

Prepared in cooperation with the Commonwealth of Kentucky and other agencies

Water Resources Data Kentucky Water Year 2004



Water-Data Report KY-04-1



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

Calendar for Water Year 2004

2003

October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1		1	2	3	4	5	6
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
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
							30													

2004

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6
4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27
25	26	27	28	29	30	31	29							28	29	30	31			
April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3							1			1	2	3	4	5
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												
July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7				1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		

Water Resources Data Kentucky Water Year 2004

By Dennis L. McClain, Clifford R. Moses, and Roy S. Darnell

Water-Data Report KY-04-1



Prepared in cooperation with the
Commonwealth of Kentucky and other agencies

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



U.S. Department of the Interior

Gale A. Norton, Secretary

U.S. Geological Survey

Charles G. Groat, Director

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U.S. Geological Survey
Kentucky Water Science Center
9818 Bluegrass Parkway
Louisville, KY 40299-1906
(502) 493-1900

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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 (USGS) 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 USGS policy and established guidelines. Most of the data were collected, computed, and processed from the USGS Kentucky Water Science Center and field offices.

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

H.C. Allen	J.D. Filbeck	B.L. Moore
P.J. Bruenderman	B.S. Fink	S.B. Pickard
S.J. Coutts	Zeke Hensley	R.E. Puckett
A.S. Crain	Jeffery Hurst	E.A. Shreve
A.K. Dirrim	D.W. Keeling	D.D. Zettwoch
D.W. Eichert	T.S. LeMaster	
P.L. Faith	G.K. McCombs	

This report was prepared in cooperation with the Commonwealth of Kentucky and other agencies under the general supervision of Dennis L. McClain, Supervisory Hydrologic Technician, and Michael S. Griffin, Assistant Director, USGS Kentucky Water Science Center.

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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, (r) recorder]

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	.52
Levisa Fork at Pikeville (d)	03209500	.56
Johns Creek near Meta (d)	03210000	.58
Levisa Fork at Paintsville (d)	03212500	.60

LITTLE SANDY RIVER BASIN

Little Sandy River at Grayson (d)	03216500	.62
Ohio River at Greenup Dam (c, d)	03216600	.64

TYGARTS CREEK BASIN

Tygarts Creek near Greenup (d)	03217000	.74

KINNICONICK CREEK BASIN

Kinniconick Creek below Trace Creek at Tannery (d)	03237255	.76

Twelvemile Creek Basin:

Twelvemile Creek at Highway 1997 near Alexandria (c, d)	03238745	.78

FOUR MILE CREEK BASIN

Four Mile Creek at Poplar Ridge Road near Alexandria (c, d)	03238772	.90

LICKING RIVER BASIN

Licking River below Mason Fork near Salyersville (d)	03248300	102
Licking River at Farmers (d)	03249500	104
Licking River at Hwy 60 at Farmers (d)	03249505	106
Slate Creek at Highway 713 near Mount Sterling (d)	03250190	108

Fox Creek:

Rock Lick Creek above Unnamed Tributary near Sharkey (d)	03250310	110
Rock Lick Creek at State Highway 158 near Sharkey (d)	03250322	112
Licking River near Blue Lick Springs (d)	03250500	114
North Fork Licking River near Mt. Olivet (d)	03251200	116
Licking River at Mckinneysburg (d)	03251500	118

South Fork Licking River:

Hinkston Creek near Carlisle (d)	03252300	120
Licking River at Catawba (d)	03253500	122
Cruises Creek at Highway 17 near Piner (c, d)	03254480	124
Banklick Creek at Hwy 1829 near Erlanger (c, d)	03254550	136

ELIJAHS CREEK BASIN

Elijahs Creek at Elijahs Creek Road near Hebron (c, d)	03260100	148

WOOLPER CREEK BASIN

Woolper Creek at Woolper Road near Burlington (c, d)	03262001	160

GUNPOWDER CREEK BASIN

Gunpowder Creek at Camp Ernst Road near Union (c, d)	03277075	172

MUD LICK CREEK BASIN

Mud Lick Creek at Highway 42 near Beaverlick (c, d)	03277130	184
Ohio River at Markland Dam (d)	03277200	196

KENTUCKY RIVER BASIN

North Fork Kentucky River (head of Kentucky River):

North Fork Kentucky River at Whitesburg (d)	03277300	198
North Fork Kentucky River at Jackson (d)	03280000	200

Middle Fork Kentucky River:

Cutshin Creek at Wooton (d)	03280700	202
Middle Fork Kentucky River at Tallega (d)	03281000	204

Kentucky River:

Goose Creek at Manchester (d)	03281100	206
South Fork Kentucky River at Booneville (d)	03281500	208
Kentucky River at Lock 14 at Heidelberg (d)	03282000	210
Sturgeon Creek at Cressmont (d)	03282040	212
Kentucky River at Lock 12 near Irvine (d)	03282120	214
Kentucky River at Lock 11 near College Hill (d)	03282290	222

**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,
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Page

STATION NUMBER

OHIO RIVER BASIN--Continued

Ohio River--Continued

KENTUCKY RIVER BASIN--Continued

Red River near Hazel Green (d)	03282500	224
Red River at Clay City (d)	03283500	226
Kentucky River at Lock 10 near Winchester (d)	03284000	228
Kentucky River at Lock 9 at Valley View (d)	03284230	230
Kentucky River at Lock 8 near Camp Nelson (d)	03284500	232
East Hickman Creek:		
East Hickman Creek at Andover Village near Cadentown (d)	03284520	238
East Hickman Creek Tributary at Chilesburg Road near Lexington (d)	03284525	240
East Hickman Creek at Delong Road near East Hickman (d)	03284530	242
West Hickman Creek at Ash Grove Pike near East Hickman (d)	03284555	244
Dix River near Danville (d)	03285000	246
Kentucky River at Lock 7 near High Bridge (d)	03286500	248
Kentucky River at Lock 6 near Salvisa (d)	03287000	250
Kentucky River at Lock 4 at Frankfort (c, d)	03287500	252
Elkhorn Creek:		
North Elkhorn Creek at Bryant Road near Cadentown (d)	03287580	262
North Elkhorn Creek at Winchester Road near Lexington (d)	03287590	264
North Elkhorn Creek at Bryan Station Road at Montrose (d)	03287600	266
North Elkhorn Creek at Georgetown (d)	03288100	268
Royal Spring at Georgetown (d)	03288110	270
Cane Run at Berea Road near Donerail (d)	03288200	272
South Elkhorn Creek at Fort Springs (d)	03289000	274
Town Branch:		
Wolf Run at Old Frankfort Pike at Lexington (d)	03289193	276
Town Branch at Yarnallton Road at Yarnallton(d)	03289200	279
South Elkhorn Creek near Midway (d)	03289300	282
Elkhorn Creek near Frankfort (d)	03289500	284
Kentucky River at Lock 2 at Lockport (d)	03290500	286
Eagle Creek at Glencoe (d)	03291500	288
HARRODS CREEK BASIN		
Harrods Creek at Hwy 329 near Goshen (d)	03292470	290
GOOSE CREEK BASIN		
Goose Creek at Old Westport Road near St. Matthews (d)	03292474	292
Goose Creek at Highway 42 at Glenview Acres (d)	03292475	294
Little Goose Creek near Harrods Creek (d)	03292480	296
BEARGRASS CREEK BASIN		
South Fork Beargrass Creek at Louisville (d)	03292500	298
South Fork Beargrass Creek at Winter Avenue at Louisville (d)	03292550	300
Middle Fork Beargrass Creek at Louisville (d)	03293000	302
Middle Fork Beargrass Creek at Lexington Road at Louisville (d)	03293500	304
Ohio River at Louisville (d)	03294500	308
MILL CREEK BASIN		
Mill Creek Cutoff near Louisville (d)	03294550	310
Mill Creek at Orell Road near Louisville (d)	03294570	312
SALT RIVER BASIN		
Salt River at Glensboro (d)	03295400	314
Brashears Creek:		
Bullskin Creek near Simpsonville (d)	03295702	316
Brashears Creek at Taylorsville (d)	03295890	318
Cedar Creek at Highway 1442 near Sheperdsville (d)	03297800	320
Floyds Fork near Pewee Valley (d)	03297900	322
Floyds Fork at Fisherville (d)	03298000	324
Chenoweth Run at Ruckriegal Parkway near Jeffersontown (d)	03298135	326
Chenoweth Run at Gelhaus Lane near Fern Creek (d)	03298150	328
Floyds Fork at Bardstown Road near Mount Washington (d)	03298200	330

**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,
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Page

STATION NUMBER

OHIO RIVER BASIN--Continued	
Salt River Basin--Continued	
Pennsylvania Run at Mt. Washington Road near Louisville (d)	03298300 332
Salt River at Shepherdsville (d)	03298500 334
Long Lick near Clermont (d)	03298550 336
Rolling Fork:	
Beech Fork at Maud (d)	03300400 338
Beech Fork at Bardstown (d)	03301000 340
Rolling Fork near Boston (d)	03301500 342
Mill Creek near Fort Knox (d)	03301700 344
Pond Creek:	
Southern Ditch:	
Northern Ditch:	
Fern Creek at Old Bardstown Road at Louisville (d)	03301900 346
Northern Ditch at Okolona (d)	03301940 348
Pond Creek near Louisville (d)	03302000 350
Pond Creek at Pendleton Road near Louisville (d)	03302030 352
Brier Creek at Pendleton Road near Louisville (d)	03302050 354
OTTER CREEK BASIN	
Otter Creek at Otter Creek Park near Rock Haven (d)	03302110 356
Sinking Creek near Lodiburg (c, d)	03303205 358
Ohio River at Cannelton Dam (c, d)	03303280 368
GREEN RIVER BASIN	
Green River near Campbellsville (t)	03306000 378
Green River at Greensburg (t)	03306500 380
Russell Creek near Columbia (d, t)	03307000 382
Green River at Munfordville (d,t)	03308500 386
Green River at Mammoth Cave (c, d)	03309000 390
Nolin River at White Mills (d)	03310300 402
Nolin River at Kyrock (d)	03311000 404
Green River at Lock 6 at Brownsville (t)	03311500 408
Barren River:	
Barren River near Finney (t)	03313000 410
West Fork Drakes Creek near Franklin (d)	03313700 412
Barren River at Bowling Green (d)	03314500 414
Green River at Paradise (d)	03316500 416
Rough River near Falls of Rough at Dam(t)	03318010 418
Rough River near Dundee (d)	03319000 420
Green River at Lock 2 at Calhoun (d)	03320000 422
Pond River near Apex (d)	03320500 424
Pond River near Madisonville (g)	03321060 426
WABASH RIVER BASIN	
Wabash River at New Harmony, IN (c)	03378500 428
TRADEWATER RIVER BASIN	
Tradewater River at Olney (d)	03383000 438
Ohio River at Smithland Dam (d)	03399800 440
CUMBERLAND RIVER BASIN	
CUMBERLAND RIVER:	
Martins Fork Lake at Martins Fork Dam near Smith (c,t)	03400798 442
Martins Fork near Smith (c,d,t)	03400800 470
Cumberland River near Harlan (d)	03401000 480
Yellow Creek near Middlesboro (d)	03402000 482
Cumberland River at Pine St. Bridge at Pineville (d)	03402900 484
Cumberland River at Barbourville (d)	03403500 486
Clear Fork at Saxton (d)	03403910 488
Cumberland River at Williamsburg (d)	03404000 490
Cumberland River at Cumberland Falls (d)	03404500 492

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
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[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
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Page

STATION NUMBER

OHIO RIVER BASIN--Continued

CUMBERLAND RIVER BASIN--Continued

Laurel River:

Lynn Camp Creek at Corbin (d)	03404900	494
Rockcastle River at Billows (d)	03406500	496
South Fork Cumberland River near Stearns (c,d)	03410500	498
South Fork Cumberland River near Yamacraw (c,d)	03410600	508
Beaver Creek near Monticello (d)	03413200	518
Little River near Cadiz (d)	03438000	520
Cumberland River at Smithland (c)	03438500	531

TENNESSEE RIVER BASIN

Tennessee River at Hwy 60 near Paducah (c)	03609750	535
Clarks River at Almo (d)	03610200	540

MASSAC CREEK BASIN

Massac Creek near Paducah (d)	03611260	542

Ohio River at Metropolis, IL (d)	03611500	544

BAYOU CREEK BASIN

Bayou Creek near Heath (d)	03611800	546
Bayou Creek near Grahamville (d)	03611850	548
Little Bayou Creek near Grahamville (d)	03611900	550

Ohio River at Lock and Dam 53 near Grand Chain, IL (c)	03612500	552

LOWER MISSISSIPPI RIVER BASIN

BAYOU DE CHEIN BASIN:

Bayou De Chein near Clinton (d)	07024000	562

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

GRAVES COUNTY

Well 365210088391301 (Viola) (r)	621

JEFFERSON COUNTY

Well 381441085452701 (Lib A-2) (r)	622
Well 381504085443202 (CP-7A)	623
Well 381518085453402 (Courthouse Annex) (r)	624
Well 381613085422801 (Edith Ln. Landfill)	625
Well 381638085415801 (WC-4)	625
Well 381648085421201 (WC-5)	625
Well 381653085413302 (WC-9A) (r)	626
Well 381701085414002 (WC-8A) (r)	627
Well 381742085402001 (WC-13)	628
Well 381827085392401 (WC-26)	628
Well 381904085384801 (WC-27)	628
Well 381958085380201 (Thompson Well)	629
Well 382007085373801 (Bird Man)	629
Well 382016085382601 (LWC-P-4)	629
Well 382026085374301 (Little Dean)	630
Well 382032085375601 (Staples)	630
Well 382034085381201 (LWC-P-1)	630
Well 382037085381101 (LWC-P-2)	631
Well 382038085382001 (Scott)	631
Well 382039085375201 (WP-7) (r)	632
Well 382051085380801 (LWC-1) (r)	633
Well 382053085381301 (LWC-3B)	634
Well 382054085380602 (LWC-7A)	634
Well 382057085380801 (LWC-2B)	634
Well 382058085373501 (Shirley Avenue)	635
Well 382102085380701 (WP-19)	635
Well 382105085375101 (Hays-Kennedy) (r)	636
Well 382120085374701 (River Fields)	637
Well 382124085375401 (Abell)	637

PRECIPITATION STATION, BY COUNTY FOR WHICH RECORD IS PUBLISHED

JEFFERSON COUNTY

381353085401801 Seneca Park 638

ROWAN COUNTY, KENTUCKY

390706083324900 Clark State Fish Hatchery. 640

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INTRODUCTION

Water resources data for the 2004 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 131 stream-gaging stations. It also includes water-quality data for 15 stations sampled at regular intervals, continuous temperature at 7 stations, and continuous water-quality at 11 stations. Ground-water levels are published for 8 recording and 22 partial record sites. Precipitation data at a regular interval are published for two sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements 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 2004, 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-04-1." These reports are for sale to the public for a nominal fee by the U.S. Department of Commerce, National Technical Information Service, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Director 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

Kentucky Cabinet for Health Services, Dr. James Holsinger, Secretary,
Kentucky Geological Survey, Dr. James C. Cobb, Director and State Geologist,
Kentucky Natural Resources and Environmental Protection Cabinet, LaJuana Wilcher, Secretary,
Kentucky River Authority, Steve Reeder, Executive Director,
Kentucky Transportation Cabinet, Bill Nighbert, Secretary,
Bullitt County, Kenneth J. Rigdon, Judge/Executive,
Jefferson County, Ken Herndon (Mayor Abramson), Judge/Executive,
Lexington-Fayette Urban County Government, Sandra M. Varellas, Judge/Executive,
Northern Kentucky Sanitation District No. 1, John Lyons, Director of Storm Water Management,
City of Bardstown, Dixie P. Hibbs, Mayor,

City of Frankfort, William I. May, Jr., Mayor,

City of Georgetown, Everett L. Varney, Mayor,

City of Lewisburg, Ken Whitson, Mayor,

City of Lexington, Teresa Ann Isaac, Mayor,

City of Louisville, Jerry Abramson, Mayor,

City of Mt. Sterling, B. D. Wilson, Judge/Executive,

City of Owingsville, Don Kincaid, Mayor,

City of Simpsonville, Steve Eden, Mayor,

Kentucky Heritage Resource Conservation & Development Council, Kenneth Catlett, Chairman,

University of Louisville, Dr. James Ramsey, President, and

Assistance in the form of funds or services was given by the Federal Highway Administration; 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 2004 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 20 surface-water gaging stations across Kentucky, recurrence intervals for annual peak flows during the 2004 water year were generally about two years with stations in the east-central part of the State (Kentucky River Basin) having recurrence intervals of less than five years to greater than ten years. Two stations in the southeast part of the State (Cumberland River Basin) had recurrence intervals of greater than five years. Low flow recurrence intervals across the State were less than two years with one station in the north-central part of the State (Beargrass Creek Basin) and one station in the west-central part of the State (Green River Basin) having a recurrence interval of greater than two years. In general, flows were above average across the State with the extreme western part of the State having flows less than the long term average. (table 1).

No major flooding occurred during the 2004 water year.

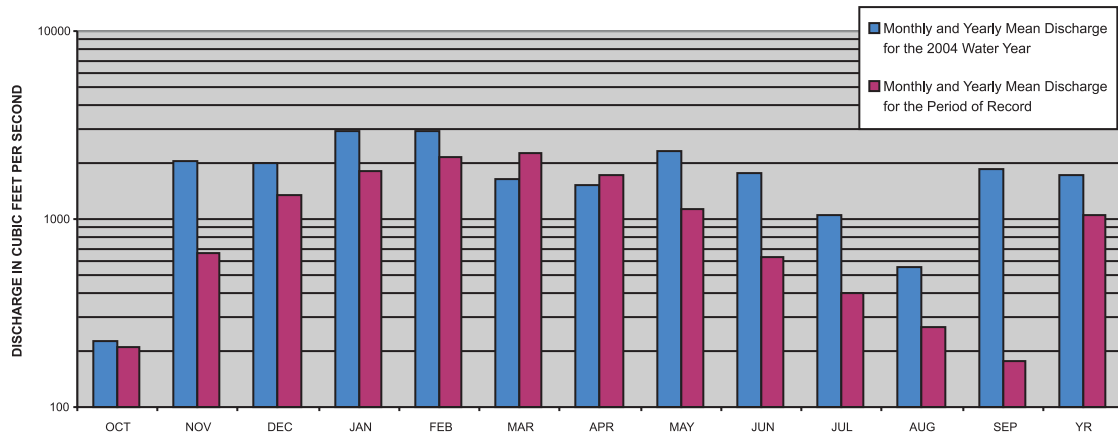
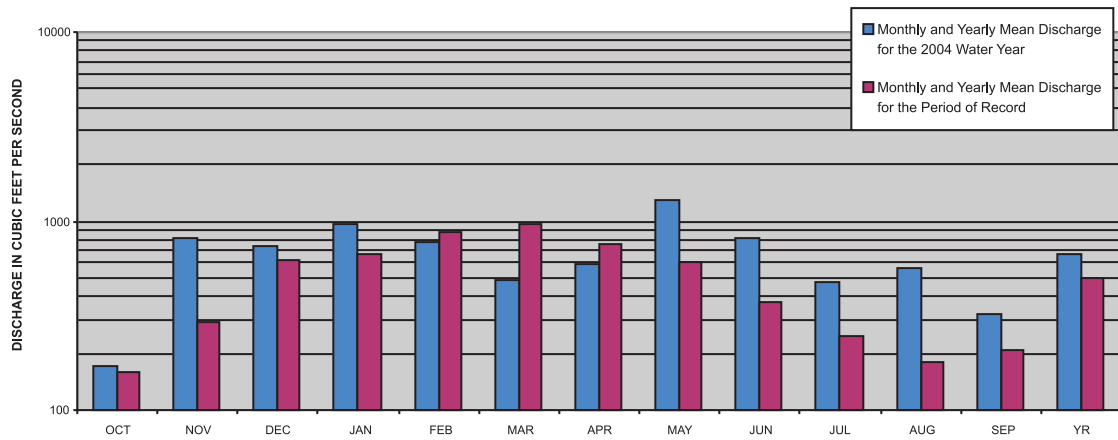
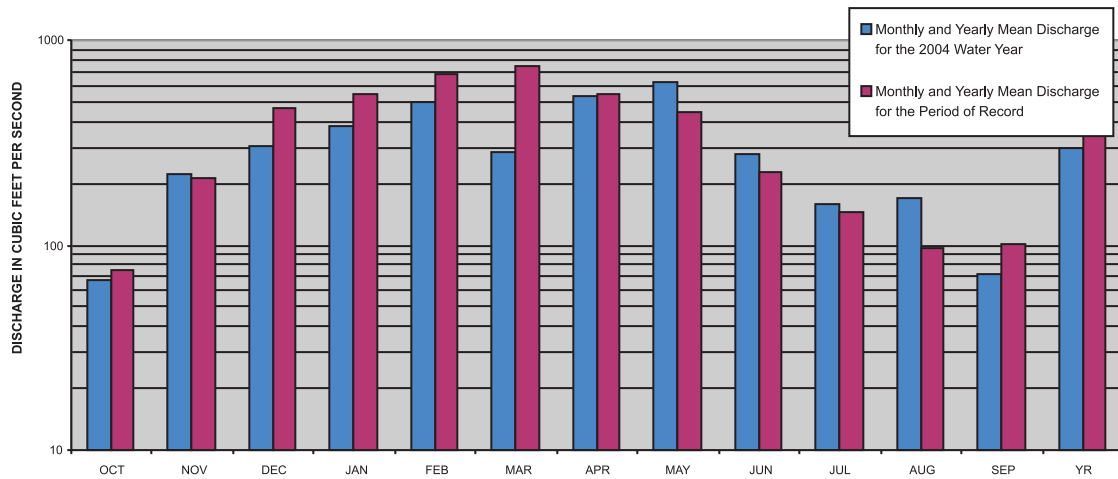
Quality of Water

Nearly all the samples collected at the six stations contained detectable concentrations of agricultural chemicals. Dissolved nitrite plus nitrate as nitrogen (hereafter referred to nitrate) were common during 2004 water year, with all samples containing concentrations greater than the detection limit of 0.05 milligrams per liter (mg/L). The largest concentration of nitrate was 4.72 mg/L from the Wabash River on May 25.

Pesticide analysis were completed for 73 water samples collected at the six NASQAN stations. Atrazine, simazine, and metolachlor, three of the most commonly used herbicides in Kentucky, were detected throughout the year at the six NASQAN stations. The largest herbicide concentration was 7.07 micrograms per liter ($\mu\text{g/L}$) of atrazine in the water sample collected from the Wabash River on May 25. Herbicide concentrations generally were larger in samples collected in March, April, May, and June than in samples collected at other times during water year 2004.

Water-quality data were collected at 16 surface-water sites during the 2004 water year. Nine of the sites were located in the Little River Basin in Christian and Trigg Counties; seven of the sites were located in the Sinking Creek Basin in Breckinridge County. Other water-quality activities included the following:

Operation of eight continuous monitors to measure temperature, dissolved oxygen, pH, turbidity, and specific conductance in the Licking River Basin, in cooperation with the Northern Kentucky Sanitation District No. 1.

03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE**03310300 NOLIN RIVER AT WHITE MILLS****03438000 LITTLE RIVER AT CADIZ****Figure 1.** Mean discharge during 2004 water year and period of record for three representative gaging stations.

Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, turbidity, and specific conductance in the Green River at Mammoth Cave, in cooperation with the National Park Service.

Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, turbidity, and specific conductance in the Little River near Cadiz, in cooperation with the Kentucky Department of Agriculture.

Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, and specific conductance in the Sinking Creek near Lodiburg, in cooperation with the Kentucky Department of Agriculture.

Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, and specific conductance in the Kentucky River at Lock 4 at Frankfort, in cooperation with the Kentucky River Authority.

Operation of two continuous monitors to measure temperature, dissolved oxygen, pH, and specific conductance on Martins Fork Lake and its tailwater, in cooperation with the U.S. Army Corp of Engineers, Nashville District operations.

Operation of two continuous monitors to measure temperature, dissolved oxygen, pH, and specific conductance on South Fork Cumberland River at Stearns and Yamacraw, in cooperation with the Kentucky Division of Water.

Retrieving data for water-quality sites can be achieved via the internet. Real-time data from monitors and water-quality data from laboratory analyses can be retrieved from the website at

<http://waterdata.usgs.gov>

Ground-Water Levels

Most currently monitored observation wells tap the alluvial aquifer underlying downtown Louisville and northeast Jefferson County.

Ground-water levels in these areas of Jefferson County respond to rainfall, pumpage, river stage, and natural flow to the Ohio River. In general many of the wells in the downtown area are starting to rebound after reaching record lows. This rebound can be attributed to at or above normal rainfall in the recent years. Most wells in the northeast section of Louisville showed a gradual increase in the water levels due to greater rainfall totals and a decrease in pumpage. Six wells reached record highs for the period of record.

Table 1. Mean, maximum, and minimum streamflow for water year 2004 and recurrence intervals.

Station number	Length of record (years)	Mean		Maximum		Minimum	
		Daily streamflow (ft³/s)	Percent of average	Peak streamflow (ft³/s)	Recurrence interval (years)	Daily streamflow (ft³/s)	Recurrence interval (years)
TYGARTS CREEK BASIN							
03217000	64	400	129	12200	>5	7.0	<2
KENTUCKY RIVER BASIN							
03280700	47	139	149	8040	>5	5.7	<2
03281100	40	327	125	9380	>2	13	<2
03281500	71	1729	163	29500	>2	90	<2
03282500	49	148	168	4550	>5	2.6	<2
03283500	67	890	178	22000	>10	33	<2
03285000	62	607	128	13900	>2	8.2	<2
BEARGRASS CREEK BASIN							
03293000	60	30.1	117	1680	>2	0.10	<10
SALT RIVER BASIN							
03298000	60	264	143	7750	<2	0.22	<2
03300400	32	836	132	14500	<2	17	<2
03301500	66	2361	130	22800	<2	100	<2
GREEN RIVER BASIN							
03307000	65	339	117	10700	>2	30	<2
03310300	45	668	135	8480	>2	45	<10
03320500	64	256	93	2420	<2	0.85	<2
CUMBERLAND RIVER BASIN							
03404900	31	102	117	3940	>5	5.6	<2
03406500	68	1499	159	31700	>2	86	<2
03410500	62	2143	121	63600	>5	148	<2
03438000	64	299	84	4000	<2	27	<2
MASSAC CREEK BASIN							
03611260	33	10.5	60	1340	<2	0.37	<2
BAYOU DE CHIEN BASIN							
07024000	59	65.4	63	1240	<2	17	<2

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 2). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

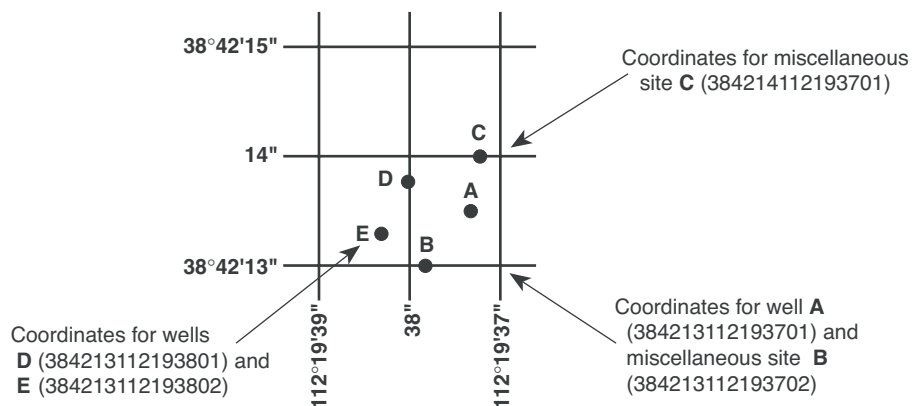


Figure 2. System for numbering wells and miscellaneous sites (latitude and longitude).

In addition to the well number that is based on the latitude and longitude for each well, another well number may be provided which in many States is based on the Public Land Survey System, a set of rectangular surveys that is used to identify land parcels. This well number is familiar to the water users of Kentucky and shows the location of the well by quadrant, township, range section, and position within the section (see fig. 3).

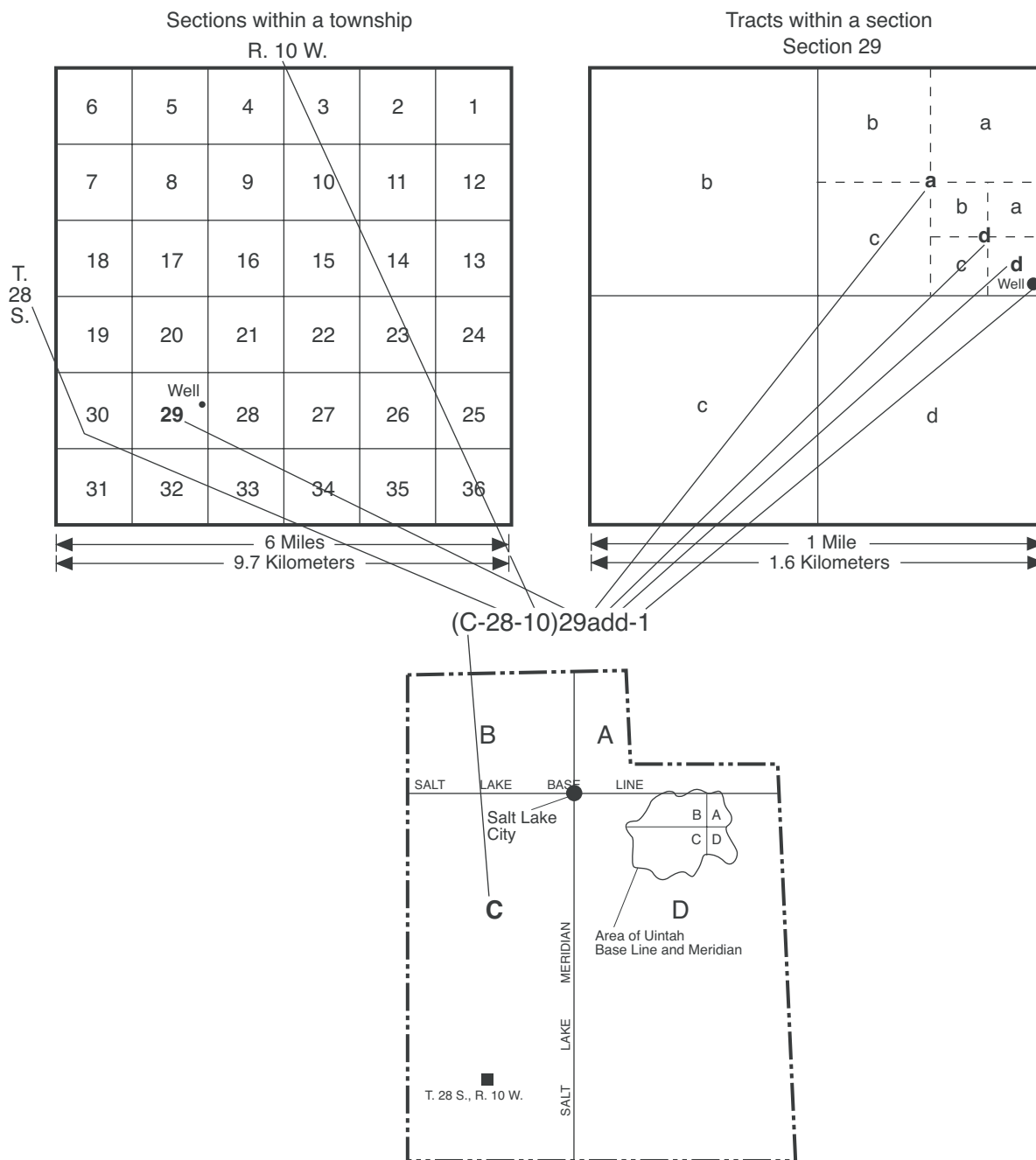


Figure 3. System for numbering wells and miscellaneous sites (township and range).

The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian—A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more wells are located within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, (C-28-10)29 add -1 indicates a well in the southeast quarter of the southeast quarter of the northeast quarter of sec. 29, T. 28 S., R.10 W., and shows that this is the first well inventoried in the quarter-quarter-quarter section. The capital letter C indicates that the township is south of the Salt Lake Base Line and that the range is west of the Salt Lake Meridian.

In addition to the Salt Lake Base Line and Salt Lake Meridian that apply to most of Utah, the Uintah Base Line and Meridian, are the basis for describing locations in a small, irregularly shaped area of northeastern Utah. The quadrants, townships, ranges, sections, and parts of sections are designated in the same way as for the Salt Lake Base Line and Meridian. For any location in the Uintah area, however, the letter “U” precedes the parenthesis.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation’s largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River Basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. 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 (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and remobilization 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. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

The USGS National Water-Quality Assessment (NAWQA) Program 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; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 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 is 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 water-resources managers to use in making decisions 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 may be accessed from <http://water.usgs.gov/nawqa/>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (figs. 4-7) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded

electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRI's), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from <http://water.usgs.gov/pubs/twri/>. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standardization (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by hydrographers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrographers, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly less accurate due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information 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 reference 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 varies 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 term indicates the time 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section

titled Identifying Estimated Daily Discharge.) Information is presented 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, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 USGS Kentucky Water Science Center (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedance in any 1 year.

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 arithmetic 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 is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some

stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (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 values. 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. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that 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.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

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 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.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, 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 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) indicate 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 has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been 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 table lists annual maximum stage and discharge at crest-stage stations, and the second table lists 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 often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e—Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 observations of stage, record of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 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 discharge values listed for partial-record stations.

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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the USGS Kentucky

Water Science Center. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the USGS Kentucky Water Science Center (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol “---” in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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 and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report 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 *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one 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 continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. 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 8 and 11.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±5%	> ±5 to 10%	> ±10 to 15%	> ±15%

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 is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRI's, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS Kentucky Water Science Center (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the 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 USGS Kentucky Water Science Center.

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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be 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 are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. These methods are consistent with ASTM standards and generally follow ISO standards.

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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. 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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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.

Remark Codes

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

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

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 the USGS Kentucky Water Science Center 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. These data are not presented in this report but are available from the USGS Kentucky Water Science Center.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall 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. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in the USGS Kentucky Water Science Center 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 collecting 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. The reference material 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

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. Many types of replicate samples are 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 the USGS Kentucky Water Science Center are

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

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, each subsample 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 and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation).

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

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 above sea level 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 in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

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 of water of several hundred feet, the error in 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 only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures 12-14 each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and 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 continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), 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 National Geodetic Vertical Datum of 1929 (NGVD 29); 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, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder’s float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRI, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS Kentucky Water Science Center (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2 and Book 5, Chapters A1, A3, and A4, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

ACCESS TO USGS WATER 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 from <http://water.usgs.gov>.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each State's Water Science Center (see address that is shown on the back of the title page of this report).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.

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. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP 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.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

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. (See also “Biomass” and “Dry weight”)

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

Annual runoff is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. 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 Plexiglas strips for periphyton collection. (See also “Substrate”)

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

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also “Peak flow”)

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also “Bedload” and “Sediment”)

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload,” “Dry weight,” “Sediment,” and “Suspended-sediment discharge”)

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. 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 microorganisms, such as bacteria.

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

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of blue-green algae in periphyton samples is given in

cells per square centimeter (cells/cm²) or biovolume per square centimeter (μm³/cm²). (See also “Phytoplankton” and “Periphyton”)

Bottom material (See “Bed material”)

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada’s first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm³) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159....

From cell volume, total algal biomass expressed as biovolume (μm³/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that 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 volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See “Cubic foot per second-day”)

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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. [See also “Biochemical oxygen demand (BOD)”]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be

higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, $[(\text{ft}^3/\text{s})/\text{d}]$) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(\text{ft}^3/\text{s})/\text{mi}^2$] 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. (See also “Annual runoff”)

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Sediment” and “Suspended-sediment concentration”)

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms (*Bacillariophyta*) are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic microme-

ters per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It 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, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO_3) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth’s surface that contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, 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. (See also “Ash mass,” “Biomass,” and “Wet mass”)

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also “Substrate embeddedness class”)

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded 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 that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also “Bacteria”)

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also “Phytoplankton”)

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. 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 streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are 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 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved

by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Fire algae (*Pyrrophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae (*Chlorophyta*) are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating “moss” in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site: <http://www.csc.noaa.gov/text/glossary.html> (see “High water”)

Hilsenhoff’s Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \sum \frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See “Datum”)

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also “Annual runoff”)

Instantaneous discharge is the discharge at a particular instant of time. (See also “Discharge”)

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a “less than” (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term ‘non-detection value’ (NDV).

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time.

LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA Website: <http://www.csc.noaa.gov/text/glossary.html> (see “Low water”)

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

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.

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

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

Micrograms per gram (UG/G, $\mu\text{g/g}$) 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 kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S/cm}$) 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 water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

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. MPN 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.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called “Sea Level Datum of 1929” or “mean sea level.” Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>* (See “North American Vertical Datum of 1988”)

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also “Substrate”)

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also “Ash mass,” “Biomass,” and “Dry mass”)

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.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) 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, as 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	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or percent of total 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, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are 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 commonly are known as algae. (See also “Plankton”)

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

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

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic 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 (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines 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 with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines 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. (See also “Primary productivity”)

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been pro-

duced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment 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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water 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.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

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

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.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

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

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that 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-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

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 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross 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. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of

at least 95 percent of the constituent determined. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

Synoptic studies are 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.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 at least 95 percent of the constituent in the sample.)

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 warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. 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 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also “Bacteria”)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. 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 judge when the results should be reported as “total in bottom material.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume”)

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Bedload,” “Bedload discharge,” “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also “Sediment,” “Suspended-sediment load,” and “Total load”)

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dis-

solved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30 ± 15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

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 human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are 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.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS 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, 2002, is called the “2002 water year.”

Watershed (See “Drainage basin”)

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.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are 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. (See also “Plankton”)

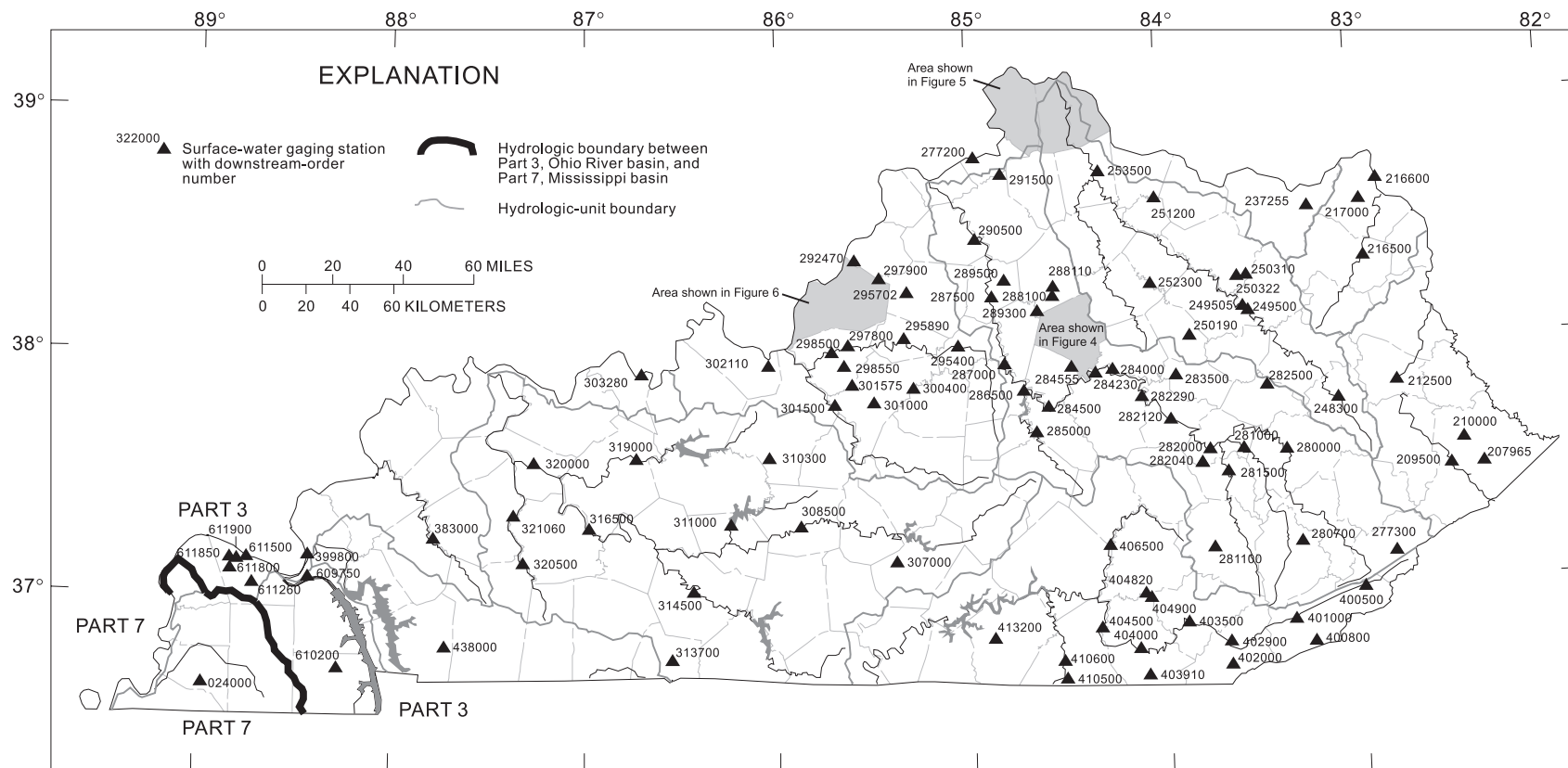


Figure 4. Location of gaging stations in Kentucky.

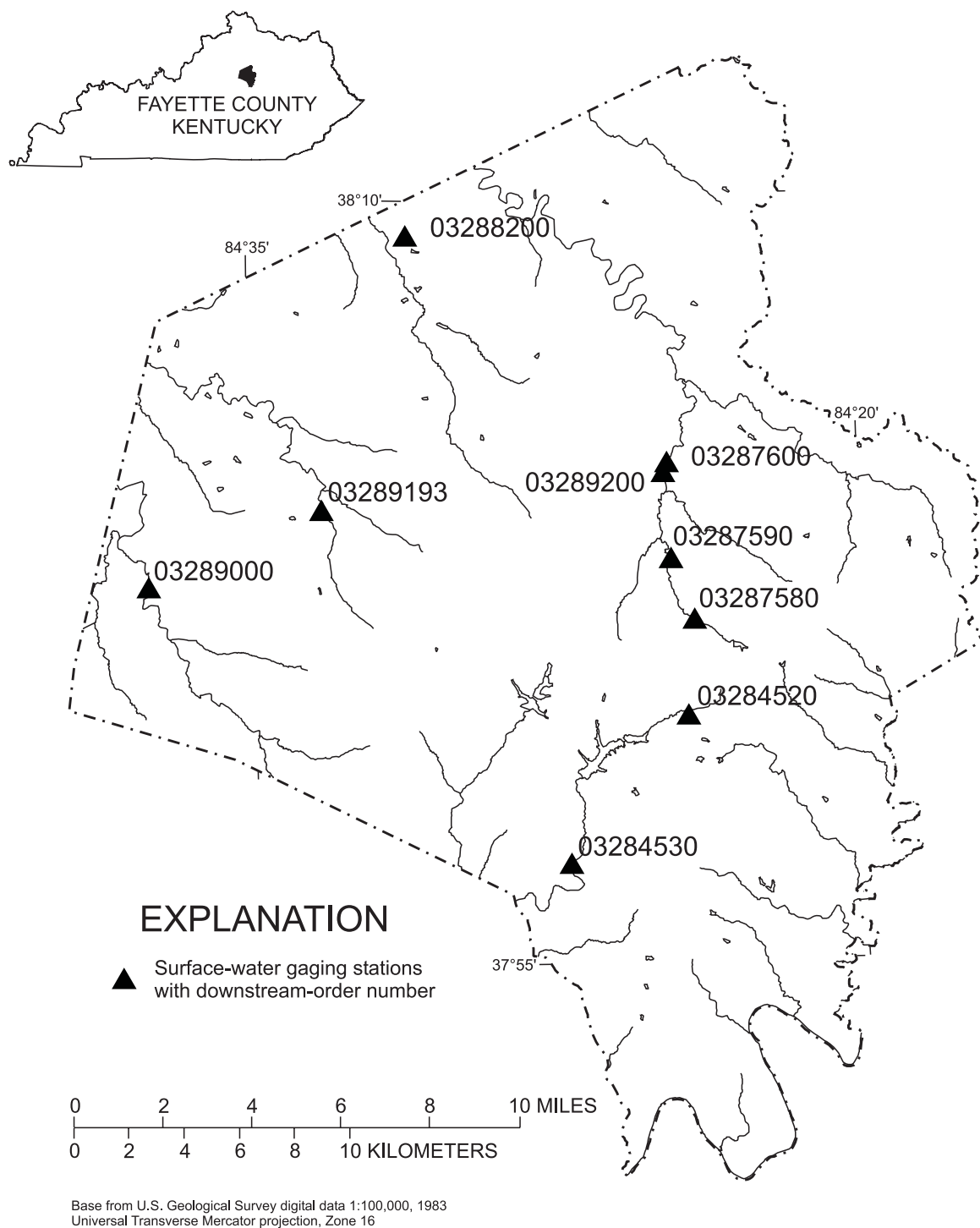


Figure 5. Location of surface-water gaging stations in Fayette County, Kentucky.

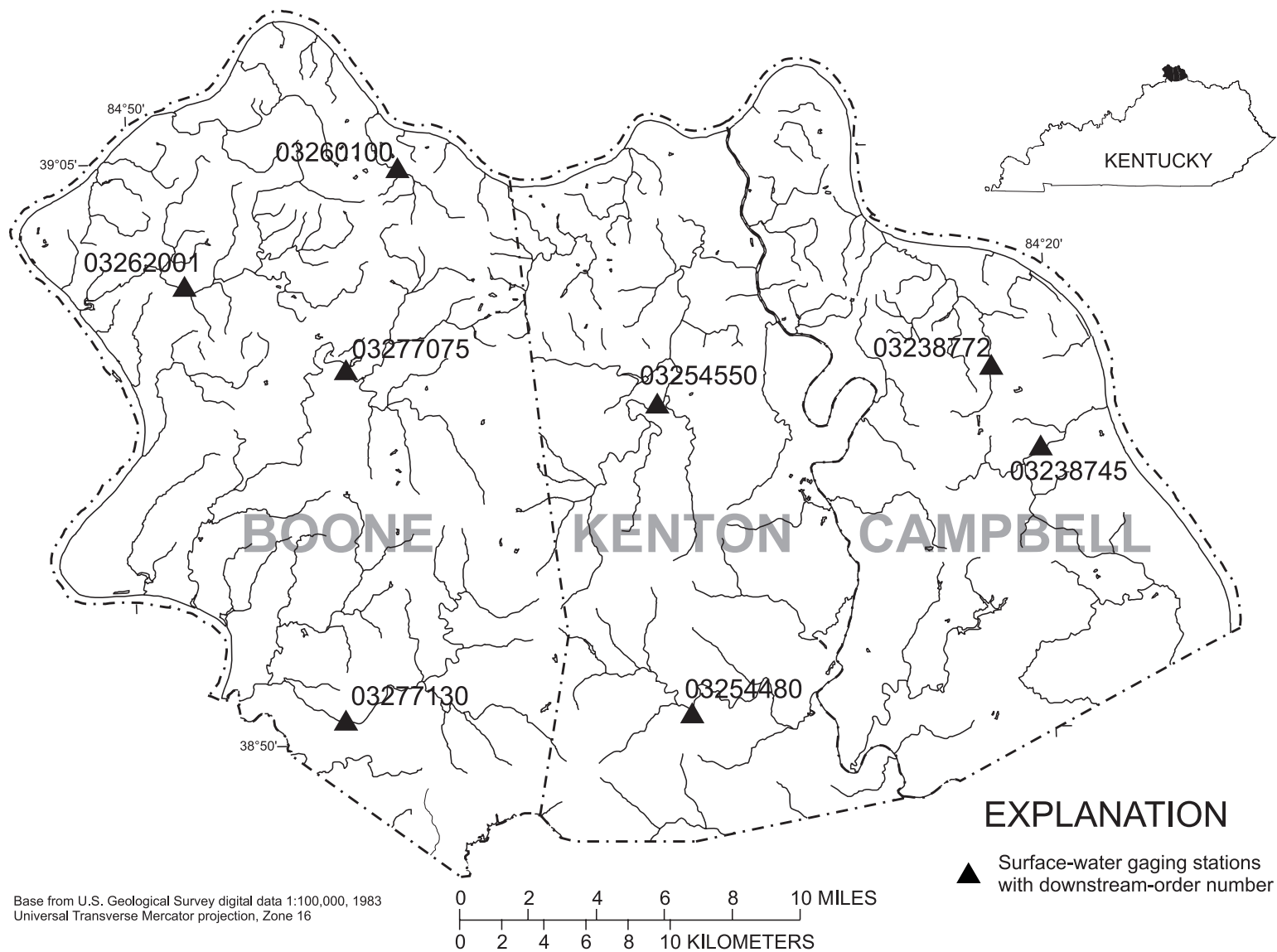


Figure 6. Location of surface-water gaging stations in Boone, Kenton, and Campbell Counties, Kentucky.

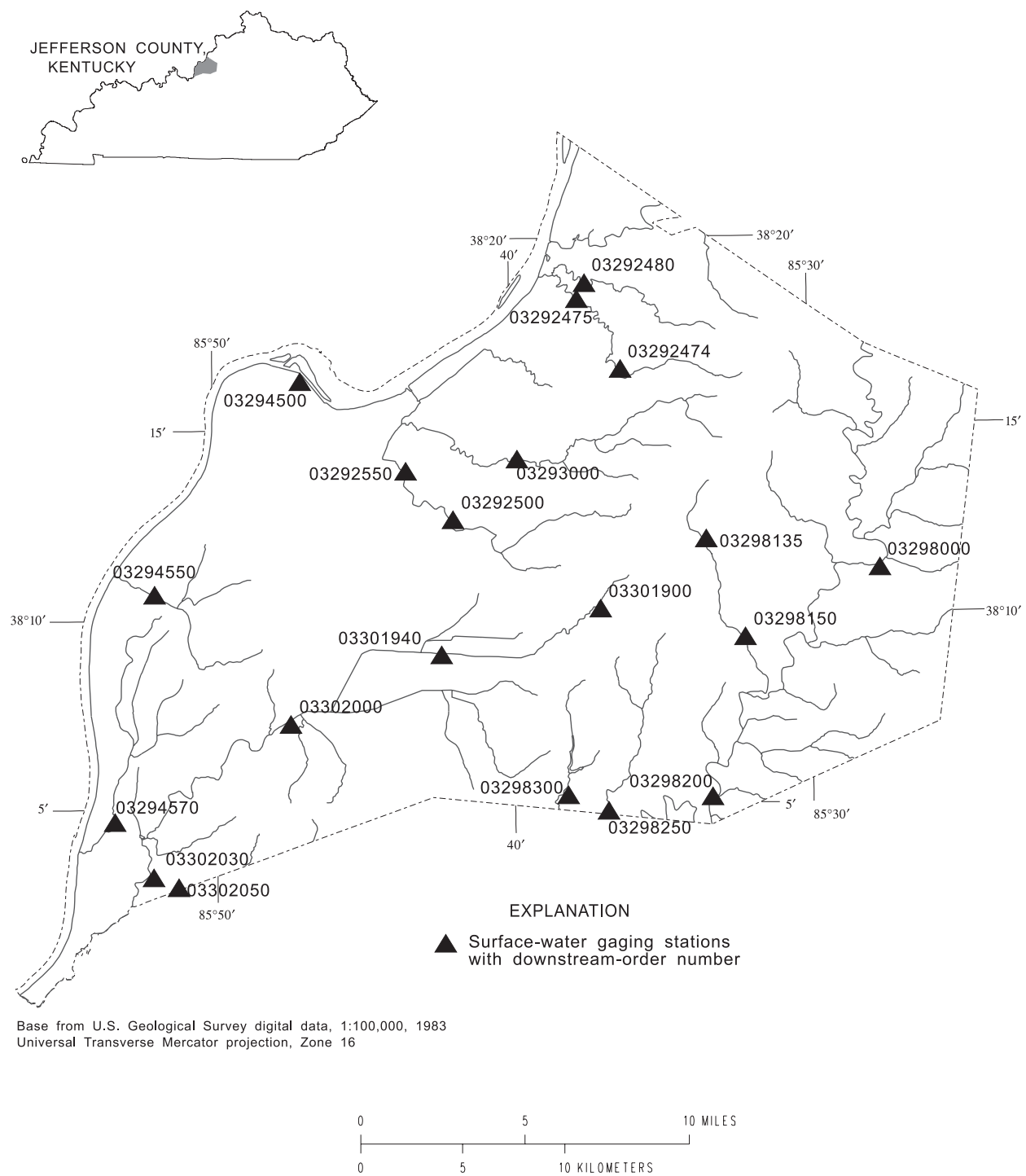


Figure 7. Location of gaging stations in Jefferson County, Kentucky.

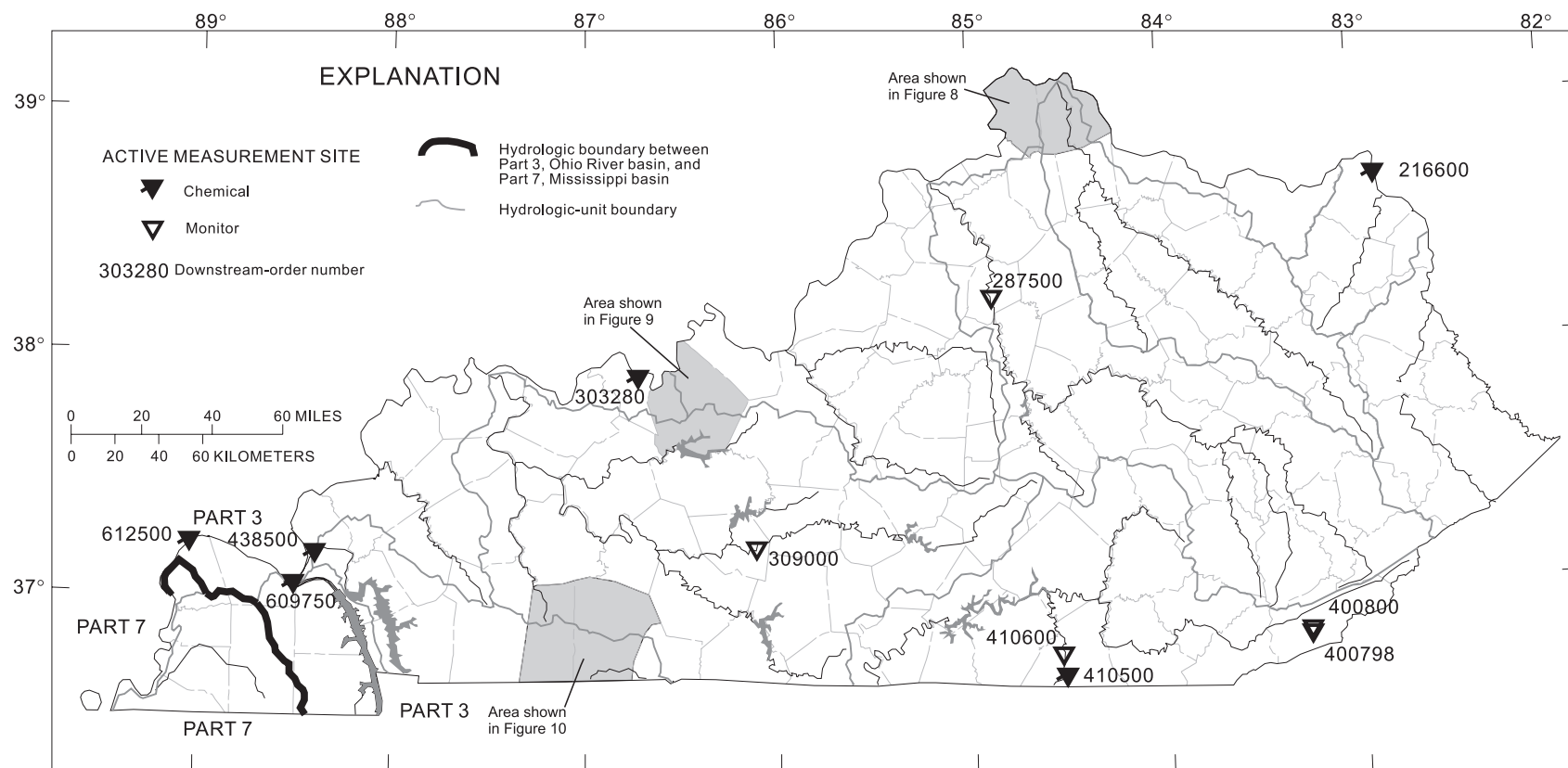


Figure 8. Location of surface-water-quality stations in Kentucky.

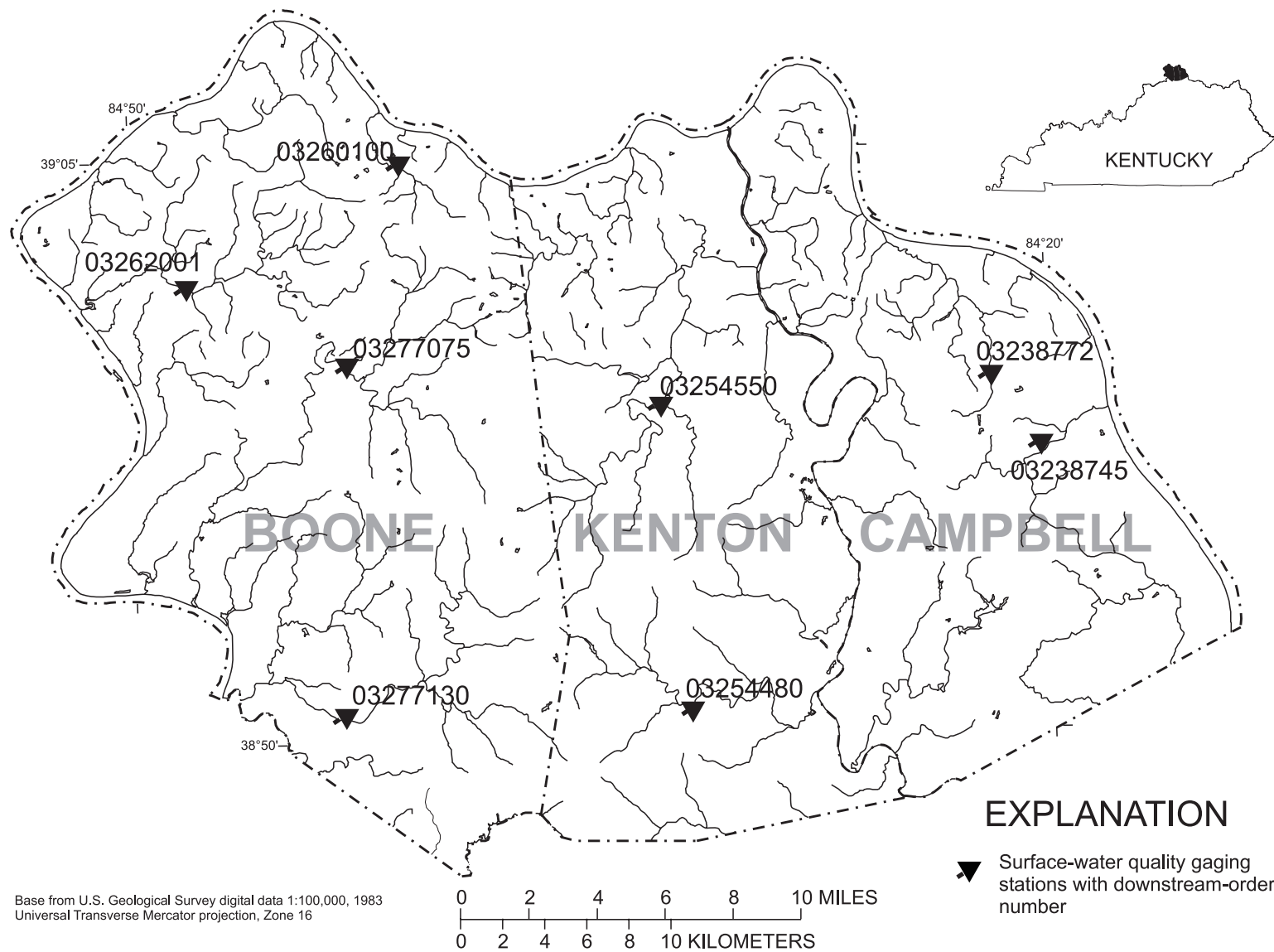


Figure 9. Location of water-quality stations in Boone, Kenton, and Campbell Counties, Kentucky.

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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 with telemetry. Datum of gage is 780 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those estimated which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 19	0915	444	1.91	May 31	0745	410	1.84
Jan 2	1215	581	2.23	Jun 12	unknown	2190	6.46
Feb 6	1315	327	1.66	Aug 29	0200	464	1.96
Mar 6	0530	313	1.63	Sep 17	1600	590	2.25
Apr 13	2030	268	1.52				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	e0.82	7.3	10	8.6	4.0	11	5.0	38	3.7	8.0	3.2
2	1.3	e0.78	5.0	214	6.7	4.5	58	6.1	11	4.3	6.0	2.6
3	1.2	e1.0	4.1	67	11	4.2	57	5.4	6.0	4.2	4.9	2.3
4	1.1	e1.2	5.2	23	10	4.3	29	4.7	68	4.4	4.5	2.1
5	1.1	e5.0	7.6	32	33	4.8	16	4.2	42	4.6	14	1.8
6	1.1	19	15	31	203	178	12	4.0	16	4.1	8.7	1.7
7	1.0	e11	14	19	98	48	8.8	3.6	8.4	4.1	5.8	2.2
8	1.0	e5.4	10	14	40	28	7.9	3.5	5.8	3.0	4.4	17
9	1.0	e3.5	7.3	12	25	19	6.5	3.2	4.7	2.6	3.8	26
10	1.0	e2.5	7.7	9.7	17	14	5.8	3.7	4.1	2.0	3.9	11
11	1.00	e2.0	6.8	8.4	13	11	5.8	3.7	4.5	1.9	3.4	6.9
12	1.00	e2.1	5.4	8.2	10	8.9	7.8	3.3	e440	1.9	5.6	5.3
13	1.1	e4.4	5.1	7.8	9.0	7.3	104	3.2	e28	6.1	4.2	4.3
14	e3.0	e2.5	7.8	7.6	8.0	6.5	151	3.0	e10	3.8	3.5	3.4
15	6.6	e2.6	7.8	7.7	7.3	5.8	48	3.5	e13	3.2	e3.1	2.8
16	e3.4	e3.2	8.5	7.0	6.4	9.7	24	3.5	e11	2.8	e2.9	2.4
17	e1.7	e2.9	22	6.9	6.2	8.7	14	4.9	e1.2	2.8	e2.8	164
18	e1.3	e2.4	21	30	5.9	7.4	9.9	3.5	e5.8	2.7	e2.7	64
19	e1.0	246	17	30	5.7	6.8	7.6	3.7	e5.0	2.6	3.6	19
20	e0.84	47	12	18	5.6	7.1	6.7	3.3	e4.4	2.5	e3.1	9.9
21	e0.78	12	10	13	5.5	9.7	5.8	3.0	e3.7	2.5	8.3	7.3
22	e0.72	6.5	12	11	5.0	8.4	4.9	2.9	e4.4	3.6	e4.9	5.8
23	e1.4	4.5	30	9.1	4.7	7.5	5.7	3.4	e5.8	6.6	e3.5	4.8
24	e1.1	7.0	47	8.5	4.4	6.8	5.0	3.3	e3.8	3.6	e2.4	4.2
25	e0.92	5.7	33	9.0	4.2	6.5	4.9	3.3	e5.6	3.7	e2.7	3.9
26	e0.78	5.0	20	9.0	4.2	6.5	14	12	e7.0	13	e2.4	3.5
27	e2.3	4.5	14	8.9	4.5	6.9	9.8	28	e4.9	15	e2.1	3.2
28	e2.6	11	11	7.9	4.1	5.4	7.4	62	e4.2	7.8	e2.0	4.4
29	e1.6	14	9.3	7.6	4.0	5.1	6.1	14	3.7	5.3	46	3.3
30	e1.3	11	14	7.5	---	6.4	5.0	41	3.5	5.2	7.1	3.0
31	e0.88	---	11	15	---	6.9	---	210	---	8.6	4.3	---
TOTAL	46.92	446.50	407.9	669.8	570.0	464.1	659.4	461.9	773.5	142.2	184.6	395.3
MEAN	1.51	14.9	13.2	21.6	19.7	15.0	22.0	14.9	25.8	4.59	5.95	13.2
MAX	6.6	246	47	214	203	178	151	210	440	15	46	164
MIN	0.72	0.78	4.1	6.9	4.0	4.0	4.9	2.9	1.2	1.9	2.0	1.7
CFM	0.24	2.40	2.12	3.48	3.17	2.41	3.55	2.40	4.16	0.74	0.96	2.13
IN.	0.28	2.68	2.45	4.02	3.42	2.78	3.96	2.77	4.64	0.85	1.11	2.37

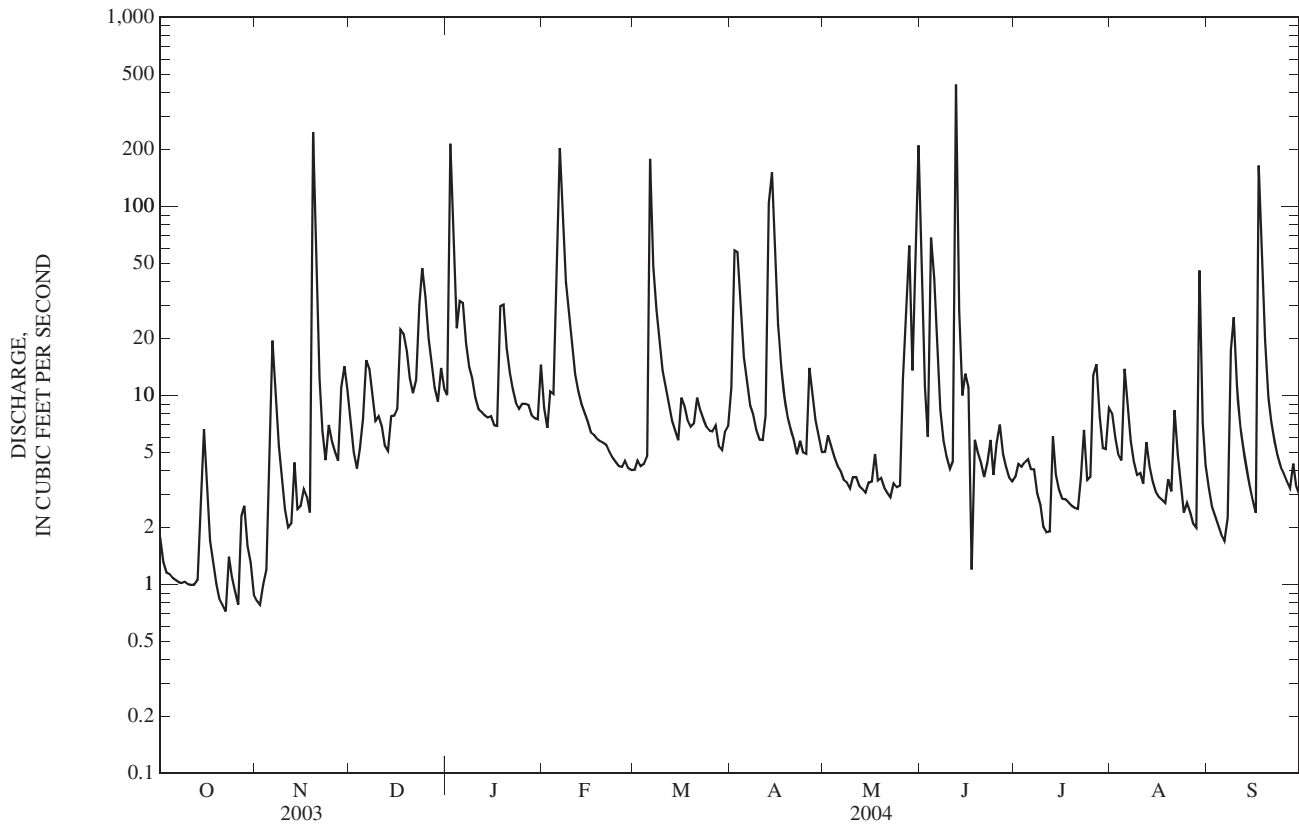
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

	3.52	6.20	7.82	13.7	13.9	17.1	14.0	11.2	8.73	3.88	3.58	2.62
MEAN	28.0	31.0	18.8	42.6	36.9	53.6	30.7	47.7	25.8	23.2	14.0	13.2
(WY)	(1990)	(1974)	(1979)	(1974)	(2003)	(1975)	(1998)	(1989)	(2004)	(2000)	(2001)	(2004)
MIN	0.32	0.27	0.98	1.44	2.55	7.12	4.62	0.71	0.64	0.32	0.31	0.38
(WY)	(1992)	(1982)	(1982)	(1981)	(2002)	(1977)	(1982)	(1976)	(1980)	(1991)	(1981)	(1981)

03207965 GRAPEVINE CREEK NEAR PHYLLIS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	4,223.37		5,222.12		8.62	
ANNUAL MEAN	11.6		14.3		17.2	
HIGHEST ANNUAL MEAN					5.30	
LOWEST ANNUAL MEAN					1974	
HIGHEST DAILY MEAN	246	Nov 19	440	Jun 12	448	Apr 4, 1977
LOWEST DAILY MEAN	0.31	Jul 27	0.72	Oct 22	0.01	Aug 19, 1982
ANNUAL SEVEN-DAY MINIMUM	0.57	Jul 22	0.93	Oct 20	0.04	Sep 22, 1981
MAXIMUM PEAK FLOW			2,190	Jun 12	2,190	Jun 12, 2004
MAXIMUM PEAK STAGE			6.46	Jun 12	9.10	Apr 7, 1977
INSTANTANEOUS LOW FLOW					0.01	Aug 19, 1982
ANNUAL RUNOFF (CFSM)	1.87		2.30		1.39	
ANNUAL RUNOFF (INCHES)	25.34		31.33		18.90	
10 PERCENT EXCEEDS	21		27		17	
50 PERCENT EXCEEDS	6.5		5.7		3.4	
90 PERCENT EXCEEDS	0.98		2.0		0.61	

e Estimated



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 with telemetry. Datum of gage is 631.98 ft above NGVD of 1929. 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.--Records good. Flow regulated since March 1965 by John W. Flannagan Lake (station 03208990), since August 1966 by North Fork Pound River Lake (station 03208680) and since October 1968 by Fishtrap Lake (station 03207995).

COOPERATION.--U.S. Army Corps of Engineers, Huntington District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	511	2,220	1,550	1,390	924	1,210	1,910	8,720	1,380	685	395
2	483	503	2,300	8,780	1,580	984	1,420	1,870	8,370	1,580	464	366
3	416	517	1,720	11,700	1,950	958	2,180	1,960	5,580	1,620	423	435
4	444	689	1,450	9,210	2,970	851	2,000	1,590	3,880	1,660	543	428
5	632	740	1,640	9,930	3,150	915	1,600	1,560	6,420	1,530	910	334
6	616	1,110	2,110	11,100	7,830	8,130	1,320	1,410	5,590	1,200	1,020	288
7	386	1,550	2,090	8,400	9,700	6,480	1,170	1,240	3,440	982	591	347
8	365	1,130	2,190	6,290	7,610	7,330	1,070	976	2,130	956	521	1,010
9	586	1,000	2,170	4,700	5,990	6,600	1,070	1,020	2,250	846	466	2,670
10	714	909	1,710	3,140	3,840	4,050	1,200	987	1,890	668	377	1,780
11	451	701	2,280	2,450	2,980	2,610	1,150	1,020	1,700	652	347	1,100
12	602	742	2,010	2,100	2,440	1,950	1,220	1,100	e3,000	717	428	756
13	636	1,030	1,540	2,020	2,190	1,720	5,350	1,250	e3,500	720	639	609
14	560	1,340	1,280	1,860	1,880	1,630	12,900	1,040	e4,100	815	637	422
15	907	1,030	1,260	1,740	1,800	1,620	8,220	933	6,070	680	568	386
16	921	1,080	2,670	1,680	1,710	1,510	4,960	530	5,490	589	520	371
17	709	1,340	4,480	1,500	1,530	1,950	3,520	713	3,290	553	404	5,170
18	474	1,080	2,710	2,320	1,340	1,880	2,890	1,030	2,760	538	368	8,060
19	617	8,100	2,770	6,080	1,350	1,590	2,380	916	2,510	477	336	4,920
20	612	7,650	2,180	4,660	1,300	1,450	1,830	1,330	2,090	533	326	3,380
21	493	10,800	1,690	3,170	1,160	1,570	2,130	835	1,670	445	360	1,370
22	539	4,700	1,790	e2,700	1,110	1,710	2,010	594	1,280	441	373	825
23	532	2,050	1,890	e2,160	1,210	1,650	1,610	575	1,410	523	339	742
24	505	1,800	2,700	1,930	1,190	1,530	1,560	623	1,800	711	320	744
25	560	1,830	3,380	1,870	1,020	1,430	1,400	1,140	e3,100	767	316	818
26	656	1,650	2,780	1,660	940	1,330	2,580	1,710	e4,800	481	305	786
27	712	1,560	2,510	1,610	915	1,080	5,400	5,560	e3,000	725	300	1,000
28	704	1,650	2,120	1,880	871	1,050	4,140	11,600	2,290	1,140	324	1,410
29	772	2,530	2,140	1,780	842	1,140	2,790	9,080	1,940	768	356	1,950
30	847	2,680	2,110	1,710	---	1,280	2,140	7,070	1,630	608	712	1,860
31	556	---	1,860	1,450	---	1,350	---	10,700	---	767	543	---
TOTAL	18,507	64,002	67,750	123,130	73,788	70,252	84,420	73,872	105,700	26,072	14,821	44,732
MEAN	597	2,133	2,185	3,972	2,544	2,266	2,814	2,383	3,523	841	478	1,491
MAX	921	10,800	4,480	11,700	9,700	8,130	12,900	11,600	8,720	1,660	1,020	8,060
MIN	365	503	1,260	1,450	842	851	1,070	530	1,280	441	300	288

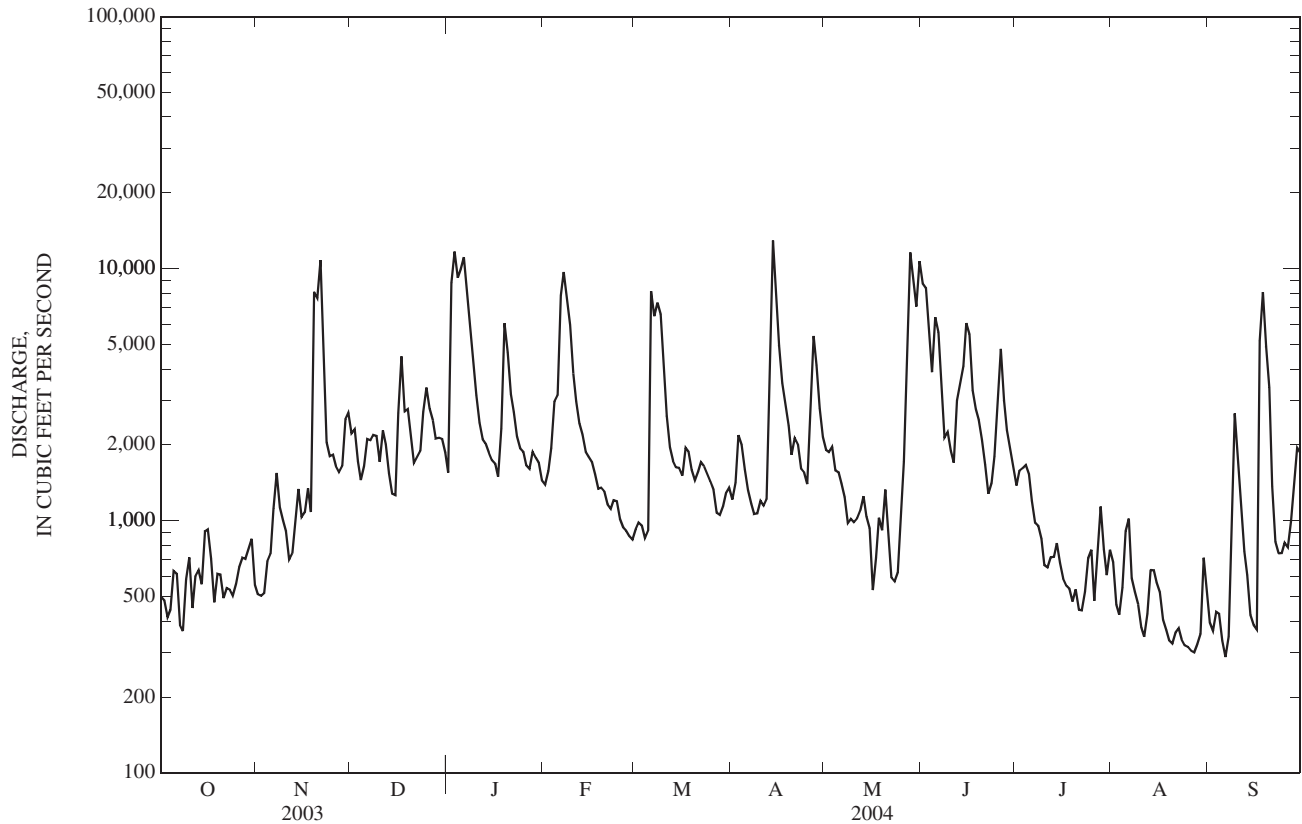
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

MEAN	769	1,117	1,519	2,278	2,824	2,905	2,343	2,006	1,140	648	509	484
MAX	3,939	3,991	5,385	6,861	6,804	8,081	7,646	6,067	3,523	2,028	1,150	1,606
(WY)	(1990)	(1978)	(1973)	(1974)	(2003)	(1975)	(1977)	(1984)	(2004)	(2001)	(2001)	(1989)
MIN	158	312	300	278	814	529	388	349	210	200	203	168
(WY)	(1970)	(2001)	(1981)	(1981)	(1992)	(1988)	(1986)	(1976)	(1988)	(1988)	(1969)	(1969)

03209500 LEVISA FORK AT PIKEVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	814,805		767,046		1,539	
ANNUAL MEAN	2,232		2,096		522	
HIGHEST ANNUAL MEAN					2,459	
LOWEST ANNUAL MEAN					522	
HIGHEST DAILY MEAN	30,000	Feb 16	12,900	Apr 14	69,300	Apr 5, 1977
LOWEST DAILY MEAN	351	Aug 28	288	Sep 6	66	Dec 3, 1970
ANNUAL SEVEN-DAY MINIMUM	436	Sep 15	323	Aug 23	103	Oct 10, 1968
MAXIMUM PEAK FLOW			17,600	Jan 2	85,500	Jan 30, 1957
MAXIMUM PEAK STAGE			26.88	Jan 2	52.72	Jan 30, 1957
INSTANTANEOUS LOW FLOW					66	Dec 3, 1970
10 PERCENT EXCEEDS	4,540		5,220		3,500	
50 PERCENT EXCEEDS	1,280		1,410		767	
90 PERCENT EXCEEDS	515		472		235	

e Estimated



03210000 JOHNS CREEK NEAR META, KY

LOCATION.--Lat 37°34'01", long 82°27'29", Pike County, Hydrologic Unit 05070203, on right bank 100 ft upstream 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 with telemetry and crest-stage gage. Datum of gage is 715.66 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Dec. 21, 1965.

REMARKS.--Records good.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Army Corps of Engineers, Huntington District.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	0900	*2,760	*15.31	Sep 17	2130	2,660	15.12

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

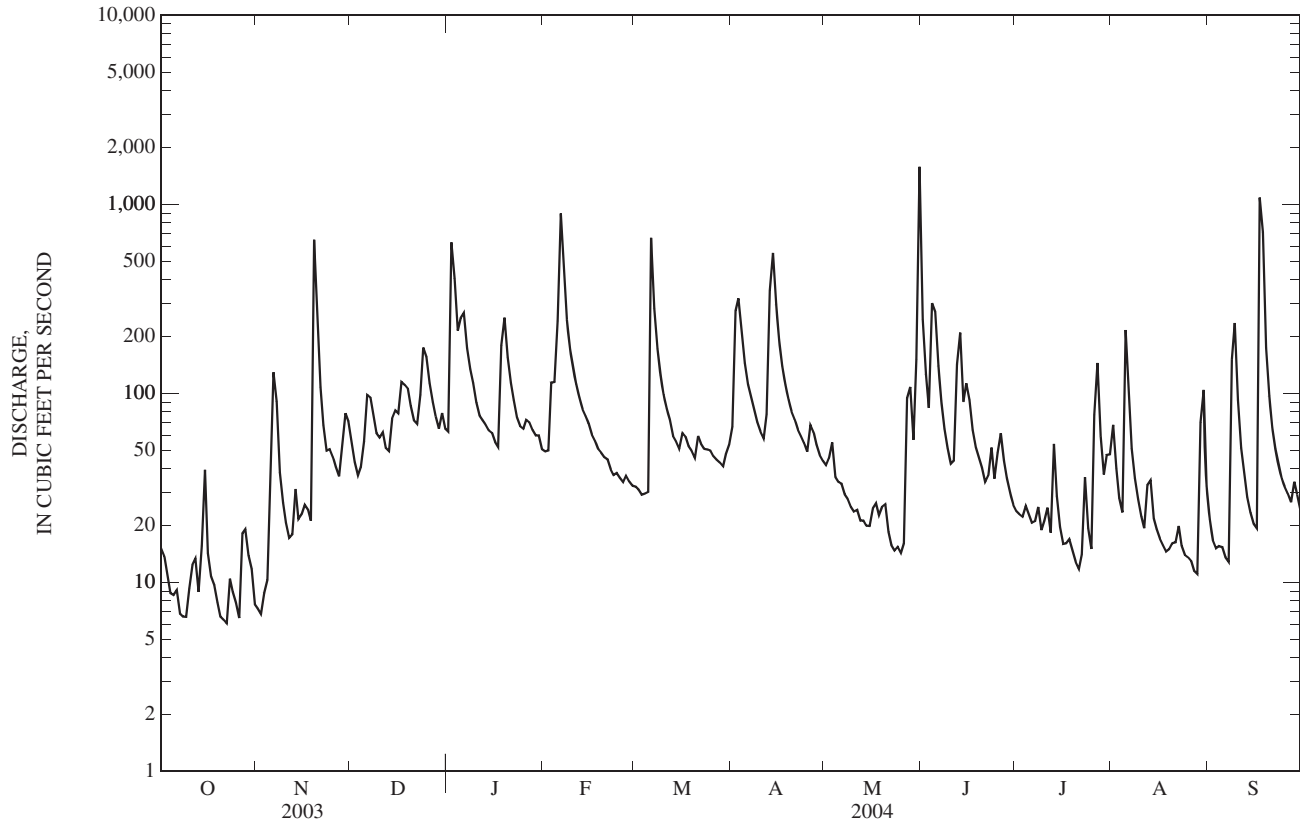
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.3	56	63	49	32	67	42	245	24	68	22
2	14	6.8	43	629	50	31	273	46	127	23	40	17
3	11	8.8	37	406	114	29	318	55	84	22	28	15
4	8.8	10	41	215	115	30	212	36	300	25	23	16
5	8.6	30	56	250	241	30	145	34	269	23	216	15
6	9.1	129	98	266	891	663	111	33	140	21	95	14
7	6.8	90	95	174	463	282	94	29	91	21	51	13
8	6.6	38	77	134	244	172	82	28	65	25	36	151
9	6.6	26	62	114	171	124	70	25	51	19	28	236
10	9.3	21	58	90	136	98	63	24	43	21	22	92
11	12	17	62	76	112	83	58	24	44	25	19	52
12	13	18	52	72	95	72	77	21	142	18	33	37
13	8.9	31	50	68	83	60	350	21	209	54	35	28
14	16	22	74	64	76	56	553	20	90	29	22	23
15	39	23	81	62	69	51	296	20	113	20	19	20
16	14	26	79	55	61	62	193	25	92	16	17	19
17	11	24	115	52	56	59	139	26	64	16	16	1,080
18	9.7	21	111	180	51	53	111	23	52	17	15	711
19	7.9	650	106	251	49	50	92	25	46	15	15	174
20	6.6	273	86	155	46	46	80	26	40	13	16	97
21	6.4	108	72	113	45	59	73	18	34	12	16	66
22	6.1	68	69	92	40	54	64	16	37	14	20	51
23	10	50	98	75	37	51	59	15	52	36	16	42
24	8.9	51	174	67	38	51	55	15	35	19	14	35
25	7.8	46	156	65	36	50	49	14	48	15	14	32
26	6.5	41	113	72	34	47	68	16	62	77	13	29
27	18	36	90	70	37	45	62	94	44	145	12	27
28	19	52	75	64	34	43	54	108	36	60	11	34
29	14	78	65	60	32	41	47	57	30	37	70	29
30	12	71	79	60	---	48	44	151	26	47	104	24
31	7.7	---	65	51	---	54	---	1,580	---	48	32	---
TOTAL	350.3	2,072.9	2,495	4,165	3,505	2,626	3,959	2,667	2,711	957	1,136	3,201
MEAN	11.3	69.1	80.5	134	121	84.7	132	86.0	90.4	30.9	36.6	107
MAX	39	650	174	629	891	663	553	1,580	300	145	216	1,080
MIN	6.1	6.8	37	51	32	29	44	14	26	12	11	13
CFSM	0.20	1.23	1.43	2.39	2.15	1.50	2.34	1.53	1.61	0.55	0.65	1.90
IN.	0.23	1.37	1.65	2.75	2.32	1.74	2.62	1.76	1.79	0.63	0.75	2.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

MEAN	17.4	37.3	72.3	105	137	159	119	73.5	41.9	27.7	18.6	17.1
MAX	175	213	319	413	338	489	356	271	193	167	155	153
(WY)	(1990)	(1974)	(1973)	(1974)	(1972)	(1955)	(1948)	(1984)	(1979)	(2000)	(1942)	(1966)
MIN	0.00	0.23	0.95	6.57	17.5	36.0	15.8	7.33	1.99	0.42	0.35	0.00
(WY)	(1954)	(1954)	(1966)	(1966)	(1954)	(1988)	(1963)	(1941)	(1969)	(1944)	(1943)	(1943)

03210000 JOHNS CREEK NEAR META, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941 - 2004	
ANNUAL TOTAL	31,721.9		29,845.2		68.7	
ANNUAL MEAN	86.9		81.5		135	
HIGHEST ANNUAL MEAN					24.5	
LOWEST ANNUAL MEAN					3,340	
HIGHEST DAILY MEAN	2,210	Feb 16	1,580	May 31	7,380	May 7, 1984
LOWEST DAILY MEAN	6.1	Oct 22	6.1	Oct 22	0.00	Oct 1, 1941
ANNUAL SEVEN-DAY MINIMUM	7.5	Oct 20	7.5	Oct 20	0.00	Oct 1, 1941
MAXIMUM PEAK FLOW			2,760	May 31	19.62	May 7, 1984
MAXIMUM PEAK STAGE			15.31	May 31	0.00	Oct 1, 1941
INSTANTANEOUS LOW FLOW					1.22	
ANNUAL RUNOFF (CFSM)	1.54		1.45		16.58	
ANNUAL RUNOFF (INCHES)	20.96		19.72		155	
10 PERCENT EXCEEDS	159		160		24	
50 PERCENT EXCEEDS	40		48		2.2	
90 PERCENT EXCEEDS	11		14			



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 with telemetry. Datum of gage is 566.84 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Oct. 19, 1954.

REMARKS.--Records good except those estimated which are poor. Flow regulated since May 1950 by Dewey Lake (station 03211000), since March 1965 by John Flannagan Lake (station 03208990), since August 1966 by North Fork Pound River Lake (station 03208680), since October 1968 by Fishtrap Lake (station 03207995).

COOPERATION.--U.S. Army Corps of Engineers, Huntington District.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	791	3,490	2,930	2,200	1,330	2,050	2,580	20,100	1,750	1,170	851
2	709	725	3,630	7,690	2,240	1,420	1,960	2,380	13,400	1,550	1,020	669
3	671	731	3,150	19,100	3,530	1,440	2,640	2,400	12,600	2,130	784	579
4	599	789	2,420	17,300	5,140	1,410	3,150	2,290	9,120	2,060	773	609
5	624	1,250	2,470	14,200	6,620	1,360	2,760	2,000	10,200	2,050	1,400	598
6	771	2,120	2,940	e16,000	19,200	11,000	2,430	1,890	10,300	1,730	2,330	512
7	732	3,230	3,240	e13,000	22,000	14,700	2,300	1,730	8,260	1,500	1,850	441
8	538	2,710	3,220	e11,000	17,100	11,400	2,140	1,480	5,430	1,310	1,120	4,010
9	520	1,890	3,520	e8,600	12,500	11,200	1,940	1,310	4,310	1,210	887	6,070
10	686	1,650	3,300	6,980	9,200	8,200	1,920	1,310	3,640	1,070	788	4,770
11	799	1,450	3,280	4,870	6,060	5,300	1,950	1,310	2,440	955	669	3,030
12	595	1,640	3,470	3,820	4,310	3,480	1,940	1,320	3,170	1,130	659	2,010
13	686	2,420	3,010	3,150	3,710	2,790	8,290	1,380	4,650	1,250	871	1,280
14	749	2,510	2,720	2,970	3,060	2,530	18,600	1,440	5,000	1,150	994	1,100
15	833	2,290	3,120	2,720	2,780	2,420	18,700	1,270	4,860	1,180	924	873
16	1,090	2,060	3,060	2,580	2,610	2,500	10,900	1,190	8,420	946	823	773
17	1,020	2,070	5,630	2,350	2,550	2,600	6,810	874	5,740	886	758	8,750
18	824	2,250	6,400	2,990	2,410	2,780	5,460	1,040	3,640	807	618	15,300
19	642	9,540	5,010	7,480	2,230	2,650	4,640	1,320	3,290	763	540	8,540
20	722	14,800	4,570	8,520	2,140	2,320	3,540	1,450	2,710	677	492	5,420
21	702	11,900	3,550	7,030	1,910	2,330	3,040	1,540	2,250	720	508	3,530
22	578	9,590	2,820	5,080	1,760	2,460	3,160	1,050	1,930	691	517	4,520
23	638	4,810	2,920	3,780	1,650	2,640	2,840	835	2,060	745	545	4,290
24	623	5,080	3,240	3,180	1,740	2,340	2,550	805	1,950	816	523	2,810
25	593	4,320	4,230	2,900	1,640	2,210	2,390	862	2,030	946	489	1,790
26	697	3,430	4,950	3,030	1,460	2,100	2,380	1,670	4,310	1,230	500	1,780
27	917	2,300	4,070	3,040	1,440	1,890	4,900	3,610	7,300	2,010	447	1,850
28	946	2,390	3,450	2,860	1,450	1,680	5,870	11,800	4,730	2,230	428	2,070
29	904	2,950	3,100	2,740	1,370	1,630	4,210	13,900	2,670	1,900	590	2,110
30	952	3,610	3,240	2,730	---	1,880	2,980	11,700	2,070	1,200	1,000	2,210
31	953	---	3,260	2,500	---	2,090	---	31,900	---	1,050	1,040	---
TOTAL	23,051	107,296	110,480	197,120	146,010	116,080	138,440	111,636	172,580	39,642	26,057	93,145
MEAN	744	3,577	3,564	6,359	5,035	3,745	4,615	3,601	5,753	1,279	841	3,105
MAX	1,090	14,800	6,400	19,100	22,000	14,700	18,700	31,900	20,100	2,230	2,330	15,300
MIN	520	725	2,420	2,350	1,370	1,330	1,920	805	1,930	677	428	441

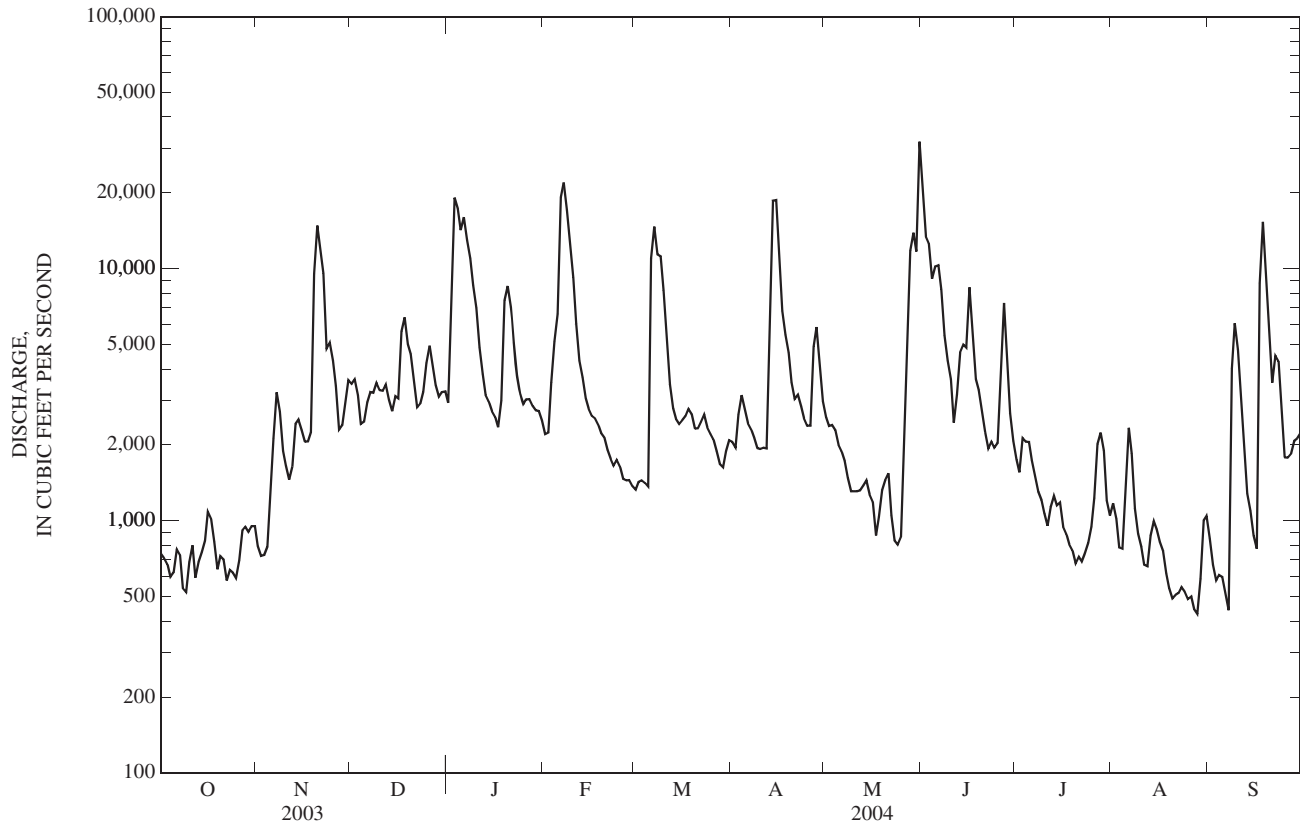
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
MEAN	1,066	1,795	2,646	3,841	4,916	5,035	4,173	3,379	1,932	1,011	832	758
MAX	6,560	4,908	8,870	12,030	12,290	13,160	10,040	9,664	5,753	2,678	2,244	3,105
(WY)	(1990)	(1978)	(1973)	(1974)	(2003)	(1975)	(1987)	(1984)	(2004)	(2000)	(2001)	(2004)
MIN	181	447	570	435	1,336	963	594	519	278	257	291	239
(WY)	(1970)	(1970)	(1981)	(1981)	(2002)	(1988)	(1986)	(1976)	(1988)	(1988)	(1969)	(1969)

03212500 LEVISA FORK AT PAINTSVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	1,356,222		1,281,537		2,603	
ANNUAL MEAN	3,716		3,501		830	
HIGHEST ANNUAL MEAN					4,234	
LOWEST ANNUAL MEAN					830	
HIGHEST DAILY MEAN	41,100	Feb 17	31,900	May 31	42,000	Apr 6, 1977
LOWEST DAILY MEAN	443	Aug 28	428	Aug 28	98	Oct 1, 1968
ANNUAL SEVEN-DAY MINIMUM	584	Sep 16	493	Aug 22	122	Aug 27, 1969
MAXIMUM PEAK FLOW			32,400	May 31	69,700	Jan 31, 1957
MAXIMUM PEAK STAGE			32.04	May 31	45.92	Jan 31, 1957
INSTANTANEOUS LOW FLOW					98	Oct 1, 1968
10 PERCENT EXCEEDS	8,150		8,530		6,190	
50 PERCENT EXCEEDS	2,110		2,270		1,260	
90 PERCENT EXCEEDS	691		700		371	

e Estimated



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 with telemetry. Datum of gage is 557.95 ft above NGVD of 1929. 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.--Records good. Flow regulated since March 1968 by Grayson Lake (station 03216300).

