1981	1977	1988	1986	1986	1988	1975	1976	1983

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1967 - 1998

ANNUAL TOTAL	31451.3	36264.1		
ANNUAL MEAN	86.2	99.4		90.2
HIGHEST ANNUAL MEAN				141
LOWEST ANNUAL MEAN				36.5
HIGHEST DAILY MEAN	1920	Mar 3	4530	Apr 17
LOWEST DAILY MEAN	1.2	Sep 7	1.1	Sep 28
ANNUAL SEVEN-DAY MINIMUM	1.9	Oct 6	1.7	Sep 24
INSTANTANEOUS PEAK FLOW			6820	Apr 17
INSTANTANEOUS PEAK STAGE			14.33	Apr 17
INSTANTANEOUS LOW FLOW				.02
ANNUAL RUNOFF (CFSM)	1.60		1.85	1.68
ANNUAL RUNOFF (INCHES)	21.75		25.07	22.79
10 PERCENT EXCEEDS	184		218	200
50 PERCENT EXCEEDS	39		45	38
90 PERCENT EXCEEDS	4.4		5.8	3.8

CUMBERLAND RIVER BASIN

03406500 ROCKCASTLE RIVER AT BILLOWS, KY

LOCATION.--Lat 37°10'16", long 84°17'46", Laurel County, Hydrologic Unit 05130102, on left bank 200 ft upstream from bridge on State Highway 80 at Billows, 0.9 mi upstream from Pine Creek, 1.1 mi downstream from Hawk Creek, 13 mi west of London, and at mile 24.4.

DRAINAGE AREA.--604 mi².

PERIOD OF RECORD.--July 1936 to current year.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.90 ft above sea level. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 30. Records good except for period of estimated record, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	75	215	315	489	690	831	5450	374	373	105	24
2	42	95	367	281	442	636	1310	6280	474	302	110	24
3	44	121	333	291	414	589	1080	3060	339	248	95	23
4	41	168	300	374	605	556	2210	2350	543	287	78	22
5	36	177	294	478	929	531	3140	3340	2270	322	67	22
6	33	172	275	868	933	498	1960	2430	2800	371	59	21
7	30	161	255	5060	1000	468	1460	2030	1650	262	52	20
8	28	157	232	19600	1200	479	1260	4460	1070	227	47	21
9	28	172	230	7710	1920	2200	1970	3070	1120	795	44	20
10	29	166	398	2680	3780	3220	2500	2270	3850	508	43	18
11	29	161	1010	1690	4710	1950	2320	2420	7220	337	49	17
12	29	145	772	1260	8290	1480	1790	2060	4140	252	61	17
13	29	132	579	1030	4980	1190	1420	1530	3530	202	52	17
14	39	171	460	835	2820	1020	1200	1160	2910	244	50	17
15	38	434	379	792	1940	869	1060	878	5460	321	57	16
16	38	419	318	1060	1550	748	2460	690	4070	282	63	14
17	41	307	277	1040	1410	700	16300	561	2020	259	59	15
18	45	244	248	979	1950	673	7070	452	1260	262	55	15
19	49	206	224	899	2530	1230	11100	378	929	218	54	19
20	44	180	203	824	2470	2760	9630	331	895	208	66	35
21	40	201	189	719	1950	6360	3730	363	657	272	57	79
22	38	633	187	657	1540	3780	3130	413	700	280	45	70
23	36	748	194	1230	1310	2550	3760	373	1170	862	40	45
24	36	512	212	2490	1160	1850	2610	874	1270	499	35	40
25	38	381	273	1810	954	1430	1910	675	797	306	31	45
26	74	307	398	1360	823	1260	1490	635	572	220	29	34
27	190	262	408	1090	759	1040	1250	714	432	174	27	27
28	238	228	396	903	724	903	1250	865	351	144	26	24
29	153	201	386	755	---	797	1040	658	296	123	24	23
30	110	190	376	645	---	701	1120	479	292	109	24	21
31	85	---	359	556	---	630	---	384	---	109	24	---
TOTAL	1777	7526	10747	60281	53582	43788	93361	51633	53461	9378	1628	805
MEAN	57.3	251	347	1945	1914	1413	3112	1666	1782	303	52.5	26.8
MAX	238	748	1010	19600	8290	6360	16300	6280	7220	862	110	79
MIN	28	75	187	281	414	468	831	331	292	109	24	14
CFSM	.09	.42	.57	3.22	3.17	2.34	5.15	2.76	2.95	.50	.09	.04
IN.	.11	.46	.66	3.71	3.30	2.70	5.75	3.18	3.29	.58	.10	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1998, BY WATER YEAR (WY)

	201	581	1271	1694	1925	2024	1484	980	582	362	199	155
MEAN	201	581	1271	1694	1925	2024	1484	980	582	362	199	155
MAX	2887	2374	5279	5990	5236	5860	4051	4207	2862	1830	1263	1052
(WY)	1990	1987	1991	1937	1956	1975	1972	1983	1947	1941	1977	1974
MIN	3.18	11.5	16.5	56.9	208	507	188	115	37.9	10.8	10.1	4.95
(WY)	1954	1954	1954	1981	1941	1983	1986	1941	1988	1944	1957	1936

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1936 - 1998

ANNUAL TOTAL	360536	387967	
ANNUAL MEAN	988	1063	
HIGHEST ANNUAL MEAN			951
LOWEST ANNUAL MEAN			1575
HIGHEST DAILY MEAN	23000	Mar 4	1979
LOWEST DAILY MEAN	22	Sep 7	345
ANNUAL SEVEN-DAY MINIMUM	25	Sep 2	46200
INSTANTANEOUS PEAK FLOW			1.90
INSTANTANEOUS PEAK STAGE			Sep 9 1957
INSTANTANEOUS LOW FLOW			1.4
ANNUAL RUNOFF (CFSM)	1.64		Sep 11 1964
ANNUAL RUNOFF (INCHES)	22.21		50000
10 PERCENT EXCEEDS	2120		28.64
50 PERCENT EXCEEDS	341		Jan 8
90 PERCENT EXCEEDS	45		Jan 8
			47.17
			.80
			1.57
			21.39
			2160
			333
			24

CUMBERLAND RIVER BASIN

03413200 BEAVER CREEK NEAR MONTICELLO, KY

LOCATION.--Lat 36°47'51", long 84°53'46", Wayne County, Hydrologic Unit 05130103, on left bank upstream of bridge on State Highway 200, 0.6 mi downstream from unnamed tributary, 0.8 mi northeast of Bethesda, 0.9 mi upstream from unnamed tributary, 3.8 mi southwest of Monticello, and at mile 24.0.

DRAINAGE AREA.--43.4 mi².

PERIOD OF RECORD.--October 1968 to September 1983, October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 804.72 ft above sea level.

REMARKS.--Estimated daily discharges: May 22-27. Records good except for period of estimated record, which is poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1946 reached a stage of 10.8 ft from information by local residents.

REVISIONS.--The peak discharges and annual maximum (*) reported for water years 1990-1996 have been revised as shown in the following table. They supercede figures published in the reports for 1990-1996.

Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
1990	Oct. 1 1989	0700	1,740	5.97	1992	Jun. 18 1992	2030	*1,760	*6.01
1990	Oct. 17 1989	1100	*2,970	*8.37	993	Feb. 21 1993	1730	*1,310	*5.27
1990	Dec. 31 1989	1100	1,200	5.15	1994	Jan. 7 1994	1400	1,780	6.07
1990	Jan. 29 1990	1630	991	4.90	1994	Feb. 23 1994	0730	1,910	6.32
1990	Feb. 10 1990	0600	1,510	5.57	1994	Mar. 28 1994	0430	1,710	5.92
1991	Dec. 23 1990	0630	*2,710	*7.89	1994	Apr. 11 1994	1500	*2,820	*8.10
1991	Dec. 28 1990	0230	1,050	4.97	1995	Feb. 15 1995	1000	*1,540	*5.62
1991	Dec. 30 1990	2300	1,670	5.85	1996	Nov. 7 1995	1300	*1,690	*5.88
1991	Feb. 18 1991	0500	1,610	5.76	1996	Mar. 6 1996	1230	1,610	5.75
1991	Mar. 29 1991	1030	1,050	4.97					

CUMBERLAND RIVER BASIN

03413200 BEAVER CREEK NEAR MONTICELLO, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.4	2.5	10	15	28	92	270	1560	13	23	2.6
2	2.5	4.9	2.4	12	13	24	55	176	216	12	12	2.3
3	2.5	5.1	2.3	29	23	22	95	155	98	12	9.1	2.0
4	2.7	5.5	2.3	30	167	20	488	136	123	12	6.7	1.8
5	2.6	5.1	2.4	26	123	18	180	126	244	11	5.8	1.8
6	2.7	5.2	2.5	70	105	17	116	94	221	11	5.2	1.8
7	2.7	7.6	2.5	1070	101	16	86	108	114	10	4.4	1.8
8	2.9	7.3	2.5	719	127	22	78	114	71	12	3.8	1.9
9	3.4	5.5	2.8	179	242	244	151	81	518	13	4.7	1.7
10	4.0	4.4	4.1	91	440	104	124	216	359	11	10	1.7
11	3.9	3.9	28	62	1240	69	101	280	176	9.3	8.6	1.7
12	3.8	3.4	14	45	1010	55	81	160	118	8.7	5.8	1.7
13	4.5	3.3	10	33	390	49	68	109	99	8.0	5.0	1.7
14	6.4	6.4	8.3	26	216	42	101	77	74	7.7	4.9	1.6
15	6.2	7.5	6.9	26	126	34	91	59	99	7.4	4.7	1.5
16	5.1	5.2	5.5	32	91	30	834	42	61	6.8	6.0	1.6
17	4.2	3.3	5.1	35	113	32	1580	34	42	6.9	9.8	1.6
18	4.0	2.6	4.4	29	345	36	382	27	32	6.4	9.1	1.6
19	4.0	2.4	3.8	26	245	62	1050	23	28	5.6	6.7	1.7
20	3.9	2.2	3.7	26	171	728	344	21	25	6.3	5.1	1.7
21	3.7	12	3.6	23	111	306	196	18	59	6.0	4.7	1.7
22	3.4	29	3.7	22	80	175	177	24	43	5.1	4.2	1.7
23	3.3	13	3.6	87	74	119	186	33	27	6.0	3.9	1.8
24	4.4	8.2	5.9	84	55	86	140	26	26	12	3.8	1.8
25	4.6	5.4	17	59	41	66	109	300	23	16	3.5	2.0
26	4.9	3.5	14	45	36	55	86	50	20	7.4	3.1	2.0
27	4.9	2.9	12	37	33	47	71	28	17	6.2	2.8	2.0
28	4.9	2.6	11	32	29	39	70	22	15	5.7	2.8	1.6
29	4.3	2.4	11	28	---	30	56	18	14	5.6	2.8	1.8
30	4.1	2.5	12	25	---	25	86	17	14	6.4	2.8	1.9
31	3.4	---	11	19	---	24	---	16	---	39	2.7	---
TOTAL	120.6	176.7	257.7	3037	5762	2624	7274	2860	4536	305.5	187.5	54.1
MEAN	3.89	5.89	8.31	98.0	206	84.6	242	92.3	151	9.85	6.05	1.80
MAX	6.4	29	41	1070	1240	728	1580	300	1560	39	23	2.6
MIN	2.5	2.2	2.3	10	13	16	55	16	14	5.1	2.7	1.5
CFSM	.09	.14	.19	2.26	4.74	1.95	5.59	2.13	3.48	.23	.14	.04
IN.	.10	.15	.22	2.60	4.94	2.25	6.23	2.45	3.89	.26	.16	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
MEAN	23.0	35.8	100	118	119	137	117	58.8	48.7	17.0	17.5	15.6								
MAX	281	109	459	265	225	479	242	215	193	101	124	106								
(WY)	1990	1980	1991	1974	1991	1975	1998	1983	1981	1971	1971	1982								
MIN	1.72	3.47	2.41	2.36	28.1	24.0	21.4	16.6	4.83	3.13	1.89	1.17								
(WY)	1981	1972	1981	1981	1981	1983	1995	1982	1980	1980	1980	1980								

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1969 - 1998	
ANNUAL TOTAL	19765.6		27195.1			
ANNUAL MEAN	54.2		74.5		67.1	
HIGHEST ANNUAL MEAN					103	1979
LOWEST ANNUAL MEAN					32.5	1969
HIGHEST DAILY MEAN	1810	Mar 3	1580	Apr 17	4280	Oct 17 1989
LOWEST DAILY MEAN	1.9	Sep 1	1.5	Sep 15	.50	Oct 2 1968
ANNUAL SEVEN-DAY MINIMUM	2.1	Aug 31	1.6	Sep 12	.95	Sep 4 1980
INSTANTANEOUS PEAK FLOW			3130	Apr 17	3130	Apr 17 1998
INSTANTANEOUS PEAK STAGE			8.67	Apr 17	8.67	Apr 17 1998
INSTANTANEOUS LOW FLOW					.50	Oct 2 1968
ANNUAL RUNOFF (CFSM)	1.25		1.72		1.55	
ANNUAL RUNOFF (INCHES)	16.94		23.31		21.01	
10 PERCENT EXCEEDS	116		175		136	
50 PERCENT EXCEEDS	12		15		21	
90 PERCENT EXCEEDS	2.5		2.5		2.7	

CUMBERLAND RIVER BASIN

03438000 LITTLE RIVER NEAR CADIZ, KY

LOCATION.--Lat 36°46'40", long 87°43'18", Trigg County, Hydrologic Unit 05130205, on right bank at upstream side of bridge on State Highway 1253, 50 ft downstream from Casey Creek, 8.8 mi southeast of Cadiz, and at mile 34.3.

DRAINAGE AREA.--244 mi², of which about 94 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--February 1940 to current year.

REVISED RECORDS.--WSP 1173: 1942-43, 1946(M), 1949. WSP 1306: 1940(M). WSP 1626: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 391.45 ft above sea level. Prior to July 31, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges. June 10-11, 13-15, and Aug. 8-10. Records good except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	37	30	89	114	248	186	913	206	678	244	47
2	31	37	31	82	110	224	201	722	199	476	196	47
3	32	45	37	76	105	209	199	703	182	407	175	45
4	32	48	38	73	99	191	302	667	190	413	161	43
5	32	39	49	75	98	175	321	612	1790	357	150	42
6	35	39	47	119	98	163	276	562	1600	327	141	43
7	34	44	41	334	99	154	246	886	858	305	145	41
8	33	71	38	1010	92	151	235	1040	646	291	e237	37
9	31	57	37	755	89	148	372	749	4380	269	e163	34
10	31	47	51	524	96	148	432	677	e9140	252	e151	33
11	32	41	142	421	105	136	325	623	e7320	236	135	34
12	31	38	101	358	163	124	261	535	3110	220	129	37
13	31	42	74	314	225	120	224	475	e2060	208	129	47
14	39	105	62	274	178	115	503	421	e1800	227	124	41
15	53	112	54	247	152	109	740	371	e1960	371	103	40
16	48	66	49	222	171	105	608	339	1300	439	94	38
17	39	50	46	201	640	105	1600	304	1020	431	86	38
18	35	45	43	180	1330	111	968	274	843	361	81	44
19	33	40	41	165	909	141	671	254	736	302	77	46
20	31	37	40	152	685	488	593	238	662	267	72	36
21	30	37	39	140	579	694	508	224	597	244	71	34
22	32	39	43	133	502	514	464	249	586	225	68	35
23	32	49	68	156	453	427	426	231	520	219	66	37
24	36	45	92	185	401	371	372	204	470	204	65	37
25	40	41	210	181	353	324	323	187	432	191	61	35
26	44	37	190	165	319	288	286	507	400	181	62	34
27	42	37	138	155	300	257	255	524	373	171	59	33
28	37	37	122	147	278	236	237	398	346	166	58	31
29	40	31	112	142	---	213	241	316	325	170	56	29
30	37	30	106	133	---	191	564	269	887	197	53	30
31	37	---	98	123	---	180	---	233	---	230	50	---
TOTAL	1101	1423	2269	7331	8743	7060	12939	14707	44938	9035	3462	1148
MEAN	35.5	47.4	73.2	236	312	228	431	474	1498	291	112	38.3
MAX	53	112	210	1010	1330	694	1600	1040	9140	678	244	47
MIN	30	30	30	73	89	105	186	187	182	166	50	29
CFSM	.15	.19	.30	.97	1.28	.93	1.77	1.94	6.14	1.19	.46	.16
IN.	.17	.22	.35	1.12	1.33	1.08	1.97	2.24	6.85	1.38	.53	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	64.1	211	456	556	694	779	554	415	227	150	94.7	96.7
MAX	504	1677	1985	2168	2130	3653	1924	1875	1498	790	381	925
(WY)	1997	1958	1979	1950	1989	1997	1979	1984	1998	1989	1950	1950
MIN	12.3	14.1	14.2	27.3	39.6	28.1	37.5	21.4	34.0	29.6	23.9	15.7
(WY)	1944	1941	1964	1963	1963	1941	1941	1941	1963	1988	1952	1941

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1940 - 1998

ANNUAL TOTAL	211659	114156
ANNUAL MEAN	580	313
HIGHEST ANNUAL MEAN		757
LOWEST ANNUAL MEAN		58.9
HIGHEST DAILY MEAN	24300	9140
LOWEST DAILY MEAN	30	29
ANNUAL SEVEN-DAY MINIMUM	32	32
INSTANTANEOUS PEAK FLOW		12900
INSTANTANEOUS PEAK STAGE		20.23
INSTANTANEOUS LOW FLOW		26.44
ANNUAL RUNOFF (CFSM)	2.38	1.28
ANNUAL RUNOFF (INCHES)	32.27	17.40
10 PERCENT EXCEEDS	1010	642
50 PERCENT EXCEEDS	190	154
90 PERCENT EXCEEDS	37	37

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°02'16", long 88°31'46", McCracken County, Hydrologic unit 06040006, at auxiliary gaging station at bridge on U.S. highway 60, 16.3 mi downstream from gaging station, 2.4 mi east of Paducah, and at mile 5.3.

DRAINAGE AREA.--40,330 mi²; 40,200 mi² at gaging station.

PERIOD OF RECORD.--Water years 1950, 1952, 1967-72, 1974-86, 1997 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1973 to September 1981.

WATER TEMPERATURE: November 1973 to September 1981.

REMARKS.--Records of daily discharge are published for gaging station near Paducah (station 03609500) 16.3 mi upstream. Flow completely regulated. Barkley-Kentucky Canal (station 03438190) diverts water from or to Lake Barkley in the Cumberland River Basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARDS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 05...	1215	ENVIRONMENTAL	55000	181	7.4	14.2	4.1	11.6	112	65	18
DEC 17...	1230	ENVIRONMENTAL	30000	188	7.9	7.0	2.1	11.4	93	77	24
DEC 17...	1240	REPLICATE	--	188	7.9	7.0	1.9	11.4	--	74	23
FEB 26...	1000	ENVIRONMENTAL	91500	137	7.7	9.5	7.6	13.8	153	57	18
MAR 25...	1300	ENVIRONMENTAL	88200	153	7.9	10.9	5.7	13.4	120	63	20
APR 14...	1320	ENVIRONMENTAL	48000	148	8.4	16.3	5.2	--	--	60	19
APR 22...	1350	ENVIRONMENTAL	147000	145	7.7	16.5	12	12.5	127	62	20
MAY 06...	1250	ENVIRONMENTAL	151000	129	7.4	18.0	6.5	13.5	143	54	17
MAY 22...	1300	ENVIRONMENTAL	56900	124	7.6	24.0	4.6	10.9	129	50	15
JUN 05...	1220	ENVIRONMENTAL	53400	130	7.2	25.0	14	5.9	72	51	16
JUN 25...	1230	ENVIRONMENTAL	23700	155	8.3	29.5	2.5	9.1	119	67	20
JUN 25...	1240	REPLICATE	--	--	--	--	2.8	--	--	68	20
JUL 23...	1110	ENVIRONMENTAL	44900	142	7.5	30.0	4.5	6.4	85	55	15
AUG 13...	1100	ENVIRONMENTAL	45000	146	7.4	28.0	3.3	6.4	81	54	15

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT TOT FIELD (MG/L AS CACO3) (39086)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV 05...	4.6	8.5	1.9	60	49	8.6	11	<.10	5.7	103	.56	.45
DEC 17...	4.3	8.0	1.8	76	62	8.7	13	<.10	5.0	120	.64	.56
DEC 17...	4.3	7.9	1.7	--	--	8.5	13	<.10	4.6	115	.67	.56
FEB 26...	2.7	4.7	1.4	57	46	5.0	9.9	<.10	4.7	92	.73	.81
MAR 25...	3.0	4.7	1.3	69	56	5.6	9.6	<.10	4.0	90	.70	.60
APR 14...	3.0	4.9	1.3	59	48	6.3	9.6	<.10	1.9	89	.57	.43
APR 22...	3.0	4.1	1.3	66	54	4.8	9.0	<.10	3.6	83	.71	.56
MAY 06...	2.9	3.8	1.5	58	47	4.2	8.2	<.10	3.4	81	.56	.47
MAY 22...	2.8	4.0	1.4	53	44	4.9	8.2	<.10	2.8	71	.52	.38
JUN 05...	3.0	4.7	1.7	51	42	5.9	8.1	<.10	3.3	74	.66	.44
JUN 25...	4.0	4.9	2.1	68	55	5.6	12	<.10	3.0	90	.65	.43
JUN 25...	4.1	4.9	2.1	--	--	5.5	12	<.10	3.0	92	.59	.34
JUL 23...	4.2	7.5	1.8	48	39	10	11	<.10	2.5	90	--	--
AUG 13...	4.1	6.6	1.8	52	42	8.0	11	<.10	4.0	84	.50	--

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV												
05...	.19	.09	.039	.300	.066	.261	.15	.26	.056	.031	.13	.08
DEC												
17...	--	--	<.010	.405	<.020	--	.15	.24	.046	.030	.12	--
17...	--	--	<.010	.403	<.020	--	.15	.26	.045	.026	.12	--
FEB												
26...	.19	.27	<.010	.514	.029	--	.30	.22	.061	.022	.08	.04
MAR												
25...	--	--	<.010	.491	<.020	--	.11	.21	.073	.035	.09	--
APR												
14...	--	--	<.010	.310	<.020	--	.12	.26	.049	.011	.02	--
22...	.25	.09	.014	.418	.051	.404	.14	.30	.146	.011	.07	.07
MAY												
06...	--	--	.010	.331	<.020	.321	.14	.23	.038	<.010	.06	--
22...	.29	.15	.018	.178	.049	.160	.20	.34	.015	<.010	.00	.06
JUN												
05...	.36	.14	.022	.171	.125	.149	.26	.49	.087	.010	.04	.16
25...	.45	.24	.015	.145	.051	.130	.29	.50	.058	.010	.03	.07
25...	.39	.15	.015	.154	.039	.139	.19	.43	.049	<.010	.03	.05
JUL												
23...	.32	.16	<.010	<.050	.030	--	.19	.35	.040	<.010	.08	.04
AUG												
13...	.34	--	.011	.108	.056	.097	<.10	.40	.053	<.010	.04	.07

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
05...	1.2	.13	.042	3.7	<1.0	<1	21	<1.0	29	<1.0	1.3
DEC											
17...	--	--	.038	5.2	<1.0	<1	21	<1.0	20	<1.0	<1.0
17...	--	--	.039	5.8	<1.0	<1	20	<1.0	26	<1.0	<1.0
FEB											
26...	--	--	.026	6.0	<1.0	<1	17	<1.0	<16	<1.0	1.8
MAR											
25...	--	--	.029	3.7	<1.0	<1	18	<1.0	<16	<1.0	<1.0
APR											
14...	--	--	.005	3.6	<1.0	<1	17	<1.0	<16	<1.0	<1.0
22...	1.8	.05	.022	2.9	<1.0	<1	17	<1.0	<16	<1.0	1.4
MAY											
06...	1.4	.03	.018	3.0	<1.0	1	18	<1.0	<16	<1.0	<1.0
22...	.71	.06	.001	3.3	<1.0	<1	19	<1.0	<16	<1.0	<1.0
JUN											
05...	.66	.07	.012	5.1	<1.0	<1	19	<1.0	<16	<1.0	<1.0
25...	.58	.05	.010	4.2	<1.0	<1	21	<1.0	<16	<1.0	<1.0
25...	.62	.05	.011	3.8	<1.0	<1	21	<1.0	16	<1.0	<1.0
JUL											
23...	--	--	.026	4.5	<1.0	1	22	<1.0	<16	<1.0	<1.0
AUG											
13...	.43	.04	.014	2.8	<1.0	<1	21	<1.0	<16	<1.0	<1.0

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
05...	<1.0	1.0	<3.0	<1.0	<4	<1.0	1.4	<1.0	<1	<1.0	62
DEC											
17...	<1.0	<1.0	<10	<1.0	<4	4.2	1.0	<1.0	<1	<1.0	70
17...	<1.0	<1.0	<10	<1.0	<4	4.2	<1.0	<1.0	<1	<1.0	69
FEB											
26...	<1.0	<1.0	17	<1.0	<4	2.7	<1.0	<1.0	<1	<1.0	50
MAR											
25...	<1.0	<1.0	15	<1.0	<4	2.8	<1.0	<1.0	<1	<1.0	53
APR											
14...	<1.0	<1.0	<10	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	55
22...	<1.0	<1.0	<10	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	56
MAY											
06...	<1.0	<1.0	11	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	47
22...	<1.0	<1.0	12	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	47
JUN											
05...	<1.0	1.0	<10	<1.0	<4	2.7	<1.0	<1.0	<1	<1.0	50
25...	<1.0	<1.0	<10	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	66
25...	<1.0	<1.0	<10	<1.0	<4	<1.0	<1.0	<1.0	<1	<1.0	66
JUL											
23...	<1.0	<1.0	<10	<1.0	<4	1.4	1.1	<1.0	<1	<1.0	60
AUG											
13...	<1.0	<1.0	<10	<1.0	<4	<1.0	1.0	<1.0	<1	<1.0	59
DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV											
05...	<6	1.0	<1.0	2.0	.20	<.002	<.0020	.036	<.0020	<.0020	<.0040
DEC											
17...	<10	1.1	<1.0	1.9	.30	<.002	<.0020	.055	<.0020	<.0020	<.0040
17...	<10	12	<1.0	1.8	.30	<.002	<.0020	.056	<.0020	<.0020	<.0040
FEB											
26...	<10	1.8	<1.0	1.8	.40	<.002	<.0020	.015	<.0020	<.0020	<.0040
MAR											
25...	<10	8.9	<1.0	1.8	.60	<.002	<.0020	.016	<.0020	<.0020	<.0040
APR											
14...	<10	2.1	<1.0	1.7	.80	<.002	<.0020	.023	<.0020	<.0020	<.0040
22...	<10	4.8	<1.0	1.8	.60	<.002	.0171	.158	<.0020	.0165	<.0040
MAY											
06...	<10	6.9	<1.0	2.0	.40	<.002	.0088	.310	<.0020	<.0020	<.0040
22...	<10	3.2	<1.0	2.3	.60	<.002	.0142	.488	<.0020	<.0020	<.0040
JUN											
05...	<10	9.9	<1.0	2.1	.60	<.002	.0127	.458	<.0020	<.0020	.0070
25...	<10	6.8	<1.0	2.1	.70	.004	.0106	.381	<.0020	<.0020	E.0031
25...	<10	13	<1.0	2.1	.80	E.004	.0117	.390	<.0020	<.0020	<.0040
JUL											
23...	<10	14	<1.0	2.0	.70	<.002	<.0020	.243	<.0020	<.0020	<.0040
AUG											
13...	<10	6.3	<1.0	1.8	.90	<.002	<.0020	.117	<.0020	<.0020	<.0040

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DEETHYL										
	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFO WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THON, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THON, DIS- SOLVED (UG/L) (39542)
NOV											
05...	<.0040	E.0075	<.002	<.001	<.0030	<.004	<.005	<.004	.008	<.0060	<.004
DEC											
17...	<.0040	E.0168	<.002	<.001	<.0030	<.004	<.005	<.004	.011	<.0060	<.004
17...	<.0040	E.0163	<.002	<.001	<.0030	<.004	<.005	<.004	.010	<.0060	<.004
FEB											
26...	<.0040	E.0065	<.002	<.001	<.0030	<.004	<.005	<.004	.005	<.0060	<.004
MAR											
25...	<.0040	E.0070	<.002	<.001	<.0030	<.004	<.005	<.004	.005	<.0060	<.004
APR											
14...	<.0040	E.0093	<.002	<.001	<.0030	<.004	<.005	<.004	.013	<.0060	<.004
22...	<.0040	E.0073	<.002	<.001	<.0030	<.004	<.005	<.004	.033	<.0060	<.004
MAY											
06...	.0165	E.0107	<.002	<.001	<.0030	<.004	<.005	<.004	.089	<.0060	<.004
22...	.0335	E.0163	<.002	<.001	<.0030	<.004	<.005	<.004	.097	<.0060	<.004
JUN											
05...	.0275	E.0228	<.002	<.001	<.0030	<.004	<.005	<.004	.087	<.0060	<.004
25...	.0227	E.0398	<.002	<.001	<.0030	<.004	<.005	<.004	.066	<.0060	<.004
25...	.0224	E.0419	<.002	<.001	<.0030	<.004	<.005	<.004	.067	<.0060	<.004
JUL											
23...	<.0040	E.0216	<.002	<.001	<.0030	<.004	<.005	<.004	.037	<.0060	<.004
AUG											
13...	E.0089	E.0186	<.002	<.001	<.0030	<.004	<.005	<.004	.025	<.0060	<.004
DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
	NOV										
05...	<.0070	E.0053	.0112	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DEC											
17...	<.0070	E.0057	.0172	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
17...	<.0070	E.0057	.0170	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
26...	<.0070	<.0180	.0184	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
25...	<.0070	<.0180	.0204	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
14...	<.0070	E.0040	.0116	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
22...	<.0070	E.0044	.0156	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAY											
06...	<.0070	<.0180	.0229	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
22...	<.0070	E.0073	.0154	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JUN											
05...	<.0070	E.0104	.0247	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
25...	<.0070	E.0077	.0221	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
25...	<.0070	E.0080	.0215	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JUL											
23...	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
AUG											
13...	<.0070	<.0180	.0104	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	ETHO- PROP WATER FLTRD 0.7 U	EPTC WATER FLTRD 0.7 U	LIN- URON WATER FLTRD 0.7 U	METHYL AZIN- PHOS WAT FLT 0.7 U	METHYL PARA- THION WAT FLT 0.7 U	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	PEB- ULATE WATER FILTRD 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U	PHORATE WATER FLTRD 0.7 U	PRON- AMIDE WATER FLTRD 0.7 U
	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82668)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	GF, REC (UG/L) (82676)
NOV 05...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC 17...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC 17...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB 26...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR 25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR 14...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR 22...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY 06...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY 22...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 05...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN 25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL 23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG 13...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DATE	PRO- PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- FLUR- ALIN WAT FLT 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 05...	<.0040	<.0130	.0256	<.0070	<.0130	<.0010	<.0020	<.0020	7	1040	96
DEC 17...	<.0040	<.0130	.0200	<.0070	<.0130	<.0010	<.0020	<.0020	3	243	95
DEC 17...	<.0040	<.0130	.0213	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
FEB 26...	<.0040	<.0130	.0201	<.0070	<.0130	<.0010	<.0020	<.0020	10	2470	99
MAR 25...	<.0040	<.0130	.0209	<.0070	<.0130	<.0010	<.0020	<.0020	10	2380	99
APR 14...	<.0040	<.0130	.0138	<.0070	<.0130	<.0010	<.0020	<.0020	12	1560	97
APR 22...	<.0040	<.0130	.0146	<.0070	<.0130	<.0010	<.0020	<.0020	18	7140	99
MAY 06...	<.0040	<.0130	.0332	<.0070	<.0130	<.0010	<.0020	<.0020	9	3670	98
MAY 22...	<.0040	<.0130	.0252	<.0070	<.0130	<.0010	<.0020	<.0020	12	1840	97
JUN 05...	<.0040	<.0130	.0304	<.0070	<.0130	<.0010	<.0020	<.0020	39	5620	98
JUN 25...	<.0040	<.0130	.0248	<.0070	<.0130	<.0010	<.0020	<.0020	10	640	96
JUN 25...	<.0040	<.0130	.0249	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
JUL 23...	<.0040	<.0130	.0219	<.0070	<.0130	<.0010	<.0020	<.0020	19	2300	98
AUG 13...	<.0040	<.0130	.0208	<.0070	<.0130	<.0010	<.0020	<.0020	19	2310	95

TENNESSEE RIVER BASIN

03610200 CLARKS RIVER AT ALMO, KY

LOCATION.--Lat 36°41'30", long 88°16'25", Calloway County, Hydrologic Unit 06040006, on left bank at downstream side of bridge on State Highway 464, 0.3 mi southeast of Almo, 5.1 mi upstream from Rockhouse Creek, and at mile 53.5.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 413.46 ft above sea level.