COOPERATION.--U.S. Army Corps of Engineers, Huntington District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

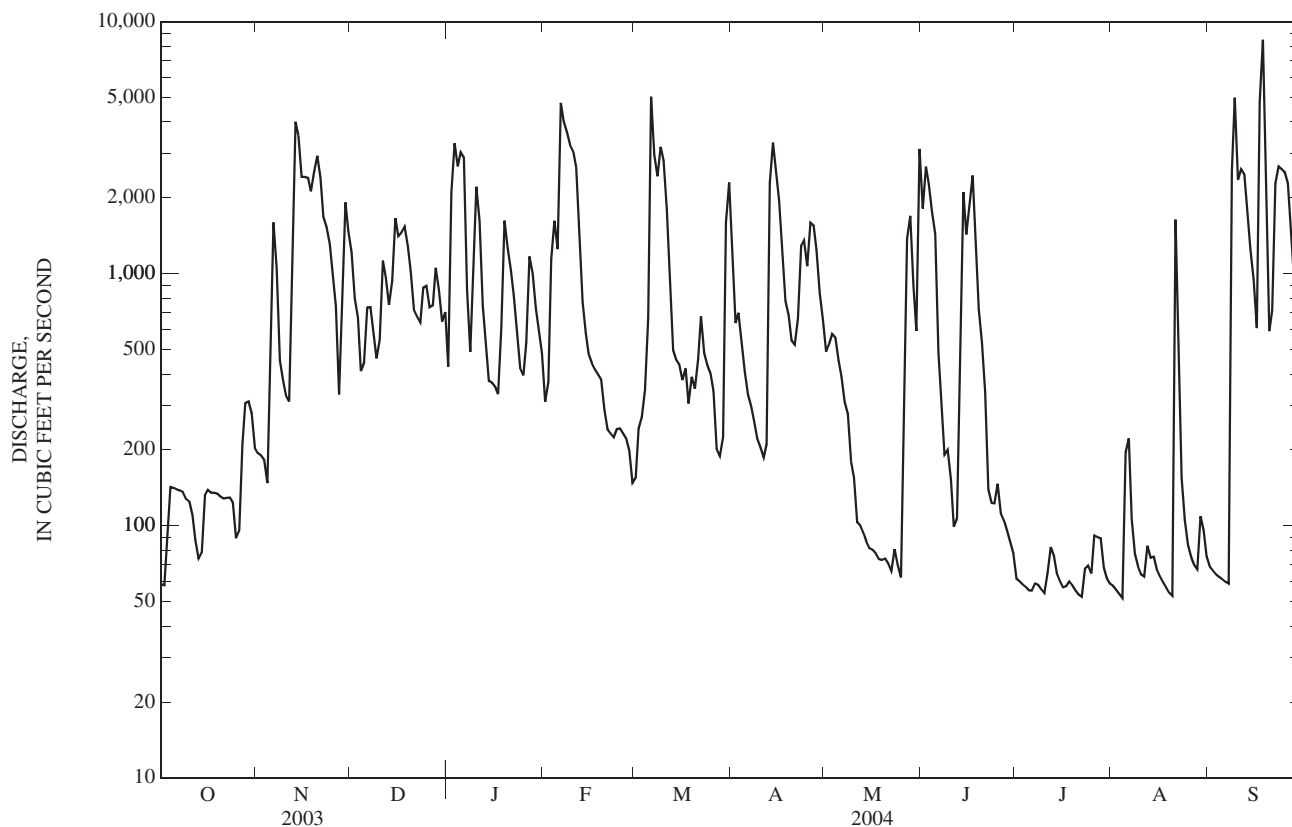
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	194	1,220	428	310	154	1,340	490	1,810	62	58	69
2	58	191	800	2,110	372	242	636	523	2,660	60	56	66
3	91	183	668	3,290	1,140	270	698	576	2,260	59	54	64
4	142	148	411	2,670	1,620	346	528	558	1,760	57	52	63
5	141	371	443	3,030	1,250	665	407	452	1,440	55	196	61
6	139	1,590	735	2,900	4,760	5,020	331	391	487	55	222	60
7	138	1,050	736	858	4,010	2,960	297	309	329	59	107	59
8	136	453	595	490	3,650	2,430	260	278	191	58	77	2,550
9	128	377	462	887	3,240	3,180	221	180	200	56	69	4,980
10	125	330	547	2,210	3,050	2,820	204	155	153	54	64	2,350
11	110	311	1,130	1,620	2,650	1,820	187	103	99	65	63	2,590
12	87	1,570	968	750	1,580	856	210	100	107	82	83	2,470
13	74	4,000	752	536	774	496	2,290	94	611	76	75	1,750
14	78	3,530	935	376	581	457	3,310	87	2,100	65	75	1,250
15	132	2,420	1,660	369	479	436	2,500	81	1,430	60	67	948
16	139	2,420	1,410	355	442	378	1,960	80	1,880	57	63	607
17	135	2,400	1,450	333	417	420	1,300	78	2,450	58	60	4,810
18	135	2,120	1,530	610	397	306	777	74	1,340	60	57	8,460
19	134	2,540	1,280	1,620	381	389	683	73	725	58	54	2,590
20	130	2,940	1,020	1,260	290	350	543	74	533	55	53	592
21	128	2,390	720	1,030	241	457	524	71	338	53	1,640	716
22	129	1,680	677	819	231	676	665	66	139	52	374	2,280
23	129	1,530	643	570	224	483	1,290	81	123	68	154	2,660
24	124	1,310	877	422	242	433	1,350	70	123	70	105	2,600
25	89	992	895	395	244	402	1,070	62	147	65	84	2,530
26	95	743	735	533	232	342	1,590	292	112	91	75	2,280
27	210	332	748	1,170	222	202	1,550	1,380	105	90	70	1,490
28	307	949	1,060	1,000	198	189	1,240	1,690	96	89	67	917
29	311	1,920	863	728	148	225	838	889	86	68	109	859
30	279	1,470	645	596	---	1,600	658	592	78	62	95	559
31	203	---	703	483	---	2,290	---	3,120	---	59	76	---
TOTAL	4,315	42,454	27,318	34,448	33,375	31,294	29,457	13,069	23,912	1,978	4,454	53,280
MEAN	139	1,415	881	1,111	1,151	1,009	982	422	797	63.8	144	1,776
MAX	311	4,000	1,660	3,290	4,760	5,020	3,310	3,120	2,660	91	1,640	8,460
MIN	58	148	411	333	148	154	187	62	78	52	52	59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

MEAN	163	361	599	713	942	1,008	681	668	333	176	114	157
MAX	733	1,415	2,630	1,954	2,886	3,226	2,291	2,116	1,410	841	399	1,776
(WY)	(1990)	(2004)	(1979)	(1974)	(1989)	(1997)	(1972)	(1996)	(2003)	(1971)	(2003)	(2004)
MIN	30.1	28.4	53.6	45.2	129	133	109	62.1	34.4	33.6	34.7	30.4
(WY)	(1981)	(1982)	(1982)	(1981)	(2002)	(1969)	(2001)	(1976)	(1999)	(1999)	(1988)	(1998)

03216500 LITTLE SANDY RIVER AT GRAYSON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	295,007		299,354		491	
ANNUAL MEAN	808		818		838	
HIGHEST ANNUAL MEAN					116	
LOWEST ANNUAL MEAN					14,600	
HIGHEST DAILY MEAN	8,330	May 6	8,460	Sep 18	18	Mar 2, 1997
LOWEST DAILY MEAN	41	Sep 20	52	Jul 22	5.8	Oct 1, 1968
ANNUAL SEVEN-DAY MINIMUM	42	Sep 16	56	Jul 16	18	Nov 1, 1968
MAXIMUM PEAK FLOW			10,100	Sep 18	24,500	Sep 22, 1950
MAXIMUM PEAK STAGE			25.70	Sep 18	30.57	Mar 2, 1997
INSTANTANEOUS LOW FLOW					1.5	Oct 12, 1953
10 PERCENT EXCEEDS	2,390		2,410		1,410	
50 PERCENT EXCEEDS	350		400		165	
90 PERCENT EXCEEDS	68		63		39	



03216600 OHIO RIVER RIVER AT GREENUP DAM

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.

WATER DISCHARGE RECORDS

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

GAGE.--Records of Greenup Dam gate operations and hydropower releases are furnished by the U.S. Army Corps of Engineers and are used to determine daily discharge. Water-stage recorder in Greenup Dam tailwater for peak stage determinations. Datum of gage is 472.43 ft above sea level or 472.97 ft Ohio River Datum. 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 of 470.99 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. Slope rating computation from Oct. 1, 1981 to Sept. 30, 1983, and Branch Flow Model from Oct. 1, 1983 to Sept. 30, 1966 based on stage record from the Greenup Dam Tailwater and Portsmouth, Ohio.

REMARKS.--Records good 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

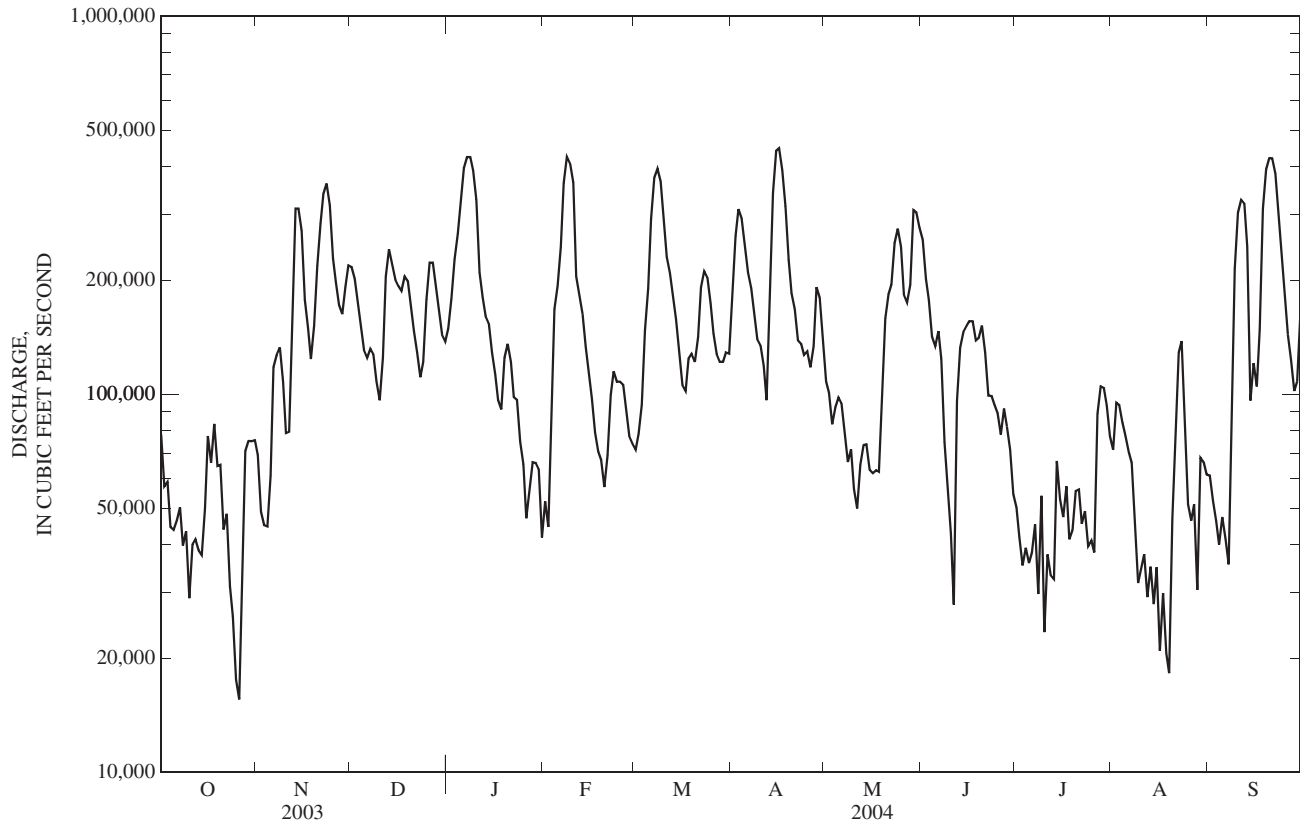
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78,400	69,100	217,000	149,000	52,100	71,500	175,000	108,000	256,000	50,100	71,300	61,000
2	57,000	48,900	202,000	179,000	44,600	78,600	262,000	101,000	202,000	41,800	95,000	52,300
3	58,600	45,000	173,000	228,000	90,000	93,900	309,000	83,400	178,000	35,300	93,700	46,200
4	44,600	44,700	152,000	266,000	168,000	148,000	292,000	92,400	142,000	39,300	84,200	40,100
5	43,800	60,800	131,000	326,000	194,000	191,000	245,000	98,200	134,000	35,800	77,200	47,400
6	46,400	118,000	125,000	396,000	246,000	291,000	210,000	94,800	147,000	38,100	70,200	41,600
7	50,200	127,000	132,000	424,000	362,000	374,000	191,000	80,200	124,000	45,300	65,900	35,500
8	39,800	133,000	128,000	424,000	426,000	395,000	163,000	66,200	74,800	29,600	46,600	92,800
9	43,400	108,000	108,000	391,000	408,000	365,000	140,000	71,500	57,800	53,900	31,700	215,000
10	28,900	78,900	96,400	327,000	363,000	298,000	135,000	56,200	42,700	23,500	34,700	302,000
11	40,100	79,600	125,000	210,000	205,000	231,000	119,000	49,900	27,800	37,700	37,800	327,000
12	41,300	131,000	205,000	180,000	182,000	209,000	96,400	65,200	96,200	33,200	29,100	319,000
13	38,700	310,000	242,000	161,000	163,000	182,000	167,000	73,400	133,000	32,400	35,000	246,000
14	37,600	310,000	220,000	154,000	133,000	158,000	341,000	73,700	146,000	66,600	27,900	96,300
15	49,900	271,000	201,000	129,000	115,000	130,000	441,000	63,200	151,000	52,800	34,900	121,000
16	77,500	178,000	194,000	113,000	97,700	106,000	448,000	61,900	156,000	47,400	21,000	105,000
17	66,000	150,000	188,000	96,400	79,200	102,000	392,000	63,000	156,000	57,100	29,800	148,000
18	83,500	124,000	205,000	91,200	70,500	124,000	314,000	62,300	139,000	41,300	20,700	310,000
19	64,600	152,000	199,000	125,000	67,000	128,000	227,000	91,400	141,000	43,700	18,300	393,000
20	65,100	e219,000	174,000	136,000	56,900	122,000	185,000	159,000	152,000	55,500	46,900	422,000
21	43,900	e283,000	147,000	122,000	69,000	142,000	168,000	184,000	129,000	56,000	77,100	421,000
22	48,300	e339,000	129,000	98,300	99,700	192,000	139,000	195,000	99,300	45,500	129,000	383,000
23	31,100	e361,000	111,000	96,600	115,000	212,000	136,000	251,000	98,900	49,100	138,000	311,000
24	25,900	317,000	122,000	74,900	108,000	204,000	127,000	274,000	93,900	39,600	85,200	248,000
25	17,600	229,000	178,000	65,300	108,000	174,000	130,000	246,000	89,100	41,000	51,200	192,000
26	15,600	198,000	223,000	47,000	106,000	145,000	118,000	184,000	78,400	38,200	46,400	144,000
27	43,600	172,000	223,000	56,100	90,800	128,000	134,000	175,000	91,800	88,900	51,200	123,000
28	70,800	163,000	196,000	66,100	77,600	122,000	192,000	195,000	82,200	105,000	30,400	102,000
29	75,400	193,000	168,000	65,900	74,200	122,000	180,000	307,000	71,500	104,000	67,900	108,000
30	75,200	219,000	144,000	63,500	---	129,000	137,000	303,000	54,400	93,600	66,100	163,000
31	75,700	---	138,000	41,800	---	128,000	---	275,000	---	77,400	61,400	---
TOTAL	1,578,500	5,232,000	5,196,400	5,303,100	4,371,300	5,496,000	6,313,400	4,203,900	3,544,800	1,598,700	1,775,800	5,616,200
MEAN	50,920	174,400	167,600	171,100	150,700	177,300	210,400	135,600	118,200	51,570	57,280	187,200
MAX	83,500	361,000	242,000	424,000	426,000	395,000	448,000	307,000	256,000	105,000	138,000	422,000
MIN	15,600	44,700	96,400	41,800	44,600	71,500	96,400	49,900	27,800	23,500	18,300	35,500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

MEAN	38,150	69,940	108,200	116,200	143,200	161,600	142,900	108,400	70,220	45,650	37,610	38,000
MAX	111,300	208,600	252,700	242,700	259,100	268,600	258,400	276,700	174,000	100,700	113,600	187,200
(WY)	(1980)	(1986)	(1973)	(1974)	(1994)	(1994)	(1994)	(1996)	(1981)	(1972)	(1980)	(2004)
MIN	11,310	14,720	24,080	27,170	66,240	53,550	52,660	36,610	13,440	13,040	11,270	9,706
(WY)	(1992)	(1999)	(1999)	(1977)	(1978)	(1969)	(1986)	(1976)	(1988)	(1999)	(1988)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	46,019,200		50,230,100		89,710	
ANNUAL MEAN	126,100		137,200		137,200	
HIGHEST ANNUAL MEAN					49,760	
LOWEST ANNUAL MEAN					540,000	
HIGHEST DAILY MEAN	406,000	Feb 25	448,000	Apr 16	540,000	Jan 12, 1974
LOWEST DAILY MEAN	15,600	Oct 26	15,600	Oct 26	3,920	Jun 11, 1999
ANNUAL SEVEN-DAY MINIMUM	30,000	Jan 23	26,800	Aug 13	7,740	Sep 22, 1999
MAXIMUM PEAK FLOW			461,000	Apr 16	520,000	Mar 4, 1997
MAXIMUM PEAK STAGE			53.82	Jan 8	54.50	Feb 21, 2000
10 PERCENT EXCEEDS	209,000		294,000		202,000	
50 PERCENT EXCEEDS	116,000		115,000		63,100	
90 PERCENT EXCEEDS	41,100		41,200		17,100	

e Estimated



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 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
NOV												
05...	1640	Environmental	69,400	12	0.078	0.058	10.1	101	7.3	330	14.0	120
05...	1650	Replicate	--	12	.079	.059	--	--	--	--	--	120
DEC												
17...	1520	Environmental	176,000	53	.053	.039	13.3	105	7.5	307	4.0	110
17...	1528	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
JAN												
15...	1530	Environmental	127,000	41	.057	.043	13.7	103	7.3	279	3.0	100
FEB												
24...	1520	Environmental	87,800	21	.039	.029	14.1	--	7.4	375	4.5	130
MAR												
11...	1540	Environmental	215,000	87	.047	.035	11.3	96	7.2	242	7.5	80
11...	1548	Field Blank	--	--	--	--	--	--	--	--	--	--
23...	1430	Environmental	188,000	24	.043	.033	12.9	107	7.4	300	7.0	100
APR												
28...	1415	Environmental	173,000	42	.055	.041	10.1	103	7.5	296	16.0	110
MAY												
03...	1500	Environmental	74,300	24	.054	.039	10.6	110	7.6	312	16.0	110
11...	1540	Environmental	60,700	6.8	.052	.038	11.2	119	8.0	343	19.5	130
11...	1548	Field Blank	--	--	--	--	--	--	--	--	--	--
26...	1530	Environmental	179,000	160	.091	.068	7.2	85	7.1	291	22.0	110
JUN												
08...	1530	Environmental	102,000	45	.069	.051	9.8	109	7.4	269	20.0	85
29...	1530	Environmental	61,400	26	.087	.065	7.9	96	7.2	340	24.0	130
29...	1538	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
JUL												
20...	1450	Environmental	53,700	9.7	.073	.053	8.4	108	7.4	450	27.5	160
20...	1500	Replicate	--	10	.074	.054	--	--	--	--	--	160
AUG												
24...	1510	Environmental	80,600	20	.078	.057	7.8	97	7.1	367	26.0	110
24...	1518	Field Blank	--	--	--	--	--	--	--	--	--	--
SEP												
21...	1530	Environmental	442,000	320	.128	.095	--	--	7.6	250	20.0	80

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, water fltr inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, water fltr incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC water fltr mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
NOV													
05...	32.1	9.28	2.69	17.1	56	68	21.2	<0.2	5.43	59.2	196	0.33	0.31
05...	31.9	9.17	2.67	16.9	56	68	19.8	<.2	5.46	59.1	184	.26	.32
DEC													
17...	29.7	8.35	2.24	17.9	47	58	24.5	<.2	6.86	51.5	170	.23	.61
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
15...	27.5	8.37	2.09	12.4	41	50	16.9	<.2	6.54	55.6	169	.16	.48
FEB													
24...	35.0	10.8	2.04	19.5	46	56	28.5	<.2	6.42	70.3	215	.25	.34
MAR													
11...	20.4	7.03	1.54	12.6	33	40	15.4	<.2	5.41	46.9	147	.15	.58
11...	E0.01	<0.008	E0.006	<0.10	--	--	1.36	<.01	<0.04	<0.01	--	--	--
23...	28.1	8.39	1.68	15.7	40	49	21.6	<.2	5.06	55.8	172	.14	.35
APR													
28...	28.8	8.85	1.95	14.6	46	56	16.4	<.2	5.82	57.8	182	.18	.41
MAY													
03...	30.3	8.80	1.91	16.4	46	56	19.0	<.2	5.84	60.9	194	.20	.30
11...	34.3	10.8	2.07	17.8	55	68	21.0	<.2	5.06	69.0	209	.23	.23
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	29.8	7.49	2.31	15.3	45	55	17.4	<.2	5.84	52.4	176	.26	.99
JUN													
08...	22.2	7.14	1.94	9.71	42	52	8.77	<.2	6.68	44.1	143	.21	.38
29...	33.1	10.7	2.92	17.0	62	76	16.2	<.2	6.81	63.8	204	.21	.33
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
20...	43.4	12.9	2.91	23.0	76	92	29.5	.2	4.46	86.8	258	.17	.31
20...	43.8	13.2	2.95	23.1	82	100	30.1	.2	4.51	87.6	257	.22	.32
AUG													
24...	30.4	8.92	2.43	21.9	53	64	20.3	<.2	4.67	50.9	167	.21	.33
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	24.0	4.89	2.77	11.6	42	51	13.3	.2	6.59	40.1	149	.39	1.2

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)
NOV 05...	<0.04	0.68	0.008	0.06	0.006	0.024	0.05	0.6	<0.1	0.6	2.9	1.1	0.8
05...	E.02	.69	E.007	.06	.013	.024	.05	.6	<.1	.6	2.7	0.8	.6
DEC 17...	.04	.93	.008	.25	.009	.014	.12	2.6	<.1	2.5	2.1	2.4	1.2
17...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	0.5	--	--
JAN 15...	<.04	1.09	.009	.18	<.006	.011	.10	1.8	<.1	1.8	2.2	1.4	.9
FEB 24...	.06	1.04	.015	.06	<.006	.012	.05	.6	<.1	.6	1.7	E.9	E.4
MAR 11...	E.03	.93	.010	.14	<.006	.006	.17	2.2	<.1	2.2	1.9	2.5	1.8
11...	<.010	<.016	<.002	--	<.006	--	--	--	--	--	--	--	--
23...	<.04	.90	.014	.11	<.006	.010	.07	1.5	<.1	1.4	1.8	2.1	1.7
APR 28...	<.04	.80	.012	.16	E.005	.014	.10	2.0	<.1	2.0	2.4	2.3	2.7
MAY 03...	E.02	.82	.014	.12	E.005	.015	.07	1.4	<.1	1.4	2.1	1.6	1.8
11...	<.04	.86	.014	.07	<.006	.008	.03	.5	<.1	.5	2.3	3.3	7.6
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.04	.94	.016	.52	.008	.018	.30	5.1	.1	5.0	2.6	5.6	2.3
JUN 08...	<.04	.76	.011	.10	.006	.016	.09	1.4	<.1	1.4	2.7	1.2	.7
29...	<.04	1.07	.013	.10	.013	.021	.05	.9	<.1	.9	3.0	2.1	2.3
29...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	.7	--	--
JUL 20...	<.04	.89	.020	.13	E.003	.012	.04	.9	<.1	.9	2.6	5.7	5.1
20...	<.04	.88	.019	.12	<.006	.012	.04	1.0	<.1	1.0	2.5	3.4	4.8
AUG 24...	<.04	.74	.010	.23	.015	.025	.07	1.8	<.1	1.8	2.6	12.5	10.4
24...	<.010	<.016	<.002	--	<.006	--	--	--	--	--	--	--	--
SEP 21...	E.03	.82	.019	.52	.008	.017	.20	6.4	.3	6.0	4.1	4.4	3.1

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Arsenic water, fltrd, ug/L (01000)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Lithium water, fltrd, ug/L (01130)	Selen- ium, water, fltrd, ug/L (01145)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)
NOV													
05...	0.4	40	10	5.5	<0.4	185	0.3	<0.006	<0.006	<0.006	<0.005	<0.005	0.032
05...	.5	40	10	5.3	<.4	181	.3	<.006	<.006	<.006	<.005	<.005	.026
DEC													
17...	.4	30	16	4.2	E.2	145	.4	<.006	<.006	<.006	<.005	<.005	.017
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
15...	.3	25	14	4.8	.4	149	.3	<.006	E.007	<.006	<.005	<.005	.015
FEB													
24...	.2	29	12	6.0	E.4	193	.7	<.006	<.006	<.006	<.005	<.005	.011
MAR													
11...	.2	21	10	3.8	E.3	123	.2	<.006	E.005	<.010	<.005	<.005	.011
11...	<.2	<8	<6	<0.6	<.4	<0.40	<.1	--	--	--	--	--	--
23...	E.2	24	12	5.2	<.4	149	.3	<.006	<.006	<.006	<.005	<.005	.009
APR													
28...	.4	29	E6	5.1	.4	176	.3	<.006	E.008	.010	<.005	<.005	.057
MAY													
03...	.4	30	11	5.4	.5	175	.5	<.006	<.006	<.015	<.005	<.005	.032
11...	.4	36	8	6.4	E.3	195	.4	<.006	E.009	.012	<.005	<.005	.117
11...	--	--	--	--	--	--	--	<.006	<.006	<.006	<.005	<.005	<.007
26...	.6	33	8	4.6	E.3	150	.4	<.006	E.037	.081	<.005	<.005	.761
JUN													
08...	.4	18	E4	3.8	.6	148	.5	<.006	E.023	.048	E.005	<.005	.479
29...	.6	36	E4	5.9	.5	211	.5	<.006	E.069	.066	<.005	<.005	.740
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
20...	.7	54	<6	7.1	.5	233	.6	<.006	E.042	.026	<.005	<.005	.403
20...	.7	55	<6	7.1	.4	232	.7	<.006	E.033	.029	<.005	<.005	.422
AUG													
24...	.6	51	<6	6.2	.4	157	.7	<.006	E.016	.008	<.005	<.005	.122
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	.5	41	14	2.8	E.2	110	.4	<.006	E.006	<.006	<.005	<.005	.030

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)
NOV													
05...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.015
05...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.010
DEC													
17...	<0.050	<0.010	<0.004	E.007	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
15...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
FEB													
24...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
MAR													
11...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
APR													
28...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
MAY													
03...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.007	<0.009	<0.02	<0.004
11...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
11...	<0.100	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
26...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
JUN													
08...	<0.050	<0.010	<0.004	E.007	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
29...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
20...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
20...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
AUG													
24...	<0.050	<0.010	<0.004	<0.041	E.008	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)
NOV 05...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E0.009	<0.006	<0.003	<0.007	<0.003	<0.010
05...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.008	<0.006	<0.003	<0.007	<0.003	<0.010
DEC 17...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.012	<0.006	<0.003	<0.007	<0.003	<0.010
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.010	<0.006	<0.003	<0.007	<0.003	<0.010
FEB 24...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	<0.013	<0.006	<0.003	<0.007	<0.003	<0.010
MAR 11...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.008	<0.006	<0.003	<0.007	<0.003	<0.010
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.007	<0.006	<0.003	<0.007	<0.003	<0.010
APR 28...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.012	<0.010	<0.003	<0.007	<0.003	<0.010
MAY 03...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.010	<0.006	<0.003	<0.007	<0.003	<0.010
11...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.021	<0.006	<0.003	<0.007	<0.003	<0.010
11...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	<0.013	<0.006	<0.003	<0.007	<0.003	<0.010
26...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.161	<0.006	<0.003	<0.007	<0.003	<0.010
JUN 08...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.132	<0.006	<0.003	<0.007	<0.003	<0.010
29...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.161	<0.006	<0.003	<0.007	<0.003	<0.010
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 20...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.067	<0.006	<0.003	<0.007	<0.003	<0.010
20...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.071	<0.006	<0.003	<0.007	<0.003	<0.010
AUG 24...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	.022	<0.006	<0.003	<0.007	<0.003	<0.010
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	E.013	<0.006	<0.003	<0.007	<0.003	<0.010

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)
NOV 05...	<0.004	<0.022	<0.011	0.01	<0.004	<0.025	<0.011	<0.02	<0.007	<0.02	<0.034	<0.02	<0.010
05...	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.005	<0.02	<0.034	<0.02	<0.010
DEC 17...	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.009	<0.02	<0.034	<0.02	<0.010
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	.012	<0.02	<0.034	<0.02	<0.010
FEB 24...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	.008	<0.02	<0.034	<0.02	<0.010
MAR 11...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	<0.005	<0.02	<0.050	<0.02	<0.010
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.010
APR 28...	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.020	<0.02	<0.034	<0.02	<0.010
MAY 03...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	<0.025	<0.02	<0.034	<0.02	<0.010
11...	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.035	<0.02	<0.034	<0.02	<0.010
11...	<0.004	<0.022	<0.011	<.01	<0.004	<0.025	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.010
26...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	.110	<0.02	<0.034	<0.02	<0.010
JUN 08...	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.069	E.01	<0.034	<0.02	<0.010
29...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	.121	<0.02	<0.034	<0.02	<0.010
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 20...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	.044	<0.02	<0.034	<0.02	<0.010
20...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	.045	<0.02	<0.034	<0.02	<0.010
AUG 24...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	<0.015	<0.02	<0.034	<0.02	<0.010
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	<0.004	<0.022	<0.011	.02	<0.004	<0.025	<0.011	<0.02	<0.010	<0.02	<0.034	<0.02	<0.010

03216600 OHIO RIVER AT GREENUP DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
NOV				
05...	<0.002	<0.009	98	16
05...	<.002	<.009	98	16
DEC				
17...	<.002	<.009	94	69
17...	--	--	--	--
JAN				
15...	<.002	<.009	93	55
FEB				
24...	<.002	<.009	93	32
MAR				
11...	<.002	<.009	87	134
11...	--	--	--	--
23...	<.002	<.009	73	68
APR				
28...	<.002	<.009	90	118
MAY				
03...	<.002	<.009	95	38
11...	<.002	<.009	96	10
11...	<.002	<.009	--	--
26...	<.002	<.009	--	--
JUN				
08...	<.002	<.009	99	72
29...	<.002	<.009	100	29
29...	--	--	--	--
JUL				
20...	<.002	<.009	96	14
20...	<.002	<.009	99	14
AUG				
24...	<.002	<.009	99	24
24...	--	--	--	--
SEP				
21...	<.002	<.009	--	--

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

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 with telemetry. Datum of gage is 547.14 ft above NGVD of 1929.

REMARKS.--Records fair except for daily discharges below 10 ft³/s, and for those estimated, which are poor. Occasional diversion at low flow caused by withdrawal of water for cooling purposes by gas transmission plant above station.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Corps of Engineers, Huntington District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 13	1500	4,330	15.42	Sep 9	1900	7,700	18.55
Feb 7	0500	4,950	16.35	Sep 18	0400	*12,200	*20.53
Mar 6	2200	6,560	17.82				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	55	471	368	e95	101	535	215	1,110	34	32	52
2	38	44	374	1,830	e147	236	452	223	414	39	40	39
3	34	38	320	2,170	e500	364	483	387	314	32	34	31
4	29	33	279	736	e759	720	431	345	224	27	32	27
5	26	54	276	1,310	554	922	358	281	179	25	390	24
6	24	893	362	1,290	3,410	5,540	309	234	153	23	391	21
7	21	465	363	567	3,570	3,510	272	198	125	25	163	21
8	18	323	320	e405	811	709	248	165	100	29	89	1,050
9	15	222	282	e315	530	481	226	142	90	26	61	5,580
10	13	156	284	e264	456	391	196	121	82	28	45	2,090
11	12	125	519	e217	401	335	175	105	75	43	35	407
12	11	1,380	478	e196	353	295	178	95	93	96	30	279
13	11	3,880	384	e174	323	253	1,810	93	167	60	28	281
14	9.7	940	363	e149	289	226	2,410	82	221	50	26	231
15	7.0	457	523	e145	263	209	781	76	204	34	25	151
16	7.6	372	531	e145	236	198	489	73	286	26	22	108
17	14	319	1,140	e145	212	195	394	71	312	21	18	3,890
18	47	271	843	268	196	184	334	66	177	21	15	10,700
19	31	1,360	542	663	182	189	281	128	328	52	14	2,330
20	22	2,100	454	496	173	225	247	183	459	53	11	484
21	19	654	384	e331	172	219	230	117	237	34	289	338
22	16	437	351	e234	161	233	251	89	156	24	920	254
23	14	348	352	e177	146	208	656	75	135	22	211	187
24	13	299	659	e140	137	189	923	60	100	61	125	142
25	13	294	676	e117	132	178	498	53	85	77	91	109
26	13	271	474	e127	123	167	418	104	72	52	88	86
27	90	241	394	e393	115	159	391	763	61	60	71	73
28	327	1,750	349	e303	108	154	329	1,880	53	60	53	65
29	177	2,200	320	e221	102	148	270	641	46	46	44	60
30	103	689	356	e159	---	563	232	332	39	36	94	55
31	71	---	422	e127	---	1,140	---	700	---	31	79	---
TOTAL	1,292.3	20,670	13,845	14,182	14,656	18,641	14,807	8,097	6,097	1,247	3,566	29,165
MEAN	41.7	689	447	457	505	601	494	261	203	40.2	115	972
MAX	327	3,880	1,140	2,170	3,570	5,540	2,410	1,880	1,110	96	920	10,700
MIN	7.0	33	276	117	95	101	175	53	39	21	11	21
CFSM	0.17	2.85	1.85	1.89	2.09	2.48	2.04	1.08	0.84	0.17	0.48	4.02
IN.	0.20	3.18	2.13	2.18	2.25	2.87	2.28	1.24	0.94	0.19	0.55	4.48

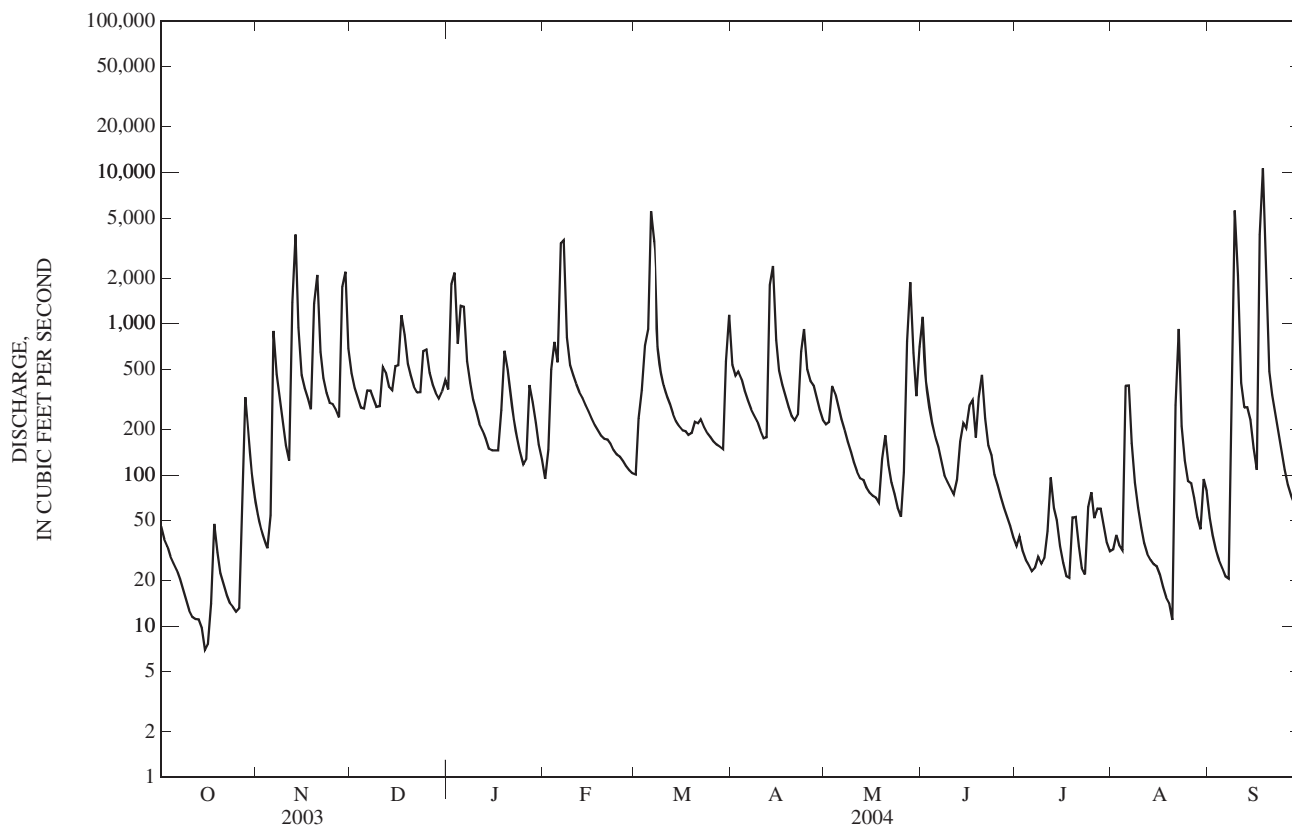
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	55.4	159	373	470	610	688	507	403	186	113	82.5	79.3
MAX	509	869	1,954	1,665	1,953	2,092	1,513	1,309	994	645	445	1,031
(WY)	(1976)	(1987)	(1979)	(1950)	(1989)	(1997)	(1972)	(1996)	(1961)	(1960)	(1979)	(1950)
MIN	0.35	0.70	3.23	31.1	20.7	80.8	90.9	27.6	4.16	3.91	2.09	1.21
(WY)	(1954)	(1954)	(1954)	(1977)	(1954)	(1941)	(1941)	(1941)	(1999)	(1999)	(1944)	(1998)

03217000 TYGARTS CREEK NEAR GREENUP, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	168,661.3		146,265.3		309	
ANNUAL MEAN	462		400		589	
HIGHEST ANNUAL MEAN					67.5	
LOWEST ANNUAL MEAN					25,800	
HIGHEST DAILY MEAN	5,990	May 7	10,700	Sep 18	25,800	Mar 2, 1997
LOWEST DAILY MEAN	7.0	Oct 15	7.0	Oct 15	0.00	Aug 24, 1952
ANNUAL SEVEN-DAY MINIMUM	10	Oct 10	10	Oct 10	0.00	Sep 17, 1955
MAXIMUM PEAK FLOW			12,200	Sep 18	34,400	Mar 2, 1997
MAXIMUM PEAK STAGE			20.53	Sep 18	23.65	Mar 2, 1997
INSTANTANEOUS LOW FLOW					0.00	Aug 24, 1952
ANNUAL RUNOFF (CFSM)	1.91		1.65		1.28	
ANNUAL RUNOFF (INCHES)	25.93		22.48		17.36	
10 PERCENT EXCEEDS	1,080		743		695	
50 PERCENT EXCEEDS	229		189		94	
90 PERCENT EXCEEDS	30		26		5.0	

e Estimated



03237255 KINNICONICK CREEK BELOW TRACE CREEK AT TANNERY, KY

LOCATION.--Lat 38°32'43", long 83°13'17", Lewis County, Hydrologic Unit 05090201, on bridge on Hwy 9, 0.10 mi downstream from Trace Creek, 0.20 mi west of Tannery, and 9.7 mi upstream from the mouth.

DRAINAGE AREA.--214 mi².

PERIOD OF RECORD.--December 7, 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 533.859 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	47	541	456	e115	63	695	202	692	21	69	10
2	26	39	371	2,860	e144	180	516	237	337	18	63	8.7
3	25	33	283	1,770	626	305	516	467	205	17	32	8.0
4	23	29	234	897	1,030	1,200	455	359	132	16	44	7.7
5	21	192	228	1,710	707	1,470	349	282	101	15	1,170	7.3
6	19	1,100	300	1,330	3,580	7,360	277	222	84	15	400	7.0
7	17	485	309	707	1,690	1,370	241	171	66	19	131	6.6
8	16	322	273	490	802	722	212	132	54	18	65	1,070
9	15	215	239	393	563	475	e175	106	49	19	40	1,140
10	13	153	229	299	472	345	e143	86	44	50	28	301
11	13	124	467	236	402	269	e124	71	39	67	22	152
12	12	3,190	481	e206	336	231	e167	64	55	29	19	95
13	11	3,150	375	e185	285	186	e1,680	55	107	23	16	71
14	12	711	365	e164	246	158	e2,070	49	93	20	14	58
15	13	448	533	e152	221	148	e759	46	75	17	13	47
16	13	352	520	e149	182	140	e454	43	81	14	11	39
17	16	284	1,540	149	156	138	e361	41	93	13	9.9	7,390
18	24	239	973	249	140	124	e305	38	67	13	9.0	3,770
19	20	1,220	631	708	129	131	e248	57	128	13	8.1	542
20	18	1,320	456	486	127	144	e222	79	230	12	7.4	267
21	17	636	344	e321	125	164	e198	66	126	12	32	164
22	16	426	321	e253	110	181	e248	48	85	11	104	112
23	16	313	379	e182	92	166	e1,170	38	66	13	53	81
24	15	262	1,280	e143	87	152	1,500	32	50	26	30	62
25	14	283	969	e124	84	143	758	28	69	21	26	50
26	14	264	596	e135	77	130	585	37	62	20	23	42
27	67	238	434	e342	71	124	477	475	42	19	21	34
28	268	3,140	353	e270	67	124	359	1,430	35	17	16	30
29	136	2,240	297	e248	62	117	276	508	29	15	14	26
30	87	876	414	e172	---	1,130	224	233	24	13	12	24
31	61	---	556	e130	---	1,300	---	726	---	31	12	---
TOTAL	1,067	22,331	15,291	15,916	12,728	18,890	15,764	6,428	3,320	627	2,514.4	15,622.3
MEAN	34.4	744	493	513	439	609	525	207	111	20.2	81.1	521
MAX	268	3,190	1,540	2,860	3,580	7,360	2,070	1,430	692	67	1,170	7,390
MIN	11	29	228	124	62	63	124	28	24	11	7.4	6.6
CFSM	0.16	3.48	2.30	2.40	2.05	2.85	2.46	0.97	0.52	0.09	0.38	2.43
IN.	0.19	3.88	2.66	2.77	2.21	3.28	2.74	1.12	0.58	0.11	0.44	2.72

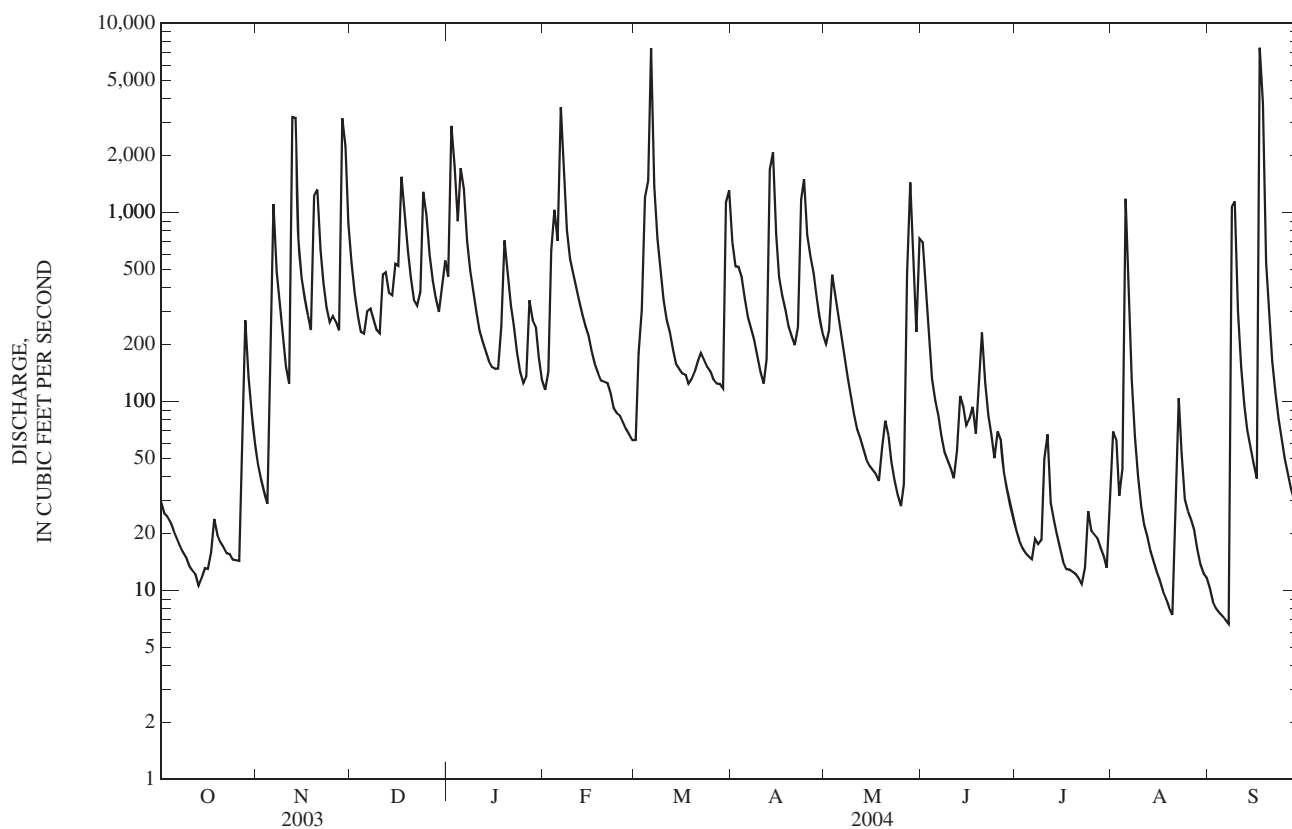
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	62.0	431	416	348	522	657	453	640	294	133	85.6	178
MAX	138	744	493	513	1,013	1,079	636	1,235	685	454	175	521
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2002)	(2003)	(2003)	(2001)	(2001)	(2004)
MIN	13.3	25.1	265	138	192	389	102	207	111	20.2	3.98	9.12
(WY)	(2002)	(2002)	(2002)	(2001)	(2002)	(2003)	(2001)	(2004)	(2004)	(2004)	(2002)	(2002)

03237255 KINNICONICK CREEK BELOW TRACE CREEK AT TANNERY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	170,825		130,498.7		368	
ANNUAL MEAN	468		357		290	
HIGHEST ANNUAL MEAN					458	
LOWEST ANNUAL MEAN					290	
HIGHEST DAILY MEAN	8,670	May 6	7,390	Sep 17	13,600	Mar 20, 2002
LOWEST DAILY MEAN	11	Oct 13	6.6	Sep 7	0.00	Aug 16, 2002
ANNUAL SEVEN-DAY MINIMUM	12	Oct 10	7.9	Sep 1	0.19	Aug 15, 2002
MAXIMUM PEAK FLOW			16,300	Sep 17	16,300	Mar 20, 2002
MAXIMUM PEAK STAGE			20.24	Sep 17	20.28	Mar 20, 2002
INSTANTANEOUS LOW FLOW			6.6	Sep 7	5.3	Oct 8, 2002
ANNUAL RUNOFF (CFSM)	2.19		1.67		1.72	
ANNUAL RUNOFF (INCHES)	29.69		22.68		23.39	
10 PERCENT EXCEEDS	1,120		824		856	
50 PERCENT EXCEEDS	228		136		131	
90 PERCENT EXCEEDS	23		15		9.9	

e Estimated



03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY

LOCATION.--Lat 38°57'05", long 84°20'18", Campbell County, Hydrologic Unit 05090201, at bridge on Highway 1997, 1.0 miles upstream from Lick Branch, 2.5 miles east of Alexandria, and 2.8 miles upstream from the mouth.

DRAINAGE AREA.--39.0 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--January 2001 to current year.

REVISIONS.--WDR KY-01-1: Latitude.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 505.854 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	6.4	31	30	15	20	67	117	37	0.88	66	2.3
2	9.5	5.7	24	585	21	27	49	747	20	1.2	19	1.8
3	7.2	5.3	22	202	433	23	43	92	15	1.0	10	2.7
4	5.5	5.0	20	2,450	88	296	33	44	12	0.89	193	2.2
5	5.0	4.8	37	635	228	91	28	34	9.3	0.77	75	1.9
6	4.7	4.7	42	76	812	182	26	28	9.1	0.78	19	1.7
7	4.4	4.8	27	e34	120	58	25	24	8.1	1.2	10	1.7
8	5.0	4.5	23	e29	52	35	23	21	7.1	0.74	7.0	17
9	4.0	4.2	21	e26	42	31	20	19	6.2	1.3	5.8	18
10	3.1	3.9	106	e24	60	27	18	17	1.5	25	5.2	9.6
11	2.7	4.4	80	27	60	25	18	16	6.6	12	4.6	5.9
12	3.1	623	35	26	50	23	32	15	13	8.6	4.0	4.3
13	4.0	79	27	e19	48	20	454	14	9.9	4.5	3.5	3.7
14	12	28	26	18	33	20	e230	14	7.6	2.4	3.2	3.1
15	27	23	25	23	30	20	51	35	10	1.7	2.6	1.9
16	12	20	33	15	e20	29	34	36	9.0	1.2	2.3	1.8
17	6.5	17	63	20	19	35	28	20	8.9	1.2	2.1	11
18	5.7	48	33	144	23	27	25	21	27	2.5	1.9	8.9
19	5.2	146	27	54	25	43	22	297	9.4	4.4	2.1	5.3
20	4.5	51	23	29	38	37	21	60	5.6	1.8	2.9	3.8
21	3.5	27	e20	e19	50	45	29	28	4.5	1.3	3.6	3.0
22	3.4	20	28	e18	31	29	64	20	3.5	45	2.0	2.1
23	3.8	17	152	e15	26	24	80	11	2.7	e17	1.8	1.1
24	3.8	37	191	e15	26	23	39	8.4	2.3	5.3	1.5	0.95
25	3.8	33	46	e15	24	22	37	7.1	2.1	2.6	1.4	0.87
26	10	20	31	e17	20	20	33	185	1.8	26	2.4	0.93
27	17	283	26	e19	19	20	25	550	1.4	8.9	2.3	0.93
28	12	554	24	e19	17	20	21	411	1.5	4.8	2.2	0.72
29	9.8	84	26	e17	17	25	19	42	1.9	2.9	4.5	0.72
30	9.2	41	157	19	---	266	30	27	1.3	51	4.8	0.72
31	7.0	---	42	17	---	92	---	183	---	1,130	3.3	---
TOTAL	223.9	2,204.7	1,468	4,656	2,447	1,655	1,624	3,143.5	255.3	1,368.86	469.0	120.64
MEAN	7.22	73.5	47.4	150	84.4	53.4	54.1	101	8.51	44.2	15.1	4.02
MAX	27	623	191	2,450	812	296	454	747	37	1,130	193	18
MIN	2.7	3.9	20	15	15	20	18	7.1	1.3	0.74	1.4	0.72
CFSM	0.19	1.88	1.21	3.85	2.16	1.37	1.39	2.60	0.22	1.13	0.39	0.10
IN.	0.21	2.10	1.40	4.44	2.33	1.58	1.55	3.00	0.24	1.31	0.45	0.12

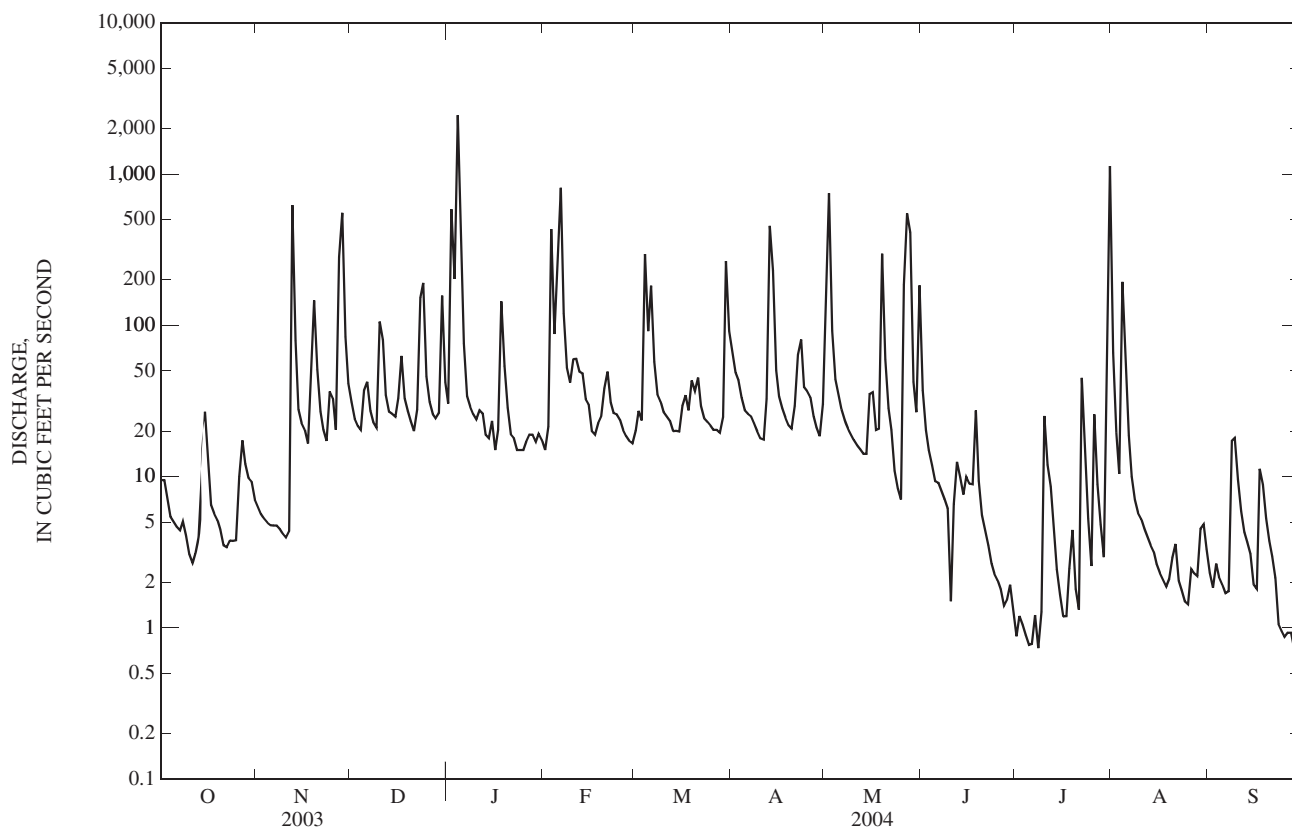
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
MEAN	26.4	59.3	77.5	83.5	67.2	60.3	53.8	108	26.7	33.1	20.6	26.0
MAX	46.1	73.5	99.0	150	120	93.3	106	160	37.5	55.3	42.4	55.0
(WY)	(2002)	(2004)	(2002)	(2004)	(2003)	(2002)	(2002)	(2002)	(2001)	(2001)	(2001)	(2003)
MIN	7.22	34.0	47.4	34.2	30.0	34.1	11.2	14.8	8.51	3.50	1.40	4.01
(WY)	(2004)	(2003)	(2004)	(2002)	(2002)	(2001)	(2001)	(2001)	(2004)	(2002)	(2002)	(2001)

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	21,570.2		19,635.90		58.0	
ANNUAL MEAN	59.1		53.6		60.7	
HIGHEST ANNUAL MEAN					53.6	
LOWEST ANNUAL MEAN					2,450	
HIGHEST DAILY MEAN	2,050	May 10	2,450	Jan 4	2,450	Jan 4, 2004
LOWEST DAILY MEAN	1.8	Sep 19	0.72	Sep 28	0.68	Aug 24, 2002
ANNUAL SEVEN-DAY MINIMUM	2.1	Sep 15	0.83	Sep 24	0.83	Aug 21, 2002
MAXIMUM PEAK FLOW			5,020	Jan 4	6,920	May 10, 2003
MAXIMUM PEAK STAGE			8.07	Jan 4	9.18	May 10, 2003
ANNUAL RUNOFF (CFSM)	1.52		1.38		1.49	
ANNUAL RUNOFF (INCHES)	20.57		18.73		20.20	
10 PERCENT EXCEEDS	97		81		99	
50 PERCENT EXCEEDS	21		19		17	
90 PERCENT EXCEEDS	4.2		1.9		2.4	

e Estimated



03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2000 to current water year.

pH: December 2000 to current water year.

WATER TEMPERATURES: December 2000 to current water year.

DISSOLVED OXYGEN: December 2000 to current water year.

TURBIDITY: December 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated good except the following periods: Dec. 24-29 rated fair; Dec. 30-Jan. 1, rated poor.

pH: Records rated excellent except the following periods: Oct. 1-13, Jan. 2-19, Mar. 25-Apr. 15 rated good; Oct. 14-31, Jan. 20-23 rated fair.

WATER TEMPERATURES: Records rated excellent except the following periods: Oct. 7-10, May 26-Jun. 4 rated good.

DISSOLVED OXYGEN: Records rated excellent for the following periods: Jan. 2-8, Jan. 27-29, Feb. 27-Mar. 2; Jul. 10-12 rated good; Oct. 16-27, Nov. 4-9, Jan. 9-21, Jan. 30, Feb. 1, Mar. 3-10, Jul. 10-12 rated fair. Oct. 1-7, Oct. 28-31, Nov. 10-Dec. 17, Jan. 22-23, Feb. 2-17, Mar. 11-Jun. 3, Jun. 30, Jul. 9 rated poor.

TURBIDITY: Records rated excellent except the following periods: Oct. 21-27, Dec. 30-Jan. 6, Mar. 4-24, Jul. 2-3, Jul. 10-15 rated good; Oct. 27-30, Dec. 10-13, Feb. 3-8, rated fair; Oct. 25, Dec. 1-6, Dec. 14-22, Dec. 26-29, Jan. 7-9, Jan. 20-21, Feb. 20-26, Mar. 1-3, Jul. 4-9, Aug. 1-31, Sept. 18 rated poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2620 microsiemens, Dec. 11, 2002; minimum recorded, 91 microsiemens, Sept. 2, 2003.

pH: Maximum recorded, 9.1 units, May 13, 2001 and Jul. 18, 2002, Mar. 25-27, Apr. 18, 2004; minimum recorded, 6.6 units, Dec. 25-26, 2000.

WATER TEMPERATURES: Maximum recorded, 32.5°C, Jul. 5, 6, 2004; minimum recorded, -0.2°C, Dec. 20-21, 2003 and Jan. 8-11, 14, 20-31, Feb. 1-4, 16, 18, 2004.

DISSOLVED OXYGEN: Maximum recorded, 21.2 mg/L, Feb. 27, 28, 2002; minimum recorded, 0.3 mg/L, May 16, 2001.

TURBIDITY: Maximum recorded, 2600 NTU, Jul. 10, 31, 2004; minimum recorded, 0.0 NTU, Apr. 3, 10-14, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 946 microsiemens, Feb. 3, 2004; minimum recorded, 111 microsiemens, Nov. 12, 2003.

pH: Maximum recorded, 9.1 units, Mar. 25-27, Apr. 18; minimum recorded, 7.3 units, Oct. 26, 2003, and Feb. 3, 4 and Jul. 22, 2004.

WATER TEMPERATURES: Maximum recorded, 32.5°C, Jul. 5, 6, 2004; minimum recorded, -0.2°C, Dec. 20-21, 2003, and Jan. 8-11, 14, 20-31, Feb. 1-4, 16, 18, 2004.

DISSOLVED OXYGEN: Maximum recorded, 16.7 mg/L, Nov. 3, 2003; minimum recorded, 3.4 mg/L, Aug. 20, 2004.

TURBIDITY: Maximum recorded, 2600 NTU, Jul. 10, 13, 2004; minimum recorded, 0.0 NTU, Apr. 3, 10-14, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	460	420	443	680	650	667	463	419	440	606	559	577
2	470	420	444	696	664	681	502	463	482	---	---	---
3	494	450	462	705	674	690	532	502	516	---	---	---
4	534	494	510	699	676	688	551	532	542	---	---	---
5	554	514	539	701	687	694	558	490	536	---	---	---
6	568	545	556	705	693	699	554	488	519	---	---	---
7	585	561	575	702	686	694	579	553	567	---	---	---
8	600	564	580	697	678	688	586	579	581	---	---	---
9	616	581	603	707	685	695	586	583	585	---	---	---
10	650	610	631	714	692	705	587	393	514	---	---	---
11	683	648	668	715	688	707	452	369	392	---	---	---
12	701	677	691	688	111	314	419	388	402	---	---	---
13	683	658	673	357	285	324	459	419	435	---	---	---
14	677	507	637	415	357	386	557	459	495	---	---	---
15	576	530	555	478	415	446	593	552	567	---	---	---
16	599	575	584	494	478	485	710	578	612	---	---	---
17	624	599	606	523	494	510	601	544	581	---	---	---
18	639	620	631	543	317	491	619	563	581	---	---	---
19	656	636	644	432	315	396	725	619	661	---	---	---
20	672	648	662	429	399	409	798	679	730	---	---	---
21	700	618	687	453	429	442	829	753	782	---	---	---
22	700	684	694	486	453	466	793	762	774	---	---	---
23	693	668	686	510	486	494	898	475	718	625	527	600
24	687	671	682	533	463	496	498	361	384	654	619	630
25	697	672	685	543	469	505	491	408	451	677	653	666
26	696	660	682	572	543	559	558	491	523	694	675	681
27	660	606	629	575	247	426	611	556	583	916	694	811
28	618	604	610	257	194	223	661	609	634	892	839	856
29	638	618	628	345	240	295	723	659	678	862	833	845
30	646	608	634	419	345	382	662	498	533	844	816	827
31	666	641	654	---	---	---	559	501	530	858	834	847
MONTH	701	420	612	715	111	522	898	361	559	916	527	734

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	853	811	829	689	649	665	518	468	495	615	265	555
2	864	778	798	691	644	673	562	518	543	341	226	269
3	946	273	448	718	651	671	---	---	---	414	285	355
4	441	299	368	723	345	405	---	---	---	500	414	458
5	595	278	431	464	367	414	---	---	---	553	500	524
6	317	175	205	441	387	401	---	---	---	582	537	563
7	387	238	307	476	400	435	---	---	---	601	538	583
8	497	387	440	534	476	503	---	---	---	629	578	602
9	556	497	519	580	534	555	---	---	---	653	597	632
10	557	507	541	613	580	591	---	---	---	658	626	645
11	552	500	524	639	611	620	674	653	662	667	633	653
12	553	526	544	648	620	634	686	579	660	670	646	660
13	546	504	518	660	633	644	585	562	578	686	606	675
14	591	546	571	667	641	654	---	---	---	700	681	692
15	600	588	591	673	634	655	461	422	441	693	632	667
16	629	599	609	677	653	665	532	461	494	646	632	638
17	642	626	631	685	648	667	580	529	544	657	635	652
18	662	636	646	669	642	657	608	538	573	675	653	665
19	671	658	662	659	621	637	625	575	604	666	277	394
20	670	603	650	636	599	624	642	585	624	418	326	380
21	623	563	578	599	569	582	648	622	639	487	418	451
22	628	596	612	636	596	610	622	552	582	533	443	508
23	628	602	618	641	610	629	552	504	513	568	488	545
24	621	608	616	642	608	625	519	500	506	599	568	586
25	625	599	612	649	604	626	564	519	540	619	596	608
26	634	604	618	668	624	644	580	544	558	668	270	532
27	640	611	628	701	646	665	611	578	588	306	233	260
28	649	623	637	735	697	712	619	578	607	317	196	258
29	659	631	647	745	639	725	636	593	621	412	316	367
30	---	---	---	639	343	409	648	594	625	509	412	450
31	---	---	---	---	---	---	---	---	---	494	350	389
MONTH	946	175	565	745	343	600	686	422	571	700	196	523
JUNE			JULY			AUGUST			SEPTEMBER			
1	424	362	392	716	692	702	373	280	336	644	601	624
2	467	424	447	732	701	714	435	373	405	676	637	652
3	501	467	481	750	723	733	478	435	458	691	644	674
4	529	501	512	770	739	751	504	210	415	715	691	704
5	562	529	543	780	743	761	336	250	296	733	688	712
6	582	560	569	781	746	768	399	336	370	738	708	721
7	597	581	589	773	739	758	460	399	431	758	722	738
8	618	595	605	788	758	771	497	454	467	745	544	651
9	631	610	619	787	713	756	521	486	503	557	540	549
10	641	618	629	741	265	633	553	518	535	578	557	568
11	649	604	633	510	383	457	561	531	549	606	574	591
12	662	633	648	589	510	550	583	545	563	633	602	618
13	654	641	649	581	548	565	586	560	573	641	608	623
14	671	643	655	605	581	595	599	578	590	641	594	613
15	659	553	628	648	603	630	619	599	610	612	596	602
16	650	637	644	691	643	664	646	608	639	613	596	603
17	659	568	641	710	672	693	665	643	657	609	476	539
18	646	521	568	715	262	658	690	655	672	522	492	514
19	577	562	568	681	550	588	703	673	690	544	514	535
20	586	576	581	661	584	629	714	696	707	556	525	545
21	601	586	594	722	654	688	728	701	714	554	534	544
22	616	599	606	716	174	466	704	660	680	557	532	544
23	622	606	615	529	367	442	706	665	693	560	534	549
24	652	604	638	576	529	554	733	693	709	662	546	596
25	663	649	655	603	569	594	757	720	732	701	662	680
26	685	657	673	569	254	498	752	719	736	716	691	700
27	702	676	693	547	523	539	754	709	737	725	700	710
28	694	678	686	573	547	562	718	661	705	725	706	718
29	701	674	684	604	572	591	713	629	672	735	723	729
30	712	684	700	636	242	512	630	574	597	741	728	735
31	---	---	---	385	161	247	603	582	595	---	---	---
MONTH	712	362	605	788	161	615	757	210	582	758	476	629
YEAR	946	111	585									

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.7	8.5	7.6	8.2	7.9	8.2	8.0	7.7	7.6	8.6	8.1
2	8.1	7.8	8.5	7.5	8.2	8.0	8.0	7.6	7.7	7.6	8.7	8.1
3	8.1	7.8	8.5	7.5	8.2	8.0	7.8	7.6	7.6	7.3	8.6	8.1
4	8.2	7.8	8.5	7.6	8.2	8.1	7.7	7.5	7.5	7.3	8.1	7.9
5	8.2	7.8	8.3	7.6	8.2	8.0	7.7	7.6	7.6	7.4	8.2	7.9
6	8.2	7.8	8.0	7.6	8.3	8.0	7.8	7.7	7.5	7.4	8.1	8.0
7	8.3	7.8	8.5	7.7	8.2	8.0	7.9	7.8	7.6	7.4	8.3	8.0
8	8.3	7.8	8.5	7.8	8.3	8.0	8.0	7.9	7.7	7.6	8.5	8.1
9	8.5	7.8	8.5	7.9	8.2	8.0	7.9	7.9	7.8	7.7	8.6	8.1
10	8.6	7.8	8.5	7.9	8.1	8.0	8.0	7.9	7.9	7.7	8.7	8.2
11	8.6	7.7	8.3	7.9	8.0	7.9	8.0	7.9	7.9	7.8	8.7	8.2
12	8.3	7.5	7.9	7.5	8.2	7.9	8.0	8.0	7.9	7.8	8.8	8.2
13	8.2	7.5	7.7	7.6	8.1	7.9	8.0	8.0	8.0	7.8	8.8	8.3
14	7.6	7.4	7.8	7.6	8.2	8.0	8.0	7.9	8.1	7.9	8.8	8.2
15	7.8	7.5	7.8	7.7	8.3	8.0	8.0	7.9	8.1	7.9	8.9	8.3
16	7.9	7.6	7.9	7.7	8.2	8.0	8.0	7.9	8.1	7.9	8.7	8.2
17	7.9	7.5	8.0	7.7	8.1	8.1	8.0	7.9	8.1	7.9	8.7	8.3
18	8.0	7.6	7.9	7.7	8.2	8.1	7.9	7.8	8.2	8.0	8.9	8.3
19	8.1	7.6	7.9	7.7	8.4	8.1	7.8	7.7	8.2	8.0	8.8	8.3
20	8.2	7.6	8.0	7.9	8.4	8.2	7.7	7.6	8.2	8.0	8.8	8.2
21	8.2	7.5	8.1	7.8	8.3	8.1	7.8	7.7	8.1	8.0	8.6	8.2
22	8.2	7.5	8.1	7.9	8.3	8.1	7.8	7.7	8.4	8.0	8.9	8.3
23	8.3	7.6	8.2	7.8	8.3	8.0	7.8	7.7	8.4	8.0	8.9	8.3
24	8.5	7.7	8.0	7.8	8.0	7.9	7.7	7.6	8.3	8.0	8.9	8.2
25	8.4	7.7	8.2	8.0	8.1	7.9	7.6	7.5	8.5	8.0	9.1	8.2
26	7.8	7.3	8.2	8.0	8.3	8.0	7.5	7.5	8.6	8.1	9.1	8.3
27	8.0	7.5	8.1	7.8	8.2	8.0	7.6	7.5	8.6	8.0	9.1	8.3
28	7.9	7.5	7.9	7.8	8.2	8.0	7.7	7.6	8.6	8.0	9.0	8.2
29	8.2	7.5	7.9	7.8	8.2	8.1	7.7	7.6	8.7	8.0	8.5	8.1
30	8.3	7.5	8.1	7.9	8.1	7.9	7.7	7.6	---	---	8.3	8.2
31	8.4	7.5	---	---	8.1	7.9	7.7	7.6	---	---	---	---
MONTH	8.6	7.3	8.5	7.5	8.4	7.9	8.2	7.5	8.7	7.3	9.1	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.3	8.6	8.0	7.9	7.7	8.6	7.9	7.6	7.5	8.4	7.7
2	8.7	8.4	8.1	8.0	8.0	7.8	8.6	7.9	7.8	7.5	8.5	7.7
3	---	---	8.3	8.0	8.0	7.8	8.5	7.8	7.9	7.6	8.1	7.6
4	---	---	8.5	8.1	8.2	7.8	8.5	7.8	7.7	7.4	8.4	7.5
5	---	---	8.6	8.1	8.3	7.9	8.5	7.8	7.6	7.4	8.4	7.6
6	---	---	8.5	8.1	8.3	8.0	8.5	7.8	7.8	7.5	8.5	7.6
7	---	---	8.6	8.0	8.4	8.0	8.4	7.7	8.0	7.6	8.4	7.5
8	---	---	8.7	8.1	8.4	7.9	8.5	7.7	8.0	7.6	7.8	7.5
9	---	---	8.7	8.1	8.3	7.9	8.4	7.7	8.1	7.7	8.0	7.8
10	---	---	8.6	8.0	8.4	7.9	8.3	7.6	8.2	7.6	8.1	7.8
11	9.0	8.6	8.6	8.0	8.3	7.9	7.8	7.6	8.2	7.7	8.2	7.7
12	8.6	8.4	8.5	8.0	8.2	7.9	8.1	7.7	8.3	7.8	8.2	7.6
13	8.4	8.4	8.4	8.0	8.3	8.0	8.1	7.7	8.4	7.9	8.3	7.5
14	---	---	8.4	8.0	8.3	7.9	8.1	7.7	8.5	7.8	8.4	7.5
15	8.7	8.3	8.2	8.0	8.2	7.9	8.4	7.8	8.6	7.9	8.4	7.7
16	8.9	8.2	8.3	8.1	8.2	7.9	8.5	7.8	8.7	7.8	8.4	7.6
17	9.0	8.2	8.4	8.0	8.4	7.9	8.5	7.8	8.7	7.8	7.8	7.5
18	9.1	8.2	8.4	8.0	8.2	8.0	8.4	7.3	8.7	7.8	8.2	7.7
19	9.0	8.2	8.1	7.8	8.3	7.9	8.1	7.6	8.6	7.7	8.2	7.7
20	8.9	8.2	7.9	7.8	8.4	8.0	8.3	7.6	7.8	7.5	8.2	7.7
21	8.7	8.2	8.1	7.8	8.4	8.0	8.3	7.6	8.3	7.6	8.3	7.7
22	8.4	8.2	8.1	7.8	8.5	8.0	7.7	7.3	8.4	7.6	8.4	7.7
23	8.4	8.2	8.3	7.9	8.5	8.0	7.8	7.5	8.4	7.7	8.7	7.7
24	8.7	8.2	8.3	7.9	8.6	8.0	8.0	7.6	8.4	7.6	8.7	7.7
25	8.7	8.2	8.4	8.0	8.4	8.0	8.0	7.7	8.5	7.6	8.6	7.6
26	8.8	8.2	8.0	7.7	8.6	8.0	7.8	7.4	8.1	7.5	8.6	7.7
27	8.9	8.2	7.7	7.6	8.6	8.1	7.8	7.6	8.3	7.5	8.7	7.7
28	8.9	8.3	7.7	7.6	8.6	8.0	8.0	7.6	8.3	7.6	8.7	7.6
29	8.9	8.2	7.9	7.7	8.5	7.9	8.1	7.7	8.1	7.5	8.5	7.6
30	8.5	8.2	7.9	7.8	8.5	7.9	8.0	7.5	8.1	7.7	8.6	7.6
31	---	---	7.8	7.7	---	---	7.6	7.4	8.2	7.7	---	---
MONTH	9.1	8.2	8.7	7.6	8.6	7.7	8.6	7.3	8.7	7.4	8.7	7.5
YEAR	9.1	7.3										

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.8	12.0	13.6	17.2	14.2	15.6	5.8	3.4	4.6	3.8	1.7	2.8
2	13.6	10.5	12.2	18.1	14.7	16.2	4.4	1.8	3.0	7.5	3.8	6.0
3	12.7	8.5	10.8	17.3	13.6	15.4	3.5	2.8	3.0	10.9	7.5	9.3
4	14.2	12.0	13.0	17.0	12.9	15.0	4.2	2.8	3.5	10.7	7.6	8.9
5	14.9	11.0	12.9	17.2	15.3	16.0	5.6	4.2	4.9	7.8	5.9	7.1
6	15.6	12.6	14.3	15.3	11.8	13.5	5.4	4.4	4.8	5.9	1.4	3.8
7	15.4	12.0	13.9	11.8	8.7	10.2	5.5	3.3	4.4	1.5	0.0	0.7
8	15.5	12.3	14.3	9.2	6.4	7.5	5.3	2.7	3.9	0.5	-0.2	0.2
9	16.9	13.4	15.1	8.2	4.6	6.1	6.2	4.6	5.5	1.0	-0.2	0.4
10	19.4	15.9	17.2	8.7	4.8	6.9	7.4	5.9	6.6	0.2	-0.2	-0.1
11	20.7	16.0	17.8	11.9	8.4	10.4	6.9	4.8	6.1	1.1	-0.2	0.3
12	19.7	16.0	17.8	13.5	11.9	12.9	4.8	2.4	3.8	1.3	0.2	0.8
13	17.6	13.1	15.1	12.7	8.1	10.5	2.4	1.5	1.8	1.5	-0.1	0.7
14	15.3	13.8	14.4	8.5	6.2	7.4	2.3	1.3	1.8	2.3	-0.2	0.8
15	15.7	12.3	13.7	7.9	6.9	7.4	2.7	1.4	2.0	1.9	0.1	0.9
16	15.3	10.8	13.0	9.2	7.8	8.4	4.3	1.2	2.6	1.9	-0.1	0.7
17	14.6	12.0	13.3	10.5	7.2	8.7	3.4	1.6	2.4	1.7	0.2	0.9
18	13.6	10.5	12.2	12.5	8.9	10.4	2.2	1.4	1.7	1.9	1.0	1.7
19	14.5	10.3	12.5	12.2	11.0	11.7	1.9	1.0	1.5	1.0	0.1	0.6
20	15.4	11.1	13.3	11.6	9.2	10.3	1.8	-0.2	0.6	0.5	-0.2	0.0
21	16.8	14.0	15.0	11.5	8.0	9.5	1.0	-0.2	0.3	1.1	-0.2	0.2
22	14.7	11.1	13.0	11.9	7.8	9.7	2.7	0.5	1.7	1.5	-0.2	0.3
23	13.3	9.9	11.2	12.7	9.3	10.9	4.8	2.5	3.5	0.0	-0.2	-0.2
24	12.8	8.3	10.2	11.6	6.9	9.5	5.0	3.6	4.4	0.5	-0.2	0.0
25	14.4	9.4	11.6	7.3	5.2	6.2	3.6	1.8	2.8	-0.2	-0.2	-0.2
26	13.5	12.2	13.0	7.6	5.1	6.2	2.8	0.4	1.4	-0.1	-0.2	-0.2
27	12.9	10.0	11.4	8.5	6.7	7.5	2.6	-0.1	1.1	-0.1	-0.2	-0.2
28	10.5	8.9	9.8	8.7	6.7	8.1	3.5	0.1	1.5	0.0	-0.2	-0.2
29	11.8	9.3	10.6	6.7	4.7	5.6	5.0	1.6	3.1	0.1	-0.2	-0.1
30	13.8	8.9	11.5	6.4	4.0	4.9	5.1	3.5	4.3	-0.1	-0.2	-0.2
31	15.4	11.4	13.6	---	---	---	4.3	2.0	3.1	-0.1	-0.2	-0.2
MONTH	20.7	8.3	13.3	18.1	4.0	10.0	7.4	-0.2	3.1	10.9	-0.2	1.5
FEBRUARY			MARCH			APRIL			MAY			
1	-0.1	-0.2	-0.2	8.4	6.0	7.2	9.4	8.5	9.0	19.6	15.3	17.0
2	0.0	-0.2	-0.1	12.2	6.9	9.0	9.6	8.0	8.8	16.1	11.7	13.6
3	0.0	-0.2	-0.1	8.3	6.5	7.6	---	---	---	14.5	10.5	12.1
4	1.5	-0.2	0.3	8.4	7.2	7.8	---	---	---	15.1	9.9	12.2
5	0.6	-0.1	0.2	13.0	8.2	10.3	---	---	---	19.6	12.0	15.1
6	2.1	-0.1	1.3	11.3	8.9	10.5	---	---	---	22.2	13.7	17.4
7	2.0	1.3	1.7	9.5	7.0	8.0	---	---	---	22.2	16.0	18.7
8	2.3	0.4	1.2	7.5	6.0	6.8	---	---	---	24.4	16.4	19.8
9	2.3	0.1	1.1	7.8	5.1	6.2	---	---	---	25.5	17.4	21.0
10	4.0	0.8	2.1	9.7	3.5	6.0	---	---	---	25.1	18.5	21.6
11	3.3	0.3	1.8	8.1	4.1	5.5	16.8	12.8	15.1	25.0	19.0	21.8
12	4.1	2.1	2.8	8.3	2.8	5.0	13.9	9.8	11.3	25.2	19.3	22.2
13	2.3	0.9	1.8	8.8	2.1	5.0	9.8	7.4	8.9	23.8	19.9	21.9
14	3.8	0.0	1.5	7.1	4.7	5.6	---	---	---	23.4	20.6	21.9
15	2.9	0.1	1.3	10.6	3.2	6.4	14.7	12.0	13.4	22.1	18.0	19.2
16	2.9	-0.2	0.8	7.0	4.7	5.4	18.4	10.3	13.8	20.3	17.5	18.7
17	3.8	0.0	1.5	5.6	4.1	4.9	20.7	12.3	16.0	23.6	16.8	19.8
18	4.5	-0.2	1.6	7.6	4.4	5.9	22.9	14.8	18.3	25.0	18.6	21.6
19	5.9	0.5	2.7	8.9	5.1	6.4	19.1	16.7	17.8	22.3	18.3	19.6
20	5.0	2.5	3.7	10.6	5.2	7.7	19.2	15.7	17.4	22.2	18.9	20.4
21	4.5	3.4	3.8	8.6	4.7	6.8	17.2	15.8	16.5	25.5	20.6	22.6
22	7.0	3.1	4.4	9.5	3.2	5.6	15.9	14.7	15.4	26.7	21.4	23.8
23	6.6	2.4	4.3	10.2	2.8	6.0	14.7	13.7	14.3	26.7	21.9	24.2
24	5.5	3.9	4.8	10.7	6.3	8.2	17.5	12.7	14.9	26.7	22.5	24.5
25	7.2	2.2	4.3	13.9	8.8	11.0	18.1	14.4	15.9	26.3	21.7	24.1
26	7.1	2.8	4.6	14.6	10.8	12.5	19.3	14.5	16.4	24.2	19.4	21.3
27	8.6	2.7	5.1	17.0	12.7	14.5	18.2	12.9	14.9	19.4	17.9	18.7
28	8.9	2.1	5.1	19.0	12.5	15.4	19.5	10.7	14.5	20.4	18.6	19.3
29	9.2	3.0	5.7	15.5	11.9	13.9	20.5	12.7	16.2	22.2	17.7	19.5
30	---	---	---	11.9	10.7	11.2	17.1	15.1	15.9	19.9	18.6	19.3
31	---	---	---	10.9	9.4	10.3	---	---	---	20.1	18.3	19.1
MONTH	9.2	-0.2	2.4	19.0	2.1	8.1	22.9	7.4	14.5	26.7	9.9	19.7

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.3	8.2	9.1	16.4	6.6	10.0	14.3	13.1	13.6	13.6	12.0	12.7
2	10.9	8.5	9.5	16.4	6.3	10.0	---	---	---	12.2	10.7	11.4
3	11.6	9.0	10.0	16.7	6.3	10.2	---	---	---	10.8	9.7	10.3
4	11.3	8.4	9.5	16.6	6.5	10.3	---	---	---	11.2	9.9	10.6
5	12.0	8.6	9.8	14.1	6.0	9.2	---	---	---	11.1	10.1	10.6
6	12.3	8.2	9.7	10.0	6.2	8.1	---	---	---	12.4	10.0	11.2
7	12.9	8.3	9.9	15.9	7.9	11.1	---	---	---	13.9	11.9	12.6
8	13.6	7.8	10.0	16.4	9.3	12.4	---	---	---	13.5	12.3	12.8
9	15.6	7.6	10.5	15.7	10.3	12.8	---	---	---	14.0	12.4	12.7
10	14.9	6.8	9.5	15.7	10.5	12.9	---	---	---	14.4	12.7	13.3
11	16.1	6.1	8.9	12.0	9.0	10.5	---	---	---	14.2	12.4	12.9
12	11.8	5.1	7.4	10.3	8.6	9.2	---	---	---	13.7	12.0	12.5
13	11.8	5.5	7.6	10.4	9.0	9.8	---	---	---	13.8	12.1	12.5
14	7.1	5.5	6.4	11.8	10.3	11.1	---	---	---	14.2	11.7	12.5
15	8.2	6.2	6.9	11.5	10.8	11.1	---	---	---	13.0	11.7	12.5
16	9.5	6.4	7.7	11.1	10.6	10.8	---	---	---	13.0	12.4	12.7
17	9.1	6.3	7.2	11.9	10.4	11.0	---	---	---	13.3	11.6	12.4
18	10.8	7.0	8.4	11.1	9.6	10.4	15.2	12.7	14.1	12.5	11.4	12.0
19	11.6	6.8	8.5	9.7	9.3	9.5	14.8	12.9	13.6	12.8	12.0	12.5
20	11.7	6.6	8.4	10.2	9.5	9.8	15.5	13.5	14.2	12.9	12.3	12.6
21	12.1	5.6	7.9	---	---	---	15.7	13.4	14.3	12.9	12.3	12.7
22	12.2	5.8	8.2	---	---	---	14.6	12.8	13.5	12.9	12.4	12.5
23	13.8	7.0	9.7	---	---	---	13.3	11.9	12.6	13.9	12.8	13.2
24	15.6	7.6	10.6	---	---	---	12.1	11.8	11.9	15.2	12.6	13.2
25	16.1	7.4	10.6	13.5	11.0	12.2	13.2	12.0	12.5	15.3	13.1	13.6
26	10.8	6.4	8.1	14.0	12.2	12.9	14.6	12.7	13.4	15.0	13.0	13.5
27	12.0	7.5	9.0	12.3	11.7	12.1	14.7	13.1	13.7	14.4	12.9	13.2
28	11.4	8.2	9.2	12.3	11.5	12.0	14.7	12.6	13.5	13.9	13.2	13.5
29	13.8	8.2	10.1	13.1	12.3	12.8	13.6	11.6	12.7	14.8	13.3	13.6
30	15.2	7.8	10.6	14.0	13.0	13.4	12.2	11.6	11.9	15.5	13.6	14.0
31	15.7	7.4	10.4	---	---	---	13.2	12.0	12.6	14.5	13.6	14.0
MONTH	16.1	5.1	9.0	16.7	6.0	11.0	15.7	11.6	13.2	15.5	9.7	12.6
FEBRUARY			MARCH			APRIL			MAY			
1	14.5	13.5	13.9	13.5	9.9	11.3	10.1	9.2	9.5	9.7	6.0	7.3
2	14.5	13.4	13.8	15.0	9.8	11.5	10.6	9.3	9.8	8.8	6.6	8.2
3	13.9	13.3	13.6	13.3	9.8	11.1	---	---	---	10.0	8.5	9.2
4	13.6	13.0	13.3	11.6	9.8	10.6	---	---	---	11.4	8.4	9.6
5	14.0	13.2	13.5	10.8	9.0	9.8	---	---	---	11.4	7.0	9.1
6	14.3	13.2	13.6	9.9	9.3	9.7	---	---	---	11.8	5.9	8.6
7	14.2	12.7	13.2	11.0	9.7	10.2	---	---	---	11.6	5.6	8.1
8	14.6	13.1	13.6	11.9	10.0	10.8	---	---	---	12.1	4.8	7.8
9	13.9	12.9	13.5	12.8	10.4	11.3	---	---	---	11.6	4.4	7.2
10	13.8	12.9	13.3	14.1	10.4	11.7	---	---	---	10.4	4.2	6.6
11	14.3	13.2	13.7	13.7	10.4	11.5	---	---	---	10.0	4.1	6.3
12	13.8	13.0	13.4	14.6	10.5	12.2	8.4	5.8	7.2	8.8	4.1	6.0
13	14.2	13.4	13.8	14.9	10.5	12.4	8.1	7.9	8.0	8.6	4.0	5.8
14	14.5	13.3	13.9	14.1	10.4	11.7	---	---	---	8.1	4.2	5.6
15	15.8	13.6	14.3	15.3	9.9	12.3	10.3	7.6	8.8	7.3	4.3	5.8
16	14.9	13.8	14.4	13.3	9.8	11.2	11.3	6.5	8.8	8.0	5.8	6.8
17	14.7	12.3	13.7	14.0	10.5	11.7	12.8	5.6	8.8	9.2	5.6	7.1
18	13.3	12.1	12.7	14.5	10.0	11.7	14.0	4.9	8.7	9.4	5.1	6.9
19	13.2	11.6	12.5	13.8	10.0	11.4	11.9	4.8	7.5	7.5	5.1	6.4
20	12.6	11.1	11.7	13.6	9.0	10.7	11.9	5.1	7.7	7.0	5.2	6.2
21	12.4	11.1	11.5	11.8	9.2	10.4	8.9	5.0	6.6	6.5	4.1	5.4
22	13.4	11.4	12.1	15.3	10.2	12.0	7.6	5.9	6.5	7.3	4.1	5.5
23	13.8	11.2	12.3	14.9	9.7	12.0	7.6	6.4	6.9	8.1	4.2	5.8
24	13.1	11.1	11.8	14.0	8.8	10.9	10.2	6.0	7.8	8.9	4.6	6.2
25	14.9	11.4	12.5	13.9	8.2	10.6	9.7	5.8	7.0	9.6	4.7	6.4
26	14.8	11.4	12.7	13.0	7.6	9.7	11.3	5.8	7.7	6.4	4.8	5.8
27	14.8	11.3	12.7	12.5	6.8	9.2	12.5	5.9	8.6	8.1	6.4	7.3
28	15.1	11.3	12.8	10.7	5.0	7.5	13.4	6.1	9.2	7.2	6.3	6.6
29	15.6	10.8	12.7	8.0	4.7	6.6	13.0	5.4	8.5	7.3	6.0	6.7
30	---	---	---	9.6	7.8	9.0	7.9	5.3	6.4	7.4	6.0	6.5
31	---	---	---	9.1	8.9	9.0	---	---	---	6.8	6.0	6.4
MONTH	15.8	10.8	13.1	15.3	4.7	10.7	14.0	4.8	8.0	12.1	4.0	6.9

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	15	1.0	3.6	66	37	51	98	63	79
2	---	---	---	14	2.0	5.1	---	---	---	990	66	610
3	---	---	---	10	2.0	4.7	---	---	---	990	110	240
4	---	---	---	15	2.0	3.7	---	---	---	990	31	510
5	---	---	---	7.0	2.0	3.4	---	---	---	560	140	290
6	---	---	---	8.0	3.0	4.6	---	---	---	280	83	120
7	---	---	---	8.0	4.0	5.1	---	---	---	92	59	76
8	---	---	---	14	4.0	5.6	---	---	---	73	39	56
9	---	---	---	61	4.0	10	---	---	---	43	31	38
10	---	---	---	13	4.0	6.1	230	12	98	---	---	---
11	---	---	---	12	4.0	6.7	190	120	160	---	---	---
12	---	---	---	>1,000	12	500	130	93	110	---	---	---
13	---	---	---	260	150	180	110	65	80	---	---	---
14	---	---	---	160	100	130	68	44	56	---	---	---
15	---	---	---	230	84	130	47	31	39	---	---	---
16	---	---	---	170	69	97	120	23	44	---	---	---
17	---	---	---	72	48	58	160	51	74	---	---	---
18	---	---	---	710	39	150	80	52	66	990	14	410
19	---	---	---	380	130	180	80	48	64	990	110	620
20	---	---	---	170	110	140	54	35	46	110	67	87
21	46	31	36	130	92	110	41	25	33	95	54	65
22	51	35	38	120	73	93	35	16	23	---	---	---
23	48	36	40	98	66	81	430	18	110	---	---	---
24	51	37	41	110	66	86	480	160	280	---	---	---
25	68	38	40	93	27	53	160	74	110	---	---	---
26	89	40	51	---	---	---	83	42	61	---	---	---
27	92	46	53	990	13	300	49	27	37	---	---	---
28	---	---	---	490	200	340	54	14	22	---	---	---
29	---	---	---	210	99	140	---	---	---	---	---	---
30	---	---	---	100	60	80	300	150	200	---	---	---
31	---	---	---	---	---	---	180	91	120	---	---	---
MONTH	92	31	43	1,000	1.0	100	480	12	86	990	14	250
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	38	8.0	11	140	100	110	2,100	43	320
2	---	---	---	38	13	15	110	92	100	1,000	260	570
3	350	27	200	130	12	18	---	---	---	260	100	170
4	130	56	87	840	130	390	---	---	---	120	60	86
5	640	32	140	260	110	150	---	---	---	75	40	52
6	690	110	330	290	170	220	---	---	---	44	24	32
7	110	50	73	190	110	140	---	---	---	44	18	24
8	54	30	42	120	68	83	---	---	---	29	15	19
9	---	---	---	70	46	56	---	---	---	26	16	19
10	---	---	---	54	34	41	---	---	---	25	16	19
11	---	---	---	44	28	33	10	9.0	9.4	37	19	21
12	---	---	---	64	21	27	200	8.0	46	54	17	22
13	---	---	---	32	19	21	130	100	120	38	19	23
14	---	---	---	31	18	21	---	---	---	34	19	23
15	---	---	---	76	17	21	100	69	86	110	24	57
16	---	---	---	50	20	26	85	45	58	88	40	57
17	---	---	---	53	34	38	49	24	34	64	27	39
18	---	---	---	96	28	38	31	15	20	180	36	69
19	---	---	---	100	42	59	19	11	14	1,300	67	630
20	79	4.2	19	80	40	54	37	10	13	370	190	260
21	71	26	49	100	59	80	78	13	22	270	180	210
22	39	12	18	62	39	47	170	46	94	240	53	87
23	24	12	16	53	36	41	180	87	120	78	38	57
24	24	14	17	57	40	44	130	67	83	65	32	43
25	19	12	15	45	36	40	85	48	59	64	28	38
26	47	8.7	12	110	34	40	78	36	50	1,300	46	390
27	---	---	---	46	30	35	45	23	30	1,100	230	580
28	---	---	---	110	35	39	31	17	21	2,100	230	780
29	---	---	---	200	34	49	52	16	20	250	120	160
30	---	---	---	400	190	290	150	19	46	130	83	100
31	---	---	---	---	---	---	---	---	---	1,400	89	410
MONTH	690	4.2	78	840	8.0	72	200	8.0	55	2,100	15	170

TWELVEMILE CREEK BASIN

03238745 TWELVEMILE CREEK AT HIGHWAY 1997 NEAR ALEXANDRIA, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	240	130	160	41	22	26	420	170	240	---	---	---
2	150	89	110	64	23	29	170	80	120	---	---	---
3	120	72	88	71	27	32	96	56	74	---	---	---
4	100	47	66	86	30	36	1,600	57	480	---	---	---
5	69	36	49	100	31	41	880	220	390	---	---	---
6	67	29	39	64	31	40	230	110	160	---	---	---
7	40	23	32	66	33	41	140	82	100	---	---	---
8	66	22	31	65	34	43	---	---	---	1,800	110	310
9	49	20	28	100	34	49	---	---	---	---	---	---
10	54	20	27	2,600	36	480	---	---	---	---	---	---
11	73	23	35	2,100	170	520	---	---	---	---	---	---
12	57	24	35	200	88	130	510	61	120	---	---	---
13	77	23	33	560	68	120	---	---	---	---	---	---
14	45	20	27	250	77	110	380	77	140	---	---	---
15	460	22	77	220	---	---	230	75	130	---	---	---
16	73	24	40	---	---	---	---	---	---	---	---	---
17	300	18	42	---	---	---	---	---	---	---	---	---
18	360	93	200	---	---	---	---	---	---	---	---	---
19	140	39	68	---	---	---	---	---	---	---	---	---
20	95	27	52	---	---	---	---	---	---	---	---	---
21	95	24	36	---	---	---	---	---	---	---	---	---
22	64	20	30	550	---	---	---	---	---	---	---	---
23	91	21	32	400	99	220	---	---	---	---	---	---
24	50	20	28	120	60	85	---	---	---	---	---	---
25	45	19	26	190	53	77	---	---	---	---	---	---
26	82	19	27	1,900	160	380	330	87	120	---	---	---
27	60	19	25	180	77	110	190	87	120	---	---	---
28	69	19	26	120	67	86	150	85	110	---	---	---
29	39	20	26	110	58	76	250	85	110	---	---	---
30	44	21	26	1,400	65	400	---	---	---	---	---	---
31	---	---	---	2,600	420	1,200	---	---	---	---	---	---
MONTH	460	18	51	2,600	22	190	1,600	56	170	1,800	110	310
YEAR	2,600	1.0	110									

> Actual value is known to be greater than the value shown

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03238772 FOURMILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY

LOCATION.--Lat 3859'12", long 84'21'55", Campbell County, Hydrologic Unit 05090203, on right bank at bridge on Poplar Ridge Road, 2.5 miles north of Alexandria, 3.0 mi upstream from Tug Creek, and 6.7 mi upstream from the mouth.

DRAINAGE AREA.--3.1 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--March 2001 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 535.243 ft above NGVD of 1929. Gage operated from May 1999 to September 2000 downstream 2.0 mi at different datum. Old site station number is 03238780.

REMARKS.--Records fair except for estimated records, which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.83	0.22	3.0	3.2	2.2	2.6	9.7	8.5	2.2	0.07	2.3	0.04
2	0.30	0.20	2.6	42	3.5	2.0	8.1	65	1.5	0.13	0.92	0.03
3	0.23	0.20	2.5	29	38	3.1	6.4	5.5	1.3	0.09	0.72	0.29
4	0.25	0.19	2.4	144	7.9	48	5.5	3.2	0.53	0.07	11	0.09
5	0.23	e0.22	6.8	36	29	18	4.8	2.6	0.54	0.06	1.3	0.04
6	0.20	e0.28	3.3	5.6	65	18	3.4	2.2	0.52	0.16	0.73	0.02
7	0.18	0.28	1.9	3.5	11	7.9	3.5	2.1	0.47	0.41	0.67	0.02
8	0.18	0.17	1.5	3.1	4.8	6.4	3.3	1.9	0.42	0.10	0.64	3.0
9	0.20	0.16	1.4	3.0	4.7	5.7	2.9	1.7	0.37	1.2	0.63	0.24
10	0.26	0.17	16	2.6	10	5.1	2.8	1.6	0.36	8.7	0.71	0.17
11	0.31	0.29	4.6	2.6	5.6	5.0	2.6	1.5	1.4	1.8	0.67	0.09
12	0.34	59	2.7	2.6	6.5	4.5	8.8	1.1	0.69	0.83	0.65	0.05
13	0.39	6.3	2.0	2.5	4.4	2.8	49	0.67	0.48	0.21	0.68	0.05
14	4.5	3.0	1.9	2.6	3.7	3.0	19	0.69	0.30	0.07	0.61	0.20
15	0.65	4.3	1.7	2.5	3.0	2.8	4.1	5.2	0.32	0.04	0.57	0.07
16	0.26	2.9	7.9	2.3	e2.9	6.3	3.2	1.4	0.41	0.03	0.36	0.07
17	0.26	2.4	4.4	3.5	2.5	4.4	2.8	0.72	1.3	0.04	0.09	7.8
18	0.26	18	2.6	20	2.5	5.1	2.6	0.81	2.2	0.09	0.07	0.30
19	0.20	11	2.2	3.7	2.7	6.5	2.5	10	0.39	0.21	0.28	0.23
20	0.19	3.5	1.8	e3.1	5.9	5.3	2.4	1.4	0.20	0.04	0.29	0.22
21	0.22	2.6	1.7	2.6	4.5	4.6	3.5	0.64	0.17	0.01	0.43	0.14
22	0.23	1.7	2.8	2.4	2.2	3.5	5.4	0.51	0.16	13	0.08	0.05
23	0.26	1.1	21	e3.8	1.9	3.1	3.2	0.43	0.13	0.94	0.04	0.04
24	0.27	5.6	11	2.3	1.9	3.1	1.7	0.36	0.11	0.21	0.04	0.04
25	0.30	1.7	3.9	2.1	1.6	2.9	2.3	0.38	0.11	0.14	0.05	0.05
26	2.6	1.2	3.1	3.1	1.4	2.9	1.6	5.3	0.12	6.0	0.84	0.05
27	0.59	32	2.8	e4.0	1.2	3.0	1.2	19	0.09	0.92	0.12	0.06
28	0.34	41	2.6	e2.7	1.1	2.7	1.0	4.6	0.09	0.34	1.6	0.06
29	0.56	6.0	9.0	2.3	1.1	10	0.95	1.5	0.10	0.20	0.38	0.06
30	0.29	3.7	20	2.1	---	32	5.7	3.1	0.08	23	0.13	0.06
31	0.24	---	4.0	e2.2	---	17	---	23	---	76	0.06	---
TOTAL	16.12	209.38	155.1	347.0	232.7	247.3	173.95	176.61	17.06	135.11	27.66	13.63
MEAN	0.52	6.98	5.00	11.2	8.02	7.98	5.80	5.70	0.57	4.36	0.89	0.45
MAX	4.5	59	21	144	65	48	49	65	2.2	76	11	7.8
MIN	0.18	0.16	1.4	2.1	1.1	2.0	0.95	0.36	0.08	0.01	0.04	0.02

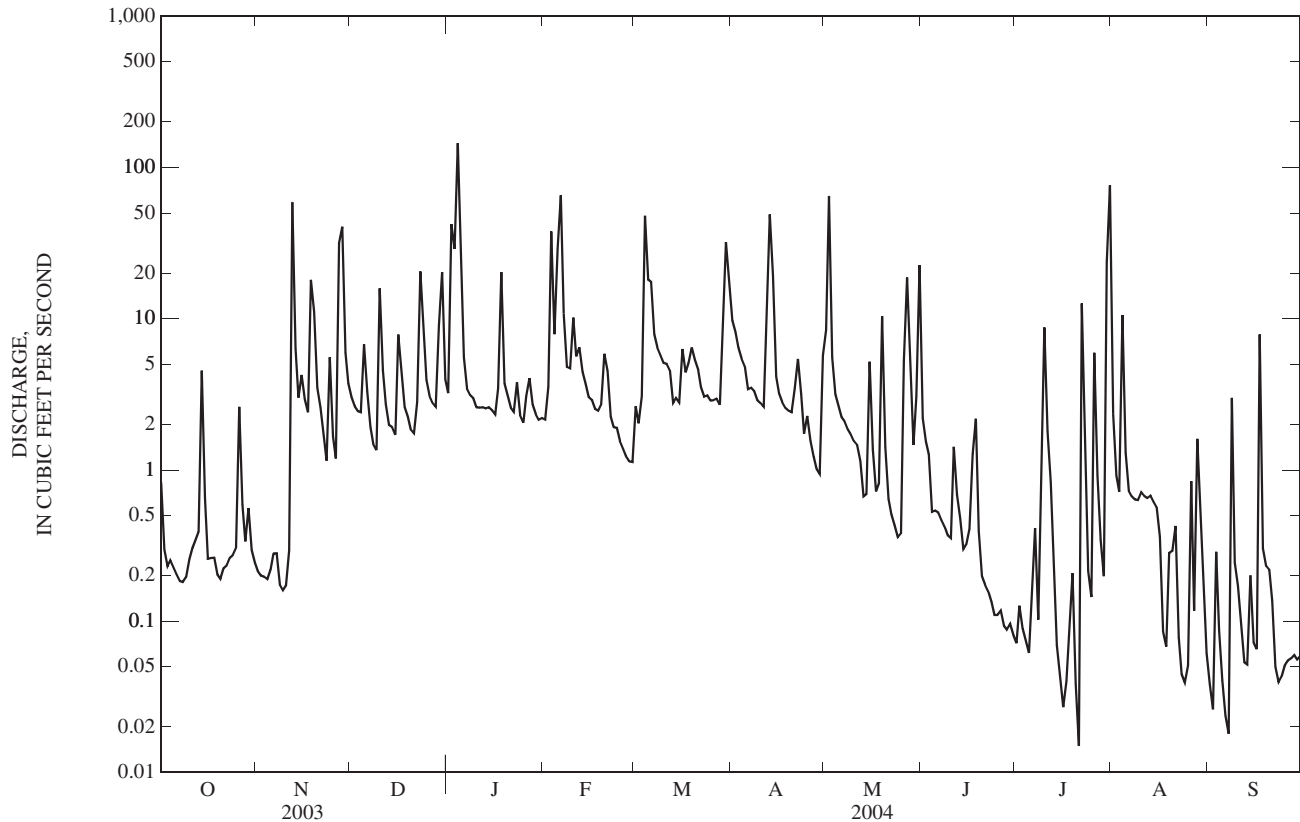
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	3.14	5.50	7.55	6.54	7.16	7.31	5.42	8.30	4.01	2.31	2.81	1.77
MAX	5.86	6.98	10.1	11.2	10.9	7.98	11.1	15.6	6.29	4.36	8.13	2.92
(WY)	(2002)	(2004)	(2003)	(2004)	(2003)	(2004)	(2002)	(2002)	(2002)	(2004)	(2001)	(2003)
MIN	0.52	3.62	5.00	3.57	2.58	6.72	1.17	1.78	0.57	1.23	0.05	0.45
(WY)	(2004)	(2003)	(2004)	(2002)	(2002)	(2002)	(2001)	(2001)	(2004)	(2003)	(2002)	(2004)

03238772 FOURMILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	1,820.17		1,751.62		5.32	
ANNUAL MEAN	4.99		4.79		5.83	
HIGHEST ANNUAL MEAN					4.79	
LOWEST ANNUAL MEAN					170	
HIGHEST DAILY MEAN	113	Feb 22	144	Jan 4	170	Aug 12, 2001
LOWEST DAILY MEAN	0.15	Sep 13	0.01	Jul 21	0.00	Jun 26, 2001
ANNUAL SEVEN-DAY MINIMUM	0.16	Sep 13	0.05	Sep 22	0.00	Aug 8, 2002
MAXIMUM PEAK FLOW			303	Jul 31	520	Apr 21, 2002
MAXIMUM PEAK STAGE			5.13	Jul 31	7.18	Apr 21, 2002
10 PERCENT EXCEEDS	11		9.2		11	
50 PERCENT EXCEEDS	1.8		1.7		2.0	
90 PERCENT EXCEEDS	0.21		0.09		0.16	

e Estimated



03238772 FOUR MILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2001 to current water year.

pH: April 2001 to current water year.

WATER TEMPERATURES: April 2001 to current water year.

DISSOLVED OXYGEN: April 2001 to current water year.

TURBIDITY: April 2001 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated excellent except the following periods: Oct. 1-20, Jan. 19-23, Feb. 20-Mar. 3, Jul. 9-14 rated good; Mar. 3-15 rated poor.

pH: Records rated excellent except the following periods: Nov. 1-4, Mar. 26-Apr. 1, Jul. 8-Sept. 24, rated good; Nov. 7-24; Dec. 15-22, Apr. 2-22 rated fair; Apr. 23-27 rated poor.

WATER TEMPERATURES: Records rated excellent except the following periods: Oct. 28-30, Apr. 7-9 rated good; Feb. 23-24 rated fair; Feb. 25-Mar. 7 rated poor.

DISSOLVED OXYGEN: Records rated good except the following periods: Oct. 23-Dec. 17, Feb. 26-Mar. 8, May 5-Jun. 3, Aug. 17-Sept. 23 rated poor; Jan. 9-22, Feb. 21-25, Mar. 25-Apr. 12, Jun. 24-30, Jul. 6-15, Aug. 5-16 rated fair.

TURBIDITY: Records rated fair except for Oct. 1, Nov. 30, Dec. 19-22, Jan. 7-9, Jan. 18, Sept. 21-25 rated poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2650 microsiemens, Feb. 10, 2003; minimum recorded, 82 microsiemens, Apr. 21, 2002.

pH.--Maximum recorded, 8.5 units, Mar. 24, 30, Apr. 1-5, 2002, Mar. 14, 15, 2003 and Mar. 16-19, 21, 2004; minimum recorded, 6.8 units, Jul. 18, 2004.

WATER TEMPERATURES: Maximum recorded, 26.9°C, July 5, 2002; minimum recorded, -0.3°C, Jan. 28, and Feb. 2, 3, 2004.

DISSOLVED OXYGEN: Maximum recorded, 18.0 mg/L, Feb. 24, 2002; minimum recorded 1.7 mg/L, Aug. 19, 2002.

TURBIDITY: Maximum recorded, 2600 NTU, Jul. 30, 31, 2004; minimum recorded, 0.0 NTU, Jan. 21-23, and Dec. 9, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2370 microsiemens, Dec. 19, 2003; minimum recorded, 128 microsiemens, Jan. 4, 2004.

pH.--Maximum recorded, 8.5 units, Mar. 16-19, 21, 2004; minimum recorded, 6.8 units, July 18, 2004.

WATER TEMPERATURES: Maximum recorded, 25.3°C, July 13, 2004; minimum recorded, -0.3°C, Jan. 28, and Feb. 2, 3, 2004.

DISSOLVED OXYGEN: Maximum recorded, 17.8 mg/L, Feb. 26, 2004; minimum recorded 2.9 mg/L, Sept. 7, 2004.

TURBIDITY: Maximum recorded, 2600 NTU, Jul. 30, 31, 2004, minimum recorded, 3.0 NTU, Nov. 1-2, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	786	676	754	864	853	859	605	598	601	721	676	698
2	758	748	752	872	861	867	599	589	594	763	170	421
3	778	750	765	875	865	870	600	594	598	648	190	548
4	810	776	792	882	869	875	618	599	607	299	128	197
5	824	802	815	---	---	---	713	466	585	541	150	386
6	839	821	829	---	---	---	603	480	559	610	539	587
7	863	831	843	892	857	876	688	603	643	616	595	605
8	872	852	860	880	856	865	728	688	709	715	590	609
9	875	863	867	872	848	860	750	727	738	1,050	645	813
10	878	867	872	862	846	855	778	323	566	992	769	873
11	888	868	874	885	846	868	563	390	501	769	663	689
12	896	876	886	906	169	389	609	563	588	668	647	659
13	895	876	886	550	373	495	679	609	637	666	653	658
14	891	503	764	560	550	558	1,630	679	974	653	625	635
15	656	505	597	631	552	591	1,650	1,250	1,440	639	601	619
16	725	656	699	591	579	584	1,520	604	1,140	602	583	590
17	776	696	748	594	586	591	675	599	643	1,390	578	714
18	833	776	807	967	233	534	1,440	675	819	1,490	526	788
19	844	829	837	523	307	462	2,370	1,410	1,850	615	577	604
20	861	836	845	591	523	565	2,230	1,830	2,030	636	598	613
21	872	849	866	617	591	607	2,160	1,760	2,020	622	606	613
22	872	859	866	691	617	648	1,760	1,100	1,380	617	611	614
23	873	753	867	773	691	741	1,360	455	948	617	584	599
24	881	866	873	814	484	612	717	470	631	599	573	585
25	879	851	870	661	539	606	739	710	725	586	568	578
26	928	518	768	719	661	693	751	727	736	1,060	561	682
27	716	599	659	736	181	498	734	723	730	2,340	1,020	1,850
28	772	716	750	430	233	332	734	727	730	1,800	1,040	1,530
29	857	772	828	572	421	508	1,150	505	789	1,130	876	962
30	853	822	844	603	572	592	610	320	480	995	848	906
31	855	842	849	---	---	---	677	402	646	958	783	865
MONTH	928	503	811	967	169	657	2,370	320	859	2,340	128	713

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	835	704	779	1,110	827	914	678	595	636	758	385	686
2	1,920	709	889	1,120	868	973	733	654	698	477	210	322
3	2,270	539	816	926	853	885	711	662	694	647	477	577
4	938	717	778	985	375	511	724	675	705	684	647	672
5	1,150	315	732	782	607	666	731	684	711	701	652	684
6	457	294	365	648	520	558	804	697	766	692	640	673
7	867	457	626	721	571	698	816	753	786	680	627	661
8	941	853	887	735	704	724	825	750	795	663	616	646
9	980	830	888	744	719	740	813	751	786	664	612	644
10	839	556	745	745	740	742	803	758	784	662	613	644
11	668	558	634	747	743	745	821	756	791	674	615	654
12	708	571	651	753	747	750	837	558	748	687	628	667
13	651	569	615	807	753	782	708	194	483	829	684	735
14	666	640	653	811	807	809	580	294	463	847	791	813
15	669	630	659	813	776	802	665	580	636	847	476	683
16	669	629	651	1,300	755	965	694	649	674	733	602	682
17	653	636	647	1,310	846	1,060	730	654	688	809	733	772
18	678	646	663	911	754	837	699	645	675	817	771	797
19	745	662	696	885	707	754	703	653	688	805	350	540
20	787	661	726	813	709	763	718	685	707	720	613	681
21	798	676	722	837	747	791	754	705	731	801	697	751
22	749	695	734	780	746	767	786	607	720	816	630	795
23	786	742	770	804	738	777	756	599	682	827	799	813
24	816	764	800	811	750	784	798	756	782	842	804	820
25	819	791	808	804	746	777	844	769	800	843	789	827
26	830	789	813	812	745	783	798	767	786	808	420	583
27	839	791	822	824	765	798	824	752	798	544	328	434
28	849	810	834	836	776	807	823	783	805	601	525	565
29	858	820	841	885	452	791	824	776	801	640	592	625
30	---	---	---	570	359	460	812	521	672	688	552	636
31	---	---	---	617	506	564	---	---	---	605	213	429
MONTH	2,270	294	733	1,310	359	767	844	194	716	847	210	662
JUNE			JULY			AUGUST			SEPTEMBER			
1	628	542	591	865	763	803	620	438	549	762	704	727
2	654	611	640	888	815	846	630	611	619	829	749	772
3	669	635	647	839	788	819	622	594	608	1,130	749	837
4	732	669	698	817	771	793	915	287	510	819	793	811
5	786	731	774	800	748	775	585	471	558	819	792	807
6	817	782	797	941	445	750	583	570	579	842	808	821
7	822	792	805	828	733	791	587	561	578	989	824	845
8	824	799	812	733	645	703	587	565	577	907	447	617
9	825	798	813	737	440	608	578	562	570	618	496	568
10	831	812	822	850	272	457	578	559	569	680	617	653
11	833	642	771	695	365	532	578	563	570	740	674	710
12	709	633	663	644	613	624	564	551	557	760	722	736
13	791	709	773	921	581	633	551	539	543	802	725	762
14	800	787	793	723	644	675	572	546	559	837	712	775
15	815	791	804	771	723	741	549	538	544	839	815	823
16	816	794	808	805	164	735	659	538	583	863	815	830
17	815	685	803	825	777	798	726	651	692	1,090	381	583
18	685	361	496	890	763	804	783	688	738	620	493	568
19	730	579	656	818	768	792	1,310	557	794	649	618	638
20	767	724	755	841	817	828	1,120	734	878	643	608	621
21	780	752	765	877	824	845	781	718	753	655	612	622
22	794	773	785	967	205	494	756	716	735	691	655	667
23	804	780	793	590	471	526	797	729	752	723	681	696
24	814	781	799	621	590	605	815	748	780	754	710	724
25	836	782	815	681	617	637	823	776	796	823	737	764
26	836	807	828	803	386	529	1,130	601	746	842	771	798
27	852	806	831	671	544	618	643	579	606	843	785	813
28	848	814	832	745	671	713	954	476	653	861	840	848
29	861	810	838	768	738	754	537	398	465	874	833	862
30	821	787	806	878	235	611	646	530	594	887	865	875
31	---	---	---	438	151	312	711	645	672	---	---	---
MONTH	861	361	760	967	151	682	1,310	287	636	1,130	381	739
YEAR	2,370	128	728									

FOUR MILE CREEK BASIN

03238772 FOUR MILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	7.8	7.4	7.2	8.0	7.8	8.0	7.7	8.1	7.7	8.0	7.7
2	7.9	7.8	7.3	7.1	8.1	7.9	7.8	7.5	8.1	7.7	8.2	7.6
3	7.8	7.7	7.2	7.0	8.1	7.9	7.7	7.5	7.7	7.6	8.2	7.7
4	7.8	7.7	7.2	7.0	8.1	7.9	7.5	7.4	8.0	7.6	7.8	7.6
5	7.8	7.7	---	---	8.0	7.8	7.5	7.4	8.0	7.6	8.2	7.6
6	7.8	7.7	---	---	8.1	7.8	7.6	7.4	7.7	7.6	7.7	7.6
7	7.9	7.7	7.3	7.1	7.9	7.8	7.7	7.6	7.9	7.6	8.2	7.6
8	7.9	7.7	7.4	7.3	7.9	7.8	7.8	7.6	8.1	7.7	8.4	7.8
9	7.9	7.7	7.4	7.3	7.9	7.8	7.8	7.7	8.1	7.8	8.1	7.8
10	7.9	7.7	7.5	7.4	7.9	7.6	7.8	7.7	8.1	7.7	7.9	7.9
11	7.7	7.6	7.6	7.5	7.8	7.6	7.8	7.7	8.3	7.7	7.9	7.9
12	7.6	7.5	7.8	7.3	8.0	7.8	7.8	7.7	8.2	7.8	7.9	7.9
13	7.5	7.4	7.5	7.3	8.0	7.9	7.8	7.7	8.2	7.8	7.9	7.9
14	7.8	7.4	7.6	7.4	7.9	7.8	7.9	7.7	8.3	7.8	7.9	7.9
15	7.6	7.4	7.7	7.5	7.9	7.8	7.9	7.7	8.3	7.9	8.4	7.9
16	7.6	7.5	7.6	7.5	7.9	7.6	7.9	7.7	8.3	7.9	8.5	8.1
17	7.6	7.5	7.7	7.6	7.8	7.6	7.8	7.7	8.3	7.9	8.5	7.9
18	7.7	7.5	7.8	7.6	7.9	7.7	7.7	7.5	8.3	7.8	8.5	8.0
19	7.8	7.6	7.8	7.5	7.9	7.7	7.8	7.5	8.3	7.8	8.5	8.0
20	8.0	7.7	7.8	7.6	7.9	7.8	7.9	7.6	8.1	7.8	8.4	7.9
21	7.9	7.8	7.9	7.7	7.9	7.7	7.9	7.7	8.2	7.7	8.5	7.8
22	7.8	7.7	7.9	7.7	7.9	7.8	7.9	7.7	8.3	7.7	8.4	7.9
23	7.8	7.7	7.9	7.8	7.8	7.5	8.0	7.7	8.2	7.7	8.3	7.9
24	7.8	7.7	7.9	7.8	7.7	7.5	8.1	7.8	8.1	7.7	8.3	7.8
25	7.9	7.7	8.0	7.5	7.9	7.6	8.0	7.8	8.1	7.8	8.2	7.7
26	8.0	7.8	8.1	8.0	7.9	7.7	8.0	7.7	8.1	7.8	8.1	7.7
27	7.8	7.7	8.0	7.7	8.0	7.8	8.0	7.7	8.1	7.8	8.0	7.7
28	7.8	7.7	7.9	7.7	8.0	7.8	8.1	7.7	8.1	7.8	8.0	7.6
29	8.0	7.8	7.9	7.7	7.9	7.7	8.1	7.8	8.0	7.8	7.9	7.6
30	8.1	7.9	8.0	7.8	7.7	7.5	8.1	7.8	---	---	7.8	7.6
31	7.9	7.4	---	---	7.9	7.6	8.0	7.7	---	---	7.8	7.5
MONTH	8.1	7.4	8.1	7.0	8.1	7.5	8.1	7.4	8.3	7.6	8.5	7.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.2	7.5	8.1	7.7	8.1	7.8	7.6	7.5	7.4	7.3	7.3	7.2
2	8.2	7.6	7.7	7.6	8.0	7.8	7.6	7.5	7.4	7.3	7.3	7.2
3	8.3	7.5	8.2	7.7	8.1	7.9	7.5	7.4	7.5	7.3	7.6	7.2
4	8.3	7.5	8.3	7.8	8.0	7.8	7.6	7.4	7.5	7.3	7.5	7.3
5	8.2	7.5	8.3	7.8	8.0	7.8	7.5	7.4	7.5	7.2	7.4	7.3
6	8.0	7.5	8.3	7.8	8.0	7.8	7.5	7.4	7.6	7.3	7.3	7.2
7	8.0	7.5	8.3	7.8	8.0	7.8	7.6	7.4	7.7	7.4	7.2	7.1
8	7.9	7.4	8.3	7.7	7.9	7.8	7.5	7.3	7.7	7.3	7.8	7.2
9	7.9	7.5	8.2	7.7	7.8	7.7	7.5	7.3	7.7	7.4	7.4	7.3
10	7.9	7.5	8.2	7.7	7.8	7.7	7.5	7.1	7.5	7.4	7.6	7.3
11	7.8	7.5	8.2	7.7	7.9	7.7	7.5	7.3	7.7	7.3	7.4	7.4
12	7.7	7.4	8.1	7.7	7.8	7.6	7.5	7.3	7.7	7.5	7.4	7.3
13	7.6	7.3	8.0	7.7	7.8	7.6	7.5	7.2	7.6	7.5	7.4	7.3
14	7.8	7.3	7.8	7.7	7.8	7.7	7.3	7.2	7.6	7.5	7.5	7.3
15	8.1	7.3	7.9	7.8	7.7	7.6	7.3	7.1	7.6	7.5	7.4	7.3
16	8.2	7.4	7.9	7.8	7.8	7.6	7.2	7.1	7.6	7.5	7.3	7.2
17	8.2	7.4	7.9	7.8	7.8	7.6	7.1	7.0	7.5	7.3	7.7	7.3
18	8.2	7.4	7.9	7.7	7.8	7.6	7.2	6.8	7.3	7.2	7.5	7.3
19	8.1	7.5	8.0	7.7	7.8	7.6	7.3	7.0	7.4	7.2	7.6	7.4
20	8.1	7.5	7.9	7.8	7.8	7.6	7.3	7.0	7.3	7.2	7.6	7.5
21	7.9	7.5	7.9	7.7	7.8	7.7	7.2	6.9	7.4	7.2	7.6	7.5
22	7.9	7.5	7.8	7.7	7.8	7.7	7.4	7.1	7.3	7.2	7.5	7.4
23	7.8	7.4	7.8	7.7	7.8	7.6	7.3	7.2	7.2	7.1	7.4	7.3
24	7.9	7.5	7.7	7.7	7.7	7.6	7.3	7.2	7.2	7.1	7.3	7.3
25	7.8	7.4	7.8	7.7	7.7	7.7	7.3	7.0	7.2	7.1	7.4	7.3
26	7.9	7.5	8.0	7.6	7.8	7.6	7.5	7.1	7.5	7.1	7.4	7.3
27	7.8	7.5	7.8	7.6	7.8	7.7	7.4	7.3	7.3	7.0	7.3	7.3
28	8.0	7.6	7.9	7.7	7.8	7.7	7.5	7.2	7.5	7.0	7.3	7.3
29	8.0	7.7	8.0	7.7	7.8	7.7	7.5	7.2	7.5	7.0	7.3	7.2
30	7.9	7.7	8.0	7.8	7.7	7.5	7.5	7.1	7.3	7.0	7.3	7.3
31	---	---	7.9	7.7	---	---	7.4	7.2	7.3	7.2	---	---
MONTH	8.3	7.3	8.3	7.6	8.1	7.5	7.6	6.8	7.7	7.0	7.8	7.1
YEAR	8.5	6.8										

03238772 FOUR MILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.5	11.7	12.5	15.9	13.8	14.6	5.9	4.1	5.1	4.4	1.3	2.6
2	12.5	10.4	11.2	17.2	14.2	15.4	4.1	1.8	3.1	8.0	4.4	6.5
3	11.3	8.6	9.9	16.4	13.5	14.8	3.7	3.1	3.4	11.6	8.0	9.7
4	13.1	11.0	11.8	15.9	12.7	14.2	4.8	3.3	3.9	10.3	7.1	8.1
5	13.9	11.0	12.2	---	---	---	6.2	4.8	5.5	7.6	5.0	6.4
6	14.3	12.0	13.1	---	---	---	5.8	5.0	5.4	5.0	0.4	2.7
7	14.4	11.7	12.8	12.0	9.1	10.5	5.3	3.8	4.6	1.1	0.0	0.5
8	14.9	12.0	13.2	9.1	7.0	7.9	4.7	2.6	3.7	1.6	0.1	0.8
9	15.2	12.7	13.8	7.0	5.4	6.3	6.6	4.7	5.8	2.1	0.8	1.6
10	16.4	14.7	15.4	7.9	5.2	6.5	8.2	6.6	7.3	0.8	-0.2	0.3
11	17.5	15.1	16.0	11.3	7.9	9.5	7.1	4.2	5.6	2.1	0.1	0.9
12	17.0	15.6	16.4	14.8	10.7	13.1	4.2	2.2	3.0	2.9	1.3	2.0
13	15.6	13.2	14.3	12.3	7.0	9.1	2.2	1.0	1.4	2.8	1.1	2.1
14	15.0	13.7	14.2	7.5	4.9	6.3	2.1	1.2	1.6	3.5	0.2	1.8
15	14.5	12.0	13.2	8.1	7.0	7.5	2.7	1.8	2.2	3.4	1.1	1.9
16	14.1	10.7	12.4	9.7	8.1	8.8	5.1	1.7	3.0	2.3	0.4	1.2
17	13.6	12.2	13.0	9.8	7.4	8.7	4.7	1.9	3.2	2.6	0.7	1.5
18	13.3	10.6	11.8	12.7	9.4	10.7	1.9	1.1	1.5	3.2	1.3	2.5
19	13.5	10.6	11.9	12.8	10.4	12.1	1.7	1.2	1.4	1.3	0.3	0.7
20	14.7	11.0	12.7	10.7	8.0	9.4	1.7	0.4	0.9	0.6	-0.2	0.2
21	15.1	13.5	14.2	10.4	7.3	9.0	1.3	0.1	0.6	1.4	-0.1	0.5
22	14.4	11.7	12.8	11.2	7.9	9.5	3.6	0.6	1.6	1.9	0.1	0.8
23	11.8	10.6	11.2	12.6	10.1	11.2	5.7	3.6	4.7	0.2	-0.2	-0.1
24	10.9	8.8	9.9	12.1	5.8	9.4	4.7	3.0	3.9	1.2	-0.1	0.4
25	13.7	9.5	11.2	5.8	3.8	4.7	3.0	1.5	2.4	0.3	-0.2	-0.2
26	13.3	11.9	12.4	6.5	4.5	5.4	1.9	0.1	1.1	-0.1	-0.2	-0.1
27	11.9	10.1	10.8	9.0	6.4	7.8	2.1	0.1	1.1	0.3	-0.1	0.1
28	10.1	8.8	9.5	9.0	5.9	7.8	3.6	0.4	1.9	0.2	-0.3	-0.1
29	10.9	9.1	10.0	5.9	4.7	5.2	5.5	2.6	3.9	0.4	-0.2	0.1
30	13.4	9.2	11.1	6.7	3.9	5.2	5.4	3.0	4.3	0.1	-0.2	-0.1
31	14.9	11.5	13.1	---	---	---	4.2	1.3	2.7	0.0	-0.2	-0.2
MONTH	17.5	8.6	12.5	17.2	3.8	9.3	8.2	0.1	3.2	11.6	-0.3	1.8
FEBRUARY			MARCH			APRIL			MAY			
1	0.1	-0.2	-0.1	9.5	7.7	8.3	9.3	7.8	8.5	18.6	14.4	16.0
2	0.1	-0.3	-0.1	12.3	8.3	10.1	10.0	7.4	8.6	16.0	11.3	13.1
3	0.1	-0.3	-0.1	10.9	7.7	8.6	13.8	7.0	10.1	14.5	9.4	11.6
4	1.6	0.1	0.6	10.8	8.5	9.5	11.2	7.3	9.1	14.6	8.8	11.6
5	1.3	0.2	0.8	15.3	10.0	12.2	11.5	5.1	8.1	18.4	11.8	14.6
6	2.2	0.9	1.6	12.9	11.2	11.4	12.7	5.7	9.0	20.2	12.6	16.0
7	1.9	1.0	1.4	---	---	---	14.8	9.7	12.2	19.4	14.7	17.1
8	2.6	0.2	1.1	---	---	---	16.8	12.3	14.3	20.7	14.5	17.5
9	2.7	-0.2	1.1	---	---	---	14.9	10.7	13.0	21.6	15.7	18.5
10	4.2	0.9	2.2	---	---	---	15.9	11.1	13.3	21.6	16.7	19.1
11	3.5	-0.1	1.5	---	---	---	14.5	12.0	13.4	21.7	17.6	19.6
12	4.3	1.8	2.6	---	---	---	13.0	8.6	10.3	21.7	18.0	19.9
13	2.0	0.7	1.4	---	---	---	8.6	7.2	7.7	20.9	18.9	19.9
14	3.4	-0.2	1.2	---	---	---	13.7	6.6	9.5	20.7	19.4	20.0
15	2.7	0.2	1.3	7.9	5.0	6.0	15.4	7.0	10.7	20.0	16.0	17.5
16	1.5	-0.2	0.7	7.4	3.7	4.9	17.3	9.0	12.7	18.1	15.6	16.5
17	3.1	-0.1	1.3	4.8	3.1	4.0	19.0	10.8	14.6	20.1	16.0	17.6
18	3.5	0.0	1.5	7.0	3.9	5.2	20.2	12.9	16.4	21.4	18.2	19.6
19	5.5	0.5	2.8	8.1	4.4	6.1	18.5	14.8	16.2	21.3	18.2	19.7
20	5.6	2.8	4.1	10.8	4.9	7.6	17.1	14.2	15.7	22.1	19.4	20.6
21	4.6	3.6	3.9	9.6	4.3	6.5	16.5	14.4	15.2	23.2	20.8	21.9
22	6.0	3.0	4.3	6.6	2.0	4.1	14.9	13.7	14.2	23.6	21.0	22.2
23	5.8	2.3	4.2	7.2	2.1	4.7	14.2	13.1	13.7	23.6	21.2	22.3
24	5.8	4.9	5.3	10.2	6.1	7.9	16.5	11.7	13.9	23.1	21.7	22.3
25	6.3	2.7	4.5	13.0	9.3	11.0	17.1	14.0	15.4	22.7	20.6	21.5
26	6.5	3.4	4.9	13.6	11.2	12.3	17.0	13.8	15.6	21.9	19.3	19.9
27	7.7	3.6	5.4	15.3	12.5	13.8	15.5	11.4	12.9	21.4	17.8	19.4
28	7.6	3.4	5.3	16.9	12.2	14.5	15.4	9.3	12.1	21.3	18.5	19.7
29	8.6	4.3	6.2	15.4	10.3	13.2	17.4	12.2	14.5	21.0	17.3	19.0
30	---	---	---	12.4	9.7	10.8	16.3	14.1	15.0	20.4	18.4	19.1
31	---	---	---	10.7	8.5	9.4	---	---	---	21.0	18.0	19.3
MONTH	8.6	-0.3	2.4	16.9	2.0	8.8	20.2	5.1	12.5	23.6	8.8	18.5

03238772 FOUR MILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	6.3	4.3	5.4	---	---	---	14.8	11.8	13.3
2	---	---	---	5.2	3.8	4.5	---	---	---	12.4	10.1	11.2
3	---	---	---	4.1	3.2	3.8	15.6	11.5	14.8	10.4	9.2	9.9
4	---	---	---	3.8	3.2	3.5	14.9	13.9	14.5	11.6	10.4	10.9
5	---	---	---	---	---	---	13.9	12.5	13.3	11.4	10.3	10.8
6	---	---	---	---	---	---	14.3	12.3	13.5	13.5	10.9	12.3
7	---	---	---	5.3	3.3	4.3	14.6	12.9	13.8	13.9	13.2	13.7
8	---	---	---	6.4	5.3	5.9	14.8	12.5	14.1	13.8	12.6	13.3
9	---	---	---	7.3	6.4	7.0	14.2	12.3	13.0	13.2	12.5	12.8
10	---	---	---	7.9	7.2	7.6	12.7	11.8	12.3	14.3	13.0	13.7
11	---	---	---	8.2	7.3	7.7	13.7	11.9	12.9	13.7	12.1	13.3
12	---	---	---	10.5	7.6	9.3	15.7	12.8	14.6	12.7	10.2	12.5
13	---	---	---	9.6	8.7	9.3	16.2	14.5	15.5	13.0	10.5	12.5
14	---	---	---	10.4	9.5	10.0	15.9	12.7	15.3	13.4	10.0	12.6
15	---	---	---	9.9	9.2	9.6	15.6	13.9	15.0	13.5	11.2	12.5
16	---	---	---	9.2	8.9	9.1	15.3	12.7	14.1	13.6	12.6	13.1
17	---	---	---	10.4	8.9	9.9	14.6	12.7	13.8	13.1	11.6	12.6
18	---	---	---	10.7	9.2	9.8	15.6	13.9	14.8	12.2	11.5	11.8
19	---	---	---	10.2	9.2	9.5	15.6	13.7	14.7	13.7	12.2	13.0
20	---	---	---	10.0	9.3	9.7	16.1	14.1	15.2	14.3	12.9	13.6
21	---	---	---	10.3	9.4	10.0	16.0	14.5	15.4	13.9	12.4	13.3
22	---	---	---	---	---	---	15.2	12.9	14.5	13.5	12.0	12.9
23	5.3	4.9	5.1	---	---	---	13.2	11.8	12.8	15.8	13.2	14.3
24	5.9	5.3	5.6	---	---	---	13.6	12.2	13.1	14.4	13.0	13.8
25	6.1	4.0	5.4	---	---	---	15.5	13.0	14.2	14.4	13.4	13.9
26	8.3	4.7	6.4	---	---	---	16.4	13.9	15.1	14.4	12.9	13.5
27	6.7	6.0	6.3	---	---	---	16.1	12.7	14.9	14.2	12.5	13.3
28	7.6	6.3	7.0	---	---	---	15.0	12.7	14.1	15.2	13.0	14.0
29	8.0	7.0	7.5	---	---	---	13.3	11.6	12.5	14.9	13.1	13.9
30	7.6	5.5	6.7	---	---	---	13.0	11.5	12.3	15.3	13.0	14.1
31	7.0	5.9	6.4	---	---	---	14.5	3.1	13.1	15.7	13.2	14.3
MONTH	8.3	4.0	6.3	10.7	3.2	7.7	16.4	3.1	14.0	15.8	9.2	12.9
FEBRUARY			MARCH			APRIL			MAY			
1	15.9	13.1	14.3	14.7	10.6	12.4	12.5	8.9	10.1	9.4	6.8	7.6
2	15.4	13.1	13.9	16.7	10.2	12.9	13.0	8.7	10.2	9.4	7.4	8.7
3	13.8	13.0	13.5	15.9	10.3	12.4	14.4	8.0	10.7	10.2	8.0	9.1
4	14.6	12.8	13.5	12.3	10.9	11.7	14.8	7.9	10.8	10.5	7.4	9.0
5	14.1	12.6	13.3	12.4	10.1	11.1	15.4	8.8	11.6	10.2	7.0	8.3
6	13.4	12.6	13.0	10.8	10.5	10.8	15.4	8.6	11.5	10.3	6.6	7.9
7	13.7	12.3	13.0	14.3	10.8	12.7	14.3	7.4	10.7	9.8	6.0	7.6
8	14.5	12.8	13.5	16.0	11.5	13.4	12.5	6.2	9.1	9.7	6.2	7.8
9	14.2	12.2	13.4	---	---	---	11.8	6.4	9.0	10.6	6.2	8.0
10	14.0	11.7	12.8	---	---	---	11.0	6.4	8.8	9.7	6.4	7.8
11	14.4	11.0	13.2	---	---	---	9.9	6.1	8.1	9.1	6.1	7.4
12	14.0	11.9	12.6	---	---	---	9.4	6.8	8.0	7.8	5.9	6.8
13	14.9	12.2	13.4	---	---	---	10.8	8.1	9.1	6.6	5.4	6.0
14	15.3	11.9	13.7	---	---	---	10.3	7.7	9.4	6.4	5.4	5.9
15	15.3	12.2	13.6	16.5	14.2	14.9	11.2	7.2	9.2	8.3	6.0	7.3
16	16.2	12.7	14.3	14.5	9.9	12.4	11.9	6.8	8.9	7.6	6.9	7.3
17	16.2	12.7	14.1	16.1	10.8	12.9	12.4	6.3	8.6	7.5	6.6	7.0
18	16.4	12.6	14.1	16.4	10.1	12.5	12.5	5.6	8.2	6.7	5.8	6.2
19	16.0	11.3	13.6	16.3	10.2	12.6	10.2	5.4	7.4	8.3	5.9	7.4
20	14.2	11.4	12.2	15.9	8.7	11.9	10.5	5.7	7.6	7.6	6.1	6.7
21	14.5	11.3	12.7	15.8	8.6	11.8	9.0	5.7	7.0	6.9	5.5	6.2
22	17.0	11.6	13.9	17.2	10.9	13.8	9.2	6.5	7.5	6.3	5.2	5.6
23	17.6	11.7	14.2	16.5	10.9	13.7	9.6	7.6	8.3	5.5	4.8	5.1
24	15.8	11.0	13.2	15.1	9.7	12.5	11.8	7.4	9.2	5.1	4.3	4.7
25	17.3	11.8	14.3	14.0	8.7	11.4	10.1	6.3	7.9	5.8	4.0	4.6
26	17.8	11.6	14.7	11.8	7.8	10.1	11.7	6.7	8.7	6.8	5.0	6.1
27	17.3	10.0	14.7	11.1	6.8	9.1	11.5	6.9	8.9	8.8	5.9	8.0
28	17.4	12.5	14.8	11.3	6.7	9.1	12.7	7.9	10.0	7.9	6.7	7.5
29	17.2	12.3	14.7	9.8	6.6	8.0	11.9	7.9	9.7	8.5	6.8	7.4
30	---	---	---	9.8	8.4	9.1	9.7	7.2	8.0	7.5	6.3	7.1
31	---	---	---	9.7	8.7	9.1	---	---	---	8.5	6.6	7.4
MONTH	17.8	10.0	13.7	17.2	6.6	11.7	15.4	5.4	9.1	10.6	4.0	7.1

03238772 FOUR MILE CREEK AT POPLAR RIDGE ROAD NEAR ALEXANDRIA, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	73	31	49	6.0	3.0	4.7	---	---	---	33	19	26
2	---	---	---	14	3.0	4.5	---	---	---	990	26	250
3	---	---	---	12	5.0	7.2	---	---	---	990	47	160
4	---	---	---	130	12	29	---	---	---	990	160	340
5	---	---	---	---	---	---	---	---	---	330	80	120
6	---	---	---	---	---	---	---	---	---	80	56	64
7	---	---	---	640	340	490	---	---	---	63	49	56
8	52	5.0	11	790	260	510	---	---	---	52	42	46
9	36	7.0	25	420	69	230	---	---	---	48	39	43
10	120	9.0	27	180	68	110	---	---	---	---	---	---
11	270	19	47	140	86	110	---	---	---	---	---	---
12	200	43	74	1,000	89	390	---	---	---	---	---	---
13	230	100	180	180	75	110	---	---	---	---	---	---
14	600	39	250	81	45	59	---	---	---	---	---	---
15	310	48	100	72	48	60	---	---	---	---	---	---
16	50	27	36	70	48	58	---	---	---	---	---	---
17	32	18	27	59	29	40	---	---	---	---	---	---
18	29	19	23	1,000	24	140	---	---	---	240	60	100
19	25	18	21	220	92	130	110	12	17	---	---	---
20	29	19	22	94	52	68	17	10	12	---	---	---
21	24	21	23	57	45	51	19	8.2	13	---	---	---
22	33	20	24	54	43	47	40	10	21	---	---	---
23	130	24	40	48	42	44	500	32	130	---	---	---
24	34	25	29	230	41	130	160	48	79	20	12	15
25	48	31	36	---	---	---	50	27	38	26	15	17
26	360	43	170	23	4.5	12	32	19	25	28	14	17
27	370	300	350	1,000	4.0	170	29	14	20	22	13	17
28	---	---	---	360	87	140	21	12	16	20	10	14
29	---	---	---	89	37	56	570	11	55	23	9.0	13
30	---	---	---	44	23	32	570	55	140	18	9.8	12
31	---	---	---	---	---	---	300	27	42	17	9.7	13
MONTH	600	5.0	74	1,000	3.0	120	570	8.2	47	990	9.0	74
FEBRUARY			MARCH			APRIL			MAY			
1	20	9.6	14	81	12	31	150	30	88	---	---	---
2	130	9.4	20	75	20	46	---	---	---	---	---	---
3	250	51	140	120	9.0	38	---	---	---	---	---	---
4	81	24	46	1,000	120	310	---	---	---	---	---	---
5	840	20	120	310	88	150	---	---	---	---	---	---
6	210	64	100	340	150	180	37	16	27	---	---	---
7	70	26	40	150	28	69	55	36	44	---	---	---
8	38	17	26	57	28	41	56	42	49	---	---	---
9	43	14	24	---	---	---	73	48	55	---	---	---
10	130	19	53	---	---	---	63	46	54	---	---	---
11	87	21	40	---	---	---	70	49	58	---	---	---
12	93	19	42	---	---	---	380	55	140	---	---	---
13	76	17	35	---	---	---	1,000	140	400	---	---	---
14	44	16	26	---	---	---	300	120	180	---	---	---
15	28	14	19	---	---	---	150	87	110	---	---	---
16	20	10	14	54	8.3	32	120	79	92	---	---	---
17	20	6.0	13	39	12	26	---	---	---	---	---	---
18	18	6.0	9.6	140	8.8	27	---	---	---	---	---	---
19	24	7.0	12	190	38	100	---	---	---	830	120	610
20	250	16	57	100	26	44	---	---	---	---	---	---
21	220	30	72	98	20	47	---	---	---	---	---	---
22	32	14	22	31	11	16	---	---	---	---	---	---
23	21	10	15	26	10	15	---	---	---	---	---	---
24	18	9.0	14	28	12	20	---	---	---	---	---	---
25	18	8.0	12	38	16	26	---	---	---	310	54	81
26	14	6.0	9.9	52	23	30	---	---	---	990	150	530
27	14	6.0	11	43	26	32	---	---	---	980	160	350
28	13	7.0	9.8	46	28	34	---	---	---	380	130	240
29	18	8.0	12	920	30	120	---	---	---	180	77	140
30	---	---	---	760	190	300	---	---	---	360	88	150
31	---	---	---	300	100	170	---	---	---	600	120	220
MONTH	840	6.0	35	1,000	8.3	79	1,000	16	110	990	54	290

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03248300 LICKING RIVER BELOW MASON FORK NEAR SALYERSVILLE, KY

LOCATION.--Lat 37°45'50", long 83°03'29", Magoffin County, Hydrologic Unit 05100101, on left bank downstream side of bridge on State Highway 1090, 0.9 mi southeast of Salyersville, 2.2 mi upstream from Burning Fork and at mile 272.2.

DRAINAGE AREA.--107 mi²

PERIOD OF RECORD.--October 2001 to current year.

REVISIONS.--The maximum discharge for WY 2002 has been revised to 2,630 ft³/s, May 3, gage height is 14.92 ft.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 840 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records fair except those estimated which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	148	147	116	e37	120	83	2,410	59	70	e48
2	22	24	119	879	116	e43	138	84	556	55	58	e38
3	19	23	103	1,180	336	e49	177	105	500	60	49	29
4	18	21	107	513	339	e46	171	82	307	84	41	27
5	17	63	152	786	510	e102	154	75	384	84	74	24
6	16	129	186	668	e2,560	e1,670	138	70	246	63	89	22
7	16	144	172	396	e1,590	e661	129	64	186	77	58	20
8	15	98	150	291	e531	e373	121	59	165	86	46	934
9	15	71	131	245	e365	e253	109	55	190	67	44	1,410
10	14	57	171	202	e275	e176	99	51	125	57	40	311
11	14	47	299	168	e206	e143	96	47	109	63	37	167
12	15	51	201	162	e164	e115	153	45	124	60	41	119
13	15	93	163	152	e136	e101	1,500	42	136	56	74	95
14	22	71	209	138	e118	e91	2,240	39	98	48	47	79
15	59	64	284	130	e106	e87	694	37	93	43	35	68
16	38	78	228	118	e90	e160	397	53	817	42	35	63
17	26	84	314	109	e82	188	285	58	310	46	29	1,630
18	21	79	283	413	e75	158	223	44	196	53	31	3,210
19	19	1,240	256	626	e71	143	187	45	152	43	30	792
20	18	1,140	215	329	e69	131	164	46	127	35	29	264
21	16	311	178	236	e68	148	152	37	104	33	27	179
22	16	194	169	195	e61	131	138	34	92	38	27	136
23	15	145	173	160	e55	120	128	31	142	52	23	114
24	15	134	242	147	e53	115	122	31	118	39	22	85
25	15	135	235	134	e52	109	109	89	98	35	32	72
26	15	112	196	146	e47	102	135	73	120	72	27	60
27	45	99	168	172	e44	99	123	358	93	316	25	53
28	71	178	149	159	e42	96	104	1,030	77	150	21	48
29	46	267	135	141	e39	89	94	439	69	81	133	43
30	38	186	179	140	---	124	87	300	63	64	124	38
31	31	---	166	119	---	135	---	4,510	---	62	83	---
TOTAL	744	5,364	5,881	9,401	8,316	5,995	8,487	8,116	8,207	2,123	1,501	10,178
MEAN	24.0	179	190	303	287	193	283	262	274	68.5	48.4	339
MAX	71	1,240	314	1,180	2,560	1,670	2,240	4,510	2,410	316	133	3,210
CFSM	0.22	1.67	1.77	2.83	2.68	1.81	2.64	2.45	2.56	0.64	0.45	3.17
IN.	0.26	1.86	2.04	3.27	2.89	2.08	2.95	2.82	2.85	0.74	0.52	3.54

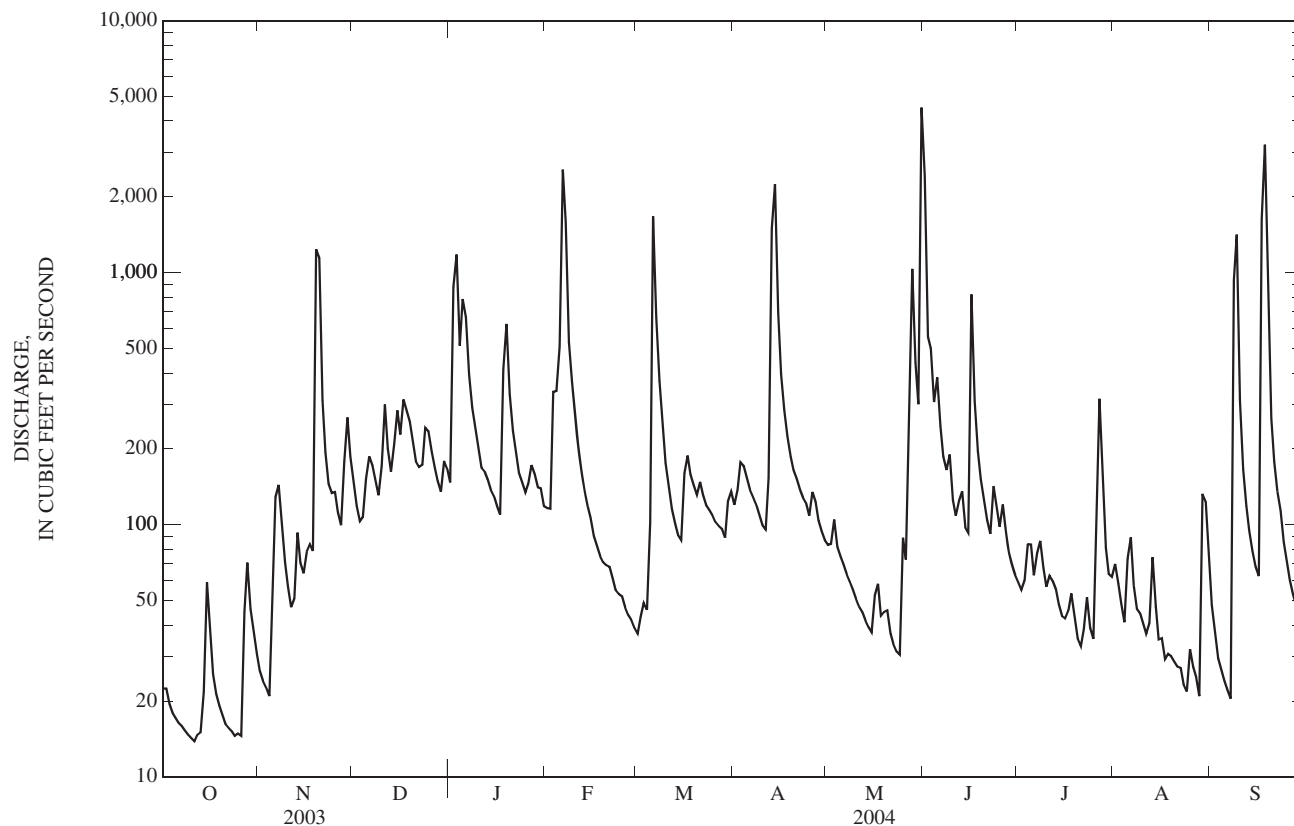
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	30.9	102	150	163	292	211	320	208	155	41.9	22.9	99.4
MAX	60.0	179	238	303	552	311	427	436	319	68.5	48.4	339
(WY)	(2003)	(2004)	(2003)	(2004)	(2003)	(2002)	(2003)	(2002)	(2003)	(2004)	(2004)	(2004)

03248300 LICKING RIVER BELOW MASON FORK NEAR SALYERSVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	64,499.9		74,313		163	
ANNUAL MEAN	177		203		203	
HIGHEST ANNUAL MEAN					2004	
HIGHEST DAILY MEAN	2,700	Feb 16	4,510	May 31	4,510	May 31, 2004
LOWEST DAILY MEAN	9.9	Aug 29	14	Oct 10	2.7	Sep 19, 2001
ANNUAL SEVEN-DAY MINIMUM	12	Aug 24	15	Oct 7	2.8	Sep 13, 2001
MAXIMUM PEAK FLOW			5,930	May 31	5,930	May 31, 2004
MAXIMUM PEAK STAGE			22.63	May 31	22.63	May 31, 2004
ANNUAL RUNOFF (CFSM)	1.65		1.90		1.52	
ANNUAL RUNOFF (INCHES)	22.42		25.84		20.66	
10 PERCENT EXCEEDS	384		345		352	
50 PERCENT EXCEEDS	94		99		65	
90 PERCENT EXCEEDS	17		27		13	

e Estimated



LICKING RIVER BASIN

03249500 LICKING RIVER AT FARMERS, KY

LOCATION.--Lat 38°06'55", long 83°32'36", Bath County, Hydrologic Unit 05100101, on left bank, 0.2 mi downstream from Hog Hollow, 0.8 mi downstream from Cave Run Dam, 1.9 mi south of Farmers, 4.5 mi upstream from Triplett Creek, and at mile 174.

DRAINAGE AREA.--827 mi².

PERIOD OF RECORD.--July 1915 to June 1920 (gage heights only), April 1928 to September 1931, December 1936 to February 1937 (in WSP 838), April 1938 to September 1994, October 2002 to current year. All figures of discharge above 2,000 ft³/s prior to April 1938 are unreliable and should not be used. Gage-height records collected at former site since 1915 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1275: 1928-31, 1937. WSP 1505: 1950(P). WSP 1705: 1952, drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 646.55 ft above sea level. See WRD-KY-90-1 for history of changes prior to Oct. 20, 1965.

REMARKS.--Records good. Discharge values published are days with mean values, 1100 ft³/s and below: Flow regulated by Cave Run Dam beginning December 1973 (station 03249498). High Flow only regulated prior to December 1973 (Cave Run Dam under construction). Diversion above station from Cave Run Lake for Fish Hatchery; return flow of which enters Licking River below station.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	654	---	---	847	552	---	---	225	---	264	247
2	216	655	---	---	573	556	---	1,090	555	---	442	228
3	230	653	---	---	---	554	1,050	---	---	---	---	220
4	235	835	---	---	---	550	1,050	---	---	---	---	235
5	230	1,070	---	---	---	608	799	889	---	---	---	232
6	237	---	---	---	---	---	599	596	---	---	---	221
7	222	---	---	143	189	---	601	597	---	---	940	209
8	218	---	---	144	---	---	604	599	---	---	592	e386
9	217	---	---	---	---	---	311	602	---	---	316	---
10	229	---	---	---	---	---	410	e399	---	656	228	---
11	214	---	---	---	---	---	598	242	---	669	220	---
12	223	---	---	---	---	---	610	228	---	903	244	---
13	233	---	---	---	---	---	927	218	---	895	229	---
14	218	---	---	---	---	---	---	217	---	449	235	---
15	217	---	---	---	---	---	---	217	---	241	252	---
16	217	---	---	---	---	---	---	218	---	228	236	---
17	214	---	---	---	---	---	---	219	---	227	229	---
18	211	---	---	---	---	---	---	218	---	229	221	---
19	221	---	---	---	---	---	---	476	---	231	148	202
20	213	---	---	---	---	339	---	---	---	248	108	161
21	115	---	---	---	---	130	---	---	---	247	141	---
22	235	---	---	---	---	582	---	830	---	257	110	---
23	217	---	---	---	---	1,020	---	414	---	244	110	---
24	208	---	---	---	---	1,030	---	229	---	232	113	---
25	205	---	---	---	789	748	---	220	---	251	113	---
26	220	---	---	---	553	575	---	249	---	240	113	---
27	235	---	---	---	544	576	---	377	---	253	112	---
28	221	---	---	---	547	579	---	297	---	242	111	---
29	220	---	---	---	550	582	---	---	---	231	111	---
30	410	---	---	---	---	601	---	---	---	228	201	---
31	658	---	---	1,020	---	---	---	---	---	234	231	---
TOTAL	7,377	---	---	---	---	---	---	---	---	---	---	---
MEAN	238	---	---	---	---	---	---	---	---	---	---	---
MAX	658	---	---	---	---	---	---	---	---	---	---	---
MIN	115	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	525	807	1,429	1,652	1,875	2,089	1,617	1,106	808	331	301	409
MAX	2,336	1,988	3,096	3,692	3,717	3,670	4,061	3,350	2,521	1,620	836	2,360
(WY)	(1990)	(1990)	(1986)	(1991)	(1991)	(1989)	(1994)	(1984)	(1983)	(1981)	(1979)	(1974)
MIN	25.2	19.7	310	138	507	286	51.0	41.1	41.7	40.2	35.5	80.5
(WY)	(1979)	(1979)	(1982)	(1981)	(1984)	(1983)	(1986)	(1976)	(1988)	(1988)	(1988)	(2002)

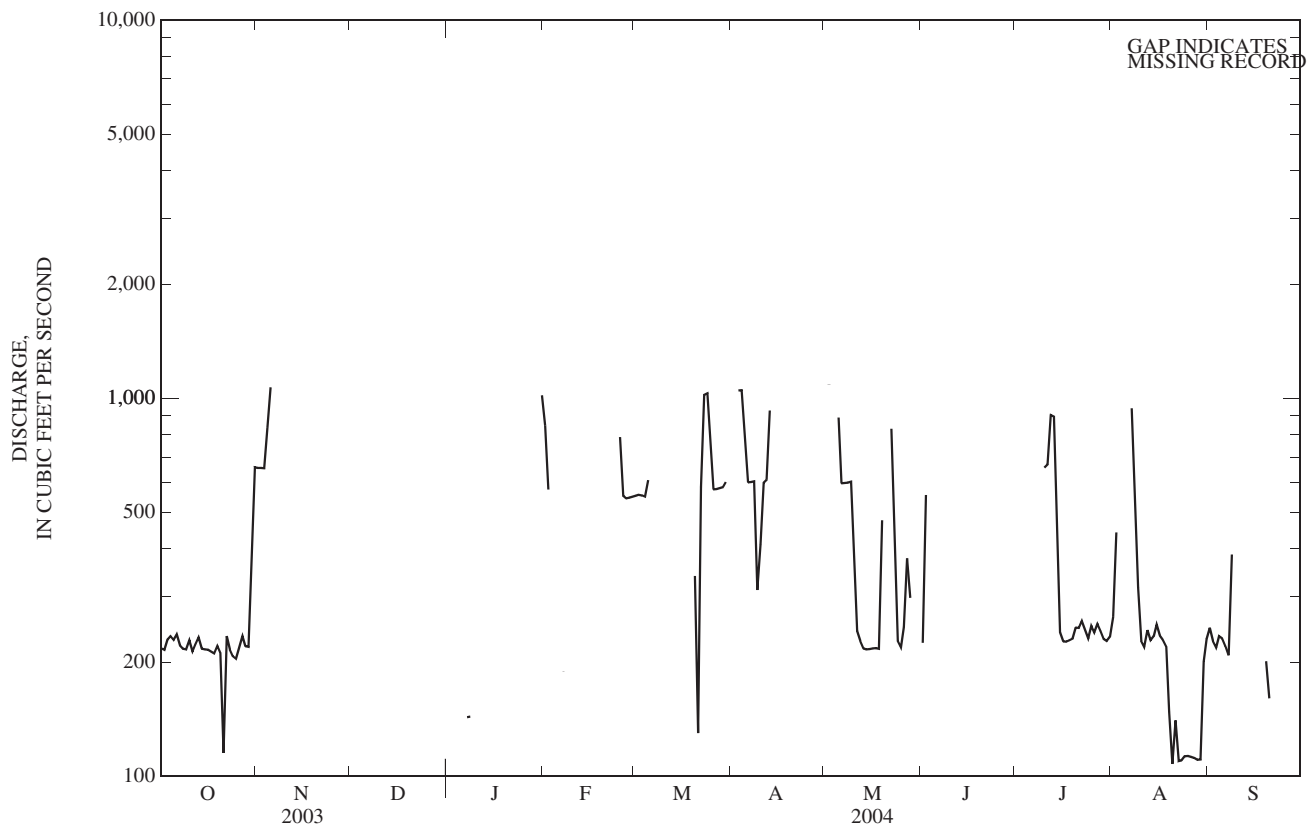
03249500 LICKING RIVER AT FARMERS, KY—Continued

SUMMARY STATISTICS

WATER YEARS 1974 - 2004

ANNUAL MEAN	1,078	
HIGHEST ANNUAL MEAN	1,754	1994
LOWEST ANNUAL MEAN	496	1988
HIGHEST DAILY MEAN	7,820	Jan 15, 1974
LOWEST DAILY MEAN	6.1	Jul 21, 1983
ANNUAL SEVEN-DAY MINIMUM	14	Oct 4, 1978
MAXIMUM PEAK FLOW	24,000	Feb 28, 1962
MAXIMUM PEAK STAGE	31.10	Feb 9, 1918
INSTANTANEOUS LOW FLOW	0.70	Oct 14, 1930
10 PERCENT EXCEEDS	3,310	
50 PERCENT EXCEEDS	349	
90 PERCENT EXCEEDS	65	

e Estimated



03249505 LICKING RIVER AT HIGHWAY 60 AT FARMERS, KY

LOCATION.--Lat 38°08'24", long 83°33'26", Rowan County, Hydrologic Unit 05100101, on right bank on downstream side of bridge on U.S. Highway 60, 250 ft upstream from Chesapeake and Ohio Railway bridge, 0.75 mi west of Farmers, 1.1 mile upstream from Triplett Creek, and 3.45 miles downstream from Farmers base gage.

DRAINAGE AREA.--831 mi²

PERIOD OF RECORD.--Nonrecording gage July 2, 1938 to Sept. 30, 1944. Oct. 1, 1944 to Oct. 11, 1960, nonrecording gage 0.35 mi upstream and Oct. 12, 1960 to Oct. 20, 1965, nonrecording gage 0.65 mi upstream at datum 5.90 ft higher. Flows less than 5,000 ft³/s published Oct. 1, 2003 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 646.55 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--Morehead Water Board.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	713	3,300	1,490	928	546	1,680	1,530	1,290	3,560	319	283
2	218	713	3,530	---	569	557	1,480	1,270	584	3,540	475	269
3	240	711	3,460	---	1,060	554	1,210	1,740	2,300	3,520	1,170	258
4	234	950	3,430	2,160	1,780	553	1,210	1,700	3,500	3,500	1,550	272
5	231	1,590	3,620	3,230	1,400	743	957	1,060	3,840	3,470	1,470	275
6	244	2,320	3,890	1,940	---	---	701	699	4,040	3,120	1,570	256
7	222	2,100	3,620	105	1,290	---	704	706	3,970	2,320	1,130	240
8	222	2,020	3,470	102	906	1,300	e699	711	3,930	1,880	731	1,770
9	225	1,980	3,390	876	3,080	3,580	398	720	3,940	1,270	390	---
10	230	1,960	3,240	2,760	4,310	4,140	423	539	3,890	763	269	2,000
11	213	1,950	3,080	4,060	4,250	4,080	692	306	3,860	780	262	3,410
12	232	2,880	2,940	4,050	4,180	4,020	717	283	3,970	1,010	288	3,810
13	237	---	2,850	4,030	4,400	3,980	1,510	273	---	1,050	270	3,360
14	225	1,680	2,690	3,990	4,690	3,940	2,360	269	2,890	523	269	3,160
15	219	3,180	2,320	3,940	4,640	3,500	3,220	267	e3,460	274	294	3,110
16	216	3,120	2,450	3,900	4,580	2,490	3,730	266	4,320	254	266	2,270
17	217	3,030	3,080	3,860	4,520	2,470	3,650	e264	3,530	259	251	---
18	212	2,010	e2,680	4,240	4,470	2,080	3,600	267	3,640	256	250	---
19	230	1,960	e2,480	4,130	4,420	1,270	3,550	528	3,930	258	178	1,270
20	205	3,140	2,380	3,800	4,390	443	2,760	1,250	3,940	276	119	194
21	102	3,530	2,340	3,980	4,330	158	1,680	1,460	3,830	282	1,700	1,430
22	242	3,650	2,110	3,900	3,810	605	1,780	989	3,780	296	130	3,580
23	221	3,560	1,930	3,830	2,110	1,190	2,530	528	3,770	278	122	3,830
24	208	3,540	2,840	3,260	1,250	1,190	e3,160	282	3,730	257	125	e3,790
25	199	3,580	3,180	e2,350	834	904	2,310	270	3,700	276	124	3,770
26	227	3,500	e2,410	1,950	545	674	2,040	346	3,680	272	121	3,750
27	257	3,440	1,750	1,530	538	677	3,180	895	3,650	280	119	3,730
28	220	---	1,490	1,500	536	677	3,120	549	3,630	269	119	3,710
29	212	---	1,490	1,490	541	679	2,640	1,050	3,600	255	119	3,690
30	478	2,110	1,540	1,230	---	942	1,910	1,590	3,580	254	215	3,660
31	718	---	e1,520	1,050	---	1,260	---	---	---	271	264	---
TOTAL	7,578	---	84,500	---	---	---	59,601	---	---	34,873	14,679	---
MEAN	244	---	2,726	---	---	---	1,987	---	---	1,125	474	---
MAX	718	3,890	3,730	3,560	1,700	---	---	---	---	---	---	---
MIN	102	1,490	398	254	119	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	244	---	2,726	---	---	---	1,987	---	---	1,125	474	---
MAX	244	---	2,726	---	---	---	1,987	---	---	1,125	474	---
(WY)	(2004)	---	(2004)	---	---	---	(2004)	---	---	(2004)	(2004)	---
MIN	244	---	2,726	---	---	---	1,987	---	---	1,125	474	---
(WY)	(2004)	---	(2004)	---	---	---	(2004)	---	---	(2004)	(2004)	---

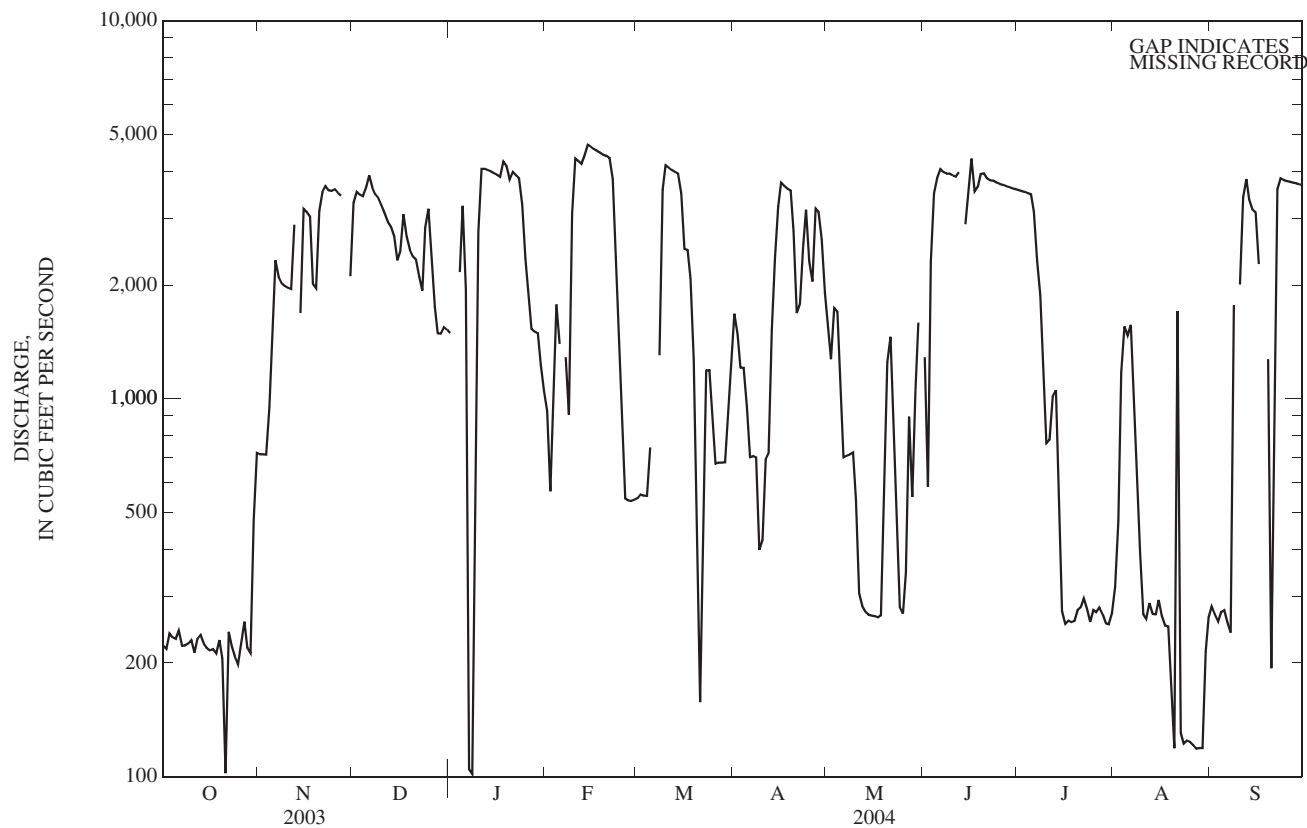
03249505 LICKING RIVER AT HIGHWAY 60 AT FARMERS, KY—Continued

SUMMARY STATISTICS

WATER YEARS 2000 - 2004

HIGHEST DAILY MEAN	4,690	Feb 14, 2004
LOWEST DAILY MEAN	3.7	Jan 13, 2003
ANNUAL SEVEN-DAY MINIMUM	121	Aug 23, 2004
MAXIMUM PEAK STAGE	21.99	Sep 17, 2004

e Estimated



03250190 SLATE CREEK AT HIGHWAY 713 NEAR MOUNT STERLING, KY

LOCATION.--Lat 38°01'26", long 83°49'54", Montgomery County, Hydrologic Unit 05100101, on right downstream side of bridge on Highway 713, 0.2 mi below Greenbrier Creek, 1.0 mi above Town Branch, 6.4 mi east of Mount Sterling, and at mile 43.2.

DRAINAGE AREA.--84.5 mi²

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 800 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records fair except for those estimated, which are poor. Discharge only published for discharges less than 1,000 ft³/s.

COOPERATION.--City of Mount Sterling.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	25	141	154	67	31	149	55	---	12	---	7.4
2	39	24	96	---	84	297	115	---	442	11	55	6.6
3	31	25	79	---	---	116	134	243	189	11	27	6.3
4	34	24	115	330	276	119	98	105	138	12	18	6.7
5	34	---	288	---	---	---	72	72	135	11	---	6.6
6	33	---	326	445	---	---	59	56	84	11	192	7.2
7	32	160	174	224	509	395	53	43	59	51	67	34
8	37	90	122	157	248	192	49	35	45	24	38	---
9	38	58	96	e125	176	131	40	28	39	15	26	---
10	41	45	163	e92	143	95	35	24	32	11	22	131
11	52	39	266	e81	109	77	32	35	29	e99	29	67
12	58	---	139	104	92	65	165	23	31	e240	22	45
13	60	---	102	138	76	54	---	18	54	37	22	34
14	67	249	497	108	67	51	608	17	80	26	16	27
15	76	230	e554	96	60	49	268	16	119	19	12	22
16	88	211	e648	74	49	59	145	18	77	14	10	19
17	e111	144	e621	68	47	59	99	15	44	58	9.1	---
18	e99	---	275	---	43	49	74	13	66	46	8.1	---
19	53	---	256	404	41	45	59	247	122	23	7.3	176
20	41	386	175	193	41	75	50	200	68	17	7.4	89
21	68	183	134	136	40	---	49	48	36	13	63	59
22	92	120	150	e103	33	146	---	28	27	34	40	44
23	61	89	---	e93	31	93	---	23	31	42	19	35
24	75	150	---	84	31	74	409	17	27	25	13	29
25	93	159	304	78	30	60	185	15	34	17	12	25
26	113	103	178	---	27	52	243	66	69	28	15	22
27	228	81	133	407	26	47	139	---	28	21	17	20
28	79	---	109	181	25	44	88	---	20	15	12	20
29	46	---	95	e122	25	43	65	232	16	12	9.3	20
30	33	231	472	e93	---	---	54	---	13	10	8.2	19
31	28	---	239	e79	---	282	---	---	---	130	8.1	---
TOTAL	1,975	---	---	---	---	---	---	---	---	1,095	---	---
MEAN	63.7	---	---	---	---	---	---	---	---	35.3	---	---
MAX	228	240	--	--	--	--	--	--	--	--	--	--
MIN	28	10	--	--	--	--	--	--	--	--	--	--

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	70.8	89.3	131	96.2	286	239	135	181	95.4	63.5	57.8	29.1
MAX	189	229	223	131	619	512	169	343	295	215	123	78.2
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2000)	(2003)	(2003)	(2001)	(2003)	(2003)
MIN	4.26	8.88	74.5	65.1	43.5	135	50.7	3.11	11.4	5.45	12.2	5.30
(WY)	(2001)	(2001)	(2001)	(2001)	(2002)	(2000)	(2001)	(2000)	(2002)	(2002)	(2002)	(2001)

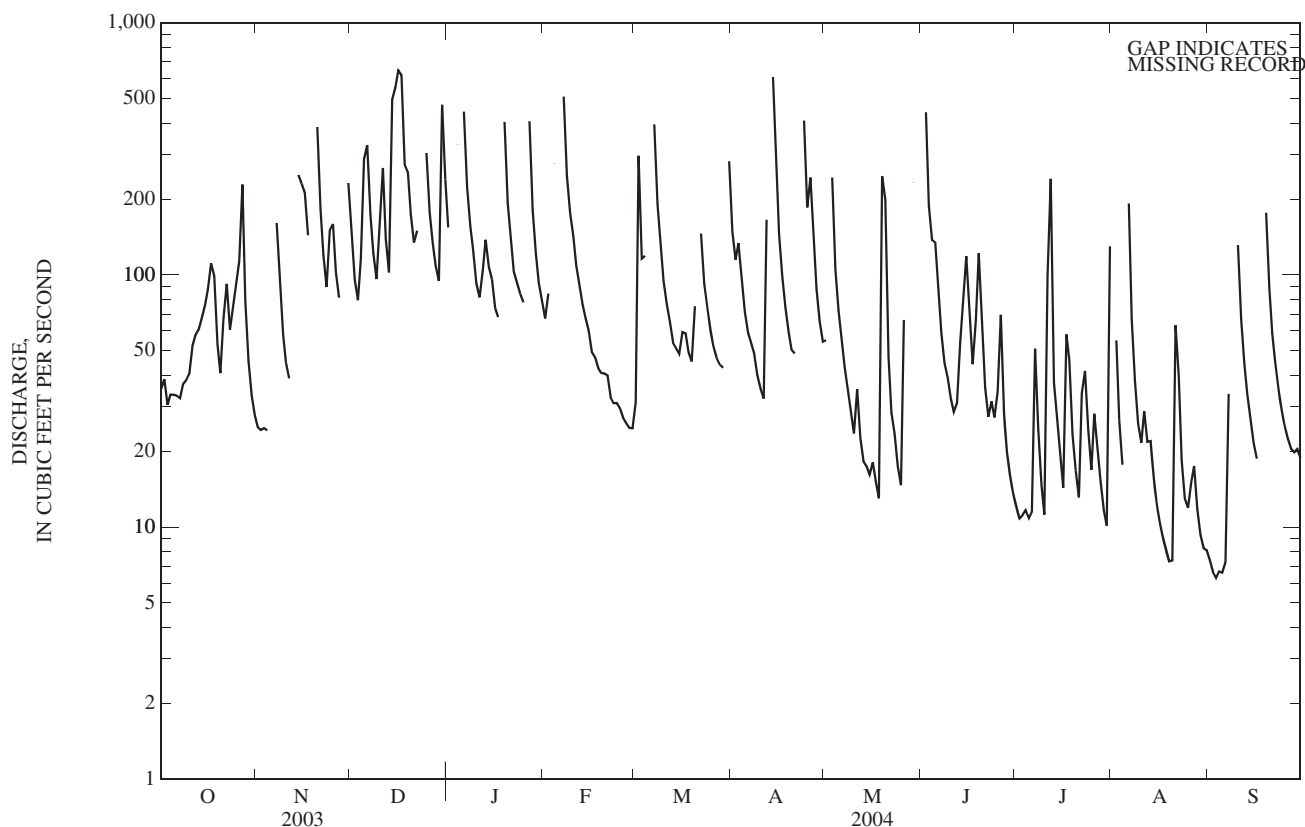
03250190 SLATE CREEK AT HIGHWAY 713 NEAR MOUNT STERLING, KY—Continued

SUMMARY STATISTICS

WATER YEARS 2000 - 2004

ANNUAL MEAN	134	
HIGHEST ANNUAL MEAN	207	2003
LOWEST ANNUAL MEAN	81.4	2001
HIGHEST DAILY MEAN	6,610	Mar 20, 2002
LOWEST DAILY MEAN	0.00	Sep 22, 2000
ANNUAL SEVEN-DAY MINIMUM	0.25	Sep 5, 2000
MAXIMUM PEAK FLOW	9,380	Mar 20, 2002
MAXIMUM PEAK STAGE	22.83	Nov 13, 2003
10 PERCENT EXCEEDS	315	
50 PERCENT EXCEEDS	37	
90 PERCENT EXCEEDS	2.2	

e Estimated



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 with telemetry. Datum of gage is 694.94 ft above NGVD of 1929. Gage moved 50 ft downstream August 8, 2002.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.21	0.19	2.2	2.1	e0.70	0.92	2.8	0.89	3.2	0.06	0.80	0.10
2	0.23	0.16	1.5	36	e0.66	5.3	2.5	4.2	3.5	0.06	0.31	0.08
3	0.20	0.14	1.2	6.7	11	4.3	3.1	2.5	1.9	0.06	0.17	0.10
4	0.16	0.12	1.6	3.7	3.6	6.4	2.0	1.4	1.1	0.06	0.72	0.12
5	0.14	17	7.8	23	14	36	1.5	1.1	1.0	0.05	17	0.10
6	0.11	4.3	4.4	5.0	30	29	1.2	0.86	0.69	0.08	1.5	0.10
7	0.09	2.2	2.5	2.6	6.9	5.3	1.1	0.67	0.45	0.14	0.67	0.10
8	0.07	1.2	1.8	e1.7	3.7	2.9	1.0	0.51	0.33	0.07	0.36	27
9	0.07	0.80	1.4	e1.3	3.1	2.0	0.87	0.40	1.3	0.24	0.22	6.5
10	0.07	0.60	5.9	e1.1	2.8	1.5	0.78	0.36	1.5	8.5	0.19	1.8
11	0.06	0.47	4.2	e0.90	2.1	1.2	0.70	0.31	0.77	2.4	0.17	0.97
12	0.06	32	2.3	e0.80	1.7	1.0	6.8	0.26	22	1.3	0.15	4.3
13	0.06	6.4	1.7	e0.70	1.4	0.89	18	0.23	6.3	0.63	0.13	1.4
14	0.07	2.3	6.8	e0.66	1.2	0.84	6.6	0.20	2.2	0.35	0.11	0.84
15	0.07	2.3	5.1	e0.62	1.1	0.78	3.5	0.18	1.6	0.21	0.08	0.53
16	0.06	2.1	5.9	e0.60	0.93	0.79	2.3	0.16	1.3	0.15	0.07	0.38
17	0.07	1.6	9.7	0.73	0.84	0.73	1.8	0.15	0.88	0.14	0.06	69
18	0.07	8.9	e3.5	11	0.77	0.73	1.4	0.14	0.62	0.12	0.05	6.2
19	0.07	17	e2.2	3.8	0.71	0.80	1.2	0.18	0.45	0.11	0.05	2.1
20	0.07	4.8	e1.7	1.9	0.72	0.81	1.2	0.28	0.33	0.08	1.4	1.2
21	0.06	2.5	e1.4	e1.4	0.69	0.91	1.2	0.25	0.24	0.07	20	0.83
22	0.07	1.7	e3.0	e1.2	0.60	0.75	5.8	0.18	0.20	0.19	1.7	0.60
23	0.09	1.3	8.2	e1.0	0.54	0.62	9.5	0.13	0.18	0.16	0.79	0.42
24	0.06	2.6	9.6	0.85	0.51	0.55	4.6	0.10	0.15	0.14	0.46	0.32
25	0.06	2.1	3.9	0.79	0.45	0.52	2.6	0.09	0.15	0.10	0.31	0.25
26	0.11	1.4	2.5	3.4	0.42	0.48	2.5	0.17	0.14	0.12	0.26	0.20
27	2.1	1.2	2.1	5.2	0.37	0.52	1.8	2.8	0.11	0.09	0.22	0.17
28	0.84	37	1.8	e2.2	0.34	0.54	1.3	2.4	0.08	0.08	0.19	0.16
29	0.44	6.9	1.7	e1.2	0.32	0.59	1.1	0.71	0.08	0.07	0.16	0.14
30	0.30	3.4	9.7	e0.88	---	21	0.98	8.1	0.07	0.07	0.14	0.13
31	0.22	---	3.7	e0.78	---	4.7	---	33	---	1.4	0.12	---
TOTAL	6.36	164.68	121.0	123.81	92.17	133.37	91.73	62.91	52.82	17.30	48.56	126.14
MEAN	0.21	5.49	3.90	3.99	3.18	4.30	3.06	2.03	1.76	0.56	1.57	4.20
MAX	2.1	37	9.7	36	30	36	18	33	22	8.5	20	69
MIN	0.06	0.12	1.2	0.60	0.32	0.48	0.70	0.09	0.07	0.05	0.05	0.08
CFSM	0.12	3.31	2.35	2.41	1.91	2.59	1.84	1.22	1.06	0.34	0.94	2.53
IN.	0.14	3.69	2.71	2.77	2.07	2.99	2.06	1.41	1.18	0.39	1.09	2.83

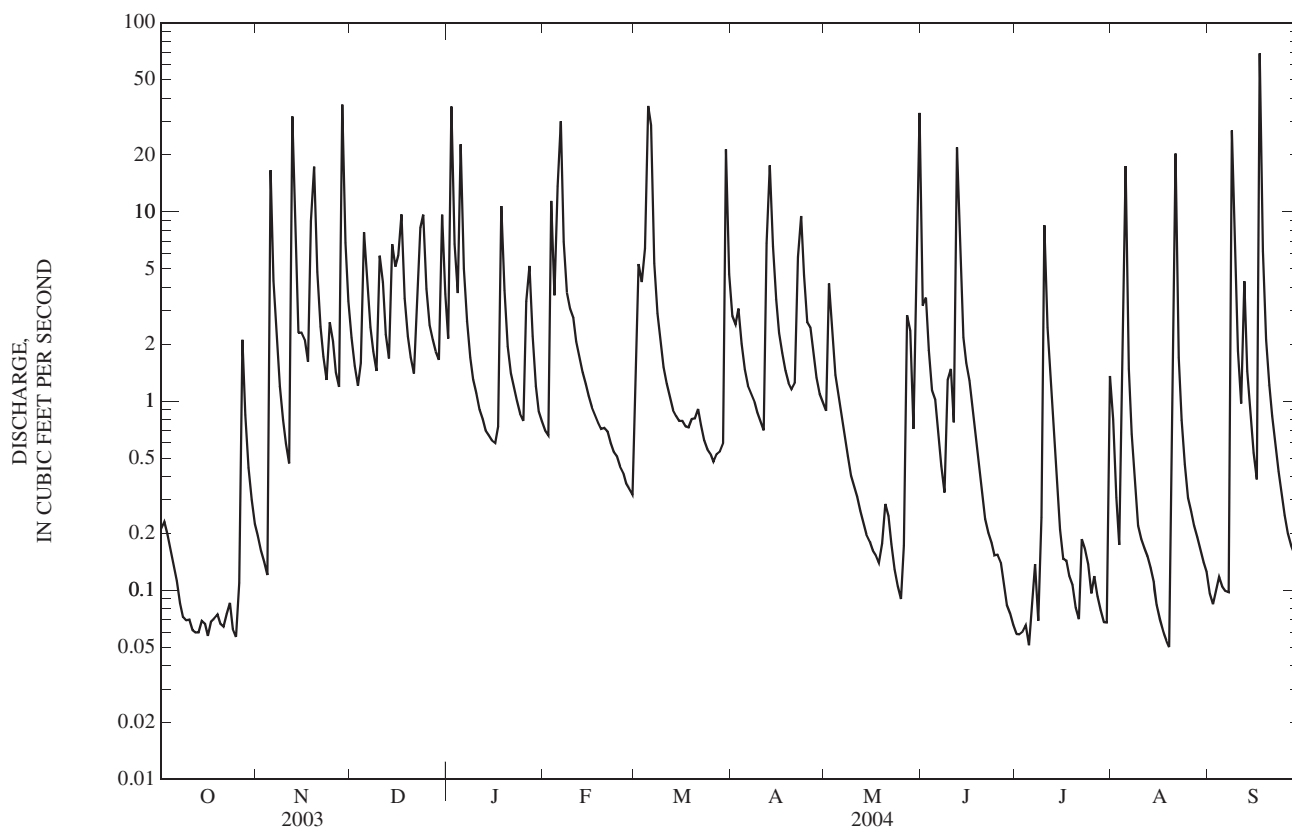
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	0.22	1.26	1.67	2.21	4.28	3.45	2.15	2.47	1.75	1.65	0.65	0.80
MAX	1.29	5.49	3.90	3.99	11.4	8.93	4.05	9.09	4.94	10.4	1.57	4.20
(WY)	(2003)	(2004)	(2004)	(2004)	(2000)	(1997)	(1998)	(2003)	(2003)	(2001)	(2004)	(2004)
MIN	0.01	0.04	0.31	0.29	0.42	2.07	0.49	0.14	0.05	0.00	0.01	0.00
(WY)	(1998)	(1999)	(1998)	(2000)	(2002)	(1998)	(1999)	(1999)	(2000)	(1999)	(1999)	(1999)

03250310 ROCK LICK CREEK ABOVE UNNAMED TRIBUTARY NEAR SHARKEY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	1,243.13		1,040.85		1.86	
ANNUAL MEAN	3.41		2.84		3.23	
HIGHEST ANNUAL MEAN					0.65	
LOWEST ANNUAL MEAN					227	
HIGHEST DAILY MEAN	48	Feb 16	69	Sep 17	227	Jul 9, 2001
LOWEST DAILY MEAN	0.05	Jul 22	0.05	Jul 5	0.00	Sep 15, 1997
ANNUAL SEVEN-DAY MINIMUM	0.06	Jul 25	0.06	Jun 29	0.00	Sep 15, 1997
MAXIMUM PEAK FLOW			270	Jun 12	916	Jul 8, 2001
MAXIMUM PEAK STAGE			3.06	Jun 12	6.51	Jul 8, 2001
ANNUAL RUNOFF (CFSM)	2.05		1.71		1.12	
ANNUAL RUNOFF (INCHES)	27.86		23.33		15.22	
10 PERCENT EXCEEDS	8.5		6.4		3.4	
50 PERCENT EXCEEDS	1.2		0.82		0.40	
90 PERCENT EXCEEDS	0.10		0.08		0.01	

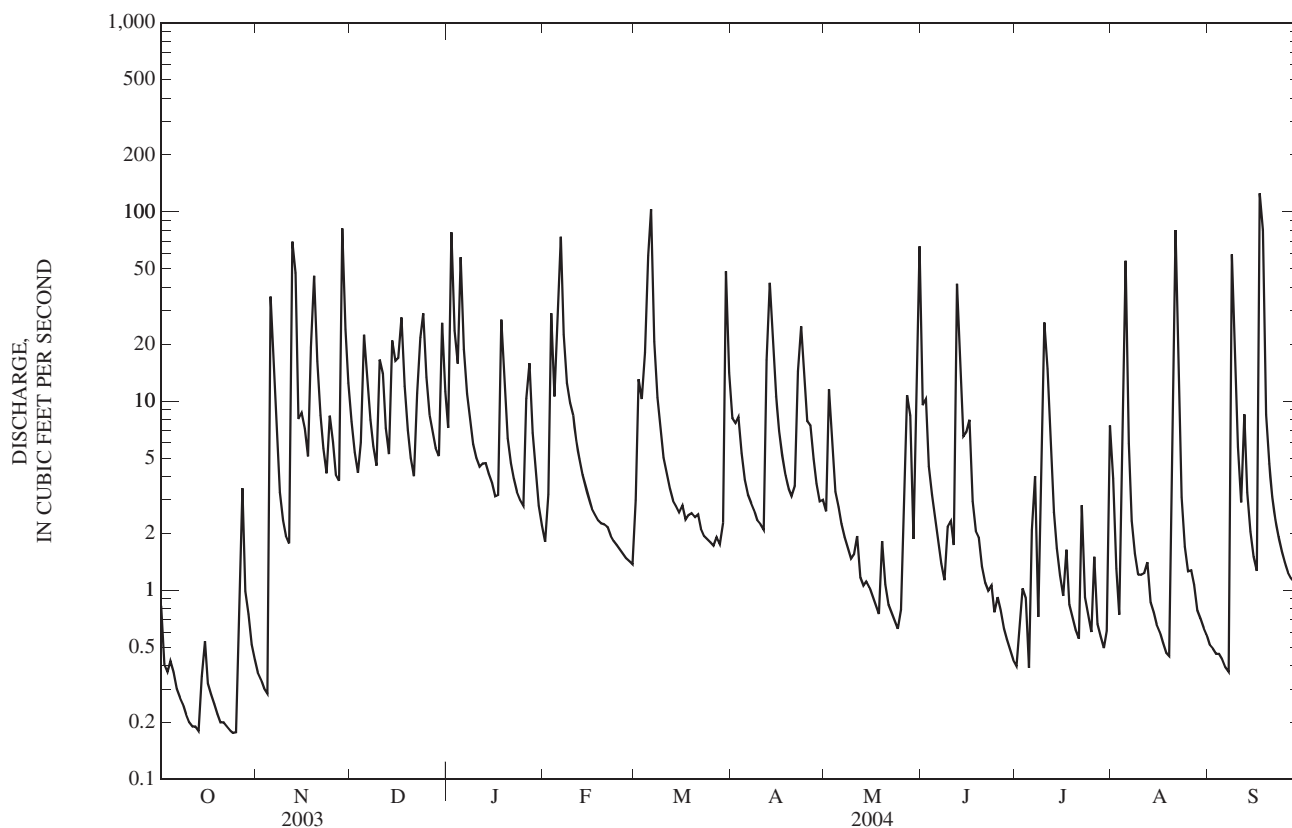
e Estimated



03250322 ROCK LICK CREEK AT HIGHWAY 158 NEAR SHARKEY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	3,853.04		2,971.85		6.00	
ANNUAL MEAN	10.6		8.12		2.65	
HIGHEST ANNUAL MEAN					9.94	
LOWEST ANNUAL MEAN					2.65	
HIGHEST DAILY MEAN	561	May 6	125	Sep 17	561	May 6, 2003
LOWEST DAILY MEAN	0.12	Jul 27	0.18	Oct 13	0.00	Sep 21, 1997
ANNUAL SEVEN-DAY MINIMUM	0.19	Oct 19	0.19	Oct 19	0.00	Sep 21, 1997
MAXIMUM PEAK FLOW			236	Sep 17	3,190	Jul 8, 2001
MAXIMUM PEAK STAGE			7.31	Sep 17	10.71	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	2.51		1.93		1.43	
ANNUAL RUNOFF (INCHES)	34.13		26.32		19.40	
10 PERCENT EXCEEDS	22		19		12	
50 PERCENT EXCEEDS	3.3		2.8		1.5	
90 PERCENT EXCEEDS	0.27		0.46		0.00	

e Estimated



03250500 LICKING RIVER AT BLUE LICK SPRINGS, KY

LOCATION.--Lat 38°25'13", long 83°59'50", Nicholas County, Hydrologic Unit 05100101, at bridge on Highway 68 at Blue Lick Springs, 1.3 mi upstream from Indian Run, 10 mi upstream from Johnson Creek, 10 mi downstream from Fleming Creek and at mile 97.6.

DRAINAGE AREA.--1,785 mi²

PERIOD OF RECORD.--April 1938 to September 1959 and October 2001 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 560.99 ft above NGVD of 1929. Gage operated from April 1938 to September 1959 500 ft downstream at same datum.

REMARKS.--Records fair except for those estimated, which are poor. Flow regulated since December 1973 by Cave Run Lake (station 03249498).