REMARKS.--Estimated daily discharges: Many days between October and May and Sept. 30. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	19	31	34	59	60	500	33	34	619	19
2	9.5	14	18	30	35	52	50	209	25	28	128	19
3	9.7	13	32	29	33	46	100	251	23	197	84	19
4	10	12	36	28	32	44	70	139	1570	56	67	18
5	9.3	13	31	72	32	41	48	84	7650	30	56	18
6	9.6	25	26	165	31	70	40	195	1190	28	49	17
7	9.0	26	24	240	30	80	36	2860	157	26	51	17
8	8.2	17	24	220	30	140	36	437	71	32	270	18
9	10	14	26	180	29	110	44	174	2630	24	234	18
10	11	14	59	120	31	66	37	713	555	22	60	17
11	14	14	43	81	120	49	30	249	172	27	91	17
12	9.6	12	31	71	110	43	27	113	800	23	234	17
13	13	50	28	61	86	40	27	74	2190	21	47	17
14	19	40	26	51	61	39	94	58	317	31	38	16
15	11	30	26	56	49	36	68	48	1120	216	34	17
16	11	20	26	55	240	40	600	43	166	181	31	18
17	9.7	19	24	52	400	48	320	38	82	44	29	30
18	9.3	18	23	47	300	70	100	35	60	32	28	18
19	9.3	18	22	52	220	120	80	31	464	28	26	16
20	9.7	19	23	50	180	400	60	29	145	26	25	884
21	13	22	23	44	140	140	54	41	146	24	24	819
22	12	21	30	53	120	83	52	86	121	23	24	39
23	11	20	27	110	100	61	56	44	57	22	23	26
24	16	19	90	100	78	53	51	29	45	22	22	22
25	14	18	120	62	70	48	43	30	39	23	22	20
26	24	16	44	52	100	46	37	227	35	21	22	19
27	14	16	45	48	200	40	49	230	33	25	21	19
28	13	15	39	45	100	37	800	55	30	34	20	18
29	12	17	38	43	---	34	700	39	28	39	20	18
30	12	17	39	39	---	34	3000	32	66	125	19	17
31	12	---	36	36	---	46	---	27	---	4300	19	---
TOTAL	364.9	584	1098	2323	2991	2215	6769	7120	20020	5764	2437	2247
MEAN	11.8	19.5	35.4	74.9	107	71.5	226	230	667	186	78.6	74.9
MAX	24	50	120	240	400	400	3000	2860	7650	4300	619	884
MIN	8.2	12	18	28	29	34	27	27	23	21	19	16
CFSM	.09	.15	.26	.56	.80	.53	1.68	1.71	4.98	1.39	.59	.56
IN.	.10	.16	.30	.64	.83	.61	1.88	1.98	5.56	1.60	.68	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1998, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	49.4	168	345	213	430	290	225	211	136	67.1	49.0	26.8				
MAX	205	684	1065	550	1693	1336	623	925	667	264	377	141				
(WY)	1986	1989	1983	1988	1989	1997	1983	1983	1998	1989	1995	1996				
MIN	2.96	19.5	24.4	27.4	65.5	61.7	21.6	12.4	3.88	4.95	2.40	2.36				
(WY)	1988	1998	1996	1987	1996	1995	1986	1988	1988	1986	1983	1983				

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1983 - 1998
ANNUAL TOTAL	76924.9	53932.9	
ANNUAL MEAN	211	148	183
HIGHEST ANNUAL MEAN			367
LOWEST ANNUAL MEAN			69.8
HIGHEST DAILY MEAN	14000	Mar 2	7650
LOWEST DAILY MEAN	8.2	Oct 8	8.2
ANNUAL SEVEN-DAY MINIMUM	9.3	Oct 2	9.3
INSTANTANEOUS PEAK FLOW			11000
INSTANTANEOUS PEAK STAGE			16.31
ANNUAL RUNOFF (CFSM)	1.57	1.10	1.37
ANNUAL RUNOFF (INCHES)	21.36	14.97	18.55
10 PERCENT EXCEEDS	300	220	326
50 PERCENT EXCEEDS	43	36	32
90 PERCENT EXCEEDS	12	15	5.3

MASSAC CREEK BASIN

03611260 MASSAC CREEK NEAR PADUCAH, KY

LOCATION.--Lat 37°02'29", long 88°42'39", McCracken County, Hydrologic Unit 05140206, on left upstream wingwall of bridge n U.S. Highway 62, 1.2 mi upstream from Middle Fork, 6.9 mi west of post office in Paducah, and at mile 8.3.

DRAINAGE AREA.--14.6 mi².

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--1983 (M), 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 345.53 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 30 to Dec. 1, Feb. 17-18, Apr. 16-21, Aug. 7-9, 11-14, Aug. 30 to Sept. 3 and Sept. 12-14. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.93	2.0	1.1	1.8	9.6	11	20	6.5	3.6	4.8	1.3
2	.63	.91	1.1	1.1	1.7	8.3	8.1	14	4.5	2.8	3.9	1.3
3	.66	.99	2.0	1.2	1.7	7.6	9.8	33	4.3	239	3.5	1.4
4	.65	.97	1.6	1.2	1.7	7.1	8.6	11	23	15	3.1	1.2
5	.77	1.0	1.1	12	1.7	6.8	7.9	8.7	341	5.3	2.9	1.2
6	.80	1.8	.95	14	1.7	6.7	7.7	112	18	4.4	3.4	1.1
7	.79	1.4	.94	24	1.6	7.1	7.6	99	12	4.3	210	1.1
8	.81	1.0	1.0	16	1.7	22	19	17	9.6	7.0	100	1.1
9	.82	.91	1.2	5.5	1.6	13	26	12	750	3.7	7.8	1.0
10	.86	.91	2.6	3.6	1.6	8.9	9.4	10	194	3.5	3.9	1.0
11	.76	.91	1.4	3.0	3.2	7.4	7.9	8.9	25	4.3	11	1.1
12	.68	.98	1.1	3.3	3.0	7.0	7.4	8.2	13	3.6	4.1	1.1
13	1.3	3.3	1.0	2.8	2.2	6.9	7.4	7.6	62	3.2	2.8	1.0
14	.73	2.3	1.0	2.7	1.9	6.7	35	7.1	14	5.7	2.4	.96
15	.46	1.0	.97	2.7	1.8	6.4	9.6	6.9	8.5	93	2.2	.98
16	.73	.95	.98	2.4	73	7.6	420	6.7	5.9	6.6	2.1	.98
17	.73	.90	.99	2.3	310	15	15	6.4	4.9	4.1	1.9	.91
18	.70	1.0	.96	2.2	120	36	8.0	6.4	4.3	3.5	1.8	.93
19	.68	1.0	.94	2.1	22	117	6.2	5.5	4.5	3.1	1.9	.88
20	.70	.97	.92	2.0	13	87	6.8	5.2	4.3	2.9	1.6	.89
21	.87	1.1	1.4	2.0	10	23	33	5.2	5.0	2.8	1.6	.88
22	.76	.89	1.4	2.7	9.0	14	12	5.4	4.0	2.7	1.5	.78
23	.76	.85	1.2	5.0	8.4	12	8.9	5.0	3.1	2.6	1.5	.71
24	1.1	.87	5.5	3.0	7.6	11	7.5	4.9	2.7	2.6	1.5	.71
25	1.1	.90	3.1	2.5	7.2	9.5	6.9	5.2	2.6	2.6	1.5	.71
26	1.7	.97	1.6	2.3	17	9.0	6.5	5.4	2.3	2.7	1.4	.72
27	.56	1.0	1.7	2.2	74	8.7	7.3	5.2	2.2	3.1	1.4	.74
28	.75	1.1	1.5	2.0	14	8.4	106	4.9	2.1	3.5	1.4	.77
29	.78	1.0	1.4	2.0	---	8.0	24	4.7	2.0	3.8	1.4	.79
30	.77	2.5	1.3	1.9	---	7.8	115	4.5	79	113	1.4	.80
31	.83	---	1.2	1.8	---	11	---	4.6	---	62	1.4	---
TOTAL	24.86	35.31	46.05	132.6	714.1	516.5	965.5	460.6	1614.3	620.0	391.1	29.04
MEAN	.80	1.18	1.49	4.28	25.5	16.7	32.2	14.9	53.8	20.0	12.6	.97
MAX	1.7	3.3	5.5	24	310	117	420	112	750	239	210	1.4
MIN	.46	.85	.92	1.1	1.6	6.4	6.2	4.5	2.0	2.6	1.4	.71
CFSM	.05	.08	.10	.29	1.75	1.14	2.20	1.02	3.69	1.37	.86	.07
IN.	.06	.09	.12	.34	1.82	1.32	2.46	1.17	4.11	1.58	1.00	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1998, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	3.10	15.5	28.3	21.2	37.1	32.0	31.8	17.9	9.97	8.80	3.18	4.32															
MAX	19.4	70.8	105	48.1	160	109	121	58.8	53.8	37.3	13.9	50.1															
(WY)	1986	1997	1983	1974	1989	1997	1973	1983	1998	1983	1982	1985															
MIN	.25	.37	.71	.58	4.19	8.36	2.14	1.17	.32	.37	.30	.23															
(WY)	1982	1972	1977	1977	1996	1987	1986	1992	1972	1974	1980	1976															

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1972 - 1998

ANNUAL TOTAL	7055.71	5549.96	
ANNUAL MEAN	19.3	15.2	17.7
HIGHEST ANNUAL MEAN			37.9
LOWEST ANNUAL MEAN			6.54
HIGHEST DAILY MEAN	1310	750	1780
LOWEST DAILY MEAN	.46	.46	.09
ANNUAL SEVEN-DAY MINIMUM	.61	.68	.10
INSTANTANEOUS PEAK FLOW		2840	5990
INSTANTANEOUS PEAK STAGE		13.11	15.86
INSTANTANEOUS LOW FLOW			.06
ANNUAL RUNOFF (CFSM)	1.32	1.04	1.21
ANNUAL RUNOFF (INCHES)	17.98	14.14	16.43
10 PERCENT EXCEEDS	31	18	29
50 PERCENT EXCEEDS	2.0	2.8	2.2
90 PERCENT EXCEEDS	.68	.87	.42

OHIO RIVER MAIN STEM

03611500 OHIO RIVER AT METROPOLIS, IL

LOCATION.--Lat 37°08'51", long 88°44'27", McCracken County, Hydrologic Unit 05140206, near center of span on downstream side of pier of Paducah & Illinois Railroad bridge at Metropolis, 9.5 mi downstream from Tennessee River, 37 mi upstream from mouth, and at mile 944.1.

DRAINAGE AREA.--203,000 mi², approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to April 1928 monthly discharge only, published in WSP 1305. Gage-height records collected 9.6 mi upstream at Paducah since 1890 are contained in reports of National Weather Service. Occasional discharge measurements 1881 to 1924 in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 276.27 ft above sea level. Prior to Dec. 22, 1936, water-stage recorders (temporary installations) at Paducah, Ky., Metropolis and Joppa, Il., and Dam 52. Auxiliary water-stage recorder near Grand Chain, 0.5 mi upstream from Dam 53, and 18 mi downstream from base gage. Prior to May 29, 1936, auxiliary nonrecording gage at Dam 53.

REMARKS.--Estimated daily discharges: Aug. 8, 9. Records fair except discharges below 100,000 ft³/s and for period of estimated record, which are poor. Flow regulated by many dams and reservoirs. Maximum daily discharge includes overflow through Bay Creek and Cache River Valleys.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148000	154000	161000	222000	314000	505000	475000	829000	266000	526000	205000	113000
2	150000	161000	173000	209000	317000	468000	396000	818000	244000	534000	214000	81100
3	128000	161000	199000	163000	318000	417000	347000	815000	234000	528000	189000	79500
4	87600	158000	222000	152000	311000	358000	311000	818000	228000	519000	177000	90800
5	104000	154000	227000	150000	303000	331000	294000	817000	259000	510000	181000	85200
6	96500	164000	219000	150000	332000	328000	298000	815000	360000	513000	155000	87700
7	102000	167000	206000	182000	374000	324000	306000	819000	385000	491000	171000	83400
8	102000	162000	170000	276000	422000	346000	342000	828000	397000	428000	191000	81600
9	102000	137000	154000	442000	462000	391000	350000	834000	425000	343000	202000	88000
10	90800	151000	160000	584000	493000	397000	352000	835000	403000	299000	216000	86000
11	72200	167000	166000	657000	508000	423000	362000	834000	407000	266000	211000	75300
12	60100	220000	170000	697000	524000	455000	388000	831000	438000	272000	203000	78800
13	70900	219000	209000	711000	523000	487000	404000	825000	489000	275000	210000	86500
14	76900	219000	215000	729000	503000	512000	430000	808000	550000	262000	202000	76500
15	97900	172000	198000	749000	529000	522000	438000	764000	598000	290000	190000	81800
16	102000	149000	197000	747000	561000	520000	472000	711000	590000	325000	155000	79700
17	88800	158000	193000	729000	586000	471000	522000	669000	599000	318000	144000	76100
18	81800	176000	157000	709000	601000	417000	634000	615000	601000	284000	152000	80100
19	74200	176000	139000	664000	599000	352000	708000	525000	608000	252000	171000	78700
20	74800	177000	129000	596000	569000	349000	807000	430000	596000	220000	178000	81200
21	91000	159000	116000	516000	544000	395000	850000	349000	580000	228000	173000	80200
22	86000	135000	108000	450000	546000	453000	809000	309000	574000	267000	140000	102000
23	76000	114000	111000	404000	563000	503000	758000	285000	568000	291000	132000	119000
24	84200	126000	110000	361000	566000	537000	752000	275000	563000	271000	129000	88300
25	88000	143000	112000	306000	566000	568000	764000	301000	555000	233000	131000	77000
26	94600	152000	150000	294000	567000	589000	802000	341000	534000	205000	130000	69400
27	96100	159000	180000	301000	560000	585000	823000	362000	520000	189000	152000	67500
28	111000	155000	177000	316000	539000	597000	830000	386000	497000	192000	128000	79500
29	114000	154000	177000	325000	---	598000	833000	390000	469000	188000	105000	87000
30	130000	148000	208000	331000	---	583000	841000	334000	490000	185000	109000	79700
31	139000	---	224000	326000	---	547000	---	296000	---	189000	92500	---
TOTAL	3020400	4847000	5337000	13448000	13600000	14328000	16698000	18868000	14027000	9893000	5138500	2520600
MEAN	97430	161600	172200	433800	485700	462200	556600	608600	467600	319100	165800	84020
MAX	150000	220000	227000	749000	601000	598000	850000	835000	608000	534000	216000	119000
MIN	60100	114000	108000	150000	303000	324000	294000	275000	228000	185000	92500	67500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1998, BY WATER YEAR (WY)

MEAN	103500	166200	291900	399300	469800	529000	461300	341000	222900	154900	122200	100000
MAX	335600	450300	717500	1022000	1218000	1039000	896400	917800	596400	441200	331100	383500
(WY)	1980	1986	1973	1937	1937	1997	1994	1983	1997	1928	1958	1979
MIN	22710	33400	48610	71650	77380	154700	129900	75180	53840	23350	25390	29330
(WY)	1931	1931	1931	1940	1934	1941	1986	1941	1936	1930	1930	1930

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1928 - 1998

ANNUAL TOTAL	120717100	121725500	
ANNUAL MEAN	330700	333500	
HIGHEST ANNUAL MEAN			278500
LOWEST ANNUAL MEAN			436600
HIGHEST DAILY MEAN	1210000	Mar 11	850000
LOWEST DAILY MEAN	60100	Oct 12	60100
ANNUAL SEVEN-DAY MINIMUM	81100	Oct 18	78300
INSTANTANEOUS PEAK FLOW			863000
INSTANTANEOUS PEAK STAGE		51.05	Apr 21
10 PERCENT EXCEEDS	688000		641000
50 PERCENT EXCEEDS	209000		191000
90 PERCENT EXCEEDS	90800		68300

BAYOU CREEK BASIN

03611800 BAYOU CREEK NEAR HEATH, KY

LOCATION.--Lat 37°05'58", long 88°49'27", McCracken County, Hydrologic Unit 05140206, on left downstream wingwall of bridge on Dyke Road, 1.0 mi southwest of Paducah Gaseous Diffusion Plant, 2.0 mi northwest of Heath, 3.0 mi upstream from Brushy Creek, and at mile 7.3.

DRAINAGE AREA.--6.55 mi².

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 366.06 ft above sea level (levels by U.S. Department of Energy).

REMARKS.--Estimated daily discharges: oct. 2-17, 18, Nov. 3-5, 30, Dec. 1-5, 14-18 and April 4-7. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.38	.42	.08	.43	1.9	1.8	5.6	.17	1.4	.95	.28
2	.15	.34	.38	.08	.38	1.3	.94	4.6	.17	.54	.43	.19
3	.14	.28	.64	.08	.40	.88	1.8	15	.16	122	.54	.18
4	.14	.26	.58	.08	.42	.66	1.6	2.5	.37	5.6	.31	.16
5	.15	.30	.52	3.2	.49	.54	1.2	1.4	27	1.5	.27	.14
6	.16	.71	.49	4.1	.49	.58	1.0	99	.54	.76	.33	.13
7	.18	.54	.49	14	.46	.57	.96	48	.20	.49	183	.13
8	.20	.44	.52	13	.43	3.7	.92	3.8	.17	.43	35	.14
9	.20	.40	.69	2.3	.40	2.4	.86	1.8	375	.43	5.6	.13
10	.22	.41	2.0	1.1	.41	1.0	.68	1.2	20	.43	1.5	.14
11	.16	.40	.41	.78	1.6	.65	.58	.65	3.7	.52	17	.16
12	.18	.45	.25	.63	1.5	.52	.55	.48	1.7	.37	5.6	.15
13	.45	.85	.21	.53	.79	.48	1.1	.36	9.1	.37	1.2	.17
14	.18	1.1	.21	.45	.53	.42	4.1	.29	2.3	.44	.62	.18
15	.13	.44	.23	1.1	.44	.40	1.5	.25	1.3	.43	.41	.18
16	.13	.38	.24	1.0	21	1.1	61	.27	.64	.38	.35	.16
17	.14	.38	.25	.69	141	10	3.8	.28	.48	.36	.35	.13
18	.20	.40	.26	.62	53	47	1.6	.33	.38	.39	.35	.10
19	.15	.39	.28	.52	5.4	91	1.0	.36	.63	.39	.32	.12
20	.14	.40	.27	.33	3.0	38	.69	.44	.58	.41	.29	.12
21	.24	.44	.41	.27	1.8	5.7	4.3	.38	1.5	.42	.27	.13
22	.13	.48	.56	.67	1.4	2.1	1.6	.32	.54	.41	.21	.15
23	.14	.49	.40	2.2	1.1	1.3	.87	.25	.37	.47	.27	.16
24	.25	.39	3.3	1.1	.79	.71	.55	.21	.36	.54	.26	.16
25	.20	.37	.81	.76	.66	.78	.70	.27	.32	.62	.25	.17
26	.71	.40	.16	.60	9.8	.94	.40	.29	.31	.74	.25	.12
27	.35	.42	.15	.50	37	.91	1.0	.26	.31	.73	.30	.12
28	.26	.40	.11	.44	3.3	.84	39	.23	.29	.75	.31	.12
29	.25	.40	.11	.44	---	.70	52	.20	.30	.90	.30	.11
30	.23	.46	.12	.39	---	.69	63	.18	50	78	.31	.13
31	.31	---	.10	.38	---	1.3	---	.16	---	14	.35	---
TOTAL	6.63	13.50	15.57	52.42	288.42	219.07	251.10	189.36	498.89	235.22	257.50	4.46
MEAN	.21	.45	.50	1.69	10.3	7.07	8.37	6.11	16.6	7.59	8.31	.15
MAX	.71	1.1	3.3	14	141	91	63	99	375	122	183	.28
MIN	.13	.26	.10	.08	.38	.40	.40	.16	.16	.36	.21	.10
CFSM	.03	.07	.08	.26	1.57	1.08	1.28	.93	2.54	1.16	1.27	.02
IN.	.04	.08	.09	.30	1.64	1.24	1.43	1.08	2.83	1.34	1.46	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	.95	5.86	10.8	7.79	10.9	12.2	8.41	9.77	5.35	2.50	2.16	.66
MAX	3.04	22.8	37.2	13.6	15.6	34.9	16.6	16.5	16.6	7.59	8.31	2.11
(WY)	1997	1997	1991	1994	1991	1997	1994	1995	1998	1998	1998	1993
MIN	.21	.45	.50	1.69	.60	3.26	4.90	.56	.17	.089	.12	.15
(WY)	1998	1998	1998	1998	1996	1995	1991	1994	1994	1993	1993	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1991 - 1998
ANNUAL TOTAL	2453.05	2032.14	
ANNUAL MEAN	6.72	5.57	6.56
HIGHEST ANNUAL MEAN			10.0
LOWEST ANNUAL MEAN			3.85
HIGHEST DAILY MEAN	710	375	710
LOWEST DAILY MEAN	.10	.08	.05
ANNUAL SEVEN-DAY MINIMUM	.14	.09	.06
INSTANTANEOUS PEAK FLOW		1640	1870
INSTANTANEOUS PEAK STAGE		9.03	9.90
ANNUAL RUNOFF (CFSM)	1.03	.85	1.00
ANNUAL RUNOFF (INCHES)	13.93	11.54	13.61
10 PERCENT EXCEEDS	5.4	4.4	5.4
50 PERCENT EXCEEDS	.55	.44	.45
90 PERCENT EXCEEDS	.16	.15	.13

BAYOU CREEK BASIN

03611850 BAYOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'41", long 88°49'38", McCracken County, Hydrologic Unit 05140206, near right bank on downstream side of bridge on State Highway 358, 750 ft downstream of Brushy Creek, 1.4 mi north of Paducah Gaseous Diffusion Plant, 3.6 mi northwest of Grahamville, and at mile 4.1.

DRAINAGE AREA.--14.9 mi².

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 330 ft above sea level (from topographic map).

REMARKS.--Estimated daily discharges: Oct. 1-3, 24-29 and Sept. 20-23. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	9.5	16	4.8	5.2	12	11	21	5.8	8.6	12	9.6
2	3.0	8.0	15	4.3	5.5	11	9.8	21	5.7	7.6	12	9.2
3	2.6	6.6	18	4.1	5.1	9.8	15	49	7.3	181	11	9.3
4	2.4	6.4	15	4.0	4.0	9.4	12	13	11	23	10	8.9
5	2.5	7.9	14	21	4.6	9.1	11	11	94	12	10	8.8
6	2.5	14	12	22	6.0	9.4	10	156	8.2	11	11	8.7
7	2.7	11	11	48	6.1	8.7	9.8	133	6.8	10	272	8.9
8	3.0	11	12	41	6.4	14	9.6	19	6.6	10	84	8.8
9	3.7	11	12	12	6.3	12	9.2	12	502	11	19	8.7
10	3.3	11	19	8.7	6.6	9.3	7.1	9.7	48	12	13	8.7
11	3.1	13	11	7.8	11	7.5	7.0	8.8	18	13	23	8.5
12	3.6	14	9.4	7.7	9.7	7.0	6.9	9.1	12	10	16	8.4
13	8.4	20	7.4	8.6	7.9	6.9	9.7	7.9	19	22	10	8.1
14	6.8	16	7.0	8.3	7.6	6.6	20	7.9	11	16	9.2	7.9
15	4.9	13	6.9	9.2	6.9	6.6	9.9	7.8	8.2	22	9.5	7.7
16	5.0	14	6.5	7.9	93	8.8	152	6.8	6.8	12	9.4	7.3
17	5.2	14	6.2	7.0	297	26	18	6.5	6.6	10	9.6	6.5
18	6.1	13	6.3	7.0	138	114	10	6.2	6.4	11	9.7	6.0
19	6.0	12	6.1	7.1	20	169	9.1	6.0	8.6	10	9.5	6.1
20	6.5	12	5.4	6.8	13	139	8.1	5.9	7.5	9.6	9.2	6.0
21	12	12	6.5	6.3	12	30	19	8.4	10	9.2	8.9	6.4
22	7.2	12	7.1	7.1	12	19	12	8.4	8.9	9.1	8.5	7.0
23	6.3	12	5.9	9.4	12	16	10	7.6	8.6	9.1	8.2	7.4
24	6.0	13	21	6.6	11	14	9.5	7.8	8.1	9.8	7.9	7.3
25	6.5	12	7.7	5.6	11	12	9.3	8.8	8.5	11	7.7	6.4
26	13	12	5.0	5.4	26	11	9.2	8.1	8.9	12	7.8	5.9
27	7.8	13	5.0	4.9	106	10	11	7.1	8.0	9.9	8.6	5.7
28	7.2	13	4.8	4.6	16	9.7	100	6.5	8.0	9.1	9.1	6.0
29	6.8	13	4.8	4.3	---	10	140	6.2	9.4	9.9	9.1	6.9
30	6.6	15	4.8	4.9	---	9.6	179	6.1	95	69	9.1	6.0
31	8.3	---	4.6	5.2	---	12	---	5.9	---	27	9.5	---
TOTAL	172.6	364.4	293.4	311.6	865.9	749.4	854.2	598.5	972.9	606.9	663.5	227.1
MEAN	5.57	12.1	9.46	10.1	30.9	24.2	28.5	19.3	32.4	19.6	21.4	7.57
MAX	13	20	21	48	297	169	179	156	502	181	272	9.6
MIN	2.4	6.4	4.6	4.0	4.0	6.6	6.9	5.9	5.7	7.6	7.7	5.7
CFSM	.37	.82	.64	.67	2.08	1.62	1.91	1.30	2.18	1.31	1.44	.51
IN.	.43	.91	.73	.78	2.16	1.87	2.13	1.49	2.43	1.52	1.66	.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	9.23	20.2	28.0	25.4	29.5	33.4	27.8	27.0	19.6	12.0	10.7	7.75				
MAX	20.0	56.7	60.7	39.2	37.9	77.5	41.0	38.4	32.4	24.3	21.4	12.6				
(WY)	1997	1997	1991	1994	1997	1997	1994	1996	1998	1996	1998	1993				
MIN	5.57	5.76	6.66	10.1	6.13	15.0	17.3	9.30	7.56	6.37	6.51	5.11				
(WY)	1998	1991	1996	1998	1996	1995	1991	1994	1991	1994	1993	1997				

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1991 - 1998

ANNUAL TOTAL	8352.3	6680.4		
ANNUAL MEAN	22.9	18.3		21.1
HIGHEST ANNUAL MEAN				30.9
LOWEST ANNUAL MEAN				16.4
HIGHEST DAILY MEAN	923	Mar 1	502	Jun 9
LOWEST DAILY MEAN	2.4	Oct 4	2.4	Oct 4
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 2	2.7	Oct 2
INSTANTANEOUS PEAK FLOW			1550	Jun 9
INSTANTANEOUS PEAK STAGE			11.88	Jun 9
ANNUAL RUNOFF (CFSM)	1.54		1.23	
ANNUAL RUNOFF (INCHES)	20.85		16.68	
10 PERCENT EXCEEDS	30		21	26
50 PERCENT EXCEEDS	11		9.1	8.5
90 PERCENT EXCEEDS	5.1		5.5	5.0

BAYOU CREEK BASIN

03611900 LITTLE BAYOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'22", long 88°47'26", McCracken County, Hydrologic Unit 05140206, on left bank on reservation of Tennessee Valley Authority Shawnee Steam Plant, 30 ft upstream of bridge on unnamed county road, 1.1 mi southwest of Shawnee Steam Plant, 2.2 mi upstream from Bayou Creek, and 2.3 mi north of Grahamville.