COOPERATION.--National Streamflow Information Program.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 35,900 ft³/s April 13, 1948, maximum stage 45.0 ft April 13, 1948 from flood mark.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 47.4 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	551	1,050	5,220	3,890	1,960	1,080	4,670	2,810	15,300	3,810	897	271
2	466	1,090	4,590	e6,910	1,920	1,300	3,460	2,950	13,300	3,770	1,680	330
3	406	1,050	4,520	11,900	3,960	1,990	2,960	3,780	6,300	3,750	1,160	336
4	e355	1,030	4,330	11,400	4,880	3,410	2,590	3,820	3,920	3,750	1,200	318
5	e334	1,170	4,510	9,170	4,830	3,960	2,380	3,180	4,390	3,720	4,130	475
6	e319	4,520	5,410	9,320	9,540	13,700	2,070	2,200	4,580	3,700	5,470	388
7	343	6,000	5,660	6,850	12,000	15,300	1,630	1,630	4,620	3,640	3,580	334
8	335	3,910	5,080	3,010	8,770	13,300	1,530	1,410	4,420	2,880	2,000	354
9	299	3,090	4,610	2,030	3,820	5,100	1,450	1,290	4,290	2,340	1,370	4,960
10	285	2,780	4,370	2,010	4,400	4,550	1,300	1,190	4,290	1,870	977	7,800
11	279	2,610	4,770	3,450	5,360	4,970	929	1,090	4,210	1,220	689	3,940
12	282	6,250	4,920	4,680	5,270	4,830	1,390	819	4,950	1,520	683	4,010
13	258	11,100	4,420	4,830	5,050	4,660	4,060	720	7,010	1,570	656	4,680
14	268	13,000	4,180	4,820	5,020	4,520	7,730	685	6,070	1,660	566	4,300
15	295	10,200	5,370	4,740	5,150	4,440	6,810	661	4,220	1,130	492	3,770
16	274	5,280	6,170	4,630	5,080	4,180	5,320	620	5,180	680	417	3,590
17	283	4,600	7,840	4,510	4,970	3,290	4,940	545	5,980	439	397	8,130
18	290	4,260	6,800	5,110	4,880	3,080	4,600	507	4,780	374	336	15,900
19	284	5,790	5,650	7,060	4,810	2,840	4,350	1,220	4,380	380	294	17,000
20	275	7,200	4,770	6,750	4,750	2,180	4,180	1,100	4,680	437	277	13,800
21	284	6,320	4,180	5,310	4,710	1,460	3,720	1,800	4,640	408	2,750	3,730
22	296	5,060	3,840	4,970	4,660	1,750	3,040	2,020	4,340	518	4,680	1,830
23	176	4,690	3,840	4,730	4,370	1,570	5,060	1,530	4,180	618	2,090	3,760
24	255	4,420	5,790	4,560	3,150	1,890	8,160	1,080	4,130	707	945	4,200
25	278	4,420	6,920	4,150	2,050	1,860	6,760	706	4,090	543	653	4,160
26	308	4,560	5,930	3,300	1,610	1,700	4,730	874	4,050	439	459	4,110
27	408	4,430	4,570	3,900	1,200	1,320	3,780	3,220	3,960	480	370	4,060
28	916	8,340	3,500	4,160	1,110	1,260	4,360	7,990	3,950	403	309	4,030
29	1,290	11,600	2,860	3,230	1,080	1,240	4,090	7,070	3,900	381	283	3,990
30	968	9,940	3,740	2,780	---	3,890	3,610	3,710	3,850	347	229	3,970
31	803	---	4,320	2,380	---	6,170	---	12,500	---	414	210	---
TOTAL	12,463	159,760	152,680	160,540	130,360	126,790	115,659	74,727	157,960	47,898	40,249	132,526
MEAN	402	5,325	4,925	5,179	4,495	4,090	3,855	2,411	5,265	1,545	1,298	4,418
MAX	1,290	13,000	7,840	11,900	12,000	15,300	8,160	12,500	15,300	3,810	5,470	17,000
MIN	176	1,030	2,860	2,010	1,080	1,080	929	507	3,850	347	210	271

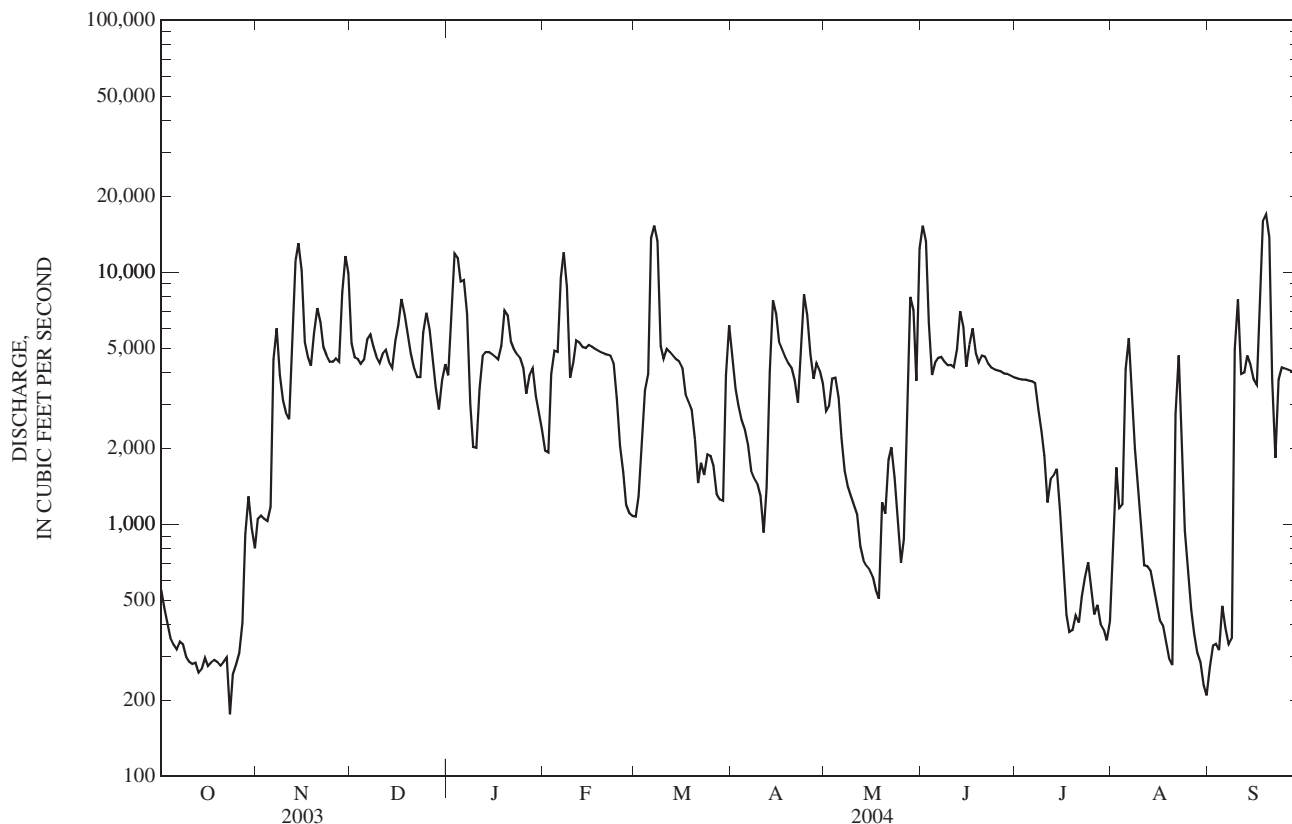
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	882	3,355	3,491	3,156	4,169	5,585	4,490	5,430	4,125	918	867	1,778
MAX	1,960	5,325	4,925	5,179	6,896	6,337	5,806	7,516	5,515	1,545	1,298	4,418
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2002)	(2003)	(2003)	(2004)	(2004)	(2004)
MIN	284	351	1,498	2,134	1,106	4,090	3,809	2,411	1,595	466	115	168
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2004)	(2003)	(2004)	(2002)	(2002)	(2002)	(2002)

03250500 LICKING RIVER AT BLUE LICK SPRINGS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	1,376,023		1,311,612		3,177	
ANNUAL MEAN	3,770		3,584		3,751	
HIGHEST ANNUAL MEAN					2,196	
LOWEST ANNUAL MEAN					26,600	
HIGHEST DAILY MEAN	26,600	May 6	17,000	Sep 19	26,600	May 6, 2003
LOWEST DAILY MEAN	166	Aug 30	176	Oct 23	40	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	231	Aug 26	264	Oct 19	43	Aug 13, 2002
MAXIMUM PEAK FLOW			17,300	Sep 19	35,900	Apr 13, 1948
MAXIMUM PEAK STAGE			27.53	Sep 19	45.00	Apr 13, 1948
10 PERCENT EXCEEDS	8,350		6,800		6,910	
50 PERCENT EXCEEDS	2,930		3,760		1,940	
90 PERCENT EXCEEDS	314		355		253	

e Estimated



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 with telemetry. Datum of gage is 622.46 ft above NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 7	0300	*4,360	*18.30				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	56	543	587	e167	74	715	151	1,080	33	26	5.2
2	39	43	344	2,170	e149	236	449	662	482	28	29	3.7
3	31	35	253	2,970	1,700	215	357	566	271	25	28	6.4
4	25	29	205	1,520	1,860	1,720	318	361	184	28	104	8.1
5	23	27	236	1,910	813	2,070	247	214	139	39	114	5.7
6	21	35	296	1,930	2,880	3,670	199	167	109	25	220	4.3
7	19	248	316	852	2,260	3,830	176	136	86	23	154	3.2
8	17	149	257	492	797	1,260	159	110	68	24	54	4.1
9	15	96	213	372	446	498	139	92	56	22	30	11
10	12	63	205	289	354	352	117	75	48	19	21	50
11	10	49	272	229	316	270	101	62	44	17	15	61
12	8.2	1,200	337	205	280	222	327	52	71	16	11	28
13	9.2	2,300	249	e185	237	184	1,320	46	72	16	8.5	25
14	13	1,540	220	e170	209	162	2,170	41	71	15	7.0	15
15	14	385	229	e160	187	148	1,050	99	150	14	5.5	10
16	16	251	729	e150	162	140	485	103	340	12	4.4	6.6
17	29	197	2,300	138	145	133	326	67	251	17	3.4	560
18	29	166	1,830	460	134	122	242	77	125	15	2.5	2,060
19	23	566	716	848	e120	134	193	988	208	14	1.8	1,830
20	19	1,170	501	491	e110	124	163	507	205	12	1.7	256
21	17	624	371	300	e103	135	156	208	144	10	1.6	115
22	15	332	317	237	e98	118	397	133	81	80	1.5	59
23	13	229	393	188	e92	109	776	95	66	62	1.5	36
24	9.3	199	1,200	e160	e86	99	1,030	70	47	49	3.7	25
25	8.0	179	1,240	140	e81	93	786	59	523	21	6.7	20
26	23	177	649	228	e77	83	466	620	440	25	7.7	15
27	64	344	436	428	e73	82	454	2,350	127	21	5.7	13
28	170	1,940	351	504	e70	80	290	3,640	76	16	5.4	11
29	165	2,940	305	283	69	79	208	2,420	51	14	6.3	9.2
30	103	1,750	1,010	227	---	1,230	172	547	40	13	6.1	8.3
31	76	---	1,020	196	---	1,530	---	810	---	14	6.7	---
TOTAL	1,083.7	17,319	17,543	19,019	14,075	19,202	13,988	15,528	5,655	739	893.7	5,264.8
MEAN	35.0	577	566	614	485	619	466	501	188	23.8	28.8	175
MAX	170	2,940	2,300	2,970	2,880	3,830	2,170	3,640	1,080	80	220	2,060
MIN	8.0	27	205	138	69	74	101	41	40	10	1.5	3.2
CFSM	0.15	2.55	2.50	2.71	2.15	2.74	2.06	2.22	0.83	0.11	0.13	0.78
IN.	0.18	2.85	2.89	3.13	2.32	3.16	2.30	2.56	0.93	0.12	0.15	0.87

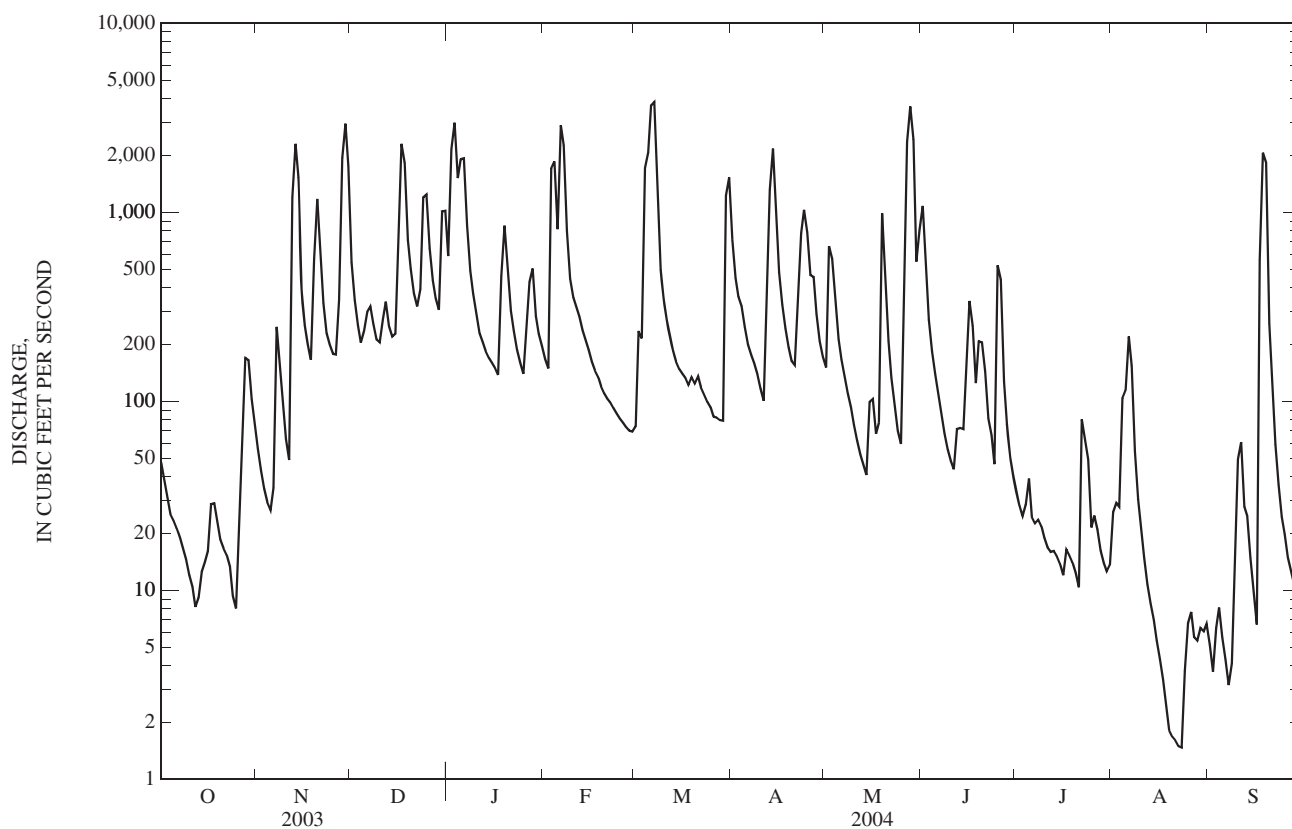
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	25.2	171	359	578	563	692	365	485	265	117	73.5	72.8
MAX	162	577	857	1,165	1,183	1,796	676	1,524	779	296	257	358
(WY)	(2003)	(2004)	(1997)	(1994)	(2003)	(1997)	(1994)	(1996)	(1998)	(1992)	(2001)	(2003)
MIN	0.01	0.01	15.0	152	213	228	73.2	18.9	1.34	0.20	0.25	0.06
(WY)	(2000)	(2000)	(2000)	(2000)	(2002)	(1998)	(1999)	(1999)	(1999)	(1999)	(2002)	(1999)

03251200 NORTH FORK LICKING RIVER NEAR MOUNT OLIVET, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	165,146.47		130,310.2		315	
ANNUAL MEAN	452		356		444	
HIGHEST ANNUAL MEAN					175	
LOWEST ANNUAL MEAN					12,400	
HIGHEST DAILY MEAN	4,950	Feb 23	3,830	Mar 7	12,400	Mar 2, 1997
LOWEST DAILY MEAN	0.42	Jul 9	1.5	Aug 22	0.00	Oct 10, 1997
ANNUAL SEVEN-DAY MINIMUM	1.9	Jul 3	2.0	Aug 17	0.00	Oct 17, 1997
MAXIMUM PEAK FLOW			4,360	Mar 7	13,500	Mar 2, 1997
MAXIMUM PEAK STAGE			18.30	Mar 7	34.71	Mar 2, 1997
INSTANTANEOUS LOW FLOW					0.36	Jul 9, 2003
ANNUAL RUNOFF (CFSM)	2.00		1.58		1.39	
ANNUAL RUNOFF (INCHES)	27.18		21.45		18.92	
10 PERCENT EXCEEDS	1,290		1,040		783	
50 PERCENT EXCEEDS	166		134		81	
90 PERCENT EXCEEDS	19		10		1.0	

e Estimated



03251500 LICKING RIVER AT MCKINNEYSBURG, KY

LOCATION.--Lat 38°35'52", long 84°16'00", Pendleton County, Hydrologic Unit 05100101, on right bank at downstream side of highway bridge at McKinneysburg, 6.5 mi southeast of Falmouth, 9.0 mi upstream from Blanket Creek, 12.9 mi upstream from South Fork, and at mile 64.6.

DRAINAGE AREA.--2,326 mi².

PERIOD OF RECORD.--July 1924 to August 1926, October 1938 to September 1994, September 2000 to current year. Monthly discharge only for October, November 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 520.83 ft above NGVD of 1929. July 23, 1924 to August 9, 1926, nonrecording gage at same site, datum unknown. Nov. 18, 1983 to June 30, 1939, nonrecording gage at present site an datum. Oct. 1, 1949 to Sept. 30, 1957, auxiliary water-stage recorder 4.0 mi downstream.

REMARKS.-- Records fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498).

COOPERATION.--National Streamflow Information Program.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 47.8 ft from flood marks. Flood of March 1997 reached a stage of 55.21 feet from flood marks. Discharge for the March 1997 flood was 74,000 cfs from rating extension.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

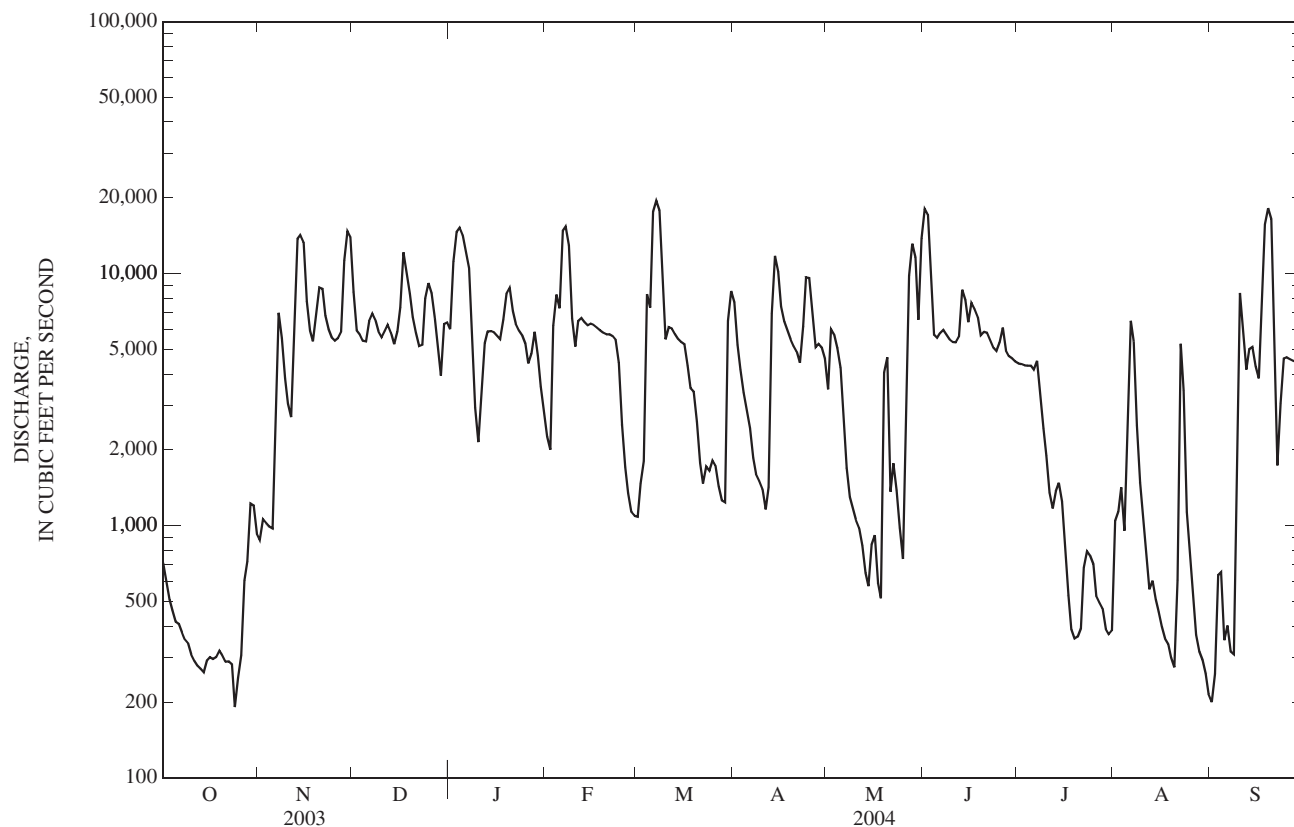
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713	879	8,470	6,020	2,250	1,090	7,690	3,480	18,100	4,400	1,040	200
2	601	1,060	5,950	11,100	2,000	1,470	5,210	6,020	17,100	4,370	1,140	259
3	510	1,020	5,720	14,600	6,210	1,800	4,170	5,730	10,800	4,330	1,420	639
4	461	991	5,410	15,200	8,260	8,270	3,370	5,050	5,720	4,320	956	655
5	416	976	5,390	14,300	7,280	7,320	2,890	4,230	5,560	4,320	2,650	352
6	407	2,680	6,490	12,300	14,800	17,600	2,440	2,650	5,840	4,170	6,490	402
7	377	6,990	6,940	10,500	15,400	19,500	1,860	1,700	5,980	4,500	5,380	318
8	354	5,550	6,580	5,820	13,000	17,800	1,600	1,300	5,730	3,400	2,490	309
9	341	3,850	5,900	2,940	6,660	9,360	1,510	1,160	5,480	2,430	1,480	2,000
10	308	3,050	5,600	2,140	5,140	5,490	1,400	1,050	5,360	1,900	1,080	8,370
11	291	2,700	5,940	3,250	6,500	6,120	1,160	980	5,340	1,350	785	5,920
12	279	6,790	6,270	5,290	6,670	6,060	1,420	834	5,630	1,170	560	4,170
13	271	13,700	5,830	5,900	6,430	5,750	6,940	649	8,620	1,370	605	5,010
14	262	14,200	5,250	5,920	6,230	5,520	11,800	576	7,850	1,480	510	5,110
15	292	13,300	5,900	5,840	6,320	5,350	10,200	842	6,420	1,250	456	4,290
16	301	7,750	7,340	5,670	6,250	5,250	7,420	916	7,670	858	397	3,840
17	296	5,940	12,100	5,490	6,110	4,310	6,460	593	7,230	531	357	6,870
18	301	5,380	10,200	6,560	5,950	3,520	5,940	515	6,730	388	339	15,700
19	319	6,850	8,320	8,340	5,820	3,410	5,480	4,060	5,690	357	299	18,100
20	307	8,800	6,730	8,780	5,750	2,590	5,160	4,650	5,880	363	274	16,500
21	289	8,710	5,810	7,100	5,740	1,770	4,910	1,360	5,830	392	607	7,980
22	290	6,820	5,160	6,330	5,640	1,470	4,430	1,770	5,430	682	5,260	1,730
23	282	6,030	5,220	5,940	5,460	1,720	6,180	1,380	5,090	791	3,440	3,050
24	191	5,580	7,980	5,690	4,420	1,660	9,660	980	4,940	759	1,130	4,600
25	249	5,420	9,160	5,280	2,520	1,820	9,600	738	5,340	704	711	4,660
26	306	5,530	8,360	4,400	1,710	1,740	7,210	1,880	6,110	527	487	4,570
27	608	5,860	6,670	4,820	1,350	1,430	5,120	9,820	4,950	496	369	4,500
28	721	11,300	5,100	5,880	1,130	1,260	5,260	13,100	4,710	469	317	4,450
29	1,230	14,800	3,940	4,730	1,090	1,240	5,100	11,600	4,610	389	294	4,400
30	1,200	14,000	6,310	3,560	---	6,500	4,600	6,550	4,480	371	259	4,370
31	929	---	6,400	2,870	---	8,520	---	13,800	---	385	215	---
TOTAL	13,702	196,506	206,440	212,560	172,090	166,710	156,190	109,963	204,220	53,222	41,797	143,324
MEAN	442	6,550	6,659	6,857	5,934	5,378	5,206	3,547	6,807	1,717	1,348	4,777
MAX	1,230	14,800	12,100	15,200	15,400	19,500	11,800	13,800	18,100	4,500	6,490	18,100
MIN	191	879	3,940	2,140	1,090	1,090	1,160	515	4,480	357	215	200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	1,154	2,434	4,490	4,744	5,608	6,191	4,586	3,551	2,336	1,213	1,015	1,239
MAX	4,877	6,550	13,020	10,430	13,960	10,920	9,136	11,130	6,807	5,783	3,537	8,088
(WY)	(1976)	(2004)	(1979)	(1974)	(1989)	(1994)	(1975)	(1983)	(2004)	(1979)	(1979)	(1979)
MIN	121	228	859	275	1,382	1,006	465	293	100	164	69.9	144
(WY)	(1974)	(1988)	(1981)	(1981)	(2002)	(1983)	(1986)	(1976)	(1988)	(1984)	(1983)	(1987)

03251500 LICKING RIVER AT MCKINNEYSBURG, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	1,678,780		1,676,724		3,202	
ANNUAL MEAN	4,599		4,581		5,802	
HIGHEST ANNUAL MEAN					1,528	
LOWEST ANNUAL MEAN					43,100	
HIGHEST DAILY MEAN	28,600	May 6	19,500	Mar 7	48	Feb 16, 1989
LOWEST DAILY MEAN	178	Aug 31	191	Oct 24	44	Aug 17, 2002
ANNUAL SEVEN-DAY MINIMUM	273	Aug 26	273	Aug 27	59,100	Aug 15, 2002
MAXIMUM PEAK FLOW			19,700	Mar 7	50.26	Mar 10, 1964
MAXIMUM PEAK STAGE			24.41	Mar 7	190	Aug 31, 2003
INSTANTANEOUS LOW FLOW					7,960	
10 PERCENT EXCEEDS	10,600		8,910		1,370	
50 PERCENT EXCEEDS	3,580		4,580		200	
90 PERCENT EXCEEDS	369		375			



03252300 HINKSTON CREEK NEAR CARLISLE, KY

LOCATION.--Lat 38°14'33", long 84°03'10", Bourbon County, Hydrologic Unit 05100102, at upstream side 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, WRD KY-99-1: Longitude.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 764.88 ft above NGVD of 1929.

REMARKS.-- Records fair except.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 6	0700	3,570	22.31	Jun 1	0000	*4,820	*27.66

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	346	372	e117	53	323	119	4,420	18	271	23
2	15	13	220	1,860	e110	77	224	334	2,330	16	90	20
3	16	9.8	164	2,140	1,020	119	185	606	785	15	47	19
4	11	8.0	151	780	696	310	157	292	398	15	32	18
5	7.4	104	435	1,690	582	593	130	201	278	14	921	18
6	6.3	755	435	1,270	2,090	3,380	112	157	193	15	335	19
7	5.8	319	323	539	1,390	2,110	103	123	144	33	113	17
8	4.3	164	241	358	551	527	95	101	111	39	66	118
9	3.3	97	187	273	380	327	83	85	89	29	47	645
10	2.7	66	168	206	301	238	74	72	102	22	36	237
11	1.5	49	246	164	250	188	68	62	79	138	30	121
12	1.7	538	199	e140	207	159	96	55	230	303	68	79
13	2.4	1,840	161	e123	179	135	327	49	530	90	41	60
14	2.7	1,140	271	e111	159	120	144	48	229	57	34	47
15	5.7	357	580	e102	143	110	152	53	183	35	26	38
16	12	352	721	e94	121	106	224	54	117	25	20	32
17	26	263	1,500	e90	109	105	235	47	80	39	17	1,740
18	17	229	717	352	100	93	188	40	63	63	14	2,580
19	12	1,450	506	592	95	84	151	94	67	50	12	742
20	9.2	952	386	337	91	76	127	106	133	29	12	238
21	8.5	433	288	233	85	100	122	83	75	20	988	154
22	7.8	264	260	e182	78	168	341	49	53	23	1,050	107
23	6.9	179	312	e150	70	116	818	36	50	48	137	82
24	6.6	144	814	e127	68	100	990	29	45	47	75	64
25	7.9	149	689	e110	65	91	423	25	37	28	53	52
26	12	119	426	142	60	82	348	32	39	21	42	43
27	40	106	310	388	57	76	270	952	48	17	55	36
28	74	1,680	241	289	54	72	198	2,140	33	14	62	32
29	52	1,700	197	188	51	69	158	907	25	13	41	27
30	31	602	665	e153	---	583	134	1,310	20	12	32	24
31	24	---	559	e130	---	480	---	4,640	---	95	27	---
TOTAL	451.7	14,100.8	12,718	13,685	9,279	10,847	7,000	12,901	10,986	1,383	4,794	7,432
MEAN	14.6	470	410	441	320	350	233	416	366	44.6	155	248
MAX	74	1,840	1,500	2,140	2,090	3,380	990	4,640	4,420	303	1,050	2,580
MIN	1.5	8.0	151	90	51	53	68	25	20	12	12	17
CFSM	0.09	3.05	2.66	2.87	2.08	2.27	1.52	2.70	2.38	0.29	1.00	1.61
IN.	0.11	3.41	3.07	3.31	2.24	2.62	1.69	3.12	2.65	0.33	1.16	1.80

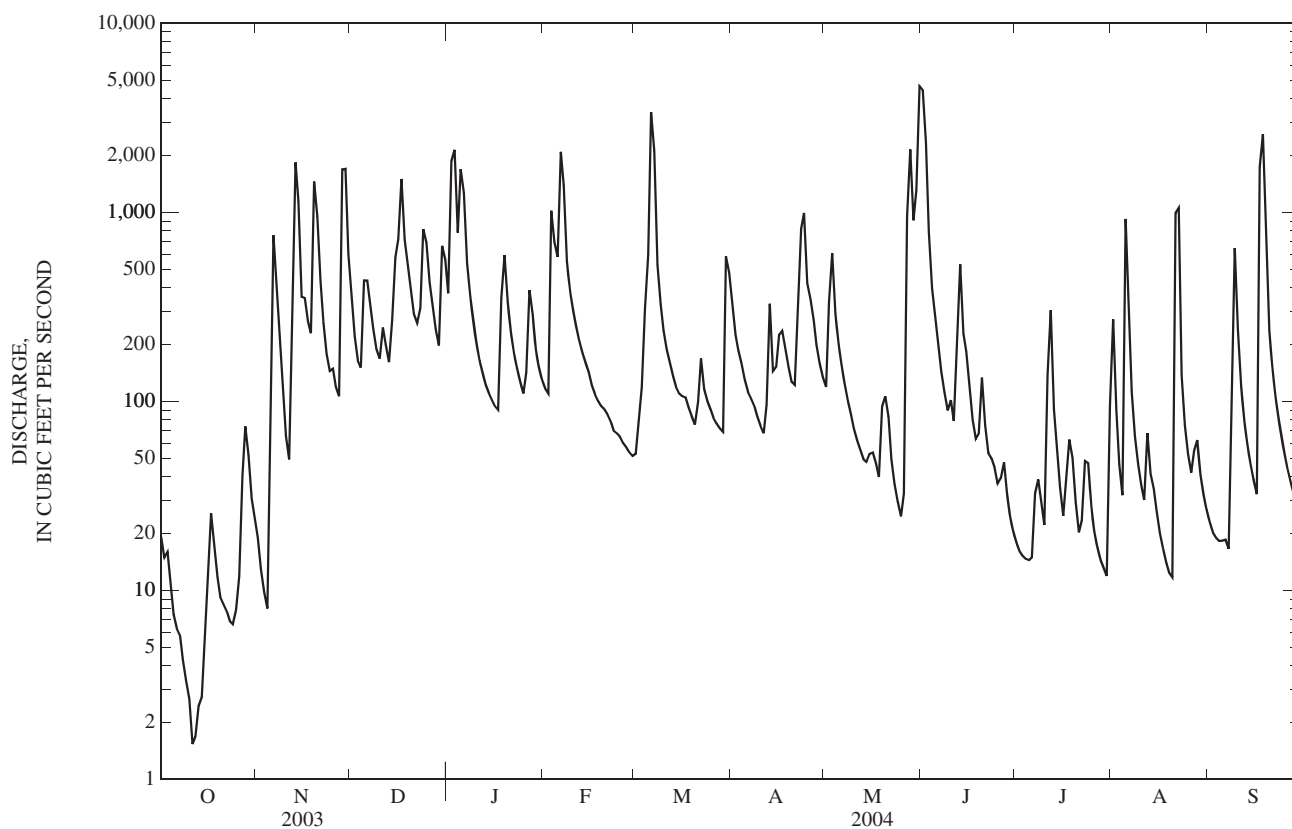
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	MEAN	28.7	138	215	365	357	472	194	326	185	72.4	73.1	35.4
MAX	138	470	453	675	898	1,210	436	875	652	315	277	248	
(WY)	(2003)	(2004)	(1997)	(1994)	(2003)	(1997)	(1994)	(1996)	(1997)	(2001)	(2001)	(2004)	
MIN	1.33	3.10	9.99	35.3	79.7	240	40.4	17.7	14.5	8.92	3.80	0.70	
(WY)	(1998)	(2000)	(2000)	(2000)	(2002)	(1998)	(1999)	(1999)	(1999)	(1999)	(2002)	(1999)	

03252300 HINKSTON CREEK NEAR CARLISLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	110,951.82		105,577.5		205	
ANNUAL MEAN	304		288		305	
HIGHEST ANNUAL MEAN					77.1	
LOWEST ANNUAL MEAN					0.00	
HIGHEST DAILY MEAN	4,260	Feb 17	4,640	May 31	7,520	Mar 2, 1997
LOWEST DAILY MEAN	0.92	Sep 20	1.5	Oct 11	0.00	Aug 11, 1999
ANNUAL SEVEN-DAY MINIMUM	2.4	Sep 15	2.7	Oct 8	0.00	Aug 11, 1999
MAXIMUM PEAK FLOW			4,820	Jun 1	7,800	Mar 2, 1997
MAXIMUM PEAK STAGE			27.66	Jun 1	37.00	Mar 2, 1997
INSTANTANEOUS LOW FLOW			1.2	Oct 11	0.50	Sep 20, 2003
ANNUAL RUNOFF (CFSM)	1.97		1.87		1.33	
ANNUAL RUNOFF (INCHES)	26.80		25.50		18.06	
10 PERCENT EXCEEDS	762		718		482	
50 PERCENT EXCEEDS	105		106		56	
90 PERCENT EXCEEDS	8.0		16		3.1	

e Estimated



03253500 LICKING RIVER AT CATAWBA, KY

LOCATION.--Lat 38°42'31", long 84°18'38", Pendleton County, Hydrologic Unit 05100101, on left bank 1.0 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 mi².

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 with telemetry. Datum of gage is 500.01 ft above NGVD of 1929 (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.--Records good except for those estimated, which are fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498).

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	799	875	12,000	8,550	3,600	1,190	11,000	4,540	33,800	4,180	1,430	466
2	788	1,020	7,630	15,800	2,910	e1,660	7,120	9,050	30,300	4,080	3,250	453
3	686	996	6,810	21,100	9,060	e2,010	5,360	9,300	17,800	4,350	2,860	546
4	615	944	6,200	23,300	12,200	e3,860	4,440	8,150	8,920	4,150	1,690	1,670
5	562	912	5,920	21,400	10,700	e7,030	3,760	6,440	6,840	4,120	3,320	855
6	524	1,760	7,120	18,400	22,900	e18,200	3,280	4,400	6,510	4,110	8,570	627
7	507	6,730	8,340	15,600	22,900	e20,800	2,730	3,060	6,310	4,580	8,210	529
8	472	6,800	7,960	9,220	18,300	e19,000	2,220	2,260	5,840	4,550	4,230	494
9	456	4,580	6,980	5,290	10,100	e11,200	2,010	1,860	5,470	e3,530	2,420	962
10	431	3,600	6,830	3,920	6,900	e8,070	1,820	1,600	5,200	e2,650	1,530	8,190
11	401	3,150	7,940	4,140	7,850	6,690	1,540	1,420	5,310	1,850	1,080	7,630
12	387	7,640	7,490	5,920	7,940	6,090	1,350	1,240	6,000	1,380	809	4,700
13	384	17,800	7,070	e6,400	7,540	5,720	7,990	984	9,370	1,780	728	5,460
14	399	18,900	6,220	e6,400	7,110	5,720	17,500	871	11,200	2,140	711	5,700
15	558	17,400	6,480	e6,400	7,050	5,990	16,000	1,070	7,640	1,700	670	4,570
16	462	10,100	8,350	6,180	6,900	5,840	10,800	1,930	8,780	1,110	613	4,030
17	420	7,130	16,600	5,910	6,620	5,120	8,420	1,140	8,310	778	546	6,010
18	403	6,370	15,600	7,380	6,380	4,150	7,310	942	7,800	604	509	21,200
19	407	8,880	11,900	9,880	6,190	4,130	6,450	4,430	6,160	538	472	26,100
20	397	11,900	9,100	10,900	6,070	3,510	5,830	7,700	6,220	520	433	20,000
21	375	12,300	7,670	8,940	6,070	2,570	5,420	3,070	5,850	688	416	10,800
22	366	8,840	6,590	7,480	5,960	1,840	5,020	3,050	5,610	697	4,420	3,150
23	396	7,160	6,470	6,800	5,730	2,380	7,510	2,500	5,060	1,160	6,590	3,070
24	347	6,340	10,700	6,330	e4,650	2,320	13,100	1,690	4,760	1,370	2,540	4,690
25	306	5,970	11,800	5,800	e2,950	2,520	14,000	1,200	4,850	1,210	1,170	4,720
26	402	5,890	11,200	4,940	2,230	2,340	10,400	3,230	6,230	907	791	4,540
27	637	6,650	8,730	5,130	1,720	1,910	7,230	17,000	5,140	767	628	4,400
28	724	14,600	6,670	7,490	1,310	1,540	6,610	23,800	4,960	694	531	4,300
29	1,030	20,600	5,130	6,480	1,210	1,480	6,310	21,700	4,580	614	498	4,210
30	1,300	19,700	8,130	4,750	---	6,980	5,560	12,300	4,340	603	599	4,150
31	1,020	---	8,630	3,860	---	10,900	---	24,300	---	924	536	---
TOTAL	16,961	245,537	264,260	280,090	221,050	182,760	208,090	186,227	255,160	62,334	62,800	168,222
MEAN	547	8,185	8,525	9,035	7,622	5,895	6,936	6,007	8,505	2,011	2,026	5,607
MAX	1,300	20,600	16,600	23,300	22,900	20,800	17,500	24,300	33,800	4,580	8,570	26,100
MIN	306	875	5,130	3,860	1,210	1,190	1,350	871	4,340	520	416	453

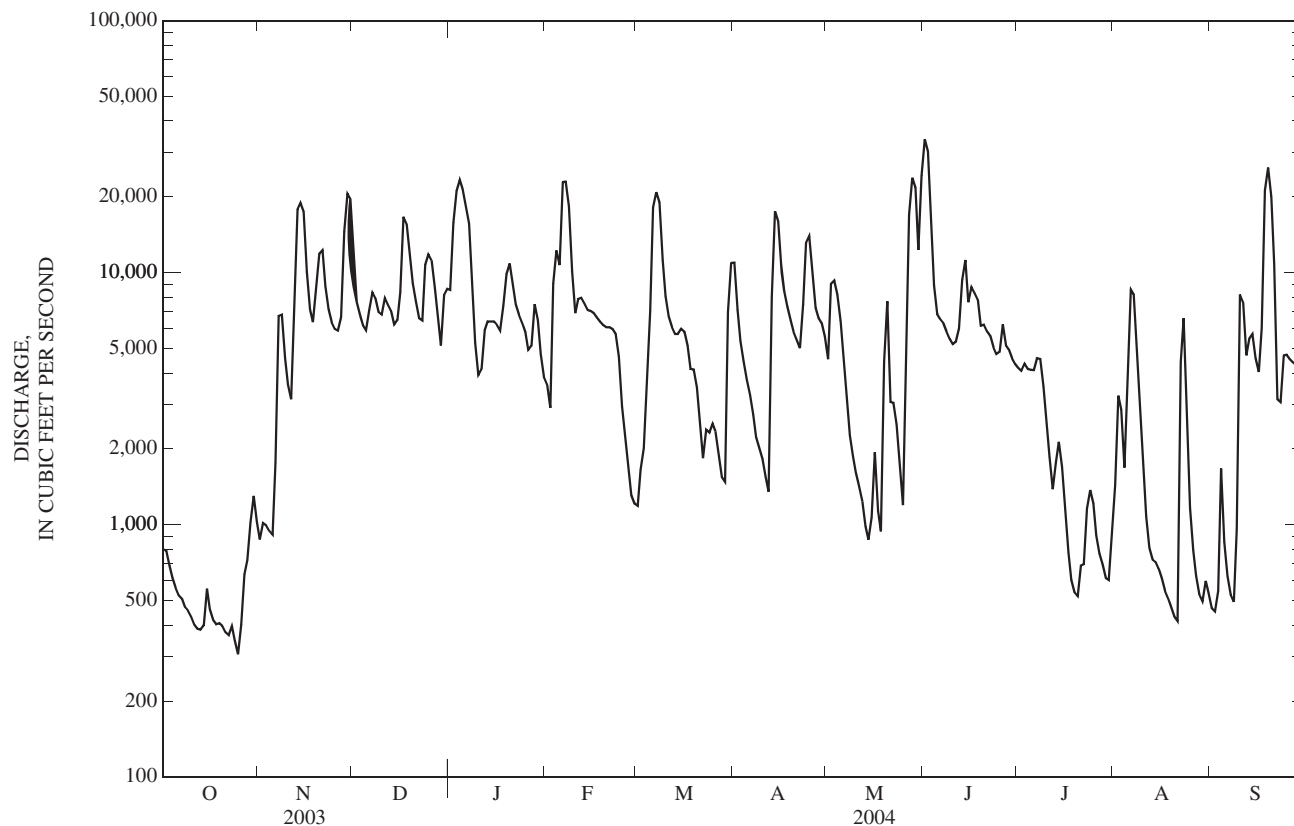
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	1,281	2,885	5,586	6,524	7,702	8,383	5,719	5,216	3,400	1,710	1,295	1,468
MAX	7,178	8,185	18,500	15,110	21,140	21,310	11,920	16,660	11,230	6,962	4,630	12,860
(WY)	(1976)	(2004)	(1979)	(1974)	(1989)	(1997)	(1975)	(1983)	(1997)	(1979)	(1974)	(1979)
MIN	79.8	107	1,008	420	1,950	1,247	666	342	101	86.0	68.4	51.5
(WY)	(2000)	(2000)	(2000)	(1981)	(2002)	(1983)	(1986)	(1999)	(1999)	(1999)	(1999)	(1999)

03253500 LICKING RIVER AT CATAWBA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	2,177,756		2,153,491		4,248	
ANNUAL MEAN	5,966		5,884		7,730	
HIGHEST ANNUAL MEAN					2,006	
LOWEST ANNUAL MEAN					104,000	
HIGHEST DAILY MEAN	40,300	May 6	33,800	Jun 1	104,000	Mar 3, 1997
LOWEST DAILY MEAN	306	Oct 25	306	Oct 25	25	Jul 8, 1988
ANNUAL SEVEN-DAY MINIMUM	370	Oct 20	370	Oct 20	38	Jul 3, 1988
MAXIMUM PEAK FLOW			34,500	Jun 1	110,000	Mar 3, 1997
MAXIMUM PEAK STAGE			26.41	Jun 1	57.57	Mar 21, 2002
INSTANTANEOUS LOW FLOW					2.5	Aug 5, 1930
10 PERCENT EXCEEDS	14,800		12,200		10,600	
50 PERCENT EXCEEDS	3,890		4,950		1,720	
90 PERCENT EXCEEDS	538		561		236	

e Estimated



03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY

LOCATION.--Lat 38°50'40", long 84°31'56", Kenton County, Hydrologic Unit 05100101, at bridge on Highway 17, 0.6 mi downstream from Sawyers Fork, 0.9 mi north of Piner, and 7.8 mi upstream from the mouth.

DRAINAGE AREA.--18.0 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 656.926 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated and those above 700 ft³/s, which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	4.4	19	24	e8.7	11	56	166	25	0.17	47	1.4
2	5.5	4.4	15	238	15	12	46	436	14	0.16	14	1.2
3	4.8	7.8	13	229	265	10	40	69	9.4	0.15	8.2	1.4
4	8.8	7.8	12	1,440	55	138	28	31	7.8	0.13	60	3.2
5	4.0	7.7	14	342	146	70	22	25	6.1	0.12	31	2.2
6	3.1	7.9	12	65	347	97	20	26	5.0	0.11	9.0	1.7
7	2.8	7.7	10	e34	73	42	18	14	4.2	1.6	6.0	1.3
8	2.8	8.9	9.9	e26	e34	27	16	15	3.6	0.99	4.3	1.3
9	3.5	14	9.4	22	e25	24	12	12	2.9	0.46	3.2	3.0
10	4.7	13	100	e18	e33	19	11	11	3.0	2.8	3.1	2.2
11	6.8	14	45	e16	e25	18	11	8.8	3.3	5.5	4.0	1.6
12	12	285	24	16	e20	15	23	e7.2	8.8	5.6	2.2	1.2
13	18	42	18	14	e17	13	249	e6.5	6.2	9.4	1.8	0.95
14	45	25	18	13	e16	14	170	6.4	2.8	2.2	1.8	0.68
15	12	21	14	12	e14	12	44	18	2.0	0.98	1.6	0.50
16	4.9	12	37	e8.5	14	21	32	14	2.0	0.47	1.4	0.37
17	4.2	9.5	38	11	13	18	23	7.0	1.9	3.6	1.3	2.0
18	4.1	86	26	57	12	15	18	7.0	1.8	1.9	1.1	4.4
19	4.0	82	21	25	12	17	16	257	1.6	1.1	1.0	2.3
20	4.2	35	17	e15	16	18	14	27	1.2	0.90	1.1	1.6
21	6.2	28	e16	e13	19	21	15	17	0.85	0.48	2.2	1.1
22	7.0	14	18	e11	13	16	21	14	0.69	16	2.2	0.82
23	6.4	11	56	e10	13	15	23	9.7	0.61	4.1	1.5	0.57
24	6.5	23	72	e10	12	16	21	6.8	0.49	4.2	1.8	0.41
25	6.4	15	33	e8.9	11	15	15	5.7	0.37	1.2	3.9	0.33
26	13	12	24	e9.8	9.8	14	12	29	0.34	18	4.4	0.29
27	8.9	129	20	e13	9.1	13	14	492	0.29	4.8	7.3	0.24
28	5.6	176	17	e10	8.5	12	10	252	0.24	2.3	2.5	0.21
29	6.1	52	20	11	8.7	20	9.1	32	0.21	1.6	2.6	0.17
30	5.1	29	93	10	---	102	28	21	0.19	251	2.7	0.15
31	4.6	---	32	e7.4	---	70	---	197	---	1,050	2.1	---
TOTAL	239.5	1,184.1	873.3	2,739.6	1,264.8	925	1,037.1	2,240.1	116.88	1,392.02	236.3	38.79
MEAN	7.73	39.5	28.2	88.4	43.6	29.8	34.6	72.3	3.90	44.9	7.62	1.29
MAX	45	285	100	1,440	347	138	249	492	25	1,050	60	4.4
MIN	2.8	4.4	9.4	7.4	8.5	10	9.1	5.7	0.19	0.11	1.0	0.15

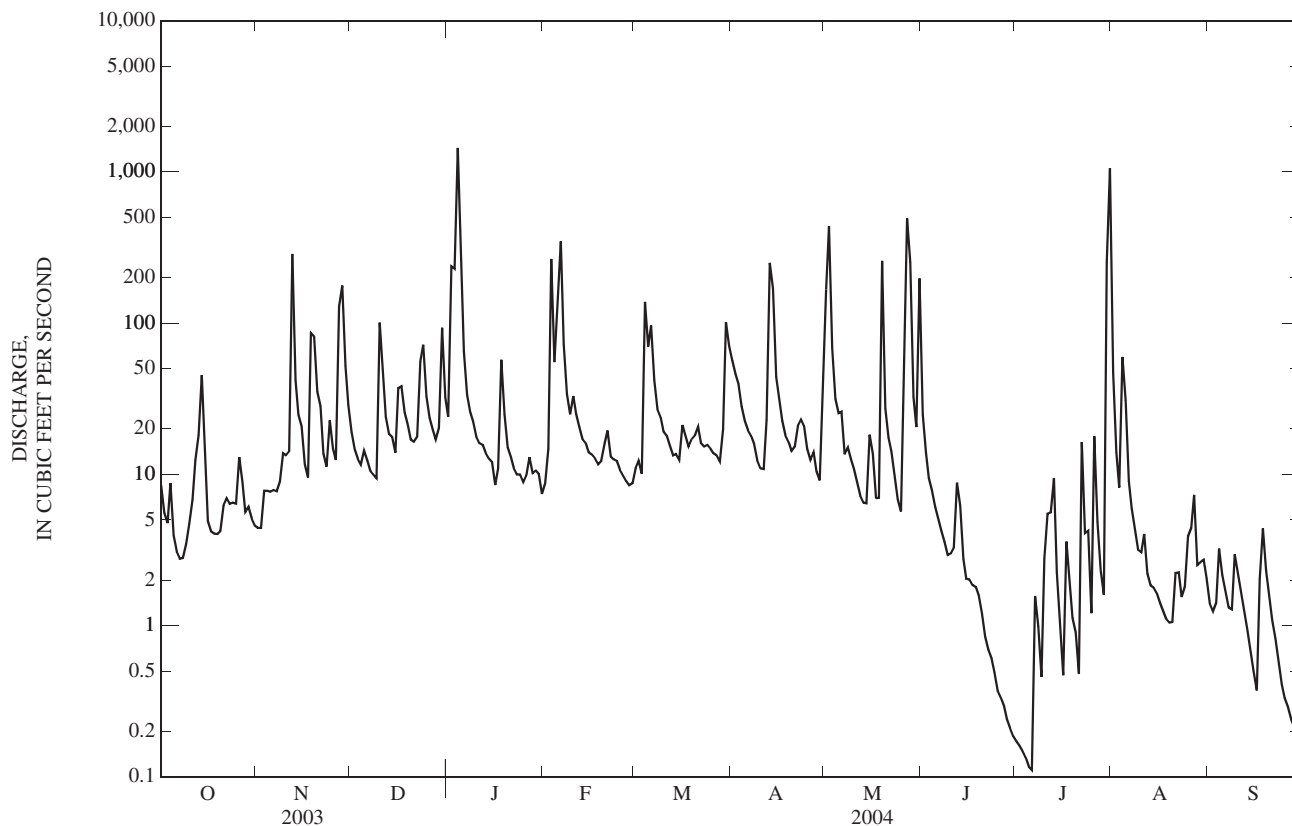
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	19.6	34.8	45.4	41.0	38.4	33.7	30.2	65.1	11.9	21.4	12.1	14.5
MAX	41.1	46.8	62.6	88.4	64.2	53.6	60.2	95.1	20.4	44.9	35.1	46.4
(WY)	(2002)	(2002)	(2002)	(2004)	(2003)	(2002)	(2002)	(2003)	(2002)	(2004)	(2003)	(2003)
MIN	7.73	18.0	28.2	11.3	21.7	16.8	2.89	3.83	3.90	0.02	0.00	1.29
(WY)	(2004)	(2003)	(2004)	(2001)	(2002)	(2001)	(2001)	(2001)	(2004)	(2002)	(2002)	(2004)

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	12,952.52		12,287.49		35.4	
ANNUAL MEAN	35.5		33.6		33.6	
HIGHEST ANNUAL MEAN					36.6	
LOWEST ANNUAL MEAN					33.6	
HIGHEST DAILY MEAN	1,610	May 10	1,440	Jan 4	1,610	May 10, 2003
LOWEST DAILY MEAN	0.67	Jul 6	0.11	Jul 6	0.00	Jul 8, 2002
ANNUAL SEVEN-DAY MINIMUM	0.86	Jul 2	0.15	Jun 30	0.00	Jul 16, 2002
MAXIMUM PEAK FLOW			5,890	Jul 31	9,110	May 10, 2003
MAXIMUM PEAK STAGE			10.03	Jul 31	11.62	May 10, 2003
INSTANTANEOUS LOW FLOW			0.10	Jul 31	0.00	Jul 8, 2002
10 PERCENT EXCEEDS	63		56		64	
50 PERCENT EXCEEDS	13		11		9.9	
90 PERCENT EXCEEDS	3.4		1.1		0.28	

e Estimated



03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY
WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2000 to current water year.

pH: December 2000 to current water year.

WATER TEMPERATURES: December 2000 to current water year.

DISSOLVED OXYGEN: December 2000 to current water year.

TURBIDITY: December 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated good except for the following periods: Feb. 3-17, Jun. 13-19 rated poor.

pH: Records rated good except for the following periods: Oct. 1-8; Jun. 20-28 rated fair.

WATER TEMPERATURES: Records rated excellent except for the following period; Oct. 4-8 rated good.

DISSOLVED OXYGEN: Records rated fair except for the following periods: Oct. 1-7, Oct. 19-30, Mar. 3-30, May 13-Jun. 2 rated poor.

TURBIDITY: Records fair.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 916 microsiemens, Feb. 25, 2001; minimum recorded, 101 microsiemens, Jul. 30, 2004.

pH: Maximum recorded, 8.8 units, Jun. 3, 2004, and March 12, 2003; minimum recorded, 7.1 units, Sept. 2, 2003, and Jan. 3-5, 2004.

WATER TEMPERATURE: Maximum recorded 27.6°C, Jul. 6, 2004; minimum recorded, -0.3°C, Feb. 14, 16, 17, 2004.

DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L, March 10, 2003; minimum recorded, 1.2 mg/L, July 24, 2001.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 30-31, 2004; minimum recorded, 0.0 NTU, Nov. 30, Dec. 2, 2002, and Jan. 12-29, 31, Feb. 1, 2, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 709 microsiemens, Feb. 1, 2004; minimum recorded, 101 microsiemens, Jul. 30, 2004.

pH: Maximum recorded, 8.8 units, Jun. 3, 2004; minimum recorded, 7.1 units, Jan. 3-5, 2004.

WATER TEMPERATURES: Maximum recorded, 27.6°C, July 6, 2004; minimum recorded, -0.3°C, Feb. 14, 16, 17, 2004.

DISSOLVED OXYGEN: Maximum recorded, 17.1 mg/L, Feb. 26, 2004; minimum recorded, 3.6 mg/L, Jul. 7, Sept. 29, 30, 2004.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 30, 31, 2004; minimum recorded, 3.0 NTU, Dec. 18, 2003.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	522	457	502	597	584	591	525	506	517	536	516	528
2	532	521	527	610	597	604	531	522	525	525	225	344
3	542	520	534	615	605	610	540	528	534	484	145	433
4	554	541	547	613	532	594	548	538	543	259	126	188
5	554	432	476	532	482	504	552	532	542	380	139	289
6	479	431	455	507	475	491	540	527	534	427	380	413
7	533	478	508	499	463	478	545	531	538	475	424	451
8	558	530	546	478	461	470	551	540	545	493	473	485
9	559	552	555	463	379	413	561	546	555	515	490	501
10	564	557	559	385	374	379	564	298	434	536	513	523
11	570	553	566	394	380	384	475	340	422	538	513	526
12	579	555	573	400	198	323	513	475	499	514	504	509
13	579	561	576	437	386	416	532	511	522	517	510	514
14	583	364	509	453	436	445	560	529	535	551	515	522
15	435	371	401	473	447	454	579	534	547	527	517	520
16	497	434	467	542	472	506	618	438	562	533	520	526
17	532	496	516	555	542	549	496	415	453	617	530	546
18	557	521	544	557	257	485	558	496	512	553	401	454
19	573	537	561	445	283	382	---	---	---	480	405	448
20	582	559	573	497	445	471	---	---	---	529	480	510
21	588	579	582	475	447	455	---	---	---	537	523	529
22	591	580	586	543	470	510	563	555	559	543	528	532
23	593	581	588	552	541	546	575	404	537	578	543	570
24	593	583	588	555	504	525	489	377	436	583	552	567
25	594	579	591	522	492	502	517	489	509	580	557	570
26	591	551	574	550	521	539	535	517	527	582	543	569
27	567	558	562	559	256	424	544	531	538	681	527	574
28	562	550	556	388	294	337	550	539	545	682	629	647
29	569	560	565	472	375	436	554	443	544	643	599	625
30	576	557	564	507	471	493	473	338	405	606	589	598
31	586	574	578	---	---	---	519	473	503	660	597	618
MONTH	594	364	543	615	198	477	618	298	515	682	126	504

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	709	651	681	540	520	530	506	460	480	518	195	436
2	677	530	644	541	522	531	523	494	510	380	222	293
3	530	308	351	568	535	553	522	498	513	465	380	427
4	437	367	408	556	324	389	533	514	524	505	464	490
5	475	297	409	492	400	468	533	515	526	525	503	516
6	335	285	303	463	387	422	534	510	524	525	489	509
7	431	335	391	501	463	489	535	500	520	524	486	506
8	458	431	448	522	499	514	526	492	511	539	520	530
9	494	456	474	532	516	524	524	489	509	555	527	539
10	496	459	485	533	520	527	525	492	508	568	533	546
11	483	444	460	539	525	532	523	498	511	572	543	554
12	503	482	493	538	521	531	529	472	509	567	550	559
13	498	487	491	538	520	530	488	202	390	576	557	565
14	515	498	507	542	524	533	432	249	362	578	480	570
15	518	510	514	539	520	531	476	432	465	569	507	535
16	540	516	525	541	508	525	498	474	488	514	479	493
17	533	524	528	551	508	525	493	479	486	530	494	511
18	540	520	531	556	532	544	489	463	475	569	523	548
19	543	526	535	546	520	534	493	472	479	562	182	352
20	540	511	529	542	525	535	508	488	499	496	412	458
21	539	505	515	544	516	531	515	496	505	539	496	521
22	543	512	526	547	532	539	513	481	502	560	537	550
23	529	501	517	547	532	540	519	487	501	572	556	566
24	536	517	526	551	528	541	527	463	508	588	564	574
25	539	520	531	548	521	537	527	472	496	583	565	579
26	546	513	531	548	527	538	544	515	530	567	393	510
27	537	511	524	555	456	545	543	516	531	409	145	311
28	538	513	524	561	535	548	543	522	532	402	168	339
29	538	513	524	561	446	543	544	524	534	458	402	436
30	---	---	---	446	379	407	543	445	494	500	458	480
31	---	---	---	480	433	461	---	---	---	498	222	337
MONTH	709	285	497	568	324	516	544	202	497	588	145	488
	JUNE			JULY			AUGUST			SEPTEMBER		
1	492	395	452	566	554	562	383	305	353	460	441	449
2	513	492	505	577	563	569	453	382	425	460	440	447
3	523	512	518	581	564	571	475	453	465	460	432	447
4	523	515	520	572	560	567	486	289	408	449	437	442
5	521	514	517	572	513	561	406	318	375	466	449	457
6	520	510	515	558	484	528	472	402	434	478	465	472
7	519	508	512	576	502	539	500	472	489	485	472	480
8	511	502	508	527	512	521	514	500	506	506	484	492
9	507	501	505	523	514	517	525	509	518	512	490	503
10	505	498	502	536	405	498	529	517	524	520	504	512
11	502	485	495	442	387	415	536	527	531	526	516	520
12	486	467	480	470	426	453	537	527	532	534	511	525
13	468	350	378	459	437	446	547	531	539	538	521	533
14	420	376	409	443	417	425	536	494	514	545	535	539
15	419	410	416	432	418	423	503	482	493	545	513	541
16	418	411	415	435	424	430	500	486	492	547	540	544
17	427	416	422	468	427	444	502	489	497	546	514	533
18	429	422	426	470	449	460	511	495	503	523	514	519
19	429	420	424	455	439	446	516	503	510	526	519	521
20	424	412	418	448	440	444	523	508	516	525	518	521
21	422	409	414	458	442	449	534	514	522	529	519	523
22	411	401	406	464	338	396	528	515	523	544	529	535
23	413	385	399	379	337	356	530	523	527	546	535	539
24	398	378	388	465	379	409	535	517	528	548	538	542
25	386	373	379	489	465	479	521	511	516	547	542	544
26	395	370	382	516	358	401	522	506	516	558	545	551
27	377	361	370	404	366	385	528	513	522	561	550	557
28	573	358	444	443	403	423	516	507	510	565	556	560
29	578	551	563	464	443	454	517	506	513	573	563	568
30	570	554	560	481	101	371	507	461	486	571	568	570
31	---	---	---	306	128	228	465	445	456	---	---	---
MONTH	578	350	455	581	101	457	547	289	492	573	432	516
YEAR	709	101	496									

LICKING RIVER BASIN

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	8.0	8.0	7.9	8.1	7.9	7.9	7.6	7.9	7.8	8.2	7.9
2	8.1	8.1	7.9	7.8	8.1	8.0	7.8	7.2	7.9	7.8	8.2	7.9
3	8.1	8.1	7.9	7.8	8.1	7.9	7.7	7.1	7.8	7.5	8.2	7.9
4	8.1	8.1	7.9	7.8	8.0	7.9	7.3	7.1	8.0	7.7	8.0	7.6
5	8.1	8.0	7.9	7.8	8.0	7.9	7.6	7.1	8.0	7.6	8.1	7.7
6	8.1	8.0	7.8	7.8	8.0	7.9	7.7	7.6	7.7	7.6	8.1	7.7
7	8.1	8.0	7.9	7.8	8.1	7.9	7.8	7.7	8.0	7.7	8.2	7.8
8	8.3	8.0	8.1	7.9	8.1	7.9	7.8	7.8	8.1	7.9	8.2	7.9
9	8.3	8.2	8.1	8.0	8.0	7.9	7.9	7.8	8.1	7.9	8.2	8.0
10	8.2	8.1	8.1	8.0	8.0	7.6	7.9	7.8	8.1	8.0	8.2	8.0
11	8.1	8.0	8.0	7.9	7.8	7.6	7.9	7.8	8.1	7.9	8.2	8.0
12	8.0	7.8	7.9	7.4	8.0	7.8	7.9	7.9	8.1	8.0	8.3	8.0
13	7.9	7.8	7.9	7.7	8.0	7.9	7.9	7.9	8.2	8.0	8.2	8.0
14	7.9	7.7	7.9	7.8	7.9	7.8	7.9	7.9	8.2	8.0	8.2	7.9
15	7.8	7.7	7.9	7.8	7.9	7.8	7.9	7.9	8.2	8.1	8.2	7.9
16	7.9	7.8	7.9	7.8	7.9	7.7	8.0	7.9	8.2	8.1	8.1	7.9
17	8.0	7.9	8.0	7.9	7.8	7.6	8.0	7.9	8.2	8.1	8.2	7.9
18	8.1	8.0	8.0	7.5	7.9	7.8	7.9	7.7	8.2	8.0	8.2	7.9
19	8.1	8.0	7.8	7.5	---	---	7.9	7.7	8.2	8.0	8.2	7.9
20	8.0	8.0	8.0	7.8	---	---	7.9	7.8	8.1	8.0	8.2	7.9
21	8.0	7.9	8.0	7.9	---	---	8.0	7.9	8.1	7.9	8.2	7.9
22	8.0	7.9	8.0	7.9	7.8	7.7	8.0	7.9	8.3	7.9	8.2	8.0
23	8.0	7.9	8.1	7.9	7.7	7.4	8.0	7.9	8.3	8.0	8.2	8.0
24	8.0	8.0	8.0	7.8	7.7	7.4	8.0	7.9	8.2	8.0	8.2	7.9
25	8.0	8.0	8.0	7.9	7.9	7.6	8.0	7.8	8.3	8.0	8.2	7.9
26	8.0	7.9	8.1	8.0	7.8	7.7	7.9	7.8	8.3	8.0	8.1	7.8
27	7.9	7.9	8.0	7.5	7.8	7.7	7.9	7.8	8.3	8.0	8.0	7.7
28	7.9	7.9	7.7	7.6	7.9	7.7	7.9	7.8	8.3	8.0	8.0	7.7
29	8.0	7.9	7.9	7.7	7.9	7.7	8.0	7.9	8.3	8.0	7.9	7.7
30	8.0	7.8	8.0	7.9	7.7	7.4	7.9	7.9	---	---	7.8	7.7
31	8.0	7.9	---	---	7.9	7.6	7.9	7.8	---	---	7.9	7.8
MONTH	8.3	7.7	8.1	7.4	8.1	7.4	8.0	7.1	8.3	7.5	8.3	7.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.8	8.4	7.8	8.7	8.5	8.3	8.1	7.6	7.5	7.6	7.4
2	8.1	7.9	8.0	7.8	8.7	8.6	8.2	8.1	7.7	7.6	7.6	7.4
3	8.2	7.9	8.3	8.0	8.8	8.7	8.2	7.9	7.7	7.6	7.6	7.5
4	8.2	7.9	8.5	8.2	8.7	8.6	8.2	7.9	7.7	7.4	7.6	7.4
5	8.3	8.0	8.6	8.3	8.7	8.6	8.1	7.9	7.7	7.4	7.6	7.4
6	8.3	8.0	8.5	8.3	8.7	8.6	8.0	7.8	7.8	7.7	7.6	7.4
7	8.3	7.9	8.6	8.2	8.7	8.5	7.8	7.6	7.8	7.8	7.6	7.4
8	8.3	7.8	8.5	8.3	8.6	8.5	8.0	7.8	7.8	7.8	7.5	7.4
9	8.3	7.9	8.5	8.2	8.5	8.4	7.9	7.8	7.8	7.8	7.6	7.5
10	8.2	7.9	8.4	8.2	8.5	8.3	7.9	7.7	7.8	7.8	7.7	7.6
11	8.2	7.9	8.4	8.2	8.4	8.3	7.8	7.6	7.9	7.8	7.7	7.6
12	8.2	7.9	8.3	8.2	8.4	8.3	7.8	7.7	7.9	7.8	7.8	7.6
13	8.1	7.7	8.3	8.1	8.4	8.2	7.8	7.7	7.9	7.8	7.7	7.6
14	8.2	7.8	8.3	8.1	8.3	8.2	7.7	7.6	7.9	7.8	7.8	7.5
15	8.3	8.0	8.4	8.2	8.2	8.2	7.8	7.6	7.9	7.8	7.7	7.5
16	8.4	8.0	8.5	8.3	8.2	8.1	7.8	7.6	7.9	7.8	7.7	7.5
17	8.4	8.0	8.5	8.4	8.2	8.1	7.8	7.6	7.9	7.8	7.6	7.5
18	8.4	7.9	8.4	8.3	8.2	8.1	7.8	7.6	7.9	7.7	7.8	7.5
19	8.3	7.9	8.4	8.0	8.2	8.1	7.7	7.5	7.9	7.7	7.8	7.6
20	8.3	8.0	8.4	8.3	8.2	8.1	7.7	7.5	7.7	7.6	7.8	7.6
21	8.2	8.0	8.5	8.3	8.3	8.1	7.8	7.4	7.6	7.5	7.8	7.6
22	8.2	8.0	8.4	8.3	8.3	8.1	7.7	7.4	7.8	7.6	7.8	7.6
23	8.4	8.0	8.4	8.3	8.2	8.0	7.4	7.4	7.8	7.6	7.8	7.6
24	8.5	8.2	8.4	8.3	8.2	8.1	7.7	7.4	7.7	7.6	7.8	7.5
25	8.4	8.1	8.4	8.4	8.2	8.0	7.7	7.6	7.7	7.5	7.7	7.5
26	8.5	8.2	8.4	8.4	8.1	7.9	7.6	7.5	7.6	7.5	7.7	7.5
27	8.5	8.2	8.4	8.1	8.1	7.9	7.6	7.5	7.6	7.5	7.8	7.5
28	8.5	8.2	8.5	8.2	8.1	7.9	7.7	7.6	7.6	7.4	7.7	7.5
29	8.4	8.2	8.6	8.5	8.0	7.8	7.7	7.6	7.5	7.4	7.5	7.4
30	8.3	8.1	8.7	8.6	8.3	7.8	7.7	7.3	7.5	7.4	7.6	7.4
31	---	---	8.7	8.3	---	---	7.5	7.2	7.5	7.4	---	---
MONTH	8.5	7.7	8.7	7.8	8.8	7.8	8.3	7.2	7.9	7.4	7.8	7.4
YEAR	8.8	7.1										

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.6	11.1	12.0	15.4	13.5	14.4	5.7	3.9	5.2	4.4	1.9	3.0
2	11.9	9.7	10.7	16.4	14.2	15.2	3.9	2.0	2.9	8.9	4.4	7.4
3	10.3	7.8	9.2	15.8	13.6	14.7	3.0	2.6	2.8	11.7	8.9	10.4
4	12.2	10.2	11.0	15.3	13.0	14.3	4.1	2.7	3.3	10.4	7.7	8.6
5	13.4	10.2	11.6	15.7	14.6	15.1	5.5	4.1	4.9	8.2	5.7	7.1
6	14.0	11.9	13.0	15.0	12.2	13.5	5.3	4.5	4.9	5.7	0.8	3.1
7	13.9	11.5	12.8	12.2	9.2	10.6	4.5	3.2	4.0	0.8	-0.2	0.1
8	14.5	12.0	13.2	9.2	6.7	7.6	4.0	2.2	3.1	0.8	0.0	0.3
9	15.0	12.9	13.8	6.7	4.9	6.0	6.1	4.0	5.1	1.8	0.8	1.2
10	16.7	14.8	15.6	8.7	6.0	7.3	8.6	6.1	7.4	0.8	-0.2	0.1
11	17.7	15.3	16.4	11.8	8.7	10.5	7.7	4.4	6.0	0.4	-0.1	0.1
12	17.3	16.0	16.6	14.4	11.8	13.2	4.4	1.6	2.9	1.1	0.0	0.5
13	16.0	13.5	14.8	12.7	6.8	9.0	1.6	0.8	1.0	1.7	0.5	1.1
14	15.0	13.5	14.1	6.8	4.9	6.0	1.7	0.6	1.2	1.7	0.0	0.7
15	13.8	11.7	12.9	7.4	6.5	7.0	2.5	1.6	1.9	1.6	0.3	0.8
16	13.3	10.4	12.1	8.9	7.4	8.2	5.3	1.2	2.8	0.9	-0.1	0.4
17	13.3	11.7	12.7	9.3	7.4	8.4	5.3	2.0	3.6	1.4	0.1	0.6
18	12.5	10.0	11.2	12.5	8.9	10.3	2.1	1.4	1.7	4.0	1.4	2.8
19	13.1	10.1	11.6	12.5	10.7	12.1	---	---	---	2.6	0.0	1.0
20	13.9	10.9	12.4	10.7	8.1	9.2	---	---	---	0.2	-0.1	0.0
21	14.9	13.3	14.1	10.2	7.8	9.1	---	---	---	0.5	0.0	0.2
22	14.5	12.2	13.1	10.8	8.0	9.4	3.6	1.8	2.8	0.6	-0.1	0.2
23	12.2	10.3	11.3	12.1	9.6	10.9	5.8	3.6	5.0	0.1	-0.1	0.0
24	11.2	8.7	10	11.9	6.2	9.6	5.7	3.6	4.6	0.5	0.0	0.1
25	12.4	9.0	10.5	6.2	3.8	4.7	3.6	1.7	2.7	0.0	0.0	0.0
26	12.4	11.5	12.0	6.2	3.8	4.9	1.7	0.0	0.9	0.1	0.0	0.0
27	11.5	9.5	10.6	9.8	6.1	7.8	1.7	-0.1	0.8	0.1	0.0	0.0
28	9.5	8.6	9.0	9.8	6.8	8.7	2.8	0.4	1.5	0.1	0.0	0.0
29	10.8	8.8	9.7	6.8	4.8	5.5	5.7	2.2	3.7	0.1	-0.1	0.0
30	12.1	9.0	10.5	6.0	4.1	5.1	6.1	3.9	5.0	-0.1	-0.2	-0.1
31	14.2	11.0	12.6	---	---	---	3.9	1.9	3.0	0.0	-0.2	-0.1
MONTH	17.7	7.8	12.3	16.4	3.8	9.6	8.6	-0.1	3.4	11.7	-0.2	1.6
FEBRUARY			MARCH			APRIL			MAY			
1	0.0	-0.1	-0.1	8.1	6.0	6.9	9.3	7.5	8.5	17.7	14.7	15.7
2	0.0	-0.1	-0.1	11.0	7.5	9.1	8.8	7.4	8.2	14.7	11.1	12.5
3	0.4	-0.2	0.2	9.5	7.0	7.8	12.2	7.2	9.7	13.2	8.8	11.0
4	2.4	0.1	1.0	9.3	7.0	8.2	10.6	7.7	9.0	12.7	8.9	11.0
5	2.4	1.4	1.8	12.9	8.7	10.6	10.6	5.6	8.1	17.7	11.8	14.5
6	3.8	2.4	3.3	10.6	8.4	9.4	12.0	6.2	9.1	19.1	13.8	16.6
7	3.2	2.0	2.5	8.4	5.6	6.9	14.8	9.9	12.1	20.6	16.2	18.4
8	2.2	0.7	1.5	6.6	5.3	5.9	17.1	12.5	14.4	21.7	16.7	19.2
9	2.3	0.3	1.3	6.7	4.9	5.7	15.6	11.2	13.5	22.5	17.5	20.1
10	3.7	1.5	2.6	7.0	2.8	5.0	16.4	11.4	13.8	22.5	18.5	20.7
11	2.9	0.4	1.9	6.5	3.8	5.0	15.2	12.7	14.0	22.6	19.1	20.9
12	4.0	2.2	2.9	6.0	2.7	4.4	13.6	8.5	10.7	21.9	19.2	20.2
13	2.7	0.7	1.7	6.0	1.6	3.9	8.5	7.1	7.5	21.7	19.8	20.9
14	2.3	-0.3	0.9	6.4	4.3	5.2	12.7	7.0	9.4	21.4	20.0	20.7
15	1.7	0.3	1.0	8.1	3.1	5.7	13.8	7.5	10.8	20.9	16.5	18.3
16	0.9	-0.3	0.3	7.3	4.1	5.4	16.2	10.4	13.4	17.7	15.8	16.6
17	2.0	-0.3	0.7	4.6	3.1	4.0	18.8	12.7	15.7	20.4	15.7	17.9
18	2.2	-0.2	0.9	6.8	3.7	5.1	20.8	15.2	17.9	22.2	18.3	20.2
19	4.3	0.3	2.2	8.0	4.6	6.1	18.9	16.8	17.5	21.7	17.0	18.2
20	5.2	2.5	3.7	10.2	5.1	7.6	17.2	14.9	16.1	20.4	17.3	18.7
21	4.7	3.4	4.1	9.1	4.7	7.0	16.4	14.9	15.5	23.0	19.6	21.1
22	5.5	2.7	4.0	6.6	2.3	4.4	14.9	13.9	14.3	24.0	20.8	22.4
23	5.4	2.3	3.9	7.5	1.8	4.7	14.3	13.2	13.7	24.1	21.7	22.9
24	5.3	4.2	4.7	10.7	6.0	8.1	15.7	11.6	13.8	24.7	22.3	23.5
25	5.0	2.4	3.8	13.6	9.6	11.4	17.3	13.8	15.4	24.2	21.6	23.0
26	5.1	2.4	3.8	14.7	11.9	13.2	17.9	14.3	16.1	23.1	18.8	20.7
27	5.9	2.5	4.3	16.1	13.4	14.6	15.9	12.3	14.0	19.6	16.8	18.0
28	5.9	1.8	4.1	17.7	12.7	15.2	16.3	9.9	13.0	20.0	17.8	18.8
29	7.0	2.8	4.9	16.2	11.1	13.9	18.3	12.6	15.4	18.8	16.3	17.5
30	---	---	---	11.9	9.7	10.8	17.5	14.9	15.6	18.3	17.3	17.7
31	---	---	---	10.9	8.3	9.3	---	---	---	19.1	16.6	17.8
MONTH	7.0	-0.3	2.3	17.7	1.6	7.8	20.8	5.6	12.9	24.7	8.8	18.6

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.6	8.5	9.0	8.6	7.5	7.8	11.3	9.9	10.5	14.9	11.8	12.9
2	10.0	8.7	9.3	7.6	6.7	7.2	12.4	10.6	11.6	11.8	9.9	10.8
3	10.4	9.3	9.8	7.8	6.6	7.2	12.2	11.2	11.6	10.2	9.2	9.8
4	10.8	9.3	9.8	8.0	6.9	7.4	11.8	10.8	11.4	11.3	10.0	10.7
5	10.8	9.0	9.7	7.7	6.8	7.2	11.2	10.2	10.6	11.8	10.9	11.3
6	10.6	8.6	9.5	7.5	6.6	7.1	11.9	10.1	10.8	13.5	11.7	12.8
7	10.6	8.6	9.5	9.1	7.3	8.1	12.3	10.4	11.2	14.4	13.5	14.1
8	11.4	7.4	9.9	10.4	8.8	9.5	12.8	11.0	11.7	14.1	13.5	13.9
9	11.4	9.2	10.2	11.1	10.1	10.7	12.6	10.0	11.1	13.8	13.3	13.5
10	10.7	8.7	9.2	10.7	9.6	10.2	11.4	9.4	10.5	14.4	13.4	14.0
11	8.7	7.0	7.5	9.6	8.3	9.1	11.9	9.8	10.9	14.3	13.6	14.0
12	7.0	5.6	6.0	9.3	6.8	7.8	14.0	10.9	12.4	13.8	13.3	13.6
13	6.3	5.0	5.6	9.3	6.9	8.3	14.2	12.1	13.1	13.8	13.2	13.4
14	6.8	5.2	6.0	10.4	8.8	9.5	14.3	12.2	13.1	14.0	12.9	13.5
15	7.0	6.2	6.5	9.8	8.6	9.1	14.3	11.5	12.7	14.1	12.9	13.5
16	7.7	6.3	7.0	8.9	8.4	8.6	13.4	10.8	12.2	14.5	13.5	13.9
17	7.4	6.2	6.9	9.9	8.3	8.9	12.9	10.5	11.8	14.0	13.0	13.6
18	8.8	7.2	7.8	9.3	8.1	8.9	14.2	11.9	12.8	13.1	11.9	12.3
19	8.7	7.5	8.1	8.7	7.5	8.1	---	---	---	13.8	12.1	13.1
20	8.4	7.4	7.9	10.2	8.5	9.3	---	---	---	14.2	13.3	13.7
21	7.9	6.8	7.3	9.9	8.8	9.4	---	---	---	14.1	13.3	13.6
22	7.4	6.5	7.0	9.1	8.0	8.7	14.7	12.4	13.7	13.9	13.1	13.4
23	7.9	6.8	7.4	9.7	8.1	8.8	12.8	11.5	12.1	14.1	13.3	13.6
24	8.3	7.5	7.9	9.9	7.7	8.7	12.8	11.5	12.1	14.1	13.0	13.5
25	8.4	7.5	8.0	12.0	9.7	10.9	14.9	12.1	13.3	13.6	13.0	13.4
26	8.1	7.3	7.7	11.8	10.3	11.0	15.6	12.9	14.0	13.9	12.7	13.2
27	8.6	7.5	8.1	10.3	8.3	9.4	15.5	13.3	14.1	14.1	12.8	13.4
28	8.7	8.1	8.3	9.2	8.2	8.8	15.5	12.8	13.8	14.5	13.2	13.7
29	9.2	8.4	8.8	10.9	9.1	10.1	14.5	11.3	12.8	14.8	13.2	13.8
30	9.5	8.6	9.0	11.4	10.0	10.7	12.7	11.2	11.8	14.1	13.3	13.6
31	9.0	8.5	8.8	---	---	---	14.3	11.5	12.7	14.5	13.3	13.8
MONTH	11.4	5.0	8.2	12.0	6.6	8.9	15.6	9.4	12.2	14.9	9.2	13.1
FEBRUARY			MARCH			APRIL			MAY			
1	15.2	13.6	14.2	12.9	10.3	11.5	---	---	---	9.0	6.7	7.7
2	15.0	13.6	14.1	14.4	9.5	11.6	---	---	---	9.2	7.9	8.8
3	13.9	13.0	13.3	13.1	9.4	11.0	---	---	---	9.8	8.3	9.1
4	13.9	12.5	13.3	10.8	9.6	10.3	---	---	---	10.6	8.3	9.3
5	13.4	12.5	12.9	11.5	9.1	10	---	---	---	10.1	7.0	8.6
6	12.9	12.0	12.4	11.2	9.6	10.2	---	---	---	9.8	6.8	8.1
7	12.9	12.0	12.4	12.8	9.9	11.3	14.4	7.7	10.4	10.6	6.7	8.2
8	13.8	12.4	13.1	13.5	10.5	11.8	13.3	6.7	9.3	9.8	6.4	7.9
9	13.9	12.5	13.2	13.8	10.8	12.1	13.2	6.7	9.5	9.5	6.1	7.6
10	13.3	11.8	12.5	14.5	11.3	12.6	12.5	6.9	9.2	9.4	5.6	7.4
11	13.9	11.9	12.9	14.0	11.2	12.3	10.9	6.3	8.3	9.8	6.1	7.7
12	13.4	12.1	12.6	14.8	11.1	12.7	9.5	6.6	8.0	7.4	5.9	6.4
13	14.3	12.1	13.1	15.1	11.7	13.2	10.2	8.4	9.1	8.0	5.7	7.0
14	14.6	13.0	13.7	14.1	11.0	12.3	9.9	7.8	9.2	7.4	5.6	6.5
15	14.7	12.7	13.6	14.9	11.0	12.6	10.9	7.3	9.2	7.9	5.9	7.0
16	15.2	13.4	14.2	13.1	10.2	11.5	11.1	7.0	8.7	8.8	7.6	8.1
17	15.4	13.5	14.3	14.6	11.1	12.7	11.5	6.4	8.4	8.8	7.0	7.8
18	15.4	13.3	14.1	14.9	11.2	12.5	11.2	5.7	7.9	8.3	6.4	7.2
19	15.4	12.5	13.8	15.0	10.8	12.5	9.6	5.4	7.1	9.0	6.4	8.1
20	14.0	11.3	12.5	14.4	10.0	11.8	9.9	6.1	7.7	8.5	7.5	8.1
21	14.0	11.1	12.3	14.7	9.7	11.9	7.9	6.0	6.8	8.3	6.9	7.6
22	16.4	11.9	13.6	15.5	11.7	13.4	8.3	6.3	7.0	8.1	6.4	7.2
23	16.6	11.9	13.7	15.7	11.8	13.5	8.9	6.6	7.4	7.6	6.2	6.8
24	15.1	11.3	12.9	15.1	10.7	12.4	9.9	6.7	7.9	7.8	6.0	6.8
25	16.3	11.6	13.6	14.8	9.5	11.7	9.4	6.1	7.3	7.9	6.0	6.9
26	17.1	11.8	14.0	13.6	8.8	10.7	11.3	6.2	8.3	7.7	6.2	7.0
27	16.6	11.8	13.9	12.6	8.4	10.1	11.6	7.0	9.0	9.3	7.6	8.3
28	16.6	11.7	13.8	13.1	8.3	10.2	11.9	7.8	9.5	8.7	7.8	8.2
29	16.4	11.6	13.7	10.2	7.9	9.1	11.1	7.1	8.9	8.8	7.7	8.2
30	---	---	---	10.8	9.9	10.4	7.9	6.3	7.1	8.2	7.7	8.0
31	---	---	---	---	---	---	---	---	---	9.0	7.8	8.3
MONTH	17.1	11.1	13.4	15.7	7.9	11.7	14.4	5.4	8.4	10.6	5.6	7.7

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	18	7.0	8.7	87	70	80	290	16	29
2	---	---	---	14	9.0	10	190	76	85	>1,000	78	300
3	---	---	---	19	12	14	79	75	77	>1,000	36	150
4	---	---	---	20	14	17	78	73	76	>1,000	160	390
5	---	---	---	26	17	22	86	75	80	480	81	150
6	---	---	---	29	25	27	86	78	83	320	46	70
7	---	---	---	440	27	50	83	75	79	52	23	38
8	---	8.0	9.8	31	22	25	380	74	81	24	20	22
9	13	8.0	9.9	41	26	32	91	9.0	41	21	18	20
10	11	7.0	8.8	54	34	38	280	12	140	20	18	18
11	14	6.0	7.4	44	35	39	150	59	89	19	16	17
12	10	6.0	7.1	>1,000	41	290	360	42	56	18	15	16
13	14	8.0	10	210	82	130	52	32	40	20	15	17
14	380	13	130	85	66	74	33	27	31	18	14	16
15	240	120	180	80	56	66	30	24	27	17	13	15
16	120	77	93	61	37	48	140	17	53	15	12	13
17	90	67	73	73	33	37	140	16	65	21	12	13
18	89	62	68	870	30	180	32	3.0	10	---	---	---
19	68	59	63	350	99	160	---	---	---	---	---	---
20	63	53	58	99	62	80	---	---	---	---	---	---
21	---	---	---	140	80	95	---	---	---	---	---	---
22	---	---	---	81	55	66	17	11	13	15	11	12
23	---	---	---	67	54	59	220	16	66	13	11	12
24	---	---	---	120	61	91	210	37	88	14	10	12
25	---	---	---	400	71	95	290	20	40	14	10	12
26	---	---	---	71	59	64	21	16	19	15	12	13
27	---	---	---	590	61	210	19	15	17	18	14	16
28	---	---	---	240	140	180	280	14	37	17	13	15
29	---	---	---	150	80	110	280	16	36	14	9.8	12
30	13	7.0	9.3	93	68	82	290	44	140	12	9.0	10
31	12	7.0	8.8	---	---	---	300	20	36	---	---	---
MONTH	380	6.0	49	1,000	7.0	80	380	3.0	60	1,000	9.0	54
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	34	18	23	87	39	59	>1,000	100	260
2	---	---	---	30	24	26	51	34	39	370	130	210
3	---	---	---	86	24	29	---	---	---	130	88	110
4	75	34	50	690	85	250	---	---	---	110	77	89
5	610	28	140	190	45	82	---	---	---	90	75	80
6	230	71	110	200	68	120	---	---	---	95	64	82
7	73	25	42	86	32	48	---	---	---	82	67	76
8	---	---	---	87	23	30	---	---	---	86	69	79
9	---	---	---	36	19	24	---	---	---	100	73	83
10	---	---	---	28	17	21	---	---	---	100	83	93
11	---	---	---	30	20	24	32	22	27	110	94	98
12	---	---	---	33	22	25	120	25	46	110	91	100
13	---	---	---	75	22	26	840	67	280	140	99	100
14	---	---	---	31	24	27	290	78	130	120	110	110
15	---	---	---	32	26	28	95	58	67	310	99	140
16	---	---	---	78	31	43	66	52	60	170	66	96
17	230	5.5	33	86	23	36	62	40	54	260	50	77
18	240	7.0	19	31	21	25	58	38	54	81	44	63
19	240	8.0	13	38	24	28	71	41	58	>1,000	62	340
20	38	13	20	33	22	26	64	55	59	310	78	110
21	39	25	31	35	26	29	92	63	73	98	63	78
22	32	15	20	29	22	25	120	76	93	98	56	72
23	21	14	17	240	23	28	110	86	97	87	69	79
24	22	15	17	41	22	25	92	73	81	94	57	69
25	22	14	17	40	22	25	80	68	74	86	45	67
26	18	12	15	40	20	25	94	63	70	550	73	190
27	20	14	16	37	19	23	78	69	74	>1,000	140	360
28	20	14	16	39	19	23	81	71	76	980	99	200
29	22	15	17	220	22	44	98	72	79	150	100	110
30	---	---	---	460	110	180	160	78	120	110	96	100
31	---	---	---	120	65	86	---	---	---	980	96	250
MONTH	610	5.5	35	690	17	47	840	22	80	1,000	44	130

LICKING RIVER BASIN

03254480 CRUISES CREEK AT HIGHWAY 17 NEAR PINER, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	100	55	78	19	9.4	14	160	67	110	17	9.9	13
2	---	---	---	21	8.9	13	90	32	52	29	9.9	13
3	---	---	---	25	11	15	51	22	34	16	8.9	10
4	---	---	---	24	12	15	860	20	250	20	9.0	13
5	---	---	---	26	14	18	260	52	95	20	9.0	12
6	---	---	---	26	14	20	110	31	48	15	9.0	12
7	---	---	---	42	18	26	49	22	34	15	9.0	11
8	---	---	---	27	10	19	43	20	29	21	9.0	13
9	---	---	---	28	15	20	71	17	24	21	9.1	14
10	---	---	---	640	18	120	45	13	19	25	8.1	13
11	42	30	36	580	110	290	44	12	18	29	8.1	12
12	640	31	53	150	57	87	26	12	16	18	8.1	12
13	320	43	70	160	69	120	72	10	20	29	7.2	11
14	250	28	43	130	69	100	96	12	36	16	6.2	11
15	170	26	36	83	52	66	190	16	67	13	6.2	9.4
16	98	23	29	76	44	58	360	6.6	59	14	6.2	9.4
17	90	22	27	100	43	56	22	6.6	12	36	7.2	20
18	41	22	25	85	48	61	18	6.6	9.4	28	9.3	16
19	37	25	30	68	37	50	9.6	4.6	6.6	20	7.3	13
20	70	11	30	63	29	43	19	5.6	7.4	20	7.3	11
21	---	---	---	50	24	33	20	7.7	10	27	9.3	12
22	---	---	---	670	25	350	28	5.7	15	17	7.3	12
23	---	---	---	730	120	230	26	7.7	13	20	7.4	12
24	---	---	---	120	76	98	31	8.7	16	27	5.4	9.5
25	---	---	---	88	41	63	25	8.7	16	10	4.4	7.3
26	---	---	---	500	61	320	18	11	14	13	5.4	7.3
27	---	---	---	280	130	210	40	13	19	13	4.5	8.3
28	---	---	---	380	69	110	33	8.8	18	30	5.5	7.5
29	---	---	---	80	44	61	21	7.8	10	28	6.5	9.7
30	40	9.7	17	2,500	38	610	16	8.9	11	18	5.5	8.0
31	---	---	---	2,500	150	600	27	9.9	12	---	---	---
MONTH	640	9.7	40	2,500	8.9	130	860	4.6	35	36	4.4	11
YEAR	2,500	3.0	65									

> Actual value is known to be greater than the value shown

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03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY

LOCATION.--Lat 38°58'34", long 84°32'40", Kenton County, Hydrologic Unit 05100101, at bridge on Highway 1829, 2.5 mi below Brushy Fork, 4.6 mi southeast of Erlanger, and at mile 8.2.

DRAINAGE AREA.--22.0 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1999 to current year.

REVISIONS.--WDR KY-01-1: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 540.33 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated periods, which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	6.6	36	39	29	29	58	139	59	0.47	64	4.4
2	12	6.7	27	390	32	33	57	410	32	0.59	22	3.6
3	9.5	6.1	24	114	334	30	50	81	21	0.73	12	17
4	8.9	5.9	22	1,830	e77	251	38	50	15	0.73	129	14
5	7.8	5.9	33	447	190	77	31	37	11	0.68	56	8.2
6	6.8	6.3	32	92	482	87	27	28	9.4	4.0	16	5.9
7	7.0	7.4	25	e66	92	53	26	22	7.5	2.1	8.1	4.6
8	5.3	6.5	22	e60	e55	39	24	19	5.8	1.3	5.1	12
9	4.8	5.3	e21	e52	e46	32	20	17	4.7	0.96	3.3	15
10	e4.8	4.9	122	e43	e46	26	18	14	4.4	10	2.7	9.2
11	4.7	5.7	79	e39	e47	25	17	13	4.5	20	2.6	6.8
12	5.1	609	44	38	e45	23	38	11	8.1	e18	2.0	5.1
13	5.0	104	e33	35	e40	20	289	10	14	13	1.7	4.1
14	13	43	e30	33	36	20	200	9.6	4.9	4.0	1.8	3.5
15	18	40	e26	32	e31	19	e63	33	6.6	1.9	1.7	2.8
16	8.4	32	72	29	e26	32	44	24	4.0	1.2	1.3	2.4
17	6.6	25	72	31	e22	32	35	14	8.9	3.7	1.5	28
18	6.5	84	45	95	e21	28	29	14	32	3.6	1.7	17
19	6.1	120	38	59	22	29	25	148	6.7	2.9	2.0	9.2
20	5.8	50	e31	e42	30	29	23	35	3.3	1.9	2.7	6.6
21	4.8	33	e32	e33	41	31	27	18	1.8	1.1	6.9	4.7
22	4.6	25	36	e32	28	25	41	13	1.4	104	5.5	3.9
23	5.0	21	99	e19	27	23	48	9.6	1.1	14	3.9	3.2
24	4.9	44	118	29	27	23	31	8.6	0.87	5.3	4.5	2.5
25	5.2	31	54	e18	25	21	45	7.5	0.72	2.7	5.1	2.3
26	26	24	40	e36	24	20	36	32	0.64	6.1	7.6	2.3
27	16	197	33	e47	22	19	25	126	0.57	4.8	12	3.3
28	9.7	288	30	e35	21	18	21	188	0.49	2.9	14	5.0
29	9.9	86	36	e26	21	26	18	33	0.60	1.8	13	3.0
30	8.5	50	135	e27	---	101	55	30	0.58	32	7.0	3.0
31	7.0	---	52	e22	---	63	---	333	---	997	5.5	---
TOTAL	264.7	1,973.3	1,499	3,890	1,939	1,284	1,459	1,927.3	271.57	1,263.46	422.2	212.6
MEAN	8.54	65.8	48.4	125	66.9	41.4	48.6	62.2	9.05	40.8	13.6	7.09
MAX	26	609	135	1,830	482	251	289	410	59	997	129	28
MIN	4.6	4.9	21	18	21	18	17	7.5	0.49	0.47	1.3	2.3

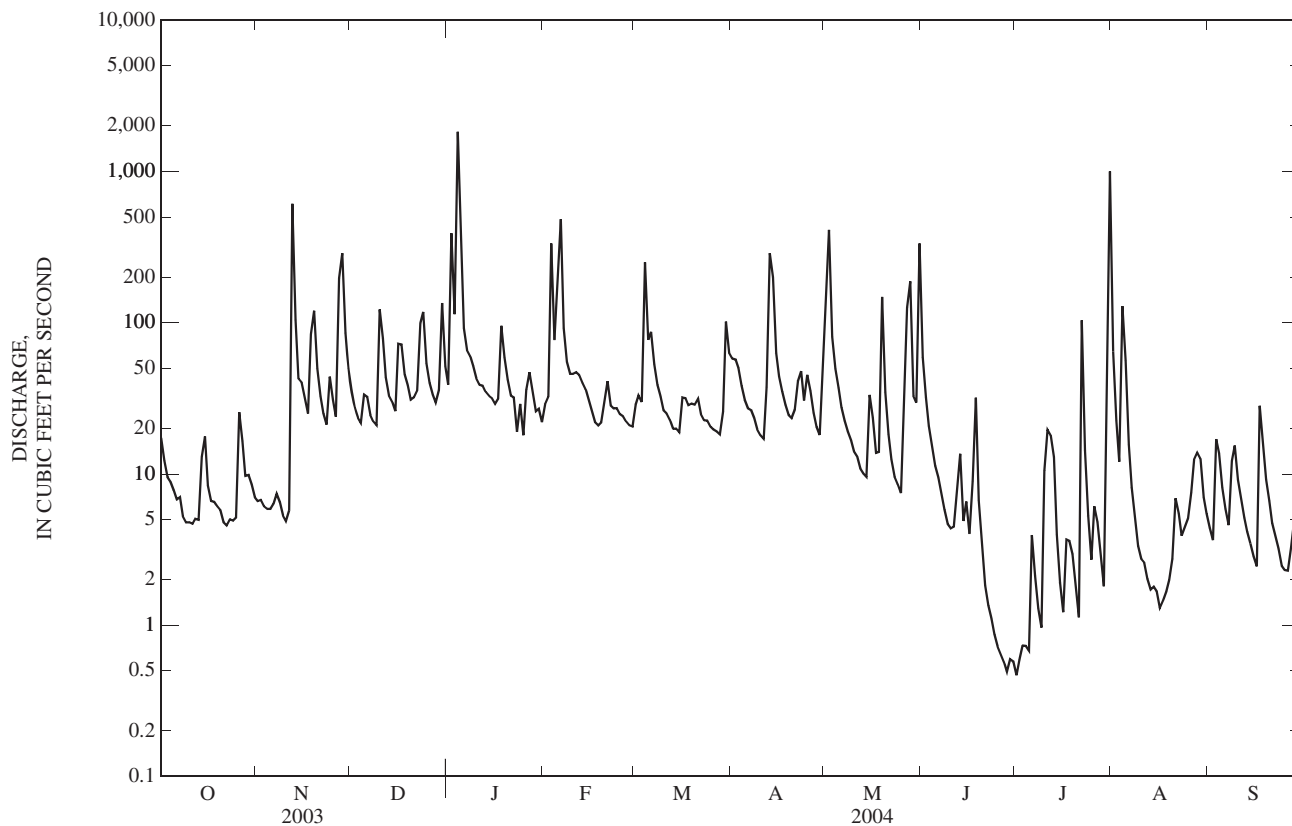
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	19.4	28.3	58.0	57.3	73.0	46.5	45.4	53.6	19.0	17.4	16.7	16.5
MAX	66.4	65.8	92.6	125	143	74.3	110	150	41.1	40.8	48.4	50.1
(WY)	(2002)	(2004)	(2003)	(2004)	(2000)	(2002)	(2002)	(2002)	(2001)	(2004)	(2003)	(2003)
MIN	1.65	1.27	10.5	21.3	33.0	21.4	6.62	5.10	2.71	2.59	0.21	0.07
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2001)	(2001)	(1999)	(1999)	(2002)	(2002)	(1999)

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	16,011.1		16,406.13		39.5	
ANNUAL MEAN	43.9		44.8		54.8	
HIGHEST ANNUAL MEAN					22.1	
LOWEST ANNUAL MEAN					2,130	
HIGHEST DAILY MEAN	911	Feb 22	1,830	Jan 4	2,130	Feb 18, 2000
LOWEST DAILY MEAN	1.2	Jul 4	0.47	Jul 1	0.00	Sep 21, 1999
ANNUAL SEVEN-DAY MINIMUM	1.8	Jul 2	0.56	Jun 26	0.00	Sep 21, 1999
MAXIMUM PEAK FLOW			3,930	Jan 4	9,570	Apr 21, 2002
MAXIMUM PEAK STAGE			8.75	Jan 4	10.65	Apr 21, 2002
10 PERCENT EXCEEDS	81		80		72	
50 PERCENT EXCEEDS	19		21		12	
90 PERCENT EXCEEDS	4.2		2.7		0.89	

e Estimated



03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2000 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2000 to current water year.

pH: December 2000 to current water year.

WATER TEMPERATURES: December 2000 to current water year.

DISSOLVED OXYGEN: December 2000 to current water year.

TURBIDITY: December 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

RECORDS.--

SPECIFIC CONDUCTANCE: Records rated excellent except the following periods: Oct. 1-30, Jan. 27-Feb. 2, Jun. 5-19 rated good; Dec. 29-Jan. 22, Feb. 3-May 26 rated fair; May 27-Jun. 4 rated poor.

pH: Records rated excellent except the following periods: Nov. 25-Dec. 11, Dec. 19-Jan. 16, Feb. 17-23, Apr. 19-May 13, Jun. 5-16 rated good; Dec. 12-17, Jan. 17-21, Jan. 31-Feb. 16, May 14-Jun. 4 rated fair; Dec. 18 rated poor.

WATER TEMPERATURES: Records excellent except the following periods: Jun. 4-10, Sept. 6-14 rated good.

DISSOLVED OXYGEN: Records rated excellent except the following periods: Oct. 11-13, Nov. 15-23, Dec. 14-16, Jan. 5-10, May 4-10, Aug. 8-12, Sept. 14-20 rated good; Oct. 14-16, Nov. 24-Dec. 6, Jan. 11-18, May 11-21, Aug. 13-20, Sept. 21-30 rated fair; Oct. 17-27, Dec. 7-13, Jan. 19-22, Jan. 27-Mar. 9, May 22-Jun. 3, Aug. 21-Sept. 13 rated poor.