DRAINAGE AREA.--5.78 mi².

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 324.80 ft above sea level (levels by U.S. Department of Energy).

REMARKS.--Estimated daily discharges: Oct. 3-11, Nov. 1-5, 16-19, 24-30, Dec. 1, 3-4 and Aug. 24 to Sept. 23. Records fair except for periods of estimated record, which are poor. Some regulation from Paducah Gaseous Diffusion Plant, 0.4 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.0	5.0	.42	.69	2.7	2.2	9.8	1.1	1.3	1.4	1.0
2	1.0	.98	1.5	.40	.74	1.8	1.5	5.7	1.1	.90	1.4	.90
3	.96	.94	2.6	.40	.70	1.5	2.8	22	1.1	36	1.3	.82
4	.90	.90	2.1	.40	.78	1.3	2.2	4.8	2.9	8.1	1.4	.76
5	.86	1.2	1.8	6.1	1.0	1.2	1.6	2.4	27	2.0	1.3	.74
6	.88	3.6	1.8	4.0	.85	1.1	1.4	53	1.3	1.3	1.6	.72
7	.90	3.0	1.7	11	.85	1.1	1.4	49	.78	1.1	130	.70
8	1.0	1.9	1.6	8.9	.76	2.9	1.4	7.1	.72	1.1	67	.74
9	1.1	1.9	2.7	1.8	.75	2.1	1.5	2.8	259	1.1	9.4	.72
10	1.0	2.0	4.9	.95	.72	1.5	1.4	2.0	19	1.7	3.4	.76
11	.94	2.2	.75	.83	2.1	1.2	1.4	1.5	4.3	2.0	3.2	.78
12	1.6	4.4	.51	.76	1.4	1.2	1.2	1.3	2.1	1.4	3.8	.76
13	4.2	10	.50	.75	.90	1.2	1.6	1.2	4.7	1.2	3.0	.80
14	2.0	5.2	.55	.74	.86	1.2	7.1	1.0	2.6	4.2	2.4	.82
15	.86	1.9	.57	1.1	.78	1.1	2.0	1.0	1.8	4.3	1.3	.82
16	.82	2.1	.56	.92	20	2.1	59	.97	1.2	2.1	1.3	.78
17	.91	2.3	.57	.82	76	6.9	8.6	.93	1.1	1.6	1.6	.72
18	.86	2.2	.59	.76	50	33	3.0	.94	1.1	1.5	1.3	.64
19	.88	2.2	.65	.79	8.7	44	2.0	.93	2.5	1.6	1.3	.66
20	.85	2.2	.76	.76	3.9	54	1.4	.90	1.6	1.6	1.3	.72
21	1.5	2.1	1.3	.70	2.1	11	4.6	.99	2.7	1.6	1.3	.78
22	1.0	2.5	1.5	.97	1.6	4.8	3.4	1.6	1.7	1.6	1.3	.80
23	.92	2.4	.91	1.7	1.4	2.7	4.4	1.0	1.5	1.6	1.3	.80
24	1.4	2.3	7.5	.81	1.2	1.9	3.6	1.0	1.4	1.7	1.2	.81
25	1.1	2.2	.92	.79	1.2	1.6	3.1	1.3	1.3	1.7	1.1	.78
26	5.3	2.2	.55	.72	5.8	1.5	2.4	1.1	1.5	2.1	1.0	.85
27	1.0	2.3	.49	.72	42	1.5	1.5	1.2	1.2	1.7	1.1	.83
28	.88	2.4	.46	.70	5.6	1.6	29	1.0	1.1	1.6	1.1	.82
29	.82	2.7	.42	.71	---	1.6	54	1.0	1.1	1.9	1.1	.80
30	.76	3.0	.44	.75	---	1.6	71	1.4	22	4.0	1.1	.89
31	.77	---	.45	.70	---	2.5	---	1.1	---	3.0	1.2	---
TOTAL	39.57	76.22	46.65	51.87	233.38	195.4	281.7	181.96	372.50	98.60	251.5	23.52
MEAN	1.28	2.54	1.50	1.67	8.34	6.30	9.39	5.87	12.4	3.18	8.11	.78
MAX	5.3	10	7.5	11	76	54	71	53	259	36	130	1.0
MIN	.76	.90	.42	.40	.69	1.1	1.2	.90	.72	.90	1.0	.64
CFSM	.22	.44	.26	.29	1.44	1.09	1.62	1.02	2.15	.55	1.40	.14
IN.	.25	.49	.30	.33	1.50	1.26	1.81	1.17	2.40	.63	1.62	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	2.14	6.28	10.4	8.90	10.0	12.0	9.61	8.94	4.65	2.52	2.36	1.56
MAX	4.25	18.3	33.5	17.9	17.0	32.5	19.2	13.5	12.4	7.87	8.11	2.98
(WY)	1997	1997	1991	1991	1991	1997	1994	1997	1998	1996	1998	1993
MIN	1.28	1.33	1.26	1.67	1.02	3.79	5.62	1.48	1.04	.82	.72	.78
(WY)	1998	1992	1996	1998	1996	1995	1991	1994	1994	1991	1996	1998

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1991 - 1998
ANNUAL TOTAL	2745.49	1852.87	
ANNUAL MEAN	7.52	5.08	6.71
HIGHEST ANNUAL MEAN			10.1
LOWEST ANNUAL MEAN			4.35
HIGHEST DAILY MEAN	506	259	506
LOWEST DAILY MEAN	.42	.40	.02
ANNUAL SEVEN-DAY MINIMUM	.53	.42	.42
INSTANTANEOUS PEAK FLOW		868	1300
INSTANTANEOUS PEAK STAGE		9.20	11.26
ANNUAL RUNOFF (CFSM)	1.30	.88	1.16
ANNUAL RUNOFF (INCHES)	17.67	11.93	15.78
10 PERCENT EXCEEDS	9.1	5.7	8.9
50 PERCENT EXCEEDS	1.6	1.3	1.2
90 PERCENT EXCEEDS	.75	.74	.70

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°12'11", long 89°02'30", Pulaski County, Hydrologic Unit 05140206, at auxiliary gaging station, 0.5 mi upstream from Gar Creek, 3.0 mi southwest of Grand Chain, 18.1 mi downstream from gaging station at Metropolis, and at mile 962.2.

DRAINAGE AREA.--203,100 mi², approximately.

PERIOD OF RECORD.--Water years 1955 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1954 to September 1970, January 1973 to September 1990.

WATER TEMPERATURES: October 1954 to September 1970, January 1973 to September 1990.

REMARKS.--Records of daily discharge are published for station at Metropolis, IL, (station 03611500). Flow regulated by many days dams and reservoirs.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 693 microsiemens, Nov. 25, 1968; minimum daily, 170 microsiemens, Feb. 9, 1957, Jan. 21, 1973.

WATER TEMPERATURES: Maximum daily, 31.0°C, July 15, 1964, July 17-21, 25, 1977; minimum daily, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV											
06...	1140	ENVIRONMENTAL	--	284	7.6	13.9	5.2	10.2	98	98	27
DEC											
18...	1230	ENVIRONMENTAL	157000	310	8.1	6.5	10	11.7	94	120	34
JAN											
20...	1310	ENVIRONMENTAL	582000	262	7.6	6.5	62	11.7	94	110	32
FEB											
25...	1400	ENVIRONMENTAL	551000	244	7.5	8.5	27	12.2	124	100	29
25...	1410	REPLICATE	--	--	--	--	28	--	--	100	29
MAR											
26...	1140	ENVIRONMENTAL	579000	269	--	9.9	41	11.2	98	110	32
APR											
10...	1310	ENVIRONMENTAL	308000	304	7.7	14.1	26	9.7	94	130	35
23...	1350	ENVIRONMENTAL	734000	256	7.7	15.0	110	8.2	81	110	33
MAY											
07...	1300	ENVIRONMENTAL	822000	235	7.6	17.0	35	9.6	100	100	30
21...	1340	ENVIRONMENTAL	339000	281	7.6	23.0	27	8.6	100	110	32
22...	1350	REPLICATE	--	--	--	--	21	--	--	120	33
JUN											
04...	1340	ENVIRONMENTAL	366000	307	7.5	25.0	17	7.3	89	130	36
24...	1220	ENVIRONMENTAL	562000	303	7.4	25.0	62	5.9	71	120	34
JUL											
22...	1300	ENVIRONMENTAL	260000	296	7.7	29.0	17	6.4	83	120	33
AUG											
12...	1230	ENVIRONMENTAL	185000	250	7.7	28.0	24	6.4	81	100	29
26...	1150	ENVIRONMENTAL	125000	258	7.8	29.5	11	7.5	98	110	30

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, DIS- TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
NOV												
06...	7.6	14	2.3	86	71	13	26	.11	4.5	156	.74	.63
DEC												
18...	9.0	17	2.7	90	74	21	56	.11	4.4	216	1.4	1.3
JAN												
20...	7.2	10	2.6	81	66	14	36	.16	5.3	178	2.0	1.6
FEB												
25...	6.8	9.1	1.8	80	66	11	34	<.10	5.5	158	1.5	1.3
25...	6.8	9.2	1.8	--	--	12	35	<.10	5.4	140	1.5	1.3
MAR												
26...	8.1	9.0	2.0	90	74	12	38	.11	4.8	167	1.9	1.5
APR												
10...	9.3	9.2	2.1	103	84	13	38	.11	4.5	186	2.1	2.0
23...	7.2	7.1	2.3	95	78	9.7	30	.13	4.6	149	2.1	1.4
MAY												
07...	7.1	6.8	2.4	92	75	8.2	30	.12	5.0	154	1.4	1.2
21...	8.1	7.2	2.2	104	85	9.3	31	.12	4.7	159	1.7	1.4
22...	8.2	7.1	2.1	--	--	9.2	31	.11	4.7	157	1.8	1.4
JUN												
04...	9.7	8.5	2.5	109	90	11	34	.14	5.2	178	2.2	2.0
24...	9.3	9.0	3.8	97	79	11	37	.15	5.7	180	2.9	2.4
JUL												
22...	9.1	7.9	2.9	102	84	11	30	.15	5.1	171	1.7	1.5
AUG												
12...	7.2	7.6	2.7	96	78	10	24	.14	4.3	146	1.3	.89
26...	7.3	7.9	2.7	99	81	10	21	.14	3.7	148	.98	.81
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV												
06...	.13	.03	.041	.446	.159	.405	.19	.29	.073	.036	.13	.20
DEC												
18...	--	--	.013	1.04	<.020	1.03	.24	.38	.079	.041	.12	--
JAN												
20...	--	--	.018	1.40	<.020	1.38	.19	.62	.252	.028	.11	--
FEB												
25...	.36	.16	<.010	1.09	.026	--	.18	.39	.141	.028	.09	.03
25...	.34	.15	<.010	1.11	.032	--	.19	.38	.139	.024	.09	.04
MAR												
26...	.57	.21	<.010	1.29	.020	--	.23	.59	.197	.045	.12	.03
APR												
10...	.36	.20	.019	1.73	.043	1.71	.24	.40	.128	.046	.12	.06
23...	--	--	.024	1.20	<.020	1.18	.22	.94	.446	.042	.15	--
MAY												
07...	--	--	.014	.946	<.020	.932	.21	.47	.151	.023	.10	--
21...	.47	.18	.023	1.20	.047	1.18	.23	.51	.120	.015	.08	.06
22...	.51	.17	.023	1.21	.039	1.18	.20	.55	.125	.020	.09	.05
JUN												
04...	.39	.20	.043	1.74	.026	1.70	.23	.42	.105	<.010	.74	.03
24...	--	--	.013	2.16	<.020	2.14	.29	.77	.249	.053	.19	--
JUL												
22...	.41	.19	.016	1.27	.020	1.25	.22	.44	.126	.024	.17	.03
AUG												
12...	.54	.10	.025	.753	.039	.728	.14	.58	.155	.040	.15	.05
26...	.38	.21	.015	.564	.033	.549	.24	.41	.078	.039	.12	.04

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV											
06...	1.8	.13	.041	3.2	<1.0	<1	25	<1.0	50	<1.0	1.5
DEC											
18...	4.6	.04	.038	3.2	<1.0	<1	34	<1.0	42	<1.0	<1.0
JAN											
20...	6.1	.06	.036	5.9	<1.0	<1	31	<1.0	28	<1.0	2.1
FEB											
25...	--	--	.029	6.0	<1.0	<1	26	<1.0	20	<1.0	2.1
25...	--	--	.029	5.8	<1.0	<1	26	<1.0	22	<1.0	1.9
MAR											
26...	--	--	.038	5.8	<1.0	<1	28	<1.0	24	<1.0	1.1
APR											
10...	7.6	.06	.040	5.8	<1.0	<1	31	<1.0	26	<1.0	<1.0
23...	5.2	.08	.049	6.8	<1.0	<1	28	<1.0	28	<1.0	1.9
MAY											
07...	4.1	.05	.032	6.5	<1.0	1	28	<1.0	24	<1.0	1.2
21...	5.2	.08	.025	6.9	<1.0	<1	32	<1.0	27	<1.0	1.1
22...	5.2	.08	.028	6.9	<1.0	<1	32	<1.0	27	<1.0	1.0
JUN											
04...	7.5	.14	.242	5.2	<1.0	<1	34	<1.0	32	<1.0	1.7
24...	9.5	.04	.063	8.6	<1.0	<1	34	<1.0	35	<1.0	1.0
JUL											
22...	5.5	.05	.054	7.1	<1.0	1	36	<1.0	38	<1.0	<1.0
AUG											
12...	3.2	.08	.050	6.3	<1.0	<1	30	<1.0	34	<1.0	1.0
26...	2.4	.05	.038	6.0	<1.0	1	30	<1.0	42	<1.0	<1.0
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
NOV											
06...	<1.0	1.0	<3.0	<1.0	<4	<1.0	2.4	<1.0	<1	<1.0	122
DEC											
18...	<1.0	1.5	10	<1.0	5	3.9	2.6	1.6	<1	<1.0	165
JAN											
20...	<1.0	1.7	12	<1.0	<4	1.5	1.4	1.9	<1	<1.0	139
FEB											
25...	<1.0	1.1	<10	<1.0	<4	1.7	<1.0	1.2	<1	<1.0	126
25...	<1.0	1.1	<10	<1.0	<4	1.8	1.0	1.2	<1	<1.0	128
MAR											
26...	<1.0	1.2	12	<1.0	6	<1.0	1.2	1.2	<1	<1.0	135
APR											
10...	<1.0	1.3	<10	<1.0	<4	1.3	1.5	1.0	<1	<1.0	146
23...	<1.0	1.5	<10	<1.0	<4	<1.0	1.2	1.2	<1	<1.0	131
MAY											
07...	<1.0	1.4	<10	<1.0	<4	<1.0	<1.0	1.1	<1	<1.0	126
21...	<1.0	1.4	<10	<1.0	<4	1.0	1.3	1.1	<1	<1.0	124
22...	<1.0	1.3	<10	<1.0	<4	<1.0	1.3	1.1	<1	<1.0	127
JUN											
04...	<1.0	1.6	<10	<1.0	<4	<1.0	1.5	1.3	<1	<1.0	142
24...	<1.0	1.9	<10	<1.0	<4	<1.0	1.6	1.3	<1	<1.0	150
JUL											
22...	<1.0	1.5	<10	<1.0	<4	<1.0	1.9	1.2	<1	<1.0	133
AUG											
12...	<1.0	1.5	<10	<1.0	<4	<1.0	1.7	1.2	<1	<1.0	106
26...	<1.0	1.5	<10	<1.0	<4	<1.0	2.2	1.2	<1	<1.0	114

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
	NOV 06...	<6	2.7	<1.0	2.2	.20	<.002	.0053	.116	<.0020	<.0020
DEC 18...	<10	4.4	<1.0	2.6	.50	<.002	.0060	.088	<.0020	<.0020	E.0037
JAN 20...	<10	1.8	<1.0	3.2	1.9	<.002	.0088	.099	<.0020	<.0020	<.0040
FEB 25...	<10	1.6	<1.0	2.2	.90	<.002	<.0020	.041	<.0020	<.0020	<.0040
FEB 25...	<10	6.6	<1.0	2.3	.90	<.002	<.0020	.045	<.0020	<.0020	<.0040
MAR 26...	<10	1.6	<1.0	2.9	1.7	<.002	<.0020	.061	<.0020	<.0020	<.0040
APR 10...	<10	<1.0	<1.0	2.7	.30	.005	.0065	.100	<.0020	<.0020	E.0037
APR 23...	<10	<1.0	<1.0	3.4	2.3	.008	.0677	.648	<.0020	<.0020	.0046
MAY 07...	<10	3.0	<1.0	3.2	1.2	.014	.177	1.42	<.0020	<.0020	<.0040
MAY 21...	<10	3.0	<1.0	3.7	1.2	<.010	.142	1.29	<.0020	<.0020	<.0040
MAY 22...	<10	6.1	<1.0	3.3	1.2	.010	.160	1.48	<.0020	<.0020	<.0040
JUN 04...	<10	6.9	<1.0	2.5	.70	.113	.766	4.18	<.0020	<.0020	E.0250
JUN 24...	<10	2.3	<1.0	3.4	2.7	.079	.325	4.26	<.0020	<.0020	--
JUL 22...	<10	2.6	<1.0	3.2	2.4	.012	.0470	.747	<.0020	<.0020	<.0040
AUG 12...	<10	1.7	<1.0	2.9	1.7	.007	.0168	.318	<.0020	<.0020	<.0040
AUG 26...	<10	2.8	<1.0	2.9	.90	.007	.0110	.282	<.0020	<.0020	<.0040
DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THON, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THON, DIS- SOLVED (UG/L) (39542)
	NOV 06...	.0155	E.0078	<.002	<.001	<.0030	<.004	<.005	<.004	.027	<.0060
DEC 18...	.0184	E.0240	.004	<.001	<.0030	<.004	<.005	<.004	.031	E.0023	<.004
JAN 20...	.0288	E.0355	<.002	<.001	<.0030	<.004	<.005	<.004	.056	<.0060	<.004
FEB 25...	.0107	E.0179	<.002	<.001	<.0030	<.004	<.005	<.004	.023	<.0060	<.004
FEB 25...	.0113	E.0168	<.002	<.001	<.0030	<.004	<.005	<.004	.025	<.0060	<.004
MAR 26...	.0175	E.0210	<.002	<.001	<.0030	<.004	<.005	<.004	.056	<.0060	<.004
APR 10...	.0266	E.0275	<.002	<.001	<.0030	<.004	<.005	<.004	.055	<.0060	<.004
APR 23...	.113	E.0222	.009	<.001	<.0030	<.004	<.005	.018	.227	<.0060	<.004
MAY 07...	.166	E.0445	.007	<.001	<.0030	<.004	<.005	.021	.434	<.0060	<.004
MAY 21...	.197	E.0483	<.002	<.001	<.0030	<.004	<.005	.019	.464	<.0060	<.004
MAY 22...	.258	E.0616	<.002	<.001	<.0030	<.004	<.005	.022	.564	<.0060	<.004
JUN 04...	.713	E.149	.004	<.001	<.0030	<.004	<.005	.039	1.62	<.0060	<.004
JUN 24...	.712	E.362	.008	<.001	<.0030	<.004	<.005	.050	2.14	<.0060	<.004
JUL 22...	.162	E.154	<.002	<.001	<.0030	<.004	<.005	.015	.382	<.0060	<.004
AUG 12...	.0638	E.0714	<.002	<.001	<.0030	<.004	<.005	<.004	.162	<.0060	<.004
AUG 26...	.0557	E.0532	<.002	<.001	<.0030	<.004	<.005	<.004	.122	<.0060	<.004

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PROP- CHLOR, WATER, DISS, REC	PRO- METON, WATER, DISS, REC	SI- MAZINE, WATER, DISS, REC	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC	CAR- BARYL WATER FLTRD 0.7 U GF, REC	CARBO- FURAN WATER FLTRD 0.7 U GF, REC	DCPA WATER FLTRD 0.7 U GF, REC	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC	DISUL- FOTON WATER FLTRD 0.7 U GF, REC	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC
	(UG/L) (04024)	(UG/L) (04037)	(UG/L) (04035)	(UG/L) (82673)	(UG/L) (82680)	(UG/L) (82674)	(UG/L) (82682)	(UG/L) (82660)	(UG/L) (82677)	(UG/L) (82663)	(UG/L) (82683)
NOV											
06...	<.0070	E.0095	.0156	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DEC											
18...	<.0070	E.0088	.0197	<.0020	E.0043	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JAN											
20...	<.0070	<.0180	.0216	<.0020	E.0036	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
FEB											
25...	<.0070	<.0180	.0116	<.0020	E.0037	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
25...	<.0070	<.0180	.0128	<.0020	E.0039	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAR											
26...	<.0070	<.0180	.0175	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
APR											
10...	<.0070	<.0180	.0198	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
23...	<.0070	E.0078	.159	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
MAY											
07...	<.0070	E.0130	.268	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
21...	<.0070	E.0124	.174	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
22...	<.0070	E.0120	.215	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
JUN											
04...	<.0070	E.0167	.304	<.0020	<.0030	E.0140	<.0020	<.0030	<.0170	<.0040	<.0040
24...	<.0070	.0180	.264	<.0020	<.0030	E.0446	<.0020	<.0030	<.0170	<.0040	.0148
JUL											
22...	<.0070	.0210	.0584	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
AUG											
12...	<.0070	E.0150	.0320	<.0020	<.0030	<.0030	E.0032	<.0030	<.0170	<.0040	<.0040
26...	<.0070	E.0160	.0254	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040	<.0040
DATE	ETHO- PROP WATER FLTRD 0.7 U GF, REC	EPTC WATER FLTRD 0.7 U GF, REC	LIN- URON WATER FLTRD 0.7 U GF, REC	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC	METHYL PARA- THION WAT FLT 0.7 U GF, REC	MOL- INATE WATER FLTRD 0.7 U GF, REC	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC	FEB- ULATE WATER FILTRD 0.7 U GF, REC	PER- METHRIN CIS WAT FLT 0.7 U GF, REC	PHORATE WATER FLTRD 0.7 U GF, REC	PRON- AMIDE WATER FLTRD 0.7 U GF, REC
	(UG/L) (82672)	(UG/L) (82668)	(UG/L) (82666)	(UG/L) (82686)	(UG/L) (82667)	(UG/L) (82671)	(UG/L) (82684)	(UG/L) (82669)	(UG/L) (82687)	(UG/L) (82664)	(UG/L) (82676)
NOV											
06...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
DEC											
18...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JAN											
20...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
FEB											
25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAR											
26...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
APR											
10...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
23...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
MAY											
07...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
21...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
22...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUN											
04...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
24...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
JUL											
22...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
AUG											
12...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030
26...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0050	<.0020	<.0030

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV											
06...	<.0040	<.0130	.0140	<.0070	<.0130	<.0010	<.0020	<.0020	20	--	93
DEC											
18...	<.0040	<.0130	<.0140	<.0070	<.0130	<.0010	<.0020	<.0020	22	9330	96
JAN											
20...	<.0040	<.0130	.0192	<.0070	<.0130	<.0010	<.0020	<.0020	172	270000	93
FEB											
25...	<.0040	<.0130	E.0087	<.0070	<.0130	<.0010	<.0020	<.0020	85	126000	86
25...	<.0040	<.0130	E.0099	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
MAR											
26...	<.0040	<.0130	.0141	<.0070	<.0130	<.0010	<.0020	<.0020	125	195000	94
APR											
10...	<.0040	<.0130	E.0090	<.0070	<.0130	<.0010	<.0020	<.0020	73	60700	98
23...	<.0040	<.0130	E.0091	<.0070	<.0130	<.0010	<.0020	<.0020	210	416000	96
MAY											
07...	<.0040	<.0130	.0196	<.0070	<.0130	<.0010	<.0020	<.0020	79	175000	93
21...	<.0040	<.0130	.0145	<.0070	<.0130	<.0010	<.0020	<.0020	80	73200	98
22...	<.0040	<.0130	.0128	<.0070	<.0130	<.0010	<.0020	<.0020	--	--	--
JUN											
04...	<.0040	<.0130	.0120	<.0070	<.0130	<.0010	<.0020	<.0020	52	51400	99
24...	<.0040	<.0130	.0137	<.0070	<.0130	<.0010	.0057	<.0020	190	288000	97
JUL											
22...	<.0040	<.0130	.0132	<.0070	<.0130	<.0010	<.0020	<.0020	95	66700	98
AUG											
12...	<.0040	<.0130	.0103	<.0070	<.0130	<.0010	<.0020	<.0020	59	29500	99
26...	<.0040	<.0130	.0161	<.0070	<.0130	<.0010	<.0020	<.0020	38	12800	96

BAYOU DE CHIEN BASIN

07024000 BAYOU DE CHIEN NEAR CLINTON, KY

LOCATION.--Lat 36°37'43", long 88°57'50", Hickman County, Hydrologic Unit 08010201, on right bank at downstream side of bridge on U.S. Highway 51, 1.1 mi upstream from Cane Creek, 3.2 mi southeast of Clinton, and at mile 15.1.

DRAINAGE AREA.--68.7 mi².

PERIOD OF RECORD.--October 1939 to September 1950 (monthly discharge only for some periods, published in WSP 1311), October 1950 to September 1978, September 1984 to current year. Published as "Bayou du Chien near Clinton," October 1954 to September 1968.

REVISED RECORDS.--WSP 1311: 1940 (M), 1942-44 (M). WSP 1711: Drainage area. WDR-KY-89: 1985-89 (m).