TURBIDITY: Records rated excellent except for the following periods: Oct. 16-18, Nov. 26, Mar. 1-3, Mar. 8-27, Aug. 28-29 rated good; Oct. 19-20, Oct. 26-29, Sept. 11-13 rated fair; Oct. 21-23, Oct. 30-Nov. 3, Feb. 9-12, Feb. 17, Feb. 23-29, Mar. 28-Apr. 5, Apr. 11, Jun. 12-14, Jun. 17, Aug. 30-Sept. 10 rated poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1570 microsiemens, Dec. 11, 2002; minimum recorded, 124 microsiemens, Dec. 19, 2002.

pH: Maximum recorded, 8.9 units, Mar. 16, 2003; minimum recorded, 7.3 units, Jul. 2, 2003.

WATER TEMPERATURES: Maximum recorded, 32.7°C, Aug. 8, 2001; minimum recorded, -0.2°C, Dec. 20-21, 2003, and Jan. 7, 8, 10, 11, 16, 19-22 and 27-31, 2004.

DISSOLVED OXYGEN: Maximum recorded, greater than 20 mg/L, Feb. 28, 2001; minimum recorded, 2.5 mg/L, Jun. 4, 2002.

TURBIDITY: Maximum recorded, 27000 NTU, Jul. 30-31, 2004; minimum recorded, 0.0 NTU, Jan. 22, 25-29, 2003, and Mar. 13, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1400 microsiemens, Jan. 28, 2004; minimum recorded, 188 microsiemens, Jul. 31, 2004.

pH: Maximum recorded, 8.7 units, Jun. 17, 19, 2004; minimum recorded, 7.5 units, May 1, 31, 2004.

WATER TEMPERATURES: Maximum recorded, 30.3°C, Jun. 17, 2004; minimum recorded, -0.2°C, Dec. 20-21, 2003 and Jan. 7, 8, 10, 11, 14, 16, 19-22 and 27-31, 2004.

DISSOLVED OXYGEN: Maximum recorded, 16.1 mg/L, Feb. 23, 2003; minimum recorded, 4.2 mg/L, Oct. 13, 2003.

TURBIDITY: Maximum recorded, 2700 NTU, Jul. 30-31, 2004; minimum recorded, 1.1 NTU, Feb. 28, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	577	567	572	684	666	674	521	509	516	650	630	637
2	583	573	577	691	671	682	532	521	526	654	280	397
3	597	581	587	703	686	694	543	493	537	496	382	471
4	609	590	602	715	695	705	552	543	548	382	192	253
5	617	606	611	724	704	712	567	537	554	411	195	330
6	634	609	623	720	707	713	537	517	524	463	411	439
7	641	627	634	727	693	708	529	523	526	492	463	478
8	653	626	636	705	697	701	541	529	535	522	491	503
9	660	628	643	709	700	704	625	539	577	642	515	578
10	675	637	649	718	707	710	628	358	504	649	625	633
11	675	646	659	723	711	716	516	369	454	638	592	618
12	676	651	663	718	210	350	567	516	543	601	583	590
13	678	656	668	508	311	428	587	566	575	593	584	588
14	707	622	664	567	507	539	760	585	658	599	576	588
15	707	607	624	592	561	578	990	741	936	595	589	592
16	624	605	614	615	578	595	975	523	850	613	544	600
17	609	596	603	627	606	618	561	474	512	699	612	637
18	626	604	615	643	354	592	606	561	580	706	491	595
19	639	624	631	491	327	416	987	863	929	551	492	519
20	651	636	644	556	490	527	1,090	987	1,040	601	551	577
21	668	647	656	594	555	575	1,060	938	1,010	610	592	602
22	683	658	668	609	593	600	939	789	841	611	604	609
23	676	657	666	619	606	613	871	533	762	---	---	---
24	682	661	667	623	521	578	593	472	525	---	---	---
25	684	661	671	569	521	544	639	591	618	---	---	---
26	713	592	651	598	567	583	661	639	646	---	---	---
27	594	561	574	613	316	473	670	654	662	1,280	1,120	1,200
28	601	563	579	398	338	363	674	657	667	1,400	1,120	1,240
29	628	597	613	472	379	434	726	658	681	1,210	1,070	1,110
30	649	627	640	509	472	492	660	449	509	1,080	992	1,040
31	670	647	659	---	---	---	630	570	606	1,050	1,000	1,010
MONTH	713	561	631	727	210	587	1,090	358	644	1,400	192	646

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1,060	978	1,010	724	640	676	564	554	559	577	331	521
2	1,190	943	1,000	742	683	700	563	554	559	433	339	373
3	1,380	466	625	763	720	747	564	547	557	521	433	485
4	661	541	605	721	419	491	563	542	555	556	521	541
5	773	401	639	609	543	578	562	548	556	573	542	559
6	427	363	387	602	553	568	579	551	560	591	538	567
7	559	427	489	584	555	572	614	561	589	596	556	577
8	644	559	612	593	584	589	622	578	600	599	569	586
9	683	641	654	600	583	593	626	589	609	609	580	595
10	670	569	624	608	581	598	636	602	621	618	590	604
11	575	552	565	609	578	593	647	617	633	625	594	609
12	619	572	596	587	575	582	657	561	627	619	597	607
13	606	598	603	586	575	580	580	296	498	620	601	613
14	622	604	614	590	578	584	482	320	410	627	613	621
15	628	620	623	584	567	579	541	482	514	626	547	584
16	663	623	638	642	569	600	556	526	543	560	545	551
17	653	636	643	714	642	688	569	515	546	600	560	579
18	659	638	651	712	624	664	568	519	546	613	589	600
19	661	638	651	630	585	613	570	542	559	603	347	417
20	707	644	657	609	584	599	593	568	580	493	441	475
21	721	655	681	600	583	592	607	581	595	583	492	555
22	720	626	664	601	587	595	600	548	584	624	574	608
23	651	611	633	595	585	591	585	540	561	652	604	642
24	649	621	634	595	577	588	607	568	588	664	638	650
25	654	624	640	596	578	589	625	569	596	674	585	657
26	652	616	637	606	590	601	599	562	578	683	534	610
27	651	619	637	616	603	610	626	582	606	534	427	453
28	654	623	640	618	608	614	635	591	615	486	329	408
29	660	625	644	618	586	613	643	606	624	559	453	516
30	---	---	---	586	526	540	649	495	569	573	528	560
31	---	---	---	561	533	549	---	---	---	532	352	425
MONTH	1,380	363	645	763	419	602	657	296	571	683	329	553
	JUNE			JULY			AUGUST			SEPTEMBER		
1	548	484	520	---	---	---	438	352	400	609	582	599
2	570	548	560	---	---	---	494	437	464	630	604	616
3	604	568	593	---	---	---	522	494	508	653	510	579
4	621	575	600	---	---	---	559	217	445	519	486	505
5	621	580	600	---	---	---	468	317	404	497	484	489
6	628	586	605	---	---	---	513	468	494	522	492	510
7	624	586	604	---	---	---	541	512	531	553	514	542
8	637	600	613	---	---	---	569	532	553	644	474	553
9	640	610	621	---	---	---	581	557	567	536	475	515
10	643	613	629	---	---	---	591	569	578	562	536	550
11	637	611	624	---	---	---	590	561	575	592	555	580
12	642	604	626	---	---	---	597	398	583	616	584	603
13	611	559	589	---	---	---	597	547	589	641	606	626
14	602	551	577	---	---	---	622	594	604	665	641	652
15	595	454	562	---	---	---	656	601	619	687	665	675
16	576	457	531	---	---	---	680	585	648	707	687	696
17	595	322	570	---	---	---	694	605	660	711	391	556
18	474	305	426	---	---	---	670	649	655	489	479	485
19	484	421	456	---	---	---	673	362	652	518	487	502
20	---	---	---	---	---	---	693	670	682	610	517	551
21	---	---	---	---	---	---	726	574	644	580	497	519
22	---	---	---	---	---	---	588	572	581	631	538	589
23	---	---	---	454	343	405	589	452	548	643	627	632
24	---	---	---	498	454	479	594	455	523	664	641	653
25	---	---	---	535	498	516	620	577	603	686	664	675
26	---	---	---	671	463	534	649	595	612	705	686	698
27	---	---	---	534	519	526	653	556	582	805	705	782
28	---	---	---	566	531	547	574	320	537	835	737	778
29	---	---	---	588	561	570	545	326	481	737	721	726
30	---	---	---	603	267	536	578	545	567	775	724	759
31	---	---	---	355	188	270	599	571	586	---	---	---
MONTH	643	305	574	671	188	487	726	217	564	835	391	606
YEAR	1,400	188	599									

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	8.2	8.4	8.1	8.3	8.2	8.3	8.0	8.0	7.9	8.4	8.1
2	8.3	8.2	8.4	8.1	8.4	8.2	8.1	7.6	8.1	7.9	8.6	8.1
3	8.3	8.2	8.4	8.1	8.4	8.2	8.2	7.9	7.9	7.7	8.5	8.0
4	8.4	8.1	8.3	8.1	8.3	8.1	7.9	7.6	8.0	7.8	8.1	7.9
5	8.4	8.1	8.3	8.0	8.3	8.1	7.9	7.6	8.0	7.7	8.4	8.1
6	8.3	8.1	8.2	8.0	8.3	8.1	8.0	7.9	7.8	7.6	8.4	8.1
7	8.3	8.1	8.4	8.1	8.4	8.1	8.0	7.9	8.0	7.8	8.4	8.0
8	8.4	8.0	8.4	8.2	8.4	8.1	8.0	8.0	8.1	7.9	8.5	8.1
9	8.4	8.0	8.4	8.2	8.3	8.1	8.1	8.0	8.1	8.0	8.5	8.1
10	8.3	8.0	8.4	8.2	8.2	7.9	8.1	8.0	8.2	8.0	8.5	8.0
11	8.3	7.9	8.3	8.2	8.1	7.9	8.1	8.0	8.1	8.0	8.5	8.0
12	8.3	8.0	8.2	7.8	8.2	8.0	8.1	8.0	8.2	8.0	8.6	8.1
13	8.3	8.0	8.2	8.0	8.1	8.0	8.1	8.0	8.2	8.0	8.5	8.0
14	8.2	8.0	8.3	8.1	8.1	7.9	8.1	8.0	8.2	8.0	8.5	8.0
15	8.4	8.1	8.3	8.1	8.1	7.8	8.1	8.1	8.3	8.0	8.5	8.0
16	8.4	8.1	8.2	8.1	7.9	7.7	8.1	8.0	8.2	8.0	8.4	8.0
17	8.3	8.1	8.3	8.1	7.9	7.7	8.0	8.0	8.4	8.0	8.5	8.1
18	8.4	8.1	8.3	8.0	7.9	7.7	8.0	7.9	8.4	8.2	8.6	8.0
19	8.3	8.1	8.2	8.0	8.3	7.9	8.0	7.9	8.5	8.2	8.5	8.0
20	8.3	8.0	8.3	8.2	8.3	8.1	8.0	7.9	8.5	8.2	8.5	7.9
21	8.3	8.0	8.4	8.2	8.3	8.1	8.0	8.0	8.5	8.2	8.4	8.0
22	8.3	8.0	8.4	8.2	8.3	8.1	8.1	8.0	8.6	8.2	8.4	8.0
23	8.3	8.0	8.4	8.2	8.2	8.0	---	---	8.6	8.2	8.4	8.0
24	8.3	8.1	8.4	8.1	8.2	8.0	---	---	8.5	8.1	8.4	8.0
25	8.3	8.1	8.3	8.1	8.3	8.0	---	---	8.5	8.1	8.4	7.9
26	8.2	8.0	8.4	8.1	8.3	8.0	---	---	8.5	8.1	8.6	7.9
27	8.3	8.0	8.2	7.9	8.3	8.0	8.0	7.9	8.5	8.1	8.3	7.9
28	8.2	8.0	8.1	7.9	8.3	8.0	8.0	7.9	8.5	8.1	8.3	7.9
29	8.3	8.0	8.2	8.0	8.3	8.0	8.1	7.9	8.5	8.1	8.2	7.9
30	8.4	8.1	8.3	8.1	8.1	7.9	8.0	7.9	---	---	8.2	8.0
31	8.5	8.2	---	---	8.3	8.0	8.0	7.9	---	---	8.2	8.1
MONTH	8.5	7.9	8.4	7.8	8.4	7.7	8.3	7.6	8.6	7.6	8.6	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	8.0	8.2	7.5	7.9	7.7	---	---	8.2	7.9	7.9	7.7
2	8.5	8.0	7.8	7.6	8.0	7.8	---	---	8.2	8.0	7.9	7.7
3	8.6	8.0	8.1	7.8	8.0	7.7	---	---	8.3	7.9	8.1	7.7
4	8.5	8.0	8.3	7.9	8.3	7.7	---	---	8.2	7.9	8.1	7.9
5	8.4	7.9	8.3	7.9	8.3	8.0	---	---	8.2	7.9	8.1	

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.9	11.4	13.2	17.3	14.1	15.4	6.0	3.7	5.0	4.7	1.7	3.1
2	13.7	9.9	11.8	18.3	14.1	15.9	4.3	2.1	3.2	8.9	4.7	7.2
3	13.0	8.2	10.7	17.8	13.4	15.5	3.5	2.9	3.1	11.9	8.9	10.5
4	14.7	11.6	12.8	17.3	12.6	15.0	4.4	2.8	3.5	11.3	7.5	8.4
5	15.7	11.0	13.2	17.2	14.7	15.7	5.6	4.4	5.0	7.9	5.4	6.8
6	16.9	12.5	14.6	15.3	11.9	13.4	5.9	4.6	5.0	5.4	0.1	2.7
7	16.8	11.9	14.3	11.9	8.8	10.3	5.2	3.2	4.3	0.3	-0.2	-0.1
8	17.7	12.8	15.1	8.8	6.0	7.6	4.8	2.3	3.6	0.6	-0.2	0.2
9	18.1	13.5	15.7	7.9	4.1	6.1	6.7	4.7	5.7	1.3	0.3	0.8
10	19.4	15.9	17.4	8.6	4.5	6.5	8.3	6.5	7.4	0.3	-0.2	-0.1
11	20.6	16.0	18.1	11.0	8.1	9.4	7.5	4.1	5.9	0.7	-0.2	0.1
12	19.9	17.0	18.2	15.0	11.0	13.4	4.1	1.6	2.9	1.3	0.1	0.7
13	17.7	13.4	15.9	12.8	6.7	9.2	1.6	0.9	1.2	1.9	0.4	1.1
14	16.4	13.6	14.8	7.2	5.0	6.2	1.9	0.5	1.2	2.0	-0.2	0.8
15	15.6	11.7	13.5	7.5	6.3	6.9	2.7	1.4	1.9	1.9	0.0	0.9
16	15.2	10.7	13.1	9.4	7.5	8.4	4.9	1.1	2.9	1.4	-0.2	0.4
17	14.2	12.6	13.5	10.2	7.1	8.5	4.8	1.9	3.5	1.5	0.0	0.6
18	14.4	10.2	12.1	12.8	8.8	10.6	2.2	1.5	1.7	3.1	1.5	2.3
19	15.5	10.3	12.7	12.8	10.6	12.2	2.0	1.1	1.6	1.7	-0.2	0.6
20	16.3	10.9	13.5	10.8	8.3	9.6	1.1	-0.2	0.4	0.1	-0.2	-0.1
21	16.0	13.4	14.7	11.1	7.8	9.3	0.4	-0.2	0.0	0.3	-0.2	0.0
22	15.2	11.9	13.4	11.8	8.0	9.8	3.9	0.1	1.8	0.9	-0.2	0.1
23	13.8	10.4	12.1	13.0	10.1	11.5	6.0	3.9	5.0	---	---	---
24	12.4	8.4	10.7	12.1	5.9	9.5	5.3	3.4	4.4	---	---	---
25	14.4	9.4	11.6	5.9	4.0	5.0	3.4	1.5	2.6	---	---	---
26	13.9	11.7	12.7	6.8	4.2	5.4	2.3	0.1	1.1	---	---	---
27	11.8	9.7	10.8	9.5	6.5	7.8	2.3	-0.1	1.0	-0.1	-0.2	-0.2
28	10.0	8.7	9.4	9.5	6.4	8.3	3.7	0.4	1.8	-0.1	-0.2	-0.2
29	11.4	9.1	10.2	6.4	4.5	5.3	5.9	2.5	4.1	0.0	-0.2	-0.1
30	13.8	8.7	11.1	6.4	3.9	5.0	5.8	3.6	4.8	-0.1	-0.2	-0.2
31	16.3	11.3	13.4	---	---	---	4.4	2.0	3.2	-0.1	-0.2	-0.2
MONTH	20.6	8.2	13.4	18.3	3.9	9.8	8.3	-0.2	3.2	11.9	-0.2	1.7
FEBRUARY			MARCH			APRIL			MAY			
1	-0.1	-0.2	-0.2	8.8	6.4	7.5	9.4	7.8	8.6	20.0	15.5	17.0
2	-0.1	-0.2	-0.1	12.7	7.6	9.7	9.4	7.3	8.5	16.2	11.6	13.2
3	-0.1	-0.2	-0.1	9.4	6.9	7.9	13.9	7.1	10.1	14.7	9.5	11.9
4	1.6	-0.2	0.5	9.4	7.7	8.5	11.8	7.6	9.2	15.1	9.4	12.0
5	1.5	0.4	0.8	13.5	9.2	11.2	12.8	5.4	8.7	20.1	11.7	15.3
6	3.2	1.5	2.6	11.8	8.4	10.3	14.1	6.0	9.7	23.0	13.7	17.8
7	2.6	1.4	2.0	9.3	6.4	7.6	16.5	10.1	13.0	22.8	16.6	19.4
8	2.5	0.4	1.3	7.2	5.4	6.2	19.0	13.1	15.3	24.5	16.1	20.0
9	2.7	0.2	1.4	7.9	4.9	6.0	17.4	11.1	14.0	25.9	17.6	21.4
10	4.7	1.3	2.7	9.2	2.9	5.7	18.0	11.6	14.4	25.7	18.8	22.1
11	3.5	0.4	2.1	8.3	4.0	5.6	16.3	12.7	14.3	26.0	19.5	22.5
12	4.6	2.3	3.1	7.6	2.2	4.6	13.5	8.9	10.6	26.4	19.8	23.0
13	2.5	0.6	1.8	8.0	1.6	4.6	8.9	7.0	7.6	24.2	20.6	22.4
14	3.3	-0.2	1.3	7.4	4.6	5.7	12.5	6.7	9.2	23.5	20.9	22.1
15	3.2	0.1	1.3	10.1	3.0	6.4	15.6	8.4	11.7	21.7	17.2	18.9
16	1.7	-0.2	0.4	7.6	4.0	5.0	18.8	10.4	14.1	20.3	16.4	18.0
17	3.1	-0.2	1.0	5.1	3.1	4.2	21.5	12.7	16.6	24.1	16.5	19.9
18	3.8	-0.2	1.4	7.4	3.8	5.4	23.1	15.3	18.7	26.4	19.1	22.4
19	5.8	0.7	3.0	9.5	4.7	6.6	19.5	16.6	18.0	24.0	19.0	20.6
20	5.9	3.1	4.4	11.7	5.5	8.4	18.7	15.7	17.1	24.2	19.5	21.6
21	5.2	3.6	4.3	9.5	4.3	6.8	17.2	15.5	16.2	26.5	21.0	23.5
22	7.0	3.0	4.5	8.6	2.0	4.8	15.9	14.9	15.3	28.2	21.8	24.8
23	6.5	2.2	4.3	9.0	1.7	5.1	15.1	13.8	14.5	28.5	22.3	25.2
24	5.7	4.2	5.1	11.5	6.2	8.5	18.2	11.9	14.9	28.1	23.1	25.2
25	6.8	2.0	4.2	14.2	9.3	11.5	18.3	14.6	16.2	27.4	22.1	24.5
26	6.3	2.3	4.2	14.9	11.7	13.2	19.2	14.0	16.3	24.2	20.3	21.5
27	7.9	2.3	4.7	17.5	13.3	15.2	17.2	12.0	14.3	21.4	18.4	19.7
28	8.0	1.7	4.7	19.4	13.1	16.1	19.0	9.6	13.9	22.1	18.4	19.7
29	8.9	3.0	5.7	16.7	11.7	14.2	20.6	12.6	16.3	23.5	17.7	20.0
30	---	---	---	12.8	10.5	11.6	18.1	15.0	16.3	20.2	18.3	19.2
31	---	---	---	11.4	8.6	10.1	---	---	---	21.2	18.0	19.3
MONTH	8.9	-0.2	2.5	19.4	1.6	8.2	23.1	5.4	13.5	28.5	9.4	20.1

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	10.8	7.6	8.7	11.2	10.0	10.6	14.4	11.4	12.7
2	---	---	---	10.6	7.2	8.5	12.2	10.7	11.3	11.4	10.2	10.7
3	---	---	---	10.7	7.1	8.4	12.1	11.0	11.4	10.2	9.2	9.8
4	---	---	---	10.6	7.0	8.5	11.7	10.2	11.0	10.9	9.4	10.5
5	---	---	---	10.0	7.1	8.2	10.9	10.0	10.3	11.2	10.0	10.5
6	---	---	---	9.2	7.2	8.2	12.7	10.2	11.7	13.3	11.2	12.2
7	---	---	---	11.6	8.0	9.7	13.3	11.3	12.0	13.7	13.2	13.4
8	---	---	---	12.2	9.3	10.6	13.9	11.5	12.5	13.5	12.8	13.2
9	9.0	5.2	6.6	12.5	10.1	11.1	12.6	11.2	11.6	13.1	12.7	12.9
10	8.3	4.8	6.0	12.4	10.2	11.1	11.4	11.1	11.2	13.8	12.9	13.4
11	8.6	4.4	6.0	10.3	8.9	9.7	12.4	11.3	11.9	13.9	12.7	13.4
12	7.7	4.4	5.5	9.4	8.6	9.0	14.2	12.4	13.2	13.4	12.5	12.9
13	8.8	4.2	6.2	10.7	9.2	10.1	14.5	13.2	13.7	13.3	12.5	12.8
14	6.5	5.2	5.8	11.5	10.5	10.9	14.5	12.9	13.6	14.1	12.3	13.1
15	8.4	6.2	7.0	11.1	10.2	10.6	14.5	12.6	13.3	13.6	12.2	13.0
16	9.3	6.4	7.6	10.4	9.5	10.1	13.6	11.6	12.5	14.0	12.9	13.4
17	8.3	6.0	6.9	10.9	9.3	10.1	12.6	11.7	12.2	13.7	12.4	13.2
18	9.7	6.9	8.1	9.7	8.4	9.2	13.7	12.4	12.9	12.5	11.9	12.3
19	9.8	7.0	8.0	8.9	8.3	8.5	13.8	12.4	13.1	13.4	12.4	13.1
20	10.0	6.8	8.0	9.9	8.9	9.3	14.6	12.5	13.5	14.0	13.4	13.6
21	9.2	6.4	7.5	10.1	8.8	9.4	14.6	13.0	13.6	14.2	13.4	13.7
22	9.7	6.4	7.8	10.2	8.3	9.3	13.6	11.5	12.6	14.0	13.4	13.7
23	10.4	7.2	8.4	10.1	8.0	8.8	11.8	11.0	11.3	---	---	---
24	11.5	7.8	9.0	10.3	8.0	9.1	12.0	11.2	11.7	---	---	---
25	10.8	8.0	9.1	11.9	10.3	11.0	13.7	11.8	12.6	---	---	---
26	9.0	6.9	8.0	11.8	9.8	10.8	14.7	12.6	13.4	---	---	---
27	10.1	8.3	9.0	9.9	9.2	9.6	14.8	12.6	13.4	14.2	13.2	13.7
28	---	---	---	10.0	9.0	9.4	14.5	12.0	13.1	14.2	13.1	13.6
29	---	---	---	10.8	9.9	10.4	13.8	10.8	12.1	14.3	13.2	13.6
30	---	---	---	11.0	9.9	10.5	12.1	11.1	11.6	14.3	13.3	13.6
31	11.4	7.9	9.4	---	---	---	13.7	11.8	12.5	14.2	13.2	13.6
MONTH	11.5	4.2	7.5	12.5	7.0	9.6	14.8	10.0	12.3	14.4	9.2	12.8
FEBRUARY			MARCH			APRIL			MAY			
1	14.6	13.4	13.8	13.3	10.7	11.7	---	---	---	7.0	5.6	6.2
2	14.6	13.5	13.8	13.5	10.1	11.6	---	---	---	7.3	5.8	6.9
3	14.0	13.5	13.9	13.4	10.2	11.6	---	---	---	8.2	7.0	7.6
4	14.0	13.3	13.7	11.6	9.1	10.0	---	---	---	9.0	6.8	7.9
5	13.8	13.1	13.5	10.8	9.0	9.7	---	---	---	9.7	6.5	7.9
6	13.3	12.5	12.8	11.3	9.8	10.4	---	---	---	9.9	5.7	7.6
7	13.4	12.7	13.1	12.8	10.4	11.5	11.5	7.1	9.1	9.4	5.7	7.3
8	14.3	13.1	13.6	13.6	10.9	12.0	10.2	6.9	8.1	9.6	6.0	7.7
9	14.0	12.7	13.4	13.6	10.5	11.9	10.2	6.9	8.4	9.1	5.7	7.2
10	13.7	12.4	12.9	---	---	---	10.1	6.6	8.2	9.1	5.4	6.8
11	14.1	12.8	13.3	---	---	---	9.4	6.6	7.7	8.8	5.4	6.9
12	13.7	12.5	13.0	---	---	---	9.3	7.1	8.5	9.5	5.5	7.1
13	14.2	12.8	13.5	---	---	---	10.0	9.1	9.5	9.1	5.5	7.0
14	14.9	12.7	13.7	---	---	---	9.8	8.2	9.1	8.9	5.5	6.8
15	15.2	12.8	13.8	---	---	---	9.5	7.2	8.5	8.3	5.9	7.3
16	15.5	13.5	14.2	---	---	---	10.5	6.9	8.6	9.2	6.9	8.2
17	15.4	13.3	14.2	---	---	---	10.6	6.2	8.3	9.9	6.0	7.9
18	15.8	13.0	14.3	---	---	---	9.9	6.0	7.6	9.4	5.8	7.4
19	15.5	12.0	13.7	---	---	---	8.7	5.9	7.1	8.0	5.7	7.4
20	14.4	11.5	12.6	---	---	---	8.4	6.3	7.1	7.8	6.4	7.3
21	14.4	11.9	12.8	---	---	---	7.8	6.3	7.0	8.2	6.1	7.1
22	15.8	12.1	13.5	---	---	---	8.3	6.8	7.2	8.4	5.9	6.9
23	16.1	11.9	13.7	---	---	---	8.0	6.8	7.2	8.5	5.6	6.8
24	14.9	11.9	12.9	---	---	---	9.6	6.5	7.8	8.1	5.6	6.6
25	15.8	12.3	13.7	---	---	---	8.0	6.2	6.8	8.5	5.6	6.7
26	15.8	12.2	13.7	---	---	---	9.1	6.3	7.3	7.3	5.5	6.8
27	15.6	12.1	13.5	---	---	---	10.1	6.6	8.2	8.0	6.9	7.5
28	15.6	11.8	13.6	---	---	---	10.5	6.3	8.4	8.0	7.4	7.8
29	15.3	11.2	13.2	---	---	---	9.2	5.5	7.3	8.5	7.2	7.9
30	---	---	---	---	---	---	6.6	5.5	6.1	8.5	7.3	7.9
31	---	---	---	---	---	---	---	---	---	8.4	7.6	8.0
MONTH	16.1	11.2	13.5	13.6	9.0	11.2	11.5	5.5	7.9	9.9	5.4	7.3

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	52	23	31	24	4.9	10	46	30	38	62	16	26
2	58	20	26	24	4.4	11	38	28	33	>1,000	36	340
3	38	17	23	31	3.9	13	36	27	29	>1,000	66	150
4	29	15	20	49	6.4	18	31	27	29	>1,000	230	690
5	32	13	20	32	5.8	15	59	29	37	>1,000	130	270
6	22	12	15	23	9.1	13	120	43	51	140	65	97
7	59	12	17	21	7.7	11	47	37	41	89	48	62
8	34	9.0	16	11	4.0	6.3	41	31	35	51	39	45
9	20	8.8	12	8.0	2.0	4.5	53	7.0	25	56	34	40
10	22	7.6	11	10	2.0	4.5	740	10	260	58	34	40
11	16	7.4	9.9	26	5.9	9.5	260	49	110	37	29	33
12	29	8.2	12	>1,000	16	510	51	22	32	41	26	28
13	41	6.0	16	470	98	190	63	13	18	47	26	31
14	110	8.0	33	140	65	79	24	10	14	45	25	32
15	77	19	34	140	52	60	21	8.0	12	30	22	24
16	130	12	19	93	49	58	660	8.8	150	24	21	22
17	30	12	15	74	34	44	360	34	120	63	21	25
18	26	8.1	12	>1,000	32	200	---	---	---	290	44	160
19	22	6.0	11	650	100	220	13	7.0	8.8	130	49	75
20	29	5.8	13	110	52	74	12	8.0	9.7	51	35	42
21	27	5.6	11	68	35	47	20	9.0	11	36	29	32
22	140	4.4	11	51	28	37	24	9.0	14	31	28	29
23	14	4.2	6.8	41	28	32	540	20	150	---	---	---
24	---	---	---	110	29	72	470	46	130	---	---	---
25	---	---	---	100	38	56	46	21	30	---	---	---
26	130	8.8	63	41	26	31	22	14	17	---	---	---
27	110	78	99	920	25	230	22	12	15	20	14	15
28	190	27	61	310	100	170	100	9.0	16	23	12	13
29	250	15	31	100	48	69	340	10	35	23	10	12
30	30	9.0	15	71	38	48	520	66	210	57	8.0	9.6
31	45	4.5	13	---	---	---	66	23	38	22	6.0	8.9
MONTH	250	4.2	23	1,000	2.0	78	740	7.0	57	1,000	6.0	87
FEBRUARY			MARCH			APRIL			MAY			
1	14	5.0	6.3	51	4.0	20	68	29	44	>1,000	140	310
2	120	5.0	11	49	14	19	46	26	33	840	130	330
3	760	100	340	230	9.8	21	69	25	36	190	50	110
4	110	47	65	>1,000	120	420	58	19	24	100	49	76
5	980	43	220	170	59	92	46	17	20	120	48	77
6	640	130	240	200	72	120	29	4.0	15	140	61	110
7	140	39	75	90	38	52	---	---	---	150	75	97
8	73	26	37	47	24	32	---	---	---	99	56	68
9	37	22	26	37	21	26	---	---	---	79	47	55
10	190	24	59	28	21	24	26	6.6	11	84	44	57
11	190	38	79	36	20	23	25	7.0	13	78	49	59
12	44	24	31	29	17	20	170	9.3	54	86	46	61
13	---	---	---	24	17	20	>1,000	120	380	91	52	64
14	---	---	---	28	16	20	510	76	170	86	53	67
15	---	---	---	32	16	20	94	41	59	250	74	130
16	---	---	---	37	19	25	55	20	32	120	68	90
17	10	2.0	5.2	39	21	24	45	18	24	91	62	73
18	8.0	1.9	3.0	54	20	26	36	19	24	88	31	68
19	19	1.8	4.7	42	18	28	47	23	33	>1,000	34	440
20	72	3.8	18	74	19	24	77	36	44	210	29	120
21	210	12	27	27	15	20	78	36	46	130	35	95
22	27	7.6	12	25	14	16	220	47	86	100	36	80
23	18	4.5	7.6	19	15	16	170	88	110	97	38	71
24	9.5	5.4	7.1	42	14	19	94	56	71	93	34	63
25	32	3.3	5.9	30	20	22	130	56	89	72	28	53
26	20	1.3	3.3	42	18	25	130	62	87	740	10	220
27	4.2	1.2	2.7	43	8.8	16	79	63	70	750	6.5	260
28	5.1	1.1	2.8	42	8.7	12	89	62	71	850	5.5	210
29	8.0	2.0	3.7	260	12	39	97	73	82	700	20	200
30	---	---	---	320	64	140	940	88	260	760	26	230
31	---	---	---	64	34	47	---	---	---	>1,000	9.3	310
MONTH	980	1.1	52	1,000	4.0	46	1,000	4.0	74	1,000	5.5	140

LICKING RIVER BASIN

03254550 BANKLICK CREEK AT HIGHWAY 1829 NEAR ERLANGER, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	580	34	200	---	---	---	---	---	---	220	88	130
2	95	41	69	---	---	---	---	---	---	300	65	120
3	84	51	64	---	---	---	---	---	---	410	66	180
4	75	30	53	---	---	---	---	---	---	200	120	160
5	---	---	---	---	---	---	---	---	---	160	94	130
6	---	---	---	---	---	---	---	---	---	180	60	110
7	---	---	---	---	---	---	---	---	---	130	65	89
8	---	---	---	---	---	---	---	---	---	790	85	280
9	---	---	---	---	---	---	---	---	---	240	74	120
10	---	---	---	---	---	---	---	---	---	99	52	69
11	---	---	---	---	---	---	---	---	---	120	44	82
12	110	31	50	---	---	---	---	---	---	120	35	65
13	78	28	46	---	---	---	---	---	---	130	35	69
14	100	24	38	---	---	---	---	---	---	93	27	54
15	990	23	240	---	---	---	---	---	---	110	34	57
16	990	84	320	---	---	---	---	---	---	110	29	54
17	160	62	89	---	---	---	---	---	---	2,500	28	590
18	990	70	880	---	---	---	---	---	---	410	220	310
19	---	---	---	---	---	---	---	---	---	300	140	200
20	---	---	---	---	---	---	---	---	---	170	65	110
21	---	---	---	---	---	---	---	---	---	170	56	110
22	---	---	---	---	---	---	---	---	---	120	40	66
23	---	---	---	---	---	---	---	---	---	100	34	57
24	---	---	---	---	---	---	---	---	---	83	29	50
25	---	---	---	---	---	---	---	---	---	78	32	53
26	---	---	---	---	---	---	---	---	---	96	45	63
27	---	---	---	---	---	---	---	---	---	93	35	54
28	---	---	---	---	---	---	2,600	65	480	83	44	62
29	---	---	---	---	---	---	2,600	200	800	73	41	53
30	---	---	---	2,700	210	1,900	360	110	170	51	28	38
31	---	---	---	2,700	380	1,400	300	91	140	---	---	---
MONTH	990	23	190	2,700	210	1,600	2,600	65	400	2,500	27	120
YEAR	2,700	1.1	96									

> Actual value is known to be greater than the value shown

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03260100 ELIJAH CREEK AT ELIJAH CREEK ROAD NEAR HEBRON, KY

LOCATION.--Lat 39°04'47", long 84°41'07", Boone County, Hydrologic Unit 05090203, at bridge on Elijahs Creek Road, 0.6 mi downstream from Interstate 275, 1.3 mi northeast of Hebron, and 2.5 mi upstream from the mouth.

DRAINAGE AREA.--4.03 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 759.085 ft above NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

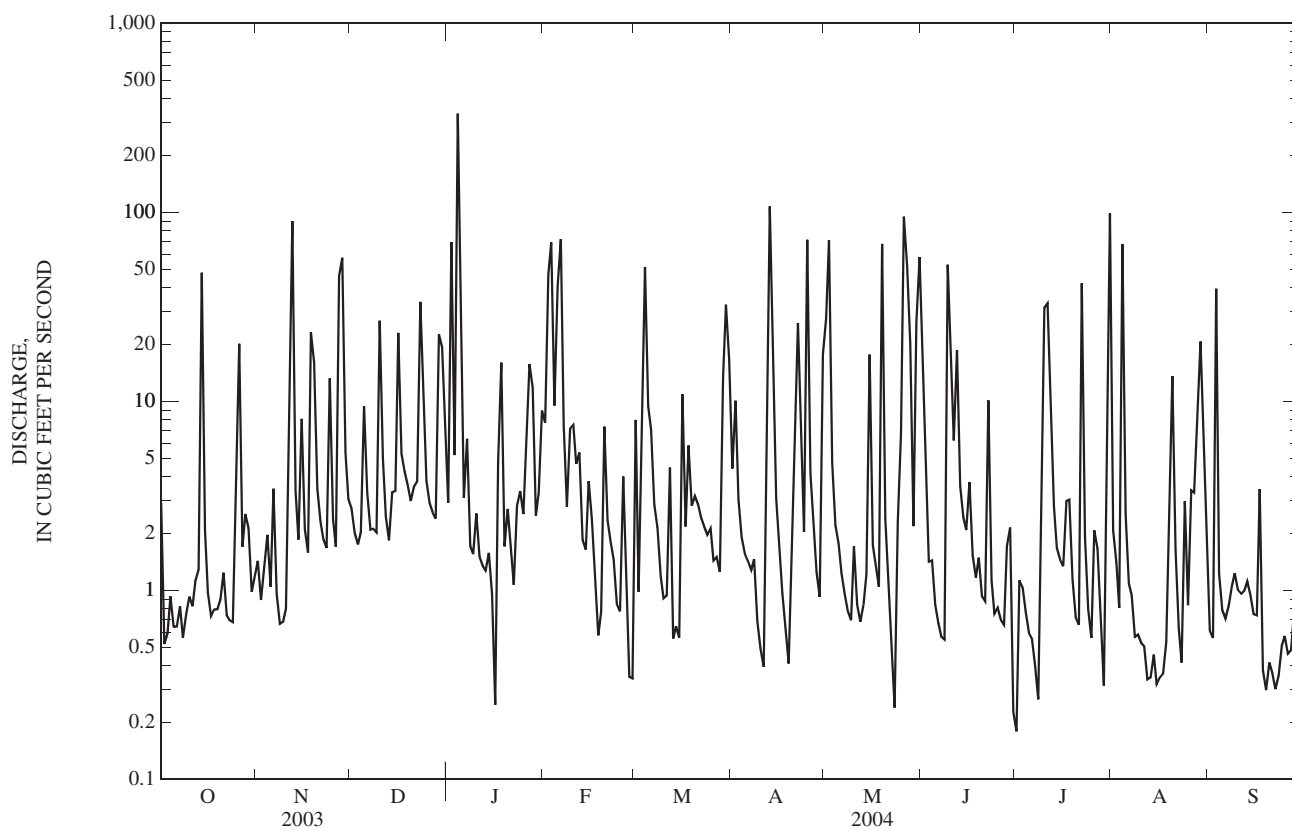
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.4	2.7	2.9	7.7	8.0	4.4	27	8.5	0.18	2.1	0.62
2	0.52	0.89	2.0	69	47	0.98	10	71	2.8	1.1	1.4	0.56
3	0.59	1.3	1.8	5.2	69	5.4	3.1	4.7	1.4	1.0	0.81	39
4	0.93	2.0	2.0	332	9.5	51	1.9	2.2	1.4	0.76	68	1.2
5	0.64	1.0	9.4	58	40	9.4	1.6	1.8	0.84	0.60	2.5	0.79
6	0.65	3.5	3.3	3.1	72	7.1	1.4	1.2	0.67	0.56	1.1	0.71
7	0.82	0.96	2.1	6.3	7.4	2.9	1.3	0.96	0.57	0.40	0.94	0.83
8	0.56	0.67	2.1	1.7	2.8	2.1	1.5	0.77	0.55	0.27	0.57	1.1
9	0.74	0.68	2.0	1.6	7.2	1.2	0.69	0.70	53	6.1	0.58	1.2
10	0.93	0.80	27	2.6	7.5	0.91	0.49	1.7	17	31	0.53	1.0
11	0.82	5.8	5.0	1.5	4.7	0.94	0.39	0.84	6.2	33	0.51	0.96
12	1.1	90	2.5	1.3	5.4	4.5	17	0.68	19	8.8	0.34	1.00
13	1.3	3.4	1.8	1.3	1.8	0.56	107	0.85	3.6	2.8	0.35	1.1
14	48	1.9	3.3	1.6	1.6	0.65	26	1.2	2.4	1.7	0.46	0.94
15	2.1	8.1	3.4	0.96	3.8	0.56	3.1	18	2.1	1.5	0.32	0.75
16	0.98	2.1	23	0.25	2.4	11	1.7	1.7	3.7	1.3	0.35	0.74
17	0.73	1.6	5.3	4.8	1.2	2.2	0.98	1.3	1.5	3.0	0.36	3.4
18	0.79	23	4.2	16	0.58	5.8	0.63	1.0	1.2	3.0	0.53	0.38
19	0.80	16	3.6	1.7	0.77	2.8	0.41	68	1.5	1.1	1.6	0.30
20	0.89	3.5	3.0	2.7	7.3	3.1	0.97	2.4	0.93	0.72	14	0.41
21	1.2	2.3	3.5	1.7	2.3	2.8	4.7	0.93	0.88	0.66	1.6	0.37
22	0.74	1.9	3.8	1.1	1.8	2.4	26	0.47	10	42	0.63	0.30
23	0.69	1.7	34	2.8	1.5	2.2	7.7	0.24	1.1	1.9	0.42	0.35
24	0.68	13	12	3.4	0.85	2.0	2.0	2.3	0.75	0.79	3.0	0.51
25	3.3	2.4	3.8	2.5	0.78	2.1	71	6.8	0.81	0.56	0.84	0.57
26	20	1.7	2.9	6.4	4.0	1.4	4.2	95	0.70	2.1	3.4	0.46
27	1.7	46	2.6	16	1.1	1.5	2.2	52	0.66	1.7	3.3	0.48
28	2.5	57	2.4	12	0.35	1.3	1.3	20	1.7	0.67	9.6	0.81
29	2.1	5.4	23	2.5	0.34	13	0.92	2.2	2.2	0.31	21	0.56
30	0.98	3.0	19	3.3	---	32	18	26	0.23	3.0	6.4	0.72
31	1.2	---	7.2	8.9	---	17	---	58	---	98	2.4	---
TOTAL	101.88	303.00	223.7	575.11	312.67	198.80	322.58	471.94	147.89	250.58	149.94	62.12
MEAN	3.29	10.1	7.22	18.6	10.8	6.41	10.8	15.2	4.93	8.08	4.84	2.07
MAX	48	90	34	332	72	51	107	95	53	98	68	39
MIN	0.52	0.67	1.8	0.25	0.34	0.56	0.39	0.24	0.23	0.18	0.32	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	6.00	5.37	6.05	9.03	8.72	7.56	8.28	13.4	5.51	4.42	2.74	5.44
MAX	14.6	10.1	14.8	18.6	18.6	15.0	16.5	21.9	7.59	8.49	5.38	12.2
(WY)	(2002)	(2004)	(2002)	(2004)	(2000)	(2002)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)
MIN	1.06	0.86	1.72	1.62	2.85	1.79	1.57	4.27	3.22	0.80	0.63	0.01
(WY)	(2001)	(2000)	(2003)	(2003)	(2003)	(2001)	(2001)	(2001)	(2001)	(2002)	(2002)	(2001)

03260100 ELIJAHS CREEK AT ELIJAHS CREEK ROAD NEAR HEBRON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	2,731.10		3,120.21		6.87	
ANNUAL MEAN	7.48		8.53		10.5	
HIGHEST ANNUAL MEAN					2.22	
LOWEST ANNUAL MEAN					0.00	
HIGHEST DAILY MEAN	310	May 10	332	Jan 4	332	Jan 4, 2004
LOWEST DAILY MEAN	0.16	Aug 18	0.18	Jul 1	0.00	Oct 2, 1999
ANNUAL SEVEN-DAY MINIMUM	0.44	Jun 28	0.37	Sep 18	0.00	Oct 15, 1999
MAXIMUM PEAK FLOW			871	May 26	1,510	May 10, 2003
MAXIMUM PEAK STAGE			4.31	May 26	7.34	May 10, 2003
10 PERCENT EXCEEDS	18		22		13	
50 PERCENT EXCEEDS	1.8		1.8		1.4	
90 PERCENT EXCEEDS	0.57		0.56		0.19	



03260100 ELIJAH CREEK AT ELIJAH CREEK ROAD NEAR HEBRON, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 to September 2003.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 2001 to current year.

pH: March 2001 to current year.

WATER TEMPERATURES: March 2001 to current year.

DISSOLVED OXYGEN: March 2001 to current year.

TURBIDITY: March 2001 to Sept. 2003.

INSTRUMENTATION.--Water-quality monitor with telemetry.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Records rated good.

pH: Records rated good except for the following periods: Oct. 16-25 rated fair; Oct. 26-Nov. 4 rated poor.

WATER TEMPERATURES: Records rated excellent except for the following periods; Jun. 13-19 rated good; Jun. 7-12 rated fair; Jun. 4-8 rated poor.

DISSOLVED OXYGEN: Records rated poor.

TURBIDITY: No data available.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 11,800 microsiemens, Dec. 14, 2003; minimum recorded, 21 microsiemens, July 18, 2001.

pH: Maximum recorded, 8.7 units, Aug. 1, 13, 17, 18, 2003; minimum recorded, 5.9 units, Nov. 4, 2003.

WATER TEMPERATURES: Maximum recorded, 29.6°C, July 8, 2003; minimum recorded, -0.3°C, Dec. 20, 21, 2003.

DISSOLVED OXYGEN: Maximum recorded, 19.9 mg/L, May 6, 2001; minimum recorded, 0.5 mg/L, May 19, 2001.

TURBIDITY: Maximum recorded, greater than 1000 NTU, several days in 2001, 2002 and June 8, 14, 2003; minimum recorded, 0.3 NTU, Sept. 18, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 11,800 microsiemens, Dec. 14, 2003; minimum recorded, 81 microsiemens, Sept. 3, 2004.

pH: Maximum recorded, 8.6 units, Sept. 3, 14, 2004; minimum recorded, 5.9 units, Nov. 4, 2003.

WATER TEMPERATURES: Maximum recorded, 27.4°C, Aug. 28, 2004; minimum recorded, -0.3°C, Dec. 20, 21, 2003.

DISSOLVED OXYGEN: Maximum recorded, 12.5 mg/L, Dec. 19, 2003; minimum recorded, 2.1 mg/L, Nov. 5, 2003.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	869	454	520	953	833	891	1,260	1,180	1,230	---	---	---
2	695	581	621	866	788	822	1,320	1,220	1,280	---	---	---
3	830	695	757	850	720	821	1,380	1,180	1,320	---	---	---
4	902	823	864	2,150	833	1,900	1,400	1,300	1,340	---	---	---
5	937	895	918	1,930	1,270	1,530	1,950	1,010	1,290	---	---	---
6	1,000	864	920	1,270	578	949	1,330	1,130	1,250	---	---	---
7	1,140	969	1,030	751	608	692	1,400	1,330	1,360	---	---	---
8	1,050	1,020	1,040	824	751	781	1,680	1,260	1,450	---	---	---
9	1,100	1,050	1,080	894	824	868	1,780	1,510	1,620	---	---	---
10	1,100	989	1,040	1,000	894	947	1,560	949	1,140	---	---	---
11	1,050	1,010	1,030	1,030	404	874	1,340	1,110	1,240	---	---	---
12	1,050	1,020	1,040	754	260	514	1,420	1,310	1,370	---	---	---
13	1,060	974	1,030	852	742	805	1,490	1,410	1,450	---	---	---
14	1,110	161	674	985	851	932	11,800	1,490	3,780	---	---	---
15	676	444	583	975	560	738	11,300	3,890	6,530	---	---	---
16	788	665	714	965	760	878	3,900	1,560	2,710	---	---	---
17	869	625	727	1,070	965	1,020	1,920	1,640	1,800	---	---	---
18	934	851	886	1,120	502	936	9,550	1,920	4,150	---	---	---
19	882	819	841	808	609	695	7,530	2,870	5,300	---	---	---
20	914	882	897	1,000	808	909	3,430	2,680	3,160	---	---	---
21	1,050	913	973	1,080	987	1,030	3,310	2,570	2,810	---	---	---
22	1,020	800	904	1,140	1,080	1,120	---	---	---	---	---	---
23	989	839	947	1,180	1,140	1,160	---	---	---	---	---	---
24	990	915	981	1,190	563	853	---	---	---	---	---	---
25	990	532	916	1,050	877	977	---	---	---	---	---	---
26	577	292	441	1,160	1,050	1,120	---	---	---	---	---	---
27	845	577	723	1,200	585	895	---	---	---	---	---	---
28	833	694	810	897	645	749	---	---	---	---	---	---
29	728	649	667	1,120	897	1,030	---	---	---	---	---	---
30	831	728	811	1,220	1,120	1,180	---	---	---	---	---	---
31	879	826	859	---	---	---	---	---	---	---	---	---
MONTH	1,140	161	847	2,150	260	954	11,800	949	2,270	---	---	---

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	900	308	678
2	---	---	---	---	---	---	---	---	---	729	418	478
3	---	---	---	---	---	---	---	---	---	599	490	542
4	---	---	---	---	---	---	---	---	---	691	599	641
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	1,230	1,110	1,190	---	---	---
9	---	---	---	---	---	---	1,110	1,080	1,090	---	---	---
10	---	---	---	---	---	---	1,140	1,090	1,120	---	---	---
11	---	---	---	---	---	---	1,180	1,140	1,160	---	---	---
12	---	---	---	---	---	---	1,200	565	1,010	---	---	---
13	---	---	---	---	---	---	857	464	726	1,180	1,010	1,070
14	---	---	---	---	---	---	769	480	609	1,220	1,120	1,170
15	---	---	---	---	---	---	1,020	769	869	1,200	322	623
16	---	---	---	---	---	---	1,260	1,020	1,120	942	683	828
17	---	---	---	---	---	---	1,450	1,260	1,340	1,090	936	1,020
18	---	---	---	---	---	---	1,590	1,450	1,510	1,170	984	1,100
19	---	---	---	---	---	---	1,610	1,550	1,580	1,040	338	663
20	---	---	---	---	---	---	1,660	1,610	1,640	1,090	853	973
21	---	---	---	---	---	---	1,680	1,630	1,660	1,210	1,090	1,170
22	---	---	---	---	---	---	1,630	1,230	1,530	1,300	1,190	1,270
23	---	---	---	---	---	---	1,230	1,030	1,080	1,360	1,290	1,340
24	---	---	---	---	---	---	1,090	1,040	1,050	1,420	1,340	1,380
25	---	---	---	---	---	---	---	---	---	1,440	516	1,380
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	1,110	1,030	1,060	---	---	---
30	---	---	---	---	---	---	1,110	302	774	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	1,680	302	1,160	1,440	308	960
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	929	813	873	740	467	630	680	447	546
2	---	---	---	1,150	914	992	1,380	740	975	724	680	702
3	---	---	---	1,810	840	1,060	1,340	880	1,010	740	81	440
4	937	745	853	2,130	1,420	1,840	978	148	663	620	498	563
5	1,140	937	1,050	1,420	1,020	1,140	695	520	616	716	619	672
6	1,170	1,060	1,130	1,090	1,020	1,050	868	618	769	771	716	738
7	1,190	1,130	1,160	1,050	1,010	1,040	1,490	867	1,140	837	771	807
8	1,190	1,140	1,170	1,130	1,050	1,090	1,130	1,000	1,040	890	607	722
9	1,170	165	837	1,250	353	964	1,030	812	965	972	890	935
10	834	165	628	699	99	557	1,080	996	1,030	992	972	982
11	942	447	749	746	268	453	1,060	1,020	1,040	1,040	992	1,020
12	697	324	544	950	461	692	1,070	1,040	1,050	1,050	1,020	1,030
13	843	552	723	1,020	715	876	1,080	1,040	1,070	1,050	1,020	1,030
14	930	804	860	1,060	961	1,040	1,100	1,060	1,080	1,040	1,020	1,030
15	959	652	853	1,140	933	1,070	1,140	1,100	1,120	1,050	1,030	1,040
16	966	552	724	1,040	825	944	1,120	1,110	1,110	1,050	1,030	1,050
17	790	623	738	1,150	551	768	1,120	1,100	1,110	1,070	481	733
18	883	733	829	1,130	524	837	1,110	1,090	1,110	529	490	510
19	912	579	808	910	532	675	1,340	592	1,130	551	529	542
20	958	906	930	917	677	791	1,110	107	588	593	551	572
21	1,120	958	991	914	753	818	537	280	440	628	593	614
22	1,150	300	690	811	158	528	662	537	606	657	628	643
23	915	774	849	1,420	811	1,080	697	662	681	686	656	671
24	951	898	922	1,240	1,000	1,080	919	395	602	729	686	705
25	1,010	931	978	1,170	1,100	1,130	501	416	459	783	729	757
26	1,090	1,010	1,050	1,150	788	1,060	695	393	561	837	783	814
27	1,130	1,090	1,110	1,060	793	861	539	415	456	884	837	862
28	1,140	520	1,030	902	846	883	432	246	392	949	884	919
29	981	651	723	908	780	874	409	136	367	992	949	968
30	814	710	775	1,020	379	835	434	175	391	1,030	992	1,010
31	---	---	---	467	134	319	447	425	430	---	---	---
MONTH	1,190	165	878	2,130	99	910	1,490	107	795	1,070	81	788
YEAR	11,800	81	1,020									

ELIJAH'S CREEK BASIN

03260100 ELIAHS CREEK AT ELIAHS CREEK ROAD NEAR HEBRON, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.8	7.1	7.0	7.3	7.2	---	---	---	---	---	---
2	7.8	7.7	7.1	7.0	7.3	7.2	---	---	---	---	---	---
3	8.1	7.7	7.1	7.0	7.3	7.3	---	---	---	---	---	---
4	8.2	7.9	7.1	5.9	7.3	7.3	---	---	---	---	---	---
5	8.1	7.9	6.6	6.1	7.4	7.2	---	---	---	---	---	---
6	8.2	8.0	7.2	6.6	7.2	7.0	---	---	---	---	---	---
7	8.2	8.0	6.8	6.7	7.0	6.9	---	---	---	---	---	---
8	8.0	7.8	6.8	6.7	7.0	6.9	---	---	---	---	---	---
9	7.9	7.8	6.9	6.8	7.2	7.0	---	---	---	---	---	---
10	8.0	7.8	7.0	6.8	7.3	7.0	---	---	---	---	---	---
11	8.0	7.9	7.1	6.8	7.0	7.0	---	---	---	---	---	---
12	7.9	7.8	7.3	6.8	7.1	7.0	---	---	---	---	---	---
13	7.9	7.8	7.2	6.8	7.2	7.0	---	---	---	---	---	---
14	7.9	7.4	7.0	6.9	7.2	6.8	---	---	---	---	---	---
15	7.4	7.3	7.0	6.8	7.2	6.8	---	---	---	---	---	---
16	7.5	7.3	6.9	6.8	7.3	7.2	---	---	---	---	---	---
17	7.5	7.4	7.0	6.9	7.4	7.2	---	---	---	---	---	---
18	7.7	7.5	7.1	7.0	7.5	7.1	---	---	---	---	---	---
19	7.7	7.6	7.0	6.9	---	---	---	---	---	---	---	---
20	7.7	7.6	7.0	6.9	---	---	---	---	---	---	---	---
21	7.7	7.6	7.1	7.0	---	---	---	---	---	---	---	---
22	7.8	7.6	7.2	7.1	---	---	---	---	---	---	---	---
23	7.7	7.6	7.2	7.1	---	---	---	---	---	---	---	---
24	7.8	7.6	7.2	7.0	---	---	---	---	---	---	---	---
25	7.8	7.4	7.1	7.0	---	---	---	---	---	---	---	---
26	7.5	7.1	7.3	7.1	---	---	---	---	---	---	---	---
27	7.2	7.0	7.2	6.9	---	---	---	---	---	---	---	---
28	7.2	7.1	7.0	6.9	---	---	---	---	---	---	---	---
29	7.2	7.0	7.1	7.0	---	---	---	---	---	---	---	---
30	7.0	6.8	7.2	7.1	---	---	---	---	---	---	---	---
31	7.0	6.9	---	---	---	---	---	---	---	---	---	---
MONTH	8.2	6.8	7.3	5.9	7.5	6.8	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.6	7.3	7.7	7.5	8.2	7.8	7.9	7.5	8.4	8.0
2	---	---	7.4	7.1	7.6	7.4	8.1	7.7	8.0	7.6	8.4	8.1
3	---	---	7.2	7.1	8.0	7.6	7.9	7.7	8.1	7.6	8.6	8.0
4	---	---	7.4	7.2	8.1	7.9	8.0	7.6	8.1	7.5	8.4	8.0
5	---	---	7.3	7.2	8.0	7.9	8.2	7.7	7.8	7.5	8.5	8.0
6	---	---	7.3	7.2	8.0	7.9	8.2	7.7	8.0	7.7	8.5	8.1
7	---	---	7.2	7.2	8.0	7.9	8.1	7.7	8.0	7.8	8.3	8.0
8	7.9	7.6	7.3	7.2	8.0	7.9	8.1	7.7	8.2	7.9	8.3	8.0
9	7.8	7.6	7.3	7.2	8.0	7.5	8.0	7.4	8.2	7.9	8.4	8.2
10	7.9	7.7	7.2	7.1	7.9	7.6	8.1	7.4	8.2	7.9	8.4	8.2
11	8.0	7.7	7.3	7.2	8.0	7.6	7.7	7.3	8.2	7.9	8.4	8.2
12	8.0	7.6	7.3	7.3	7.8	7.6	7.7	7.4	8.2	8.0	8.4	8.1
13	7.8	7.3	7.6	7.3	8.0	7.7	7.6	7.2	8.2	8.0	8.4	8.1
14	7.7	7.6	7.6	7.5	8.0	7.9	7.6	7.2	8.2	8.0	8.6	8.1
15	7.8	7.7	7.5	7.2	8.1	7.8	7.9	7.5	8.2	7.9	8.3	8.1
16	7.7	7.5	7.6	7.2	8.0	7.7	7.9	7.6	8.1	7.9	8.3	8.0
17	7.5	7.3	7.8	7.6	8.0	7.7	7.8	7.4	8.1	7.8	8.1	7.7
18	7.4	7.3	7.6	7.4	8.1	7.9	7.7	7.3	8.1	7.9	8.3	7.7
19	7.3	7.2	7.8	7.3	8.1	7.8	7.8	7.3	8.0	7.3	8.4	7.8
20	7.3	7.2	7.7	7.4	8.2	8.0	8.0	7.5	8.1	7.3	8.5	7.9
21	7.3	7.2	7.8	7.6	8.2	8.0	8.1	7.6	8.0	7.7	8.5	8.0
22	7.4	7.2	7.9	7.7	8.1	7.7	8.0	7.4	8.2	7.8	8.4	8.0
23	7.5	7.4	7.9	7.7	8.3	7.9	7.8	7.6	8.2	7.8	8.4	8.0
24	7.5	7.4	8.0	7.8	8.4	8.1	8.0	7.7	8.0	7.6	8.4	7.9
25	7.6	7.4	8.1	7.6	8.5	8.1	8.1	7.8	7.8	7.5	8.4	8.0
26	7.6	7.5	8.0	7.4	8.4	8.2	7.9	7.6	7.9	7.6	8.4	8.0
27	7.6	7.5	7.6	7.4	8.4	8.2	7.6	7.4	8.1	7.8	8.4	8.1
28	7.8	7.5	7.5	7.5	8.4	8.0	7.8	7.4	8.1	7.8	8.3	8.1
29	7.9	7.5	7.6	7.5	8.0	7.7	7.9	7.5	8.2	7.9	8.3	8.1
30	7.7	7.5	7.7	7.4	8.1	7.7	8.0	7.5	8.3	7.9	8.3	8.1
31	---	---	7.8	7.4	---	---	8.1	7.4	8.4	8.1	---	---
MONTH	8.0	7.2	8.1	7.1	8.5	7.4	8.2	7.2	8.4	7.3	8.6	7.7
YEAR	8.6	5.9										

03260100 ELIJAH CREEK AT ELIJAH CREEK ROAD NEAR HEBRON, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.3	11.2	12.5	16.9	14.8	15.7	5.3	3.2	4.4	---	---	---
2	11.9	9.0	10.3	17.7	13.3	15.3	3.7	1.2	2.5	---	---	---
3	11.1	7.4	9.4	17.5	12.5	14.8	3.4	2.6	2.9	---	---	---
4	13.3	10.7	11.8	17.4	13.3	15.2	4.6	2.5	3.3	---	---	---
5	14.6	10.4	12.4	17.9	14.0	16.1	6.9	4.6	5.8	---	---	---
6	14.7	11.3	13.0	14.0	10.6	12.3	5.5	4.5	5.0	---	---	---
7	15.0	10.4	12.7	10.7	6.9	9.0	4.8	3.0	4.1	---	---	---
8	15.9	11.7	13.7	7.5	4.6	5.9	5.0	2.1	3.4	---	---	---
9	16.8	12.5	14.7	6.5	2.6	4.6	7.3	5.0	6.1	---	---	---
10	18.7	15.4	16.8	8.8	3.2	6.2	8.7	7.1	8.0	---	---	---
11	18.8	15.5	17.0	13.5	8.4	10.5	7.1	3.4	5.1	---	---	---
12	18.1	14.5	16.7	15.6	11.9	14.2	3.4	1.0	2.0	---	---	---
13	15.6	11.7	13.8	11.9	5.3	7.6	1.0	0.3	0.6	---	---	---
14	16.9	13.5	14.6	6.6	3.6	5.2	1.6	0.1	0.7	---	---	---
15	14.0	11.4	12.9	7.9	6.0	7.2	2.7	1.5	2.0	---	---	---
16	14.4	10.4	12.5	9.7	7.7	8.5	5.7	1.7	3.6	---	---	---
17	13.7	11.0	12.7	9.8	6.3	8.2	4.4	1.3	2.7	---	---	---
18	12.3	8.6	10.6	14.1	9.5	11.6	2.1	0.8	1.4	---	---	---
19	13.9	9.7	11.7	13.4	10.0	12.5	2.0	0.6	1.4	---	---	---
20	15.3	10.1	12.7	10.6	7.5	9.2	0.7	-0.3	0.1	---	---	---
21	15.9	13.3	14.5	11.0	7.8	9.4	0.5	-0.3	0.1	---	---	---
22	14.2	10.3	11.9	12.2	8.2	10.2	---	---	---	---	---	---
23	11.9	9.0	10.2	14.0	11.0	12.4	---	---	---	---	---	---
24	10.5	6.7	8.9	12.8	4.7	8.8	---	---	---	---	---	---
25	15.0	9.0	11.7	5.4	3.1	4.3	---	---	---	---	---	---
26	14.7	11.2	12.8	6.9	4.3	5.6	---	---	---	---	---	---
27	11.2	8.7	10	9.2	6.8	8.0	---	---	---	---	---	---
28	10.6	8.3	9.3	9.3	4.9	7.1	---	---	---	---	---	---
29	11.1	8.7	10.1	4.9	3.7	4.3	---	---	---	---	---	---
30	13.6	8.5	11.1	6.0	2.9	4.4	---	---	---	---	---	---
31	16.0	11.6	13.8	---	---	---	---	---	---	---	---	---
MONTH	18.8	6.7	12.5	17.9	2.6	9.5	8.7	-0.3	3.1	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	19.3	15.4	17.0
2	---	---	---	---	---	---	---	---	---	16.8	11.3	12.9
3	---	---	---	---	---	---	---	---	---	14.0	9.0	11.4
4	---	---	---	---	---	---	---	---	---	14.1	8.8	11.5
5	---	---	---	---	---	---	---	---	---	18.5	11.7	14.9
6	---	---	---	---	---	---	---	---	---	20.3	13.6	17.1
7	---	---	---	---	---	---	---	---	---	20.4	16.5	18.5
8	---	---	---	---	---	---	18.6	12.6	15.0	21.1	15.1	18.3
9	---	---	---	---	---	---	16.6	9.8	13.2	22.6	16.9	19.7
10	---	---	---	---	---	---	17.2	10.3	13.3	23.0	18.2	20.4
11	---	---	---	---	---	---	16.0	11.6	13.2	22.9	18.5	20.7
12	---	---	---	---	---	---	11.9	8.2	9.5	24.0	18.9	21.3
13	---	---	---	---	---	---	8.2	3.7	6.3	22.4	19.7	21.0
14	---	---	---	---	---	---	13.5	4.8	8.6	21.7	19.7	20.7
15	---	---	---	---	---	---	15.8	6.9	11.1	20.2	15.8	17.0
16	---	---	---	---	---	---	18.3	9.8	14.0	18.3	15.4	16.6
17	---	---	---	---	---	---	20.6	12.2	16.3	21.6	16.1	18.8
18	---	---	---	---	---	---	21.9	14.7	18.2	23.5	18.7	20.9
19	---	---	---	---	---	---	18.9	15.9	17.1	22.7	18.9	20.6
20	---	---	---	---	---	---	17.4	14.8	16.1	22.9	19.7	21.3
21	---	---	---	---	---	---	16.4	14.9	15.6	24.3	21.0	22.7
22	---	---	---	---	---	---	15.9	14.4	15.0	25.2	21.3	23.2
23	---	---	---	---	---	---	14.6	12.8	13.6	25.4	21.4	23.1
24	---	---	---	---	---	---	17.1	10.9	14.0	25.5	21.7	23.0
25	---	---	---	---	---	---	18.2	13.4	15.6	24.7	20.5	22.3
26	---	---	---	---	---	---	17.2	12.5	14.9	21.6	18.9	20.0
27	---	---	---	---	---	---	14.4	10.6	12.6	22.4	17.9	19.8
28	---	---	---	---	---	---	16.1	8.7	12.5	21.8	18.5	20.0
29	---	---	---	---	---	---	18.0	12.3	15.2	20.8	17.0	18.9
30	---	---	---	---	---	---	17.4	14.6	16.0	21.4	17.7	19.6
31	---	---	---	---	---	---	---	---	---	21.8	18.7	20.1
MONTH	---	---	---	---	---	---	21.9	3.7	13.8	25.5	8.8	19.1

03260100 ELIJAH CREEK AT ELIJAH CREEK ROAD NEAR HEBRON, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.8	7.0	8.2	---	---	---	---	---	---	---	---	---
2	9.5	6.9	8.2	---	---	---	---	---	---	---	---	---
3	9.7	6.8	8.2	---	---	---	---	---	---	---	---	---
4	9.6	6.2	7.8	---	---	---	---	---	---	---	---	---
5	10.3	7.7	8.7	3.2	2.1	2.5	---	---	---	---	---	---
6	10.1	7.6	8.6	8.6	2.8	5.1	---	---	---	---	---	---
7	10.1	6.7	8.5	6.2	5.1	5.5	---	---	---	---	---	---
8	8.4	5.9	6.8	6.9	5.3	6.0	---	---	---	---	---	---
9	8.2	4.7	6.4	7.6	5.9	6.6	---	---	---	---	---	---
10	7.4	4.4	6.1	7.0	4.7	6.1	---	---	---	---	---	---
11	7.2	5.7	6.2	7.7	3.7	5.4	---	---	---	---	---	---
12	7.2	5.6	6.4	8.3	3.2	5.4	---	---	---	---	---	---
13	8.0	6.6	7.3	---	---	---	---	---	---	---	---	---
14	8.6	6.6	7.2	---	---	---	---	---	---	---	---	---
15	7.1	6.2	6.8	---	---	---	---	---	---	---	---	---
16	8.5	7.0	7.8	---	---	---	---	---	---	---	---	---
17	9.0	7.5	8.2	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	12.5	9.9	11.2	---	---	---
21	---	---	---	---	---	---	10.5	2.4	7.1	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.3	4.4	7.5	8.6	2.1	5.3	12.5	2.4	9.2	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	6.9	3.8	5.4
2	---	---	---	---	---	---	---	---	---	6.7	4.2	5.1
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	6.4	4.1	4.9	---	---	---
9	---	---	---	---	---	---	6.2	4.1	5.2	---	---	---
10	---	---	---	---	---	---	5.7	4.0	4.7	---	---	---
11	---	---	---	---	---	---	5.6	4.2	4.8	---	---	---
12	---	---	---	---	---	---	6.8	4.4	5.3	---	---	---
13	---	---	---	---	---	---	---	---	---	8.5	6.6	7.7
14	---	---	---	---	---	---	---	---	---	8.4	4.7	6.8
15	---	---	---	---	---	---	---	---	---	8.1	4.5	6.6
16	---	---	---	---	---	---	---	---	---	8.3	6.5	7.4
17	---	---	---	---	---	---	---	---	---	9.0	5.8	7.4
18	---	---	---	---	---	---	---	---	---	5.8	3.4	4.4
19	---	---	---	---	---	---	---	---	---	9.0	3.5	8.3
20	---	---	---	---	---	---	---	---	---	8.7	7.4	8.1
21	---	---	---	---	---	---	---	---	---	8.8	7.4	8.1
22	---	---	---	---	---	---	---	---	---	8.9	7.4	8.1
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	11.1	7.8	9.4	---	---	---
29	---	---	---	---	---	---	10.6	6.4	8.6	---	---	---
30	---	---	---	---	---	---	7.6	5.9	6.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	11.1	4.0	6.2	9.0	3.4	7.0

03260100 ELIJAH'S CREEK AT ELIJAH'S CREEK ROAD NEAR HEBRON, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	1,000	74	330
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	55	17	23	---	---	---
9	---	---	---	---	---	---	24	15	20	---	---	---
10	---	---	---	---	---	---	29	18	21	---	---	---
11	---	---	---	---	---	---	28	17	21	---	---	---
12	---	---	---	---	---	---	780	16	210	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	210	92	94
15	---	---	---	---	---	---	---	---	---	350	170	220
16	---	---	---	---	---	---	---	---	---	300	180	190
17	---	---	---	---	---	---	---	---	---	290	180	200
18	---	---	---	---	---	---	---	---	---	280	150	190
19	---	---	---	---	---	---	---	---	---	1,000	150	420
20	---	---	---	---	---	---	---	---	---	300	99	130
21	---	---	---	---	---	---	---	---	---	110	80	91
22	---	---	---	---	---	---	---	---	---	110	74	84
23	---	---	---	---	---	---	---	---	---	110	55	72
24	---	---	---	---	---	---	---	---	---	91	68	72
25	---	---	---	---	---	---	---	---	---	620	71	93
26	---	---	---	---	---	---	---	---	---	860	64	210
27	---	---	---	---	---	---	---	---	---	70	67	68
28	---	---	---	---	---	---	---	---	---	140	69	110
29	---	---	---	---	---	---	52	40	43	130	92	110
30	---	---	---	---	---	---	480	40	150	150	75	82
31	---	---	---	---	---	---	---	---	---	83	78	80
MONTH	---	---	---	---	---	---	780	15	70	1,000	55	150

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03262001 WOOLPER CREEK AT WOOLPER CREEK ROAD NEAR BURLINGTON, KY

LOCATION.--Lat 39°01'48", long 84°48'15", Boone County, Hydrologic Unit 05090203, at bridge, 1.0 mi upstream from Ashby Fork, 1.1 mi downstream from Double Lick Creek, 4.3 mi west of Burlington, and at mile 4.8.

DRAINAGE AREA.--24.19 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 490.67 ft NGVD of 1929.

REMARKS.--Records fair except for periods of estimated records, which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	2.9	19	25	18	17	63	162	45	0.72	14	2.3
2	3.6	2.9	14	293	37	17	54	421	24	0.76	4.6	1.3
3	2.4	2.6	12	60	253	14	40	70	13	2.1	2.5	84
4	2.4	2.5	11	1,550	55	225	26	35	10	1.0	197	9.1
5	2.4	2.4	25	338	146	60	21	25	7.1	0.70	29	3.9
6	2.2	2.6	23	66	396	43	18	21	5.6	0.59	7.3	2.6
7	2.0	3.6	15	43	82	28	17	15	4.5	0.53	3.7	2.1
8	1.9	2.3	13	31	39	24	16	12	3.6	0.44	2.4	1.9
9	1.9	1.9	12	25	38	20	12	9.5	74	7.1	1.9	1.9
10	2.2	1.8	65	25	60	17	11	7.8	50	6.4	1.7	1.7
11	2.7	2.2	41	20	47	16	10	7.3	12	13	1.4	1.6
12	3.3	267	21	16	38	14	27	5.7	30	25	1.2	1.5
13	3.5	30	16	17	32	12	420	4.8	22	17	1.2	1.5
14	63	15	17	17	27	13	249	4.6	11	2.7	1.1	1.4
15	16	20	15	14	20	12	46	16	9.9	1.4	0.88	1.3
16	5.1	16	65	11	19	24	28	10	13	0.96	0.73	1.3
17	3.3	12	48	13	19	19	21	5.6	7.4	0.80	0.64	1.3
18	2.8	49	27	63	17	21	17	5.0	4.6	0.99	0.60	1.1
19	2.6	100	23	28	15	21	14	105	3.6	0.84	1.4	1.4
20	2.5	32	17	30	21	20	14	32	2.7	0.63	7.2	1.1
21	2.4	19	22	17	28	24	18	12	2.3	0.55	6.2	0.85
22	2.4	14	18	14	18	17	79	7.5	6.4	16	1.7	0.74
23	2.4	12	120	21	17	15	117	5.3	3.1	2.9	1.1	0.67
24	2.5	42	92	17	16	16	35	3.9	1.9	1.4	1.3	0.75
25	4.0	21	34	17	14	14	216	3.0	1.5	0.91	1.5	0.75
26	38	15	23	26	13	13	57	150	1.4	0.98	1.6	0.62
27	10	184	19	36	12	13	30	235	1.2	1.2	1.9	0.42
28	5.1	297	17	23	11	12	21	190	1.0	1.2	31	0.33
29	6.1	57	39	15	11	16	16	29	0.94	1.4	18	0.32
30	4.0	28	125	16	---	118	40	92	0.77	e1.7	7.8	0.32
31	3.1	---	35	15	---	148	---	303	---	283	2.5	---
TOTAL	211.6	1,257.7	1,043	2,902	1,519	1,043	1,753	2,005.0	373.51	394.90	355.05	130.07
MEAN	6.83	41.9	33.6	93.6	52.4	33.6	58.4	64.7	12.5	12.7	11.5	4.34
MAX	63	297	125	1,550	396	225	420	421	74	283	197	84
MIN	1.9	1.8	11	11	11	12	10	3.0	0.77	0.44	0.60	0.32

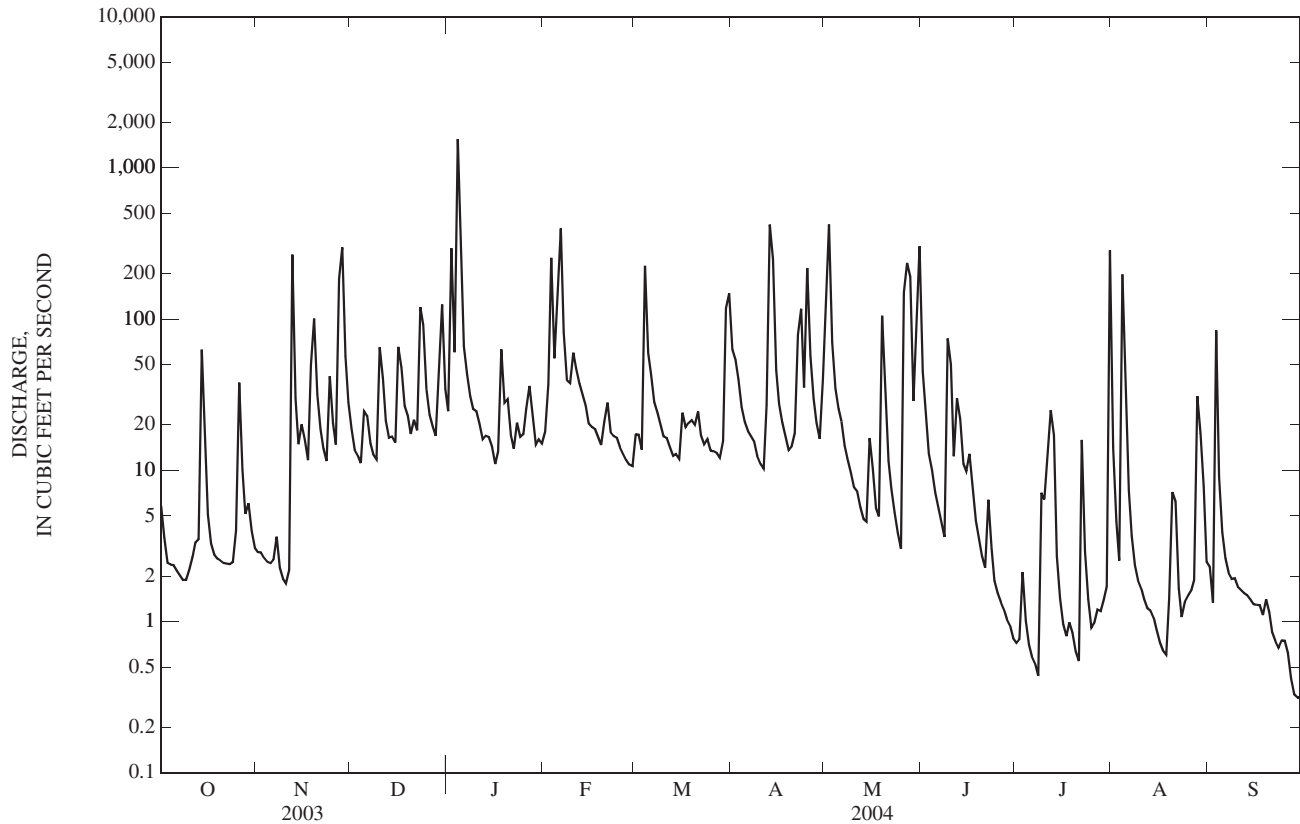
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	35.0	39.2	58.8	45.7	43.2	38.8	46.1	66.0	27.3	20.6	11.6	19.4
MAX	72.7	45.1	84.1	93.6	59.7	69.3	104	114	34.8	56.5	29.0	31.6
(WY)	(2002)	(2002)	(2002)	(2004)	(2003)	(2002)	(2002)	(2002)	(2003)	(2001)	(2001)	(2003)
MIN	6.83	30.7	33.6	14.0	28.0	11.0	6.34	15.3	12.5	0.33	0.13	4.34
(WY)	(2004)	(2003)	(2004)	(2001)	(2001)	(2001)	(2001)	(2001)	(2004)	(2002)	(2002)	(2004)

03262001 WOOLPER CREEK AT WOOLPER CREEK ROAD NEAR BURLINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	11,904.48		12,987.83		40.9	
ANNUAL MEAN	32.6		35.5		50.5	
HIGHEST ANNUAL MEAN					35.5	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	934	May 10	1,550	Jan 4	1,550	Jan 4, 2004
LOWEST DAILY MEAN	0.21	Aug 21	0.32	Sep 29	0.00	Jul 27, 2002
ANNUAL SEVEN-DAY MINIMUM	0.47	Aug 15	0.50	Sep 24	0.00	Aug 5, 2002
MAXIMUM PEAK FLOW			3,120	Jan 4	6,640	Jul 18, 2001
MAXIMUM PEAK STAGE			7.90	Jan 4	12.17	Jul 18, 2001
INSTANTANEOUS LOW FLOW			0.60	Sep 29	0.00	Sep 14, 2002
10 PERCENT EXCEEDS	61		65		73	
50 PERCENT EXCEEDS	11		14		12	
90 PERCENT EXCEEDS	2.0		1.2		0.80	

e Estimated



03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2000 to current water year.

pH: December 2000 to current year.

WATER TEMPERATURES: December 2000 to current water year.

DISSOLVED OXYGEN: December 2000 to current water year.

TURBIDITY: December 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated good.

pH: Records rated good.

WATER TEMPERATURES: Records rated excellent except for the following periods: Jun. 21-27 rated good; Jun. 28-29 rated fair.

DISSOLVED OXYGEN: Records rated poor.

TURBIDITY: Records poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2550 microsiemens, Jan. 27, 28, 2004; minimum recorded, 96 microsiemens, May 8, 2002.

pH: Maximum recorded, 8.8 units, Mar. 14, 16-18, Apr. 1, 2, 2003, and Apr. 3, 2004; minimum recorded, 7.3 units, Jul. 6, 2004.

WATER TEMPERATURES: Maximum recorded, 31.8°C, Jul. 4, 2002; minimum recorded, -0.3°C, several days in Jan. Feb. Mar. 2002, 2003 and 2004.

DISSOLVED OXYGEN: Maximum recorded, 20.0 mg/L, Dec. 4, 6, 2000; minimum recorded, 2.3 mg/L, Aug. 19, 2002.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 31 and Sept. 3, 2004; minimum recorded, 0.0 NTU, Nov., Jul. 7-9, 2002, and Nov. 8-11, Jun. 8, 21, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2550 microsiemens, Jan. 27, 28, 2004; minimum recorded, 157 microsiemens, Jan. 4, 2004.

pH: Maximum recorded, 8.8 units, Apr. 3, 2004; minimum recorded, 7.3 units, Jul. 6, 9, 2004.

WATER TEMPERATURES: Maximum recorded, 29.5°C, Jul. 5, 2004; minimum recorded, -0.3°C, Jan. 27-30, Feb. 3, 14, 17, 2004

DISSOLVED OXYGEN: Maximum recorded, 16.0 mg/L, Apr. 7, 2004; minimum recorded, 3.9 mg/L, July 6, 2004.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 31 and Sept. 3, 2004; minimum recorded, 0.0 NTU, Nov. 8-11, Jun. 8, 21, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	580	556	569	615	604	611	539	521	531	572	555	566
2	598	580	590	619	608	614	550	537	544	568	277	386
3	601	578	591	622	611	617	562	548	554	519	449	492
4	615	599	607	627	616	621	573	560	567	518	157	245
5	612	599	607	632	625	629	571	549	564	393	179	312
6	611	602	607	634	623	630	560	504	521	467	393	434
7	618	603	611	640	628	632	545	515	531	514	467	493
8	625	608	616	651	637	643	558	545	550	534	514	523
9	625	608	618	648	638	641	607	557	580	663	526	586
10	630	617	623	648	639	642	581	400	510	961	663	797
11	636	621	629	646	633	642	494	406	453	954	827	914
12	644	628	634	635	212	365	532	494	516	827	673	733
13	655	629	637	501	427	472	558	532	545	673	657	662
14	657	337	521	544	501	524	590	556	568	665	644	656
15	446	347	399	590	541	553	843	564	718	654	625	640
16	518	446	486	587	559	570	910	547	796	632	623	627
17	548	518	535	580	561	570	555	522	536	633	603	622
18	574	547	558	595	403	567	601	555	567	923	601	718
19	586	572	577	422	369	398	1,030	601	874	634	582	592
20	594	584	589	508	421	470	1,310	1,030	1,200	624	584	601
21	605	593	599	544	508	528	1,170	1,010	1,080	627	614	618
22	609	598	603	565	542	554	1,010	803	865	629	617	622
23	617	601	608	566	553	559	804	484	714	659	628	643
24	623	613	616	612	463	515	551	479	511	662	632	645
25	627	612	621	513	464	484	593	551	574	669	635	647
26	765	483	569	551	513	535	604	593	599	669	641	653
27	511	495	501	561	272	429	612	603	607	2,550	641	1,090
28	541	511	526	367	270	319	615	606	611	2,550	2,090	2,190
29	574	541	556	474	367	431	621	523	606	2,110	1,510	1,820
30	611	574	591	521	474	499	568	413	457	1,510	1,140	1,280
31	614	606	610	---	---	---	555	502	533	1,150	1,090	1,120
MONTH	765	337	581	651	212	542	1,310	400	625	2,550	157	740

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1,190	1,130	1,170	617	536	565	557	470	511	392	246	332
2	1,150	824	1,100	726	617	680	571	536	550	387	233	303
3	1,420	433	612	710	651	687	555	497	529	484	386	443
4	595	521	555	654	399	458	567	525	546	513	482	496
5	743	377	626	549	488	520	565	511	540	534	478	512
6	377	282	315	592	549	574	559	508	534	548	486	522
7	586	363	459	592	560	576	556	517	534	555	500	529
8	845	586	756	587	559	573	557	526	540	562	518	541
9	796	698	757	586	551	567	551	536	545	575	535	556
10	698	527	622	579	545	562	568	551	561	589	551	576
11	532	512	520	585	556	569	578	564	571	599	573	586
12	550	532	545	581	552	567	652	548	582	593	565	579
13	555	544	548	569	556	564	558	199	441	592	568	580
14	580	545	557	583	564	574	602	222	381	598	581	589
15	575	556	569	581	556	569	627	503	526	628	553	581
16	608	569	583	611	551	564	521	407	457	637	577	599
17	595	572	582	1,540	611	1,080	439	376	407	589	569	579
18	607	569	582	1,450	777	1,030	417	380	396	611	586	593
19	589	565	580	777	678	722	482	413	441	606	294	402
20	591	568	581	724	646	690	492	411	454	526	419	485
21	881	570	714	710	646	679	430	401	410	569	526	551
22	739	597	656	716	649	680	446	270	414	583	567	576
23	614	557	593	653	617	635	387	268	337	589	576	582
24	597	567	582	626	591	611	382	354	365	605	579	589
25	590	554	577	609	578	597	383	239	310	608	564	586
26	583	536	566	618	598	605	526	324	428	615	175	459
27	574	528	558	628	607	619	440	375	407	388	208	328
28	578	547	564	630	600	617	477	360	401	491	283	370
29	578	528	557	629	615	623	527	363	426	521	441	482
30	---	---	---	687	397	595	526	361	395	585	355	463
31	---	---	---	470	420	452	---	---	---	412	200	323
MONTH	1,420	282	620	1,540	397	626	652	199	465	637	175	506
	JUNE			JULY			AUGUST			SEPTEMBER		
1	463	412	443	616	552	585	463	385	431	516	202	500
2	501	419	471	614	553	588	503	460	484	529	495	510
3	574	500	526	608	581	590	518	501	509	531	163	335
4	593	535	561	688	607	628	527	191	395	446	372	413
5	609	541	563	706	651	675	464	321	410	486	441	463
6	598	546	563	722	650	681	503	464	488	511	485	495
7	600	541	562	700	641	670	525	501	514	534	509	517
8	586	538	558	692	623	658	530	519	526	548	514	527
9	586	262	518	689	342	628	540	521	531	565	541	550
10	---	---	---	430	288	346	549	529	541	568	544	556
11	---	---	---	507	405	449	551	513	540	579	552	566
12	---	---	---	507	437	460	556	527	542	585	553	572
13	---	---	---	466	402	430	565	537	552	592	559	577
14	---	---	---	476	445	459	575	543	560	599	563	583
15	573	529	555	510	474	482	578	548	566	603	570	588
16	571	535	557	518	482	499	581	547	567	603	568	588
17	594	571	585	532	485	507	584	548	571	610	589	599
18	595	570	584	536	488	516	594	448	571	607	583	599
19	586	560	574	545	490	518	587	559	574	611	591	601
20	580	562	572	557	491	528	625	436	562	614	594	605
21	588	555	569	561	498	532	669	463	495	616	595	607
22	573	554	565	679	407	471	501	477	486	621	598	610
23	601	559	582	468	421	447	521	486	502	624	599	612
24	588	545	567	488	451	467	528	479	505	626	377	606
25	568	540	557	496	468	483	514	492	505	627	594	612
26	578	538	561	506	476	492	520	496	503	619	603	611
27	575	539	561	522	498	505	546	519	527	621	602	611
28	586	535	563	526	497	513	554	181	478	630	612	623
29	619	548	571	533	492	517	467	253	401	627	614	620
30	623	548	583	541	431	513	482	423	458	625	613	618
31	---	---	---	497	160	314	501	476	491	---	---	---
MONTH	623	262	555	722	160	521	669	181	509	630	163	562
YEAR	2,550	157	571									

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.8	8.1	7.8	8.0	7.7	8.2	7.8	8.0	7.9	8.5	8.0
2	8.1	7.9	8.1	7.8	8.0	7.7	7.9	7.5	8.0	7.9	8.6	7.9
3	8.4	7.8	8.1	7.8	8.0	7.8	7.9	7.7	7.9	7.7	8.5	7.9
4	8.4	7.9	8.3	8.0	7.9	7.7	7.8	7.4	8.0	7.7	8.1	7.8
5	8.4	8.0	8.3	8.0	8.1	7.8	7.8	7.4	7.9	7.6	8.5	7.9
6	8.3	8.0	8.2	8.0	8.1	7.8	7.9	7.7	7.7	7.6	8.5	7.9
7	8.3	8.0	8.2	8.0	8.2	7.7	7.9	7.8	7.9	7.7	8.5	7.9
8	8.3	7.9	8.2	7.9	8.1	7.7	7.9	7.9	8.0	7.8	8.5	7.9
9	8.3	7.9	8.2	8.0	7.9	7.7	8.0	7.9	8.1	7.8	8.6	7.9
10	8.2	7.8	8.2	8.0	7.8	7.6	7.9	7.8	8.0	7.7	8.5	7.9
11	8.1	7.7	8.1	8.0	7.8	7.5	8.0	7.9	8.0	7.7	8.5	7.8
12	8.0	7.7	8.0	7.7	8.0	7.6	8.0	7.9	8.1	7.7	8.5	7.8
13	8.0	7.6	8.0	7.8	7.9	7.7	8.0	7.9	8.1	7.8	8.5	7.9
14	7.8	7.5	8.1	7.9	8.0	7.7	8.0	7.9	8.2	7.8	8.5	7.9
15	7.8	7.6	8.0	7.9	8.0	7.7	8.0	8.0	8.2	7.9	8.5	7.9
16	8.0	7.7	8.0	7.9	7.8	7.5	8.1	8.0	8.2	7.8	8.4	7.9
17	8.0	7.8	8.1	7.8	7.7	7.4	8.1	8.1	8.2	7.9	8.4	7.9
18	8.1	7.8	8.0	7.9	7.9	7.6	8.1	8.0	8.2	7.8	8.5	7.9
19	8.1	7.9	7.9	7.7	8.0	7.6	8.1	8.0	8.3	7.9	8.6	7.9
20	8.1	7.9	8.1	7.8	8.0	7.6	8.1	7.9	8.2	7.9	8.5	7.8
21	8.2	7.8	8.1	7.8	8.0	7.7	8.1	8.0	8.2	7.9	8.5	7.9
22	8.1	7.9	8.1	7.8	7.9	7.7	8.1	8.0	8.4	7.8	8.5	7.9
23	8.1	7.9	8.1	7.8	7.9	7.5	8.2	8.0	8.4	7.8	8.5	7.9
24	8.1	7.9	7.9	7.7	7.8	7.5	8.2	8.1	8.4	7.8	8.5	7.9
25	8.1	7.9	8.1	7.7	8.1	7.6	8.2	8.1	8.4	7.9	8.6	8.0
26	8.0	7.8	8.1	7.8	8.1	7.8	8.1	7.9	8.5	7.9	8.4	7.9
27	8.0	7.8	7.9	7.6	8.1	7.8	8.1	8.0	8.5	8.0	8.4	7.9
28	7.9	7.8	7.7	7.6	8.1	7.8	8.1	7.9	8.5	8.0	8.4	7.9
29	8.1	7.8	7.9	7.6	8.0	7.8	8.1	7.9	8.6	8.0	8.2	7.9
30	8.1	7.9	8.0	7.7	8.0	7.6	8.1	8.0	---	---	8.3	7.9
31	8.1	7.8	---	---	8.1	7.7	8.0	7.9	---	---	8.1	8.0
MONTH	8.4	7.5	8.3	7.6	8.2	7.4	8.2	7.4	8.6	7.6	8.6	7.8
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	8.0	8.0	7.4	8.2	7.8	8.1	7.5	8.2	7.8	8.0	7.6
2	8.6	8.0	7.9	7.7	8.1	7.8	8.1	7.5	8.2	7.8	8.1	7.6
3	8.8	7.9	8.4	7.8	8.1	7.8	8.1	7.7	8.3	7.9	7.9	7.6
4	8.7	8.0	8.5	7.8	8.1	7.7	8.0	7.5	8.1	7.7	7.8	7.5
5	8.7	8.0	8.6	7.9	8.3	7.8	8.0	7.4	8.1	7.9	8.0	7.6
6	8.6	8.0	8.5	7.7	8.3	7.9	7.9	7.3	8.2	7.9	8.0	7.7
7	8.6	7.9	8.4	7.7	8.3	7.9	8.0	7.4	8.2	7.9	8.0	7.8
8	8.4	7.7	8.2	7.7	8.3	7.9	8.0	7.4	8.3	8.0	8.0	7.8
9	8.3	7.7	8.2	7.7	8.3	7.8	7.9	7.3	8.3	8.0	8.1	7.8
10	8.3	7.8	8.1	7.7	---	---	7.6	7.4	8.3	8.0	8.2	7.9
11	8.2	7.8	8.1	7.7	---	---	7.9	7.6	8.4	8.0	8.2	7.8
12	8.1	7.8	8.1	7.7	---	---	7.7	7.6	8.3	8.0	8.2	7.8
13	8.0	7.6	8.1	7.7	---	---	7.7	7.6	8.3	8.0	8.2	7.8
14	8.0	7.6	8.1	7.8	---	---	7.8	7.5	8.3	8.0	8.2	7.7
15	8.3	7.8	8.2	7.8	8.2	8.1	7.9	7.5	8.3	7.9	8.1	7.7
16	8.4	7.8	8.2	7.8	8.3	8.0	8.3	7.5	8.3	7.9	8.2	7.8
17	8.5	7.7	8.2	7.8	8.3	8.0	8.3	7.8	8.3	7.9	8.1	7.8
18	8.4	7.7	8.2	7.8	8.3	8.0	8.3	7.7	8.3	7.8	8.1	7.8
19	8.3	7.7	8.0	7.8	8.3	8.0	8.3	7.7	8.3	7.8	8.2	7.8
20	8.2	7.7	8.1	7.8	8.3	8.0	8.4	7.6	8.2	8.0	8.1	7.9
21	8.2	7.8	8.1	7.8	8.3	7.9	8.3	7.7	8.2	7.9	8.1	7.8
22	8.2	7.8	8.2	7.8	8.3	8.0	8.0	7.7	8.3	7.9	8.1	7.8
23	8.1	7.8	8.2	7.8	8.3	7.9	8.1	7.8	8.3	7.8	8.1	7.8
24	8.6	7.8	8.2	7.8	8.3	7.8	8.2	7.7	8.2	7.7	8.2	7.7
25	7.9	7.6	8.2	7.8	8.2	7.8	8.1	7.7	8.3	7.8	8.2	7.7
26	8.5	7.8	8.1	7.7	8.2	7.7	8.0	7.8	8.2	7.8	8.1	7.8
27	8.5	7.8	8.0	7.7	8.2	7.7	8.2	7.8	8.2	7.8	8.1	7.8
28	8.5	7.6	8.0	7.9	8.2	7.7	8.3	7.9	8.2	7.7	8.0	7.7
29	8.3	7.5	8.1	7.8	8.1	7.5	8.4	7.9	7.7	7.4	8.0	7.8
30	8.1	7.4	8.1	7.8	8.1	7.4	8.4	7.8	7.9	7.5	8.0	7.8
31	---	---	8.0	7.7	---	---	8.1	7.6	7.9	7.4	---	---
MONTH	8.8	7.4	8.6	7.4	8.3	7.4	8.4	7.3	8.4	7.4	8.2	7.5
YEAR	8.8	7.3										

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.2	11.5	12.6	16.7	14.5	15.4	5.6	3.9	5.1	4.5	1.8	2.9
2	12.6	10.3	11.4	17.4	14.0	15.6	3.9	2.2	3.1	8.9	4.5	7.0
3	11.7	8.8	10.3	17.3	13.3	15.2	3.5	3.0	3.3	11.9	8.9	10.5
4	13.4	11.1	12.0	16.7	12.6	14.8	4.6	3.2	3.8	11.2	7.1	8.1
5	14.9	10.7	12.5	17.1	14.8	15.8	5.5	4.6	5.1	7.5	5.0	6.4
6	15.7	11.6	13.4	14.8	11.7	13.3	5.5	4.7	5.1	5.0	-0.1	2.2
7	15.9	11.1	13.3	11.7	8.5	10.2	5.0	3.6	4.5	0.4	-0.1	0.0
8	16.6	11.9	14.0	8.7	6.3	7.5	4.6	2.5	3.5	0.6	-0.1	0.3
9	17.3	12.4	14.7	8.0	4.6	6.0	6.8	4.6	5.7	1.3	0.4	0.8
10	18.8	15.1	16.6	8.6	4.5	6.7	8.1	6.7	7.4	0.4	-0.2	0.1
11	19.8	15.1	16.9	11.0	8.5	9.7	7.3	3.9	5.5	0.9	-0.1	0.3
12	18.6	14.8	16.8	14.4	10.8	13.1	3.9	1.3	2.6	1.4	0.1	0.7
13	17.9	12.0	14.7	12.3	6.3	8.9	1.3	0.6	0.9	1.3	0.2	0.9
14	15.1	13.5	14.2	6.4	4.5	5.7	1.4	0.4	0.9	1.7	-0.1	0.7
15	13.9	11.8	13.0	7.0	6.0	6.5	2.2	1.3	1.6	1.6	0.3	0.9
16	13.8	10.8	12.5	8.8	7.0	8.0	4.9	1.2	2.8	1.4	-0.1	0.6
17	13.6	11.8	13.0	9.2	7.0	8.2	4.5	1.7	3.1	1.6	0.2	0.8
18	13.4	10.3	11.8	12.8	9.2	10.6	2.1	1.2	1.6	2.8	1.4	2.0
19	14.3	10.2	12.1	12.8	10.5	12.3	1.8	1.1	1.5	1.4	-0.2	0.4
20	15.3	10.7	13.0	10.5	8.2	9.4	1.1	-0.2	0.4	0.1	-0.1	0.0
21	16.0	13.1	14.3	10.3	7.6	9.0	0.7	-0.1	0.2	0.7	-0.1	0.1
22	14.1	11.0	12.5	11.0	8.1	9.6	3.5	0.5	1.6	0.7	-0.2	0.1
23	13.8	10.1	11.5	12.9	10.6	11.8	5.8	3.5	4.9	-0.1	-0.2	-0.2
24	13.0	8.1	10.3	12.7	5.8	9.3	5.2	3.1	4.1	0.4	-0.2	-0.1
25	14.2	9.4	11.5	5.8	4.1	4.9	3.1	1.3	2.3	-0.1	-0.2	-0.2
26	13.0	11.4	12.1	6.6	4.4	5.4	1.7	0.0	0.9	-0.2	-0.2	-0.2
27	11.4	9.3	10.3	9.3	6.6	7.9	1.8	-0.1	0.8	-0.2	-0.3	-0.2
28	9.5	8.6	9.1	9.3	5.9	7.9	3.3	0.3	1.7	-0.2	-0.3	-0.3
29	10.8	8.9	9.9	5.9	4.4	5.1	6.1	2.8	4.1	0.2	-0.3	-0.2
30	12.7	8.8	10.8	6.3	3.8	5.0	6.1	3.5	4.7	-0.2	-0.3	-0.3
31	15.0	11.3	13.1	---	---	---	4.1	1.9	3.0	-0.2	-0.2	-0.2
MONTH	19.8	8.1	12.7	17.4	3.8	9.6	8.1	-0.2	3.1	11.9	-0.3	1.4
FEBRUARY			MARCH			APRIL			MAY			
1	-0.1	-0.2	-0.2	8.7	6.2	7.2	9.1	7.4	8.3	17.6	14.6	15.9
2	-0.1	-0.2	-0.2	11.2	7.5	9.2	9.2	7.1	8.3	15.5	11.3	12.9
3	-0.1	-0.3	-0.2	9.4	6.7	7.5	12.8	7.0	9.8	13.4	9.0	11.2
4	0.9	-0.2	0.1	9.2	7.3	8.2	10.6	7.2	8.8	13.6	8.7	11.2
5	0.6	0.0	0.2	13.9	9.1	11.4	11.2	5.2	8.0	18.6	11.4	14.5
6	2.7	0.5	2.0	12.2	8.6	10.6	12.5	5.8	9.1	20.7	13.4	16.8
7	2.0	1.0	1.5	8.7	6.2	7.4	15.0	9.9	12.3	20.6	15.9	18.2
8	1.8	-0.1	0.8	6.7	5.2	6.0	17.4	12.6	14.7	21.7	15.7	18.7
9	2.7	-0.1	1.3	6.7	4.8	5.6	15.1	11.1	13.3	22.9	16.9	19.8
10	4.0	1.3	2.6	7.4	2.7	5.0	15.8	11.1	13.4	22.1	18.3	20.4
11	2.8	-0.1	1.6	7.1	3.9	5.3	14.7	12.2	13.5	23.2	18.4	20.7
12	3.8	2.0	2.7	5.8	2.6	4.4	12.8	8.6	10.4	23.6	18.9	21.3
13	2.2	0.2	1.2	6.0	1.6	4.0	8.6	6.0	7.2	22.5	19.9	21.2
14	2.1	-0.3	0.7	6.5	4.4	5.4	13.0	6.0	8.9	21.2	19.9	20.5
15	2.4	0.1	1.1	8.1	3.3	5.9	14.8	7.3	10.9	20.2	16.2	18.0
16	1.2	-0.2	0.4	7.5	3.8	5.0	17.3	10.0	13.5	18.6	15.6	16.8
17	1.7	-0.3	0.6	4.5	3.1	3.9	19.7	12.3	15.8	21.5	15.9	18.6
18	2.3	-0.2	0.9	6.6	3.4	4.9	21.3	15.1	18.0	23.1	18.6	20.7
19	4.1	0.1	2.0	8.0	4.2	6.0	19.3	16.5	17.3	22.0	18.6	20.1
20	5.3	3.0	4.0	10.0	5.1	7.5	17.0	15.1	16.1	21.8	18.5	20.0
21	4.9	3.3	4.0	8.9	4.2	6.4	16.2	15.0	15.6	23.6	19.9	21.6
22	5.8	2.7	4.1	6.6	2.0	4.2	15.6	13.9	14.9	25.1	20.8	22.9
23	5.4	2.3	4.0	7.2	1.7	4.5	14.0	12.6	13.3	25.2	21.4	23.3
24	5.6	4.3	4.9	10.2	5.9	7.9	16.4	11.2	13.7	25.8	22.3	23.9
25	5.4	2.4	4.0	13.0	9.3	11.1	17.0	13.3	15.1	25.5	21.5	23.3
26	5.5	2.4	4.0	13.9	11.6	12.8	16.4	12.7	14.6	22.9	18.9	20.3
27	6.0	2.3	4.2	16.0	12.8	14.3	14.6	10.7	12.6	20.5	17.6	18.8
28	6.1	1.9	4.2	18.1	13.0	15.4	16.3	8.8	12.3	20.8	17.8	18.9
29	7.0	3.0	5.1	16.3	11.8	13.9	18.2	12.0	15.0	20.8	16.5	18.5
30	---	---	---	12.5	9.9	11.3	16.8	14.4	15.6	19.1	17.4	18.0
31	---	---	---	9.9	8.4	9.0	---	---	---	20.5	17.7	18.9
MONTH	7.0	-0.3	2.1	18.1	1.6	7.8	21.3	5.2	12.7	25.8	8.7	18.9

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.4	8.2	9.2	10.9	7.7	8.9	13.2	11.2	12.0	14.7	11.7	13.0
2	10.7	8.5	9.6	10.6	7.7	8.8	---	---	---	11.8	10.3	11.1
3	12.6	9.0	10.4	10.4	7.9	8.8	---	---	---	10.6	9.5	10.1
4	12.2	8.6	10.2	10.3	7.9	8.7	---	---	---	12.1	9.6	11.4
5	11.8	8.4	10.1	10.1	7.7	8.5	---	---	---	12.0	11.6	11.7
6	11.3	8.4	9.7	9.4	8.0	8.7	---	---	---	13.6	11.8	12.8
7	11.2	7.4	9.6	11.2	8.8	9.9	---	---	---	13.7	13.3	13.5
8	11.0	7.7	9.3	11.7	9.7	10.8	---	---	---	13.7	12.8	13.3
9	11.5	6.5	9.3	12.2	10.7	11.3	---	---	---	13.3	12.6	13.0
10	10.4	6.4	8.4	12.3	10.3	11.3	---	---	---	13.4	12.3	13.0
11	9.7	6.3	7.9	10.5	9.5	10.0	---	---	---	13.4	12.6	12.9
12	9.3	6.0	7.6	9.7	8.7	9.2	---	---	---	13.2	12.3	12.9
13	9.4	6.4	8.0	10.9	9.0	10.2	---	---	---	13.4	12.6	12.9
14	8.8	6.3	7.8	11.9	10.7	11.3	---	---	---	13.5	12.0	12.7
15	9.0	8.0	8.6	11.4	10.5	10.9	---	---	---	13.2	12.1	12.7
16	9.8	8.0	8.8	11.2	10.1	10.6	---	---	---	13.5	12.5	13.0
17	9.8	8.0	8.6	11.9	9.9	10.8	---	---	---	13.3	12.3	12.8
18	10.5	8.2	9.2	11.0	9.3	9.9	---	---	---	12.9	12.1	12.5
19	10.4	8.2	9.1	9.7	9.1	9.3	14.7	12.9	13.6	13.5	12.4	13.0
20	10.4	7.7	9.0	11.0	9.5	10.1	15.8	12.9	14.0	14.2	12.2	13.1
21	10.4	7.3	8.6	11.6	9.4	10.3	15.5	13.3	14.0	13.4	12.5	13.0
22	10.3	7.6	9.0	11.6	9.1	10.2	14.1	12.1	13.2	13.5	12.4	12.9
23	10.5	8.5	9.2	12.2	8.7	10	12.2	11.6	11.9	13.4	12.5	12.9
24	10.7	9.0	9.7	10.7	8.6	9.8	12.6	11.8	12.2	13.3	12.4	12.8
25	10.6	8.2	9.4	13.1	10.7	11.7	14.4	12.3	13.2	13.3	12.6	12.9
26	9.7	8.0	9.0	13.5	10.6	11.7	15.1	12.9	13.8	13.4	12.5	12.9
27	10.7	9.1	9.9	11.0	10.3	10.6	15.2	13.0	13.8	13.6	12.7	13.0
28	11.2	9.5	10.3	11.4	10.3	11.0	15.0	12.2	13.5	14.0	12.8	13.3
29	11.5	9.2	10.4	12.5	11.3	11.8	14.0	11.4	12.4	14.1	12.9	13.3
30	11.6	9.0	10.2	12.9	11.1	11.9	12.9	11.6	12.1	14.0	12.9	13.4
31	11.1	8.2	9.5	---	---	---	14.3	12.0	12.9	14.3	12.9	13.5
MONTH	12.6	6.0	9.2	13.5	7.7	10.2	15.8	11.2	13.0	14.7	9.5	12.8
FEBRUARY			MARCH			APRIL			MAY			
1	14.4	13.0	13.5	---	---	---	---	---	---	9.7	6.6	7.9
2	14.2	12.8	13.4	---	---	---	---	---	---	10.6	9.6	10.2
3	13.7	13.2	13.6	---	---	---	---	---	---	12.1	9.6	10.8
4	14.0	13.4	13.6	---	---	---	---	---	---	13.8	9.1	11.0
5	13.8	13.1	13.5	---	---	---	---	---	---	13.1	7.8	10.4
6	13.4	12.6	12.9	---	---	---	---	---	---	12.7	7.1	9.7
7	13.3	12.7	12.9	---	---	---	16.0	9.1	12.5	11.8	7.1	9.0
8	14.3	13.0	13.5	---	---	---	14.0	8.4	10.6	11.0	6.7	8.6
9	14.1	12.5	13.4	---	---	---	13.7	8.4	10.7	10.6	6.3	8.1
10	13.8	12.2	12.9	---	---	---	13.6	8.6	10.6	10.2	6.3	7.7
11	14.4	12.5	13.3	---	---	---	12.6	8.5	9.9	10.0	6.4	7.9
12	14.0	12.5	13.0	---	---	---	11.2	8.8	10.1	10.0	6.2	7.7
13	14.7	12.7	13.6	---	---	---	12.3	10.3	11.1	9.4	6.1	7.4
14	15.1	13.0	13.9	---	---	---	11.7	6.9	9.8	8.8	6.2	7.2
15	15.2	13.1	13.9	---	---	---	10.2	6.8	8.7	9.4	6.6	7.9
16	15.9	13.5	14.4	---	---	---	11.6	7.0	9.1	10.4	7.8	8.9
17	16.0	13.6	14.6	---	---	---	12.0	6.5	9.0	10.8	7.0	8.7
18	16.1	13.3	14.5	---	---	---	11.7	6.0	8.6	10.3	6.7	8.1
19	16.0	12.5	14.2	---	---	---	10.2	5.4	7.7	9.1	6.7	8.2
20	14.7	12.0	12.9	---	---	---	10.2	6.9	8.2	8.5	7.1	8.0
21	14.8	12.1	13.1	---	---	---	9.8	7.3	8.3	8.9	6.6	7.5
22	16.5	12.5	14.0	---	---	---	10.3	7.5	8.4	8.6	6.5	7.4
23	16.7	12.3	14.2	---	---	---	8.6	6.6	7.7	9.2	6.5	7.6
24	16.1	12.2	13.6	---	---	---	9.3	5.0	7.0	9.9	6.5	7.7
25	16.7	12.5	14.3	---	---	---	9.9	4.2	6.9	10.2	6.5	7.9
26	17.3	12.6	14.5	---	---	---	8.6	6.2	7.2	9.6	6.9	8.3
27	16.9	12.7	14.4	---	---	---	10.6	7.0	8.6	10.1	9.1	9.6
28	17.3	12.6	14.6	---	---	---	12.7	7.3	9.5	9.9	9.0	9.6
29	---	---	---	---	---	---	11.3	5.1	8.5	10.5	8.9	9.7
30	---	---	---	---	---	---	8.8	6.0	7.5	9.9	8.8	9.5
31	---	---	---	---	---	---	---	---	---	10.0	8.5	9.1
MONTH	17.3	12.0	13.7	---	---	---	16.0	4.2	9.0	13.8	6.1	8.6

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	76	67	71	27	16	19
2	---	---	---	---	---	---	73	65	69	>1,000	27	340
3	---	---	---	---	---	---	71	65	69	88	45	61
4	---	---	---	5.0	1.0	2.2	72	66	69	>1,000	55	690
5	---	---	---	5.0	1.0	2.0	110	68	80	570	65	160
6	---	---	---	4.0	1.0	2.2	120	95	110	65	31	47
7	---	---	---	5.0	2.0	2.9	99	86	93	35	22	27
8	---	---	---	2.0	0.0	1.3	93	85	90	22	16	19
9	---	---	---	2.0	0.0	0.8	110	88	96	---	---	---
10	---	---	---	5.0	0.0	0.7	270	97	160	---	---	---
11	---	---	---	3.0	0.0	0.9	180	140	160	---	---	---
12	---	---	---	>1,000	2.0	380	150	130	140	---	---	---
13	---	---	---	120	36	63	140	120	130	---	---	---
14	>1,000	6.3	390	36	20	26	140	120	130	---	---	---
15	840	120	290	30	19	22	130	110	120	---	---	---
16	120	71	88	31	21	24	260	120	150	---	---	---
17	71	59	64	22	15	18	170	78	110	---	---	---
18	65	56	61	>1,000	13	110	---	---	---	---	---	---
19	60	30	55	370	100	190	---	---	---	---	---	---
20	57	29	52	100	47	65	43	6.2	7.2	---	---	---
21	63	29	50	47	38	42	6.5	5.4	6.1	---	---	---
22	59	29	53	110	39	61	5.8	3.7	5.1	---	---	---
23	61	55	56	49	42	45	680	5.8	140	11	3.0	3.8
24	60	55	57	470	43	120	270	33	81	4.0	2.0	3.1
25	58	28	53	110	69	85	33	14	22	3.0	2.0	2.4
26	590	56	160	72	60	65	15	9.8	13	3.0	2.0	2.6
27	150	58	80	960	60	220	11	7.9	9.4	12	3.0	6.5
28	58	46	50	520	120	220	9.2	7.2	8.7	12	6.0	9.2
29	49	40	44	120	74	88	450	8.2	38	6.0	3.0	3.7
30	40	30	35	79	66	73	940	44	180	3.0	2.0	2.1
31	---	---	---	---	---	---	45	19	29	3.0	2.0	2.0
MONTH	1,000	6.3	96	1,000	0.0	71	940	3.7	82	1,000	2.0	82
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	1.0	2.0	14	4.0	8.1	110	43	65	160	120	120
2	210	1.0	8.3	13	8.0	10	---	---	---	130	34	60
3	540	63	200	130	6.0	8.1	---	---	---	49	41	43
4	65	29	41	>1,000	76	340	---	---	---	57	49	52
5	780	21	130	76	31	48	---	---	---	65	56	60
6	490	64	160	43	25	33	---	---	---	69	64	67
7	64	23	37	26	18	22	---	---	---	70	45	62
8	23	12	16	21	15	17	7.0	4.0	5.7	55	52	53
9	46	10	14	16	13	14	9.0	7.0	7.9	57	46	53
10	160	20	48	19	12	14	11	8.0	9.5	55	46	52
11	84	17	42	15	12	13	12	10	11	58	49	54
12	26	12	16	19	12	14	230	12	42	62	48	52
13	18	10	13	15	13	14	990	38	280	66	44	51
14	10	7.0	8.1	14	13	14	220	190	200	53	40	46
15	7.0	4.0	5.1	16	13	14	200	180	190	45	41	43
16	6.0	5.0	5.2	19	14	16	180	170	180	47	43	45
17	5.0	3.0	4.1	20	15	17	180	160	170	52	43	46
18	4.0	3.0	3.8	17	15	16	170	160	170	55	43	47
19	5.0	3.0	3.7	20	15	16	170	170	170	63	44	49
20	26	5.0	10	28	16	18	180	170	170	53	44	46
21	25	14	18	22	18	20	180	170	170	45	39	43
22	14	7.0	9.4	19	17	18	190	170	180	49	40	42
23	8.0	5.0	6.1	19	17	18	180	160	160	52	39	44
24	12	5.0	6.8	23	17	19	160	150	160	42	36	39
25	8.0	4.0	5.0	24	17	20	160	130	140	41	36	39
26	6.0	3.0	4.3	18	16	17	140	130	130	720	39	140
27	5.0	3.0	3.9	20	16	17	140	130	130	170	46	99
28	5.0	3.0	3.6	21	15	17	140	120	130	200	88	98
29	5.0	3.0	3.7	40	16	19	130	120	120	95	85	90
30	---	---	---	>1,000	39	250	120	120	120	110	84	90
31	---	---	---	380	110	170	---	---	---	110	39	48
MONTH	780	1.0	29	1,000	4.0	40	990	4.0	130	720	34	60

03262001 WOOLPER CREEK AT WOOLPER ROAD NEAR BURLINGTON, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	44	40	41	13	1.2	3.8	190	63	110	100	51	73
2	45	37	41	17	4.9	10	100	41	63	74	36	47
3	40	5.0	29	32	12	22	66	29	42	2,500	35	820
4	32	2.0	13	21	7.5	13	2,300	29	600	420	140	260
5	67	3.0	16	28	7.6	18	300	74	140	150	65	110
6	31	5.0	15	35	17	21	94	37	62	89	44	67
7	21	3.0	9.4	33	15	21	68	31	44	86	32	42
8	8.0	0.0	3.3	38	20	25	59	23	33	59	32	40
9	690	0.4	130	870	22	130	38	17	24	82	29	40
10	---	---	---	890	600	820	34	16	21	52	22	34
11	---	---	---	---	---	---	27	14	18	44	22	28
12	---	---	---	---	---	---	37	13	18	37	16	20
13	---	---	---	---	---	---	30	13	16	25	13	18
14	---	---	---	420	160	250	67	12	16	26	14	18
15	180	12	72	200	140	160	67	12	15	24	14	19
16	120	45	74	380	59	85	24	11	14	26	14	18
17	78	13	31	83	41	55	27	11	15	35	15	20
18	36	9.0	17	130	39	54	47	9.9	14	27	13	18
19	80	5.0	14	59	37	47	47	12	19	46	18	22
20	21	1.0	9.6	120	28	38	470	13	58	40	16	21
21	15	0.0	5.4	64	24	37	750	87	320	27	13	18
22	---	---	---	2,400	34	580	100	42	73	40	13	18
23	---	---	---	380	130	220	56	28	38	50	13	19
24	---	---	---	210	64	110	69	24	35	51	12	17
25	---	---	---	110	39	69	46	20	26	25	11	16
26	---	---	---	190	39	73	51	19	22	37	12	17
27	---	---	---	96	54	69	40	18	23	43	10	15
28	---	---	---	83	39	58	2,400	18	510	34	11	14
29	---	---	---	63	31	42	2,200	170	470	20	10	14
30	---	---	---	250	23	51	250	110	160	20	10	14
31	---	---	---	2,500	110	800	140	72	100	---	---	---
MONTH	690	0.0	33	2,500	1.2	140	2,400	9.9	100	2,500	10	63
YEAR	2,500	0.0	77									

> Actual value is known to be greater than the value shown

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03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY

LOCATION.--Lat 38°59'39", long 84°42'58", Boone County, Hydrologic Unit 05090203, on upstream right wing wall of bridge on Camp Ernst Road, 0.65 mi below South Fork Gunpowder Creek, 3.8 mi northwest of Union, and 14.2 mi above the mouth.

DRAINAGE AREA.--36.6 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 683.066 ft above NGVD of 1929.

REMARKS.--Records fair except for periods of estimated records, which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	2.7	24	28	22	47	79	64	e60	0.00	42	1.2
2	5.4	2.2	17	513	95	24	97	480	21	29	14	0.36
3	2.9	2.0	14	133	492	24	47	83	19	13	8.3	381
4	2.7	2.1	13	2,140	92	524	27	36	14	1.4	381	18
5	1.7	1.6	66	573	272	122	23	25	11	0.62	54	7.8
6	0.83	8.6	29	103	689	103	17	19	8.8	0.14	14	4.0
7	0.95	6.6	17	43	133	44	17	15	7.1	0.17	8.0	2.5
8	0.53	2.0	14	31	57	28	16	11	6.0	0.59	5.0	25
9	0.32	1.0	13	27	48	24	13	10	62	0.08	3.4	8.0
10	0.33	0.80	199	21	75	19	9.9	10	30	100	3.1	3.4
11	0.42	7.3	72	16	56	19	8.7	e2.3	10	111	2.3	2.0
12	0.16	747	27	17	45	14	121	e4.3	61	e88	1.6	2.2
13	0.10	95	19	16	33	13	594	e4.3	22	50	0.90	0.78
14	165	24	23	12	24	13	376	e6.3	9.0	7.2	0.77	0.47
15	20	54	22	15	21	13	83	e30	9.6	2.8	0.44	0.33
16	6.0	22	143	9.7	16	67	45	e16	13	1.3	0.36	0.23
17	3.6	15	73	27	16	28	33	10	6.3	12	0.34	65
18	3.6	126	36	164	13	35	25	27	29	3.1	0.21	8.5
19	1.6	142	30	34	16	32	21	284	9.7	1.4	16	2.3
20	1.5	34	20	20	33	26	21	28	3.8	0.70	62	0.80
21	0.59	19	18	17	34	24	44	14	1.9	0.30	15	0.45
22	1.0	14	25	14	17	17	100	10	7.0	212	2.9	0.24
23	0.53	11	190	15	16	13	99	6.3	2.3	13	1.4	0.13
24	0.41	109	138	11	15	15	34	4.5	0.65	4.5	3.4	0.09
25	0.59	23	42	8.1	12	11	346	6.2	0.39	2.3	4.5	0.07
26	124	15	25	21	13	14	73	e51	0.26	7.2	3.7	0.05
27	15	332	20	146	12	14	38	335	0.17	7.4	4.6	0.03
28	7.7	561	17	83	9.1	10	23	205	0.12	3.0	15	0.00
29	16	102	95	44	8.8	52	15	38	0.19	2.3	21	0.04
30	5.5	40	220	76	---	239	116	179	0.05	39	30	0.03
31	3.5	---	43	19	---	189	---	515	---	912	3.8	---
TOTAL	418.46	2,521.90	1,704	4,396.8	2,384.9	1,817	2,561.6	2,529.2	425.33	1,625.50	723.02	535.00
MEAN	13.5	84.1	55.0	142	82.2	58.6	85.4	81.6	14.2	52.4	23.3	17.8
MAX	165	747	220	2,140	689	524	594	515	62	912	381	381
MIN	0.10	0.80	13	8.1	8.8	10	8.7	2.3	0.05	0.00	0.21	0.00

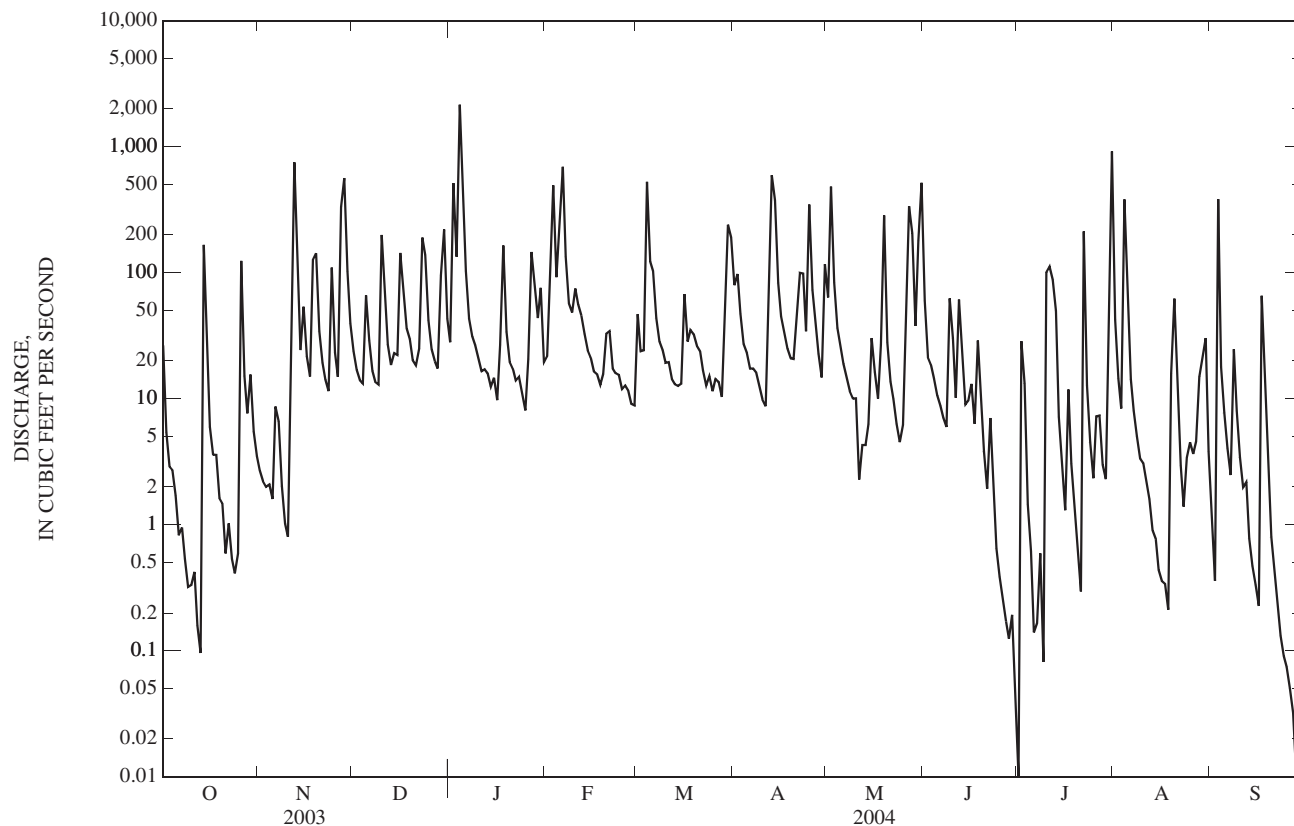
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	MEAN	35.1	37.6	70.9	68.8	90.1	63.0	58.4	69.9	32.0	33.3	26.6	29.1
	MAX	99.1	84.1	107	142	151	102	118	149	55.0	76.6	71.1	63.9
	(WY)	(2002)	(2004)	(2003)	(2004)	(2000)	(2002)	(2002)	(2002)	(2000)	(2001)	(2003)	(2003)
	MIN	7.91	5.68	31.8	21.9	44.8	22.5	10.9	9.25	9.79	4.00	2.89	1.01
	(WY)	(2001)	(2000)	(2000)	(2001)	(2001)	(2001)	(2001)	(1999)	(1999)	(2002)	(2002)	(1999)

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	22,455.85		21,642.71		54.1	
ANNUAL MEAN	61.5		59.1		67.6	
HIGHEST ANNUAL MEAN					32.8	
LOWEST ANNUAL MEAN					2,140	
HIGHEST DAILY MEAN	1,230	Feb 22	2,140	Jan 4	2,140	Jan 4, 2004
LOWEST DAILY MEAN	0.10	Oct 13	0.00	Jul 1	0.00	Sep 10, 1999
ANNUAL SEVEN-DAY MINIMUM	0.40	Oct 7	0.04	Sep 24	0.00	Sep 10, 1999
MAXIMUM PEAK FLOW			3,870	Jan 4	6,590	May 8, 2002
MAXIMUM PEAK STAGE			6.94	Jan 4	8.22	May 8, 2002
INSTANTANEOUS LOW FLOW					0.03	Sep 21, 2003
10 PERCENT EXCEEDS	142		128		113	
50 PERCENT EXCEEDS	20		16		14	
90 PERCENT EXCEEDS	1.1		0.53		0.95	

e Estimated



03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2000 to current water year.

pH: November 2000 to current water year.

WATER TEMPERATURES: November 2000 to current water year.

DISSOLVED OXYGEN: November 2000 to current water year.

TURBIDITY: November 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated good except for the following periods: Nov. 12-23 rated good; Nov. 27-Dec. 18 rated poor.

pH: Records rated good except for the following period: Dec. 3-19 rated fair..

WATER TEMPERATURES: Records rated excellent except for the following periods: Oct. 1-3, Feb. 2-13, Jul. 8-Aug. 1.

DISSOLVED OXYGEN: Records rated poor.

TURBIDITY: Records rated fair except for the following period: Nov. 4-11 and Feb. 26-Mar. 3 rated poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 6310 microsiemens, Jan. 29, 2003; minimum recorded, 118 microsiemens, July 18, 2001.

pH: Maximum recorded, 10.4 units, Aug. 12, 2001; minimum recorded, 6.5 units, Aug. 23, 2003.

WATER TEMPERATURES: Maximum recorded, 31.8°C, Jun. 28, 2001; minimum recorded, -0.3°C, Jan. 29, 30, and Feb. 11-14, 2003.

DISSOLVED OXYGEN: Maximum recorded, 19.6 mg/L, Jun. 28, 2004; minimum recorded, 0.7 mg/L, Aug. 14, 2003.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 22, 31, Aug. 4, 20, 28 and Sept. 3, 2004; minimum recorded, 0.0 NTU, several days in Nov. and Dec. 2002, Feb., July, Aug., Sept. 2003, and Nov. 4-11, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4500 microsiemens, Jan. 27, 2004; minimum recorded, 148 microsiemens, Jul. 31, 2004.

pH: Maximum recorded, 9.1 units, Aug. 28, 2004; minimum recorded, 7.2 units, Jun. 28, 2004.

WATER TEMPERATURES: Maximum recorded, 29.8°C, Jul. 6, 2004; minimum recorded, -0.2°C, Jan. 7, 10, 27, 28, 2004.

DISSOLVED OXYGEN: Maximum recorded, 19.6 mg/L, Jun. 28, 2004; minimum recorded, 4.8 mg/L, Jul. 4, 5, 7, 2004.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 22, 31, Aug. 4, 20, 28, and Sept. 3, 2004; minimum recorded, 0.0 NTU, Nov. 4-11, 2003.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	610	496	547	647	631	639	633	610	622	732	665	679
2	541	496	519	668	644	655	665	627	648	709	362	503
3	592	541	567	678	663	670	692	665	671	649	478	594
4	626	592	609	700	677	685	705	683	694	478	206	291
5	649	626	640	725	700	708	729	556	664	445	217	354
6	656	641	648	763	704	729	621	562	593	522	445	491
7	643	633	638	767	673	729	673	621	650	571	514	551
8	654	632	640	673	631	644	695	673	684	678	564	598
9	653	613	635	652	636	640	729	666	700	1,410	678	986
10	666	634	644	670	652	663	726	469	589	1,760	1,410	1,540
11	711	664	681	716	662	690	625	509	578	1,770	1,100	1,410
12	723	697	712	780	229	368	656	625	641	1,100	876	967
13	712	696	703	544	348	466	702	647	675	893	860	874
14	706	277	529	593	542	566	1,640	692	874	865	802	832
15	473	358	419	629	531	576	2,840	1,640	2,470	890	799	852
16	550	473	510	608	536	566	2,760	885	1,910	883	819	853
17	602	550	571	668	603	636	885	816	845	1,160	826	875
18	652	587	621	737	390	655	1,870	846	1,030	1,810	722	1,070
19	676	652	660	544	392	490	2,910	1,870	2,550	823	687	707
20	683	673	678	604	542	576	3,500	2,530	2,960	797	695	722
21	677	648	665	651	597	622	3,160	2,410	2,780	801	733	763
22	684	672	678	667	637	655	2,410	1,430	1,760	775	721	744
23	696	679	686	681	626	660	1,850	887	1,320	804	766	781
24	702	691	697	668	432	534	933	732	789	800	757	784
25	702	670	688	608	523	566	881	751	785	787	739	771
26	757	326	496	664	607	639	868	735	764	916	721	772
27	521	412	470	675	329	518	852	748	765	4,500	916	3,060
28	588	521	553	487	350	416	842	758	775	3,960	2,900	3,620
29	656	588	629	577	487	537	923	752	795	3,510	2,580	2,900
30	618	595	604	620	566	595	761	597	624	2,820	2,300	2,530
31	637	618	627	---	---	---	714	622	664	3,240	2,570	2,890
MONTH	757	277	612	780	229	603	3,500	469	1,060	4,500	206	1,140

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3,460	3,050	3,270	1,090	764	865	676	616	638	---	---	---
2	3,350	2,410	2,820	1,470	1,090	1,250	718	597	661	---	---	---
3	3,020	756	1,020	1,200	958	1,080	672	593	630	---	---	---
4	1,100	785	874	958	532	624	684	632	654	---	---	---
5	1,240	609	966	759	627	682	688	631	650	---	---	---
6	609	420	483	820	672	731	696	647	669	---	---	---
7	891	524	668	754	689	709	697	652	673	---	---	---
8	1,270	866	1,070	747	703	714	717	661	684	---	---	---
9	1,400	1,270	1,350	754	617	685	755	690	705	---	---	---
10	1,280	944	1,100	705	588	628	746	701	709	---	---	---
11	944	828	869	692	646	667	718	710	713	---	---	---
12	828	800	808	736	691	711	720	538	675	---	---	---
13	804	784	792	745	695	725	712	308	527	---	---	---
14	868	746	777	723	689	705	543	308	430	---	---	---
15	854	758	780	740	694	711	618	537	575	---	---	---
16	861	746	787	2,400	703	1,140	639	588	617	---	---	---
17	842	790	809	2,350	1,320	1,880	637	584	611	---	---	---
18	816	764	793	1,320	891	1,070	602	575	588	---	---	---
19	842	792	817	984	886	921	615	594	601	---	---	---
20	1,090	781	841	901	843	879	623	601	617	---	---	---
21	1,460	1,020	1,320	948	874	903	731	613	668	---	---	---
22	1,220	918	1,070	902	826	871	676	450	592	---	---	---
23	918	842	891	826	758	792	633	450	527	---	---	---
24	842	833	838	759	737	749	635	583	612	---	---	---
25	842	827	834	758	738	751	600	436	460	---	---	---
26	856	811	833	755	719	737	591	436	530	---	---	---
27	827	797	814	864	738	779	606	587	595	---	---	---
28	826	785	794	823	752	779	624	599	612	---	---	---
29	792	765	781	885	735	765	619	596	609	---	---	---
30	---	---	---	834	592	705	621	416	509	---	---	---
31	---	---	---	686	595	642	---	---	---	---	---	---
MONTH	3,460	420	1,030	2,400	532	834	755	308	611	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	677	224	510	518	414	474	566	536	553
2	---	---	---	663	301	557	562	518	545	576	532	562
3	586	553	568	568	459	538	609	562	582	592	161	345
4	600	578	590	549	529	539	627	188	454	481	385	440
5	610	577	594	585	530	557	513	357	455	522	477	505
6	624	560	592	582	539	562	570	513	552	545	464	517
7	607	542	574	601	559	584	598	544	578	578	516	554
8	615	558	586	676	601	644	612	584	597	586	456	525
9	641	218	516	688	653	673	617	592	601	492	468	477
10	598	298	499	759	221	617	625	601	612	551	492	518
11	673	582	648	443	251	352	637	615	623	592	550	572
12	703	422	614	518	244	409	671	632	656	618	570	592
13	542	435	488	484	381	444	653	625	641	639	618	626
14	586	531	560	552	484	523	664	628	649	650	634	643
15	631	530	604	587	550	571	664	634	651	644	620	634
16	580	509	544	587	569	581	645	634	639	645	600	632
17	584	536	569	631	508	587	661	642	650	644	293	470
18	634	375	410	508	472	487	659	642	649	429	353	396
19	557	404	470	560	486	538	651	350	546	489	427	452
20	608	557	593	561	543	550	493	258	378	520	483	491
21	616	589	603	593	549	568	534	438	490	535	520	529
22	697	479	602	561	226	388	578	534	555	562	526	550
23	608	471	526	534	441	500	621	578	595	576	562	570
24	627	585	607	569	530	556	741	414	651	595	576	588
25	622	590	607	589	551	577	734	590	618	615	591	606
26	648	603	627	618	559	587	602	555	585	645	611	627
27	649	624	633	652	597	622	588	551	566	682	531	665
28	654	627	639	648	618	634	602	324	554	685	674	681
29	657	634	645	670	604	627	576	404	457	684	676	681
30	700	657	682	713	323	624	576	316	432	693	678	686
31	---	---	---	414	148	293	542	501	531	---	---	---
MONTH	703	218	578	759	148	542	741	188	567	693	161	556
YEAR	4,500	148	741									

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	8.0	8.6	8.0	8.2	8.0	8.0	7.7	8.2	8.1	8.2	7.7
2	8.3	8.0	8.5	8.0	8.3	8.0	7.9	7.6	8.3	8.1	7.8	7.6
3	8.4	8.1	8.5	8.0	8.2	8.0	8.1	7.7	8.5	7.9	7.8	7.6
4	8.5	8.1	8.5	8.0	8.1	8.0	7.9	7.6	8.0	7.9	7.9	7.8
5	8.5	8.1	8.5	8.1	8.1	7.8	7.8	7.7	8.0	7.8	8.2	7.9
6	8.5	8.1	8.3	8.1	8.2	7.7	8.0	7.8	7.9	7.8	8.3	7.9
7	8.5	8.2	8.5	8.1	8.3	7.9	8.1	7.9	7.9	7.8	8.5	8.0
8	8.5	8.1	8.5	8.1	8.3	8.0	8.1	8.0	8.0	7.9	8.6	8.1
9	8.6	8.0	8.5	8.2	8.2	8.0	8.1	8.1	8.3	7.9	8.6	8.1
10	8.4	8.0	8.5	8.1	8.1	7.7	8.1	8.0	8.4	8.2	8.4	8.0
11	8.3	8.0	8.2	8.1	8.0	7.7	8.3	8.0	8.4	8.0	8.5	7.9
12	8.3	8.0	8.2	7.7	8.2	7.9	8.3	8.2	8.2	8.1	8.3	7.9
13	8.3	8.0	8.1	7.8	8.2	8.0	8.3	8.1	8.1	8.0	8.5	7.9
14	8.1	7.8	8.2	8.0	8.1	7.9	8.3	8.1	8.2	8.0	8.5	8.0
15	8.1	7.8	8.1	8.0	8.1	7.8	8.3	8.2	8.2	8.0	8.6	8.0
16	8.3	8.0	8.2	7.9	8.0	7.7	8.4	8.2	8.2	8.0	8.3	7.8
17	8.4	8.1	8.3	8.0	7.8	7.6	8.4	8.3	8.3	8.0	8.2	7.7
18	8.5	8.1	8.3	7.9	8.0	7.8	8.3	7.9	8.2	8.0	8.2	7.8
19	8.5	8.2	8.1	7.9	7.9	7.7	8.1	7.9	8.3	8.0	8.0	7.7
20	8.5	8.1	8.3	7.9	7.9	7.6	8.3	7.8	8.1	7.9	8.0	7.6
21	8.6	8.1	8.3	8.0	8.0	7.6	8.3	8.1	8.0	7.6	8.0	7.7
22	8.5	8.0	8.3	7.9	7.9	7.7	8.2	8.0	8.0	7.8	7.8	7.6
23	8.5	8.1	8.4	8.0	7.9	7.6	8.1	8.0	7.9	7.7	8.0	7.6
24	8.5	8.2	8.2	7.8	7.9	7.6	8.1	8.0	8.0	7.6	8.0	7.8
25	8.5	8.1	8.3	7.9	8.0	7.7	8.1	7.9	8.0	7.5	7.9	7.7
26	8.2	7.8	8.4	8.0	8.0	7.8	8.2	8.0	8.2	7.6	7.9	7.6
27	8.3	7.9	8.2	7.7	8.0	7.8	8.2	8.0	8.4	7.8	8.1	7.7
28	8.4	8.0	7.8	7.6	8.0	7.8	8.3	8.2	8.4	7.8	8.1	7.8
29	8.5	8.1	8.0	7.8	7.9	7.6	8.3	8.1	8.5	7.8	8.1	7.8
30	8.5	7.9	8.2	7.9	7.9	7.6	8.2	8.1	---	---	8.1	7.9
31	8.6	8.0	---	---	8.0	7.7	8.1	8.1	---	---	8.2	7.9
MONTH	8.6	7.8	8.6	7.6	8.3	7.6	8.4	7.6	8.5	7.5	8.6	7.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	8.0	---	---	---	---	8.1	7.4	8.5	8.1	8.7	8.1
2	8.4	8.1	---	---	---	---	8.1	7.4	8.6	8.2	8.8	8.1
3	8.7	8.0	---	---	8.3	8.0	8.1	7.3	8.7	8.2	8.4	7.7
4	8.6	8.1	---	---	8.3	7.9	8.3	7.4	8.4	7.5	8.4	8.0
5	8.7	8.2	---	---	8.5	7.9	8.5	7.4	8.5	8.0	8.5	8.1
6	8.7	8.0	---	---	8.5	8.0	8.3	7.5	8.5	8.3	8.4	8.1
7	8.5	7.9	---	---	8.5	7.9	8.1	7.5	8.5	8.3	8.5	8.0
8	8.4	7.9	---	---	8.4	7.8	8.3	7.6	8.6	8.3	8.2	8.1
9	8.3	7.9	---	---	8.4	7.7	8.1	7.6	8.7	8.3	8.5	8.0
10	8.3	7.9	---	---	8.4	7.8	8.3	7.5	8.6	8.3	8.5	8.0
11	8.4	7.9	---	---	8.4	7.9	7.7	7.5	8.7	8.2	8.5	8.0
12	8.3	8.1	---	---	8.2	7.8	7.9	7.6	8.7	8.3	8.6	8.1
13	8.2	8.0	---	---	8.6	7.8	8.1	7.7	8.6	8.3	8.5	8.0
14	8.3	8.0	---	---	8.6	8.0	8.4	7.9	8.7	8.2	8.4	8.0
15	8.5	8.1	---	---	8.6	8.0	8.6	8.0	8.6	8.2	8.4	8.0
16	8.7	8.2	---	---	8.5	7.9	8.8	8.3	8.6	8.2	8.4	8.0
17	8.7	8.1	---	---	8.5	7.9	8.6	8.2	8.6	8.2	8.2	7.9
18	8.6	8.1	---	---	8.2	7.8	8.8	8.2	8.6	8.2	8.2	7.8
19	8.6	8.1	---	---	8.3	7.6	9.0	8.2	8.5	7.8	8.4	7.9
20	8.6	8.1	---	---	8.4	7.8	9.0	8.2	8.1	7.7	8.5	8.0
21	8.4	8.1	---	---	8.3	7.7	8.9	8.2	8.6	8.0	8.5	8.0
22	8.4	7.9	---	---	8.1	7.6	8.5	8.0	8.7	8.0	8.4	8.0
23	8.4	8.0	---	---	8.2	7.4	8.6	8.1	8.8	8.1	8.4	8.0
24	8.7	8.1	---	---	8.1	7.4	8.7	8.2	8.6	7.9	8.5	8.0
25	8.4	8.1	---	---	8.1	7.3	8.8	8.3	8.7	8.1	8.4	8.0
26	8.4	7.9	---	---	7.9	7.4	8.6	8.3	8.5	8.0	8.3	8.0
27	8.6	8.1	---	---	7.8	7.4	8.7	8.3	8.6	8.0	8.3	8.0
28	8.5	8.2	---	---	7.7	7.2	8.9	8.3	9.1	7.8	8.2	8.0
29	8.5	8.0	---	---	7.9	7.3	8.9	8.2	8.5	8.0	8.3	8.0
30	8.2	7.8	---	---	7.9	7.4	8.7	8.0	8.6	8.0	8.3	8.0
31	---	---	---	---	---	---	8.2	7.9	8.7	8.0	---	---
MONTH	8.7	7.8	---	---	8.6	7.2	9.0	7.3	9.1	7.5	8.8	7.7
YEAR	9.1	7.2										

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.3	11.9	13.2	17.3	15.2	16.1	6.1	4.3	5.4	5.1	2.2	3.4
2	12.9	10.1	11.6	17.6	14.4	16.1	4.3	2.5	3.5	8.5	5.1	7.2
3	11.7	8.5	10.4	17.2	13.7	15.5	3.7	3.2	3.4	11.9	8.5	10.3
4	13.4	11.4	12.3	16.6	12.9	15.0	4.6	3.1	3.7	11.5	7.2	8.3
5	14.7	11.0	12.8	17.8	15.0	16.3	5.9	4.6	5.4	7.8	5.3	6.7
6	15.4	12.4	14.0	15.0	11.3	13.1	5.6	4.6	5.1	5.3	0.4	2.7
7	15.5	11.9	13.9	11.3	8.3	9.7	4.9	3.6	4.4	0.5	-0.2	0.2
8	16.6	12.9	14.8	8.3	5.8	6.9	4.9	2.7	3.8	0.9	-0.1	0.5
9	17.8	13.6	15.6	6.4	3.9	5.3	6.9	4.9	6.0	1.4	0.4	0.9
10	19.2	16.2	17.5	8.7	4.2	6.4	8.3	6.9	7.6	0.5	-0.2	0.0
11	19.5	16.3	17.9	11.2	8.3	9.7	7.2	3.8	5.4	0.5	-0.1	0.2
12	18.2	16.1	17.6	15.3	11.2	13.8	3.8	1.8	2.7	1.5	0.1	0.8
13	16.4	13.0	15.0	13.0	6.7	9.1	1.8	1.0	1.2	1.8	0.5	1.2
14	16.3	14.4	15.0	7.2	5.0	6.3	1.8	0.4	1.1	2.1	0.1	0.9
15	14.5	12.2	13.6	7.8	6.4	7.1	2.5	1.5	1.9	2.1	0.3	1.0
16	14.4	10.7	12.9	9.6	7.8	8.7	5.3	1.7	3.3	1.6	0.2	0.7
17	14.0	11.9	13.2	9.8	7.3	8.7	4.6	1.6	3.0	1.7	0.5	1.0
18	13.0	9.8	11.5	13.4	9.5	11.3	2.0	1.3	1.6	3.4	1.6	2.7
19	14.0	10.1	12.1	13.3	10.7	12.5	2.0	1.2	1.6	1.6	0.0	0.6
20	15.4	11.0	13.2	10.7	8.3	9.7	1.2	0.0	0.5	0.2	0.0	0.1
21	16.6	13.7	14.9	10.9	8.3	9.6	0.8	0.0	0.5	0.5	0.0	0.2
22	15.0	11.6	13.0	11.8	8.5	10.2	4.2	0.6	2.3	0.5	0.0	0.2
23	12.7	10.0	11.3	13.3	10.9	12.1	6.1	4.2	5.2	0.1	0.0	0.0
24	11.5	7.9	10	12.6	5.7	9.4	4.9	2.9	3.8	0.2	0.0	0.1
25	14.9	9.7	11.9	5.9	4.1	5.1	2.9	1.6	2.2	0.0	0.0	0.0
26	13.9	11.6	12.8	7.0	4.7	5.9	2.1	0.0	1.2	0.1	0.0	0.0
27	11.6	9.4	10.5	9.3	6.9	8.0	2.4	0.2	1.3	0.0	-0.2	-0.1
28	9.8	8.5	9.2	9.3	5.8	7.7	4.0	1.1	2.5	-0.1	-0.2	-0.1
29	11.2	8.9	10.1	5.8	4.8	5.3	6.7	3.4	4.8	-0.1	-0.1	-0.1
30	13.0	8.8	11.1	6.5	4.2	5.3	6.5	3.7	4.9	-0.1	-0.1	-0.1
31	15.8	11.9	13.8	---	---	---	4.3	2.4	3.4	0.0	-0.1	-0.1
MONTH	19.5	7.9	13.1	17.8	3.9	9.9	8.3	0.0	3.3	11.9	-0.2	1.6
FEBRUARY			MARCH			APRIL			MAY			
1	-0.1	-0.1	-0.1	9.3	7.3	8.1	9.9	7.8	8.9	---	---	---
2	0.0	-0.1	-0.1	12.4	8.2	10.1	9.4	7.5	8.5	---	---	---
3	0.7	0.0	0.4	10.4	7.4	8.2	13.8	7.2	10.3	---	---	---
4	2.5	0.2	1.2	10.0	8.2	8.9	11.0	7.4	9.1	---	---	---
5	1.8	0.7	1.4	14.2	9.7	11.7	11.8	5.5	8.7	---	---	---
6	2.9	1.3	2.3	12.4	9.0	10.6	13.9	6.5	10.2	---	---	---
7	2.3	1.5	1.9	9.3	6.7	8.0	16.2	10.9	13.5	---	---	---
8	2.3	0.6	1.4	7.3	5.5	6.3	18.3	13.5	15.6	---	---	---
9	3.0	0.7	1.8	7.6	5.3	6.3	16.3	11.4	14.2	---	---	---
10	4.5	1.6	2.9	8.2	3.5	6.0	17.1	11.5	14.3	---	---	---
11	3.4	0.4	2.1	7.8	4.8	6.1	16.4	12.8	14.6	---	---	---
12	4.5	2.6	3.4	6.5	2.8	4.9	13.8	8.9	10.6	---	---	---
13	2.9	0.8	1.8	7.2	2.2	4.8	8.9	6.1	7.2	---	---	---
14	3.1	-0.1	1.3	7.6	5.3	6.3	13.0	5.8	8.7	---	---	---
15	2.6	0.9	1.7	9.8	3.8	6.8	15.3	7.6	11.4	---	---	---
16	2.0	-0.1	0.8	8.5	3.8	5.2	18.4	10.7	14.4	---	---	---
17	3.1	0.1	1.3	5.2	3.2	4.2	20.4	13.0	16.7	---	---	---
18	3.5	0.0	1.7	7.6	4.2	5.7	22.0	15.7	18.8	---	---	---
19	5.6	1.0	3.2	9.2	5.1	6.9	20.0	16.9	18.1	---	---	---
20	6.5	4.0	5.1	11.8	6.2	8.7	17.9	15.8	17.0	---	---	---
21	5.8	3.7	4.5	10.1	4.5	7.0	17.0	15.7	16.3	---	---	---
22	6.4	3.0	4.5	7.2	1.8	4.6	15.8	14.9	15.3	---	---	---
23	6.3	2.7	4.6	8.4	2.1	5.3	15.0	13.4	14.2	---	---	---
24	6.2	4.6	5.6	11.4	7.0	8.9	17.5	11.7	14.7	---	---	---
25	5.6	2.3	4.2	14.3	9.9	12.0	16.4	14.1	14.3	---	---	---
26	5.8	2.4	4.2	14.5	12.0	13.3	17.4	13.4	15.4	---	---	---
27	7.2	2.7	4.9	17.5	13.6	15.3	15.3	11.7	13.7	---	---	---
28	7.1	2.1	4.9	19.0	13.6	16.4	16.8	9.6	13.3	---	---	---
29	8.3	3.6	6.1	17.3	12.0	14.5	18.9	13.0	15.9	---	---	---
30	---	---	---	13.2	10.9	11.9	17.5	15.0	16.0	---	---	---
31	---	---	---	11.5	8.8	9.9	---	---	---	---	---	---
MONTH	8.3	-0.1	2.7	19.0	1.8	8.5	22.0	5.5	13.3	---	---	---

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.2	8.8	9.4	11.8	7.6	9.0	---	---	---	9.2	7.5	8.5
2	11.0	8.8	9.8	11.7	7.9	9.2	---	---	---	8.2	6.6	7.7
3	12.3	9.4	10.5	11.7	8.1	9.3	---	---	---	7.4	5.8	6.8
4	12.6	9.1	10.3	11.6	7.9	9.3	---	---	---	9.3	5.1	7.7
5	12.6	8.9	10.4	11.4	7.6	9.0	---	---	---	9.7	8.6	9.1
6	12.3	8.6	9.9	10.0	8.0	9.0	---	---	---	10.7	8.8	10
7	12.1	8.6	9.8	12.9	9.4	10.8	---	---	---	11.5	10.1	10.8
8	11.7	8.2	9.5	13.8	10.1	11.7	---	---	---	11.1	9.4	10.2
9	12.0	7.8	9.4	14.1	11.4	12.5	---	---	---	10.6	9.2	9.8
10	9.9	7.0	8.2	14.5	10.9	12.6	---	---	---	11.4	8.6	10.0
11	9.2	6.7	7.6	11.2	9.6	10.5	---	---	---	10.8	8.8	10.2
12	8.6	6.4	7.2	10.0	9.1	9.7	---	---	---	10.6	7.7	9.0
13	9.2	6.9	7.8	11.7	10.0	11.2	---	---	---	10.2	6.2	8.5
14	8.6	6.9	7.6	12.8	11.7	12.2	---	---	---	9.8	7.0	8.6
15	9.7	8.5	9.0	12.1	11.3	11.7	---	---	---	9.7	8.0	8.7
16	11.1	8.8	9.8	11.7	11.0	11.3	---	---	---	10.1	8.0	9.0
17	11.4	8.8	9.7	12.6	10.8	11.6	---	---	---	10.0	7.9	9.0
18	12.2	9.6	10.5	11.6	10.0	10.7	---	---	---	---	---	---
19	12.4	9.3	10.4	10.5	9.9	10.2	---	---	---	---	---	---
20	12.6	8.8	10.3	11.9	10.4	11.0	14.8	12.0	13.2	---	---	---
21	12.6	8.3	9.8	12.1	10.7	11.2	14.5	12.3	13.2	---	---	---
22	12.1	8.4	10	---	---	---	12.6	10.7	11.8	---	---	---
23	12.3	9.1	10.2	---	---	---	11.2	10.0	10.5	---	---	---
24	12.1	9.3	10.4	---	---	---	12.0	10.8	11.3	---	---	---
25	11.9	8.4	10.0	---	---	---	13.1	10.7	11.5	---	---	---
26	9.1	8.3	8.7	---	---	---	12.1	10.6	11.4	---	---	---
27	10.5	8.8	9.6	---	---	---	11.4	9.9	10.6	---	---	---
28	11.1	9.2	9.9	---	---	---	10.5	8.0	9.5	---	---	---
29	11.2	9.1	10.0	---	---	---	9.1	5.0	7.9	---	---	---
30	11.9	8.6	10.1	---	---	---	9.4	7.3	8.2	---	---	---
31	12.2	8.1	9.6	---	---	---	10.2	7.2	8.4	---	---	---
MONTH	12.6	6.4	9.5	14.5	7.6	10.7	14.8	5.0	10.6	11.5	5.1	9.0
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	15.9	8.5	12.0	---	---	---
7	---	---	---	---	---	---	12.8	6.5	9.5	---	---	---
8	---	---	---	---	---	---	10.6	6.2	8.1	---	---	---
9	---	---	---	---	---	---	10.5	6.7	8.6	---	---	---
10	---	---	---	---	---	---	10.3	6.6	8.3	---	---	---
11	---	---	---	---	---	---	9.7	6.5	7.5	---	---	---
12	---	---	---	---	---	---	9.8	7.1	8.5	---	---	---
13	13.8	12.2	12.6	---	---	---	11.1	9.3	10.2	---	---	---
14	13.2	11.5	12.3	---	---	---	11.3	8.8	10.3	---	---	---
15	12.3	10.7	11.4	---	---	---	10.7	7.9	9.5	---	---	---
16	12.6	11.3	12.0	---	---	---	10.4	7.3	8.9	---	---	---
17	14.6	10.8	12.7	---	---	---	10.5	6.8	8.5	---	---	---
18	12.6	10.5	11.4	---	---	---	9.9	6.6	7.9	---	---	---
19	12.1	9.5	11.2	---	---	---	9.7	6.4	7.8	---	---	---
20	9.9	7.2	9.1	---	---	---	9.8	6.5	7.9	---	---	---
21	---	---	---	---	---	---	9.2	6.1	7.5	---	---	---
22	---	---	---	---	---	---	8.9	6.2	7.4	---	---	---
23	---	---	---	---	---	---	8.4	6.6	7.5	---	---	---
24	---	---	---	---	---	---	9.3	6.3	8.0	---	---	---
25	---	---	---	---	---	---	7.9	5.9	7.0	---	---	---
26	---	---	---	---	---	---	8.7	5.8	7.5	---	---	---
27	---	---	---	---	---	---	9.8	7.1	8.5	---	---	---
28	---	---	---	---	---	---	12.3	8.1	9.9	---	---	---
29	---	---	---	---	---	---	12.4	8.1	10.2	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	14.6	7.2	11.6	---	---	---	15.9	5.8	8.6	---	---	---

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	76	72	74	49	29	33
2	---	---	---	---	---	---	75	71	73	>1,000	49	410
3	---	---	---	---	---	---	78	73	74	>1,000	72	140
4	---	---	---	5.0	0.0	1.9	79	71	74	>1,000	350	720
5	---	---	---	0.0	0.0	0.0	140	76	100	700	120	230
6	---	---	---	9.0	0.0	1.7	120	85	95	130	90	100
7	---	---	---	5.0	0.0	2.0	92	80	83	120	77	85
8	---	---	---	2.0	0.0	0.2	88	79	81	160	79	110
9	---	---	---	0.0	0.0	0.0	110	79	84	86	79	82
10	---	---	---	22	0.0	3.8	300	79	210	85	75	81
11	---	---	---	11	0.0	2.9	180	100	130	84	79	81
12	---	---	---	>1,000	7.0	510	110	96	100	84	80	82
13	---	---	---	560	53	110	100	95	97	89	81	83
14	>1,000	100	690	53	28	37	100	95	98	91	84	86
15	400	81	170	44	28	37	98	89	93	93	84	88
16	87	37	54	42	26	33	360	89	180	89	85	87
17	45	23	32	43	22	26	260	67	120	140	85	92
18	25	18	21	>1,000	21	150	67	30	48	250	140	190
19	20	16	18	380	80	150	30	4.0	13	---	---	---
20	19	15	18	81	18	56	5.0	3.0	3.8	---	---	---
21	22	17	19	52	37	47	13	2.0	3.7	---	---	---
22	22	18	20	50	41	43	37	3.0	8.4	---	---	---
23	26	19	21	43	40	42	870	6.0	160	---	---	---
24	24	20	22	250	41	130	240	27	85	---	---	---
25	32	22	25	110	59	73	36	12	22	---	---	---
26	400	30	220	60	53	56	17	7.0	12	---	---	---
27	180	63	92	790	53	240	12	7.0	9.1	---	---	---
28	63	51	56	530	120	260	10	5.0	7.0	---	---	---
29	---	---	---	120	79	93	560	5.0	57	---	---	---
30	---	---	---	88	74	77	620	51	160	---	---	---
31	---	---	---	---	---	---	57	33	44	---	---	---
MONTH	1,000	15	99	1,000	0.0	81	870	2.0	77	1,000	29	150
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	60	16	30	---	---	---	---	---	---
2	---	---	---	110	31	42	---	---	---	---	---	---
3	640	250	380	83	37	40	---	---	---	---	---	---
4	250	220	230	>1,000	83	410	---	---	---	---	---	---
5	690	210	290	180	130	150	---	---	---	---	---	---
6	610	340	430	170	130	150	---	---	---	---	---	---
7	350	300	320	170	120	140	---	---	---	---	---	---
8	310	280	300	140	130	130	---	---	---	---	---	---
9	300	260	270	160	130	140	---	---	---	---	---	---
10	330	270	290	150	120	130	---	---	---	---	---	---
11	---	---	---	150	130	140	---	---	---	---	---	---
12	---	---	---	150	130	140	---	---	---	---	---	---
13	---	---	---	150	130	140	>1,000	130	450	---	---	---
14	---	---	---	150	130	140	>1,000	110	250	---	---	---
15	---	---	---	340	130	150	110	77	97	---	---	---
16	---	---	---	300	180	250	100	80	89	---	---	---
17	---	---	---	280	190	240	110	80	89	---	---	---
18	---	---	---	310	190	250	140	85	110	---	---	---
19	---	---	---	340	220	270	220	100	150	---	---	---
20	---	---	---	450	140	380	440	220	310	---	---	---
21	---	---	---	440	290	350	580	310	440	---	---	---
22	---	---	---	320	270	290	>1,000	440	560	---	---	---
23	---	---	---	300	200	220	>1,000	250	400	---	---	---
24	---	---	---	260	190	220	320	230	260	---	---	---
25	---	---	---	280	170	210	>1,000	250	900	---	---	---
26	21	12	13	370	190	250	---	---	---	---	---	---
27	18	16	16	560	240	360	---	---	---	---	---	---
28	20	18	19	500	210	380	---	---	---	---	---	---
29	21	18	19	490	240	410	---	---	---	---	---	---
30	---	---	---	>1,000	350	490	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	690	12	210	1,000	16	220	1,000	77	320	---	---	---

03277075 GUNPOWDER CREEK AT CAMP ERNST ROAD NEAR UNION, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	120	40	68	42	12	24
2	---	---	---	---	---	---	46	20	30	24	9.0	16
3	---	---	---	---	---	---	29	12	18	2,500	13	630
4	---	---	---	---	---	---	2,500	11	510	200	48	100
5	---	---	---	---	---	---	200	44	89	69	24	37
6	---	---	---	---	---	---	230	26	47	54	17	26
7	---	---	---	---	---	---	42	15	23	44	11	16
8	---	---	---	---	---	---	25	9.0	12	120	17	73
9	---	---	---	---	---	---	35	6.0	9.0	120	30	65
10	---	---	---	---	---	---	34	3.0	6.7	31	14	22
11	---	---	---	---	---	---	16	5.2	7.8	22	7.0	11
12	---	---	---	---	---	---	9.2	4.2	5.7	18	6.0	8.6
13	---	---	---	---	---	---	18	4.2	5.8	19	4.0	6.5
14	---	---	---	---	---	---	10	4.2	5.4	9.0	4.0	5.5
15	---	---	---	---	---	---	12	4.3	5.8	18	3.0	5.7
16	---	---	---	24	10	14	12	4.3	6.0	14	3.0	5.7
17	---	---	---	180	13	64	71	4.3	7.7	420	5.0	150
18	---	---	---	210	46	110	55	5.3	8.7	110	29	57
19	---	---	---	56	9.0	27	1,900	9.3	120	37	12	19
20	---	---	---	27	5.0	9.2	2,500	72	420	47	8.0	11
21	---	---	---	34	4.0	7.0	150	24	64	23	6.0	8.2
22	---	---	---	2,500	6.0	710	48	11	22	17	4.0	6.3
23	---	---	---	130	31	68	24	6.0	11	24	3.0	5.0
24	---	---	---	59	11	24	1,200	7.0	57	8.0	3.0	4.3
25	---	---	---	23	6.0	11	22	4.0	7.5	16	3.0	4.1
26	---	---	---	22	7.0	12	12	5.0	7.9	12	3.0	3.7
27	---	---	---	32	6.0	11	37	4.0	7.2	7.0	2.0	3.5
28	---	---	---	8.0	3.0	5.1	2,500	4.0	300	7.0	2.0	3.2
29	---	---	---	43	2.0	3.9	560	56	150	6.0	2.0	3.2
30	---	---	---	1,400	2.0	230	650	30	120	5.0	2.0	2.8
31	---	---	---	2,500	120	850	66	16	37	---	---	---
MONTH	---	---	---	2,500	2.0	130	2,500	3.0	71	2,500	2.0	44
YEAR	2,500	0.0	120									

> Actual value is known to be greater than the value shown

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03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY

LOCATION.--Lat 38°50'42", long 84°43'15", Boone County, Hydrologic Unit 05090203, at bridge on Highway 42 2.8 mi southwest of Beaverlick, 2.9 mi upstream from the mouth, and 3.0 mi downstream from the confluence of Fullers Creek and McCoy's Fork.

DRAINAGE AREA.--36.4 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 487.73 ft above NGVD of 1929.

REMARKS.--Records fair except for those below 1.0 ft³/s cfs and those estimated which are poor.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.0	52	55	e26	19	81	85	73	0.67	88	e1.3
2	7.7	6.8	40	455	40	25	73	482	43	0.66	32	1.2
3	6.4	8.4	34	270	464	17	63	129	25	0.60	17	15
4	6.5	9.5	29	2,510	102	262	49	80	18	0.65	99	7.8
5	5.7	10	40	689	282	113	38	60	14	0.63	51	3.2
6	5.1	11	39	139	687	148	31	e47	11	0.65	18	2.1
7	4.5	12	29	e85	150	73	28	39	8.8	1.2	11	1.6
8	4.8	12	26	e61	72	e55	24	30	7.2	1.7	7.3	1.6
9	5.5	12	24	e50	60	42	19	17	6.5	1.5	5.6	4.2
10	6.1	11	139	e40	70	34	17	e15	7.6	1.3	5.6	2.7
11	6.3	12	100	e33	62	30	15	12	8.2	36	4.6	1.8
12	6.3	502	58	e30	52	26	40	10	21	e24	3.6	1.4
13	6.8	91	46	e26	47	20	383	9.2	19	20	2.9	1.3
14	17	41	44	e22	38	22	363	8.7	7.5	5.4	2.6	1.3
15	13	38	37	e22	31	20	100	34	5.2	2.8	2.3	1.3
16	5.8	30	87	e19	e31	36	64	22	5.7	1.8	2.0	1.3
17	4.8	23	92	19	e28	35	50	11	4.9	13	1.8	7.4
18	4.7	126	60	107	e24	26	39	12	9.9	5.9	1.6	8.4
19	4.8	168	53	51	21	27	32	378	5.7	6.3	1.4	3.2
20	4.9	67	44	e36	25	28	28	57	3.9	2.7	1.6	1.9
21	4.3	46	e38	e29	32	31	33	29	2.7	1.8	4.4	1.5
22	4.2	34	42	e23	22	23	48	18	2.3	56	3.4	1.3
23	4.8	27	129	e17	20	23	51	13	2.0	11	2.0	1.2
24	4.1	74	164	e15	19	26	31	9.3	1.6	4.2	1.6	1.2
25	4.4	45	74	e16	18	22	53	7.4	1.3	2.4	2.6	1.2
26	e12	34	54	e24	16	20	39	62	1.2	6.1	2.3	e1.2
27	9.2	241	46	e33	15	20	26	850	1.1	4.6	5.5	1.2
28	5.5	441	40	e31	14	19	20	553	0.93	3.1	3.0	1.1
29	5.5	131	53	e25	14	26	17	81	0.84	2.2	2.1	0.99
30	5.5	74	199	e26	---	114	53	61	0.72	e66	1.8	0.91
31	4.7	---	72	e26	---	85	---	392	---	1,490	1.5	---
TOTAL	202.9	2,343.7	1,984	4,984	2,482	1,467	1,908	3,613.6	319.79	1,774.86	389.1	81.80
MEAN	6.55	78.1	64.0	161	85.6	47.3	63.6	117	10.7	57.3	12.6	2.73
MAX	17	502	199	2,510	687	262	383	850	73	1,490	99	15
MIN	4.1	6.0	24	15	14	17	15	7.4	0.72	0.60	1.4	0.91

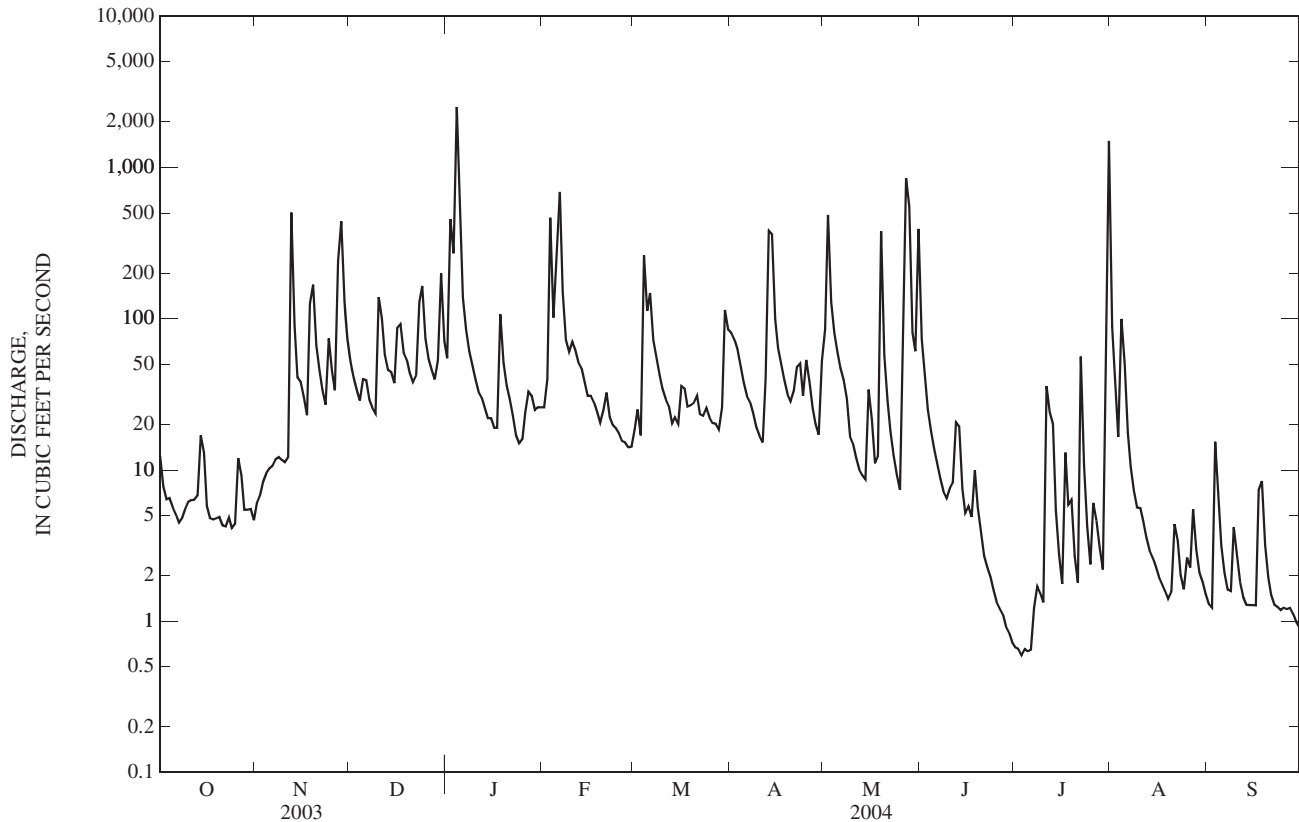
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

	2001	2002	2003	2004
MEAN	24.4	51.8	81.4	76.6
MAX	52.5	78.1	114	161
(WY)	(2002)	(2004)	(2002)	(2004)
MIN	6.55	27.0	53.3	19.6
(WY)	(2004)	(2003)	(2001)	(2001)

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	22,388.0		21,550.75		62.3	
ANNUAL MEAN	61.3		58.9		67.8	
HIGHEST ANNUAL MEAN					58.9	
LOWEST ANNUAL MEAN					2,510	
HIGHEST DAILY MEAN	2,080	May 10	2,510	Jan 4	2,510	Jan 4, 2004
LOWEST DAILY MEAN	1.6	Jul 6	0.60	Jul 3	0.00	Jul 8, 2002
ANNUAL SEVEN-DAY MINIMUM	2.2	Jun 30	0.65	Jun 30	0.00	Aug 2, 2002
MAXIMUM PEAK FLOW			5,860	May 27	12,600	Apr 21, 2002
MAXIMUM PEAK STAGE			7.76	May 27	10.26	Apr 21, 2002
10 PERCENT EXCEEDS	108		99		110	
50 PERCENT EXCEEDS	23		20		18	
90 PERCENT EXCEEDS	5.5		1.6		1.3	

e Estimated



03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2002 to September 2004.

COOPERATION.--Northern Kentucky Sanitation District No. 1.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2000 to current water year.

pH: December 2000 to current water year.

WATER TEMPERATURES: December 2000 to current water year.

DISSOLVED OXYGEN: December 2000 to current water year.

TURBIDITY: December 2000 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry. New turbidity probe installed summer 2004, range 0-3000 NTU.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated excellent except for the following periods: Oct. 1-9, Nov. 12-19 rated good; Nov. 20-25 rated fair; Nov. 26-Dec. 19 rated poor.

pH: Records rated good.

WATER TEMPERATURES: Records rated excellent except for the following periods: Jun. 16-Jul. 18 rated good.

DISSOLVED OXYGEN: Records rated poor.

TURBIDITY: Records rated fair except for the following period: Oct. 1-Jun. 1 rated poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1640 microsiemens, Jan. 28, 2004; minimum recorded, 113 microsiemens, Apr. 21, 2002.

pH: Maximum recorded, 9.0 units, Dec. 2, 3, 5, 6, and 9, 2000; minimum recorded, 7.0 units, Jul. 13, 2004.

WATER TEMPERATURES: Maximum recorded, 33.8°C, Jun. 25, 2002; minimum recorded, -0.3°C, Dec. 21, 2003, Jan. 7, 10, 11, 20-31 and Feb. 1-3, 14, 16-18, 2004.

DISSOLVED OXYGEN: Maximum recorded, 18.4 mg/L, Dec. 7, 2002; minimum recorded, 1.5 mg/L, Sept. 8, 2002.

TURBIDITY: Maximum recorded, 2500 NTU, Jul. 31, 2004; minimum recorded, 0.0 NTU, Feb. 25 and April 2, 6-8, Oct. 31, Nov. 1, 2, 4, 5, 14, 16, 20, 21, 2002, Mar. 30, 2003, Oct. 9-14, Dec. 20-30, 27-20, 2003 and Sept. 26, 27, 30, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1640 microsiemens, Jan. 28, 2004; minimum recorded, 150 microsiemens, Jul. 31, 2004.

pH: Maximum recorded, 8.9 units, Sept. 22, 23, 2004; minimum recorded, 7.0 units, Jul. 13, 2004.

WATER TEMPERATURES: Maximum recorded, 32.6°C, July 6, 2004; minimum recorded, -0.3°C, Dec. 21, 2003, Jan. 7, 10, 11, 20-31 and Feb. 1-3, 14, 16-18, 2004.

DISSOLVED OXYGEN: Maximum recorded, 17.1 mg/L, Apr. 6, 2004; minimum recorded, 2.4 mg/L, July 7, 2004.

TURBIDITY: Maximum recorded, 2500 NTU, May 27, 2004 and Jul. 31, 2004; minimum recorded, 0.0 NTU, Oct. 9-14, Dec. 20-23, 27-30, 2003 and Sept. 26, 27, 30, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	559	535	539	601	573	585	503	487	498	587	576	582
2	563	543	553	610	584	598	515	501	508	586	305	396
3	564	554	560	622	591	607	526	512	520	530	248	488
4	569	548	560	639	614	623	537	525	531	252	159	209
5	561	537	552	653	638	642	543	535	539	392	159	308
6	571	526	552	658	641	649	554	540	549	455	392	427
7	566	520	550	656	646	651	545	539	542	486	455	473
8	569	522	551	656	646	651	556	543	547	512	486	499
9	569	528	554	662	649	654	568	555	561	560	507	525
10	578	549	565	671	655	662	572	476	537	626	560	597
11	589	554	573	682	652	671	564	476	524	646	624	639
12	599	575	589	676	251	367	589	564	579	624	578	588
13	605	578	594	420	324	380	622	589	602	583	575	579
14	608	567	597	463	420	444	648	539	614	601	583	588
15	602	517	536	490	463	475	937	617	731	597	588	593
16	534	516	520	508	490	502	1,030	732	901	605	594	597
17	547	534	542	519	508	512	734	630	659	666	605	629
18	563	547	554	527	348	486	666	637	648	819	543	671
19	567	540	556	434	357	396	905	647	751	630	582	590
20	560	538	550	469	434	452	934	880	905	608	584	599
21	560	526	546	492	469	483	986	871	935	609	562	603
22	554	519	539	507	492	499	871	733	775	616	595	601
23	543	513	531	516	506	509	750	536	687	641	616	631
24	547	522	534	517	463	483	698	544	575	647	616	632
25	552	529	543	485	454	465	590	573	585	640	624	635
26	573	524	541	519	485	504	598	587	594	640	624	632
27	619	573	606	523	366	451	603	594	599	1,580	625	1,000
28	619	551	585	397	360	377	606	598	603	1,640	1,300	1,490
29	609	520	545	464	394	436	639	406	588	1,300	1,060	1,240
30	576	531	543	490	462	478	560	461	510	1,060	893	938
31	587	552	565	---	---	---	576	539	565	943	898	922
MONTH	619	513	556	682	251	523	1,030	406	621	1,640	159	642

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	957	900	914	623	593	604	628	578	594	595	344	543
2	1,280	626	945	722	604	654	604	583	596	435	319	368
3	993	436	561	888	722	761	604	560	584	516	435	487
4	600	505	568	727	447	517	590	558	573	539	516	532
5	658	327	564	575	545	566	573	556	565	558	537	547
6	382	293	331	566	550	559	561	548	556	555	539	549
7	506	382	451	582	566	575	561	542	553	560	543	551
8	629	506	569	590	570	579	567	542	554	569	543	557
9	648	622	634	586	566	576	568	549	560	584	558	574
10	622	569	598	578	566	572	574	553	564	591	571	581
11	574	550	564	582	567	574	580	565	573	601	571	589
12	584	565	578	585	562	576	657	501	569	615	586	601
13	588	574	580	583	556	573	592	217	476	616	587	604
14	594	587	590	592	567	581	289	213	252	618	592	610
15	594	587	591	596	564	581	330	289	313	617	585	603
16	607	590	599	632	575	594	338	324	331	607	596	600
17	607	594	601	714	632	668	341	324	333	624	595	611
18	600	588	595	729	669	700	339	327	334	656	621	636
19	600	590	596	669	620	644	509	334	415	658	223	402
20	677	598	610	655	620	641	558	422	535	524	450	492
21	633	600	610	661	644	652	580	558	571	571	524	550
22	708	633	666	660	642	652	636	566	586	598	571	583
23	705	595	637	656	622	638	611	572	594	620	598	608
24	609	580	595	637	598	621	613	591	605	682	619	644
25	604	580	593	625	586	608	618	581	596	724	651	710
26	602	577	592	618	597	609	590	556	567	735	589	686
27	593	573	584	626	604	616	602	579	591	---	---	---
28	592	574	584	624	598	613	608	574	590	---	---	---
29	595	571	587	700	535	619	609	581	596	---	---	---
30	---	---	---	609	539	583	630	541	574	---	---	---
31	---	---	---	629	580	610	---	---	---	---	---	---
MONTH	1,280	293	603	888	447	610	657	213	523	735	223	570
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	553	530	542	455	356	415	629	575	608
2	---	---	---	556	537	547	496	455	476	629	568	605
3	---	---	---	561	537	550	519	496	505	613	428	544
4	---	---	---	558	540	550	527	338	470	561	544	551
5	561	547	555	557	529	547	467	354	410	567	549	559
6	561	541	552	552	510	541	515	467	494	558	525	542
7	560	534	548	558	532	544	535	515	523	546	518	534
8	559	534	548	563	541	555	545	528	536	531	510	520
9	564	539	555	570	481	554	550	453	538	523	499	510
10	575	557	566	568	543	555	556	529	544	547	518	527
11	581	550	571	606	401	503	559	520	543	559	533	549
12	584	455	556	470	398	439	554	524	542	565	531	552
13	547	520	536	500	443	483	556	519	541	570	526	555
14	546	527	537	480	457	466	562	517	544	578	521	558
15	554	531	545	491	464	474	574	520	552	581	536	562
16	559	538	550	503	468	488	575	515	551	585	553	569
17	574	542	559	549	446	517	572	518	551	594	528	563
18	573	552	562	549	431	500	570	529	553	668	594	644
19	558	517	537	492	449	461	572	535	556	630	598	609
20	548	521	538	519	492	502	573	522	560	601	552	577
21	549	506	536	---	---	---	576	550	563	582	541	565
22	557	511	540	477	373	411	596	566	580	578	529	557
23	549	486	526	421	373	395	603	560	587	572	519	548
24	542	478	522	454	421	433	608	570	594	563	510	538
25	542	522	533	474	451	459	618	587	605	556	518	542
26	544	503	530	527	461	491	627	539	612	556	518	541
27	542	499	528	634	527	590	640	619	628	553	533	544
28	548	504	531	631	538	579	654	629	644	559	535	546
29	548	521	536	538	500	518	655	614	639	570	559	564
30	553	526	541	590	247	492	638	609	628	571	558	566
31	---	---	---	356	150	252	630	589	614	---	---	---
MONTH	584	455	544	634	150	498	655	338	552	668	428	558
YEAR	1,640	150	567									

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	8.0	8.3	7.8	8.0	7.9	8.2	7.9	8.1	7.9	8.4	8.2
2	8.2	8.0	8.3	7.7	8.1	7.9	8.1	7.7	8.0	7.9	8.6	8.0
3	8.3	8.0	8.4	7.7	8.0	7.9	8.1	7.7	7.9	7.7	8.4	8.0
4	8.4	8.0	8.3	7.8	8.0	8.0	7.7	7.6	8.1	7.8	8.1	7.9
5	8.4	8.0	8.2	7.8	8.0	7.9	8.0	7.6	8.0	7.7	8.4	8.0
6	8.5	8.0	8.0	7.8	8.2	8.0	8.0	7.9	7.8	7.7	8.3	8.0
7	8.6	7.9	8.2	7.8	8.2	8.0	8.0	8.0	8.0	7.8	8.5	8.0
8	8.6	7.9	8.3	7.9	8.2	8.0	8.0	8.0	8.0	7.8	8.5	8.1
9	8.6	7.9	8.4	8.0	8.1	8.0	8.1	8.0	8.0	7.9	8.5	8.1
10	8.5	7.9	8.4	8.0	8.0	7.8	8.1	8.0	8.1	7.9	8.4	8.0
11	8.5	7.8	8.2	7.9	7.9	7.8	8.1	8.0	8.1	7.9	8.4	8.0
12	8.4	7.7	7.9	7.6	8.1	7.9	8.1	8.0	8.2	7.9	8.5	8.1
13	8.4	7.7	7.9	7.6	8.1	8.0	8.2	8.1	8.2	8.0	8.5	8.1
14	7.9	7.7	8.1	7.9	8.1	8.0	8.1	8.1	8.2	8.0	8.5	8.1
15	8.0	7.7	8.1	8.0	8.2	8.0	8.2	8.1	8.2	8.0	8.5	8.1
16	8.2	7.7	8.1	8.0	8.1	7.9	8.2	8.1	8.2	8.0	8.3	8.1
17	8.1	7.7	8.1	7.9	7.9	7.8	8.2	8.1	8.2	8.0	8.4	8.0
18	8.3	7.8	8.1	7.8	8.1	7.9	8.1	8.0	8.3	8.0	8.5	8.0
19	8.4	7.8	7.9	7.8	8.1	7.9	8.1	8.0	8.3	8.0	8.6	8.0
20	8.4	7.8	8.0	7.8	8.1	7.9	8.2	8.0	8.3	8.1	8.5	8.1
21	8.4	7.8	8.1	7.9	8.1	7.9	8.2	8.1	8.3	8.0	8.5	8.0
22	8.4	7.7	8.2	8.0	8.1	7.9	8.2	8.1	8.5	8.0	8.5	8.1
23	8.4	7.8	8.2	8.0	8.0	7.8	8.2	8.1	8.5	8.1	8.5	8.1
24	8.5	7.9	8.1	7.9	8.0	7.8	8.2	8.1	8.5	8.1	8.6	8.1
25	8.5	8.0	8.2	7.9	8.2	7.9	8.1	8.1	8.5	8.1	8.6	8.1
26	8.2	7.9	8.2	8.0	8.1	7.9	8.1	8.0	8.6	8.2	8.5	8.0
27	8.1	7.8	8.0	7.7	8.1	7.9	8.1	7.9	8.6	8.2	8.4	8.0
28	8.0	7.7	7.8	7.7	8.2	8.0	8.0	7.8	8.5	8.2	8.5	7.9
29	8.2	7.5	8.0	7.8	8.2	8.0	8.1	7.9	8.6	8.1	8.2	8.0
30	8.4	7.6	8.0	7.9	8.0	7.8	8.1	8.0	---	---	8.2	8.0
31	8.4	7.9	---	---	8.2	7.9	8.0	7.9	---	---	8.2	8.0
MONTH	8.6	7.5	8.4	7.6	8.2	7.8	8.2	7.6	8.6	7.7	8.6	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.0	8.3	7.9	8.0	7.8	8.1	7.5	8.2	7.9	8.7	7.4
2	8.5	8.1	8.1	7.9	8.0	7.8	8.1	7.4	8.2	8.0	8.6	7.4
3	8.7	8.0	8.4	8.1	---	---	8.2	7.4	8.2	8.0	7.9	7.4
4	8.7	8.1	8.5	8.1	---	---	8.1	7.3	8.1	7.8	8.2	7.6
5	8.7	8.1	8.5	8.1	8.3	7.9	8.0	7.2	8.2	7.8	8.4	7.6
6	8.7	8.2	8.4	8.0	8.3	8.0	8.0	7.2	8.3	8.0	8.5	7.4
7	8.7	8.1	8.4	8.0	8.3	8.0	8.0	7.2	8.2	8.0	8.3	7.4
8	8.6	8.0	8.4	8.0	8.3	7.9	8.0	7.4	8.3	7.9	8.1	7.4
9	8.6	8.1	8.4	8.0	8.2	7.8	7.9	7.2	8.4	7.9	8.2	7.4
10	8.6	8.1	8.4	8.0	8.3	7.8	7.9	7.2	8.4	7.9	8.3	7.5
11	8.5	8.0	8.4	7.9	8.3	7.9	7.5	7.2	8.5	7.9	8.5	7.5
12	8.3	8.0	8.4	7.9	8.2	7.9	7.6	7.2	8.5	7.9	8.5	7.4
13	8.1	7.9	8.4	7.9	8.3	7.9	7.6	7.0	8.5	7.9	8.5	7.3
14	8.3	7.9	8.3	7.9	8.4	7.9	8.0	7.2	8.5	7.9	8.6	7.2
15	8.5	8.1	8.2	7.9	8.4	7.8	8.3	7.5	8.5	7.8	8.5	7.3
16	8.6	8.0	8.3	8.0	8.4	7.9	8.4	7.5	8.5	7.7	8.4	7.2
17	8.6	8.0	8.3	7.9	8.5	7.9	8.0	7.5	8.4	7.6	8.0	7.3
18	8.5	7.9	8.2	7.8	8.4	7.9	8.1	7.5	8.4	7.6	8.2	7.5
19	8.3	7.9	7.9	7.4	8.4	7.9	8.2	7.6	8.3	7.5	8.5	7.5
20	8.4	7.9	8.1	7.9	8.5	7.9	8.4	7.6	7.9	7.4	8.7	7.3
21	8.2	8.0	8.1	7.9	8.6	7.9	8.0	7.6	8.2	7.5	8.8	7.4
22	8.3	8.0	8.0	7.8	8.6	7.9	7.8	7.7	8.4	7.7	8.9	7.2
23	8.4	8.0	8.1	7.8	8.6	7.9	8.0	7.7	8.4	7.6	8.9	7.3
24	8.5	8.1	8.1	7.8	8.5	7.8	8.4	7.7	8.4	7.5	8.7	7.3
25	8.3	8.0	8.1	7.8	8.4	7.8	8.5	7.7	8.4	7.5	8.5	7.4
26	8.6	8.0	7.9	7.8	8.6	7.8	8.1	7.7	8.3	7.4	8.5	7.4
27	8.5	8.1	7.9	7.3	8.5	7.9	8.4	7.9	8.3	7.6	8.5	7.4
28	8.5	8.2	7.9	7.4	8.5	7.8	8.7	7.8	8.5	7.6	8.4	7.5
29	8.5	8.1	8.0	7.8	8.3	7.8	8.7	7.8	8.4	7.5	8.2	7.3
30	8.2	7.9	7.9	7.8	8.3	7.6	8.6	7.6	8.4	7.5	8.3	7.4
31	---	---	7.9	7.6	---	---	7.9	7.5	8.6	7.5	---	---
MONTH	8.7	7.9	8.5	7.3	8.6	7.6	8.7	7.0	8.6	7.4	8.9	7.2
YEAR	8.9	7.0										

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.7	11.8	12.8	17.0	14.2	15.4	5.8	4.2	5.2	4.7	2.2	3.3
2	13.1	10.6	11.8	18.5	14.3	16.2	4.2	2.5	3.3	9.1	4.7	7.3
3	12.1	8.8	10.7	18.3	13.9	15.8	3.3	3.0	3.1	11.8	9.1	10.6
4	14.2	11.2	12.4	17.9	13.1	15.5	4.3	3.0	3.5	10.7	7.9	8.7
5	15.1	11.1	13.1	17.0	14.9	15.8	5.3	4.3	4.9	8.1	5.6	7.1
6	16.5	12.6	14.4	14.9	12.0	13.5	5.8	4.7	5.1	5.6	0.4	3.1
7	17.0	12.4	14.6	12.0	9.0	10.8	5.3	3.5	4.5	0.5	-0.3	0.0
8	17.6	13.0	15.2	9.3	6.7	8.0	4.6	2.8	3.8	1.2	-0.1	0.5
9	17.8	13.6	15.7	8.4	4.9	6.6	6.4	4.6	5.6	1.9	1.1	1.5
10	18.5	16.0	17.2	9.0	5.1	7.2	8.3	6.4	7.4	1.1	-0.3	0.1
11	20.6	15.9	18.0	11.0	8.3	9.8	7.5	4.4	5.9	0.8	-0.3	0.1
12	20.0	16.8	18.0	14.3	11.0	13.2	4.4	1.9	3.1	1.6	0.1	0.9
13	19.0	13.8	16.3	12.9	6.8	9.4	1.9	1.1	1.3	1.6	0.5	1.2
14	16.2	13.8	15.1	6.8	4.8	5.8	1.7	0.6	1.2	1.9	-0.2	0.9
15	15.1	12.2	13.6	7.0	6.0	6.5	2.6	1.6	2.0	1.9	0.6	1.2
16	15.1	10.9	13.2	8.7	7.0	8.0	4.9	1.7	3.0	1.8	0.0	0.7
17	13.9	11.9	13.2	10.0	7.8	8.9	4.8	2.2	3.6	1.5	0.3	0.8
18	14.2	10.6	12.2	12.8	9.5	11.0	2.3	1.7	2.0	3.5	1.5	2.5
19	15.2	10.5	12.7	13.0	10.7	12.4	2.1	1.5	1.9	2.2	0.0	1.0
20	15.9	11.2	13.5	10.7	8.6	9.7	1.5	-0.1	0.6	0.1	-0.3	-0.2
21	16.3	13.6	14.9	10.2	7.7	9.0	0.6	-0.3	0.1	0.5	-0.3	-0.1
22	15.1	12.0	13.5	10.9	8.2	9.6	3.8	0.2	1.8	1.0	-0.3	0.0
23	13.4	10.6	11.8	12.6	10.2	11.5	5.7	3.8	4.9	-0.2	-0.3	-0.3
24	13.4	8.7	10.9	12.2	6.4	9.6	5.7	3.5	4.5	0.4	-0.3	-0.1
25	14.3	9.9	12.0	6.4	4.4	5.2	3.5	1.9	2.9	-0.2	-0.3	-0.3
26	13.4	11.9	12.7	6.4	4.3	5.4	1.9	0.3	1.2	-0.2	-0.3	-0.3
27	12.3	10.0	11.2	9.6	6.4	7.9	2.0	0.0	1.1	-0.2	-0.3	-0.3
28	10.2	9.0	9.7	9.6	6.5	8.4	3.3	0.7	2.1	-0.2	-0.3	-0.3
29	12.3	9.4	10.8	6.5	4.9	5.5	5.7	2.9	4.2	-0.1	-0.3	-0.3
30	13.6	9.3	11.6	6.3	4.3	5.3	6.0	3.8	5.0	-0.3	-0.3	-0.3
31	15.7	11.4	13.4	---	---	---	4.2	2.3	3.4	-0.2	-0.3	-0.3
MONTH	20.6	8.7	13.4	18.5	4.3	9.9	8.3	-0.3	3.3	11.8	-0.3	1.6
FEBRUARY			MARCH			APRIL			MAY			
1	-0.2	-0.3	-0.3	8.5	6.6	7.6	9.2	7.7	8.6	18.6	15.8	17.0
2	-0.2	-0.3	-0.3	11.8	7.8	9.6	8.8	7.4	8.3	16.6	11.8	13.4
3	0.2	-0.3	-0.1	9.5	7.3	8.2	12.9	7.2	10	14.0	9.7	11.9
4	2.2	0.0	1.0	9.9	7.0	8.7	11.0	8.1	9.3	13.7	9.8	11.9
5	2.0	0.8	1.5	13.3	9.7	11.5	11.5	5.8	8.6	18.7	12.4	15.2
6	3.4	1.6	2.8	11.9	8.5	10.3	13.1	6.6	9.8	21.1	14.9	17.9
7	2.9	1.5	2.1	8.5	6.3	7.4	15.3	10.6	12.9	21.6	17.3	19.5
8	2.2	0.6	1.3	6.9	5.5	6.2	18.2	13.2	15.3	23.0	17.4	20.3
9	2.4	0.3	1.3	6.9	5.3	6.0	16.3	12.1	14.2	24.2	18.8	21.4
10	4.0	1.6	2.8	7.9	3.2	5.5	17.4	12.1	14.6	24.4	19.7	22.1
11	3.0	0.7	2.1	7.6	4.3	5.6	16.2	13.4	14.6	25.1	20.0	22.4
12	4.0	2.1	2.9	7.1	3.0	5.0	13.6	8.9	11.1	25.2	20.2	22.7
13	2.7	0.7	1.7	6.9	2.3	4.7	8.9	6.6	7.6	24.2	21.0	22.6
14	2.4	-0.3	0.9	7.0	5.0	5.7	12.8	6.7	9.3	23.3	21.2	22.1
15	2.4	0.2	1.1	9.1	3.6	6.4	14.5	8.3	11.4	21.8	17.2	19.3
16	1.9	-0.3	0.6	7.5	4.3	5.6	17.2	11.0	14.0	19.6	16.6	17.8
17	2.7	-0.3	1.0	4.8	3.5	4.3	19.7	13.3	16.5	22.9	16.9	19.6
18	3.2	-0.3	1.4	7.0	3.9	5.3	21.6	15.8	18.7	24.1	19.1	21.5
19	4.3	0.5	2.4	9.2	4.8	6.7	19.5	17.4	18.2	22.4	18.4	19.8
20	5.2	3.0	4.0	10.3	5.9	8.1	18.1	15.7	16.8	22.1	19.0	20.5
21	4.7	3.6	4.2	8.9	4.6	6.9	16.7	15.5	16.1	24.4	20.6	22.4
22	6.6	3.0	4.6	7.5	2.8	5.0	15.5	14.7	15.0	25.6	21.9	23.7
23	6.1	3.0	4.6	8.1	2.5	5.3	14.9	13.9	14.4	26.1	22.3	24.2
24	6.1	4.6	5.3	11.3	6.6	8.7	16.7	12.5	14.7	27.0	23.1	24.9
25	6.6	2.9	4.7	13.7	10.0	11.8	17.5	15.0	16.1	26.8	22.5	24.5
26	6.0	3.0	4.5	14.7	12.0	13.3	18.2	14.4	16.3	23.9	19.9	21.5
27	7.4	2.8	4.9	16.2	13.5	14.7	16.2	12.9	14.5	20.6	17.7	19.0
28	7.7	2.4	5.0	18.2	13.0	15.6	17.1	10.7	13.9	20.8	18.1	19.3
29	8.4	3.5	5.9	16.1	11.8	14.2	19.5	13.3	16.2	20.8	17.5	19.1
30	---	---	---	12.8	10.7	11.6	17.5	15.6	16.5	19.9	18.5	19.0
31	---	---	---	11.7	8.6	10.0	---	---	---	20.8	18.0	19.1
MONTH	8.4	-0.3	2.5	18.2	2.3	8.2	21.6	5.8	13.4	27.0	9.7	19.9