GAGE.--Water-Stage recorder. Datum of gage is 307.71 ft above sea level. Prior to Aug. 2, 1951, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Aug. 8-9. Records fair except for period of estimated record, which is poor. Minimum flow affected by backwater from the Mississippi River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	28	32	30	33	64	65	150	29	37	117	24
2	23	27	28	30	34	55	31	75	25	31	52	26
3	23	27	34	30	34	52	49	135	25	30	43	25
4	23	27	35	30	34	50	37	55	761	30	40	25
5	22	27	31	311	36	51	32	45	2450	30	36	25
6	22	67	29	159	35	114	30	267	2950	28	40	23
7	22	47	28	356	32	63	32	1060	336	28	75	23
8	22	32	29	391	33	197	30	603	86	30	e140	23
9	23	31	31	103	34	103	29	108	1210	28	e100	21
10	32	30	38	52	36	58	27	69	883	28	47	21
11	66	29	32	46	144	52	25	54	133	32	102	22
12	24	29	30	44	72	48	24	46	612	29	42	22
13	25	138	28	40	41	49	25	41	374	197	38	21
14	29	131	29	39	38	46	260	41	187	176	34	21
15	24	42	28	40	36	45	32	38	535	201	32	19
16	23	35	28	39	580	50	539	38	87	535	31	19
17	23	31	28	38	1100	55	292	36	54	75	29	20
18	23	31	27	37	1190	89	73	35	44	43	27	19
19	22	30	28	42	196	146	57	35	43	35	27	20
20	22	29	28	38	114	529	49	35	45	32	27	21
21	23	29	30	38	84	126	49	40	96	30	26	21
22	23	29	35	50	76	60	45	158	51	28	26	21
23	23	28	30	64	77	51	41	49	38	28	26	20
24	25	27	92	43	63	41	39	33	34	36	26	20
25	26	27	49	39	60	37	37	32	32	32	25	20
26	37	28	37	38	118	33	35	167	31	118	29	20
27	28	28	42	37	445	31	109	82	28	351	30	21
28	26	28	35	36	100	30	763	41	27	259	24	21
29	27	28	34	36	---	30	166	35	26	244	25	21
30	26	32	33	34	---	31	645	35	152	769	25	21
31	26	---	32	33	---	55	---	33	---	913	25	---
TOTAL	806	1152	1050	2343	4875	2441	3667	3671	11384	4463	1366	646
MEAN	26.0	38.4	33.9	75.6	174	78.7	122	118	379	144	44.1	21.5
MAX	66	138	92	391	1190	529	763	1060	2950	913	140	26
MIN	22	27	27	30	32	30	24	32	25	28	24	19
CFSM	.38	.56	.49	1.10	2.53	1.15	1.78	1.72	5.52	2.10	.64	.31
IN.	.44	.62	.57	1.27	2.64	1.32	1.99	1.99	6.16	2.42	.74	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	32.5	82.3	129	153	186	214	138	101	76.6	59.8	40.9	34.7
MAX	165	520	557	586	672	1138	335	470	419	397	206	269
(WY)	1985	1958	1991	1950	1989	1975	1970	1978	1976	1976	1977	1977
MIN	7.27	9.41	12.1	12.7	16.3	14.2	18.6	12.1	11.7	10.7	9.43	8.74
(WY)	1944	1944	1944	1944	1941	1941	1986	1969	1952	1943	1953	1941

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1940 - 1998
ANNUAL TOTAL	45369	37864	
ANNUAL MEAN	124	104	
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			268
HIGHEST DAILY MEAN			18.7
LOWEST DAILY MEAN			18.7
HIGHEST DAILY MEAN	4370	2950	7150
LOWEST DAILY MEAN	17	19	4.0
ANNUAL SEVEN-DAY MINIMUM	18	20	4.7
INSTANTANEOUS PEAK FLOW		3970	9460
INSTANTANEOUS PEAK STAGE		16.03	16.48
ANNUAL RUNOFF (CFSM)	1.81	1.51	1.51
ANNUAL RUNOFF (INCHES)	24.57	20.50	20.50
10 PERCENT EXCEEDS	297	180	192
50 PERCENT EXCEEDS	38	35	24
90 PERCENT EXCEEDS	23	23	11

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. At a few of these stations crest stages are determined from continuous water-stage recorder graphs. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1998

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
BIG SANDY RIVER BASIN							
03208000	Levisa Fork below Fishtrap Dam, near Millard, Ky.	Lat 37°25'33", long 82°24'45", Pike County, Hydrologic Unit 05070202, on right bank, 0.4 mi downstream from Fishtrap Dam, 1.1 mi upstream from Lower Pompey Branch, 1.9 mi northeast of Millard, 2.4 mi upstream from Russell Fork, and at mile 129.6.	392	1939-92†, 1993-98	04-17-98	85.93	9,970
03209300	Russell Fork at Elkhorn City, Ky.	Lat 37°18'14", long 82°20'35", Pike County, Hydrologic Unit 05070202, on left bank 10 ft downstream from steel highway bridge on abandoned section of State Highway 80, at Elkhorn City, 0.9 mi upstream from Elkhorn Creek, and at mile 13.2.	554	1957-60, 1961-92†, 1993-98	04-17-98	16.55	22,300

See footnote at end of table.

Annual maximum discharge at crest-stage partial-record stations during water year 1998--Continued

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
BIG SANDY RIVER BASIN--Continued							
03211500	Johns Creek near Van Lear, Ky.	Lat 37°44'37", long 82°43'27", Floyd County, Hydrologic Unit 05070203, on right bank 100 ft upstream from Long Branch, 0.3 mi upstream from Daniels Creek, 0.7 mi downstream from Dewey Dam, 2.5 mi southeast of Van Lear, and at mile 4.7.	206	1940-92†, 1993-98	04-23-98	13.06	2,590
LITTLE SANDY RIVER BASIN							
03216350	Little Sandy River below Grayson Dam, near Leon, Ky.	Lat 38°15'14", long 82°59'28", Carter County, Hydrologic Unit 05090104, on right bank 0.3 mi downstream from Grayson Dam (new channel), 0.3 mi upstream from Big Sinking Creek, 2.4 mi southwest of Leon, and at mile 50.3.	196	1967-92†, 1993-98	02-14-98	98.84	2,790
CUMBERLAND RIVER BASIN							
03400500	Poor Fork at Cumberland, Ky.	Lat 36° 58'26", long 82 59'38", Harlan County, Hydrologic Unit 05130101, at left upstream side of New York Avenue bridge at Cumberland, 250 ft upstream from Cloverlick Creek, 0.6 mi downstream from Looney Creek, and at river mile 718.8.	82.3	1941-92†, 1993-98	04-17-98	10.25	5,150
03404820	Laurel River at Municipal Dam, near Corbin, Ky.	Lat 36°58' 13", long 84 07' 11", Laurel County, Hydrologic Unit 05130101, on left bank adjacent to State Highway 709, 200 ft upstream from Corbin Municipal Dam, 0.1 mi upstream from Lynn Camp Creek, 2.0 mi northwest of Corbin, and at mile 21.4.	140	1974-92†, 1993-98	04-17-98	24.45	6,830

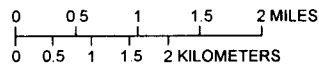
† Operated as a continuous-record gaging station.

WATER RESOURCES DATA - KENTUCKY, 1998

85°57'30" 85°47'30"
37°46'



37°38'
Base from U.S. Geological Survey,
Digital data, 1:100,000, 1983
Universal Transverse Mercator projection
Zone 16

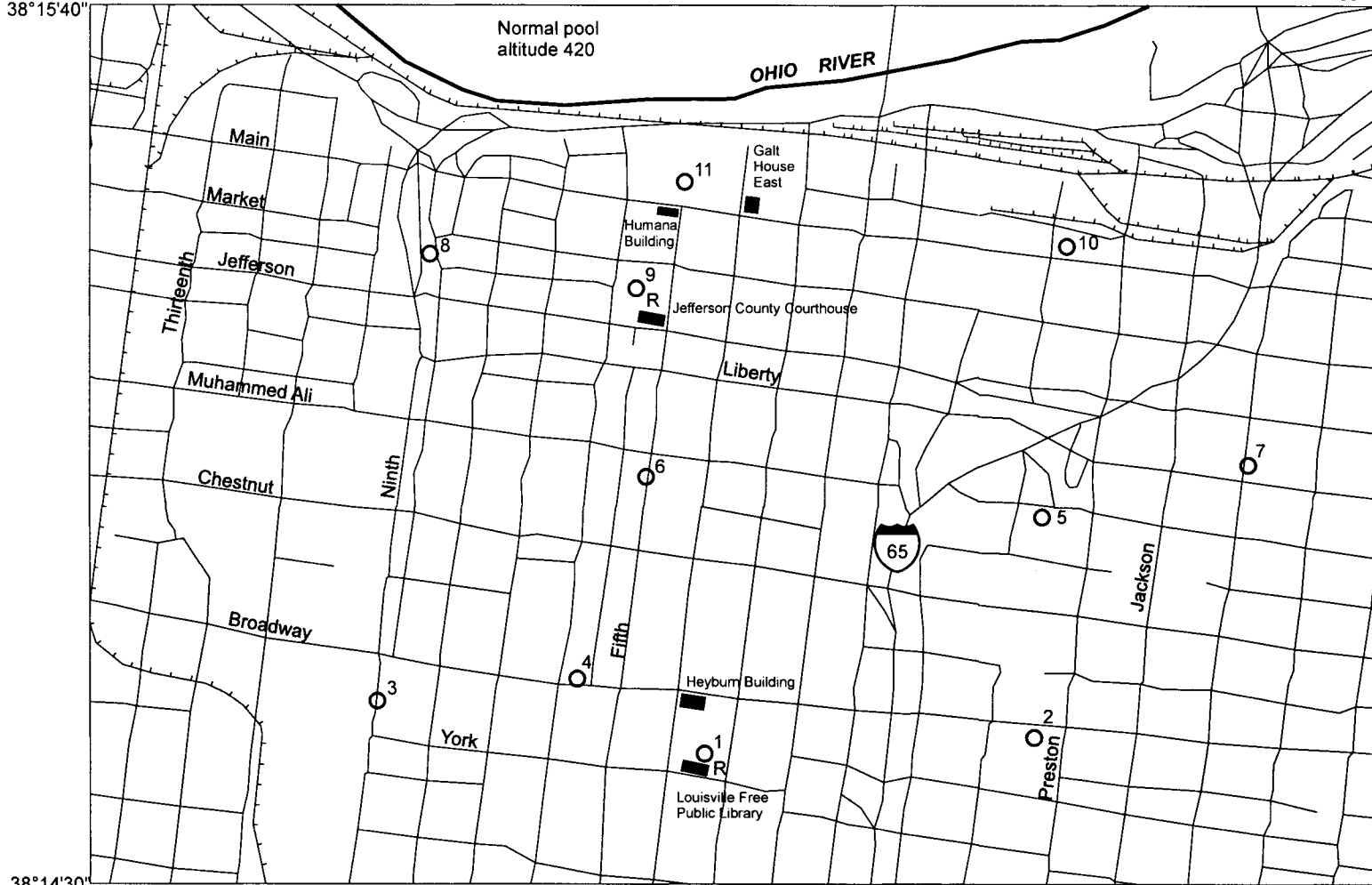


EXPLANATION

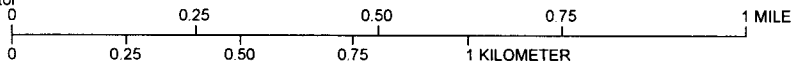
- Elizabethtown corporation boundary
- ¹_R Observation well equipped with water-level recorder with identifier

Figure 6. Location of observation wells in Elizabethtown, Kentucky.

85°46'30" 38°15'40" 85°44'20"



Base from U.S. Geological Survey, Digital data, 1:100,000, 1983 Universal Transverse Mercator projection, Zone 16



EXPLANATION

- ¹ Observation well with identifier
- _R Observation well equipped with water-level recorder

Figure 7. Location of observation wells in downtown Louisville, Kentucky.

GROUND-WATER LEVELS

GRAVES COUNTY

365210088391301. Viola well.

LOCATION.--Lat 36°52'10", long 88°39'13", Hydrologic Unit 08010201, County Code 083, Hickory quadrangle, in a cultivated field, 200 ft east of a private road, 1.2 mi northwest of Viola. Owner: J. Whittemore.

AQUIFER.--Sand of Claiborne Group of Eocene age. Aquifer code: 124CLBR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 105 ft, cased to 85 ft, screened 85-105 ft.

INSTRUMENTATION.--ADR recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 405.65 ft above sea level. Measuring point: Floor of shelter, 403. ft above land-surface datum.

PERIOD OF RECORD.--February 1951 to September 1984 and October 1988 to current year.

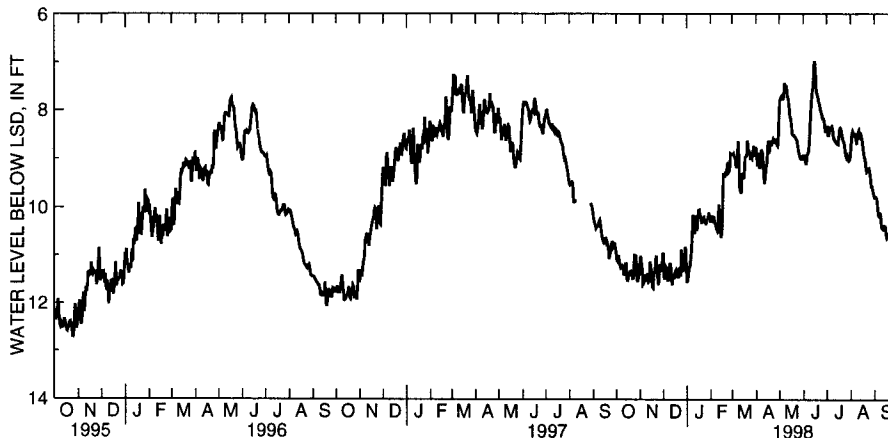
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.98 ft below land-surface datum, June 15, 1998; lowest measured, 19.24 ft below land-surface datum, Jan. 10, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.10	11.01	11.43	11.51	10.16	8.92	8.95	7.78	9.02	8.43	8.72	9.78
2	11.12	11.13	11.49	11.35	10.31	8.90	9.15	7.74	8.92	8.52	8.52	9.78
3	11.00	11.28	11.21	11.25	10.25	8.96	8.89	7.71	9.07	8.52	8.45	9.81
4	11.08	11.60	11.24	11.22	10.18	8.99	9.13	7.69	9.12	8.37	8.50	9.96
5	11.19	11.57	11.44	11.03	10.24	9.14	9.20	7.79	8.93	8.38	8.52	10.16
6	11.26	11.40	11.51	10.86	10.33	9.19	9.07	7.73	8.90	8.37	8.51	10.18
7	11.25	11.54	11.51	10.51	10.37	8.99	8.82	7.44	8.85	8.35	8.59	10.10
8	11.22	11.43	11.25	10.15	10.45	8.65	8.87	7.48	8.69	8.41	8.71	10.15
9	11.28	11.40	11.15	10.40	10.49	9.00	8.91	7.59	8.39	8.54	8.60	10.39
10	11.41	11.43	11.21	10.55	10.42	9.62	9.30	7.56	8.04	8.61	8.46	10.44
11	11.33	11.55	11.46	10.35	9.94	9.67	9.51	7.73	7.79	8.64	8.43	10.45
12	11.17	11.53	11.61	10.17	10.53	9.71	9.41	7.79	7.62	8.65	8.54	10.40
13	11.17	11.13	11.45	10.48	10.50	9.34	9.19	7.96	7.49	8.69	8.57	10.38
14	11.49	11.21	11.41	10.24	10.63	9.30	9.12	8.14	7.06	8.70	8.53	10.39
15	11.54	11.42	11.48	10.06	10.47	9.41	8.90	8.18	6.98	8.71	8.60	10.56
16	11.46	11.66	11.33	10.05	9.87	9.26	8.64	8.34	7.28	8.56	8.73	10.63
17	11.38	11.68	11.30	10.19	9.30	8.97	8.89	8.50	7.62	8.41	8.87	10.60
18	11.33	11.40	11.39	10.19	9.37	8.96	8.81	8.52	7.67	8.38	8.98	10.57
19	11.32	11.32	11.40	10.33	9.36	8.95	8.64	8.52	7.73	8.41	9.01	10.54
20	11.41	11.21	11.47	10.29	9.27	8.64	8.74	8.54	7.83	8.51	9.17	10.60
21	11.41	11.00	11.27	10.21	9.34	8.81	8.67	8.57	7.87	8.60	9.27	10.65
22	11.50	11.26	11.26	10.20	9.12	8.86	8.61	8.59	7.98	8.65	9.25	10.78
23	11.36	11.46	11.43	10.32	9.08	8.87	8.66	8.64	8.04	8.68	9.21	10.94
24	10.97	11.61	10.87	10.25	9.25	9.02	8.67	8.73	8.09	8.82	9.20	10.90
25	11.26	11.43	11.26	10.36	9.22	8.95	8.64	8.85	8.18	8.94	9.27	10.90
26	10.99	11.17	11.33	10.26	8.90	8.99	8.59	8.91	8.18	8.98	9.41	10.98
27	11.44	11.33	11.22	10.24	8.91	8.90	8.73	8.98	8.23	8.94	9.57	10.97
28	11.55	11.25	11.07	10.17	8.91	8.75	8.75	9.01	8.37	9.00	9.57	10.95
29	11.47	11.12	10.82	10.11	---	8.95	8.50	9.01	8.46	9.04	9.66	10.91
30	11.40	10.94	10.98	10.24	---	8.89	8.05	9.00	8.33	9.02	9.73	10.97
31	11.16	---	11.56	10.30	---	8.77	---	8.92	---	8.92	9.79	---
MAX	11.55	11.68	11.61	11.51	10.63	9.71	9.51	9.01	9.12	9.04	9.79	10.98
MIN	10.97	10.94	10.82	10.05	8.90	8.64	8.05	7.44	6.98	8.35	8.43	9.78

WTR YR 1998 HIGH 6.98 LOW 11.68



GROUND-WATER LEVELS

HARDIN COUNTY

374035085525401. Local number OW-1-82, map number 1.

LOCATION.--Lat 37°40'54", long 85°52'54", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, 0.30 mi west of Elizabethtown Water Plant, 0.20 mi west on gravel road to sewage lagoon parallel to RR tracks, 100 ft south of RR tracks, 75 ft east of electric power tower, 10 ft north of gravel road. Owner: City of Elizabethtown.

AQUIFER.--St. Louis Limestone of Lake Mississippi age. Aquifer code: 333STLS.

WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 6 in., depth 120 ft, with 14 ft of 8 in. surface casing.

INSTRUMENTATION.--Graphical recorder-continous..

DATUM.--Elevation of land-surface datum is 692.25 ft above sea level. Measuring point: Floor of shelter, 1.4 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells and proximity to RR tracks.

PERIOD OF RECORD.--September 1982 to current year.

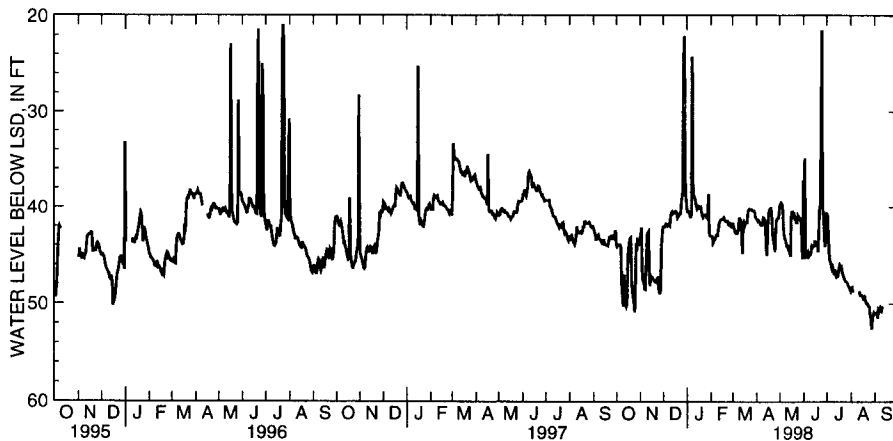
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 8.99 ft below land-surface datum, May 3, 1983; lowest, 78.77 ft below land-surface datum, July 14, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.11	42.95	42.12	40.48	42.99	41.80	41.30	39.70	44.19	40.78	48.32	50.95
2	44.00	42.13	42.10	40.47	43.00	42.10	41.47	39.52	34.90	42.50	48.28	50.89
3	43.92	46.70	41.90	40.60	43.72	42.50	41.40	39.60	45.20	44.45	48.80	51.01
4	43.96	47.70	41.75	40.88	43.55	42.65	41.50	39.90	45.16	45.50	---	51.42
5	43.95	47.80	41.79	41.10	43.39	42.75	41.72	42.05	44.81	45.65	---	50.48
6	44.15	48.49	41.98	40.65	43.25	42.74	41.86	43.00	44.65	46.10	---	50.55
7	48.00	48.55	41.95	24.25	42.92	42.55	41.82	43.30	45.10	46.40	---	50.42
8	49.15	45.67	41.80	38.00	42.85	42.00	41.82	43.50	45.00	46.20	---	50.90
9	50.30	42.89	41.92	38.82	42.90	41.09	41.10	44.00	44.90	46.50	---	50.70
10	47.02	42.75	41.00	38.96	42.29	41.30	41.15	43.99	44.70	47.00	---	50.25
11	50.12	42.60	40.60	39.25	41.65	41.32	41.35	44.35	44.05	46.48	48.70	---
12	50.08	45.50	40.50	39.80	41.50	43.11	42.00	44.50	44.15	47.01	49.12	---
13	50.30	48.20	40.71	40.10	41.32	44.82	44.80	44.69	44.00	47.25	49.15	---
14	50.00	47.15	40.61	39.84	41.30	41.90	45.00	45.11	44.00	47.20	49.15	---
15	45.45	47.30	40.61	39.88	41.30	41.60	42.00	41.02	43.45	47.11	49.25	---
16	44.32	47.28	40.45	40.11	41.21	41.85	40.75	40.50	43.70	46.30	49.40	---
17	43.73	47.39	40.45	40.09	41.11	41.60	40.30	40.48	44.10	46.00	49.60	---
18	43.28	47.55	40.67	40.01	41.32	41.58	40.12	40.90	43.69	46.15	49.10	---
19	43.20	47.71	41.12	40.45	41.48	41.60	40.09	40.78	44.65	46.12	49.69	---
20	48.00	47.77	40.99	40.86	41.48	40.70	41.00	41.28	42.50	46.60	49.80	---
21	48.85	47.81	40.92	41.05	41.48	40.25	42.89	41.29	40.01	46.99	50.00	---
22	49.32	47.49	40.68	40.90	41.48	40.20	43.50	41.62	39.82	47.19	50.02	---
23	49.99	47.41	40.68	40.87	41.82	40.23	44.00	41.61	32.00	47.40	50.22	---
24	50.88	48.15	39.50	40.80	41.89	40.29	44.60	40.87	21.50	47.62	50.25	---
25	47.80	48.70	38.98	40.88	41.90	40.25	42.71	40.99	39.92	47.70	51.05	---
26	43.78	49.00	38.25	41.10	41.60	40.35	41.26	41.20	41.00	47.75	51.29	---
27	44.50	48.62	25.25	41.16	42.15	40.40	41.21	41.20	43.00	47.90	52.61	---
28	43.40	44.05	22.10	38.68	41.85	40.40	41.08	41.50	44.09	48.10	51.80	---
29	43.45	42.99	35.50	42.58	---	40.59	41.09	43.11	41.08	48.25	51.12	---
30	43.65	42.09	39.00	42.95	---	41.10	39.87	45.40	40.70	48.45	50.92	---
31	43.20	---	40.20	43.00	---	41.18	---	37.18	---	48.65	51.00	---
MAX	50.88	49.00	42.12	43.00	43.72	44.82	45.00	45.40	45.20	48.65	---	---
MIN	43.20	42.09	22.10	24.25	41.11	40.20	39.87	37.18	21.50	40.78	---	---

WTR YR 1998 HIGH 21.50 LOW 52.61



GROUND-WATER LEVELS

HARDIN COUNTY

374046085523501. Local number OW-1-81, map number 2.

LOCATION.--Lat 37°40'46", long 85°52'35", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, Elizabeth Water Plant, 300 ft south of blue water tank, 25 ft east of engineer;s office, next to gravel driveway. Owner: City of Elizabethtown.

AQUIFER.--St. Louis Limestone of Late Mississippi age. Aquifer Code: 333STLS.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 100 ft, with 6 ft of 6 in. surface casing.

INSTRUMENTATION.--Continuous recorder, 30 minute intervals.

DATUM.--Elevation of land-surface datum is 685.89 ft above sea level. Measuring point: Floor of shelter, 1.9 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells.

PERIOD OF RECORD.--September 1982 to current year.

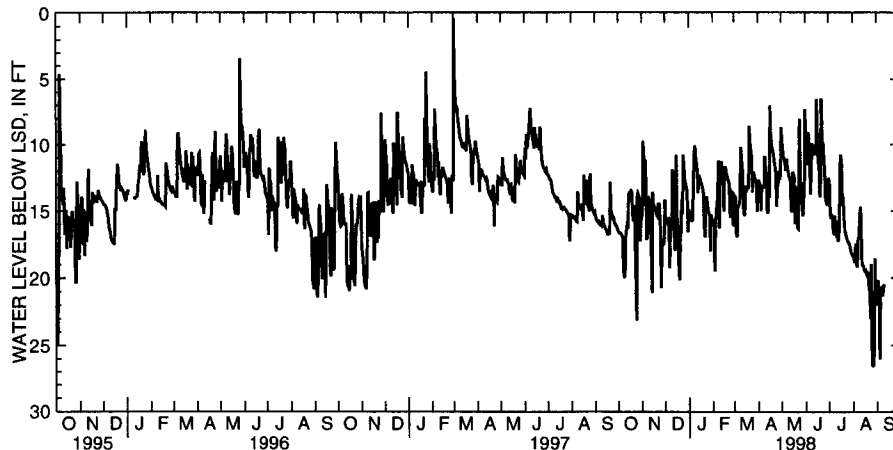
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 0.40 ft below land-surface datum, March 1, 1997; lowest, 49.47 ft below land-surface datum, Oct. 8, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.60	15.00	15.61	15.25	15.82	13.89	12.71	9.63	9.31	12.82	18.41	20.51
2	16.70	9.75	15.77	15.59	15.96	14.02	12.95	10.41	10.32	15.00	18.70	20.20
3	16.69	11.11	15.90	15.63	19.54	16.80	13.03	10.98	11.55	15.59	18.60	21.25
4	16.75	11.20	15.63	15.73	16.00	16.99	15.00	11.18	9.11	15.35	17.49	26.02
5	16.85	11.25	15.60	15.70	15.15	14.70	13.50	11.49	9.45	15.45	19.01	20.67
6	17.00	17.19	19.30	12.62	14.35	14.65	13.10	12.00	10.72	16.50	19.20	20.80
7	19.50	16.95	16.59	10.90	14.20	14.50	13.32	11.10	13.75	16.84	17.11	20.71
8	19.99	14.21	16.30	10.10	11.25	13.60	13.04	11.72	11.82	15.37	17.02	21.32
9	19.80	14.08	15.95	10.85	16.32	10.21	10.89	12.05	9.90	16.25	15.70	20.50
10	16.99	14.22	11.90	11.40	12.82	11.21	11.70	12.38	10.81	17.00	14.72	20.68
11	16.47	14.25	13.20	12.09	11.45	11.81	12.31	12.61	10.05	15.75	15.22	---
12	16.02	18.00	16.81	13.65	11.31	14.80	15.05	12.85	10.82	17.30	19.02	---
13	16.10	21.09	18.00	12.35	11.96	15.23	15.19	14.99	10.40	17.15	19.10	---
14	13.75	13.60	15.35	12.50	12.45	15.37	12.30	15.11	10.50	16.15	19.12	---
15	13.65	14.51	10.85	12.70	15.03	13.16	14.00	12.11	6.55	11.66	19.42	---
16	13.62	14.62	16.03	12.90	12.25	13.50	7.05	12.28	10.61	10.82	19.50	---
17	13.50	14.93	16.11	13.09	11.70	13.44	9.29	12.45	11.39	11.50	19.45	---
18	13.58	15.00	19.20	13.35	12.02	13.21	10.15	15.98	11.80	14.60	19.80	---
19	15.40	15.30	20.15	13.71	12.41	13.32	10.32	13.20	13.99	13.98	19.90	---
20	15.78	15.41	16.90	16.25	12.58	8.62	10.72	14.55	12.65	15.61	19.55	---
21	14.60	14.52	16.65	16.99	12.79	9.81	11.32	16.31	6.50	16.49	20.65	---
22	15.70	14.49	14.15	14.37	13.04	10.46	11.60	16.37	10.05	16.75	21.02	---
23	20.50	14.60	15.21	13.95	15.51	11.00	12.20	12.86	9.82	16.95	23.01	---
24	23.11	16.41	10.82	14.42	13.52	13.59	14.69	8.09	10.90	17.21	18.99	---
25	14.00	20.75	11.75	14.95	13.61	12.10	12.88	12.77	11.79	17.30	26.50	---
26	13.69	17.40	12.70	15.21	15.50	12.29	12.95	13.20	14.00	17.45	26.55	---
27	13.85	17.20	13.00	15.32	16.15	12.58	12.00	14.78	14.38	17.51	26.51	---
28	14.05	17.50	13.23	18.03	13.81	12.72	12.69	15.40	14.52	17.80	24.55	---
29	17.30	17.41	13.61	15.29	---	12.84	12.30	14.11	14.50	18.12	18.59	---
30	15.50	14.18	16.60	15.55	---	15.06	8.70	13.72	12.58	18.25	22.00	---
31	15.57	---	14.90	15.71	---	13.07	---	7.34	---	18.35	21.75	---
MAX	23.11	21.09	20.15	18.03	19.54	16.99	15.19	16.37	14.52	18.35	26.55	---
MIN	13.50	9.75	10.82	10.10	11.25	8.62	7.05	7.34	6.50	10.82	14.72	---

WTR YR 1998 HIGH 6.50 LOW 26.55



GROUND-WATER LEVELS

JEFFERSON COUNTY

381441085452701. Local number 45-14-71, (owner's number A-2), map number 1.

LOCATION.--Lat 38°14'41", long 85°45'27", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the Louisville Free Public Library, 301 West York Street, on east side of building at base of the TV-radio tower, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 105 ft, cased and screened.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 454.23 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water-quality sample collected May 8, 1956.

PERIOD OF RECORD.--February 1937 to current year. February 1937 to September 1976 published in hydrograph form and on file at district office.