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.0	8.2	8.9	14.8	5.4	8.6	12.6	11.1	11.8	14.7	11.9	13.2
2	11.0	8.2	9.4	12.2	5.3	8.3	13.4	11.7	12.5	12.2	10.7	11.3
3	12.0	8.4	9.8	12.3	6.0	9.0	13.1	12.0	12.4	10.7	9.4	10.1
4	12.3	8.0	9.5	---	---	---	12.8	11.5	12.2	11.6	10.2	11.2
5	12.8	7.6	9.6	---	---	---	12.0	10.8	11.3	11.6	10.7	11.0
6	13.7	7.4	9.7	---	---	---	12.8	11.0	11.6	12.6	10.7	11.7
7	14.6	7.2	10	---	---	---	13.1	11.0	11.9	13.3	12.6	12.9
8	14.9	7.0	9.9	---	---	---	13.4	11.3	12.2	13.0	12.2	12.6
9	13.6	6.1	9.0	---	---	---	11.7	9.8	11.0	12.6	12.0	12.3
10	13.0	5.3	7.7	---	---	---	11.6	9.8	10.7	13.4	12.4	13.0
11	13.2	4.9	7.5	---	---	---	11.7	10.8	11.3	13.4	12.6	13.0
12	11.3	4.3	6.5	---	---	---	13.5	11.4	12.4	12.9	12.2	12.6
13	11.3	5.0	7.2	---	---	---	13.6	12.3	12.8	13.0	12.3	12.6
14	7.9	5.1	6.2	---	---	---	13.6	12.3	12.8	13.4	12.2	12.7
15	9.3	6.2	7.3	---	---	---	13.8	12.0	12.6	13.1	12.2	12.7
16	10.5	6.1	7.7	---	---	---	12.8	11.2	12.0	13.7	12.8	13.2
17	10.3	6.2	7.3	---	---	---	11.8	10.9	11.4	---	12.5	13.0
18	11.2	6.7	8.4	---	---	---	13.0	11.6	12.2	---	12.1	12.5
19	11.8	6.7	8.6	---	---	---	13.4	11.6	12.3	---	12.3	13.0
20	13.1	6.6	8.8	---	---	---	14.7	12.2	13.4	---	13.3	13.7
21	13.0	4.9	8.2	---	---	---	14.7	13.1	13.8	---	13.5	13.7
22	13.6	5.1	8.7	---	---	---	13.9	11.5	12.9	---	13.6	13.8
23	14.9	6.7	9.5	---	---	---	12.1	11.2	11.5	14.5	13.5	13.9
24	14.4	7.3	10.2	---	---	---	12.2	11.2	11.8	14.2	13.3	13.8
25	13.2	7.5	9.7	---	---	---	13.9	11.8	12.7	14.2	13.3	13.7
26	11.6	7.1	8.9	13.5	11.2	12.1	14.7	12.5	13.5	14.1	13.2	13.6
27	13.8	8.2	9.8	12.9	10.8	11.4	14.8	12.8	13.6	14.3	13.2	13.6
28	12.4	7.3	9.2	12.4	11.1	11.8	14.7	12.2	13.3	14.6	13.5	14.0
29	16.3	5.7	9.8	12.5	11.7	12.0	13.8	11.3	12.4	14.5	13.5	13.9
30	14.8	6.6	10.2	12.5	11.0	11.8	12.5	11.6	12.1	14.5	13.5	13.9
31	16.6	6.0	9.5	---	---	---	14.4	12.2	13.0	15.0	13.5	14.1
MONTH	16.6	4.3	8.8	14.8	5.3	10.6	14.8	9.8	12.3	15.0	9.4	12.9
FEBRUARY			MARCH			APRIL			MAY			
1	15.2	13.5	14.2	13.1	10.1	11.2	13.1	10.5	11.5	10.6	8.7	9.6
2	14.8	13.5	14.0	13.6	9.6	11.2	13.7	10.5	11.6	11.9	10.5	11.5
3	13.8	13.6	13.7	13.0	9.2	10.7	14.7	9.8	12.0	13.4	11.3	12.3
4	14.1	13.1	13.6	11.2	10.1	10.7	15.0	9.8	12.0	14.2	10.7	12.5
5	13.4	12.9	13.2	10.9	9.0	9.9	16.5	10.7	13.2	13.5	9.2	11.6
6	13.2	12.5	12.7	11.2	9.6	10.2	17.1	10.4	13.6	13.3	8.7	10.8
7	13.4	12.6	13.1	12.7	9.9	11.0	16.0	9.3	12.2	12.4	8.5	10.2
8	13.9	13.0	13.4	13.3	10.2	11.5	14.1	8.6	10.7	12.8	7.8	10.1
9	13.9	12.6	13.3	13.6	10.4	11.7	14.0	8.4	10.9	12.3	7.7	9.6
10	13.6	12.4	12.8	14.3	10.7	12.2	14.4	8.7	11.0	---	---	---
11	13.9	12.4	13.1	14.1	10.6	11.9	14.0	8.3	10.4	---	---	---
12	13.6	12.3	12.8	14.8	10.7	12.5	12.3	8.9	10.7	---	---	---
13	14.3	12.3	13.3	15.0	11.0	12.7	13.3	11.0	12.1	---	---	---
14	14.9	13.0	13.9	14.3	10.5	11.9	13.2	10.6	12.2	---	---	---
15	14.9	13.0	13.8	14.8	10.1	12.3	13.0	8.9	11.3	---	---	---
16	15.4	13.4	14.3	13.0	9.9	11.3	13.6	9.1	11.2	---	---	---
17	15.4	13.4	14.3	14.4	11.0	12.5	14.9	8.8	11.2	12.9	8.3	10.6
18	15.5	13.2	14.2	15.0	10.8	12.4	14.2	7.7	10.7	12.4	7.4	9.8
19	15.4	12.4	13.8	15.3	10.5	12.4	12.6	7.6	9.7	10.8	7.1	9.7
20	14.1	11.7	12.5	14.2	9.7	11.4	12.5	8.1	10.0	10.3	8.5	9.6
21	14.4	11.6	12.7	13.9	9.6	11.6	11.3	8.3	9.5	10.2	7.5	8.9
22	16.0	12.0	13.6	15.6	11.5	13.2	11.6	9.0	10.0	9.6	6.4	8.1
23	16.2	11.8	13.5	15.8	11.2	13.2	12.1	9.4	10.5	9.4	6.1	7.7
24	15.1	11.3	12.8	14.8	9.8	12.1	13.7	9.1	11.2	9.8	5.9	7.5
25	15.6	11.3	13.2	13.6	9.0	11.0	11.0	8.6	9.4	9.8	5.9	7.5
26	16.0	11.7	13.4	12.6	8.4	10	12.5	8.6	10.0	8.6	5.9	7.3
27	15.5	11.7	13.2	12.0	8.1	9.4	13.0	8.6	10.7	10.1	8.3	9.5
28	15.3	11.4	13.0	12.3	7.8	9.6	13.6	9.0	11.2	9.9	9.0	9.6
29	15.1	10.8	12.7	9.9	7.6	8.7	12.8	7.9	10.4	10.1	8.7	9.5
30	---	---	---	11.1	9.6	10.4	10.2	8.2	9.0	9.7	8.7	9.1
31	---	---	---	11.7	9.6	10.7	---	---	---	9.7	8.5	9.1
MONTH	16.2	10.8	13.4	15.8	7.6	11.3	17.1	7.6	11.0	14.2	5.9	9.7

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	6.6	0.4	1.8	110	97	100	20	1.0	4.9
2	---	---	---	3.2	0.3	1.3	100	93	98	>1,000	20	390
3	---	---	---	7.0	1.0	2.6	95	91	92	>1,000	31	140
4	---	---	---	5.0	2.0	3.1	140	90	94	>1,000	88	620
5	---	---	---	8.0	3.0	3.4	120	97	100	>1,000	84	240
6	---	---	---	11	2.0	4.7	110	100	110	130	45	72
7	---	---	---	5.0	3.0	3.2	110	100	100	120	53	92
8	---	---	---	8.0	3.0	4.2	100	93	97	100	82	93
9	5.0	0.0	1.7	6.0	3.0	3.9	170	94	130	120	43	78
10	6.0	0.0	0.2	6.0	3.0	4.0	900	130	250	45	38	41
11	3.0	0.0	0.0	15	4.0	5.5	390	78	140	40	35	37
12	4.0	0.0	0.2	>1,000	9.0	380	92	63	70	37	34	36
13	0.0	0.0	0.0	870	96	230	68	62	64	72	27	34
14	65	0.0	13	98	60	78	69	63	65	94	34	53
15	63	28	43	95	52	66	120	63	66	74	37	47
16	29	8.0	18	69	49	54	480	65	130	61	37	53
17	11	3.0	6.4	320	47	73	250	110	170	94	20	48
18	4.0	2.0	2.8	840	37	180	110	61	92	---	---	---
19	4.0	1.0	2.3	410	110	190	74	1.0	25	---	---	---
20	7.0	2.0	2.8	140	77	97	6.0	0.0	1.7	---	---	---
21	6.0	2.0	3.3	93	66	72	7.0	0.0	0.6	---	---	---
22	6.0	2.0	3.6	91	64	70	6.0	0.0	0.7	---	---	---
23	5.0	2.0	3.3	160	57	82	350	0.0	73	---	---	---
24	5.0	2.0	3.1	180	55	110	270	26	100	---	---	---
25	7.0	2.0	3.3	300	62	87	26	6.0	14	---	---	---
26	26	3.0	9.5	63	46	54	11	2.0	4.0	---	---	---
27	16	4.7	8.4	>1,000	46	260	11	0.0	1.5	---	---	---
28	16	3.4	5.2	980	160	260	2.0	0.0	0.4	---	---	---
29	6.3	2.2	3.5	280	130	180	>1,000	0.0	42	---	---	---
30	5.1	1.1	2.4	130	110	120	810	38	160	---	---	---
31	2.8	0.7	1.5	---	---	---	38	6.0	17	---	---	---
MONTH	65	0.0	6.0	1,000	0.3	89	1,000	0.0	78	1,000	1.0	120
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	91	51	68	1,500	88	220
2	---	---	---	---	---	---	---	---	---	1,200	160	440
3	990	77	260	---	---	---	---	---	---	160	71	100
4	79	27	47	>1,000	99	360	---	---	---	140	60	82
5	830	28	180	170	69	88	31	5.0	20	---	---	---
6	440	81	170	320	79	120	17	4.6	5.9	---	---	---
7	81	25	45	360	64	92	17	6.1	7.7	---	---	---
8	---	---	---	120	42	57	34	7.4	9.4	---	---	---
9	---	---	---	45	39	41	69	8.0	9.9	---	---	---
10	---	---	---	47	21	36	12	9.0	10	---	---	---
11	---	---	---	37	35	36	19	11	12	---	---	---
12	---	---	---	38	21	36	180	12	56	---	---	---
13	---	---	---	39	22	36	1,300	48	400	---	---	---
14	---	---	---	38	36	37	520	100	210	---	---	---
15	---	---	---	39	37	38	---	---	---	---	---	---
16	---	---	---	62	39	49	---	---	---	---	---	---
17	---	---	---	58	47	52	---	---	---	---	---	---
18	---	---	---	55	43	47	---	---	---	---	---	---
19	---	---	---	50	38	44	---	---	---	---	---	---
20	---	---	---	76	35	39	---	---	---	---	---	---
21	---	---	---	88	38	42	---	---	---	---	---	---
22	---	---	---	42	24	38	---	---	---	---	---	---
23	---	---	---	41	24	38	---	---	---	---	---	---
24	---	---	---	47	38	40	---	---	---	---	---	---
25	---	---	---	48	38	40	---	---	---	---	---	---
26	---	---	---	56	40	43	---	---	---	1,300	72	320
27	---	---	---	54	38	44	---	---	---	2,500	200	540
28	---	---	---	51	41	45	---	---	---	2,400	110	390
29	---	---	---	170	44	64	---	---	---	150	62	86
30	---	---	---	230	75	120	---	---	---	160	55	78
31	---	---	---	94	61	74	---	---	---	1,400	100	400
MONTH	990	25	140	1,000	21	64	1,300	4.6	74	2,500	55	270

03277130 MUD LICK CREEK AT HIGHWAY 42 NEAR BEAVERLICK, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	120	50	70	---	---	---	190	43	78	16	3.0	5.0
2	64	38	49	---	---	---	58	24	37	16	3.0	5.4
3	---	---	---	---	---	---	35	14	24	950	5.0	210
4	---	---	---	---	---	---	2,400	19	350	120	15	49
5	41	16	22	---	---	---	570	60	220	26	10	14
6	39	13	18	---	---	---	66	28	41	22	9.0	12
7	26	11	15	---	---	---	48	20	26	21	8.0	10
8	31	9.0	15	---	---	---	26	15	20	26	7.0	10
9	28	10	14	---	---	---	37	11	15	28	7.0	11
10	26	8.0	13	---	---	---	37	8.0	12	20	7.0	9.3
11	49	12	16	---	---	---	12	4.0	7.5	22	5.0	8.4
12	220	16	69	---	---	---	16	4.0	6.2	23	4.0	7.5
13	190	30	87	---	---	---	27	1.0	6.1	21	4.0	8.5
14	57	15	27	110	60	73	6.0	1.0	2.4	25	5.0	8.1
15	49	9.0	16	67	29	46	5.0	1.0	3.0	23	4.0	8.0
16	33	8.0	14	36	11	23	7.0	1.0	3.6	24	5.0	8.4
17	28	9.0	16	120	14	48	9.0	2.0	3.4	73	4.0	23
18	96	16	49	85	49	61	8.0	2.0	3.5	56	12	21
19	99	58	85	120	51	84	8.0	3.0	3.8	16	6.0	9.0
20	99	6.0	37	52	17	32	25	4.0	7.6	22	4.0	6.3
21	---	---	---	24	17	19	8.0	4.0	5.8	9.0	3.0	4.4
22	---	---	---	1,500	420	720	7.0	3.0	4.9	7.0	1.0	3.4
23	---	---	---	620	140	320	9.0	3.0	3.9	10	1.0	3.3
24	---	---	---	250	54	88	9.0	3.0	4.0	7.0	1.0	2.8
25	---	---	---	73	30	45	12	3.0	4.8	9.0	2.0	3.2
26	---	---	---	180	26	45	14	3.0	5.8	7.0	0.0	1.9
27	---	---	---	66	25	37	11	3.0	5.9	8.0	0.0	1.9
28	---	---	---	78	20	29	14	4.0	6.0	8.0	1.0	2.5
29	---	---	---	130	14	23	10	4.0	5.3	8.0	1.0	2.4
30	---	---	---	2,400	12	320	15	3.0	4.9	7.0	0.0	2.1
31	---	---	---	2,500	54	740	16	3.0	6.1	---	---	---
MONTH	220	6.0	35	2,500	11	150	2,400	1.0	30	950	0.0	16
YEAR	2,500	0.0	72									

> Actual value is known to be greater than the value shown

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03277200 OHIO RIVER AT MARKLAND DAM NEAR 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.--Water-stage recorder with telemetry in tailwater gage. 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. Records of Markland Dam gate operations, headwater gage readings, and turbine flow are furnished by U.S. Army Corps of Engineers.

REMARKS.--Records good except for estimated period and 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 of locks, dams, and reservoirs upstream from station.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132,000	103,000	280,000	173,000	54,600	88,700	200,000	160,000	447,000	48,300	96,300	48,900
2	117,000	94,500	266,000	209,000	70,100	93,400	223,000	171,000	440,000	50,900	93,800	42,700
3	90,000	75,700	241,000	247,000	87,200	102,000	272,000	171,000	426,000	42,500	108,000	40,300
4	82,100	66,400	205,000	375,000	157,000	144,000	311,000	137,000	379,000	32,500	102,000	29,400
5	65,100	67,900	175,000	492,000	203,000	196,000	314,000	137,000	191,000	43,900	93,000	28,900
6	63,700	89,400	162,000	507,000	281,000	242,000	283,000	139,000	166,000	36,700	82,200	32,100
7	73,100	121,000	153,000	508,000	395,000	324,000	238,000	126,000	175,000	44,900	72,100	33,400
8	70,400	137,000	155,000	509,000	431,000	420,000	202,000	102,000	164,000	39,000	62,200	21,200
9	55,500	140,000	153,000	507,000	461,000	441,000	168,000	82,300	120,000	35,700	42,200	126,000
10	40,100	113,000	133,000	491,000	479,000	438,000	149,000	76,400	95,100	35,000	27,700	244,000
11	48,800	85,400	136,000	381,000	469,000	408,000	136,000	66,700	70,800	32,700	32,700	309,000
12	38,800	121,000	161,000	335,000	416,000	279,000	129,000	65,500	103,000	38,600	32,200	322,000
13	39,400	212,000	215,000	e303,000	253,000	227,000	128,000	80,200	162,000	31,800	30,900	314,000
14	36,500	308,000	248,000	e254,000	199,000	189,000	232,000	86,500	187,000	44,000	28,900	253,000
15	51,000	329,000	246,000	e220,000	164,000	166,000	367,000	85,500	202,000	66,500	23,100	153,000
16	93,900	310,000	223,000	e196,000	138,000	143,000	424,000	75,000	212,000	39,700	27,100	119,000
17	103,000	231,000	221,000	e169,000	117,000	123,000	452,000	74,000	217,000	41,400	24,000	112,000
18	92,600	172,000	234,000	e152,000	93,300	115,000	453,000	74,600	224,000	44,200	25,100	221,000
19	102,000	150,000	233,000	e146,000	85,200	133,000	428,000	102,000	198,000	38,200	19,800	338,000
20	88,300	221,000	224,000	e159,000	81,400	136,000	377,000	149,000	194,000	39,600	21,200	422,000
21	79,100	285,000	195,000	e176,000	83,700	143,000	218,000	184,000	190,000	46,800	54,200	448,000
22	64,900	430,000	168,000	e172,000	112,000	165,000	181,000	199,000	166,000	63,800	98,300	461,000
23	62,000	452,000	149,000	e141,000	126,000	190,000	185,000	209,000	133,000	49,500	131,000	451,000
24	55,900	452,000	156,000	e122,000	137,000	210,000	174,000	254,000	101,000	45,600	133,000	412,000
25	49,200	424,000	175,000	e106,000	136,000	205,000	178,000	283,000	98,800	38,700	74,700	242,000
26	45,000	293,000	207,000	e88,600	133,000	182,000	179,000	272,000	91,300	38,200	46,600	167,000
27	56,500	231,000	236,000	e63,700	122,000	157,000	158,000	253,000	82,400	49,700	41,000	123,000
28	83,500	231,000	242,000	84,100	107,000	141,000	157,000	365,000	86,300	96,800	44,200	102,000
29	94,900	261,000	213,000	93,900	91,500	137,000	184,000	392,000	86,400	111,000	35,100	86,900
30	100,000	275,000	199,000	84,400	---	151,000	187,000	422,000	58,200	99,400	77,500	103,000
31	107,000	---	187,000	70,500	---	189,000	---	443,000	---	133,000	61,200	---
TOTAL	2,281,300	6,481,300	6,191,000	7,535,200	5,683,000	6,278,100	7,287,000	5,436,700	5,466,300	1,598,600	1,841,300	5,805,800
MEAN	73,590	216,000	199,700	243,100	196,000	202,500	242,900	175,400	182,200	51,570	59,400	193,500
MAX	132,000	452,000	280,000	509,000	479,000	441,000	453,000	443,000	447,000	133,000	133,000	461,000
MIN	36,500	66,400	133,000	63,700	54,600	88,700	128,000	65,500	58,200	31,800	19,800	21,200

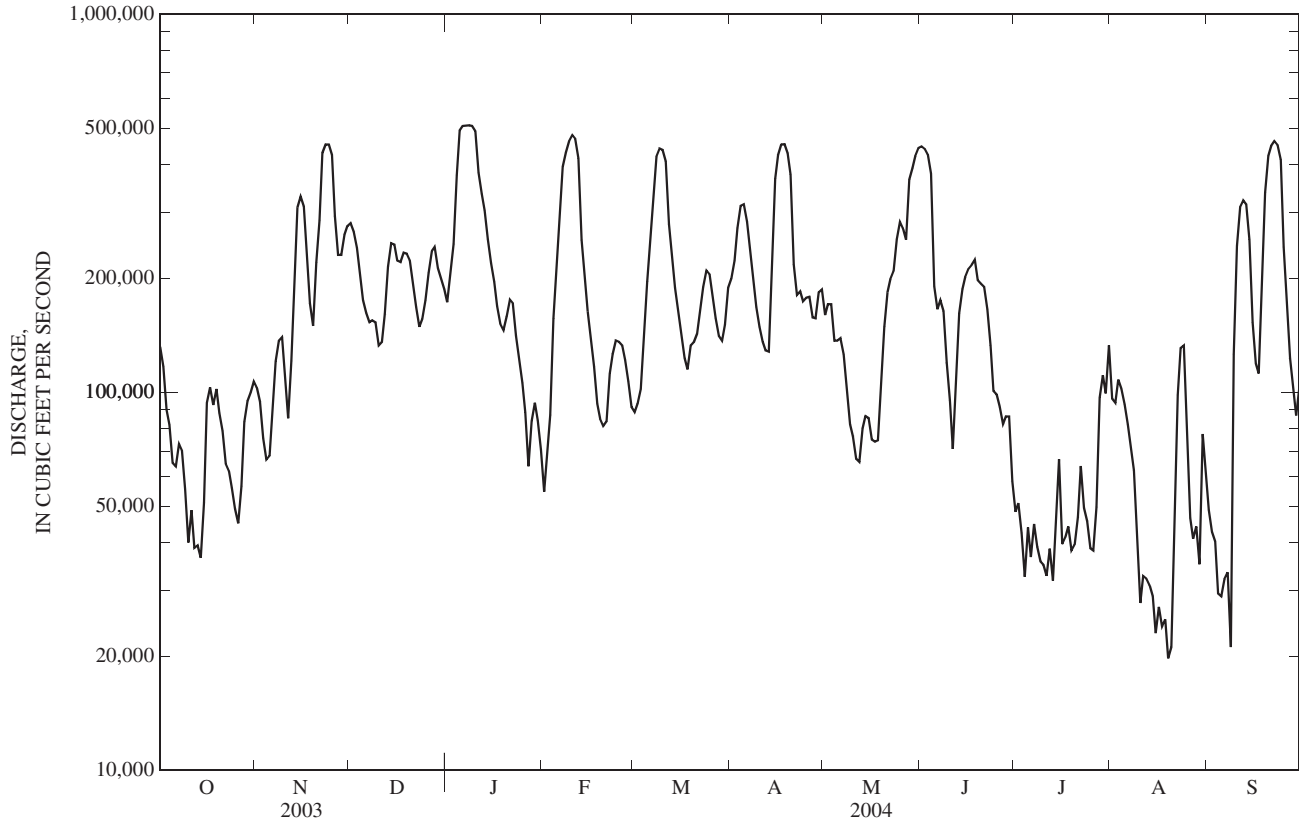
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

	MEAN	47,120	85,460	138,200	146,300	175,900	206,900	180,000	142,800	95,710	58,960	45,650	44,820
MAX	144,100	230,600	288,700	289,900	291,200	338,500	292,200	370,100	219,100	109,500	146,200	193,500	
(WY)	(1980)	(1986)	(1973)	(1974)	(1975)	(1997)	(1972)	(1996)	(1981)	(1972)	(1980)	(2004)	
MIN	13,910	16,810	29,220	34,060	77,100	98,440	61,160	43,510	15,030	13,890	13,060	9,033	
(WY)	(1992)	(1999)	(1999)	(1977)	(1992)	(1990)	(1986)	(1976)	(1999)	(1999)	(1988)	(1999)	

03277200 OHIO RIVER AT MARKLAND DAM NEAR WARSAW, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	57,066,300		61,885,600		113,900	
ANNUAL MEAN	156,300		169,100		169,100	
HIGHEST ANNUAL MEAN					60,450	
LOWEST ANNUAL MEAN					579,000	
HIGHEST DAILY MEAN	453,000	Feb 27	509,000	Jan 8	579,000	Mar 6, 1997
LOWEST DAILY MEAN	26,100	Jan 28	19,800	Aug 19	3,210	Sep 3, 2002
ANNUAL SEVEN-DAY MINIMUM	35,000	Jan 24	24,200	Aug 14	7,310	Jul 1, 1988
MAXIMUM PEAK FLOW			510,000	Jan 8	582,000	Mar 6, 1997
MAXIMUM PEAK STAGE			48.01	Jan 8	60.72	Mar 6, 1997
10 PERCENT EXCEEDS	272,000		380,000		260,000	
50 PERCENT EXCEEDS	137,000		138,000		80,700	
90 PERCENT EXCEEDS	49,200		41,300		20,300	

e Estimated



03277300 NORTH FORK KENTUCKY RIVER AT WHITESBURG, KY

LOCATION.--Lat 37°07'03", long 82°49'29", Letcher County, Hydrologic Unit 05100201, on downstream side of bridge on State Highway 15 at Whitesburg, 0.6 mile downstream from Solomon Branch, and at mile 405.4

DRAINAGE AREA.--66.4 mi².

PERIOD OF RECORD.--October 1952 to September 1954 and October 1957 to September 1975 (crest-stage partial-record), October 1987 to September 1998 (gage heights only), October 1998 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 1,127.924 ft above NGVD of 1929. Prior to October 1, 1998, crest-stage gage and recording gage at same site and datum 1.0 ft higher.

REMARKS.--Records fair. Small diversions by City of Whitesburg waterworks.

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	1645	*2,600	*8.14	May 30	1915	1,940	6.78
Mar 6	0700	2,130	7.20	May 31	0945	1,690	6.22

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

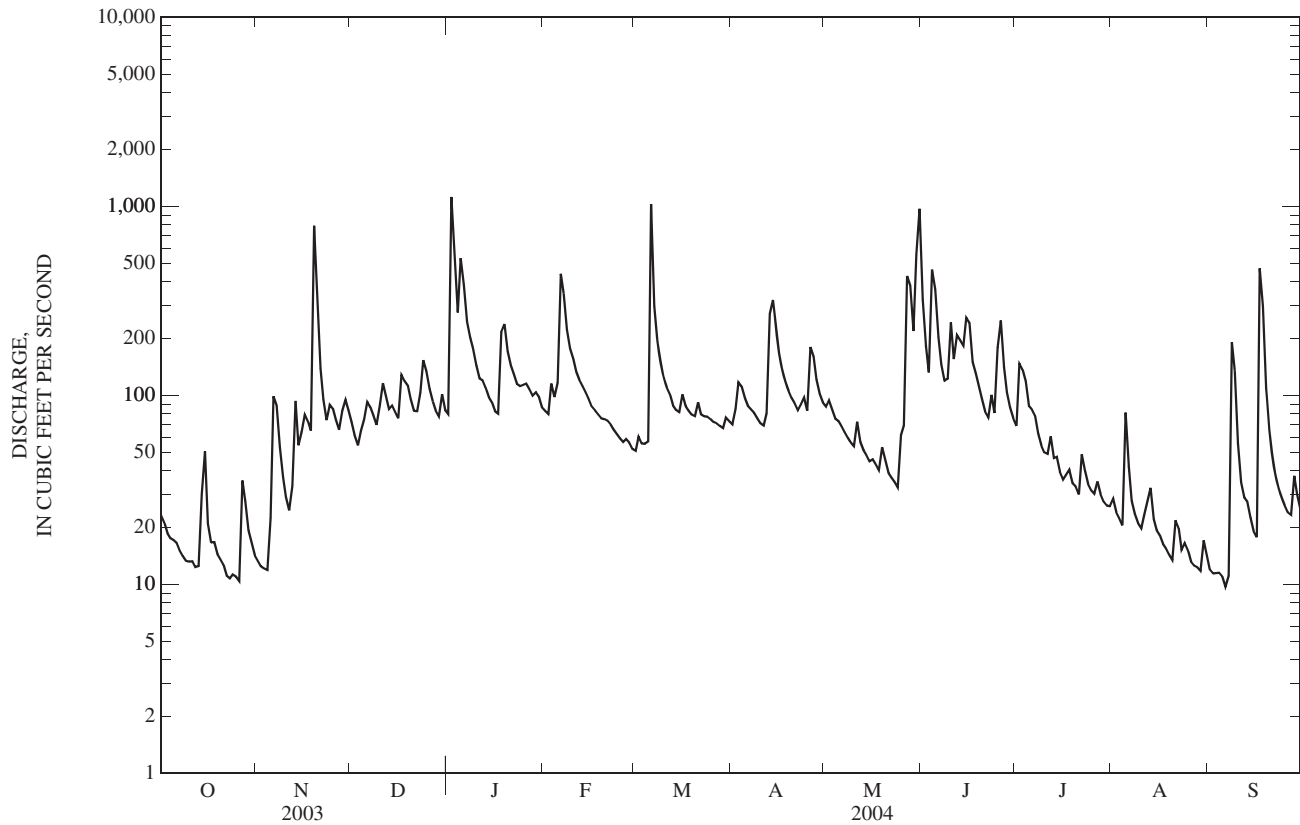
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	13	72	80	83	51	70	87	320	69	28	12
2	21	12	61	1,120	80	61	85	94	183	148	24	11
3	19	12	54	511	115	56	117	84	132	137	22	11
4	18	12	64	275	98	56	111	75	462	119	21	12
5	17	22	74	531	116	57	97	73	365	88	81	11
6	17	99	93	383	438	1,030	88	69	204	85	42	9.7
7	15	88	86	244	345	298	84	64	146	78	28	11
8	14	53	78	202	223	191	81	60	119	62	23	191
9	13	37	70	176	176	150	76	56	122	54	21	135
10	13	29	88	144	156	124	71	54	243	50	20	56
11	13	25	116	123	134	110	69	73	156	49	23	35
12	12	33	100	120	121	101	80	57	209	61	27	29
13	13	93	84	110	112	88	270	51	196	47	32	27
14	30	54	88	98	104	84	320	48	184	47	22	23
15	50	64	82	92	96	81	223	45	258	39	19	19
16	21	79	76	82	87	101	167	46	242	36	18	18
17	17	73	128	80	83	88	136	43	150	38	16	470
18	17	65	119	216	79	83	118	40	130	40	15	296
19	14	786	113	238	76	79	105	53	113	34	14	110
20	14	289	95	170	75	77	97	45	96	33	13	66
21	13	139	83	143	73	92	91	39	82	30	22	49
22	11	95	83	130	70	79	84	37	77	49	20	38
23	11	74	104	115	66	78	90	35	101	40	15	32
24	11	89	153	112	63	77	97	33	81	34	17	29
25	11	85	134	114	59	75	83	62	179	31	15	26
26	10	74	108	115	57	72	180	69	249	30	13	24
27	35	66	93	108	59	71	160	427	141	35	13	23
28	28	83	83	100	56	69	121	380	104	30	12	38
29	19	94	78	104	52	67	102	219	86	27	12	30
30	17	84	101	99	---	76	92	557	76	26	17	25
31	14	---	83	87	---	73	---	967	---	26	14	---
TOTAL	551	2,821	2,844	6,222	3,352	3,795	3,565	4,042	5,206	1,672	679	1,866.7
MEAN	17.8	94.0	91.7	201	116	122	119	130	174	53.9	21.9	62.2
MAX	50	786	153	1,120	438	1,030	320	967	462	148	81	470
MIN	10	12	54	80	52	51	69	33	76	26	12	9.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	12.7	30.9	45.5	97.3	116	112	136	94.4	73.6	56.9	28.5	27.6
MAX	17.8	94.0	91.7	201	275	164	270	134	174	126	61.4	62.2
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2003)	(2004)	(2000)	(2003)	(2004)
MIN	9.08	9.90	13.6	24.6	56.8	45.5	80.2	52.9	17.6	13.4	7.66	5.47
(WY)	(2000)	(2002)	(2000)	(2000)	(2000)	(2000)	(2001)	(1999)	(1999)	(1999)	(1999)	(1999)

03277300 NORTH FORK KENTUCKY RIVER AT WHITESBURG, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	39,213		36,615.7		68.9	
ANNUAL MEAN	107		100		101	
HIGHEST ANNUAL MEAN					45.8	
LOWEST ANNUAL MEAN					1,960	
HIGHEST DAILY MEAN	1,960	Feb 16	1,120	Jan 2	1,960	Feb 16, 2003
LOWEST DAILY MEAN	10	Oct 26	9.7	Sep 6	1.9	Oct 8, 1999
ANNUAL SEVEN-DAY MINIMUM	12	Oct 20	11	Sep 1	3.8	Sep 13, 1999
MAXIMUM PEAK FLOW			2,600		7,730	
MAXIMUM PEAK STAGE			8.14		14.90	
10 PERCENT EXCEEDS	200		192		134	
50 PERCENT EXCEEDS	70		76		38	
90 PERCENT EXCEEDS	20		15		8.6	



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 with telemetry. Datum of gage is 697.67 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Aug. 22, 1980.

REMARKS.--Records good. Small diversions by City of Jackson waterworks. Flow regulated by Carr Fork Lake (station 03277446) beginning January 1976.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

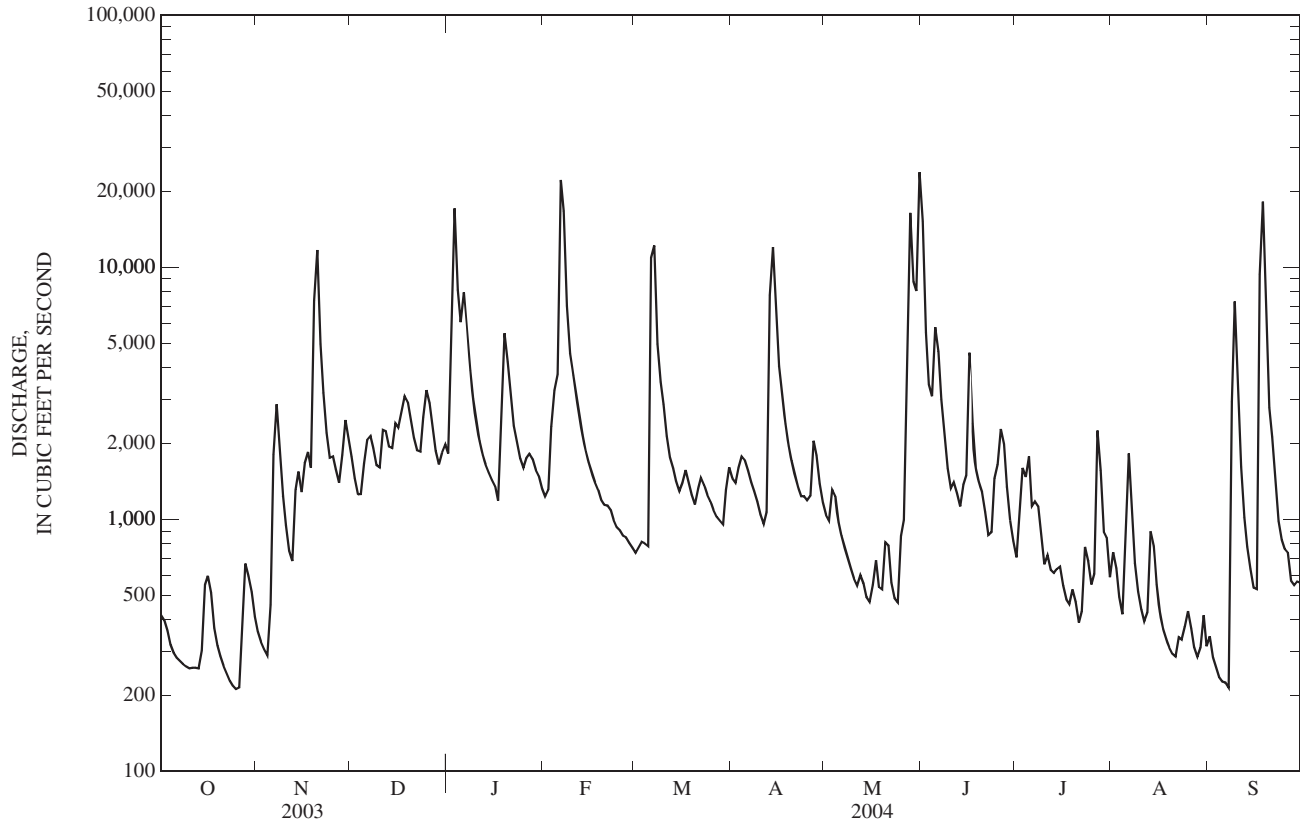
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	359	1,770	1,820	1,230	737	1,460	1,040	15,200	707	740	344
2	398	327	1,460	7,160	1,310	772	1,400	989	5,510	1,010	640	284
3	362	306	1,260	17,100	2,330	815	1,600	1,310	3,420	1,600	492	258
4	320	289	1,260	8,150	3,260	803	1,770	1,240	3,080	1,470	421	237
5	296	458	1,660	6,070	3,770	784	1,720	977	5,780	1,780	783	227
6	283	1,810	2,070	7,960	22,200	10,900	1,560	861	4,630	1,120	1,830	226
7	275	2,860	2,140	5,580	16,700	12,200	1,400	779	3,000	1,180	1,190	215
8	267	1,890	1,910	3,900	7,020	4,970	1,290	703	2,150	1,130	671	2,930
9	261	1,240	1,640	3,020	4,550	3,510	1,180	634	1,590	861	518	7,310
10	257	947	1,610	2,480	3,730	2,860	1,040	583	1,330	664	440	3,290
11	258	750	2,260	2,040	3,180	2,140	957	546	1,400	719	394	1,610
12	258	683	2,240	1,800	2,620	1,760	1,070	601	1,270	632	428	1,020
13	257	1,310	1,940	1,650	2,170	1,590	7,760	557	1,130	613	897	779
14	302	1,550	1,920	1,530	1,860	1,420	12,000	493	1,370	636	783	638
15	550	1,280	2,410	1,440	1,680	1,290	6,240	471	1,500	651	551	535
16	597	1,680	2,320	1,350	1,540	1,400	4,060	550	4,580	546	430	528
17	513	1,850	2,670	1,190	1,400	1,560	3,060	688	2,400	481	368	9,380
18	371	1,600	3,090	2,320	1,310	1,410	2,390	540	1,590	462	335	18,200
19	316	7,370	2,920	5,480	1,200	1,250	1,960	529	1,410	526	311	6,160
20	287	11,700	2,510	4,220	1,140	1,150	1,710	811	1,290	470	293	2,780
21	263	4,950	2,100	3,040	1,130	1,320	1,520	788	1,070	389	286	2,120
22	245	3,190	1,880	2,350	1,090	1,460	1,350	561	868	432	340	1,470
23	229	2,210	1,860	2,020	996	1,370	1,240	486	890	777	334	983
24	219	1,760	2,540	1,750	932	1,250	1,240	468	1,450	682	376	829
25	212	1,780	3,260	1,600	904	1,180	1,190	860	1,650	552	433	764
26	215	1,580	2,890	1,740	860	1,090	1,240	996	2,280	607	369	736
27	386	1,400	2,260	1,820	847	1,030	2,050	6,220	1,990	2,250	311	572
28	668	1,800	1,870	1,740	806	988	1,800	16,400	1,350	1,570	285	549
29	595	2,480	1,650	1,570	772	953	1,390	8,770	994	893	310	567
30	517	2,110	1,840	1,490	---	1,310	1,170	8,050	822	847	417	560
31	410	---	1,980	1,330	---	1,610	---	23,800	---	590	314	---
TOTAL	10,804	63,519	65,190	106,710	92,537	66,882	69,817	82,301	76,994	26,847	16,290	66,101
MEAN	349	2,117	2,103	3,442	3,191	2,157	2,327	2,655	2,566	866	525	2,203
MAX	668	11,700	3,260	17,100	22,200	12,200	12,000	23,800	15,200	2,250	1,830	18,200
MIN	212	289	1,260	1,190	772	737	957	468	822	389	285	215
CFSM	0.32	1.92	1.91	3.13	2.90	1.96	2.11	2.41	2.33	0.79	0.48	2.00
IN.	0.37	2.15	2.20	3.61	3.13	2.26	2.36	2.78	2.60	0.91	0.55	2.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	466	876	1,535	1,958	2,627	2,601	2,368	1,882	1,136	547	438	375
MAX	4,189	3,019	4,649	5,168	6,392	7,268	5,944	7,189	4,166	1,484	945	2,203
(WY)	(1990)	(1986)	(1992)	(1979)	(1994)	(1994)	(1998)	(1984)	(1989)	(2000)	(1977)	(2004)
MIN	92.8	152	196	155	790	541	452	526	136	90.2	85.6	37.5
(WY)	(1981)	(1982)	(1981)	(1981)	(1988)	(1988)	(1986)	(2001)	(1988)	(1988)	(1988)	(1999)

03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	772,885		743,992		1,394	
ANNUAL MEAN	2,117		2,033		477	
HIGHEST ANNUAL MEAN					2,570	
LOWEST ANNUAL MEAN					1994	
HIGHEST DAILY MEAN	29,700	Feb 17	23,800	May 31	52,200	May 8, 1984
LOWEST DAILY MEAN	212	Oct 25	212	Oct 25	21	Sep 20, 1999
ANNUAL SEVEN-DAY MINIMUM	239	Oct 20	239	Oct 20	26	Sep 17, 1999
MAXIMUM PEAK FLOW			26,100	May 31	53,500	Jan 30, 1957
MAXIMUM PEAK STAGE			32.04	May 31	43.10	Feb 4, 1939
INSTANTANEOUS LOW FLOW					0.00	Oct 16, 1930
ANNUAL RUNOFF (CFSM)	1.92		1.85		1.27	
ANNUAL RUNOFF (INCHES)	26.11		25.14		17.20	
10 PERCENT EXCEEDS	4,270		3,950		3,130	
50 PERCENT EXCEEDS	1,220		1,260		658	
90 PERCENT EXCEEDS	318		335		131	



03280700 CUTSHIN CREEK AT WOOTON, KY

LOCATION.--Lat 37°09'54", long 83°18'29", Leslie County, Hydrologic Unit 05100202, on right bank 30 ft upstream from bridge on State Highway 80, 400 ft upstream from Poundmill Branch, 600 ft upstream from Rockhouse Branch, 0.7 mi downstream from Saw Branch, 1.0 mi southwest of Wooton, and at mile 10.7.

DRAINAGE AREA.--61.3 mi².

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 869.84 ft above NGVD of 1929. Prior to Dec. 26, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1957 reached a stage of 19.43 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 19	0700	2,480	6.82	May 27	0630	*8,040	*13.65
Jan 2	unknown	3,200	7.86	May 30	2200	2,520	6.88
Feb 6	unknown	unknown	unknown	May 31	0815	2,340	6.59
Mar 6	unknown	5,440	10.91	Sep 8	1900	unknown	5.96
Apr 13	unknown	unknown	unknown	Sep 17	1530	6,950	12.64
May 26	2100	1,680	5.51				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	72	97	87	27	73	58	541	114	55	e15
2	11	10	55	e1,400	77	43	70	97	215	86	27	e13
3	8.8	9.7	49	659	218	38	84	80	182	56	19	e11
4	8.6	9.9	55	330	203	39	77	63	169	45	15	e40
5	8.6	58	64	678	253	55	72	56	437	41	200	e20
6	7.8	267	86	537	e1,640	2,290	66	50	233	50	97	e14
7	7.3	157	79	305	693	456	59	42	147	56	41	e10
8	6.3	62	72	213	305	223	59	36	151	33	27	e900
9	6.2	39	62	171	201	146	e50	33	150	25	19	e400
10	6.9	29	99	128	150	102	44	30	95	20	15	e180
11	6.3	25	147	104	115	80	43	30	87	21	14	e130
12	5.7	33	117	97	94	67	131	26	66	50	40	e110
13	5.8	73	94	89	77	58	e1,100	25	53	31	44	e92
14	15	44	121	82	67	54	e635	23	48	374	20	e80
15	35	78	125	81	62	50	342	23	99	78	14	71
16	12	115	117	70	53	63	206	29	80	39	12	66
17	8.8	101	286	68	50	54	136	24	49	46	9.3	3,020
18	8.1	79	221	405	45	49	98	20	44	55	7.9	840
19	7.1	1,420	180	414	44	45	77	25	40	28	7.1	279
20	6.6	457	131	236	44	47	67	28	36	21	7.4	150
21	6.8	175	104	167	45	71	62	19	30	17	20	97
22	8.5	100	107	134	38	62	54	20	31	36	22	71
23	8.3	67	154	107	34	59	57	34	84	42	9.7	55
24	8.2	85	387	100	34	56	55	23	48	20	62	45
25	7.6	80	270	100	32	52	51	73	55	21	37	37
26	9.7	70	167	100	31	48	219	683	97	24	e22	30
27	39	58	119	101	32	46	189	2,990	54	78	e13	28
28	26	87	93	90	29	44	114	842	41	31	e8.4	26
29	17	101	77	86	27	43	80	398	36	21	e9.4	25
30	14	89	137	88	---	79	65	628	55	17	e42	21
31	12	---	111	79	---	74	---	1,850	---	56	e23	---
TOTAL	352.0	3,989.6	3,958	7,316	4,780	4,620	4,435	8,358	3,453	1,632	959.2	6,876
MEAN	11.4	133	128	236	165	149	148	270	115	52.6	30.9	229
MAX	39	1,420	387	1,400	1,640	2,290	1,100	2,990	541	374	200	3,020
MIN	5.7	9.7	49	68	27	27	43	19	30	17	7.1	10
CFSM	0.19	2.17	2.08	3.85	2.69	2.43	2.41	4.40	1.88	0.86	0.50	3.74
IN.	0.21	2.42	2.40	4.44	2.90	2.80	2.69	5.07	2.10	0.99	0.58	4.17

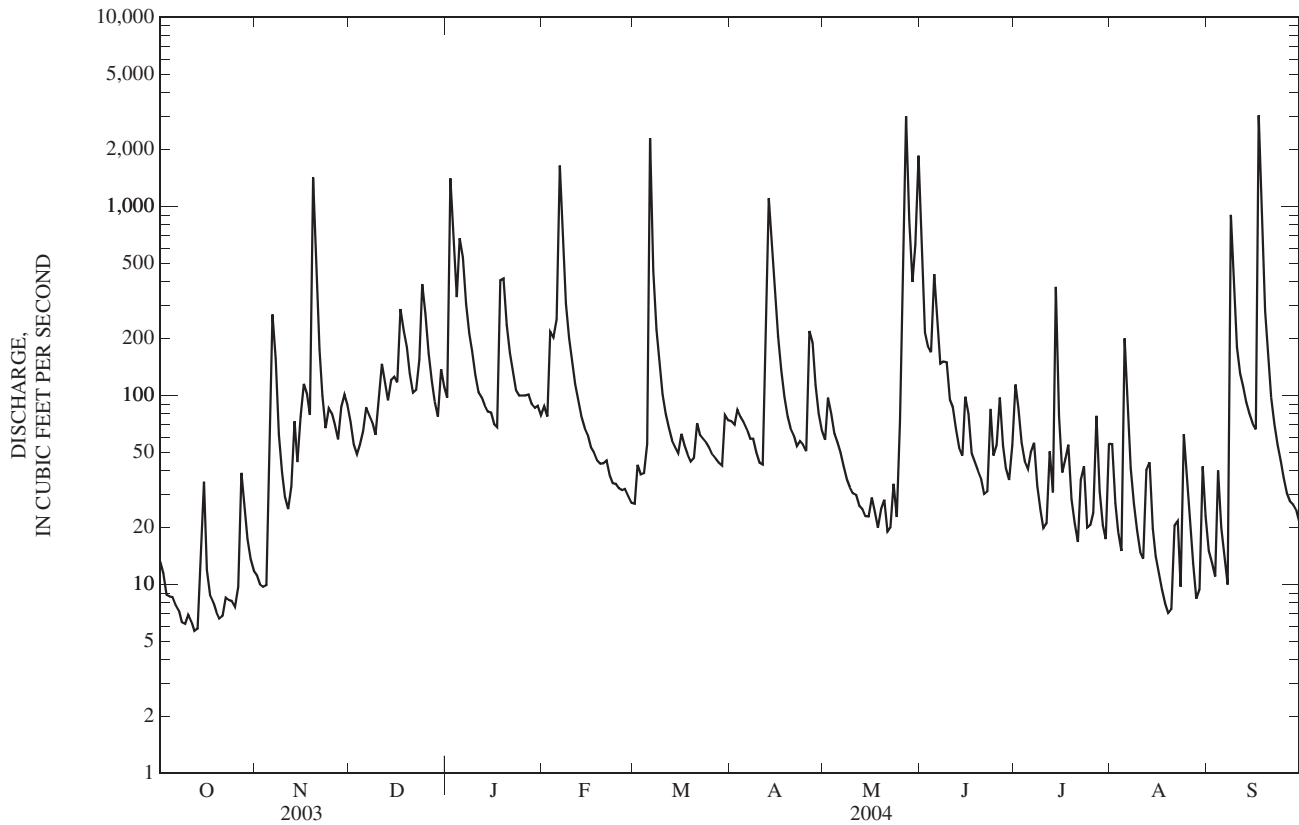
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

	MEAN	25.0	59.8	105	145	171	196	166	116	59.4	32.5	24.0	21.9
MAX	287	309	359	597	425	620	471	449	423	144	107	229	
(WY)	(1990)	(1978)	(1973)	(1974)	(2003)	(1975)	(1998)	(1983)	(1989)	(1958)	(1966)	(2004)	
MIN	0.26	5.05	3.30	6.97	27.0	21.4	16.6	14.0	3.17	2.17	1.16	0.73	
(WY)	(1964)	(2001)	(1966)	(1981)	(1968)	(1988)	(1963)	(1964)	(1988)	(1970)	(1988)	(1969)	

03280700 CUTSHIN CREEK AT WOOTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004	
ANNUAL TOTAL	50,530.5		50,728.8		93.1	
ANNUAL MEAN	138		139		212	
HIGHEST ANNUAL MEAN					27.6	
LOWEST ANNUAL MEAN					4,890	
HIGHEST DAILY MEAN	4,410	Feb 16	3,020	Sep 17	May 7, 1984	
LOWEST DAILY MEAN	4.9	Sep 19	5.7	Oct 12	0.00	Sep 29, 1959
ANNUAL SEVEN-DAY MINIMUM	6.4	Oct 7	6.4	Oct 7	0.01	Sep 11, 1964
MAXIMUM PEAK FLOW			8,040	May 27	14,200	Mar 12, 1963
MAXIMUM PEAK STAGE			13.65	May 27	16.23	Mar 12, 1963
INSTANTANEOUS LOW FLOW					0.00	Sep 29, 1959
ANNUAL RUNOFF (CFSM)	2.26		2.26		1.52	
ANNUAL RUNOFF (INCHES)	30.66		30.78		20.63	
10 PERCENT EXCEEDS	261		257		201	
50 PERCENT EXCEEDS	60		56		33	
90 PERCENT EXCEEDS	8.6		12		3.0	

e Estimated



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 with telemetry. Datum of gage is 642.13 ft above NGVD of 1929. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800).

COOPERATION.--U.S.Army Corps of Engineers, Louisville District, and Kentucky River Authority.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	393	1,180	1,220	605	273	507	593	5,690	250	243	228
2	207	385	945	3,420	554	341	485	659	4,700	409	297	227
3	197	379	656	4,930	977	388	765	863	3,850	511	275	230
4	171	376	750	4,110	1,410	424	779	756	4,910	431	263	140
5	117	768	836	4,310	2,350	438	752	596	3,990	424	232	48
6	112	890	992	4,190	8,030	3,480	633	541	4,230	426	601	47
7	108	1,520	1,010	3,540	6,230	3,180	575	526	4,210	515	714	108
8	106	1,920	956	3,150	3,550	4,010	560	455	4,080	572	540	1,820
9	105	986	895	3,000	2,900	3,990	541	326	3,960	457	340	3,060
10	104	896	829	3,330	3,070	3,840	524	298	3,850	276	166	3,860
11	103	518	941	3,190	3,300	3,620	407	222	3,760	238	80	3,780
12	103	620	1,200	3,010	3,940	2,940	373	178	3,880	202	118	2,160
13	102	1,030	1,050	2,690	3,880	2,160	1,660	211	3,770	180	321	956
14	111	1,410	1,020	1,350	3,950	1,430	4,060	210	3,010	246	418	711
15	262	1,110	1,140	901	3,820	715	4,610	210	836	681	291	403
16	307	1,450	1,230	576	3,820	704	3,790	231	620	366	168	685
17	329	1,610	1,370	549	3,730	849	1,970	387	1,030	315	110	4,940
18	521	1,550	1,680	1,090	2,210	648	1,340	299	493	173	107	6,670
19	560	2,600	2,090	2,050	523	710	1,270	230	399	120	99	3,560
20	449	4,040	1,720	2,540	654	561	1,020	e250	352	141	60	3,970
21	389	3,920	1,170	3,010	562	612	552	262	242	165	53	3,990
22	332	4,160	1,100	1,900	481	744	451	257	123	209	54	3,860
23	298	3,950	883	1,010	492	735	436	214	103	297	61	3,760
24	236	3,220	1,290	906	415	660	438	164	484	261	126	3,650
25	205	1,710	1,790	709	400	624	323	328	780	169	244	3,510
26	153	1,130	2,370	822	362	611	433	394	976	342	245	2,330
27	164	740	1,690	771	382	525	344	2,950	532	1,920	233	1,620
28	263	1,390	1,200	831	383	484	613	5,180	606	1,190	205	1,110
29	337	1,700	1,060	736	302	531	701	4,320	394	505	153	735
30	665	1,350	1,180	729	---	637	561	5,050	249	382	123	401
31	438	---	1,100	736	---	579	---	9,250	---	234	159	---
TOTAL	7,821	47,721	37,323	65,306	63,282	41,443	31,473	36,410	66,109	12,607	7,099	62,569
MEAN	252	1,591	1,204	2,107	2,182	1,337	1,049	1,175	2,204	407	229	2,086
MAX	665	4,160	2,370	4,930	8,030	4,010	4,610	9,250	5,690	1,920	714	6,670
MIN	102	376	656	549	302	273	323	164	103	120	53	47
CFSM	0.47	2.96	2.24	3.92	4.06	2.49	1.95	2.19	4.10	0.76	0.43	3.88
IN.	0.54	3.31	2.59	4.52	4.38	2.87	2.18	2.52	4.58	0.87	0.49	4.33

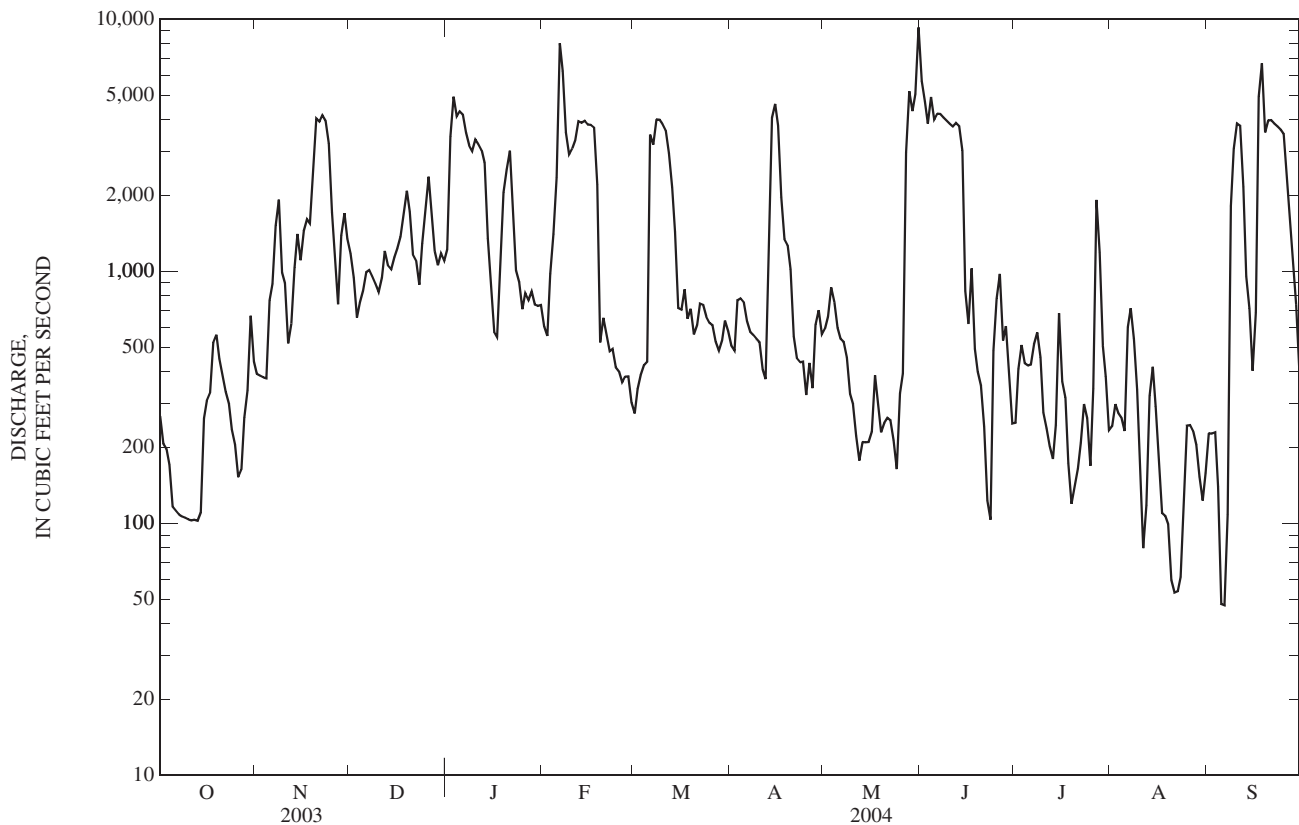
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

	303	580	921	1,289	1,484	1,668	1,200	944	538	232	181	217
MEAN	2,225	1,715	2,826	3,320	3,634	3,672	3,280	2,762	2,599	687	623	2,086
(WY)	(1990)	(1978)	(1973)	(1974)	(1994)	(1994)	(1994)	(1971)	(1989)	(1992)	(1992)	(2004)
MIN	47.5	23.8	45.5	56.8	270	241	98.7	57.9	49.1	43.6	33.9	45.9
(WY)	(1989)	(2002)	(1966)	(1981)	(1968)	(1988)	(1986)	(1986)	(1988)	(1988)	(2002)	(1987)

03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	467,990		479,163		793	
ANNUAL MEAN	1,282		1,309		1,492	
HIGHEST ANNUAL MEAN					267	
LOWEST ANNUAL MEAN					10,300	
HIGHEST DAILY MEAN	9,100	Feb 17	9,250	May 31	10,300	Feb 27, 1962
LOWEST DAILY MEAN	41	Aug 29	47	Sep 6	3.7	Nov 15, 2001
ANNUAL SEVEN-DAY MINIMUM	78	Aug 23	78	Aug 17	4.4	Nov 10, 2001
MAXIMUM PEAK FLOW			10,200	May 31	52,700	Jan 30, 1957
MAXIMUM PEAK STAGE			26.05	May 31	43.33	Jan 30, 1957
INSTANTANEOUS LOW FLOW					0.10	Oct 12, 1953
ANNUAL RUNOFF (CFSM)	2.39		2.44		1.48	
ANNUAL RUNOFF (INCHES)	32.42		33.19		20.07	
10 PERCENT EXCEEDS	4,020		3,850		2,560	
50 PERCENT EXCEEDS	655		635		304	
90 PERCENT EXCEEDS	149		167		63	

e Estimated



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 with telemetry and crest-stage gages. Datum of gage is 819.37 ft above NGVD of 1929. Prior to September 15, 1975, nonrecording gage at same site and datum.

REMARKS.--Records good except for those estimated, which are poor. Slight diversions by City of Manchester.

COOPERATION.--Kentucky River Authority.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	2200	5,960	20.61	May 27	1000	6,030	20.73
Feb 6	1300	*9,380	*25.84	Sep 17	1900	5,650	20.09
Mar 6	1400	5,690	20.16				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

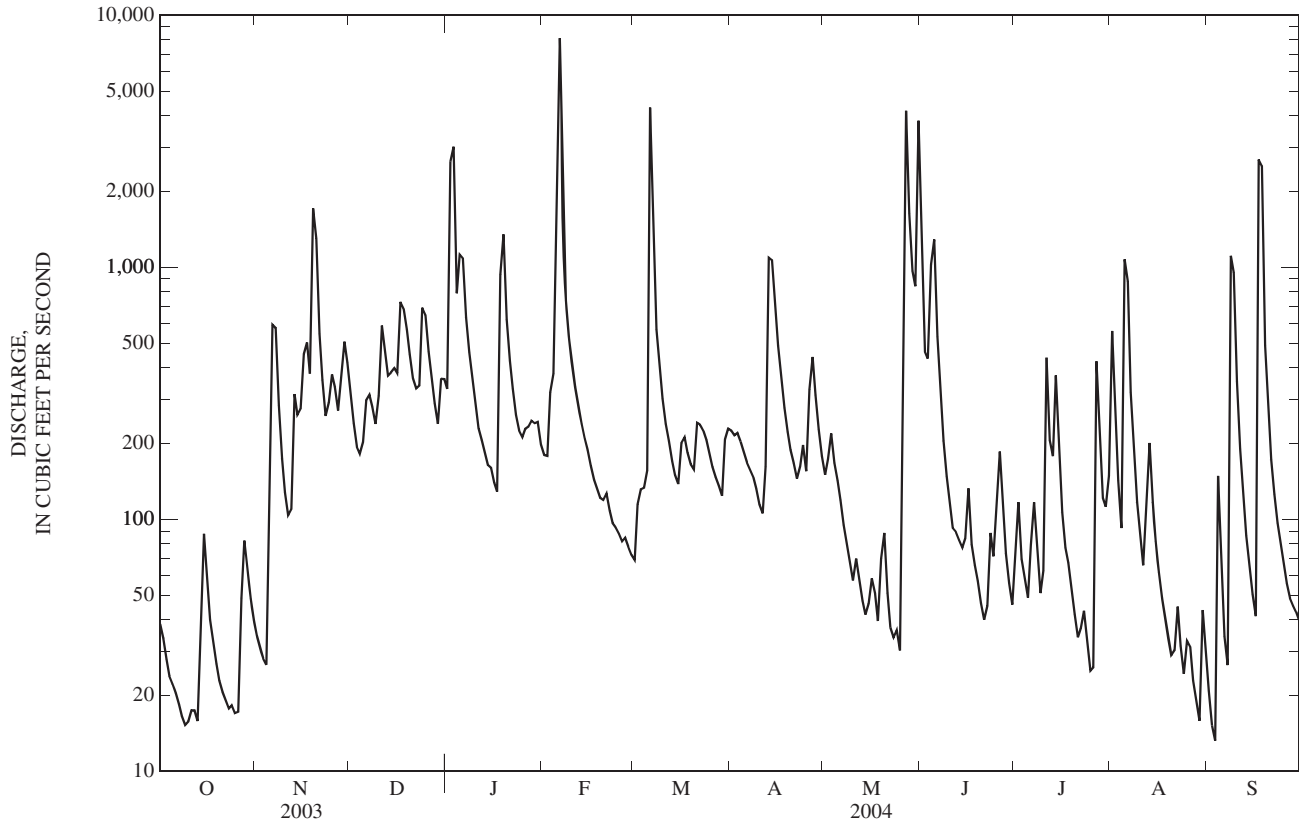
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	35	324	329	180	69	225	151	1,250	73	558	21
2	34	31	241	2,630	179	115	215	174	463	117	252	15
3	28	28	194	3,010	320	132	220	219	435	70	142	13
4	24	27	182	788	379	134	203	168	1,030	59	92	148
5	22	73	202	1,120	1,740	156	185	143	1,290	49	1,070	62
6	20	593	297	1,090	8,110	4,300	168	119	530	79	879	34
7	18	575	311	633	2,680	1,220	157	95	316	117	319	26
8	17	283	279	460	738	566	148	79	206	78	180	1,110
9	15	175	239	377	518	401	132	67	148	51	117	954
10	16	128	309	293	416	302	114	57	116	63	85	352
11	17	104	586	230	336	239	106	70	92	438	66	190
12	17	110	479	206	283	204	162	58	89	206	111	124
13	16	314	372	185	239	171	1,090	47	83	178	201	86
14	44	260	383	165	208	150	1,070	42	77	372	117	65
15	88	275	398	160	188	138	693	46	84	186	82	50
16	59	453	381	140	163	201	489	58	133	107	62	41
17	40	503	728	129	144	211	362	51	79	77	49	2,680
18	33	379	685	933	132	184	277	40	66	67	40	2,520
19	27	1,710	567	1,350	122	165	222	70	57	54	34	490
20	23	1,300	451	620	119	158	188	88	47	42	29	265
21	21	545	363	426	126	241	167	51	40	34	30	173
22	19	358	331	330	108	238	145	37	45	37	45	126
23	18	257	340	259	97	225	162	34	88	43	32	97
24	18	291	692	225	93	206	198	36	71	32	24	78
25	17	376	648	212	88	182	155	30	112	25	33	66
26	17	335	463	228	82	161	328	386	185	26	31	56
27	49	271	358	233	85	147	441	4,180	111	424	23	49
28	82	367	288	246	78	136	311	1,630	73	246	19	45
29	62	507	239	241	72	124	227	968	56	121	16	43
30	49	419	361	243	---	207	178	841	46	112	44	39
31	40	---	361	198	---	229	---	3,810	---	149	31	---
TOTAL	988	11,082	12,052	17,689	18,023	11,312	8,738	13,845	7,418	3,732	4,813	10,018
MEAN	31.9	369	389	571	621	365	291	447	247	120	155	334
MAX	88	1,710	728	3,010	8,110	4,300	1,090	4,180	1,290	438	1,070	2,680
MIN	15	27	182	129	72	69	106	30	40	25	16	13
CFSM	0.20	2.27	2.39	3.50	3.81	2.24	1.79	2.74	1.52	0.74	0.95	2.05
IN.	0.23	2.53	2.75	4.04	4.11	2.58	1.99	3.16	1.69	0.85	1.10	2.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	76.9	188	353	438	493	514	432	298	164	92.5	53.2	52.0
MAX	600	646	1,229	1,205	1,196	1,665	1,308	1,158	975	381	178	334
(WY)	(1990)	(1978)	(1991)	(1974)	(1972)	(1975)	(1998)	(1984)	(1989)	(1965)	(1977)	(2004)
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)

03281100 GOOSE CREEK AT MANCHESTER, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	133,403.5		119,710		262	
ANNUAL MEAN	365		327		456	
HIGHEST ANNUAL MEAN					107	
LOWEST ANNUAL MEAN					13,700	
HIGHEST DAILY MEAN	9,680	Feb 16	8,110	Feb 6	13,700	May 7, 1984
LOWEST DAILY MEAN	9.5	Aug 28	13	Sep 3	0.00	Oct 8, 1980
ANNUAL SEVEN-DAY MINIMUM	13	Aug 23	17	Oct 7	0.16	Oct 4, 1980
MAXIMUM PEAK FLOW			9,380	Feb 6	19,200	May 7, 1984
MAXIMUM PEAK STAGE			25.84	Feb 6	32.85	May 7, 1984
INSTANTANEOUS LOW FLOW					0.00	Oct 8, 1980
ANNUAL RUNOFF (CFSM)	2.24		2.01		1.61	
ANNUAL RUNOFF (INCHES)	30.45		27.32		21.82	
10 PERCENT EXCEEDS	656		638		559	
50 PERCENT EXCEEDS	153		158		89	
90 PERCENT EXCEEDS	24		31		6.2	



03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY

LOCATION.--Lat 37°28'47", long 83°40'31", Owsley County, Hydrologic Unit 05100203, on right bank 100 ft downstream from Buck Creek, 350 ft downstream from bridge on State Highway 30 at Booneville, 0.3 mi downstream from Meadow Creek, and at mile 11.7.

DRAINAGE AREA.--722 mi².

PERIOD OF RECORD.--March 1925 to September 1931, October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1305.

REVISED RECORDS.--WSP 893: 1929(M). WSP 1335: WSP 1555: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 642.49 ft above NGVD of 1929. See WDR KY-92-1 for history of changes prior to Nov. 27, 1929. Nov. 28, 1929 to July 26, 2000, recording gage 500 ft downstream at present site and datum.

REMARKS.--Records good except for those estimated, which are poor. Diversions by City of Booneville.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 3	1100	19,500	28.64	May 28	0400	21,400	30.13
Feb 7	0300	*29,500	*35.66	May 31	2200	18,800	28.09
Mar 7	0200	16,600	26.15	Sep 18	0700	19,700	28.79

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	250	2,000	1,700	929	352	e1,400	691	12,900	340	880	201
2	215	217	1,530	6,910	956	400	e1,350	763	3,970	2,750	1,200	161
3	193	194	1,240	17,800	1,420	523	e1,500	1,040	1,930	1,870	704	138
4	167	178	1,150	7,180	2,000	537	e1,640	881	5,290	898	487	147
5	148	566	1,210	5,220	3,510	550	e1,500	743	7,510	855	773	205
6	136	2,050	1,430	6,520	23,100	10,300	e1,000	661	3,750	959	3,770	239
7	127	3,160	1,610	4,030	26,400	12,100	771	575	1,970	1,570	1,750	169
8	117	1,930	1,520	2,660	7,850	3,730	730	470	1,320	1,170	912	3,700
9	110	1,230	1,350	2,080	3,120	2,140	689	388	932	748	613	6,790
10	100	895	1,340	1,700	2,250	1,550	633	329	739	581	445	2,640
11	93	699	2,210	1,370	1,760	1,190	590	291	632	1,610	341	1,280
12	90	600	2,260	1,200	1,420	978	650	265	555	1,930	341	792
13	93	1,960	1,860	1,080	1,200	825	4,000	255	500	1,320	578	601
14	122	1,850	1,780	975	996	746	7,420	226	516	1,010	649	443
15	743	1,570	2,080	906	872	703	4,560	208	606	1,020	422	333
16	652	2,190	1,980	834	791	749	2,840	477	571	658	313	272
17	408	2,420	2,730	733	724	928	1,930	1,040	610	597	255	8,100
18	285	2,130	3,560	2,000	679	840	1,430	567	463	472	221	17,400
19	227	5,390	2,970	6,420	640	791	1,110	396	417	356	194	5,230
20	189	8,840	2,380	4,140	617	749	900	551	351	299	174	1,810
21	161	4,110	1,900	2,700	610	923	802	591	290	255	160	1,130
22	142	2,290	1,660	1,810	600	1,080	753	376	255	460	154	762
23	129	1,640	1,610	1,470	528	996	700	407	303	494	162	591
24	120	1,450	2,770	1,260	486	922	750	338	530	361	227	470
25	114	1,710	3,660	1,160	465	825	704	363	1,510	281	228	386
26	112	1,650	2,690	1,220	431	e768	970	542	2,090	945	176	328
27	161	1,470	2,000	1,200	410	e743	1,590	12,200	1,180	3,890	161	286
28	336	2,450	1,620	1,210	400	e726	1,340	18,300	721	2,190	149	257
29	456	3,650	1,380	1,150	374	e712	962	7,890	534	1,060	142	236
30	373	2,690	1,600	1,170	---	e1,270	776	4,570	398	820	250	218
31	301	---	1,880	1,040	---	e1,500	---	15,600	---	621	288	---
TOTAL	6,870	61,429	60,960	90,848	85,538	51,146	45,990	71,994	53,343	32,390	17,119	55,315
MEAN	222	2,048	1,966	2,931	2,950	1,650	1,533	2,322	1,778	1,045	552	1,844
MAX	743	8,840	3,660	17,800	26,400	12,100	7,420	18,300	12,900	3,890	3,770	17,400
MIN	90	178	1,150	733	374	352	590	208	255	255	142	138
CFSM	0.31	2.84	2.72	4.06	4.09	2.29	2.12	3.22	2.46	1.45	0.76	2.55
IN.	0.35	3.17	3.14	4.68	4.41	2.64	2.37	3.71	2.75	1.67	0.88	2.85

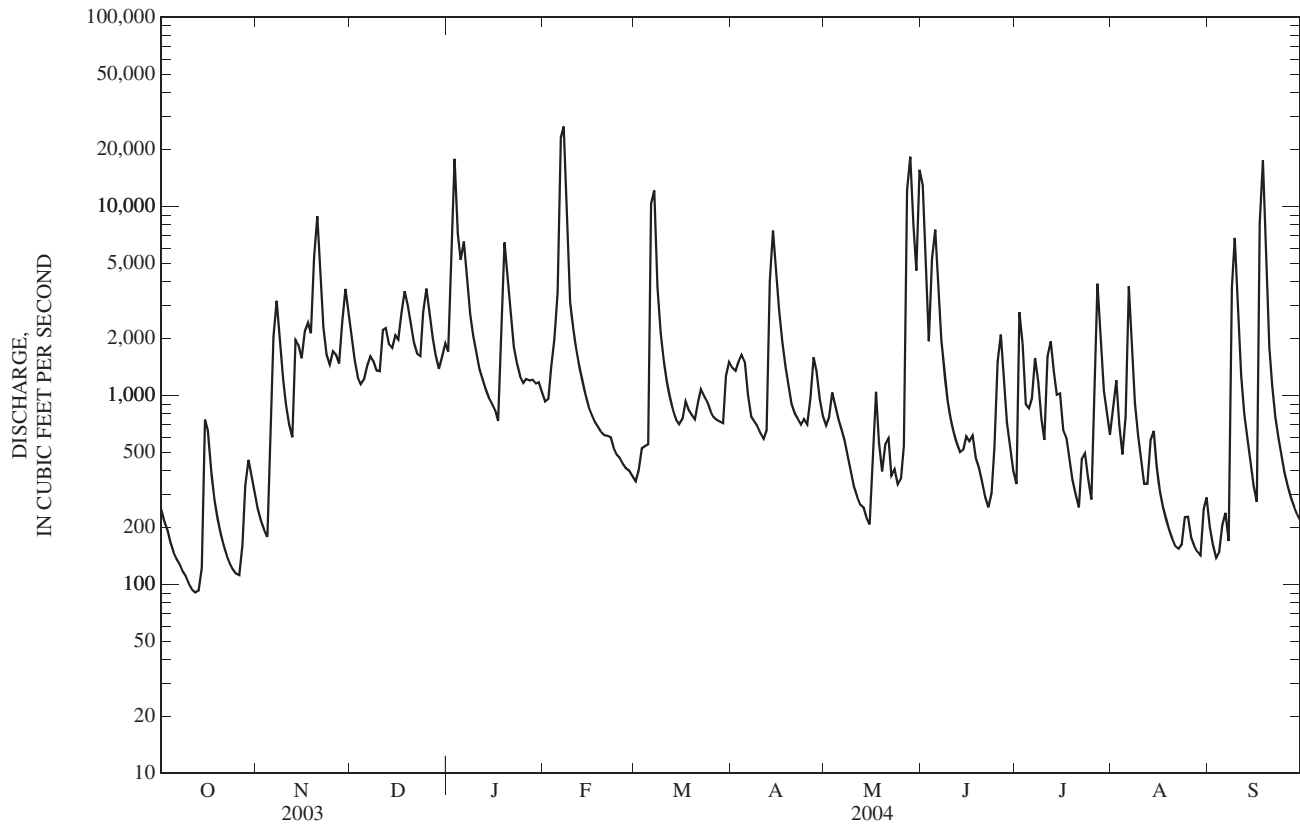
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	210	659	1,332	1,812	2,135	2,270	1,722	1,130	635	404	266	177
MAX	2,843	2,380	4,935	5,461	5,905	7,400	4,703	5,130	2,950	2,666	1,700	1,844
(WY)	(1990)	(1974)	(1991)	(1974)	(1956)	(1975)	(1998)	(1984)	(2003)	(1941)	(1942)	(2004)
MIN	0.08	0.32	12.1	104	178	568	222	119	36.7	3.67	4.56	0.68
(WY)	(1954)	(1954)	(1954)	(1981)	(1941)	(1988)	(1963)	(1941)	(1966)	(1944)	(1930)	(1930)

03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	644,412		632,942		1,061	
ANNUAL MEAN	1,766		1,729		1,808	
HIGHEST ANNUAL MEAN					413	
LOWEST ANNUAL MEAN					51,300	
HIGHEST DAILY MEAN	32,400	Feb 17	26,400	Feb 7	51,300	Jan 30, 1957
LOWEST DAILY MEAN	90	Oct 12	90	Oct 12	0.00	Oct 11, 1953
ANNUAL SEVEN-DAY MINIMUM	104	Oct 8	104	Oct 8	0.00	Oct 11, 1953
MAXIMUM PEAK FLOW			29,500	Feb 7	66,100	Jan 30, 1957
MAXIMUM PEAK STAGE			35.66	Feb 7	43.40	Jan 30, 1957
INSTANTANEOUS LOW FLOW					0.00	Oct 11, 1953
ANNUAL RUNOFF (CFSM)	2.45		2.40		1.47	
ANNUAL RUNOFF (INCHES)	33.20		32.61		19.97	
10 PERCENT EXCEEDS	3,630		3,710		2,420	
50 PERCENT EXCEEDS	820		825		361	
90 PERCENT EXCEEDS	187		204		27	

e Estimated



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.

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.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 625.77 ft NGVD of 1929, 625.70 ft Ohio River Datum, 629.00 ft Kentucky River Datum. Prior to September 2, 1939, nonrecording gage at lock 14 at same datum.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

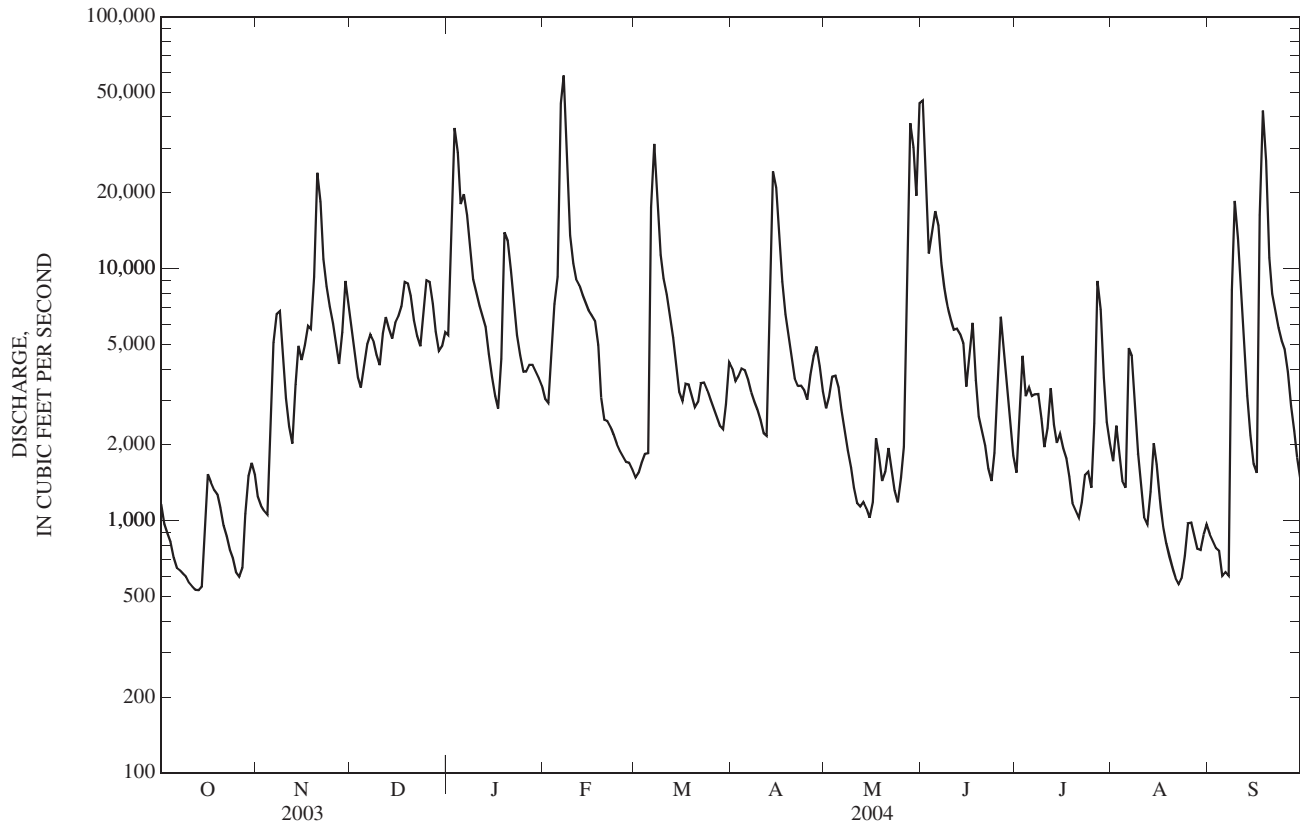
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,170	1,250	5,970	5,460	3,050	1,480	4,020	2,790	46,400	1,550	1,720	886
2	970	1,150	4,690	12,800	2,930	1,550	3,580	3,100	24,600	2,740	2,390	830
3	887	1,090	3,700	36,100	4,390	1,700	3,740	3,730	11,500	4,500	1,860	778
4	826	1,050	3,370	28,900	7,240	1,840	4,010	3,760	13,800	3,120	1,440	761
5	715	2,600	4,080	18,000	9,280	1,850	3,950	e3,370	16,900	3,370	1,350	603
6	652	5,080	5,000	19,700	45,300	17,500	3,630	e2,750	14,800	3,120	4,830	626
7	635	6,610	5,480	16,300	58,300	31,200	3,230	e2,300	10,600	3,180	4,520	603
8	618	6,790	5,190	11,700	32,400	19,100	2,980	e1,900	8,340	3,180	2,780	8,230
9	600	4,290	4,550	9,070	13,600	11,300	2,760	e1,620	7,020	2,550	1,850	18,500
10	566	3,070	4,140	8,030	10,500	9,140	2,510	e1,350	6,250	1,960	1,350	13,200
11	546	2,360	5,550	7,120	9,090	7,900	2,230	e1,180	5,740	2,330	1,030	8,030
12	533	2,020	6,420	6,440	8,610	6,530	2,170	1,140	5,780	3,350	968	5,160
13	530	3,460	5,770	5,860	7,870	5,330	7,970	1,190	5,500	2,400	1,310	3,140
14	547	4,940	5,280	4,590	7,310	4,280	24,300	1,120	5,050	2,030	2,030	2,180
15	1,020	4,340	6,110	3,720	6,830	3,240	21,000	1,030	3,410	2,210	1,680	1,680
16	1,530	4,960	6,450	3,120	6,510	2,980	13,600	1,180	4,670	1,930	1,220	1,550
17	1,420	5,940	7,090	2,780	6,190	3,500	8,920	2,120	6,090	1,770	950	16,300
18	1,320	5,770	8,840	4,380	4,970	3,470	6,600	1,820	3,610	1,500	814	42,300
19	1,270	9,250	8,740	13,900	3,090	3,140	5,370	1,440	2,580	1,180	737	26,700
20	1,130	24,000	7,790	12,900	2,520	2,810	4,500	1,570	2,280	1,100	654	11,100
21	957	18,400	6,240	9,850	2,480	2,960	3,680	1,940	1,990	1,030	594	7,950
22	868	10,900	5,410	7,270	2,350	3,510	3,420	1,610	1,610	1,180	561	6,810
23	765	8,500	4,910	5,460	2,200	3,530	3,430	1,320	1,440	1,520	591	5,800
24	711	7,070	6,710	4,540	2,020	3,300	3,310	1,180	1,860	1,570	725	5,150
25	625	6,070	8,990	3,900	1,890	3,020	3,020	1,480	3,580	1,350	976	4,780
26	601	5,080	8,840	3,910	1,800	2,810	3,800	1,970	6,440	2,430	983	3,890
27	651	4,180	7,260	4,150	1,710	2,590	4,500	13,600	4,600	8,920	876	2,860
28	1,060	5,600	5,640	4,160	1,700	2,380	4,910	37,700	3,450	6,890	775	2,270
29	1,500	8,940	4,720	3,900	1,600	2,310	4,110	30,300	2,510	3,680	764	1,780
30	1,700	7,450	4,910	3,690	---	2,900	3,260	19,500	1,810	2,470	884	1,460
31	1,520	---	5,600	3,430	---	4,260	---	45,400	---	2,020	966	---
TOTAL	28,443	182,210										

MEAN	1,256	2,624	4,659	5,796	7,419	7,440	6,281	5,012	3,011	1,303	1,036	995
MAX	10,380	7,006	14,850	14,010	17,660	18,260	15,260	16,010	10,630	3,320	3,006	6,864
(WY)	(1990)	(1978)	(1991)	(1994)	(2003)	(1994)	(1998)	(1984)	(2003)	(1992)	(1977)	(2004)
MIN	232	263	582	362	2,345	1,791	855	910	247	206	154	70.1
(WY)	(2000)	(2002)	(1981)	(1981)	(1988)	(1988)	(1986)	(1986)	(1988)	(1988)	(1988)	(1999)

03282000 KENTUCKY RIVER AT LOCK 14, AT HEIDELBERG, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	2,283,482		2,051,758		3,884	
ANNUAL MEAN	6,256		5,606		1,461	
HIGHEST ANNUAL MEAN					6,973	
LOWEST ANNUAL MEAN					1,461	
HIGHEST DAILY MEAN	74,000	Feb 17	58,300	Feb 7	85,900	May 8, 1984
LOWEST DAILY MEAN	386	Aug 29	530	Oct 13	45	Jul 10, 1988
ANNUAL SEVEN-DAY MINIMUM	492	Aug 24	563	Oct 8	51	Sep 11, 1999
MAXIMUM PEAK FLOW			60,000	Feb 7	120,000	Feb 4, 1939
MAXIMUM PEAK STAGE			23.83	Feb 7	35.60	Feb 4, 1939
INSTANTANEOUS LOW FLOW					4.0	Oct 20, 1930
10 PERCENT EXCEEDS	13,800		11,600		9,780	
50 PERCENT EXCEEDS	3,000		3,370		1,650	
90 PERCENT EXCEEDS	777		931		284	

e Estimated



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 with telemetry and crest-stage gages. Datum of gage is 704.53 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	1345	4,110	*11.14	Jun 4	1200	3,810	10.73
Feb 6	unknown	*10,100	16.18	Jul 27	0115	2,570	9.08
Mar 6	0500	3,120	9.81	Sep 8	1300	2,580	9.10
May 31	0615	3,580	10.43	Sep 17	1000	11,800	17.30

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e19	e11	e133	195	80	11	167	95	482	42	97	5.2
2	e18	e9.8	e93	2,320	75	38	124	276	310	211	59	4.0
3	e17	e9.2	e78	959	351	28	95	299	172	152	42	5.4
4	e14	e8.5	e105	425	311	22	73	203	2,610	94	34	12
5	e12	e423	e252	635	1,030	34	58	154	721	159	185	12
6	e11	e341	e266	443	3,000	1,590	48	114	e350	241	141	6.6
7	e10	e111	e205	296	749	448	42	86	e230	139	79	5.2
8	e8.2	e66	e146	230	388	259	38	64	133	120	51	1,300
9	e6.8	e44	e129	194	276	189	31	48	103	71	37	470
10	e5.4	e33	160	148	220	127	25	39	73	55	30	187
11	e5.6	e27	240	102	177	88	22	34	54	128	25	108
12	e5.4	e225	200	90	140	73	90	30	44	77	55	87
13	e5.8	e311	175	78	e102	56	922	26	38	101	78	61
14	e5.6	e103	222	66	e85	48	518	23	164	64	39	41
15	e10	e82	255	62	e76	43	322	21	445	41	29	32
16	e14	e70	234	50	e59	70	227	63	210	30	23	28
17	e13	e66	353	45	e51	68	171	56	123	51	19	5,530
18	e10	e62	311	437	e43	56	132	32	85	47	17	815
19	e8.6	e547	279	450	e40	50	106	26	59	28	15	305
20	e6.6	e392	226	270	38	47	90	30	43	21	12	180
21	e6.0	e178	191	201	37	106	80	23	33	17	13	120
22	e5.6	e111	181	165	30	89	122	19	29	140	14	84
23	e5.4	e80	220	111	24	80	124	16	32	113	12	61
24	e5.1	e86	654	94	23	73	113	15	31	47	16	46
25	e4.6	e99	392	85	21	62	110	18	452	58	21	38
26	e4.4	e89	270	117	18	53	421	34	442	590	16	33
27	e8.8	e76	211	113	16	47	306	912	186	1,360	12	29
28	e19	e272	174	90	13	42	202	820	109	307	9.5	27
29	e17	e380	139	84	12	37	148	312	72	162	7.9	24
30	e15	e207	262	85	---	213	115	379	50	101	10	22
31	e13	---	221	68	---	210	---	1,970	---	96	7.4	---
TOTAL	309.9	4,519.5	6,977	8,708	7,485	4,357	5,042	6,237	7,885	4,863	1,205.8	9,678.4
MEAN	10.0	151	225	281	258	141	168	201	263	157	38.9	323
MAX	19	547	654	2,320	3,000	1,590	922	1,970	2,610	1,360	185	5,530
MIN	4.4	8.5	78	45	12	11	22	15	29	17	7.4	4.0
CFSM	0.13	1.95	2.91	3.63	3.34	1.82	2.17	2.60	3.40	2.03	0.50	4.17
IN.	0.15	2.17	3.36	4.19	3.60	2.10	2.43	3.00	3.79	2.34	0.58	4.66

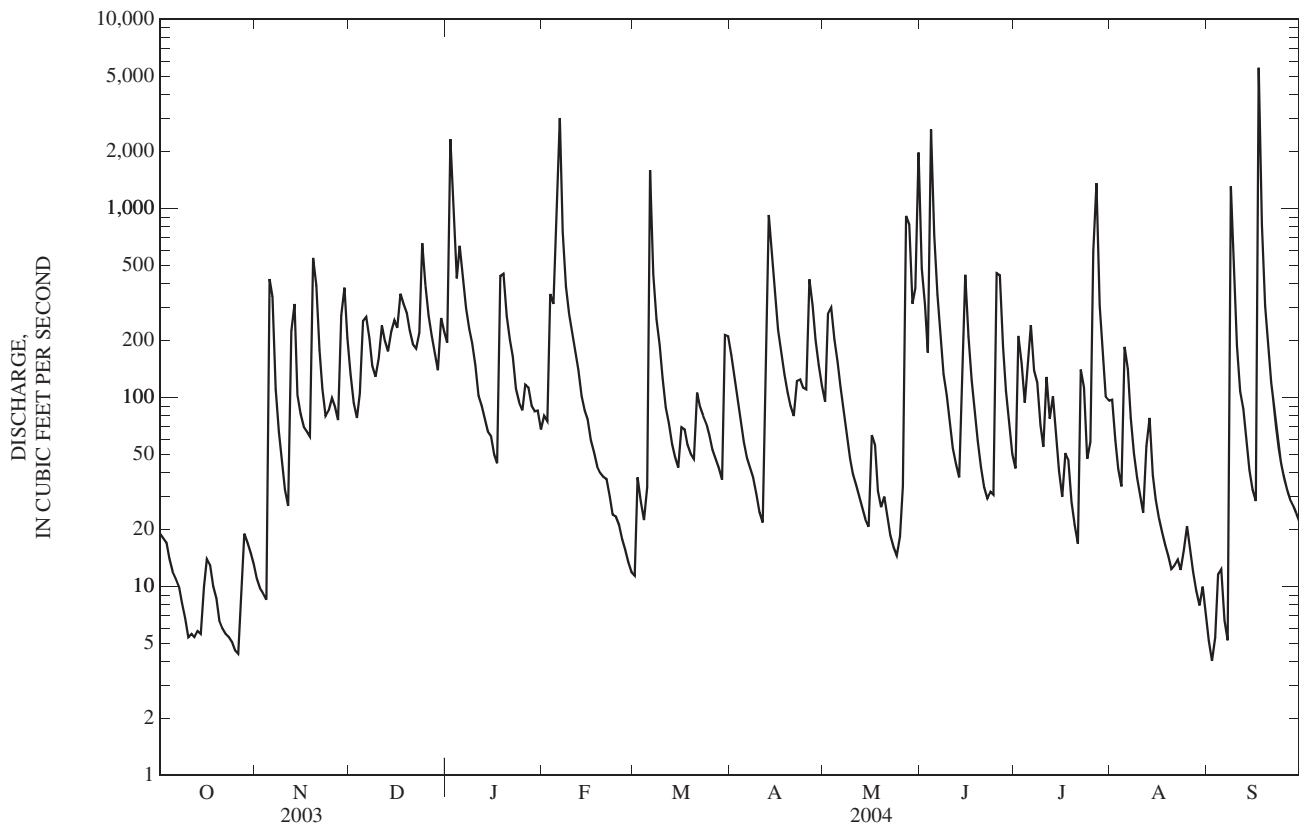
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	29.5	74.2	119	204	227	240	191	152	116	37.2	32.5	41.2
MAX	108	246	225	403	544	540	441	345	304	157	219	323
(WY)	(1997)	(1997)	(2004)	(1994)	(2003)	(1994)	(1998)	(1995)	(1997)	(2004)	(2003)	(2004)
MIN	1.22	2.70	16.8	30.3	76.4	65.8	49.6	22.4	2.20	1.22	0.11	0.30
(WY)	(2001)	(2001)	(2000)	(2000)	(2002)	(2003)	(1997)	(2001)	(1999)	(1999)	(1999)	(1999)

03282040 STURGEON CREEK AT CRESSMONT, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	62,341.5		67,267.6		121	
ANNUAL MEAN	171		184		195	1994
HIGHEST ANNUAL MEAN					53.4	2000
LOWEST ANNUAL MEAN					5,530	Sep 17, 2004
HIGHEST DAILY MEAN	5,010	Feb 16	5,530	Sep 17	5,530	Sep 17, 2004
LOWEST DAILY MEAN	1.5	Aug 29	4.0	Sep 2	0.00	Aug 18, 1999
ANNUAL SEVEN-DAY MINIMUM	4.0	Aug 24	5.4	Oct 20	0.00	Aug 18, 1999
MAXIMUM PEAK FLOW			11,800	Sep 17	11,800	Sep 17, 2004
MAXIMUM PEAK STAGE			17.30	Sep 17	17.30	Sep 17, 2004
INSTANTANEOUS LOW FLOW					0.00	Aug 18, 1999
ANNUAL RUNOFF (CFSM)	2.21		2.38		1.57	
ANNUAL RUNOFF (INCHES)	30.00		32.37		21.34	
10 PERCENT EXCEEDS	346		382		276	
50 PERCENT EXCEEDS	72		78		42	
90 PERCENT EXCEEDS	9.9		12		2.0	

e Estimated



LOCATION.--Lat 37°40'42", long 83°56'54", Estill County, Hydrologic Unit 05100205, on right upstream bank of Lock 12 at Irvine, 2.4 mi upstream from Station Camp Creek, 4.7 mi downstream from Millers Creek, and at mile 220.9.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 593.53 ft above NGVD of 1929.

REMARKS.--Water year 2001: Records fair except for periods of estimated records, which are poor. Water year 2002: Records fair except for periods of estimated records, which are poor. Water year 2003: Records fair except for periods of estimated records, which are poor. Water year 2004: Records fair except for periods of estimated records, which are fair. Flows below 150 ft³/s are considered poor. 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.