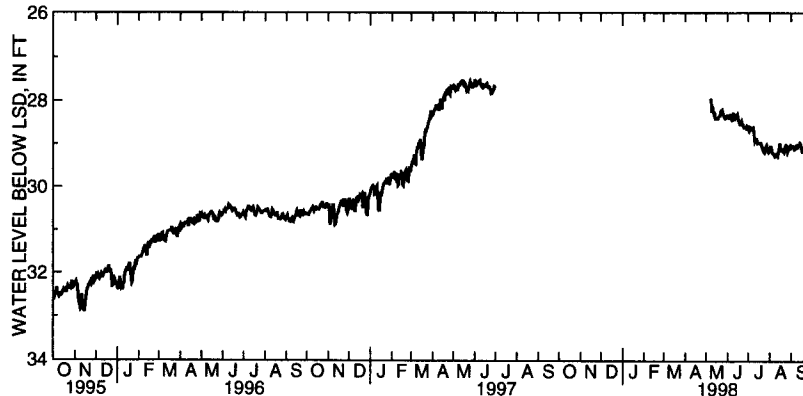
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 27.51 ft below land-surface datum, June 1, 1997; lowest, 77.82 ft below land-surface datum, Sept. 18, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	28.33	28.66	29.15	29.06
2	---	---	---	---	---	---	---	---	28.33	28.70	29.04	29.07
3	---	---	---	---	---	---	---	---	28.38	28.66	29.08	29.05
4	---	---	---	---	---	---	---	---	28.36	28.61	29.18	29.06
5	---	---	---	---	---	---	---	---	28.30	28.62	29.21	29.12
6	---	---	---	---	---	---	---	---	28.41	28.67	29.23	29.11
7	---	---	---	---	---	---	---	27.95	28.45	28.68	29.25	29.04
8	---	---	---	---	---	---	---	27.99	28.45	28.65	29.29	29.03
9	---	---	---	---	---	---	---	28.26	28.27	28.73	29.28	29.10
10	---	---	---	---	---	---	---	28.12	28.33	28.94	29.22	29.04
11	---	---	---	---	---	---	---	28.24	28.38	28.91	29.22	29.02
12	---	---	---	---	---	---	---	28.30	28.41	28.89	29.26	29.02
13	---	---	---	---	---	---	---	28.26	28.37	28.89	29.18	28.98
14	---	---	---	---	---	---	---	28.42	28.32	28.98	29.09	29.00
15	---	---	---	---	---	---	---	28.42	28.30	28.97	28.98	29.11
16	---	---	---	---	---	---	---	28.42	28.38	28.97	29.17	29.17
17	---	---	---	---	---	---	---	28.41	28.48	28.99	29.09	29.16
18	---	---	---	---	---	---	---	28.41	28.52	28.98	29.15	29.13
19	---	---	---	---	---	---	---	28.36	28.49	28.98	29.16	29.07
20	---	---	---	---	---	---	---	28.34	28.52	29.04	29.15	29.08
21	---	---	---	---	---	---	---	28.34	28.48	29.08	29.18	29.16
22	---	---	---	---	---	---	---	28.23	28.57	29.15	29.09	29.24
23	---	---	---	---	---	---	---	28.23	28.52	29.18	29.05	29.20
24	---	---	---	---	---	---	---	28.21	28.61	29.20	29.00	29.06
25	---	---	---	---	---	---	---	28.28	28.63	29.15	29.10	29.07
26	---	---	---	---	---	---	---	28.33	28.63	29.06	29.18	29.09
27	---	---	---	---	---	---	---	28.37	28.63	29.03	29.14	29.04
28	---	---	---	---	---	---	---	28.40	28.60	29.10	29.11	29.15
29	---	---	---	---	---	---	---	28.38	28.68	29.14	29.05	29.13
30	---	---	---	---	---	---	---	28.39	28.56	29.19	29.03	29.16
31	---	---	---	---	---	---	---	28.34	---	29.17	29.08	---
MAX	---	---	---	---	---	---	---	---	28.68	29.20	29.29	29.24
MIN	---	---	---	---	---	---	---	---	28.27	28.61	28.98	28.98

WTR YR 1998 HIGH 28.12 LOW 29.29



GROUND-WATER LEVELS

JEFFERSON COUNTY

381442085444801. (Metro United Way), map number 2.

LOCATION.--Lat 38°14'42", long 85°44'48", Hydrologic Unit 0514101, County Code 111, Louisville East quadrangle, near the southwest corner of east Broadway and Preston street on west side of Metro United Way Building in window vault next to parking lot in rear.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., depth, 104 ft, screen unknown.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 461.78 ft above sea level. Measuring point: Top of casing 5.99 ft below land-surface datum.

PERIOD OF RECORD.--April 1991 to May 1992 and February 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.40 ft below land-surface datum, May 6, 1998; lowest measured, 38.81 ft below land-surface datum, Oct. 29, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	35.59	Jul. 9, 1998	35.63
May 6, 1998	35.40	Sept. 22, 1998	36.07

381445085460201. (QW well 9th and Broadway), map number 3.

LOCATION.--Lat 38°14'45", long 85°46'02" Hydrologic Unit 05140101, County Code 111, Louisville West Quadrangle, in median of South 9th street 300 ft south of West Broadway. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 77 ft, screened 67-77 ft.

INSTRUMENTATION.--Quarterly measurement by USGS with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 454.14 ft above sea level. Measuring point: Top of casing, 0.34 ft below land-surface datum.

REMARKS.--Deeper of two wells drilled for water quality study 10 feet south of shallow well.

PERIOD OF RECORD.--August 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.95 ft below land-surface datum Feb. 20, 1998; lowest measured, 29.60 ft below land-surface datum Aug. 7, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Oct. 9, 1997	27.04	Jul. 9, 1998	27.15
Feb 20, 1998	26.95	Sept. 22, 1998	27.14
May 4, 1998	26.97		

381447085454001. Local number 45-14-66. (owner number 5), map number 4.

LOCATION.--Lat 38°14'47", long 85°45'40", Hydrologic Unit 0514101, County Code 111, Louisville West quadrangle, at Courier Journal-Louisville Times, Sixth and Broadway Streets in subbasement below building entrance walkway from Armory Street, in Louisville. Owner Gannett.

AQUIFER.--Louisville Limestone and Laurel Dolomite of Middle Silurian age. Aquifer code: 354LVLL.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 190 ft, eased to 121 ft, open-hole 121-190 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.83 ft above sea level. Measuring point: Top of metal well cover, 15.87 ft below land-surface datum.

PERIOD OF RECORD.--October 1953 to current year. October 1953 to September 1998 published in hydrograph form and on file in district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 28.49 ft below land-surface datum, June 1, 1997; lowest, 86.85 ft below land-surface datum, Sept. 20, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	28.75	Jul. 10, 1998	29.47
May 4, 1998	28.80	Sept. 22, 1998	29.79

GROUND-WATER LEVELS

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JEFFERSON COUNTY

381501085445601. (QW Well U OF L Medical School), map number 5.

LOCATION.--Lat 38°15'01", long 85°44'56", Hydrologic Unit 0514101, County Code 111, Jeffersonville quadrangle, near southeast corner of Floyd Street and Muhammad Ali Blvd, 250 feet east of Floyd Street and 10 ft South of Muhammad Ali Blvd. Owner: University of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 83.2 ft, screened 73.2 ft to 83.2 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.97 ft above sea level. Measuring point: Top of casing, 0.25 ft below land-surface datum.

REMARKS.--Deeper of two wells drilled for water-quality study 10 ft east of shallow well.

PERIOD OF RECORD.--September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.44 ft below land-surface datum, May 4, 1998: lowest measured, 36.56 ft below land-surface datum, Sept. 22, 1998.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Oct. 1, 1997	35.75	Jul. 9, 1998	35.94
Feb. 20, 1998	35.48	Sept. 22, 1998	36.56
May 04, 1998	35.44		

381503085453301. Local number 45-15-36, map 6.

LOCATION.--Lat 38°15'03", long 85°45'33" Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, in subbasement of Kentucky Towers Apartments, on east side of South Fifth Street, at Fifth and Muhammad Ali Blvd., in Louisville. Owner: Kentucky Towers (formerly Kentucky Hotel).

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., depth 104 ft, screened 84-104 ft.

INSTRUMENTATION.--Quarterly measurement by USGS with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.00 ft above sea level. Measuring point: Floor of recorder shelter 22.81 ft below land-surface datum.

PERIOD OF RECORD.--September 1948 to current year. November 1973 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.53 ft below land-surface datum, Apr. 24, 1984: lowest measured, 87.74 ft below land-surface datum, Sept. 23, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	33.75	Jul. 9, 1998	35.20
May 4, 1998	34.10	Sept. 22, 1998	35.48

381504085443202. Local number CP7A, map number 7.

LOCATION.--Lat 38°15'04", long 85°44'32", Hydrologic Unit 0514101, County Code 111, Jeffersonville quadrangle, at the southwest corner of east Louisville Park, 13.7 ft west of a tennis court fence, 16.5 ft east of curb on south Hancock Street, 58.2 ft north of curb on east Liberty Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 84.6 ft, screened 71.1-74.1 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 467.19 ft above sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Replaces destroyed well 381504085443201 (CP7), which was 10 ft north.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.41 ft below land-surface datum, May 6, 1997: lowest measured, 47.69 ft below land-surface datum, Oct. 25, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	44.18	Jul. 9, 1998	44.20
May 4, 1998	43.78	Sept. 22, 1998	44.80

GROUND-WATER LEVELS

JEFFERSON COUNTY

381517085455501. Local number 86-6 (Roy Wilkins Blvd.), map number 8.

LOCATION.--Lat 38°15'17", long 85°45'55", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, in median of Roy Wilkins Blvd. near Market Street, in Louisville. Owner: City Of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in, depth 86.4 ft, screened 82.4-86.4 ft.

INSTRUMENTATION.--Quarterly measurement by USGS with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 457.59 ft above National Geodetic Vertical Datum Measuring point: Top of casing, at land-surface datum.

REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--October 1986 to May 1991 and February 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.08 ft below land-surface datum Feb. 20, 1998; lowest measured, 38.41 ft below land-surface datum Sept. 26, 27, 29, 30, and Oct. 5, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	32.08	Jul. 9, 1998	33.26
May 4, 1998	32.43	Sept. 22, 1998	33.45

GROUND-WATER LEVELS

JEFFERSON COUNTY

381518085453402. Local number 86-11 (Courthouse Annex), map number 9.

LOCATION.--Lat 38°15'18", long 85°45'34", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at northwest corner behind Courthouse Annex building between 5th and 6th Streets, east of walkway to parking garage. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 102 ft, screened 42-44 ft, 61-63 ft, 99-101 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute intervals.

DATUM.--Elevation of land-surface datum is 461.63 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--November 1986 to current year.

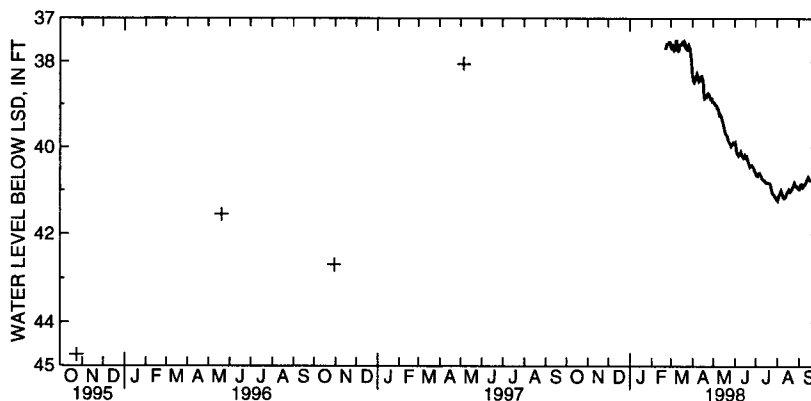
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.49 ft below land-surface datum, March 8, 1998; lowest, 46.82 ft below land-surface datum, July 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	37.67	38.36	38.95	39.87	40.62	41.22	40.96
2	---	---	---	---	---	37.64	38.46	38.97	39.97	40.65	41.16	40.91
3	---	---	---	---	---	37.62	38.48	39.01	40.12	40.66	41.10	40.86
4	---	---	---	---	---	37.69	38.44	39.02	40.15	40.60	41.09	40.85
5	---	---	---	---	---	37.74	38.38	39.03	40.14	40.60	41.04	40.90
6	---	---	---	---	---	37.72	38.34	39.09	40.19	40.59	41.00	40.92
7	---	---	---	---	---	37.66	38.29	39.10	40.17	40.61	41.05	40.90
8	---	---	---	---	---	37.52	38.34	39.16	40.14	40.65	41.10	40.86
9	---	---	---	---	---	37.52	38.40	39.24	40.10	40.71	41.15	40.86
10	---	---	---	---	---	37.73	38.46	39.22	40.14	40.73	41.17	40.83
11	---	---	---	---	---	37.75	38.44	39.25	40.20	40.75	41.16	40.79
12	---	---	---	---	---	37.74	38.41	39.28	40.22	40.76	41.15	40.75
13	---	---	---	---	---	37.62	38.35	39.34	40.25	40.76	41.11	40.71
14	---	---	---	---	---	37.60	38.34	39.42	40.24	40.80	41.06	40.68
15	---	---	---	---	---	37.60	38.41	39.47	40.19	40.80	41.03	40.71
16	---	---	---	---	---	37.57	38.44	39.56	40.23	40.82	41.01	40.75
17	---	---	---	---	---	37.55	38.76	39.64	40.25	40.81	40.98	40.76
18	---	---	---	---	---	37.58	38.86	39.68	40.23	40.82	41.02	40.77
19	---	---	---	---	---	37.60	38.84	39.70	40.28	40.82	41.03	40.77
20	---	---	---	---	---	37.54	38.84	39.73	40.34	40.83	41.01	40.77
21	---	---	---	---	37.71	37.57	38.80	39.77	40.39	40.83	40.98	40.76
22	---	---	---	---	37.64	37.69	38.76	39.84	40.45	40.88	40.94	40.77
23	---	---	---	---	37.59	37.71	38.74	39.87	40.43	40.96	40.91	40.84
24	---	---	---	---	37.59	37.72	38.76	39.89	40.42	41.02	40.86	40.79
25	---	---	---	---	37.59	37.64	38.82	39.93	40.41	41.07	40.82	40.74
26	---	---	---	---	37.54	37.61	38.83	39.97	40.44	41.09	40.86	40.74
27	---	---	---	---	37.54	37.66	38.90	39.94	40.45	41.10	40.89	40.71
28	---	---	---	---	37.62	37.71	38.84	39.93	40.50	41.13	40.89	40.69
29	---	---	---	---	---	37.85	38.94	39.89	40.54	41.16	40.92	40.67
30	---	---	---	---	---	37.94	38.94	39.91	40.57	41.18	40.94	40.68
31	---	---	---	---	---	38.23	---	39.88	---	41.20	40.96	---
MAX	---	---	---	---	---	38.23	38.94	39.97	40.57	41.20	41.22	40.96
MIN	---	---	---	---	---	37.52	38.29	38.95	39.87	40.59	40.82	40.67

WTR YR 1998 HIGH 37.52 LOW 41.22



GROUND-WATER LEVELS

JEFFERSON COUNTY

381522085445201 (Louisville Scrap Metal), map number 10.

LOCATION.--Lat 38°15'22", long 85°50'26", Hydrologic Unit 0514101, County Code 111, Jeffersonville Quadrangle, at northeast corner of Floyd and Main Streets behind Louisville Scrap Metal Office. Owner: Louisville Scrap Metal.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in. with 2" PVC casing and screen inserted for measurement access, depth 90.0 ft, screened 85.0-90.0 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.04 ft above sea level. Measuring point: Top of 2" coupling 1.11 ft above land-surface datum.

PERIOD OF RECORD.--May 1991 to June 1993 and May 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.22 ft below land-surface datum, Mar. 7, 1997; lowest measured, 40.29 ft below land-surface datum, Oct. 29, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	37.43	Jul. 9, 1998	38.64
May 4, 1998	37.37	Sept. 22, 1998	39.31

381527085453001. Local number 86-7 (Belvedere Well), map number 11

LOCATION.--Lat 38°15'27", long 85°45'30", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at Place Montpelier and Main Street, 3 ft east of east sidewalk. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 89.9 ft, screened 85.1-87.1 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 452.43 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.92 ft below land-surface datum, Mar. 9, 1997; lowest, 39.64 ft below land-surface datum, Sept. 2-3, 1993, Aug. 31, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Water Level	Date	Water Level
Feb. 20, 1998	28.51	Jul. 9, 1998	32.48
May 4, 1998	30.01	Sept. 22, 1998	32.33

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°06'58", Long 83°33'18", Rowan County, Hydrologic Unit 05100101 at Clark State Fish Hatchery, 0.9 mi southwest of Clark State Fish Hatchery office, 1.2 mi west of Cave Run Reservoir Dam.

PERIOD OF RECORD.--September 1983 to current year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.

REMARKS.--Samples collected on weekly basis by observer.

COOPERATION.--Chemical quality data were provided by the National Atmospheric Deposition Program.

CHEMICAL ANALYSES, OCTOBER 1997 TO SEPTEMBER 1998

DATE	TOTAL PRECIP- ITATION FOR	VOLUME	PH	SPEC. CONDUCT- TANCE	CALCIUM	MAG- NESIUM	SODIUM
	DEFINED PERIOD (IN) (00193)	ATM DEP WET (L) (83177)	FIELD ATM DEP WET T (UNITS) (83106)	FIELD ATM DEP WET TOT (US/CM) (83154)	ATM DEP WET DIS (MG/L) (82932)	ATM DEP WET DIS (MG/L) (83002)	ATM DEP WET DIS (MG/L) (83138)
OCT 1997							
07-14	.44	.757	4.54	15.1	.092	.014	.024
OCT							
14-21	.00	.000	--	--	.023	<.003	.055
OCT							
21-28	1.12	1.906	4.75	14.3	.063	.008	.014
OCT 28-							
NOV 04	--	--	--	--	.131	.013	.018
NOV							
04-11	.45	.696	4.42	25.6	.060	.008	.012
NOV							
11-18	.45	.735	4.68	14.2	.128	.023	.459
NOV							
18-25	.64	1.097	4.53	20.4	.028	.006	.005
NOV 25-							
DEC 02	1.70	2.911	4.76	13.5	.015	.005	.004
DEC							
02-09	.20	.284	4.45	26.0	.054	.009	.020
DEC							
09-16	.45	.808	4.69	15.5	.225	.230	.020
DEC							
15-23	.30	.466	4.74	17.5	.380	.016	.027
DEC							
23-30	.77	1.285	4.43	18.2	.090	.009	.011
DEC 30 1997-							
JAN 06 1998	.30	.475	4.63	16.9	.039	.012	.008
JAN							
06-13	3.25	5.582	5.16	7.9	.026	.004	<.003
JAN							
13-20	.60	.908	4.59	17.9	.040	.004	.009
JAN							
20-27	.47	.817	4.23	20.8	.051	.006	.011
FEB							
03-10	2.25	3.793	4.65	10.8	.036	.003	<.003
FEB							
10-17	.45	.705	4.45	17.1	.054	.010	.007
FEB							
17-24	.65	1.134	4.30	26.1	.101	.008	.015
FEB 24-							
MAR 03	.57	1.006	4.34	26.1	.303	.020	.023
MAR							
03-10	1.30	2.204	4.61	11.0	.152	.010	.034
MAR							
17-24	1.02	1.765	4.47	14.5	.125	.013	.025

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1997 TO SEPTEMBER 1998

DATE	TOTAL PRECIP- ITATION FOR	VOLUME	PH	SPEC. CONDOC- TANCE	CALCIUM	MAG- NESIUM	SODIUM
	DEFINED PERIOD (IN) (00193)	ATM DEP WET (L) (83177)	FIELD ATM DEP WET T (UNITS) (83106)	FIELD ATM DEP WET TOT (US/CM) (83154)	ATM DEP WET DIS (MG/L) (82932)	ATM DEP WET DIS (MG/L) (83002)	ATM DEP WET DIS (MG/L) (83138)
MAR 24-31	.05	.062	--	--	.220	.023	.014
MAR 31- APR 07	1.00	1.743	4.87	15.2	.270	.027	.267
APR 07-14	.70	1.215	4.29	26.5	.346	.039	.118
APR 14-21	2.35	4.058	4.69	13.6	.189	.037	.071
APR 21-28	.79	1.354	4.05	54.8	.470	.047	.146
APR 28- MAY 05	2.39	4.170	5.01	12.5	.180	.024	.252
MAY 05-12	.88	1.511	7.22	21.9	1.97	.165	.524
MAY 19-26	2.85	4.843	5.58	17.1	.418	.037	.101
MAY 26- JUN 02	.65	1.069	4.06	42.9	.698	.054	.139
JUN 02-09	.50	.008	4.82	25.0	.591	.070	.734
JUN 09-16	2.75	4.682	4.54	16.1	.258	.033	.031
JUN 16-23	.90	1.569	3.23	25.6	.236	.040	.105
JUN 23-30	3.05	5.172	3.45	18.7	.122	.017	.015
JUN 30- JUL 07	.40	.701	3.41	40.1	.293	.045	.025
JUL 07-14	.45	.724	4.56	33.5	.402	.063	.046
JUL 14-21	2.08	3.581	3.68	26.2	.118	.015	.012
JUL 21-28	.80	1.195	4.76	27.5	.131	.014	.009
JUL 28- AUG 04	.35	.612	4.67	55.0	.379	.030	.015
AUG 04-11	.80	1.367	4.83	33.6	.124	.010	.018
AUG 11-18	.35	.721	4.60	42.5	.127	.013	.012
AUG 18-25	.05	.078	4.37	95.1	1.24	.101	.066
SEP 15-22	.10	.170	4.76	47.9	.648	.064	.066
SEP 29- OCT 06	.60	1.027	4.92	35.7	.252	.026	.017

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1997 TO SEPTEMBER 1998

DATE	POTAS-	SULFATE	CHLO-	NI-	NI-	PHOS-
	SIUM	ATM DEP	RIDE	TROGEN	TROGEN	PHORUS
	ATM DEP	ATM DEP	ATM DEP	NITRATE	AMMON.	ORTHO
	WET DIS	WET DIS	WET DIS	ATM DEP	ATM DEP	ATM DEP
	AS SO4	AS SO4	AS NO3	AS NH4	AS P04	AS P04
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	(83120)	(83160)	(82944)	(83071)	(83047)	(83111)
OCT 1997						
07-14	.055	1.49	.11	1.05	.240	<.003
OCT						
14-21	.097	.06	.08	.19	.170	.038
OCT						
21-28	.026	1.42	.08	1.15	.190	<.003
OCT 28-						
NOV 04	.045	1.65	.09	1.42	.300	<.003
NOV						
04-11	.020	1.69	.18	3.19	.400	<.003
NOV						
11-18	.018	2.14	.11	1.52	.100	.103
NOV						
18-25	.041	1.71	.09	1.38	.120	<.003
NOV 25-						
DEC 02	.033	1.04	.06	.75	.070	<.003
DEC						
02-09	.062	1.36	.15	2.63	.130	<.003
DEC						
09-16	.109	1.62	.17	2.01	.210	<.003
DEC						
15-23	.039	1.75	.09	1.36	.100	<.003
DEC						
23-30	.019	1.68	.17	2.55	.170	<.003
DEC 30 1997-						
JAN 06 1998	.090	1.12	.18	1.42	.110	<.003
JAN						
06-13	.010	.54	.03	.54	<.020	<.003
JAN						
13-20	.012	1.52	.09	2.21	.150	<.003
JAN						
20-27	.019	1.41	.09	2.00	.130	<.003
FEB						
03-10	.005	.83	.05	1.05	.060	<.003
FEB						
10-17	.043	1.23	.12	1.24	.080	<.003
FEB						
17-24	.014	1.92	.09	2.24	.190	<.003
FEB 24-						
MAR 03	.030	2.06	.11	3.31	.450	<.003
MAR						
03-10	.009	1.01	.03	1.33	.280	<.003
MAR						
17-24	.057	1.01	.12	1.27	.100	<.003

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1997 TO SEPTEMBER 1998

DATE	POTAS-	SULFATE	CHLO-	NI-	NI-	PHOS-
	SIUM	ATM DEP	RIDE	TROGEN	TROGEN	PHORUS
	ATM DEP	WET DIS	ATM DEP	NITRATE	AMMON.	ORTHO
	WET DIS	AS SO4	WET DIS	AS NO3	AS NH4	AS PO4
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	(83120)	(83160)	(82944)	(83071)	(83047)	(83111)
MAR						
MAR 24-31	.108	2.03	.13	1.22	.020	<.003
MAR 31-						
APR 07	.045	2.23	.17	2.30	1.12	.292
APR						
APR 07-14	.115	3.25	.19	2.82	.610	<.003
APR						
APR 14-21	.194	1.66	.32	1.05	.400	<.003
APR						
APR 21-28	.070	4.62	.41	5.78	1.09	.016
APR 28-						
MAY 05	.093	1.75	.24	1.23	.550	<.003
MAY						
MAY 05-12	.064	2.19	.09	1.24	1.49	.335
MAY						
MAY 19-26	.065	2.96	.14	1.98	1.40	.017
MAY 26-						
JUN 02	.087	6.44	.25	3.29	1.87	<.003
JUN						
JUN 02-09	.414	3.22	.77	2.42	2.13	.652
JUN						
JUN 09-16	.092	1.88	.14	1.44	.400	<.003
JUN						
JUN 16-23	.063	2.54	.14	1.91	.270	<.003
JUN						
JUN 23-30	.042	1.81	.08	1.46	.250	<.003
JUN 30-						
JUL 07	.030	4.03	.13	3.13	.720	<.003
JUL						
JUL 07-14	.205	3.52	.30	3.12	.430	<.003
JUL						
JUL 14-21	.023	2.85	.08	1.71	.290	<.003
JUL						
JUL 21-28	.031	2.67	.12	2.05	.250	<.003
JUL 28-						
AUG 04	.027	5.09	.13	3.57	.410	<.003
AUG						
AUG 04-11	.008	3.13	.07	1.88	.260	<.003
AUG						
AUG 11-18	.007	4.20	.10	2.73	.410	<.003
AUG						
AUG 18-25	.028	12.7	.21	5.87	2.05	<.010
SEP						
SEP 15-22	.083	5.36	.29	3.99	.500	<.003
SEP 29-						
OCT 06	.018	3.40	.08	2.31	.370	<.003

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COMPLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
CARD CR AT MOUTH CARD, KY	03207845	4.18	1973-75	E	E			
FEDS CR AT FEDS CR, KY	03207875	11.60	1973-75	E	E			
BIG CR AT DUNLAP, KY	03207905	9.55	1974-76	E	E			
ELKFOOT BRANCH NR NIGH, KY	03207915	.70	1980-84	E	E			
ISLAND CR NR PHYLLIS, KY	03207925	2.42	1974	E	E			
LICK CR AT LICK CR, KY	03207935	6.70	1973-76	E	E			
MILLERS CR NR PHYLLIS, KY	03207940	1.68	1973-75	E	E			
DICKS FK AT PHYLLIS, KY	03207962	.82	1975-84	E	E			
GRAPEVINE CR NR PHYLLIS, KY	03207965	6.20	1974-82	E		E	E	
			1989-92					
LEVISA FK BELOW FISHTRAP DAM, NR MILLARD, KY	03208000	392	1938-92*	E		C	E	
RUSSELL FORK AT ELKHORN CITY, KY	03209300	554.00	1960-92	E	E		E	
ELKHORN CR NR ELKHORN CITY, KY	03209400	48.80	1967-72	E		E	E	
SHELBY CR AT DORTON, KY	03209440	12.60	1971-76*	E	E	E	E	
SHELBY CR AT SHELBIANA, KY	03209460	112.00	1965			E	E	
			1972-81					
MUD CR AT HAROLD, KY	03209545	51.90	1975-81				E	
BILL D BR NR KITE, KY	03209575	3.17	1976-86			E		
RIGHT FK BEAVER CR AT WAYLAND, KY	03209600	73.90	1959-75				E	
BEAVER CR AT MARTIN, KY	03209700	228.00	1953-72				E	
LEVISA FK AT PRESTONSBURG, KY	03209800	1702.00	1964-81		E			
MIDDLE CR NR PRESTONSBURG, KY	03209890	62.10	1975-81				E	
RACCOON CR NR ZEBULON, KY	03210040	14.80	1974-75*	E	E			
CANEY FK NR GULNARE, KY	03210160	3.74	1974-75*	E	E	E		
BRUSHY FK AT HEENON, KY	03210310	20.40	1974-76	E	E			
BUFFALO CR NR ENDICOTT, KY	03210420	6.21	1974-75*	E	E			
JOHNS CR NR PRESTONSBURG, KY	03210500	197.00	1938-40		E			
JOHNS CR NR VAN LEAR, KY	03211500	206	1939-92*	E		C	E	
OPEN FK PAINT CR NR RELIEF, KY	03211945	25.50	1975-81				E	
PAINT CR NR STAFFORDSVILLE, KY	03212000	103.00	1950-75*	E	E	E	E	
KERSHAW BR NR HURLEY, VA	03213577	.60	1981-82		E			
CAMP CR NR ARGO, KY	03213594	1.60	1981-82		E			
KNOX CR AT ARGO, KY	03213600	95.90	1958-72				E	
R FK HURRICANE CR NR STOPOVER, KY	03213630	.82	1980-83		E			
BIG CR NR HATFIELD, KY	03213790	59.10	1975-81				E	
WOLF CR AT PILGRIM, KY	03214400	62.80	1975-81				E	
ROCKCASTLE CR AT CLIFFORD, KY	03214730	121.00	1965-65					E
			1972-81					
BIG SANDY R AUXILIARY AT LOUISA, KY	03214980	3885.00	1938-76		E			
BIG SANDY R AT LOUISA, KY	03215000	3897.00	1939-77		E			C
BLAINE CR ABOVE CAINS CR NR BLAINE, KY	03215362	64.70	1975-81				E	
BLAINE CR NR BLAINE, KY	03215410	119.00	1972-76				E	
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1915-75*	E	E	E	E	
OHIO R AT ASHLAND, KY	03216000	60750.00	1939-75		E			
LITTLE SANDY R AT SANDY HOOK, KY	03216190	35.70	1970-74				E	
LITTLE SANDY R NR SANDY HOOK, KY	03216200	60.40	1954-69				E	
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196	1966-92	E		C	E	
LITTLE SANDY R AT LEON, KY	03216400	255.00	1962-80		C			
LITTLE FK LITTLE SANDY R NR WILLARD, KY	03216438	58.10	1975-81				E	
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1965-65					E
			1972-81					
BECKWITH BR TRIBUTARY NR GRAYSON, KY	03216505	.51	1977-86			E		
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1972-91	E	E	E	E	
E FK LITTLE SANDY R NR CANNONSBURG, KY	03216550	38.20	1980-81		E		E	
MILE BRANCH NR RUSH, KY	03216563	.94	1976-90			E		
MILE BR NR COALTON, KY	03216564	1.61	1977-86			E		
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1968-76				E	
TYGARTS CREEK AT OLIVE HILL, KY	03216800	59.6	1957-94	E	E	E	E	
TROUGH CAMP CR TRIB NR OLIVE HILL, KY	03216901	1.11	1976-86			E		
TYGARTS CR NR KEHOE, KY	03216935	124.00	1963-74		E			E
BUFFALO CR BELOW GRASSY CR AT KEHOE, KY	03216965	54.60	1975-81				E	
KINNICONICK CR NR KINNICONICK, KY	03237225	60.10	1975-81				E	
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1954-72				E	
LAUREL FK NR CAMP DIX, KY	03237246	57.00	1975-81				E	
SALT LICK CR NR VANCEBURG, KY	03237285	47.50	1954-62					
INDIAN RUN TRIB NR TOLLESBORO, KY	03237895	.23	1975-86					
CABIN CR NR TOLLESBORO, KY	03237900	22.40	1972-91	E	E	E	E	
CABIN CR NR PLUMVILLE, KY	03237985	57.60	1975-78				E	
			1980-81					
OHIO R AT MAYSVILLE, KY	03238000	70130.00	1939-80		E	E		
LAWRENCE CR NR MAYSVILLE, KY	03238030	1.90	1975-86			E		

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
BRACKEN CR NR AUGUSTA, KY	03238620	28.80	1975-78 1980-81				E	
LOCUST CR NR AUGUSTA, KY	03238660	41.70	1975-78 1980-81				E	
TWELVEMILE CR NR CALIFORNIA, KY	03238750	44.30	1975-81				E	
DUCK CR AT COLD SPRING, KY	03238795	.49	1975-78			E		
LICKING R AT FREDVILLE, KY	03248170	40.30	1973-76				E	
LICKING R AT ROYALTON, KY	03248250	76.70	1973-76				E	
LICKING R NR SALYERSVILLE, KY	03248500	140	1939-92, 1994-97	E	E	E	E	
ELK FK NR LENOX, KY	03248685	59.40	1958-73				E	
CANEY CR NR W LIBERTY, KY	03248730	41.40	1973-75				E	
GRASSY CR NR W LIBERTY, KY	03248765	46.10	1974-79 1981				E	
BLACKWATER CR NR EZEL, KY	03248815	38.30	1974-81					
N FK LICKING R NR WRIGLEY, KY	03248855	33.70	1974-81			E		
LICKING R AT YALE, KY	03249000	714.00	1937-42		E			
LICKING R AT FARMERS, KY	03249500	827	1915-20 1928-31 1936-87 1938-94	E E E E	E E E	E E E	E E E	
TRIPLETT CR AT MOREHEAD, KY	03250000	47.5	1941-82 1989-92	E		E	E	
JACKS BRANCH NR MOREHEAD, KY	03250080	.19	1976-86			E		
N FK TRIPLETT CR AT MOREHEAD, KY	03250100	84.7	1967-94	E	E	E	E	
INDIAN CR NR OWINGSVILLE, KY	03250150	2.43	1975-90			E		
SLATE CR NR JEFFERSNVILLE, KY	03250185	56.70	1973-81				E	
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1954-72				E	
ROSE RUN TRIB NR OLYMPIA, KY	03250243	.70	1975-86			E		
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1973-82		E			
FOX CR NR HILLSBORO, KY	03250330	110.00	1953-72			E	E	
FLEMING CR NR HILL TOP, KY	03250470	77.20	1954-72				E	
LICKING R AT BLUE LICK SPRINGS, KY	03250500	1785.00	1938-59*	E	E	E		
JOHNSON CR TRIB NR FAIRVIEW, KY	03250620	.33	1976-86			E		
JOHNSON CR AT PIQUA, KY	03250640	72.40	1973-74				E	
N FK LICKING R NR LEWISBURG, KY	03251000	119.00	1946-91	E	E	E	E	
WELLS CR TRIB NR WASHINGTON, KY	03251008	.96	1977-86		E	E		
LEES CR TRIB AT MAYS LICK, KY	03251015	.45	1975-86		E	E		
N FK LICKING R NR MILFORD, KY	03251400	286.00	1954-72		E	E		
LICKING R AT MCKINNEYSBURG, KY	03251500	2326.00	1924-26 1939-94	E	E	E	E	
STONER CR NR N MIDDLETOWN, KY	03251665	51.60	1974-81			E		
STRODES CR NR N MIDDLETOWN, KY	03251790	53.60	1973-81			E		
STONER CR AT PARIS, KY	03252000	239.00	1953-91	E	E	E	E	
GRASSY LICK CR NR SHARPSBURG, KY	03252188	40.60	1973-74			E		
HINKSTON CR NR SHARPSBURG, KY	03252190	78.90	1973-77			E		
HINKSTON CR NR CARLISLE, KY	03252300	154.00	1968-76			E		
S FK LICKING R AT CYNTHIANA, KY	03252500	621.00	1938-94	E		E	E	
RAVEN CR NR BERRY, KY	03252770	46.60	1973-81			E		
FK LICK CR AT MORGAN, KY	03252940	50.20	1973-81			E		
SF LICKING R AT HAYES, KY	03253000	920.00	1915-31		E			
LICKING R AT BUTLER, KY	03254000	3385.00	1938-42			E		C
N FK GRASSY CR NR PINER, KY	03254400	13.60	1967-83		E			
GRASSY CR AT DEMOSSVILLE, KY	03254460	119.00	1950-72				E	
LICKING R AT MORNING VIEW, KY	03254500	3539.00	1914-16		E			
BANKLICK CR NR S FT MITCHELL, KY	03254680	54.60	1974-81			E		
OHIO R AT CINCINNATI, OH	03255000	76580.00	1936-76		E	E		
FOWLERS FORK AT UNION, KY	03277070	1.54	1976-90			E		
PLEASANT RUN CR AT CRESENT SPRINGS, KY	03260010	.68	1973-86			E		
PLEASANT RUN CR TRIB AT FT MITCHELL, KY	03260012	1.62	1973-90			E		
GUNPOWDER CR NR UNION, KY	03277100	50.20	1975-81				E	
CRAIGS CR TRIB NR WARSAW, KY	03277185	.68	1976-86					
OHIO R AT MARKLAND D NR WARSAW, KY	03277210	83170.00	1915-65					
BOTTOM FK NR MAYKING, KY	03277290	3.03	1976-87			E		
N FK KENTUCKY R AT WHITESBURG, KY	03277300	66.40	1953-75		E	E		
N FK KENTUCKY R AT BLACKKEY, KY	03277340	131.00	1965-65 1972-81				E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
ROCKHOUSE CR NR FLETCHER, KY	03277360	51.60	1958-67				E	
LINE FK AT DEFEATED CR, KY	03277370	40.80	1958-76				E	
N FK KENTUCKY R AT CORNETTSTVILLE, KY	03277411	322.00	1958-72				E	
BREEDING CR NR ISOM, KY	03277437	.69	1977-85			E		
CARR FORK NR SASSAFRAS, KY	03277450	60.6	1963-94	E	E	E	E	
N FK KENTUCKY R AT HAZARD, KY	03277500	466	1940-92	E		E	E	
BRIAR FK NR HAZARD, KY	03277630	1.32	1976-85			E		
TROUBLESOME CR AT DRAWF, KY	03277835	59.90	1958-67				E	
BALLS FK AT ARY, KY	03277915	45.40	1959-75				E	
BEAR BR NR NOBLE, KY	03278000	2.21	1955-73*		E	E		
TROUBLESOME CR AT NOBLE, KY	03278500	177.00	1950-81		E			
TROUBLESOME CR NR CLAYHOLE, KY	03279000	187.00	1928-31		E			
QUICKSAND CR AT LUNAH, KY	03279400	101.00	1958-72				E	
QUICKSAND CR NR JACKSON, KY	03279500	153.00	1928-31		E			
N FK KENTUCKY R NR AIRDALE, KY	03280500	1294.00	1928-42		E			
MIDDLE FK KENTUCKY R AT ASHER, KY	03280551	70.60	1958-76				E	
GREASY CR AT NAPIER, KY	03280570	37.70	1975-81				E	
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1958-67				E	
MIDDLE FK KENTUCKY R NR HYDEN, KY	03280600	202	1957-92	E		E	E	
BULL CR NR HYDEN, KY	03280728	1.84	1976-86			E		
MIDDLE FK KENTUCKY R AT BUCKHORN, KY	03280900	420.00	1957-75*	E	E	E		
STAMPER FK AT CANOE, KY	03280935	1.57	1975-87			E		
RED BIRD R NR SPRING CR, KY	03281016	52.70	1976-81				E	
RED BIRD R AT BIG CR, KY	03281030	125.00	1954-72			E	E	
GOOSE CR AT GOOSEROCK, KY	03281065	49.60	1976-81				E	
COLLINS FK AT BLUEHOLE, KY	03281080	67.40	1958-76				E	
PACES CR NR GARRARD, KY	03281090	.47	1976-85			E		
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1958-82			E		
SEXTON CR AT TAFT, KY	03281350	71.00	1959-64				E	
			1967					
			1975-77					
			1979-81					
STURGEON CR NR HEIDELBERG, KY	03282045	96.40	1942-72				E	
BIG SINKING CR NR CRYSTAL, KY	03282075	23.4	1988-89*	E	E			
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1988-89*	E	E			
S FK STATION CAMP CR NR DRIP ROCK, KY	03282135	41.40	1959-76				E	
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1954-72				E	
REDLICK CR NR STATION CAMP, KY	03282190	69.50	1959-76				E	
CLEAR CR TRIB NR WEST IRVINE, KY	03282198	.59	1975-86			E		
STILLWATER CR AT STILLWATER, KY	03283000	24.00	1954-73*	E	E	E		
RED R NR PINE RIDGE, KY	03283100	142.00	1969-76					
M FK RED R AT ZACHARIAH, KY	03283305	.58	1975-86			E		
CAT CR NR STANTON, KY	03283370	8.30	1987-89*	E	E			
LULBGRUD CR TRIB AT WESTBEND, KY	03283610	.33	1975-86					
LULBGRUD CR AT LOG LICK, KY	03283630	49.30	1973-81				E	
MUDDY CR AT DOYLESVILLE, KY	03283830	63.80	1973-77				E	
			1979-81					
OTTER CR NR FORD, KY	03283995	63.50	1973-77				E	
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-74				E	
SILVER CR NR KINGSTON, KY	03284300	28.60	1967-83		E			
SILVER CR NR BEREAS, KY	03284310	53.40	1975-83			E	E	
OLD TOWN BR TR NR RICHMOND, KY	03284340	1.83	1976-85			E		
SILVER CR NR RICHMOND, KY	03284350	98.50	1972-77				E	
			1979-81					
PAINT LICK CR AT PAINT LICK, KY	03284415	54.40	1973-74				E	
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1954-74				E	
SUGAR CR NR BUCKEYE, KY	03284495	41.50	1975-77				E	
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1910-71*	E	E	E		
W HICKMAN CR AT JONESTOWN, KY	03284550	11.00	1975-84		E			
KENTUCKY R AT CAMP NELSON, KY	03284600	4528.00	1940-71		E	E		
DIX R AB COPPER CR NR CRAB ORCHARD, KY	03284720	44.40	1973-76				E	
DIX R BL COPPER CR NR CRAB ORCHARD, KY	03284750	70.60	1973-76				E	
DIX R NR STANFORD, KY	03284800	160.00	1973-76				E	
HANGING FK CR NR STANFORD, KY	03284935	46.90	1973-74				E	
HANGING FK CR NR HUBBLE, KY	03284995	91.10	1973-74				E	
BALLS BR TRIB NR DANVILLE, KY	03285100	.13	1976-86			E		
CLARKS RUN NR DANVILLE, KY	03285200	26.4	1992-97		E	E	E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
DIX R NR BURGIN, KY	03285500	395.00	1909-22		E			
KENTUCKY R AT L7 AT HIGHBRIDGE, KY	03286500	5036.00	1901-27		E			
TANNERS CREEK AT MORTONSVILLE, KY	03287128	1.49	1976-88, 90			E		
CLEAR CR NR MORTONSVILLE, KY	03287130	61.60	1973-77				E	
GILBERT CR TR NR SALVISA, KY	03287160	.81	1975-78			E		
S BENSON CR NR FRANKFORT, KY	03287534	4.47	1976-86			E		
BENSON CR NR FRANKFORT, KY	03287550	107.00	1943-72				E	
CANE RUN NR GEORGETOWN, KY	03288260	45.40	1973-74				E	
N ELKHORN CR AT SWITZER, KY	03288450	265.00	1972-77				E	
CAVE CR NR FORT SPRING, KY	03288500	2.53	1953-72*	E	E	E	E	
S ELKHORN CR AT FORT SPRING, KY	03289000	24.0	1950-92	E		E	E	
WOLF RUN AT CAMBRIDGE DR AT LEXINGTON, KY	03289190	5.30	1976-88			E		
S ELKHORN CR NR WOODLAKE, KY	03289410	156.00	1972-81				E	
FLAT CR NR FRANKFORT, KY	03290000	5.63	1952-71		E	E		
SIX MILE NR DEFOE, KY	03290420	42.60	1973-74				E	
SIX MILE CR NR LOCKPORT, KY	03290490	76.50	1973-74				E	
TOWN CR AT NEW CASTLE, KY	03290580	5.62	1976-86			E		
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74				E	
EAGLE CR AT SADIEVILLE, KY	03291000	42.90	1941-75*	E	E	E	E	
S RAYS FK TRIB NR CORINTH, KY	03291050	0.58	1976-86			E		
EAGLE CR NR NEW COLUMBUS, KY	03291110	124.00	1972-74				E	
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1954				E	
			1957					
			1962					
			1972-81					
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973-76				E	
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1950-72				E	
CORN CR NR BEDFORD, KY	03292100	27.50	1975-81				E	
JEFF BR NR SLIGO, KY	03292200	.87	1976-86			E		
HARRODS CR NR LAGRANGE, KY	03292460	24.1	1967-94	E	E	E	E	
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1972-74				E	
S FK HARRODS CR NR CRESTWOOD, KY	03292472	.97	1975-88			E		
MILL CREEK CUTOFF NR LOUISVILLE, KY	03294550	24.4	1988-94	E	E	E	E	
SALT R NR HARRODSBURG, KY	03295000	41.40	1953-73*	E	E	E		
SALT R AT FOX CR, KY	03295290	131.00	1972-76					
SALT R NR VAN BUREN, KY	03295500	196.00	1938-82		E			
BEECH CR NR TAYLORSVILLE, KY	03295580	53.20	1974-76				E	
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1937-75				E	
			1972-76					
BULLSKIN CR AT FINCHVILLE, KY	03295705		1974-75		E		E	
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1953-72				E	
BRADSHAW CR NR SHELBYVILLE, KY	03295845	1.36	1976-86			E		
SIMPSON CR NR TAYLORSVILLE, KY	03295985	57.30	1974-76			E		
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1955-64*		E			
PLUM CR NR WILSONVILLE, KY	03296500	19.10	1954-61*	E	E	E	E	
PLUM CR SWS N 15 NR WILSONVILLE, KY	03296700	1.03	1957-61*		E			
PLUM CR SWS N 17 NR WATERFORD, KY	03296800	.52	1957-61*		E			
LITTLE PLUM CR NR WATERFORD, KY	03297000	5.15	1954-61*	E	E	E		
PLUM CR AT WATERFORD, KY	03297500	31.80	1954-74*	E	E	E		
COX CR NR HIGHGROVE, KY	03297700	95.80	1968-72				E	
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-91	E	E	E	E	
LONG RUN NR EASTWOOD, KY	03297970	15.20	1974-77*	E	E	E		
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1972-76				E	
ELM LICK CR NR CLERMONT, KY	03298535	.68	1976-86			E		
N ROLLING FK NR GRAVEL SWITCH, KY	03298710	66.20	1974-81				E	
N ROLLING FK AT BRADFORDVILLE, KY	03298760	95.70	1972-77				E	
BIG S FK AT BRADFORDVILLE, KY	03298865	59.60	1974-81				E	
ROLLING FK NR LEBANON, KY	03299000	239	1938-92	E		E	E	
POTTINGER CR NR NEW HOPE, KY	03299445	43.50	1974-78				E	
			1980-81					
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1953-72		E	E		
N PRONG NR WILLISBURG, KY	03300065	1.71	1975-89			E		
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1954-72				E	
CHAPLIN R NR CHAPLIN, KY	03300390	262.00	1972-77				E	
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1972-77				E	
BEECH FK AT FREDERICKTOWN, KY	03300500	542.00	1929-32		E			
HARDINS CR NR HOLY CROSS, KY	03300780	57.80	1975-78				E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	NUMBER	AREA (MI ²)	RECORD PERIOD OF COMPLETE FLOW	COM- PLETE FLOW	STAGE PLETE FLOW	PEAK FLOW	LOW FLOW	MISC FLOW
TOWN CR TRIB AT BARDSTOWN, KY	03300990	.32	1975-86	E	E	E	E	E
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1939-74	E	E	E	E	E
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-96	E	E	E	E	E
SLOP DITCH NR OKOLONA, KY	03301885	1.4	1994-96	E	E	E	E	E
NORTHERN DITCH AT OKOLONA, KY	03301940	11.10	1974-79	E	E	E	E	E
OTTER CR AT GRAHAMTON, KY	03302085	.90	1975-86					
DOE RUN NR BRANDBURG STATION, KY	03302150	52.70	1953-72					
SINKING CR AT ROSETTA, KY	03303195	36.00	1970-76					
SINKING CR DENTS BR NR IRVINGTON, KY	03303198	66.10	1970-76					
SINKING CR NR IRVINGTON, KY	03303205	86.70	1953-72					
SINKING CR NR LODIBURG, KY	03303210	125.00	1971-77					
SINKING CR AT SAMPLE, KY	03303310	222.00	1953-70					
BLACKFORD CR NR MACEO, KY	03303450	111.00	1953-74					
OHIO R AT OWENSBORO, KY	03303500	97200.00	1940-54*	E	E	E	E	E
MCGILLS CR NR MCKINNEY, KY	03304500	2.14	1951-71*	E	E	E	E	E
GREEN R NR MCKINNEY, KY	03305000	22.40	1951-73*	E	E	E	E	E
GREEN R NR MOUNT SALEM, KY	03305500	36.30	1954-61*	E	E	E	E	E
GREEN R AT MIDDLEBURG, KY	03305520	66.50	1972-74					
CARPENTER CR TRIB NR HUSTONVILLE, KY	03305559	.88	1976-86					
GREEN R NR DUNNVILLE, KY	03305660	221.00	1972-77					
S FK NR DUNNVILLE, KY	03305720	71.00	1972-78					
IRVIN BRANCH NR SALEM, KY	03305725	1.37	1976-86	E				
GOOSE CR AT DUNNVILLE, KY	03305760	51.60	1972-77					
GREEN R AT NEATSVILLE, KY	03305800	399.00	1953-73					
GUM LICK TRIB NR CLEMENTSVILLE, KY	03305835	.71	1976-90	E				
CASEY CR, KY	03305865	74.70	1972-77					
ROBINSON CR AT ACTON, KY	03305945	48.40	1974-81					
GREEN R AT CAMPBELLSVILLE, KY	03306000	682	1930-32	E	E	E	E	E
GREEN R AT GREENSBURG, KY	03306500	736.00	1963-94	E	E	E	E	E
WHITE OAK CR TR NR MONTPELIER, KY	03306640	.50	1976-86	E	E	E	E	E
RUSSELL CR NR JOPPA, KY	03306690	62.90	1974-81					
RUSSELL CR AT COLUMBIA, KY	03306850		1972-74					
RUSSELL CR NR GRESHAM, KY	03307100	265.00	1965-75*	E	E	E	E	E
BIG PITMAN CR NR BENGAL, KY	03307215	47.70	1974-78					
LITTLE PITMAN CR NR CAMPBELLSVILLE, KY	03307260	19.3	1990-95	E	E	E	E	E
BIG PITMAN CR NR SUMMERSVILLE, KY	03307295	126.00	1953-72					
BIG BRUSH CR NR SUMMERSVILLE, KY	03307400	45.70	1974-78					
S FK LITTLE BARREN R AT EDMONTON, KY	03307500	18.30	1941-72*	E	E	E	E	E
S FK LITTLE BARREN R AT SULPHUR WELL, KY	03307600	79.60	1975-81					
S FK LITTLE BARREN R AT SULPHUR WELL, KY	03307670	2.53	1976-86	E				
PRICES CR NR GRADYVILLE, KY	03307730	87.40	1975-81					
E FK LITTLE BARREN R NR SULPHUR WELL, KY	03307800	244.00	1960-76					
LITTLE BARREN R NR MONROE, KY	03307850		1953-74					
ECHO R OUTLET AT MAMMOTH CAVE, KY	03309000	1983.00	1938-50	E	E	E	E	E
GREEN R AT MAMMOTH CAVE, KY	03309100	2.26	1962-74					
WET PRONG BUFFALO CR NR MAMMOTH CAVE, KY	03309500	5.34	1953-71*	E	E	E	E	E
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1941-73*	E	E	E	E	E
S FK NOLIN R AT MATHERS MILL, KY	03310078	49.60	1974-78					
NOLIN R NR GLENDALE, KY	03310160	185.00	1972-73					
VALLEY CR NR GLENDALE, KY	03310270	90.10	1973-81					
BACON CR AT HIGHWAY 31W AT BONNIEVILLE, KY	03310380	53.50	1974-81					
BACON CR TRIB NR UPTON, KY	03310385	.56	1975-90					
BACON CR NR PRICEVILLE, KY	03310400	85.4	1959-94	E	E	E	E	E
NOLIN R AT WAX, KY	03310500	600.00	1935-62*	E	E	E	E	E
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74					
BRIER CR TRIB NR OLLIE, KY	03310880	.31	1976-86					
BYLW CR NR MAMMOTH CAVE, KY	03311100	5.16	1961-74					
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762	1925-31	E				
BEAVERDAM CR NR RHODA, KY	03311600	10.9	1961-72	E	E	E	E	E
BEAR CR NR LEITCHFIELD, KY	03312000	30.80	1950-71*	E	E	E	E	E

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE		PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
		AREA (MI ²)							
BEAR CR NR ROUNDHILL, KY	03312100	137.00		1953-72				E	
BARREN R NR PAGEVILLE, KY	03312500	533.00		1939-63	E	E	E		
LITTLE BEAVER CR NR GLASGOW, KY	03312795	.89		1976-86			E		
BARREN R NR FINNEY, KY	03313000	942		1941-50	E	E	E	E	
				1960-94	E	E	E	E	
SOLOMON CR TRIB NR SCOTTSVILLE, KY	03313020	.24		1976-90			E		
W BAYS FK AT SCOTTSVILLE, KY	03313500	7.47		1951-72		E	E		
LICK CR NR FRANKLIN, KY	03313800	21.60		1959-83			E		
TRAMMEL CR NR SCOTTSVILLE, KY	03313900	93.40		1953-72				E	
DRAKES CR NR ALVATON, KY	03314000	478.00		1940-71	E	C	E	E	
BARREN R AT BOWLING GREEN, KY	03314500	1,849		1938-94	E	E	E	E	
LOST R BLUE HOLE NR BOWLING GREEN, KY	03314670			1985-86	E	E	E	E	
LOST R RISE AT LAMPKIN PK AT BOWLING GREEN, KY	03314675			1985-86	E	E	E	E	
BARREN R TRIB NR BOWLING GREEN, KY	03314750	.50		1976-90			E		
BARREN R AT LOCK 1 AT GREENCASTLE, KY	03315000	1968.00		1923-37	E	E	E		
GASPER R NR RICHELIEU, KY	03315265			1972-77				E	
GREEN R AT WOODBURY, LOCK #4, KY	03315500	5404.00		1936-92	E		E	E	
GASPER R AT HADLEY, KY	03315300	190.00		1953-72				E	
MUDDY CR AT DUNBAR, KY	03315810	94.30		1953-74				E	
POINDEXTER BR TRIB NR RUSSELLVILLE, KY	03315885	.25		1976-86			E		
MUD R NR LEWISBURG, KY	03316000	90.50		1940-72*	E	E	E		
WOLFLICK CR NR LEWISBURG, KY	03316200	116.00		1953-72				E	
MUD RIVER NR HUNTSVILLE, KY	03316275	268.00		1991-94	E	E	E	E	
GREEN R NR PARADISE, KY	03316500	6182.00		1940-81		E			
				1961-81					
MUD R NR HUNTSVILLE, KY	03316275	268		1974-80				E	
				1991-94	E	E	E	E	
ROUGH R NR MADRID, KY	03317000	225.00		1936-59	E	E	E		
N FK ROUGH T NR WESTVIEW, KY	03317500	42.00		1954-73*	E	E	E		
LONG LICK CR TRIB NR AXTEL, KY	03317965	.38		1975-86			E		
ROUGH R NR FALLS OF ROUGH, KY	03318000	454.00		1940-56		E			
ROCK LICK CR NR GLEN DEAN, KY	03318200	20.10		1955-71*	E	E		E	
ROUGH R AT FALLS OF ROUGH, KY	03318500	504		1939-94	E	E	E	E	
PLEASANT RUN TRIB NR FALLS OF ROUGH, KY	03318505	.22		1975-90			E		
CANEY CR NR HORSE BRANCH, KY	03318800	124		1956-92	E	E	E	E	
ROUGH R NR DUNDEE, KY	03319000	757		1939-92	E		E	E	
W FK ADAMS FK NR FORDSVILLE, KY	03319520	.26		1976-86			E		
ROUGH RIVER AT HARTFORD, KY	03319600	880.00		1991-94	E	E	E	E	
POND R NR WHITE PLAINS, KY	03321000	343.00		1927-40	E	E	E		
CYPRESS CR NR CALHOUN, KY	03321210	142		1979-81	E	E			
				1990-94	E	E	E	E	
CYPRESS CR NR RUMSEY, KY	03321215	149.00		1972-76				E	
E FK DEER CR TRIB NR ONTON, KY	03321275	.95		1976-86			E		
S FK PANTHER CR NR WHITESVILLE, KY	03321350	58.20		1968-83		E			
S FK PANTHER CR NR MASONVILLE, KY	03321370	109.00		1954-72				E	
N FK PANTHER CR NR MASONVILLE, KY	03321410	88.30		1954-72				E	
RHODES CR TRIB NR OWENSBORO, KY	03321465	.29		1975-86			E		
GREEN R AT LOCK AND DAM 1 AT SPOTTSVILLE, KY	03321500	9181.00		1928-31		E			
OHIO R AT MOUNT VERNON, KY	03322250			1977-80		E			
HIGHLAND CR NR WAVERLY, KY	03322350	62.30		1975-77				E	
BEAVERDAM CREEK NR CORYDON, KY	03322360	14.3		1972-94	E	E	E	E	
HIGHLAND CR NR UNIONTOWN, KY	03322400	166.00		1953-77				E	
OHIO R UNIONTOWN DAM	03322420	108000.00		1985-93	E	E	E	E	
WARD CR AT LEWISTOWN, KY	03382975	.91		1975-86			E		
TRADEWATER R NR DALTON, KY	03383500	283.00		1927-40		E	E		
W FK DONALDSON CR NR FREDONIA, KY	03383605	2.52		1975-86			E		
CLEAR CR NR RICHLAND, KY	03383755	17.0		1966-80				E	
				1991-94		E			
ROSE CR AT NEBO, KY	03384000	2.10		1952-70*	E	E	E		
TRADEWATER R	03384180	861		1975-80					E
				1980-81	E	E			
OHIO R AT DAM 51 AT GOLCONDA, IL	03384500	143900.00		1941-52		C			
POOR FK AT HARLAN, KY	03400000	51.70		1940-43		E			
POOR FK AT CUMBERLAND, KY	03400500	82.3		1940-92	E		C	E	
POOR FK AT ROSSPOINT, KY	03400585	142.00		1972-77				E	
WOOD CR NR LONDON, KY	03400600	3.89		1953-71			E		
				1972-87			E		

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE		PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
		AREA (MI ²)							
CLOVER FK AT EVARTS, KY	03400700	82.40		1959-87, 90			E		
MARTINS FK ABOVE SMITH, KY	03400785	23.80		1985-90*	E	E	E	E	
CRANE CR NR SMITH, KY	03400796	1.63		1976-77		E			
MARTINS FK AT HARLAN, KY	03400985	116.00		1960					E
CLOVER FK AT HARLAN, KY	03400990	222		1977-92	E	E	E	E	
PEARL BR AT WALLINS CR, KY	03401040	1.40		1976-85			E		
LITTLE YELLOW CR AT MIDDLESBORO, KY	03401400	10.80		1959-66		E	E		
BENNETTS FORK AT MIDDLESBORO, KY	03401428	60.6		1985-94	E	E	E	E	
YELLOW CR BYPASS AT MIDDLESBORO, KY	03401500	35.30		1941-83			E		
SHILALAN CR NR PAGE, KY	03402020	2.96		1976-86			E		
YELLOW CR NR FERNDAL, KY	03402230	99.50		1972-81				E	
CLEAR CR AT CLEAR CR SPRINGS, KY	03402480	38.50		1975-81				E	
CUMBERLAND R AT PINEVILLE, KY	03402500	676.00		1928-31		E			
LEFT FK STRAIGHT CR AT CARY, KY	03402850	33.70		1958-76				E	
STRAIGHT CR AT STRAIGHT CR, KY	03402852	89.80		1953-67				E	
CUMBERLAND RIVER NR PINEVILLE, KY	03403000	809.00		1938-92	E	E	E	E	
STINKING CR AT DEWITT, KY	03403180	49.10		1961-75				E	
ROAD E CR AT DEWITT, KY	03403255	25.20		1961-75				E	
RICHLAND CR NR BARBOURVILLE, KY	03403530	27.70		1961-76				E	
LITTLE RICHLAND CR NR HINKLE, KY	03403538	11.60		1974-83			E		
CLEAR FK AT SAXTON, KY	03403910	331.00		1968-90*	E	E	E	E	
JELICO CR NR WILLIAMSBURG, KY	03404200	103.00		1953-72				E	
MARSH CR NR WHITELY CITY, KY	03404390	72.00		1960-61				E	
				1974-81					
CUMBERLAND R AT CUMBERLAND FALLS, KY	03404500	1,977		1907-11	E	E			
				1914-94	E	E	E	E	
LAUREL R NR LILY, KY	03404688	52.30		1974-81				E	
LITTLE LAUREL R NR LILY, KY	03404810	42.40		1975-81				E	
LAUREL R AT MUNICIPAL DAM NR CORBIN, KY	03404820	140		1973-92	E		C	E	
GOZEY HOLLOW NR CORBIN, KY	03404867	.31		1976-85			E		
LAUREL R AT CORBIN, KY	03405000	201.00		1910-73	E	E	E		
LAUREL R NR VOX, KY	03405500	245.00		1929-31		E			
S FK ROCKCASTLE R NR PEOPLES, KY	03405700	95.10		1961-72				E	
MIDDLE FK ROCKCASTLE R NR PARROT, KY	03405818	79.00		1975-81				E	
HORSE LICK CR NR LAMERO, KY	03405842	61.70		1975-81				E	
BIG HURRICANE BR AT CONWAY, KY	03405854	1.91		1976-85			E		
ROUNDSTONE CR AT HOMMEL, KY	03405868	52.90		1975-81				E	
ROUNDSTONE CR AT LIVINGSTON, KY	03405900	144.00		1953-76					
WOOD CR NR LONDON, KY	03406000	3.89		1954-71*	E	E		E	
				1972-87, 90			E		
SKEGG CR NR BILLOWS, KY	03406330	55.90		1975-81				E	
ROCKCASTLE R AT ROCKCASTLE SPRINGS, KY	03407000	745.00		1921-31	E	E	E		
CANE BR NR PARKERS LAKE, KY	03407100	.67		1956-87		E	E		
W FK CANE BR NR PARKERS LAKE, KY	03407200	.26		1956-86			E		
HELTON BR AT GREENWOOD, KY	03407300	.85		1956-74		E	E		
BUCK CR NR WOODSTOCK, KY	03407425	73.00		1975-81				E	
BUCK CR NR SHOPVILLE, KY	03407500	165.00		1952-91	E	E	E	E	
BUCK CR AT DYKES, KY	03407640	253.00		1972-81				E	
ROCK CR NR YAMACRAW, KY	03410590	58.90		1965				E	
				1975-81					
LITTLE S FK CUMBERLAND R NR GRIFFIN, KY	03410825	56.40		1975-81				E	
LITTLE S FK CUMBERLAND R NR OIL VALLEY, KY	03410900	98.20		1953-72				E	
S FK CUMBERLAND R AT NEVELSVILLE, KY	03411000	1271.00		1915-50		E	E		
CUMBERLAND R AT BURNSIDE, KY	03411500	4865.00		1925-50		E	E		
LAKE CUMBERLAND AT BURNSIDE, KY	03411700	4869.00		1951-70					
PITMAN CR NR SOMERSET, KY	03412000	26.30		1949-53		E			
PITMAN CR AT SOMERSET, KY	03412500	31.30		1953-72*	E	E	E		
FISHING CR NR HOGUE, KY	03412700	59.80		1968-77				E	
CUMBERLAND R NR JAMESTOWN, KY	03413000	5331.00		1937-40		E			
BEAVER CR NR MONTICELLO, KY	03413200	43.40		1968-83		E			
ELK SPRING CR NR SPANN, KY	03413202	0.57		1976-87, 90			E		
OTTER CR NR SUSIE, KY	03413345	67.10		1953-66				E	
WILLIAMS CR TRIB NR CARTWRIGHT, KY	03413425	.76		1976-86			E		
CUMBERLAND R NR ROWENA, KY	03414000	5790		1939-92	E	E	E	E	
CROCUS CR NR BAKERTON, KY	03414080	108.00		1972-76				E	
BEAR CR NR BURKESVILLE, KY	03414102	352.00		1976-87, 90			E		
MARROWBONE CR AT GRIDER, KY	03414175	80.70		1975-81				E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
RED R NR ADAIRVILLE, KY	03435100	229.00	1957-72				E	
WHIPPOORILL CR NR CLAYMOUR, KY	03435140	20.80	1973-91	E	E	E	E	
ELBOW CR TRIB NR CANTON, KY	03437380	.83	1975-86			E		
LICK CR NR CANTON, KY	03437390	.39	1977-86			E		
S FK LITTLE R TRIB NR HOPKINSVILLE, KY	03437490	2.62	1977-87, 90			E		
S FK LITTLE R AT HOPKINSVILLE, KY	03437500	46.50	1950-73*	E	E	E		
WHITE CR TR NR HOPKINSVILLE, KY	03437610	.19	1975-76		E			
MUDDY R NR DERULEAN, KY	03438070	30.50	1968-83		E			
N FK DRYDEN CR TRIB NR CONFEDERATE, KY	03438120	.10	1975-90			E		
DRY CR NR LAMASCO, KY	03438167	34.60	1968-72			E	E	
EDDY CR NR LAMASCO, KY	03438170	71.70	1968-74				E	E
BARKLEY-KENTUCKY CANAL NR GRAND RIVERS, KY	03438190		1966-97	E	E	E	E	
KENTUCKY-BARKLEY CANAL NR GRAND RS, KY	03438191		1971-74		E			
CUMBERLAND R AT EUREKA, KY	03438200	17594.00	1939-64		E			
CUMBERLAND RIVER NR GRAND RIVERS	03438220	17598.00	1939-97	E	E	E	E	
LIVINGSTON CR NR DYCUSBURG, KY	03438470	112.00	1954-74				E	
TENNESSEE R AT SHANNON DAM SITE NR MURRAY, KY	03608000	39780.00	1931-37		E			
TENNESSEE R AT AURORA LANDING, KY	03608500	40010.00	1930-32		E			
TENNESSEE R NR PADUCAH, KY	03609500	40200.00	1941-89			E		
CLARKS R AT MURRAY, KY	03610000	89.70	1952-71*	E	E	E		
YORK CR NR BENTON, KY	03610470	.96	1975-90			E		
CLARKS R NR BENTON, KY	03610500	227.00	1938-73*	E	E	E		
WEST FK CLARKS R NR BREWERS, KY	03610545	68.7	1968-83	E	E	E	E	
			1988-94	E	E	E	E	
CHESTNUT CR NR BENTON, KY	03610503	.82	1975-86			E		
CLARKS R TRIB NR REIDLAND, KY	03610820	.13	1975-86			E		
OHIO R AT PADUCAH, KY	03611000	202800.00	1873-75		C			
LITTLE BAYOU CR NR GRAHAMVILLE, KY	03611600	5.78	1990-91	E	E	E	E	
BAYOU CR NR HEATH, KY	03611800	6.55	1990-91	E	E	E	E	
BAYOU CR NR GRAHAMVILLE, KY	03611850	14.90	1990-91	E	E	E	E	
HUMPHREY CR AT LACENTER, KY	03613000	44.20	1953-72				E	
PERRY CR NR MAYFIELD, KY	07022500	1.72	1953-65*	E	E		E	
			1968-72					
			1973-90			E		
LICK CR TRIB NR KERBYTON, KY	07023040	.53	1975-90			E		
MAYFIELD CR NR BLANDVILLE, KY	07023100	295	1938-72	E	E			
			1991-94		E			
MAYFIELD CR AT MAYFIELD, KY	07022600	95.10	1954-72				E	
MAYFIELD CR AT LOVELACEVILLE, KY	07023000	204.00	1938-72*	E	E	E		
MISSISSIPPI R AT COLUMBUS, KY	07023200	921900.00	1843-58			E		
OBION CR AT PRYORSBURG, KY	07023500	36.30	1951-73	E	E	E		
OBION CR NR ARLINGTON, KY	07023700	203.00	1953-72				E	
S FK BAYOU de CHIEN TRIB AT WATER VALLEY, KY	07023935	.23	1975-90			E		
MISSISSIPPI R AT HICKMAN, KY	07024070	922500.00	1926-58			E		

* Period of complete flow only

C Currently operated

E Eliminated

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEM-ICAL AC-TIVE STA-TUS
BRUSHY FK AT THOMAS, KY	03201400		1980-82		N	N	N
CARD CR AT MOUTH CARD, KY	03207845	4.18	1974-80		N	N	N
FEDS CR AT FEDS CREEK, KY	03207875	11.60	1972-75		N	N	N
BIG CR AT DUNLAP, KY	03207905	9.55	1974-76			N	N
ELKFOOT BRANCH NR NIGH, KY	03207915	.70	1980-84			N	
ISLAND CR NR PHYLLIS, KY	03207925	2.42	1974-80		N	N	N
LICK CR AT LICK CREEK, KY	03207935	6.70	1972-76		N	N	N
MILLERS CR NR PHYLLIS, KY	03207940	1.68	1973-81		N	N	N
DICKS FK AT PHYLLIS, KY	03207962	.82	1975-79			N	
			1982-84			N	
LEVISA FK BELOW FISHTRAP DAM, KY	03208000	392.00	1965-79		N	N	N
RUSSELL FK AT ELKHORN CITY, KY	03209300	554.00	1961-83		N	N	N
ELKHORN CR NR ELKHORN CITY, KY	03209402		1980-82		N	N	N
MARROWBONE CR AT WOLFPIT, KY	03209420		1980-82		N	N	N
GREASY CR NR SUTTON, KY	03209430		1980-82		N	N	N
DORTON CR NR DORTON, KY	03209438		1980-82		N	N	N
LONG FK NR VIRGIE, KY	03209453		1980-82		N	N	N
ROBINSON CR AT ROBINSON CREEK, KY	03209457		1980-82		N	N	N
SHELBY CR AT SHELBIANA, KY	03209460	112.00	1965-79		N	N	N
MUD CR NR GRETHEL, KY	03209530		1980-82		N	N	N
TOLLAR CR NR HAROLD, KY	03209540		1980-82		N	N	N
MUD CR AT HAROLD, KY	03209545	51.90	1978-80		N	N	N
RIGHT FK BEAVER CR AT TOPMOST, KY	03209585		1980-82		N	N	N
CANEY FK BEAVER CR NR RAVEN, KY	03209590		1980-82		N	N	N
RIGHT FK BEAVER CR AT WAYLAND, KY	03209600	73.90	1978-80		N	N	N
JONES FK AT BETTY, KY	03209603		1980-82		N	N	N
SALT LICK CR NR BOSCO, KY	03209607		1980-82		N	N	N
LEFT FK BEAVER CR AT DRIFT, KY	03209650	58.50	1978-80		N		N
LEFT FK BEAVER CR AT PRINTER, KY	03209680		1980-82		N	N	N
BEAVER CR AT MARTIN, KY	03209700	228.00	1961-71		N		N
LEVISA FK AT PRESTONSBURG, KY	03209800	1702.00	1976-79		N	N	N
MIDDLE CR NR PRESTONSBURG, KY	03209850		1980-82		N	N	N
LEFT FK MIDDLE CR NR GOODLOE, KY	03209870		1980-82		N	N	N
MIDDLE CR NR PRESTONSBURG, KY	03209890	62.10	1978-80		N	N	N
ABBOTT CR NR PRESTONSBURG, KY	03209910		1980-82		N	N	N
RACCOON CR NR ZEBULLON, KY	03210040	14.80	1973-80		N	N	N
RACKOON CR NR ZEBULLON, KY	03210060		1980-82		N	N	N
CANEY FK NR GULNARE, KY	03210160	3.74	1973-80		N	N	N
BRUSHY FK AT HEENON, KY	03210310	20.40	1975-76		N	N	N
BUFFALO CR NR ENDICOTT, KY	03210420	6.21	1973-80		N	N	N
BUFFALO CR NR GERMAN, KY	03210450		1980-82		N	N	N
DANIELS CR NR ODDS, KY	03211690		1980-82		N	N	N
DANIELS CR AT MOUTH NR VAN LEAR, KY	03211700	12.00	1978-80		N		N
LEVISA FK ABOVE PAINT CR AT PAINTSVILLE, KY	03211800	1975.00	1974-79		N		N
PAINT CR NR ELNA, KY	03211970	79.30	1967		N		N
PAINT CR ABOVE BARNETTS CR NR STAFFORDSVILLE, KY	03211997		1971-72		N		N
GREASY CR NR OFFUTT, KY	03212510		1980-82		N	N	N
TOMS CR NR TUTOR KEY, KY	03212520		1980-82		N	N	N
GEORGES CR NR ULYSSES, KY	03212530		1980-82		N	N	N
RIGHT FK CR NR CHARLEY, KY	03212535		1980-82		N	N	N
RIGHT FK HURRICANE CR NR STOPOVER, KY	03213630	.82	1980-84			N	
LEFT FK PETER CR AT JAMBOREE, KY	03213670		1980-82		N	N	N
RIGHT FK PETER CR NR PHELPS, KY	03213680		1980-82		N	N	N
BLACKBERRY CR AT RANSOM, KY	03213690		1980-82		N	N	N
POND CR NR TOLER, KY	03213698		1980-82		N	N	N
BIG CR NR HATFIELD, KY	03213750		1980-82		N	N	N
WOLF CR NR MCCLURE, KY	03214300		1980-82		N	N	N
MIDDLE FK ROCKCASTLE CR AT INEZ, KY	03214600	33.34	1980-82		N	N	N
COLDWATER FK NR INEZ, KY	03214650	17.85	1980-82		N	N	N
ROCKCASTLE CR AT INEZ, KY	03214700	63.10	1970-72	N	N	N	N
ROCKHOUSE FK NR MILO, KY	03214720		1980-82		N	N	N
ROCKCASTLE CR AT CLIFFORD, KY	03214730	121.00	1965-75		N		N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO.	PHY.	SED.	CHEM-
				AC-TIVE STA-TUS	AC-TIVE STA-TUS	AC-TIVE STA-TUS	ICAL AC-TIVE STA-TUS
BIG SANDY R AT LOUISA, KY	03215000	3897	1950, 1966-72, 1974-92	N	N	N	N
LEFT FK BLAINE CR NR MARTHA, KY	03215250		1980-82		N	N	N
LOWER LAUREL CR NR FLATGAP, KY	03215320		1967		N		N
CAINES CR NR BLAINE, KY	03215367		1980-82		N	N	N
BLAINE CR AT HWY 32 BR AT BLAINE, KY	03215370	73.80	1978-80		N		N
HOOD CR AT BLAINE, KY	03215380		1980-82		N	N	N
BRUSHY CR NR CORDELL, KY	03215420		1980-82		N	N	N
BLAINE CR BELOW BRUSHY CR NR BLAINE, KY	03215430	151.00	1971-80		N		N
RICH CR NR ADAMS, KY	03215440		1971-72		N		N
LITTLE BLAINE CR NR EVERGREEN, KY	03215470		1980-82		N	N	N
LITTLE BLAINE CR AT EVERGREEN, KY	03215480	23.00	1971-80		N		N
BLAINE CR NR YATESVILLE, KY	03215490	206.00	1971-72		N		N
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1965-79		Y		N
CAT FK CR AT FALLSBURG, KY	03215550		1980-82		N	N	N
BIG SANDY R AT CATLETTSBURG, KY	03215700	4281.00	1955-75		N		N
LITTLE SANDY R AT SANDY HOOK, KY	03216180		1980-82		N	N	N
BIG CANEY CR NR STARK, KY	03216230		1980-82		N	N	N
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196.00	1966-79		N		N
BIG SINKING CR NR ADEN, KY	03216370		1980-82		N	N	N
LITTLE SANDY R AT LEON, KY	03216400	255.00	1978-80		N		
LITTLE SANDY R AT DOBBINS, KY	03216430		1980-82		N	N	N
DRY FK AT WILLARD, KY	03216450		1980-82		N	N	N
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1973-75		N		N
BERET CR NR GRAYSON, KY	03216520		1980-82		N	N	N
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1978-83		N		
E FK LITTLE SANDY R NR CANNONSBURG, KY	03216558		1980-82		N	N	N
WILLIAMS CR AT PRINCESS, KY	03216567		1980-82		N	N	N
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1970-72		N		N
OHIO R AT GREENUP DAM, KY	03216600	62000.00	1974-86	N	N	N	N
SOLDIER FK AT LAWTON, KY	03216770		1971-72		N		N
TYGARTS CR AT IRON HILL, KY	03216930		1971-72		N		N
BUFFALO CR NR GESLING, KY	03216960		1980-82		N	N	N
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1970-72		N		N
OHIO R AT MELDAHL DAM NR CHILO, OH	03238680	70800.00	1967-70		N		N
OHIO R AT RAW WATER INTAKE, CINCINNATI, OH	03238800		1970				N
LICKING R NR FREDVILLE, KY	03248165		1980-82		N	N	N
BURNING FK AT SAYLERSVILLE, KY	03248380		1980-82		N	N	N
LEFT FK NR HENDRICKS, KY	03248520		1980-82		N	N	N
RIGHT FK AT FRITZ, KY	03248530		1980-82		N	N	N
JOHNSON CR AT KERNIE, KY	03248560		1980-82		N	N	N
LICK CR NR BLOOMINGTON, KY	03248580		1980-82		N	N	N
WHITE OAK CR AT WHITE OAK, KY	03248610		1980-82		N	N	N
WILLIAMS CR NR ELAMTON, KY	03248670		1980-82		N	N	N
ELK FK NR LENOX, KY	03248685	59.40	1980-82		N	N	N
CANEY CR NR CANEY, KY	03248710		1980-82		N	N	N
GRASSY CR AT GRASSY CREEK, KY	03248750		1980-82		N	N	N
LICKING R AT FARMERS, KY	03249500	827.00	1948-79		N	N	N
TRIPLETT CR AT MOREHEAD, KY	03250000	47.50	1978-80		N		
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1970-71		N		N
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1978-83		N		
LICKING R AT SHERBURNE, KY	03250400		1981-83	N	N	N	N
N FK LICKING R NR MILFORD, KY	03251400	286.00	1970-72		N		N
LICKING R AT MCKINNEYSBURG, KY	03251500	2326.00	1951-79		N	N	N
STONER CR NR MIDDLETOWN, KY	03251665	51.60	1974		N		N
HINKSTON CR NR SHARPSBURG, KY	03252190	78.90	1973		N		N
HINKSTON CR NR CARLISLE, KY	03252300	154.00	1970-74		N		N
S FK LICKING R AT CYNTHIANA, KY	03252500	621.00	1949-83	N	N	N	N
LICKING R AT CATAWA, KY	03253500	3300.00	1962-79		N		N
LICKING R AT BUTLER, KY	03254000	3375.00	1950, 1975-94	N	N	N	N
OHIO R AT MARKLAND DAM, KY	03277200	83170.00	1960-70	N	N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEM-ICAL AC-TIVE STA-TUS
			1974-86	N	N	N	N
OHIO R AT LOCK AND DAM 39 NR FLORENCE, KY	03277205	82910.00	1953-75		N		
YONTS CR NR NEON, KY	03277260		1980-82		N	N	N
N FK KENTUCKY R AT WHITESBURG, KY	03277300	66.40	1970-75		N		N
KINGS CR NR ROXANA, KY	03277320		1980-82		N	N	N
N FK KENTUCKY R AT BLACKKEY, KY	03277340	131.00	1971-75		N		N
ROCKHOUSE CR NR FLETCHER, KY	03277361		1980-82		N	N	N
ROCKHOUSE CR AT LETCHER, KY	03277362		1971		N		N
LINE FK AT DEFEATED CREEK, KY	03277370	40.80	1980-82		N	N	N
LINE FK AT ULVAH, KY	03277380		1971		N		N
N FK KENTUCKY R AT CORNETTSTVILLE, KY	03277411	322.00	1970-72		N		N
RIGHT FK MACYS CR NR FARLAR, KY	03277415		1980-82		N	N	N
YELLOW CR AT SASSAFRAS, KY	03277455		1965-75		N		N
CARR FK NR HAZARD, KY	03277480		1971		N		N
LOTS CR NR DARFORK, KY	03277515		1980-82		N	N	N
BIG CR NR AVAWAN, KY	03277580		1980-82		N	N	N
GRAPEVINE CR NR LAMONT, KY	03277700		1980-82		N	N	N
TROUBLESOME CR NR ARY, KY	03277800		1980-82		N	N	N
BALLS FK NR TALCUM, KY	03277900		1980-82		N	N	N
BUCKHORN CR NR NOBLE, KY	03278100		1980-82		N	N	N
LOST CR NR LOST CREEK, KY	03279150		1980-82		N	N	N
LAUREL FK NR ELMROCK, KY	03279250		1980-82		N	N	N
MIDDLE FK QUICKSAND CR NR DECOY, KY	03279300		1980-82		N	N	N
HAWLS FK NR TIPTOP, KY	03279370		1980-82		N	N	N
QUICKSAND CR AT LUNAH, KY	03279400	101.00	1970-72		N		N
CANEY CR NR CAMP LEWIS, KY	03279430		1980-82		N	N	N
HUNTING CR NR ROUSSEAU, KY	03279460		1980-82		N	N	N
S FK QUICKSAND CR AT PORTSMOUTH, KY	03279650		1980-82		N	N	N
QUICKSAND CR AT QUICKSAND, KY	03279700	203.00	1965-75		N		N
N FK KENTUCKY R AT JACKSON, KY	03280000	1101.00	1948-75	N	N	N	N
			1979-81				
			1987-91				
CANE CR NR JACKSON, KY	03280100		1980-82		N	N	N
ROCKHOUSE CR NR HYDEN, KY	03280360		1980-82		N	N	N
FROZEN CR NR TAULBEE, KY	03280400		1980-82		N	N	N
BOONE FK NR VANCLEAVE, KY	03280450		1980-82		N	N	N
MIDDLE FK KENTUCKY R NR WARBRANCH, KY	03280520		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT ASHER, KY	03280530		1971		N		N
BEECH FK NR HELTON, KY	03280540		1980-82		N	N	N
BEECH FK AT ASHER, KY	03280550	33.90	1971		N		N
GREASY CR NR NAPIER, KY	03280560		1980-82		N	N	N
LAUREL FK NR LEWIS CREEK, KY	03280575		1980-82		N	N	N
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1971		N		N
MIDDLE FK KENTUCKY R NR HAYDEN, KY	03280600	202.00	1975-82	N	N	N	N
			1988		N		N
CUTSHIN CR NR CINDA, KY	03280670		1980-82		N	N	N
HELL FOR CERTAIN CR NR KALIOPI, KY	03280750		1980-82		N	N	N
TURKEY CR NR TURKEY, KY	03280950		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT TALLEGA, KY	03281000	537.00	1950-75	N	N	N	N
			1978-83				
			1987-90				
RED BIRD R AT BIG CREEK, KY	03281030	125.00	1970-72		N		N
BIG CR NR BIG CREEK, KY	03281035		1980-82		N	N	N
HECTOR BRANCH NR ERILINE, KY	03281045		1980-82		N	N	N
GOOSE CR NR GOOSEROCK, KY	03281065	49.60	1979-82		N	N	N
COLLINS FK NR BLUEHOLE, KY	03281075		1980-82		N	N	N
HORSE CR NR HIMA, KY	03281097		1980-82		N	N	N
LITTLE GOOSE CR NR MANCHESTER, KY	03281133		1980-82		N	N	N
BULLSKIN CR NR BRUTUS, KY	03281175		1980-82		N	N	N
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1970-72		N		N
SEXTON CR NR CHESTNUTBURG, KY	03281340		1980-82		N	N	N
LOWER ALLEN CR NR CONKLING, KY	03281360		1980-82		N	N	N
S FK KENTUCKY R AT BOONEVILLE, KY	03281500	722.00	1950-75	N	N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO.	PHY.	SED.	CHEM.
				AC-TIVE STA-TUS	AC-TIVE STA-TUS	AC-TIVE STA-TUS	ICAL AC-TIVE STA-TUS
			1979-83				
			1987-90				
BIG SINKING CR NR CRYSTAL, KY	03282075	23.40	1987-89		N	N	N
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1987-89		N	N	N
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1970-72		N		N
KENTUCKY R NR TRAPP, KY	03282300		1982-83		N	N	N
RED R AT DAYSBORO, KY	03282400		1980-82		N	N	N
RED R NR PINE RIDGE, KY	03283100	142.00	1968-76		N		N
CAT CR NR STANTON, KY	03283370	8.30	1987-89		N	N	N
KENTUCKY R AT LOCK 10 NR WINCHESTER, KY	03284000	3955.00	1987-91	N	N	N	N
BAUGHMAN FK AT GENTRY ROAD NR ATHENS, KY	03284090	7.18	1967-68		N		N
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-68		N		N
KENTUCKY R NR LEXINGTON, KY	03284105		1970				N
SILVER CR NR KINGSTON, KY	03284300	28.60	1978-83		N		
SILVER CR NR RICHMOND, KY	03284350		1973-75		N		N
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1970-72		N		N
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1948-75		N		N
DIX R NR STANFORD, KY	03284800	160.00	1973-75		N		N
HANGING F CR NR STANFORD, KY	03284935	46.90	1974		N		N
DIX R NR DANVILLE, KY	03285000	318.00	1988		N		N
DIX R AT DIX DAM NR BURGIN, KY	03286200	439.00	1961-79		N		N
KENTUCKY R AT LOCK 4 AT FRANKFORT, KY	03287500	5411.00	1949-73	N	N	N	N
			1987-90				
BENSON CR AT FRANKFORT, KY	03287530	71.20	1973		N		N
BENSON CR NR FRANKFORT, KY	03287550	107.00	1970-72		N		N
N ELKHORN CR AT BRYAN STATION RD AT MONTROSE, KY	03287600	21.50	1967-68		N		N
N ELKHORN CR UNNAMED TR AT MUIR STA RD NR MUI, KY	03287620	15.80	1967-68		N		N
N ELKHORN CR AT HUFFMAN MILL RD NR MATTOXTOWN, KY	03287700	62.70	1967-68		N		N
GOOSE CR AT MT HOREB RD NR NEWTOWN, KY	03287800	14.20	1967-68		N		N
GOOSE CR AT NEWTOWN RD, NR NEW ZION, KY	03287810		1967		N		N
N ELKHORN CR NR GEORGETOWN, KY	03288000	119.00	1988-89		N		N
CANE RUN AT BEREAD ROAD NR DONERAIL, KY	03288200	19.90	1967-68		N		N
CANE RUN NR GEORGETOWN, KY	03288260	45.40	1973		N		N
CAVE CR NR FORT SPRING, KY	03288500	2.53	1968		N		N
STEELES RUN AT OLD FRANKFORT RD AT FAYWOOD, KY	03289100	6.67	1967-68		N		N
TOWN BRANCH AT YARNALLTON RD AT YARNALLTON, KY	03289200		1967-68		N		N
ELKHORN CR NR FRANKFORT, KY	03289500	473.00	1987-91	N	N	N	N
SIX MILE NR DEFOE, KY	03290420	42.60	1973		N		N
SIX MILE CR NR LOCKPORT, KY	03290490	76.50	1973-74		N		N
KENTUCKY R AT LOCK #2 AT LOCKPORT, KY	03290500	6180.00	1974-95	N	N	N	N
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74		N		N
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1973-75		N		N
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973		N		N
EAGLE CR AT GLENCOE, KY	03291500	437.00	1948-79		N	N	N
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1970-72		N		N
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1974-75		N		N
OHIO R AT WATER SUPPLY INTAKE AT LOUISVILLE, KY	03292494		1970				N
S FK BEARGRASS CR AT LOUISVILLE, KY	03292500	17.2	1988-92		N		
MIDDLE FK BEARGRASS CR AT LOUISVILLE, KY	03293000	18.9	1988-92		N		
OHIO R AT LOUISVILLE, KY	03294500	91170.00	1968-83		N	N	N
MILL CR CUTOFF NR LOUISVILLE, KY	03294550	24.4	1988-92		N		
OHIO R AT KOSMOSDALE, KY	03294600	91200.00	1970				N
SALT R NR HARRODSBURG, KY	03295000	41.40	1970-72		N		N
SALT R NR VAN BUREN, KY	03295500	196.00	1970-79		N		N
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1970-72		N		N
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1970-72		N		N
BRASHEARS CR AT TAYLORSVILLE, KY	03295900	262.00	1973-75		N		N
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1953-64			N	
PLUM CR AT WATERFORD, KY	03297500	31.80	1953-61		N	N	N
COX CR NR HIGHGROVE, KY	03297700	95.80	1970-72		N		N
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-83	N	N	N	N
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1973-75		N		N
SALT R AT SHEPHERDSVILLE, KY	03298500	1197	1948-75	N	N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEM-ICAL AC-TIVE STA-TUS
			1979-92				
N ROLLING FK AT BRADSFORDVILLE, KY	03298760	95.70	1973-75		N		N
ROLLING FK NR LEBANON, KY	03299000	239.00	1970-80		N		N
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1970-72		N		N
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1970-72		N		N
BEECH FK AT MAUD, KY	03300400	436.00	1979-83	N	N	N	N
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1973-75		N		N
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1962-72		N		N
ROLLING FK NR BOSTON, KY	03301500	1299.00	1948-79		N		N
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-92		N		
			1992-96				N
ROLLING FORK NR LEBANON JUNCTION, KY	03301630	1375.00	1975-94	N	N	N	N
POND CR NR LOUISVILLE, KY	03302000	64.0	1988-92		N		
SALT R AT MOUTH NR LOUISVILLE, KY	03302060		1970				N
OTTER CR NR VINE GROVE, KY	03302080		1970-71		N		N
OTTER CR AT GRAHAMTON, KY	03302100	88.40	1970-72		N		N
DOE RUN NR BRANDENBURG STATION, KY	03302150	52.70	1970-72		N		N
SINKING CR NR LODIBURG, KY	03303205	125.00	1971		N		N
SINKING CR AT SAMPLE, KY	03303210	222.00	1970		N		N
BEECH FK NR CLOVERPORT, KY	03303220		1980-82		N	N	N
TAR FK NR CLOVERPORT, KY	03303230		1980-82		N	N	N
OHIO R AT CANNELTON DAM, KY	03303280	97000.00	1975-86	N	N	N	N
BLACKFORD CR NR MACEO, KY	03303447		1980-82		N	N	N
BLACKFORD CR NR MACEO, KY	03303450	111.00	1973-75		N		N
PUP CR NR MACEO, KY	03303490		1980-82		N	N	N
OHIO R AT OWENSBORO, KY	03303500	97200.00	1970				N
GREEN R NR MCKINNEY, KY	03305000	22.40	1970-72		N		N
GREEN R NR DUNNVILLE, KY	03305660	221.00	1973-75		N		N
GREEN R AT NEATSVILLE, KY	03305800	399.00	1959-72		N	N	N
CASEY CR AT CASEY CR, KY	03305865	74.70	1973-75		N		N
GREEN R AT GREENSBURG, KY	03306500	736.00	1948-59		N		
BIG PITMAN CR NR GREENSBURG, KY	03307300		1966		N		N
LITTLE BARREN R NR MONROE, KY	03307800	244.00	1960-72		N		N
GREEN RIVER AT MUNFORDVILLE, KY	03308500	1673.00	1950-94	N	N	N	N
ECHO R OUTLET AT MAMMOTH CAVE, KY	03308950		1974		N		N
GREEN R AT MAMMOTH CAVE, KY	03309000	1983.00	1958-74		N		N
WET PRONG BUFFALO CR NR MAMMOTH CAVE, KY	03309100	2.26	1962-74		N	N	N
MCDUGAL CR AT HODGENVILLE, KY	03309600		1970		N		N
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1970-72		N		N
N FK NOLIN R NR EAGLE MILLS, KY	03310030		1970-79		N		N
NOLIN R AT EAGLE MILLS, KY	03310100		1970-72		N		N
MIDDLE CR AT NEELY BRANCH, KY	03310117		1971		N		N
MIDDLE CR NR TONIEVILLE, KY	03310120		1970-72		N		N
MIDDLE CR AT EAGLE MILLS, KY	03310130		1971-72		N		N
NOLIN R NR GLENDALE, KY	03310160	185.00	1971-75		N		N
VALLEY CR AT ELIZABETHTOWN, KY	03310210		1970-73		N		N
VALLEY CR AT GAITHERS, KY	03310225		1971-73		N		N
W RHUDES CR NR CECILIA, KY	03310250		1970-72		N		N
VALLEY CR NR GLENDALE, KY	03310270	90.10	1960-75		N		N
NOLIN R NR STAR MILLS, KY	03310273		1971-72		N		N
NOLIN R AT WAX, KY	03310500	600.00	1949-61		N	N	N
ROCK CR NR CLARKSON, KY	03310550		1980-82		N	N	N
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74		N		N
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1965-74		N		N
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762.00	1978-82		N		
BEAVERDAM CR AT RHODA, KY	03311600	10.90	1965-79		N		N
BEAR CR NR BEE SPRING, KY	03312040		1980-82		N	N	N
SUNFISH CR NR BEE SPRING, KY	03312070		1980-82		N	N	N
BEAR CR NR ROUNDHILL, KY	03312100	137.00	1960-72		N		N
BIG REEDY CR NR ROUNDHILL, KY	03312120		1980-82		N	N	N
LITTLE REEDY CR NR ROUNDHILL, KY	03312130		1980-82		N	N	N
BARREN R AT ACKERSVILLE, KY	03312400	298.00	1970-72		N		N
SKAGGS CR NR GLASGOW, KY	03312680	141.00	1970-72		N		N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO.	PHY.	SED.	CHEM-
				AC-TIVE STA-TUS	AC-TIVE STA-TUS	AC-TIVE STA-TUS	ICAL AC-TIVE STA-TUS
BAYS FK AT CLAYPOOL, KY	03313570	80.90	1960-68		N		N
UNNAMED NON-CONTRIB STREAM AT GREENHILL, KY	03313590		1968		N		N
TRAMMEL CR NR SCOTTSVILLE, KY	03313900	93.40	1970-72		N		N
DRAKES CR NR ALVATON, KY	03314000	478.00	1968-72		N	N	N
UNNAMED NON-CONTRIB STREAM AT THREE SPRINGS, KY	03314595		1968		N		N
JENNINGS CR NR LOST RIVER, KY	03314610		1968		N		N
JENNINGS CR AT US 231 AT BOWLING GREEN, KY	03314650		1968		N		N
JENNINGS CR BELOW LOST R OUTLET AT BOWLING GREEN, KY	03314680		1968		N		N
JENNINGS CR AT BARREN R RD NR BOWLING GREEN, KY	03314700		1968		N		N
GASPER R AT HADLEY, KY	03315300	190.00	1960-72		N		N
WELCH CR NR ABERDEEN, KY	03315510		1980-82		N	N	N
INDIAN CAMP CR NR MORGANTOWN, KY	03315590		1980-82		N	N	N
E PRONG INDIAN CAMP CR NR MORGANTOWN, KY	03315600		1980-82		N	N	N
MUDDY CR AT DUNBAR, KY	03315810	94.30	1960-82		N	N	N
PANTHER CR NR ROCHESTER, KY	03315830		1980-82		N	N	N
MUD R NR LEWISBURG, KY	03316000	90.50	1960-72		N		N
WOLFLICK CR NR LEWISBURG, KY	03316200	116.00	1970-72		N		N
ROCKY CR NR PENROD, KY	03316300		1980-82		N	N	N
GREEN R AT PARADISE, KY	03316500	6183.00	1978-82		N		
POND CR NR MARTWICK, KY	03316640	125.00	1972-82		N	N	N
LEWIS CR AT ROCKPORT, KY	03316660		1980-82		N	N	N
MEETING CR NR BIG CLIFTY, KY	03316885		1980-82		N	N	N
N FK ROUGH R NR WESTVIEW, KY	03317500	42.00	1970-72		N		N
ROUGH R AT ROUGH R DAM NR FALLS OF ROUGH, KY	03318010	454.00	1962-83		N		
ROCK LICK CR NR FALLS OF ROUGH, KY	03318300		1980-82		N	N	N
SHORT CR NR FALLS OF ROUGH, KY	03318600		1980-82		N	N	N
S FK CANEY CR AT CANEYVILLE, KY	03318700		1980-82		N	N	N
ADAMS FK NR FORDSVILLE, KY	03319510		1980-82		N	N	N
W FK ADAMS FK NR FORDSVILLE, KY	03319530		1980-82		N	N	N
HALLS CR NR DUNDEE, KY	03319570		1980-82		N	N	N
ROUGH R AT HARTFORD, KY	03319600		1966-72		N		
MUDDY CR NR BEAVER DAM, KY	03319615		1980-82		N	N	N
THREELICK CR NR BEAVER DAM, KY	03319620		1980-82		N	N	N
BARNETT CR NR HARTFORD, KY	03319700		1980-82		N	N	N
N FK BARNETT CR NR HARTFORD, KY	03319750		1980-82		N	N	N
GREEN R AT LIVERMORE, KY	03319885	7512.00	1948-75		N		
BUCK CR NR LIVERMORE, KY	03319925		1980-82		N	N	N
LONG FALLS CR NR RUMSEY, KY	03320075		1980-82		N	N	N
LONG CR NR KIRKMANSVILLE, KY	03320400		1980-82		N	N	N
W FK POND R NR APEX, KY	03320700		1980-82		N	N	N
MCFARLAN CR NR WHITE PLAINS, KY	03320740		1980-82		N	N	N
DRAKES CR NR WHITE PLAINS, KY	03321035	52.50	1979-82		N	N	N
FLAT CR NR MADISONVILLE, KY	03321050		1980-82		N	N	N
POND R NR SACRAMENTO, KY	03321100	523.00	1959-73		N		
POND R NR VANDETTA, KY	03321120		1980-82		N	N	N
OTTER CR NR HANSON, KY	03321150		1980-82		N	N	N
CYPRESS CR NR MIDLAND, KY	03321160		1980-82		N	N	N
CYPRESS CR NR CENTRAL CITY, KY	03321170		1980-82		N	N	N
LITTLE CYPRESS CR AT CENTRAL CITY, KY	03321180		1980-82		N	N	N
CYPRESS CR NR RUMSEY, KY	03321215	149.00	1973-75		N		
GREEN R NR BEECH GROVE, KY	03321230	8545.00	1975-86	N	N	N	N
DEER CR NR SEBREE, KY	03321290	122.00	1974-75		N		
N FK PANTHER CR NR MASONVILLE, KY	03321400		1980-82		N	N	N
N FK PANTHER CR NR MASONVILLE, KY	03321410	88.30	1970-71		N		
PANTHER CR NR CURDSVILLE, KY	03321450	344.00	1973-80		N		
LICK CR NR BLUFF CITY, KY	03321455		1980-82		N	N	N
NOBLICK CR NR CURDSVILLE, KY	03321455		1980-82		N	N	N
GREEN R AT LOCK AND DAM 1 AT SPOTTSVILLE, KY	03321500	9181.00	1955-62		N		
CANOE CR NR HENDERSON, KY	03322180	56.00	1979-82		N	N	N
CASEY CR NR WAVERLY, KY	03322370		1980-82		N	N	N
HIGHLAND CR NR UNIONTOWN, KY	03322400	166.00	1970-72		N		
OHIO R NR UNIONTOWN DAM, KY	03322420		1975		N		
EAGLE CR NR MORGANFIELD, KY	03382570		1980-82		N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEM-ICAL AC-TIVE STA-TUS
TRADEWATER R AT POOLS MILL BR NR DAWSON SPRINGS, KY	03382600	60.40	1966-82		N	N	N
CASTLEBERRY CR NR DAWSON SPRINGS, KY	03382650		1980-82		N	N	N
TRADEWATER R AT COLLINS BRDG, NR DAWSON SPRINGS, KY	03382680		1965-67		N		N
TRADEWATER R AT MURPHY FK NR DAWSON SPRINGS, KY	03382685	94.10	1966-75		N		N
BUFFALO CR AT ST HWY 1338 NR DAWSON SPRINGS, KY	03382700		1965-69		N		
BUFFALO CR NR DAWSON SPRINGS, KY	03382720	12.70	1965-67		N		N
COPPERAS CR AT HWY BRIDGE NR ILSLEY, KY	03382835		1966-67		N		N
CANY CR AT MOUTH NR DAWSON SPRINGS, KY	03382855		1965-67		N		N
TRADEWATER R AT ST HWY 109 AT DAWSON SPRINGS, KY	03382870	143.00	1966-67		N		N
PINY CR BL LK BESHEAR D NR DAWSON SPRINGS, KY	03382890		1966-67		N		N
TRADEWATER R AT OLNEY, KY	03383000	255.00	1949-83	N	N	N	N
TRADEWATER R NR DALTON, KY	03383500	283.00	1965-66		N		N
DONALDSON CR NR FRYER, KY	03383650		1980-82		N	N	N
DONALDSON CR AT BR ON HWY 293 NR DALTON, KY	03383700		1966		N		N
TRADEWATER R AT ST HWY 293 NR DALTON, KY	03383710		1965-66		N		N
CLEAR CR AT HWY 70 BR NR RICHLAND, KY	03383755	17.00	1966-82		N	N	N
RICHLAND CR ABOVE TRIBUTARY NO 1 NR ILSLEY, KY	03383770		1966-67		N		N
UNNAMED TRIB NO 1 TO RICHLAND CR NR ILSLEY, KY	03383775		1966-67		N		N
UNNAMED TRIB NO 2 TO RICHLAND CR NR ILSLEY, KY	03383780		1966-67		N		N
RICHLAND CR AT RICHLAND, KY	03383800		1966		N		
UNNAMED TRIB TO CLEAR CR NR BEULAH, KY	03383901		1966		N		N
LICK CR NR RABBIT RIDGE, KY	03384035		1980-82		N	N	N
CLEAR CR AT BRIDGE ON ST HWY 293 NR PROVIDENCE, KY	03384050	197.00	1966-67		N		N
TRADEWATER R AT DAM NR PROVIDENCE, KY	03384060		1965-66		N		N
TRADEWATER R AT BRIDGE BELOW DAM NR PROVIDENCE, KY	03384072		1966-67		N		N
TRADEWATER R NR PROVIDENCE, KY	03384100	605.00	1965-72		N		N
TRADEWATER R NR BLACKFORD, KY	03384103		1980		N	N	N
PINEY CR NR SHADY GROVE, KY	03384106		1980-82		N	N	N
UNNAMED TRIB TO SLOVER CR NR PROVIDENCE, KY	03384133		1968				N
SLOVER CR NR CLAY, KY	03384136		1969		N		N
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384138		1969		N		N
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384140		1969-79		N		N
FREDRICKS DITCH NR CLAY, KY	03384145		1969		N		N
CRABORCHARD CR NR CLAY, KY	03384150		1965-82		N	N	N
CRABORCHARD CR NR CLAY, KY	03384151		1969		N		N
CRABORCHARD CR AT CLAY, KY	03384152		1966		N		N
CRABORCHARD CR AT CLAY, KY	03384154	86.60	1969-72		N	N	N
CANEY FK NR CLAY, KY	03384158		1980-82		N	N	N
TRADEWATER R NR SULLIVAN, KY	03384180	861.19	1975-77		N	N	N
SMITH DITCH NR STURGIS, KY	03384200		1980-82		N	N	N
LOONEY CR NR CLUTTS, KY	03400480		1980-82		N	N	N
CLOVER FK NR SHIELDS, KY	03400650		1980-82		N	N	N
CLOVER FK AT EVARTS, KY	03400700	82.40	1960-72		N		N
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1986-88			N	
CRANE CR NR SMITH, KY	03400796	1.63	1978-80		N		
BROWNICE CR NR OAKS, KY	03401290		1980-82		N	N	N
CLEAR CR NR PINEVILLE, KY	03402400		1980-82		N	N	N
LITTLE CLEAR CR NR PINEVILLE, KY	03402450		1980-82		N	N	N
STRAIGHT CR NR KETTLE ISLAND, KY	03402800		1980-82		N	N	N
LEFT FK STRAIGHT CR NR CARY, KY	03402830		1980-82		N	N	N
MIDDLE FK STINKING CR NR WALKER, KY	03403100		1980-82		N	N	N
ROAD FK CR NR BARNYARD, KY	03403150		1980-82		N	N	N
LITTLE INDIAN CR NR PERMON, KY	03403550		1980-82		N	N	N
FOURMILE BRANCH NR BRYANTS STORE, KY	03403590		1980-82		N	N	N
WATTS CR NR WOFFORD, KY	03404100		1980-82		N	N	N
JELICO CR NR WILLIAMSBURG, KY	03404200	103.00	1979-82		N	N	N
MARSH CR NR DUCKRUN, KY	03404350		1980-82		N	N	N
TRIBUTARY TO LAUREL R NR LESBAS, KY	03404650		1980-82		N	N	N
TRIBUTARY TO LAUREL R NR PINE GROVE, KY	03404800		1980-82		N	N	N
LAUREL R AT MUNICIPAL DAM NR CORBIN, KY	03404820	140.00	1977-83		N		
LYNN CAMP CR AT CORBIN, KY	03404900	53.80	1973-83		N		
LAUREL R AT CORBIN, KY	03405000	201.00	1949-73		N		N
CRAIG CR NR HIGHTOP, KY	03405550		1980-82		N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO.	PHY.	SED.	CHEM-
				AC-TIVE STA-TUS	AC-TIVE STA-TUS	AC-TIVE STA-TUS	ICAL AC-TIVE STA-TUS
S FK TO ROCKCASTLE R NR CRAWFORD, KY	03405600		1980-82		N	N	N
S FK ROCKCASTLE R NR PEOPLES, KY	03405700	95.10	1961-72		N		N
POND CR NR PEOPLES, KY	03405730		1980-82		N	N	N
LAUREL FK NR MCKEE, KY	03405780		1980-82		N	N	N
INDIAN CR NR HURLEY, KY	03405800		1980-82		N	N	N
ROUNDSTONE CR AT LIVINGSTON, KY	03405900	144.00	1960-72		N		N
WOOD CR NR LONDON, KY	03406000	3.89	1976-80	N	N		
CANE BRANCH NR PARKERS LAKE, KY	03407100	.67	1955-74			N	N
W FK CANE BR NR PARKERS LAKE, KY	03407200	.26	1957-73		N	Y	N
HELTON BRANCH AT GREENWOOD, KY	03407300	.85	1955-73		N	N	N
BUCK CR AT DYKES, KY	03407640	253.00	1973-75		N		N
S FK CUMBERLAND R NR STEARNS, KY	03410500	954.00	1960-72				
			1979-95	N	N	N	N
ROARING PAUNCH CR NR BARTHELL, KY	03410530		1980-82		N	N	N
ROCK CR AT WHITE OAK JUNCTION, KY	03410560		1980-82		N	N	N
S FK CUMBERLAND R NR YAMACRAW, KY	03410600	1083.00	1948-76		N		
WOLF CR AT WOLF CREEK, KY	03410700		1980-82		N	N	N
LITTLE S FK CUMBERLAND R NR OIL VALLEY, KY	03410900	98.20	1970-72		N		N
S FK CUMBERLAND R AT NEVELSVILLE, KY	03411000	1271.00	1960-75		N		
SINKING CR NR GREGORY, KY	03411100		1980-82		N	N	N
PUCKETT CR NR PATHFORK, KY	03411250		1980-82		N	N	N
PITMAN CR AT SOMERSET, KY	03412500	31.30	1970-72		N		N
FISHING CR NR HOGUE, KY	03412700	59.80	1970-72		N		N
CUMBERLAND R NR ROWENA, KY	03414000	5790.00	1965-79		N		N
CROCUS CR NR BAKERTON, KY	03414080	108.00	1973-75		N		N
CUMBERLAND R NR BURKESVILLE, KY	03414110	6050.00	1948-79		N		N
RED R NR ADAIRVILLE, KY	03435100	229.00	1970-72		N		N
WHIPPOORWILL CR NR CLAYMOUR, KY	03435140	20.80	1978-82		N		
WHIPPOORWILL CR AT DOT, KY	03435265	115.00	1973-75		N		N
ELK FK NR HADENSVILLE, KY	03435380	88.50	1973-75		N		N
W FK RED R NR SAINT ELMO, KY	03436190	162.00	1973-75		N		N
S FK LITTLE R AT HOPKINSVILLE, KY	03437500	46.50	1949-75		N		
LITTLE R NR CADIZ, KY	03438000	244.00	1958-73			N	N
MUDDY FK LITTLE R NR CERULEAN, KY	03438070	30.50	1978-82		N		
EDDY CR NR LAMASCO, KY	03438170	71.70	1970-74		N		N
BARKLEY-KENTUCKY CANAL NR GRAND RIVERS, KY	03438190		1978-82		N		
CUMBERLAND R NR GRAND RIVERS, KY	03438220	17598.00	1969-86	N		N	N
LIVINGSTON CR NR DYCUSBURG, KY	03438470	112.00	1970-72		N		N
TENNESSEE R NR PADUCAH, KY	03609500	40200.00	1951-73		N		N
TENNESSEE R AT HWY 60 NR PADUCAH, KY	03609750	40330.00	1950		N		
			1952		N		
			1967-72		N		
			1974-86	N	N	N	N
CLARKS R AT MURRAY, KY	03610000	89.10	1970-72		N		N
CLARKS R AT ALMO, KY	03610200	134.00	1982-83	N	N	N	N
CLARKS R NR BENTON, KY	03610500	227.00	1948-61		N		N
W FK CLARKS R NR BREWERS, KY	03610545	68.70	1970-81		N	N	N
W FK CLARKS R AT KALER, KY	03610585	150.00	1973-75		N		N
HUMPHREY CR AT LACENTER, KY	03613000	44.20	1970-72		N		N
MAYFIELD CR AT LOVELACEVILLE, KY	07023000	212.00	1960-72		N		N
BAYOU DE CHIEN NR CLINTON, KY	07024000	68.70	1954-83	N	N	N	N
OBION CR NR ARLINGTON, KY	07023700	203.00	1970-72		N		N
MISSISSIPPI R AT HICKMAN, KY	07024070	922500.00	1969-70	N	N		N

N Eliminated activity

DISCONTINUED GROUND-WATER STATIONS

Station Number	County	Station Name	Period of Record
363634088191601	Calloway	Joe Parks	1948-83, 1988-97
365142087270401	Christian	Western State Hospital	1950-83, 1988-97
374638087054101	Daviess	OMU	1951-83, 1990-97
380425083091901	Elliott	Roy Adkins	1952-84, 1998-97
375928084362001	Fayette	M.A. Kehrt	1952-84, 1988-97
382031084553901	Franklin	Harp Road	1973-83, 1988-97
365210088391301	Graves	Viola	1951-84, 1988-98
373925085540301	Hardin	OW-6	1989-95
374020085530601	Hardin	OW-5	1989-90, 1994,95
375958085575401	Hardin	Hart #1	1980-92
374441087421001	Henderson	Town of Corydon	1952-83, 1988-97
380122085545001	Jefferson	80-1	1980-97
380252085530601	Jefferson	79-3	1979-97
380308085533501	Jefferson	79-4	1979-92
380341085534501	Jefferson	83-1	1983-97
380423085541501	Jefferson	Genewein	1976-97
380434085525101	Jefferson	E-1-d	1980-92
380458085523201	Jefferson	86-4	1986-97
380517085535201	Jefferson	77-1	1977-97
380532085515301	Jefferson	76-1	1976-97
380616085532801	Jefferson	Lou. Ext. Water District	1962-92
380619085512301	Jefferson	86-3	1986-97
380637085521301	Jefferson	D-1-d	1980-92
380709085531101	Jefferson	C-5-m	1980-97
380716085521801	Jefferson	RR-47	1945-97
380718085515802	Jefferson	C-3-s	1984-92
380718085524202	Jefferson	C-4-m	1983-92
380816085520701	Jefferson	Dohn	1943-97
380827085503001	Jefferson	86-5	1986-97
380843085530701	Jefferson	B-3-d	1980-97
380843085522801	Jefferson	B-2-d	1980-92
380846085520101	Jefferson	B-1-d	1980-92
380850085534701	Jefferson	78-2	1978-97
380852085515901	Jefferson	Waller	1943-92
380940085514001	Jefferson	81-1	1981-97
380955085531801	Jefferson	83-2	1983-97
381011085491601*	Jefferson	86-1	1986-93
381034085502601	Jefferson	RR-30	1945-97
381050085511001	Jefferson	RR-29	1945-97
381102085485601	Jefferson	86-2	1986-97
381102085512102	Jefferson	Kaufman	1944-92
381108085511301	Jefferson	Baugh	1945-92
381123085491401	Jefferson	RR-32	1945-87
381130085515001	Jefferson	Thienemen	1944-97
381139085502301	Jefferson	81-2	1991-97
381142085475702	Jefferson	RR-42	1945-97

DISCONTINUED GROUND-WATER STATIONS

Station Number	County	Station Name	Period of Record
381143085465801	Jefferson	RR-25	1945-97
381155085483401	Jefferson	Mathis	1944-92
381157085510201	Jefferson	RR-39	1945-92
381204085455301	Jefferson	CP-16	1979-97
381207085484601	Jefferson	RR-41	1945-97
381209085472101	Jefferson	C-7	1935-97
381212085473801	Jefferson	C-6	1935-92
381213085521701	Jefferson	RR-22	1945-97
381221085475001	Jefferson	C-5	1935-92
381222085505201	Jefferson	RR-27	1945-97
381224085474001	Jefferson	Early Times	1947-92
381229085510201	Jefferson	Triangle Refinery	1978-92
381246085470601	Jefferson	Seagrams TW #2	1943-97
381246085463201	Jefferson	CP-18A	1984-97
381250085484901	Jefferson	C-2	1935-92
381251085500501	Jefferson	RR-35	1945-97
381256085471501	Jefferson	National Distillery TW-2	1941-92
381257085471801	Jefferson	TW-4	1942-97
381259085471502	Jefferson	National Distillery TW-1	1941-92
381259085511002	Jefferson	RR-21	1945-97
381305085501302	Jefferson	Reynolds Metals	1980-92
381309085505302	Jefferson	RR-24	1945-92
381313085495501	Jefferson	B.F. Goodrich TW-2	1947-92
381315085501401	Jefferson	Airco TW-11	1956-92
381315085502602	Jefferson	NC-TW-D	1956-97
381316085502101	Jefferson	Airco TW-12	1956-92
381320085464101	Jefferson	CP-15	1978-97
381324085460401*	Jefferson	American Standard	1978-93
381331085491601	Jefferson	RR-26	1945-97
381338085481601	Jefferson	CP-8	1977-92
381346085453801	Jefferson	St. Patricks's well	1981-97
381346085454201	Jefferson	CP-1	1977-97
381355085465901	Jefferson	Louisville Cooperage	1948-92
381400085445001	Jefferson	CP-6	1977-97
381406085463001	Jefferson	United Catalyst	1978-92
381417085500301	Jefferson	RR-23	1945-97
381424085454602	Jefferson	CP12A	1980-92
381428085485701	Jefferson	78-6	1978-97
381430085452602	Jefferson	Conna	1943-92
381430085472501	Jefferson	CP-17	1982-97
381500085445501	Jefferson	89-2	1989-92
381500085454701	Jefferson	78-5	1978-92
381501085464601	Jefferson	CP-10	1977-97
381503085452601	Jefferson	Stewarts	1981-92
381505085475701	Jefferson	CP-5	1977-92
381508085455701	Jefferson	CP-4	1977-97
381514085453502	Jefferson	CP11A	1984-92
381517085455501	Jefferson	86-6	1986-92
381518085451801	Jefferson	87-1	1986-96
381518085454401	Jefferson	86-10	1986-97
381524085452301	Jefferson	86-8	1986-92
381528085454201	Jefferson	86-9	1986-92
381536085492801	Jefferson	CP-2	1977-92
381538085434401*	Jefferson	78-7	1978-92
381539085465201	Jefferson	CP-9	1977-97

DISCONTINUED GROUND-WATER STATIONS

Station Number	County	Station Name	Period of Record
361343085480101	Jefferson	CP-14	1978-97
381553085431602	Jefferson	M-2	1978-97
381604085430501	Jefferson	WC-1	1946-97
381607085483601	Jefferson	CP-3	1977-97
381613085421901	Jefferson	WC-14	1946-92
381628085473101	Jefferson	CP-13	1978-92
381638085415801	Jefferson	WC-4	1946-97
381648085421201	Jefferson	WC-5	1946-97
381653085413302	Jefferson	WC-9A	1979-97
381701085414002	Jefferson	WC-8A	1979-92
381722085405801	Jefferson	WC-11	1946-92
381742085402001	Jefferson	WC-13	1946-92
381827085392401	Jefferson	WC-26	1946-92
374151085413201	Larue	Wagner	1971-83, 1988-97
370757084045001	Laurel	Hale	1951-62, 1965-84,
371033082374301*	Letcher	C&ORR	1962-92 1988-97
372739084402101	Lincoln	Peck	1953-84 1988-97
365046086444901	Logan	Appling	1988-97
370551088510401	Mccracken	Heath	1969-83, 1988-97
370211085354301	Metcalfe	Froedge	1979-83, 1988-97
370342086080101	Warren	Estes	1961-83, 1988-97

* destroyed

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