COOPERATION.--Kentucky River Authority.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	531	368	582	2,650	7,550	3,040	771	781	699	5,440	616
2	439	522	347	537	2,420	6,130	3,300	753	812	907	2,910	679
3	358	491	317	460	2,080	4,930	3,380	749	851	912	2,720	880
4	319	462	278	435	1,730	3,900	5,110	862	915	1,030	2,890	766
5	294	447	253	481	1,630	4,520	7,710	888	1,170	2,310	4,220	616
6	272	435	235	485	1,510	6,690	7,100	787	2,360	4,370	6,870	539
7	224	434	225	473	1,420	7,530	6,030	691	3,100	2,610	3,640	443
8	149	449	223	462	1,310	6,520	5,010	751	6,920	1,970	2,610	434
9	194	491	229	456	1,220	5,380	3,990	1,080	7,450	4,890	1,890	430
10	219	775	241	398	1,310	4,380	3,270	1,020	4,460	4,420	1,710	408
11	228	908	251	354	1,510	3,670	2,750	848	2,560	3,880	3,600	377
12	229	1,090	253	352	1,780	3,170	2,350	723	1,680	2,160	2,970	354
13	226	1,040	277	377	1,830	3,070	2,190	638	1,250	1,420	3,430	342
14	229	991	995	375	1,890	3,340	2,260	582	995	1,060	5,620	325
15	235	857	4,790	386	e10,300	3,350	2,270	542	825	784	4,690	310
16	235	746	5,220	419	e26,200	3,780	2,140	503	1,090	577	2,590	296
17	252	674	e25,000	427	e34,900	5,120	1,950	460	884	471	1,550	284
18	335	656	e15,900	442	e32,400	5,240	1,810	434	758	481	1,310	279
19	416	651	7,550	e2,120	e18,000	4,490	1,660	447	598	707	1,060	299
20	473	583	4,650	e23,700	10,600	3,930	1,540	635	487	954	935	321
21	430	539	3,380	e25,000	8,630	4,730	1,440	963	483	791	871	359
22	440	493	2,720	e11,400	7,890	7,040	1,360	1,400	553	750	728	366
23	495	442	2,060	e7,730	8,700	9,430	1,270	2,200	719	865	707	363
24	490	414	1,520	6,730	9,810	10,400	1,190	2,940	747	918	666	371
25	520	418	1,190	6,400	8,920	8,560	1,100	2,890	863	773	651	410
26	554	405	938	5,040	e11,100	6,280	1,040	2,030	857	1,030	715	447
27	509	379	886	3,190	e10,800	4,930	976	1,640	765	2,370	702	714
28	459	378	888	2,340	9,180	4,000	920	1,310	1,110	1,520	636	807
29	513	377	775	2,040	---	3,390	862	1,060	1,150	11,200	622	607
30	533	381	701	2,190	---	3,040	801	883	842	15,000	695	524
31	531	---	633	2,620	---	2,880	---	758	---	9,970	733	---
TOTAL	11,326	17,459	83,293	108,401	231,720	161,370	79,819	32,238	48,035	81,799	70,381	13,981
MEAN	365	582	2,687	3,497	8,276	5,205	2,661	1,040	1,601	2,639	2,270	466
MAX	554	1,090	25,000	25,000	34,900	10,400	7,710	2,940	7,450	15,000	6,870	880
MIN	149	377	223	352	1,220	2,880	801	434	483	471	622	279
MED	358	492	775	485	5,270	4,730	2,170	787	874	1,030	1,710	409
AC-FT	22,470	34,630	165,200	215,000	459,600	320,100	158,300	63,940	95,280	162,200	139,600	27,730
CFSM	0.13	0.20	0.92	1.20	2.84	1.79	0.91	0.36	0.55	0.90	0.78	0.16
IN.	0.14	0.22	1.06	1.38	2.96	2.06	1.02	0.41	0.61	1.04	0.90	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

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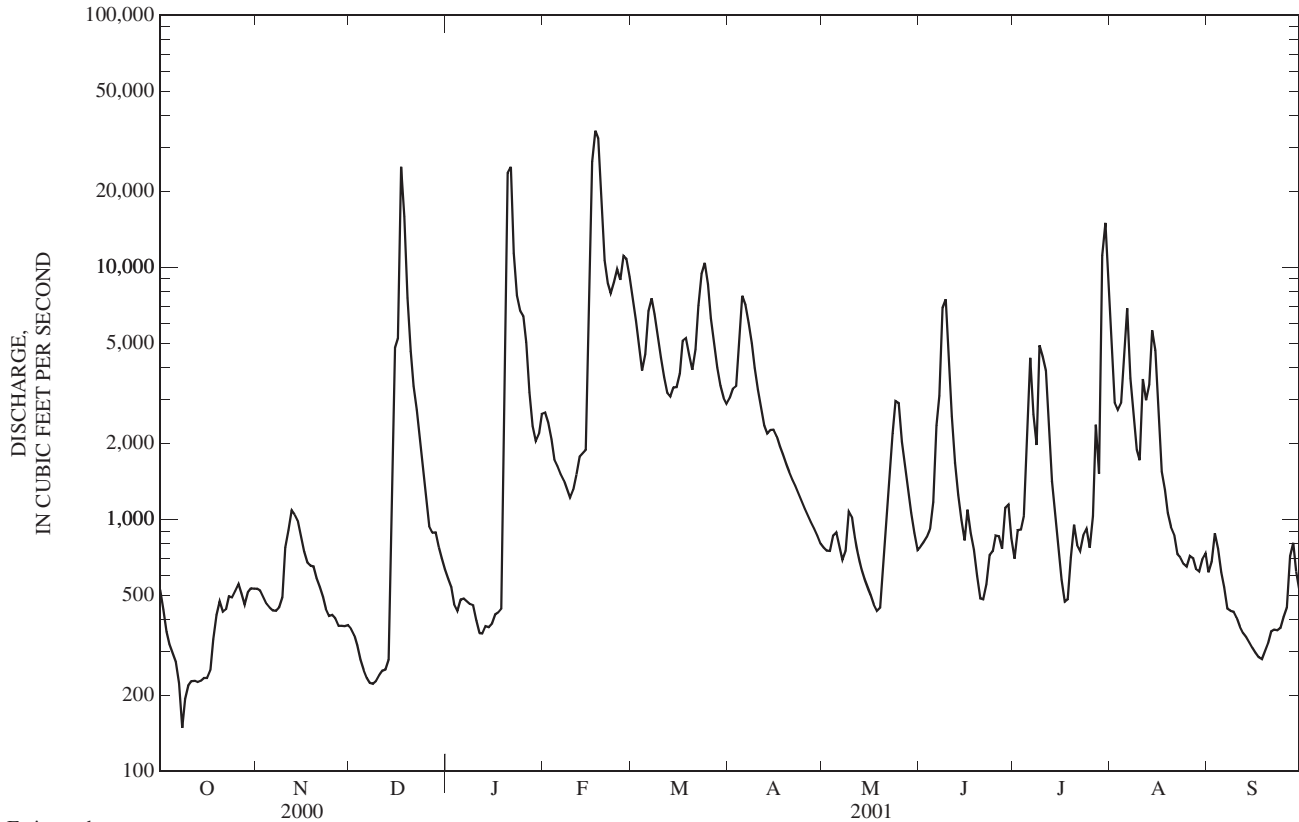
03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001

ANNUAL TOTAL	939,822			
ANNUAL MEAN	2,575		2,575	
HIGHEST ANNUAL MEAN			2,575	2001
LOWEST ANNUAL MEAN			2,575	2001
HIGHEST DAILY MEAN	34,900	Feb 17	34,900	Feb 17, 2001
LOWEST DAILY MEAN	149	Oct 8	149	Oct 8, 2000
ANNUAL SEVEN-DAY MINIMUM	210	Oct 7	210	Oct 7, 2000
MAXIMUM PEAK FLOW	38,500	Feb 17	38,500	Feb 17, 2001
MAXIMUM PEAK STAGE	25.00	Feb 17	25.00	Feb 17, 2001
ANNUAL RUNOFF (AC-FT)	1,864,000		1,865,000	
ANNUAL RUNOFF (CFSM)	0.883		0.883	
ANNUAL RUNOFF (INCHES)	11.99		12.00	
10 PERCENT EXCEEDS	6,710		6,710	
50 PERCENT EXCEEDS	907		907	
90 PERCENT EXCEEDS	353		353	



e Estimated

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

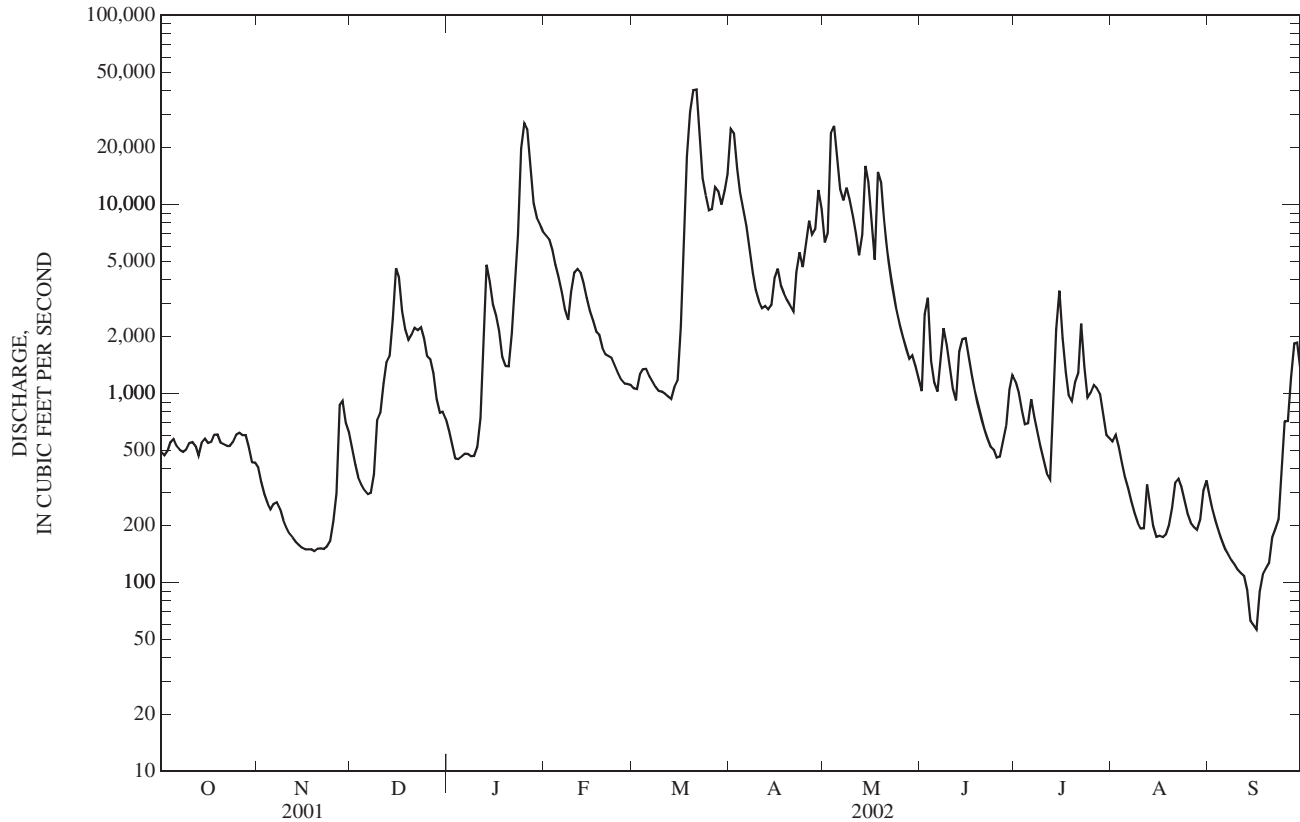
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	408	510	631	6,830	1,060	25,100	6,290	1,030	1,160	557	288
2	470	337	419	531	6,510	1,050	23,700	7,040	2,630	1,010	601	240
3	494	291	359	452	5,700	1,260	15,400	23,800	3,210	813	518	208
4	551	261	329	449	4,790	1,340	11,600	25,900	1,490	688	424	184
5	573	244	307	463	4,110	1,350	9,440	16,800	1,140	696	360	164
6	524	260	293	480	3,430	1,230	7,680	12,000	1,020	931	314	151
7	501	266	297	477	2,770	1,150	5,710	10,500	1,460	744	268	141
8	490	244	374	464	2,440	1,080	4,330	12,300	2,210	613	232	131
9	504	213	720	467	3,430	1,030	3,520	10,500	1,800	521	207	124
10	545	196	789	522	4,350	1,020	3,080	8,630	1,340	442	193	117
11	553	181	1,130	743	4,550	995	2,820	7,030	1,060	378	194	112
12	524	173	1,460	1,950	4,340	961	2,890	5,370	917	352	331	108
13	469	164	1,570	4,780	3,840	935	2,770	6,920	1,660	974	253	91
14	549	158	2,480	3,890	3,190	1,080	2,920	15,900	1,940	2,180	199	63
15	577	152	4,580	2,940	2,720	1,170	4,080	13,100	1,960	3,490	174	60
16	547	149	4,100	2,560	2,420	2,250	4,570	8,240	1,610	1,970	176	56
17	554	150	2,720	2,150	2,110	6,620	3,720	5,100	1,260	1,300	174	89
18	604	150	2,170	1,550	2,050	17,900	3,400	14,800	1,020	979	180	110
19	607	146	1,910	1,400	1,750	30,900	3,120	13,000	874	913	200	118
20	548	151	2,050	1,390	1,610	40,200	2,910	8,210	750	1,150	247	126
21	538	151	2,220	2,100	1,570	40,500	2,720	5,660	649	1,280	336	173
22	527	150	2,160	3,630	1,540	23,100	4,370	4,320	579	2,340	353	192
23	528	154	2,240	6,860	1,410	13,700	5,580	3,420	523	1,390	321	216
24	554	165	1,940	19,700	1,280	11,100	4,660	2,750	502	948	270	410
25	605	210	1,580	26,900	1,180	9,280	6,110	2,310	458	1,010	230	712
26	618	297	1,520	25,100	1,130	9,420	8,180	1,980	463	1,110	206	714
27	602	865	1,270	15,900	1,120	12,300	6,890	1,740	558	1,070	196	1,220
28	602	908	932	10,100	1,110	11,700	7,370	1,520	678	996	190	1,840
29	519	699	790	8,510	---	9,940	11,900	1,590	1,050	769	215	1,860
30	432	621	799	7,840	---	11,800	9,480	1,390	1,250	601	305	1,340
31	431	---	730	7,190	---	14,400	---	1,200	---	581	346	---
TOTAL	16,631	8,514	44,748	162,119	83,280	281,821	210,020	259,310	37,091	33,399	8,770	11,358
MEAN	536	284	1,443	5,230	2,974	9,091	7,001	8,365	1,236	1,077	283	379
MAX	618	908	4,580	26,900	6,830	40,500	25,100	25,900	3,210	3,490	601	1,860
MIN	431	146	293	449	1,110	935	2,720	1,200	458	352	174	56
MED	545	203	1,270	2,100	2,580	2,250	4,610	7,030	1,050	974	247	157
AC-FT	32,990	16,890	88,760	321,600	165,200	559,000	416,600	514,300	73,570	66,250	17,400	22,530
CFSM	0.18	0.10	0.50	1.79	1.02	3.12	2.40	2.87	0.42	0.37	0.10	0.13
IN.	0.21	0.11	0.57	2.07	1.06	3.60	2.68	3.31	0.47	0.43	0.11	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	451	433	2,065	4,363	5,625	7,148	4,831	4,702	1,419	1,858	1,277	422
MAX	536	582	2,687	5,230	8,276	9,091	7,001	8,365	1,601	2,639	2,270	466
(WY)	(2002)	(2001)	(2001)	(2002)	(2001)	(2002)	(2002)	(2002)	(2001)	(2001)	(2001)	(2001)
MIN	365	284	1,443	3,497	2,974	5,205	2,661	1,040	1,236	1,077	283	379
(WY)	(2001)	(2002)	(2002)	(2001)	(2002)	(2001)	(2001)	(2001)	(2002)	(2002)	(2002)	(2002)

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	897,637		1,157,061		2,872	
ANNUAL MEAN	2,459		3,170		3,170	
HIGHEST ANNUAL MEAN					2,575	
LOWEST ANNUAL MEAN					40,500	
HIGHEST DAILY MEAN	34,900	Feb 17	40,500	Mar 21	40,500	Mar 21, 2002
LOWEST DAILY MEAN	146	Nov 19	56	Sep 16	56	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	150	Nov 16	82	Sep 12	82	Sep 12, 2002
MAXIMUM PEAK FLOW			43,700	Mar 20	43,700	Mar 20, 2002
MAXIMUM PEAK STAGE			27.28	Mar 20	27.28	Mar 20, 2002
ANNUAL RUNOFF (AC-FT)	1,780,000		2,295,000		2,081,000	
ANNUAL RUNOFF (CFSM)	0.843		1.09		0.985	
ANNUAL RUNOFF (INCHES)	11.45		14.76		13.38	
10 PERCENT EXCEEDS	6,330		9,340		7,550	
50 PERCENT EXCEEDS	912		1,050		978	
90 PERCENT EXCEEDS	340		188		251	



03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

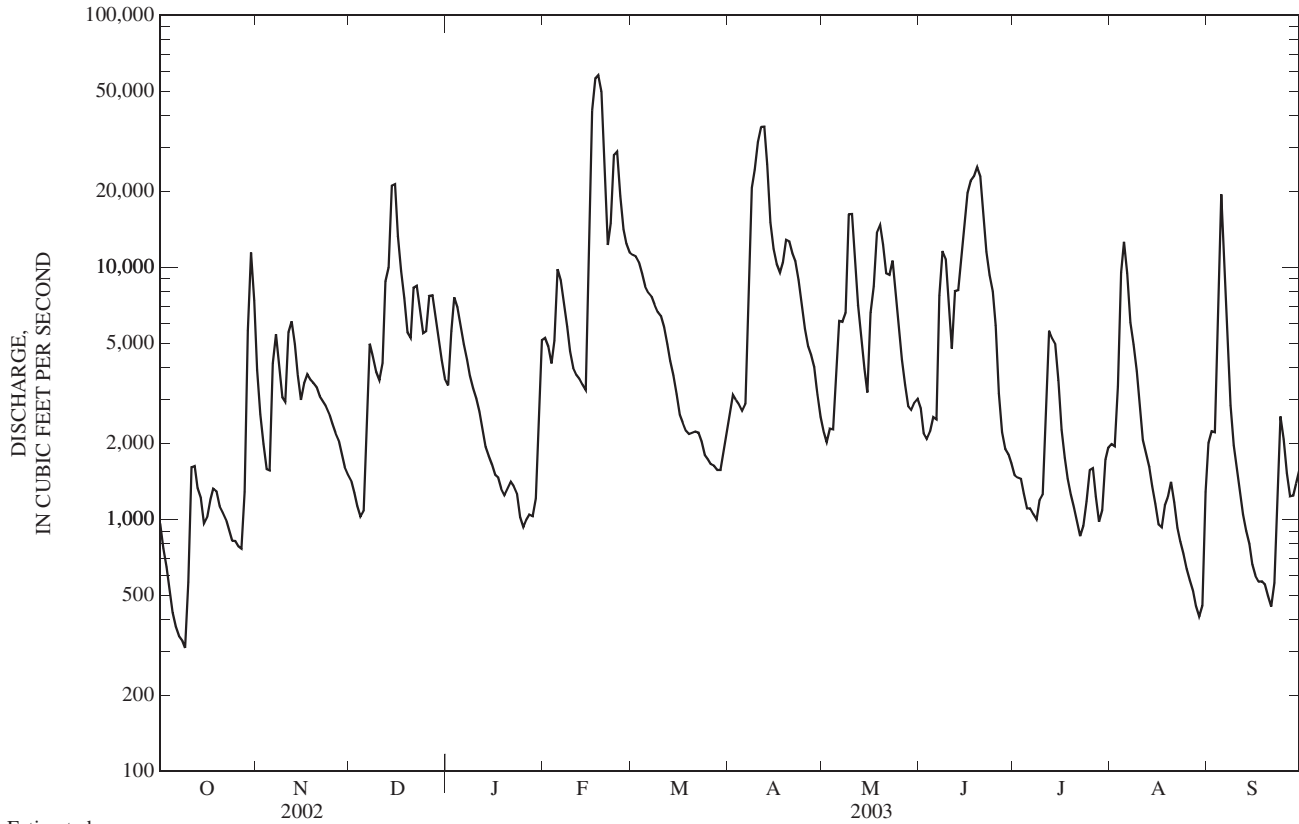
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	965	3,920	1,420	3,400	5,230	11,200	2,610	2,210	2,750	1,500	1,990	2,010
2	769	2,610	1,270	5,590	4,860	11,000	3,120	2,030	2,200	1,470	1,950	2,240
3	648	1,990	1,130	7,590	4,160	10,500	2,970	2,290	2,090	1,450	3,370	2,220
4	534	1,580	1,020	6,930	5,120	9,440	2,860	2,280	2,230	1,270	9,520	5,920
5	427	1,560	1,080	5,900	9,820	8,380	2,700	3,820	2,540	1,110	12,600	19,500
6	375	4,150	2,580	4,960	8,870	7,900	2,870	6,120	2,490	1,110	9,470	9,990
7	345	5,430	4,970	4,300	7,200	7,630	6,140	6,070	7,730	1,050	6,050	5,090
8	330	4,150	4,410	3,710	5,820	7,110	20,700	6,610	11,600	1,000	4,950	2,830
9	310	3,050	3,860	3,310	4,650	6,660	24,400	16,200	10,800	1,190	3,870	1,970
10	563	2,920	3,570	3,020	3,990	6,410	31,400	16,300	7,380	1,250	2,870	1,580
11	1,610	5,530	4,170	2,660	3,750	5,780	36,000	11,100	4,750	2,820	2,060	1,280
12	1,630	6,100	8,780	2,290	3,600	4,950	36,200	7,080	8,040	5,600	1,820	1,050
13	1,330	4,950	10,000	1,940	3,430	4,240	25,600	5,330	8,120	5,250	1,610	898
14	1,220	3,740	21,100	1,780	3,260	3,720	15,100	3,950	10,700	4,990	1,360	798
15	963	2,980	21,400	1,650	16,000	3,140	11,800	3,190	14,500	3,560	1,150	662
16	1,020	3,460	13,300	1,500	42,000	2,600	10,300	6,590	19,700	2,270	955	596
17	1,200	3,770	9,690	1,470	56,200	2,420	9,540	8,400	22,000	1,750	930	566
18	1,330	3,590	7,540	1,320	57,900	2,250	10,400	13,700	22,900	1,450	1,140	569
19	1,290	3,480	5,520	1,250	49,700	2,180	12,900	14,700	25,000	1,250	1,230	554
20	1,130	3,350	5,260	1,330	23,500	2,200	12,700	12,300	22,900	1,110	1,410	497
21	1,070	3,080	8,280	1,410	12,300	2,230	11,300	9,460	16,100	968	1,170	451
22	998	2,940	8,450	1,360	15,000	2,210	10,500	9,320	11,500	857	926	560
23	909	2,820	6,880	1,270	27,900	2,040	8,920	10,600	9,310	943	816	1,250
24	824	2,640	5,470	1,020	28,800	1,800	7,080	7,740	8,020	1,180	728	2,560
25	821	2,400	5,570	931	19,200	1,730	5,700	5,660	5,880	1,570	634	2,080
26	781	2,200	7,700	993	14,100	1,660	4,860	4,310	3,160	1,590	572	1,530
27	765	2,060	7,750	1,040	12,400	1,630	4,500	3,420	2,220	1,230	518	1,240
28	1,280	1,830	6,400	1,030	11,500	1,570	4,010	2,800	1,900	980	453	1,240
29	5,600	1,610	5,140	1,210	---	e1,570	3,130	2,720	1,810	1,090	412	1,390
30	11,400	1,510	4,290	2,210	---	e1,880	2,550	2,900	1,670	1,730	455	1,570
31	7,380	---	3,610	5,130	---	e2,210	---	3,010	---	1,930	1,280	---
TOTAL	49,817	95,400	201,610	83,504	460,260	140,240	342,860	212,210	271,990	56,518	78,269	74,691
MEAN	1,607	3,180	6,504	2,694	16,440	4,524	11,430	6,845	9,066	1,823	2,525	2,490
MAX	11,400	6,100	21,400	7,590	57,900	11,200	36,200	16,300	25,000	5,600	12,600	19,500
MIN	310	1,510	1,020	931	3,260	1,570	2,550	2,030	1,670	857	412	451
MED	965	3,010	5,470	1,780	10,600	2,600	9,230	6,070	7,880	1,270	1,280	1,330
AC-FT	98,810	189,200	399,900	165,600	912,900	278,200	680,100	420,900	539,500	112,100	155,200	148,100
CFSM	0.55	1.09	2.23	0.92	5.64	1.55	3.92	2.35	3.11	0.63	0.87	0.85
IN.	0.64	1.22	2.57	1.07	5.87	1.79	4.37	2.71	3.47	0.72	1.00	0.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	836	1,349	3,545	3,807	9,229	6,273	7,030	5,417	3,968	1,846	1,693	1,111
MAX	1,607	3,180	6,504	5,230	16,440	9,091	11,430	8,365	9,066	2,639	2,525	2,490
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)	(2003)	(2001)	(2003)	(2003)
MIN	365	284	1,443	2,694	2,974	4,524	2,661	1,040	1,236	1,077	283	379
(WY)	(2001)	(2002)	(2002)	(2003)	(2002)	(2003)	(2001)	(2001)	(2002)	(2002)	(2002)	(2002)

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	1,433,995		2,067,369		3,803	
ANNUAL MEAN	3,929		5,664		5,664	
HIGHEST ANNUAL MEAN					2,575	
LOWEST ANNUAL MEAN					57,900	
HIGHEST DAILY MEAN	40,500	Mar 21	57,900	Feb 18	57,900	Feb 18, 2003
LOWEST DAILY MEAN	56	Sep 16	310	Oct 9	56	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	82	Sep 12	412	Oct 4	82	Sep 12, 2002
MAXIMUM PEAK FLOW			58,600	Feb 18	58,600	Feb 18, 2003
MAXIMUM PEAK STAGE			35.02	Feb 18	35.02	Feb 18, 2003
ANNUAL RUNOFF (AC-FT)	2,844,000		4,101,000		2,755,000	
ANNUAL RUNOFF (CFSM)	1.35		1.94		1.30	
ANNUAL RUNOFF (INCHES)	18.29		26.37		17.72	
10 PERCENT EXCEEDS	10,000		12,500		9,740	
50 PERCENT EXCEEDS	1,590		2,940		1,510	
90 PERCENT EXCEEDS	237		938		336	



e Estimated

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

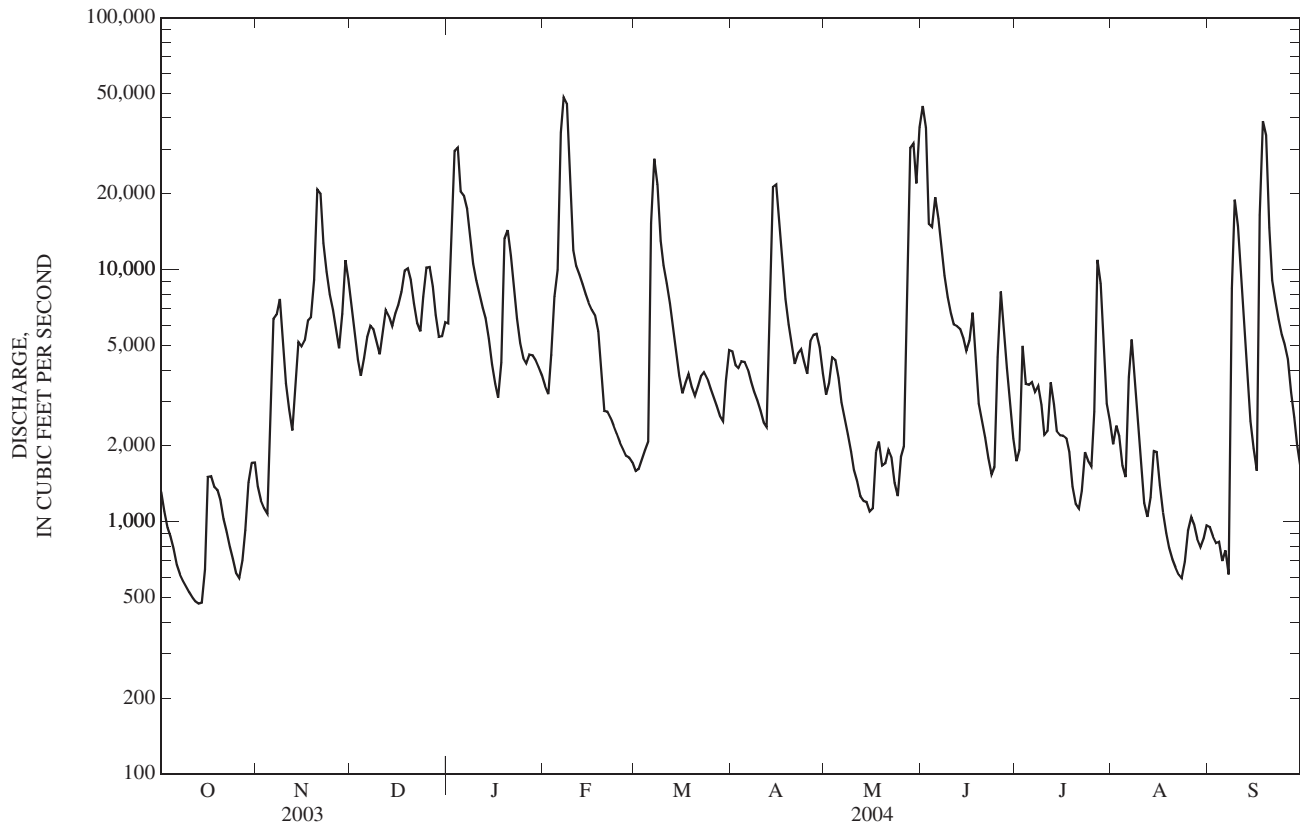
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,320	1,380	7,080	6,100	3,460	1,590	4,740	3,200	44,600	1,740	2,030	952
2	1,100	1,220	5,550	12,000	3,210	1,610	4,180	3,540	36,600	1,930	2,400	874
3	947	1,130	4,390	29,600	4,590	1,760	4,060	4,500	15,200	4,980	2,180	822
4	874	1,080	3,800	30,500	7,810	1,920	4,330	4,390	14,800	3,530	1,670	832
5	782	2,400	4,450	20,400	9,990	2,080	4,300	3,710	19,400	3,490	1,500	699
6	675	6,370	5,410	19,700	34,900	15,300	4,010	2,980	15,900	3,580	3,750	e769
7	618	6,620	5,990	17,400	48,300	27,500	3,580	2,560	12,300	3,270	5,280	e619
8	585	7,650	5,820	13,400	45,600	21,700	3,280	2,230	9,480	3,450	3,360	e8,420
9	554	5,280	5,170	10,600	21,900	13,000	3,030	1,900	7,790	2,900	2,200	18,900
10	526	3,540	4,620	9,040	11,900	10,400	2,760	1,600	6,710	2,210	1,550	14,900
11	501	2,790	5,690	7,950	10,300	8,840	2,470	1,450	6,060	2,290	1,190	9,550
12	483	2,300	6,940	7,060	9,550	7,340	2,380	1,260	5,970	3,570	1,050	6,200
13	474	3,530	6,530	6,400	8,760	5,940	7,230	1,210	5,810	2,920	1,250	3,860
14	478	5,160	5,970	5,330	7,970	4,850	21,300	1,200	5,350	2,280	1,910	2,510
15	647	4,960	6,700	4,210	7,390	3,790	21,800	1,100	4,770	2,200	1,890	1,950
16	1,510	5,240	7,230	3,520	6,940	3,230	15,200	1,130	5,230	2,190	1,400	1,590
17	1,510	6,280	8,150	3,110	6,590	3,560	10,700	1,890	6,740	2,150	1,090	16,400
18	1,380	6,470	9,890	4,270	5,690	3,850	7,660	2,080	4,440	1,890	901	38,700
19	1,340	9,120	10,100	13,300	3,890	3,420	6,050	1,670	2,940	1,380	788	34,000
20	1,220	20,800	9,110	14,400	2,750	3,160	5,060	1,700	2,510	1,180	710	14,600
21	1,030	20,000	7,350	11,400	2,730	3,450	4,230	1,930	2,160	1,130	659	9,080
22	910	12,700	6,150	8,620	2,580	3,770	4,640	1,810	1,790	1,330	616	7,510
23	792	9,810	5,700	6,400	2,410	3,920	4,830	1,430	1,540	1,890	596	6,360
24	714	7,980	7,800	5,110	2,240	3,700	4,320	1,260	1,650	1,740	693	5,510
25	627	6,930	10,200	4,450	2,060	3,380	3,860	1,810	4,490	1,660	923	5,050
26	599	5,850	10,200	4,260	1,940	3,130	5,200	1,990	8,190	2,730	1,040	4,420
27	702	4,880	8,590	4,600	1,830	2,880	5,520	9,930	5,700	10,900	974	3,270
28	928	6,690	6,620	4,580	1,790	2,630	5,570	30,300	4,070	8,800	854	2,590
29	1,430	10,900	5,420	4,360	1,720	2,500	4,900	31,600	3,030	4,970	795	2,010
30	1,710	9,170	5,450	4,110	---	3,640	3,870	22,000	2,140	2,940	860	1,660
31	1,720	---	6,180	3,810	---	4,800	---	36,700	---	2,500	967	---
TOTAL	28,686	198,230	208,250	299,990	280,790	182,640	185,060	186,060	267,360	93,720	47,076	224,607
MEAN	925	6,608	6,718	9,677	9,682	5,892	6,169	6,002	8,912	3,023	1,519	7,487
MAX	1,720	20,800	10,200	30,500	48,300	27,500	21,800	36,700	44,600	10,900	5,280	38,700
MIN	474	1,080	3,800	3,110	1,720	1,590	2,380	1,100	1,540	1,130	596	619
MED	792	6,070	6,180	6,400	5,690	3,640	4,480	1,930	5,750	2,290	1,090	4,140
AC-FT	56,900	393,200	413,100	595,000	556,900	362,300	367,100	369,000	530,300	185,900	93,380	445,500
CFSM	0.32	2.27	2.30	3.32	3.32	2.02	2.12	2.06	3.06	1.04	0.52	2.57
IN.	0.37	2.53	2.66	3.83	3.58	2.33	2.36	2.37	3.41	1.20	0.60	2.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	859	2,663	4,338	5,274	9,346	6,178	6,815	5,563	5,204	2,141	1,649	2,705
MAX	1,607	6,608	6,718	9,677	16,440	9,091	11,430	8,365	9,066	3,023	2,525	7,487
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)
MIN	365	284	1,443	2,694	2,974	4,524	2,661	1,040	1,236	1,077	283	379
(WY)	(2001)	(2002)	(2002)	(2003)	(2002)	(2003)	(2001)	(2001)	(2002)	(2002)	(2002)	(2002)

03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	2,155,708		2,202,469		4,358	
ANNUAL MEAN	5,906		6,018		6,018	
HIGHEST ANNUAL MEAN					2,575	
LOWEST ANNUAL MEAN					57,900	
HIGHEST DAILY MEAN	57,900	Feb 18	48,300	Feb 7	57,900	Feb 18, 2003
LOWEST DAILY MEAN	412	Aug 29	474	Oct 13	56	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	514	Oct 8	514	Oct 8	82	Sep 12, 2002
MAXIMUM PEAK FLOW			49,700	Feb 7	58,600	Feb 18, 2003
MAXIMUM PEAK STAGE			30.15	Feb 7	35.02	Feb 18, 2003
ANNUAL RUNOFF (AC-FT)	4,276,000		4,369,000		3,157,000	
ANNUAL RUNOFF (CFSM)	2.03		2.06		1.49	
ANNUAL RUNOFF (INCHES)	27.50		28.10		20.30	
10 PERCENT EXCEEDS	12,500		13,100		10,400	
50 PERCENT EXCEEDS	3,310		3,800		2,010	
90 PERCENT EXCEEDS	905		941		412	
e Estimated						



03282290 KENTUCKY RIVER AT LOCK 11 NEAR COLLEGE HILL, KY

LOCATION.--Lat 37°47'02", long 84°06'12", Estill County, Hydrologic Unit 05100205, on upstream right bank of Lock 11, 0.6 mi downstream from Flint Creek, 1.0 mi east of College Hill, 1.0 mi upstream from Lick Run, and at mile 201.

DRAINAGE AREA.--3,219 mi² of which 26.1 mi² is non-contributing.

PERIOD OF RECORD.--June 2002 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 575.60 feet above NGVD of 1929.

REMARKS.--Records good except for periods of estimated record which are fair. 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.

COOPERATION.--Kentucky River Authority.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,330	1,380	8,050	e6,630	3,890	1,720	5,680	3,730	43,500	1,950	2,710	865
2	1,110	1,170	6,350	e14,400	3,600	1,800	4,960	4,130	42,100	1,780	2,510	794
3	941	1,060	5,040	e30,400	5,060	1,920	4,630	5,360	23,900	4,590	2,460	751
4	850	996	4,350	e33,700	8,250	2,070	4,770	5,010	15,400	3,920	1,860	749
5	773	1,840	4,920	e26,600	10,900	2,360	4,740	4,350	24,200	3,580	1,790	677
6	681	7,200	5,890	23,200	31,500	16,800	4,470	3,520	19,000	3,700	3,290	583
7	617	6,830	6,430	20,700	42,600	28,900	4,040	2,950	14,100	3,400	5,720	572
8	577	7,910	6,330	15,400	44,600	26,700	3,680	2,540	10,300	3,580	3,910	7,790
9	551	5,980	5,720	11,600	32,000	15,700	3,380	2,160	8,390	3,180	2,520	22,600
10	528	3,970	5,130	9,660	14,100	11,300	3,090	1,800	7,160	2,420	1,740	17,800
11	507	3,100	5,910	8,460	11,100	9,460	2,780	1,600	6,430	2,240	1,300	10,800
12	483	2,950	7,220	7,520	10,100	7,980	2,830	1,390	6,270	3,490	1,070	7,000
13	471	4,250	7,050	6,830	9,270	6,520	8,450	1,250	6,260	3,260	1,170	4,500
14	474	5,260	6,880	5,920	8,390	5,410	23,000	1,240	5,800	2,490	1,700	2,880
15	537	5,460	7,440	4,700	7,780	4,370	25,900	1,130	5,170	2,210	1,960	2,150
16	1,110	5,620	7,830	3,950	7,260	3,640	18,700	1,090	5,800	2,280	1,500	1,660
17	1,370	6,530	9,000	3,470	6,900	3,840	12,400	1,630	6,830	2,470	1,110	16,400
18	1,260	7,020	10,400	4,740	6,230	4,210	8,590	2,150	5,200	2,340	886	36,500
19	1,200	10,600	11,000	13,200	4,580	3,800	6,710	1,860	3,400	1,570	755	36,600
20	1,110	21,400	9,960	16,200	3,140	3,560	5,630	1,840	2,760	1,220	676	21,400
21	959	23,700	8,170	12,500	2,960	4,230	4,770	1,880	2,350	1,110	662	9,900
22	827	14,900	6,780	9,490	2,820	4,220	6,070	1,920	1,980	1,460	601	7,920
23	743	10,500	6,280	e7,770	2,620	4,350	7,440	1,520	1,680	2,310	561	6,710
24	674	8,580	8,660	e5,570	2,440	4,150	6,190	1,300	1,640	1,910	593	5,770
25	612	7,600	11,000	e5,160	2,240	3,790	4,940	1,820	5,860	1,670	751	5,250
26	654	6,430	11,000	4,870	2,100	3,500	6,700	1,960	11,100	2,550	920	4,710
27	1,080	5,450	9,430	e5,500	1,970	3,240	6,680	7,770	6,730	10,300	905	3,600
28	1,040	8,720	7,380	e5,300	1,910	2,970	6,270	28,700	4,660	10,000	804	2,820
29	1,350	13,200	6,030	4,880	1,840	2,780	5,650	32,900	3,520	5,960	775	2,150
30	1,610	10,600	e6,200	4,590	---	5,090	4,530	27,700	2,510	3,460	766	1,720
31	1,650	---	e6,950	4,240	---	5,950	---	36,800	---	3,120	835	---
TOTAL	27,679	220,206	228,780	337,150	292,150	206,330	217,670	195,000	304,000	99,520	48,810	243,621
MEAN	893	7,340	7,380	10,880	10,070	6,656	7,256	6,290	10,130	3,210	1,575	8,121
MAX	1,650	23,700	11,000	33,700	44,600	28,900	25,900	36,800	43,500	10,300	5,720	36,600
MIN	471	996	4,350	3,470	1,840	1,720	2,780	1,090	1,640	1,110	561	572

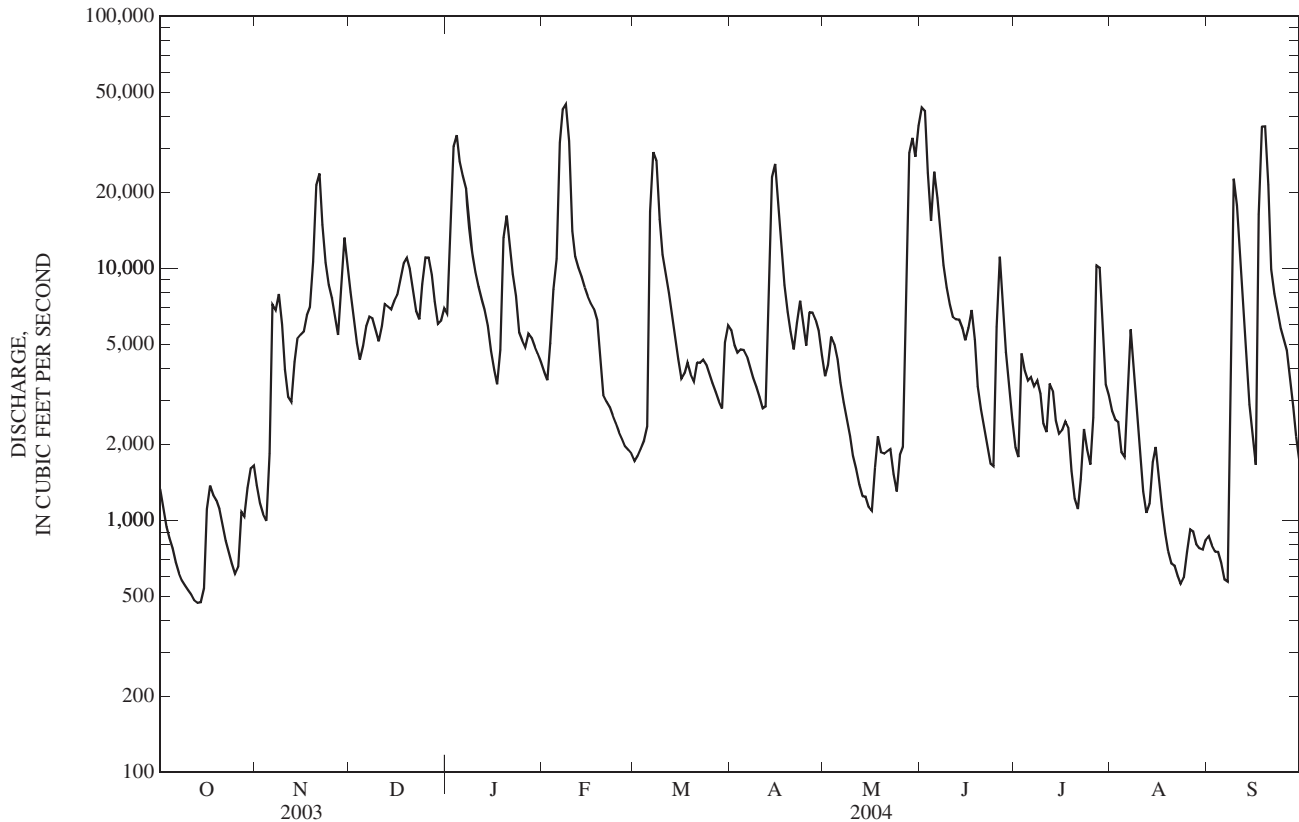
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	1,402	5,552	7,379	6,900	13,670	5,696	9,532	6,977	10,220	2,097	1,537	3,740
MAX	1,910	7,340	7,380	10,880	17,400	6,656	11,810	7,664	10,310	3,210	2,738	8,121
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)
MIN	893	3,764	7,379	2,924	10,070	4,736	7,256	6,290	10,130	1,126	298	427
(WY)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)	(2004)	(2004)	(2002)	(2002)	(2002)

03282290 KENTUCKY RIVER AT LOCK 11 NEAR COLLEGE HILL, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	2,327,963		2,420,916		6,393	
ANNUAL MEAN	6,378		6,615		6,615	
HIGHEST ANNUAL MEAN					6,170	
LOWEST ANNUAL MEAN					55,900	
HIGHEST DAILY MEAN	55,900	Feb 18	44,600	Feb 8	55,900	Feb 18, 2003
LOWEST DAILY MEAN	447	Aug 29	471	Oct 13	118	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	507	Oct 9	507	Oct 9	137	Sep 8, 2002
MAXIMUM PEAK FLOW			45,300	Feb 8	56,500	Feb 18, 2003
MAXIMUM PEAK STAGE			29.15	Feb 8	35.06	Feb 18, 2003
10 PERCENT EXCEEDS	13,600		15,000		14,300	
50 PERCENT EXCEEDS	3,740		4,350		3,840	
90 PERCENT EXCEEDS	932		899		947	

e Estimated



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 with telemetry, crest-stage gage, and concrete control. Datum of gage is 870.11 ft NGVD of 1929.

REMARKS.--Records good except for daily discharges below 2.0 ft³/s and for those estimated, which are poor.

Cooperation.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	1830	1,280	5.56	May 28	1545	1,460	6.08
Feb 6	2045	2,800	9.77	May 31	1545	*4,550	13.86
Mar 6	1345	1,620	6.52	Sep 8	2145	2,210	8.20
Apr 13	2145	1,220	5.39	Sep 18	0245	3,270	10.96

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	7.2	127	116	60	21	175	85	1,120	15	23	5.4
2	7.3	6.2	88	848	60	25	140	159	348	14	17	3.6
3	6.3	5.6	70	690	212	29	151	186	294	12	13	8.9
4	5.2	4.8	101	350	333	26	135	116	222	11	11	33
5	4.7	420	253	762	388	65	113	88	238	22	71	11
6	4.3	333	264	528	2,290	1,420	93	69	161	14	53	7.1
7	4.0	102	201	289	1,350	510	82	56	102	12	29	6.0
8	3.7	57	141	204	401	271	73	46	70	15	e19	1,550
9	3.5	41	107	153	265	177	63	40	56	10	13	1,300
10	3.1	33	125	112	194	118	54	36	44	15	11	258
11	3.2	26	221	90	140	94	49	31	37	106	8.5	125
12	3.1	226	160	82	109	74	72	27	36	40	11	78
13	3.2	304	122	80	89	64	741	23	32	24	18	56
14	3.2	99	174	e70	76	57	798	21	38	17	12	e35
15	4.8	78	230	60	67	54	432	20	46	13	7.9	38
16	7.1	72	192	53	56	61	269	19	127	10	6.5	31
17	6.8	63	277	50	51	60	182	23	48	12	5.9	1,730
18	5.5	60	236	307	46	53	127	23	35	15	5.5	2,000
19	4.5	538	200	490	43	51	98	40	73	10	5.0	313
20	3.7	385	147	254	42	49	82	77	46	8.8	4.9	162
21	3.4	173	115	167	41	124	74	47	30	7.4	5.9	98
22	3.2	107	106	120	37	107	255	37	29	10	6.2	71
23	3.1	76	109	88	32	89	380	29	32	15	5.8	55
24	2.8	85	236	78	31	79	351	23	26	9.9	6.1	44
25	2.8	97	215	67	31	68	259	20	46	9.7	8.3	39
26	2.6	83	156	76	27	59	356	21	77	75	10	32
27	5.1	70	118	91	25	55	323	300	43	606	9.4	27
28	12	277	97	78	24	51	212	1,210	30	111	8.9	24
29	12	363	82	71	e22	47	141	414	23	44	18	23
30	9.5	206	139	72	---	190	103	609	19	33	9.2	21
31	8.4	---	130	62	---	246	---	3,510	---	26	8.2	---
TOTAL	159.6	4,397.8	4,939	6,558	6,542	4,394	6,383	7,405	3,528	1,342.8	441.2	8,185.0
MEAN	5.15	147	159	212	226	142	213	239	118	43.3	14.2	273
MAX	12	538	277	848	2,290	1,420	798	3,510	1,120	606	71	2,000
MIN	2.6	4.8	70	50	22	21	49	19	19	7.4	4.9	3.6
CFSM	0.08	2.23	2.42	3.22	3.43	2.15	3.23	3.63	1.79	0.66	0.22	4.15
IN.	0.09	2.49	2.79	3.71	3.70	2.48	3.61	4.19	1.99	0.76	0.25	4.63

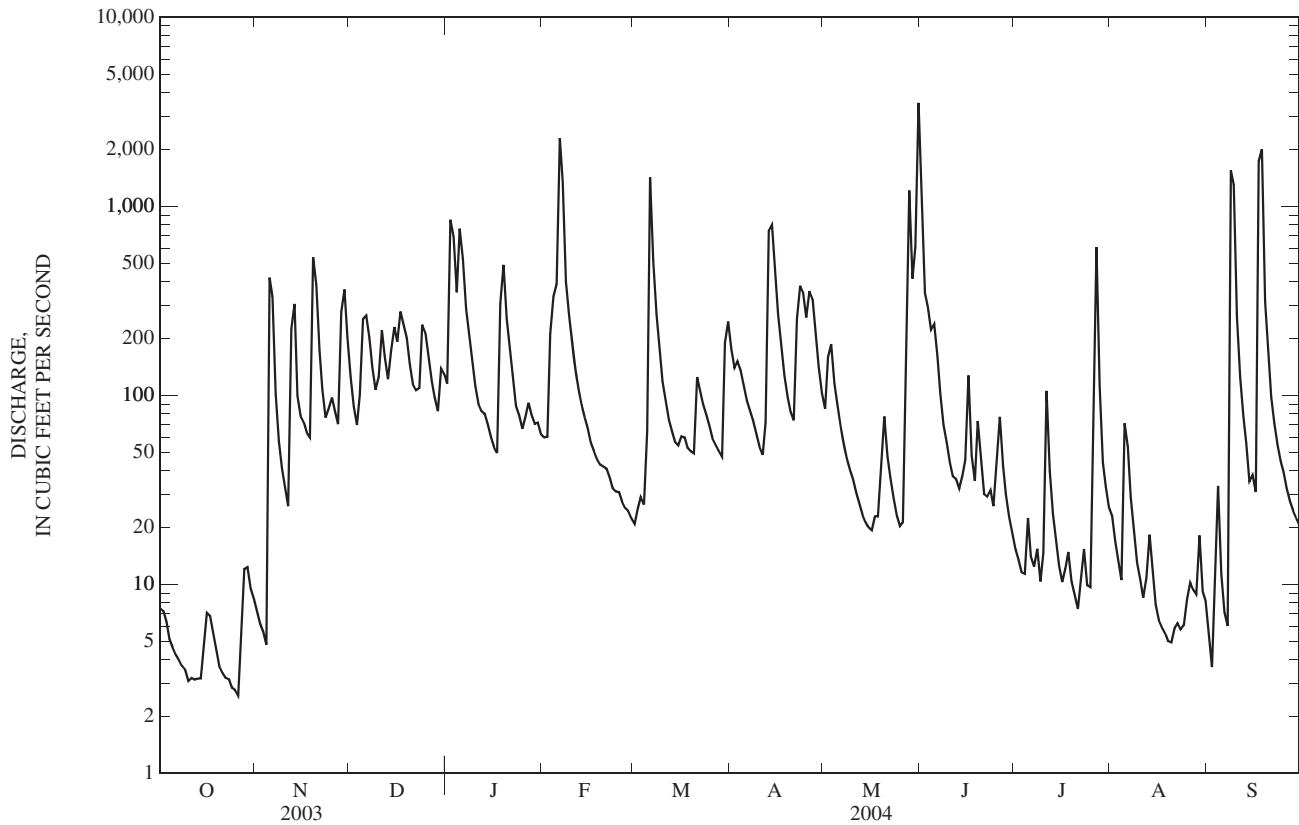
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

	MEAN	16.0	51.4	111	130	179	156	104	49.6	33.2	24.8	18.5
MAX	138	227	555	357	555	523	472	318	351	159	141	273
(WY)	(1990)	(1986)	(1979)	(1974)	(1989)	(1955)	(1972)	(1983)	(1997)	(2001)	(1974)	(2004)
MIN	0.22	0.54	2.76	17.5	27.6	49.1	16.6	13.9	1.19	0.99	0.27	0.05
(WY)	(1964)	(1956)	(1964)	(1981)	(1968)	(1969)	(1986)	(1986)	(1988)	(1999)	(1957)	(1999)

03282500 RED RIVER NEAR HAZEL GREEN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1954 - 2004	
ANNUAL TOTAL	42,216.2		54,275.4		88.3	
ANNUAL MEAN	116		148		153	
HIGHEST ANNUAL MEAN					39.6	
LOWEST ANNUAL MEAN					6,170	
HIGHEST DAILY MEAN	3,510	Feb 16	3,510	May 31	Dec 9, 1978	1994
LOWEST DAILY MEAN	2.6	Oct 26	2.6	Oct 26	Sep 14, 1954	1969
ANNUAL SEVEN-DAY MINIMUM	3.1	Oct 20	3.1	Oct 20	Sep 12, 1955	
MAXIMUM PEAK FLOW			4,550	May 31	Feb 27, 1962	
MAXIMUM PEAK STAGE			13.86	May 31	22.12	Feb 27, 1962
INSTANTANEOUS LOW FLOW					0.00	Sep 14, 1954
ANNUAL RUNOFF (CFSM)	1.76		2.25		1.34	
ANNUAL RUNOFF (INCHES)	23.87		30.68		18.24	
10 PERCENT EXCEEDS	264		316		203	
50 PERCENT EXCEEDS	50		58		31	
90 PERCENT EXCEEDS	6.2		6.3		1.5	

e Estimated



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 with telemetry and crest-stage gage. Datum of gage is 600.47 ft above NGVD of 1929 (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.--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.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky River Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 7	unknown	11,500	19.42	May 31	2100	*22,000	*24.08
Mar 7	unknown	unknown	unknown	Sep 9	2300	10,200	18.68
May 29	1300	6,670	16.25	Sep 18	1500	12,800	20.05

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	126	812	e550	431	233	792	458	16,200	181	562	130
2	96	110	591	e4,200	441	351	658	795	7,700	159	287	97
3	84	100	483	e2,800	915	322	658	1,100	1,850	143	203	78
4	72	92	482	e1,800	1,440	303	610	711	1,160	132	166	108
5	65	270	763	e3,700	1,430	520	540	541	1,390	122	506	173
6	61	1,320	1,040	3,280	e5,990	e4,900	490	450	1,030	116	682	127
7	56	711	850	1,590	e11,000	e5,600	457	378	730	164	368	89
8	52	429	682	1,010	e5,300	1,930	434	323	535	174	253	1,930
9	49	326	563	803	1,470	973	404	274	446	127	189	6,530
10	46	262	530	664	1,040	748	367	238	373	106	158	7,960
11	43	225	792	552	840	604	339	230	326	214	317	1,500
12	41	1,160	724	522	708	531	417	214	293	1,040	181	598
13	38	e4,400	593	511	610	472	1,480	178	439	480	227	472
14	37	1,710	846	480	540	431	2,810	157	422	303	200	376
15	45	707	1,070	455	497	412	2,040	146	394	222	150	315
16	65	630	906	422	456	407	1,160	146	1,150	169	116	268
17	72	542	1,550	392	416	417	783	153	679	160	97	3,170
18	56	573	1,350	868	394	389	596	160	419	207	85	9,960
19	51	2,110	1,100	1,770	373	363	484	982	413	191	76	8,910
20	45	2,180	842	1,120	362	370	421	1,330	507	141	69	2,180
21	41	1,100	674	744	357	924	390	565	354	112	166	685
22	38	692	617	620	335	744	1,160	363	287	135	181	481
23	35	527	683	526	306	588	2,010	279	367	190	117	380
24	34	521	e1,150	483	293	519	1,640	226	341	209	86	320
25	33	610	e1,000	457	286	475	1,140	224	401	133	73	275
26	77	519	e900	586	268	435	1,780	229	581	186	69	238
27	386	462	e700	710	255	408	1,560	1,840	462	445	66	210
28	367	1,980	e600	609	246	387	960	4,770	329	898	65	188
29	245	2,430	e530	520	236	370	679	6,080	260	350	184	171
30	194	1,280	e750	508	---	1,260	530	3,320	216	237	368	156
31	153	---	e580	411	---	1,060	---	14,600	---	391	205	---
TOTAL	2,784	28,104	24,753	33,663	37,235	27,446	27,789	41,460	40,054	7,837	6,472	48,075
MEAN	89.8	937	798	1,086	1,284	885	926	1,337	1,335	253	209	1,602
MAX	386	4,400	1,550	4,200	11,000	5,600	2,810	14,600	16,200	1,040	682	9,960
MIN	33	92	482	392	236	233	339	146	216	106	65	78

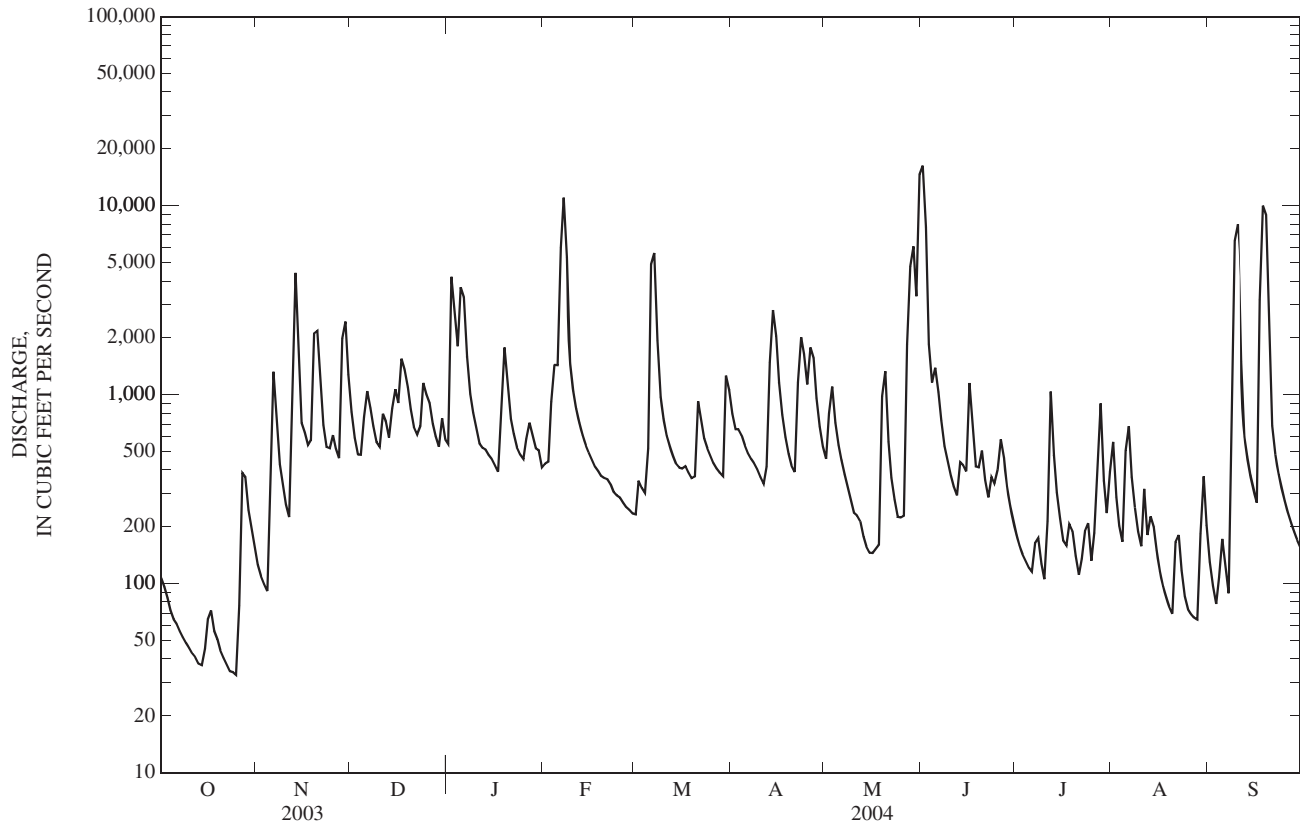
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	89.2	278	597	770	1,014	1,065	822	559	325	269	180	127
MAX	928	1,220	3,036	2,634	3,564	3,048	2,406	1,943	2,246	1,845	1,179	1,602
(WY)	(1990)	(1987)	(1979)	(1950)	(1989)	(1955)	(1972)	(1995)	(1997)	(1938)	(1938)	(2004)
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)

03283500 RED RIVER AT CLAY CITY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004	
ANNUAL TOTAL	249,443		325,672		501	
ANNUAL MEAN	683		890		890	
HIGHEST ANNUAL MEAN					158	
LOWEST ANNUAL MEAN					26,100	
HIGHEST DAILY MEAN	18,200	Feb 17	16,200	Jun 1	26,100	Dec 9, 1978
LOWEST DAILY MEAN	33	Oct 25	33	Oct 25	1.2	Aug 10, 1944
ANNUAL SEVEN-DAY MINIMUM	40	Oct 19	40	Oct 19	2.0	Oct 2, 1930
MAXIMUM PEAK FLOW			22,000	May 31	28,800	Dec 9, 1978
MAXIMUM PEAK STAGE			24.08	May 31	26.75	Dec 9, 1978
INSTANTANEOUS LOW FLOW					1.2	Aug 10, 1944
10 PERCENT EXCEEDS	1,390		1,730		1,170	
50 PERCENT EXCEEDS	377		434		184	
90 PERCENT EXCEEDS	61		97		22	

e Estimated



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 with telemetry. Datum of gage is 557.37 ft above sea level (Ohio River datum) or 556.76 ft NGVD of 1929. 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.--Records fair. Flow regulated since December 1960 by Buckhorn Lake (station 03280800), since January 1976 by Carr Fork Lake (station 03277446),..

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

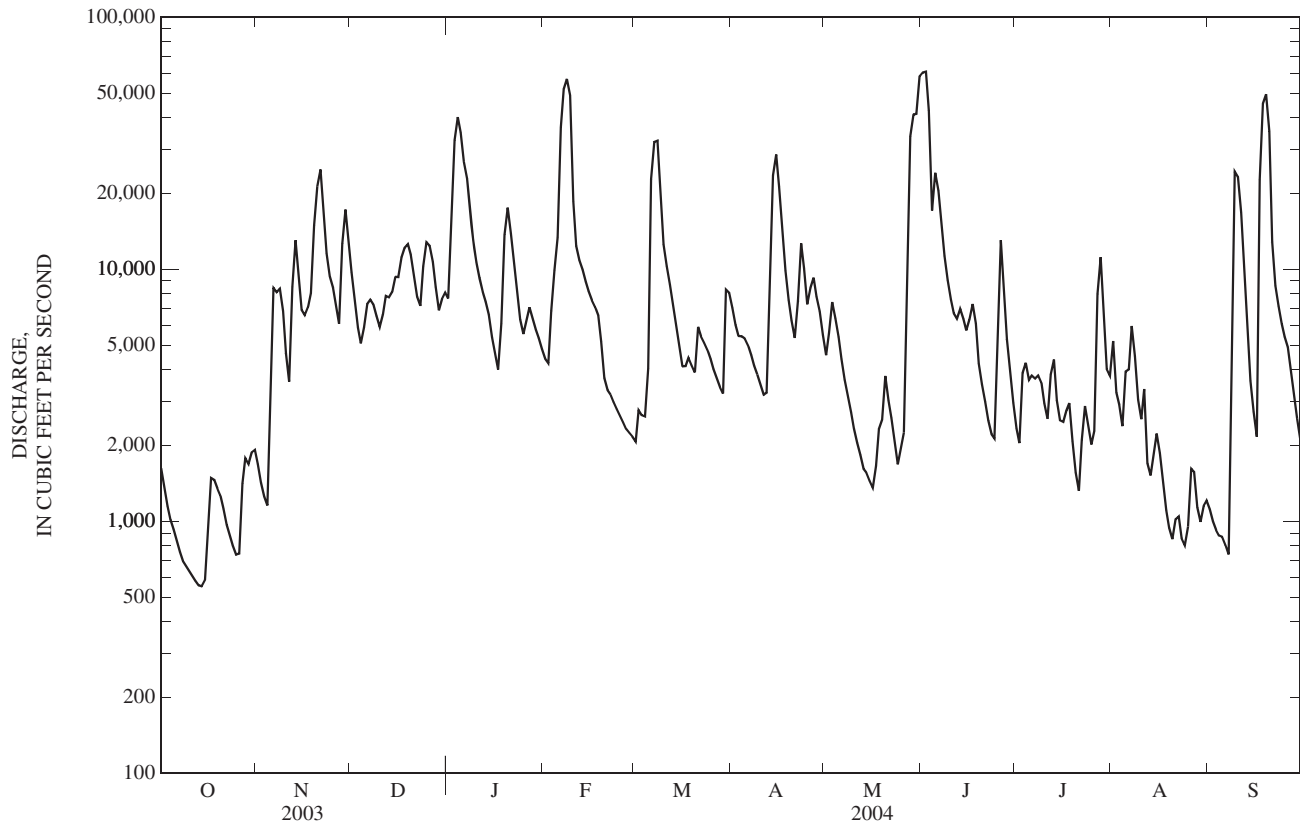
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,630	1,690	9,720	7,660	4,420	2,070	7,040	4,560	60,300	2,340	5,190	1,120
2	1,370	1,420	7,460	18,000	4,240	2,760	6,010	5,590	60,800	2,040	3,240	1,000
3	1,150	1,250	5,870	32,500	6,840	2,630	5,430	7,420	42,600	3,870	2,900	924
4	1,020	1,160	5,090	40,200	9,910	2,610	5,420	6,390	17,100	4,250	2,380	878
5	929	3,420	5,890	34,900	13,400	4,040	5,310	5,390	24,200	3,640	3,920	869
6	835	8,440	7,260	26,700	36,600	22,800	5,000	4,410	20,500	3,790	4,000	807
7	754	8,130	7,570	22,900	51,800	32,000	4,560	3,650	15,600	3,690	5,950	738
8	697	8,380	7,260	17,300	56,900	32,300	4,150	3,130	11,300	3,800	4,530	7,610
9	665	6,840	6,520	13,100	49,000	18,800	3,820	2,710	9,040	3,560	3,040	24,500
10	634	4,640	5,910	10,700	18,600	12,600	3,490	2,330	7,590	2,930	2,540	23,200
11	606	3,580	6,610	9,230	12,400	10,300	3,170	2,050	6,700	2,550	3,340	16,800
12	581	8,520	7,830	8,120	10,800	8,670	3,230	1,830	6,370	3,830	1,700	8,420
13	558	13,000	7,740	7,440	9,970	7,090	10,600	1,620	6,940	4,380	1,520	5,370
14	554	9,490	8,120	6,600	8,920	5,900	23,600	1,560	6,350	3,020	1,850	3,620
15	586	6,920	9,340	5,370	8,170	4,900	28,500	1,450	5,720	2,510	2,230	2,730
16	963	6,580	9,320	4,580	7,550	4,130	21,300	1,360	6,340	2,480	1,870	2,170
17	1,490	7,080	11,100	4,000	7,100	4,130	14,200	1,660	7,300	2,750	1,420	22,700
18	1,460	8,040	12,200	6,080	6,550	4,450	9,880	2,330	6,100	2,950	1,110	45,400
19	1,350	14,900	12,600	13,700	5,170	4,160	7,550	2,530	4,230	2,080	941	49,500
20	1,270	21,300	11,400	17,600	3,700	3,900	6,260	3,770	3,500	1,560	851	35,300
21	1,120	24,900	9,480	13,900	3,320	5,900	5,350	3,010	2,990	1,320	1,020	12,800
22	966	17,100	7,770	10,800	3,180	5,420	7,510	2,570	2,510	2,110	1,050	8,620
23	872	11,600	7,160	8,090	2,980	5,120	12,700	2,070	2,220	2,870	857	7,130
24	800	9,360	10,300	6,320	2,800	4,800	10,100	1,690	2,130	2,410	804	6,050
25	740	8,460	12,800	5,540	2,630	4,410	7,260	1,960	5,550	2,020	953	5,390
26	746	7,180	12,400	6,230	2,470	4,020	8,420	2,250	13,000	2,280	1,620	4,900
27	1,410	6,080	10,700	7,070	2,330	3,710	9,270	7,280	7,950	7,980	1,570	3,940
28	1,790	12,600	8,510	6,370	2,240	3,420	7,800	33,700	5,280	11,200	1,140	3,120
29	1,690	17,300	6,870	5,740	2,170	3,210	6,810	41,100	3,960	6,930	997	2,550
30	1,880	13,400	7,630	5,330	---	8,310	5,480	41,300	2,950	4,020	1,150	2,110
31	1,920	---	8,100	4,830	---	8,070	---	58,100	---	3,780	1,210	---
TOTAL	33,036	272,760	266,530	386,900	356,160	246,630	259,220	260,770	377,120	108,940	66,893	310,266
MEAN	1,066	9,092	8,598	12,480	12,280	7,956	8,641	8,412	12,570	3,514	2,158	10,340
MAX	1,920	24,900	12,800	40,200	56,900	32,300	28,500	58,100	60,800	11,200	5,950	49,500
MIN	554	1,160	5,090	4,000	2,170	2,070	3,170	1,360	2,130	1,320	804	738

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

	MEAN	1,481	3,362	6,772	8,526	10,170	11,760	9,316	6,709	3,804	1,842	1,554	1,371
	MAX	12,850	10,270	23,400	25,490	25,060	27,650	26,100	19,600	15,220	4,640	4,916	10,340
	(WY)	(1990)	(1987)	(1979)	(1974)	(1989)	(1975)	(1972)	(1984)	(1997)	(1992)	(1992)	(2004)
	MIN	177	359	416	446	2,011	3,125	1,177	1,031	265	292	258	102
	(WY)	(1970)	(2002)	(1966)	(1981)	(1968)	(1988)	(1986)	(1976)	(1988)	(1970)	(1986)	(1999)

03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	2,793,829		2,945,225		5,533	
ANNUAL MEAN	7,654		8,047		9,815	
HIGHEST ANNUAL MEAN					2,228	
LOWEST ANNUAL MEAN					99,100	
HIGHEST DAILY MEAN	78,700	Feb 18	60,800	Jun 2	99,100	Dec 10, 1978
LOWEST DAILY MEAN	543	Aug 29	554	Oct 14	22	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	598	Oct 9	598	Oct 9	72	Sep 7, 1999
MAXIMUM PEAK FLOW			62,600	Jun 2	101,000	Dec 10, 1978
MAXIMUM PEAK STAGE			26.29	Jun 2	40.15	Dec 10, 1978
10 PERCENT EXCEEDS	17,200		17,400		13,900	
50 PERCENT EXCEEDS	4,380		5,240		2,400	
90 PERCENT EXCEEDS	1,010		1,150		342	



03284230 KENTUCKY RIVER AT LOCK 9 AT VALLEY VIEW, KY

LOCATION.--Lat 37°50'36", long 84°26'27", Madison County, Hydrologic Unit 05100205, at Lock and Dam No. 9 at Valley View, 1.0 mi below Tate Creek, and at mile 157.9.

DRAINAGE AREA.--4,101 mi².

PERIOD OF RECORD.--October 1999 to current year.

REVISIONS.--Peak discharge for the water year 2001 has been revised to 34,800 ft³/s February 18, 2001 based on rating number 2.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 538.71 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are fair. 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.

COOPERATION.--Kentucky River Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61,900 ft³/s, June 2, gage height, 29.82 ft; minimum discharge, 526 ft³/s, Oct. 14, gage height, 10.84 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,710	1,840	11,200	8,760	4,980	2,310	8,270	5,210	e61,100	2,540	6,460	1,190
2	1,460	1,550	8,610	20,000	4,750	3,030	7,040	6,190	61,300	2,120	3,900	1,060
3	1,220	1,350	6,750	34,100	7,400	3,070	6,250	8,540	50,700	3,470	3,270	956
4	1,070	1,220	5,780	42,900	10,900	2,970	6,130	7,390	19,100	4,640	2,760	883
5	959	3,320	6,540	41,000	14,300	4,000	6,020	6,240	24,800	3,810	5,550	867
6	865	9,010	8,040	29,900	37,900	25,600	5,680	5,080	22,300	3,880	4,590	812
7	774	9,100	8,500	25,500	53,100	34,400	5,180	4,150	17,000	3,860	6,420	731
8	706	8,940	8,180	19,300	58,000	36,600	4,670	3,510	12,400	3,810	5,340	5,450
9	664	7,730	7,400	14,600	55,100	22,300	4,290	2,990	10,000	3,640	3,580	25,300
10	638	5,260	6,700	12,000	24,300	14,400	3,930	2,680	8,380	3,060	2,750	25,300
11	607	3,940	7,290	10,400	14,200	11,800	3,570	2,870	7,320	2,540	4,260	19,200
12	583	10,100	8,570	9,180	12,400	10,100	3,460	2,090	7,320	3,320	2,030	10,000
13	564	16,700	8,700	8,410	11,400	8,320	10,500	1,720	8,450	4,690	1,550	6,280
14	554	11,100	8,910	7,540	10,300	6,920	24,600	1,580	7,270	3,530	1,760	4,200
15	567	8,190	10,500	6,210	9,460	5,770	31,400	1,520	6,470	2,700	2,240	3,040
16	782	7,480	10,700	5,210	8,730	4,790	24,300	1,410	6,690	2,550	2,010	2,350
17	1,370	7,830	12,700	4,520	8,190	4,610	16,100	1,520	7,810	3,170	1,510	26,900
18	1,470	8,850	13,500	6,270	7,640	4,950	11,400	2,300	7,210	3,390	1,150	47,300
19	1,370	16,700	13,900	13,900	6,250	4,750	8,730	2,970	5,090	2,340	950	51,500
20	1,290	22,200	12,800	18,900	4,510	4,420	7,180	4,220	4,030	1,640	841	41,400
21	1,160	27,100	10,800	15,500	3,860	6,700	6,150	3,570	3,370	1,340	1,080	15,600
22	992	19,500	8,910	12,200	3,680	6,360	7,980	2,890	2,740	2,180	1,170	9,820
23	887	12,900	8,090	9,370	3,440	5,890	15,000	2,310	2,380	3,270	907	8,080
24	795	10,500	10,900	7,320	3,220	5,510	12,300	1,820	2,150	2,660	791	6,800
25	733	9,480	13,900	6,320	2,960	5,050	8,810	1,930	5,810	2,190	996	6,010
26	717	8,110	13,600	6,870	2,800	4,600	9,270	2,410	14,900	2,140	1,860	5,450
27	1,200	6,880	12,100	8,300	2,630	4,240	10,600	7,120	9,490	7,050	2,040	4,470
28	1,860	13,700	9,790	7,450	2,500	3,920	8,950	36,700	6,200	12,200	1,350	3,510
29	1,730	19,100	7,890	6,670	2,420	3,650	7,800	43,200	4,570	8,200	1,720	2,810
30	1,900	15,200	8,470	6,120	---	8,890	6,350	e42,700	3,400	4,760	1,330	2,270
31	2,000	---	9,240	5,520	---	9,630	---	e60,400	---	4,310	1,330	---
TOTAL	33,197	304,880	298,960	430,240	391,320	279,550	291,910	279,230	409,750	115,000	77,495	339,539
MEAN	1,071	10,160	9,644	13,880	13,490	9,018	9,730	9,007	13,660	3,710	2,500	11,320
MAX	2,000	27,100	13,900	42,900	58,000	36,600	31,400	60,400	61,300	12,200	6,460	51,500
MIN	554	1,220	5,780	4,520	2,420	2,310	3,460	1,410	2,150	1,340	791	731

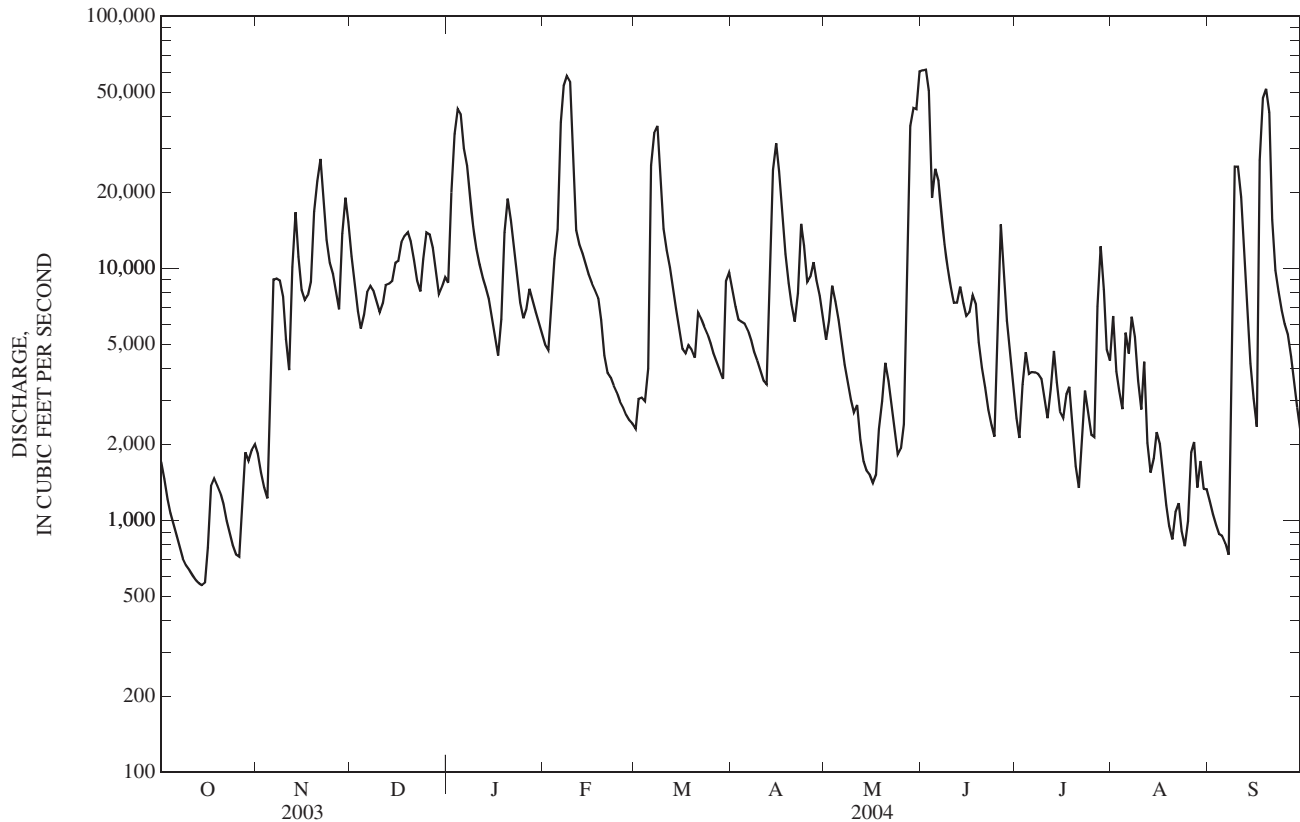
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	1,033	3,484	5,175	5,930	11,600	8,280	9,054	7,117	6,519	2,963	2,341	3,194
MAX	2,952	10,160	9,644	13,880	23,030	13,990	13,090	12,320	13,660	4,145	3,933	11,320
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2002)	(2004)	(2001)	(2001)	(2004)
MIN	256	366	1,317	1,452	3,892	4,572	3,631	1,652	2,056	1,195	287	392
(WY)	(2000)	(2002)	(2000)	(2000)	(2002)	(2000)	(2001)	(2001)	(2000)	(2002)	(2002)	(2002)

03284230 KENTUCKY RIVER AT LOCK 9 AT VALLEY VIEW, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	2,920,694		3,251,071		5,515	
ANNUAL MEAN	8,002		8,883		8,883	
HIGHEST ANNUAL MEAN					2,909	
LOWEST ANNUAL MEAN					71,800	
HIGHEST DAILY MEAN	71,800	Feb 18	61,300	Jun 2	71,800	Feb 18, 2003
LOWEST DAILY MEAN	451	Aug 29	554	Oct 14	40	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	597	Oct 9	597	Oct 9	67	Oct 1, 1999
MAXIMUM PEAK FLOW			63,200	May 31	72,600	Feb 18, 2003
MAXIMUM PEAK STAGE			30.80	May 31	36.12	Feb 18, 2003
10 PERCENT EXCEEDS	18,100		19,400		13,100	
50 PERCENT EXCEEDS	5,010		5,950		2,440	
90 PERCENT EXCEEDS	958		1,220		393	

e Estimated



03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY

LOCATION.--Lat 37°44'43", long 84°35'12", Jessamine County, Hydrologic Unit 05100205, on right bank at Lock and Dam No. 8, 1.5 mi downstream from Davis Creek, 1.8 mi upstream from Canoe Creek, 2.4 mi Southeast of Camp Nelson, and at mile 139.9.

DRAINAGE AREA.--4414 mi² of which 45.1 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1939 to September 1971, July 2002 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 520.51 ft above NGVD of 1929.

REMARKS.-- 2002 Wy: Records good except for those estimated and flows below 500 ft³/s, which are poor.

2003 Wy: Records good except for those estimated and flows below 500 ft³/s, which are poor.

2004 Wy: Records good except for those estimated and flows below 500 ft³/s, which are poor.

Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446), Small diversion by City of Lexington Waterworks.

COOPERATION.--Kentucky River Authority.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	551	229
2	---	---	---	---	---	---	---	---	---	---	504	255
3	---	---	---	---	---	---	---	---	---	---	501	228
4	---	---	---	---	---	---	---	---	---	---	467	201
5	---	---	---	---	---	---	---	---	---	---	398	176
6	---	---	---	---	---	---	---	---	---	---	329	160
7	---	---	---	---	---	---	---	---	---	---	265	150
8	---	---	---	---	---	---	---	---	---	---	222	142
9	---	---	---	---	---	---	---	---	---	---	e194	134
10	---	---	---	---	---	---	---	---	---	---	e170	124
11	---	---	---	---	---	---	---	---	---	---	e157	115
12	---	---	---	---	---	---	---	---	---	---	e148	106
13	---	---	---	---	---	---	---	---	---	---	e140	98
14	---	---	---	---	---	---	---	---	---	---	e134	92
15	---	---	---	---	---	---	---	---	---	---	e130	90
16	---	---	---	---	---	---	---	---	---	---	e128	99
17	---	---	---	---	---	---	---	---	---	---	e130	110
18	---	---	---	---	---	---	---	---	---	---	e130	118
19	---	---	---	---	---	---	---	---	---	1,270	e134	122
20	---	---	---	---	---	---	---	---	---	1,180	e146	125
21	---	---	---	---	---	---	---	---	---	1,290	e167	148
22	---	---	---	---	---	---	---	---	---	1,600	214	166
23	---	---	---	---	---	---	---	---	---	2,160	251	178
24	---	---	---	---	---	---	---	---	---	1,840	264	182
25	---	---	---	---	---	---	---	---	---	1,540	253	229
26	---	---	---	---	---	---	---	---	---	1,320	232	552
27	---	---	---	---	---	---	---	---	---	1,250	214	1,120
28	---	---	---	---	---	---	---	---	---	1,150	195	2,150
29	---	---	---	---	---	---	---	---	---	1,020	184	2,430
30	---	---	---	---	---	---	---	---	---	838	185	2,110
31	---	---	---	---	---	---	---	---	---	649	197	---
TOTAL	---	---	---	---	---	---	---	---	---	---	7,334	12,139
MEAN	---	---	---	---	---	---	---	---	---	---	237	405
MAX	---	---	---	---	---	---	---	---	---	551	2,430	---
MIN	---	---	---	---	---	---	---	---	---	128	90	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2002, BY WATER YEAR (WY)

MEAN	625	2,349	5,901	9,129	12,060	13,760	9,542	5,559	2,656	2,586	1,732	765
MAX	2,784	9,098	18,790	27,160	31,030	39,250	19,030	16,600	9,681	9,455	10,480	4,469
(WY)	(1965)	(1943)	(1952)	(1950)	(1956)	(1955)	(1948)	(1971)	(1950)	(1942)	(1942)	(1950)
MIN	45.8	63.5	92.4	1,192	1,081	3,971	2,909	814	417	95.0	137	87.8
(WY)	(1954)	(1954)	(1954)	(1940)	(1954)	(1969)	(1963)	(1941)	(1966)	(1944)	(1957)	(1955)

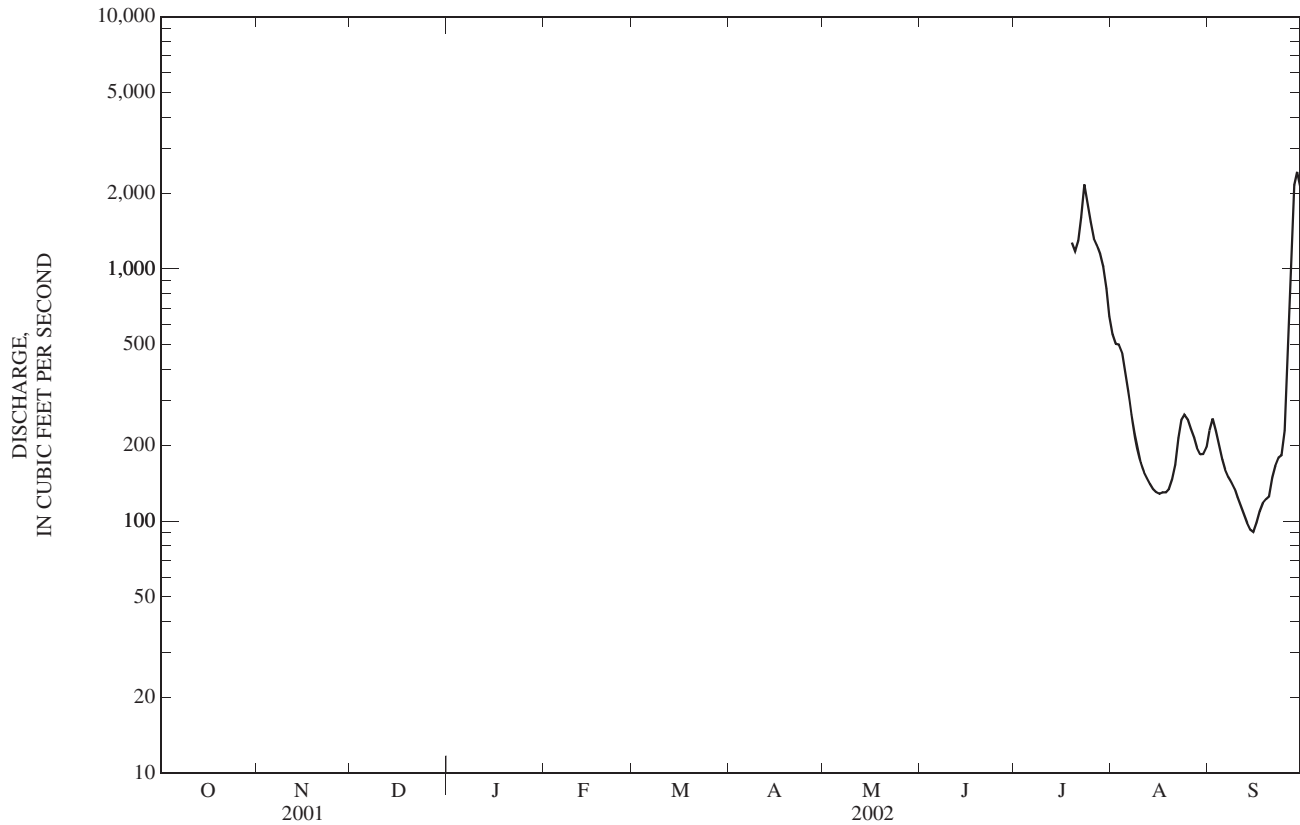
03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

SUMMARY STATISTICS

WATER YEARS 1926 - 2002

ANNUAL MEAN	5,530	
HIGHEST ANNUAL MEAN	8,642	1950
LOWEST ANNUAL MEAN	2,119	1954
HIGHEST DAILY MEAN	92,300	Mar 2, 1962
LOWEST DAILY MEAN	35	Oct 12, 1953
ANNUAL SEVEN-DAY MINIMUM	38	Oct 10, 1953
MAXIMUM PEAK FLOW	92,800	Mar 2, 1962
MAXIMUM PEAK STAGE	40.30	Mar 2, 1962
10 PERCENT EXCEEDS	14,300	
50 PERCENT EXCEEDS	1,930	
90 PERCENT EXCEEDS	250	

e Estimated



03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,570	8,280	2,040	5,940	5,930	13,800	3,090	3,110	3,690	1,880	3,970	2,610
2	1,120	5,020	1,900	8,610	6,010	13,200	3,370	2,930	3,200	1,700	2,890	4,110
3	852	3,580	1,720	10,100	5,570	12,500	3,640	2,910	3,260	1,660	2,510	7,480
4	671	2,830	1,560	10,300	7,140	11,500	3,490	3,040	4,170	1,590	4,700	9,290
5	549	4,080	1,510	8,960	10,000	10,100	3,440	13,500	3,660	1,410	14,800	15,000
6	430	12,100	1,590	7,490	11,900	9,210	3,560	21,400	3,430	1,230	13,700	19,100
7	362	10,300	3,090	6,360	10,000	8,720	7,760	12,200	31,700	1,200	8,900	8,730
8	314	8,040	4,890	5,530	8,230	8,200	17,900	9,660	27,800	1,140	6,250	4,950
9	283	5,750	4,560	4,850	6,660	7,560	31,400	27,100	22,600	1,100	5,210	3,150
10	1,200	8,010	4,250	4,330	5,640	7,100	37,400	28,300	14,700	2,020	4,530	2,320
11	20,400	17,000	5,900	3,870	5,200	6,700	41,100	22,100	8,920	3,560	3,480	1,870
12	10,100	14,600	9,510	3,400	4,990	6,020	42,100	13,900	9,590	4,410	4,120	1,530
13	4,650	10,100	13,400	2,930	4,750	5,330	40,600	8,910	10,400	6,310	2,930	1,250
14	2,890	7,060	30,500	2,610	4,510	4,800	29,100	6,590	15,200	5,650	2,220	1,060
15	2,160	5,510	36,100	2,360	33,100	4,330	16,200	5,010	29,700	4,830	1,790	930
16	2,530	7,530	29,200	2,200	62,600	3,740	12,600	6,460	27,300	6,230	1,830	819
17	2,570	7,510	16,000	2,060	74,700	3,250	11,600	10,300	33,100	3,780	1,580	726
18	2,240	6,580	11,400	1,940	76,500	3,010	14,400	16,900	31,500	2,410	1,330	670
19	2,060	5,660	8,950	1,830	77,100	3,880	14,600	22,000	31,100	1,890	1,380	634
20	1,940	5,110	10,200	1,770	70,300	13,400	15,700	19,000	31,100	1,550	1,430	633
21	1,790	4,640	10,100	1,800	39,300	7,500	14,000	16,400	25,700	1,310	1,490	596
22	1,650	4,250	11,100	1,820	25,000	5,080	13,400	13,000	16,000	1,130	1,290	635
23	1,510	4,050	9,860	1,740	35,400	4,140	11,700	12,600	11,200	1,020	1,030	1,010
24	1,320	3,770	7,970	1,590	39,900	3,520	9,460	11,200	9,060	1,200	869	1,720
25	1,150	3,440	7,790	1,400	36,500	3,050	7,630	8,200	7,710	1,530	764	2,440
26	1,090	3,130	8,550	1,290	23,100	2,830	6,530	6,240	5,310	1,710	651	2,120
27	1,060	2,890	9,630	1,290	16,900	2,650	5,610	4,930	3,410	1,660	562	e1,710
28	1,450	2,690	8,810	1,310	14,800	2,500	5,110	4,140	2,610	1,410	531	e1,710
29	5,680	2,420	7,340	1,460	---	2,590	4,450	3,720	2,230	1,700	463	e1,710
30	16,700	2,180	6,110	2,490	---	2,920	3,680	4,040	2,050	1,860	586	1,770
31	14,600	---	5,230	3,920	---	2,950	---	3,950	---	2,630	1,260	---
TOTAL	106,891	188,110	290,760	117,550	721,730	196,080	434,620	343,740	431,400	72,710	99,046	102,283
MEAN	3,448	6,270	9,379	3,792	25,780	6,325	14,490	11,090	14,380	2,345	3,195	3,409
MAX	20,400	17,000	36,100	10,300	77,100	13,800	42,100	28,300	33,100	6,310	14,800	19,100
MIN	283	2,180	1,510	1,290	4,510	2,500	3,090	2,910	2,050	1,020	463	596

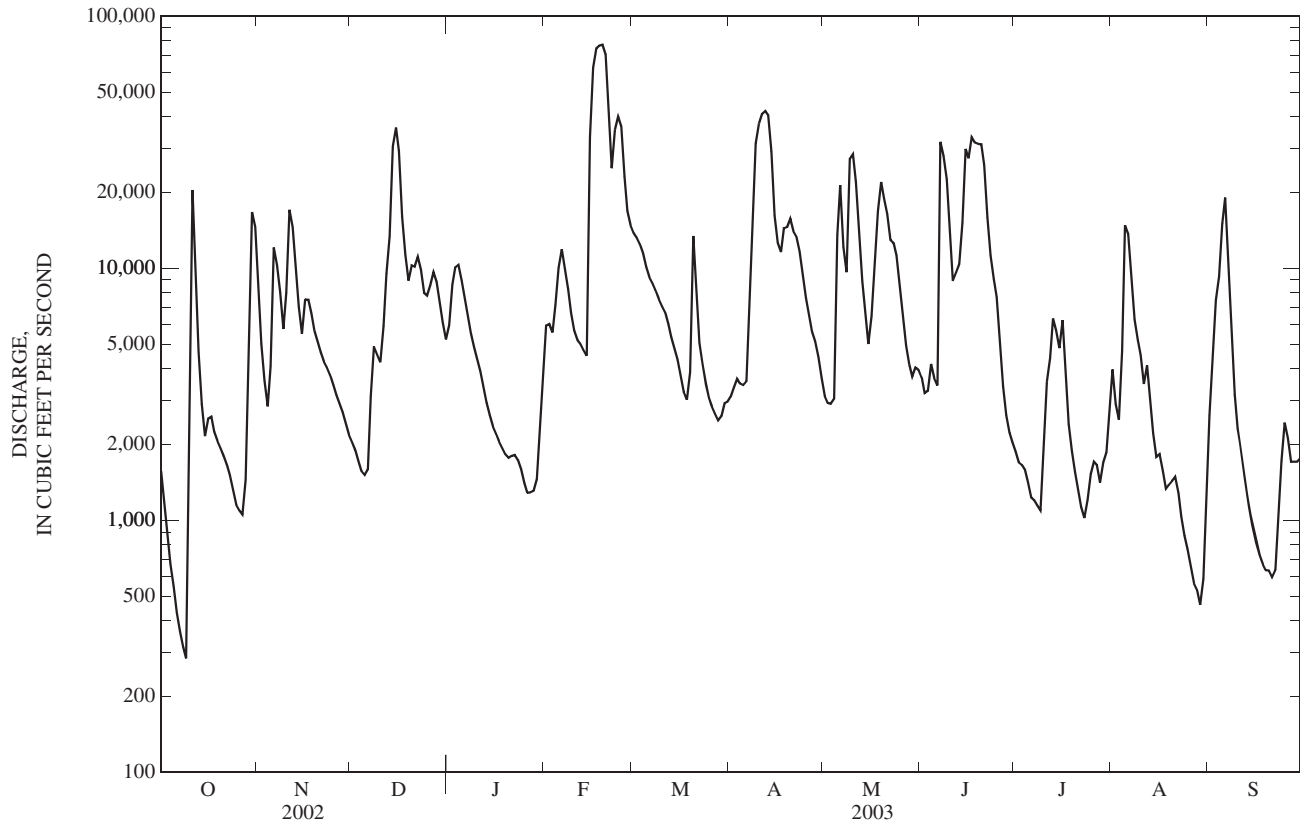
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2003, BY WATER YEAR (WY)

MEAN	711	2,468	6,007	8,967	12,480	13,530	9,691	5,727	3,012	2,579	1,775	843
MAX	3,448	9,098	18,790	27,160	31,030	39,250	19,030	16,600	14,380	9,455	10,480	4,469
(WY)	(2003)	(1943)	(1952)	(1950)	(1956)	(1955)	(1948)	(1971)	(2003)	(1942)	(1942)	(1950)
MIN	45.8	63.5	92.4	1,192	1,081	3,971	2,909	814	417	95.0	137	87.8
(WY)	(1954)	(1954)	(1954)	(1940)	(1954)	(1969)	(1963)	(1941)	(1966)	(1944)	(1957)	(1955)

03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1926 - 2003	
ANNUAL TOTAL	3,104,920			
ANNUAL MEAN	8,507		5,621	
HIGHEST ANNUAL MEAN			8,642	
LOWEST ANNUAL MEAN			2,119	
HIGHEST DAILY MEAN	77,100	Feb 19	92,300	Mar 2, 1962
LOWEST DAILY MEAN	283	Oct 9	35	Oct 12, 1953
ANNUAL SEVEN-DAY MINIMUM	494	Oct 3	38	Oct 10, 1953
MAXIMUM PEAK FLOW	77,900	Feb 19	92,800	Mar 2, 1962
MAXIMUM PEAK STAGE	38.44	Feb 19	40.30	Mar 2, 1962
10 PERCENT EXCEEDS	20,800		14,500	
50 PERCENT EXCEEDS	4,510		2,020	
90 PERCENT EXCEEDS	1,220		250	

e Estimated



03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,760	1,890	11,600	8,700	4,810	2,140	8,190	5,190	62,100	2,590	7,800	1,320
2	1,550	1,620	8,680	24,300	4,620	2,780	6,910	6,840	61,000	2,150	4,430	1,160
3	1,300	1,410	6,770	36,400	7,680	3,000	6,020	9,030	52,700	2,800	3,350	1,040
4	1,140	1,260	5,750	41,000	10,800	2,800	5,750	7,530	22,700	4,370	2,850	953
5	1,010	3,040	6,350	42,000	15,500	4,030	5,640	6,280	25,700	3,610	6,520	943
6	913	8,330	7,840	34,300	40,600	31,800	5,330	5,120	24,400	3,570	5,150	892
7	808	8,920	8,360	28,700	48,500	35,900	4,890	4,170	17,800	3,850	5,890	775
8	717	8,380	8,040	21,100	54,600	38,200	4,410	3,500	12,500	3,670	5,390	3,770
9	657	7,590	7,280	15,200	54,100	25,400	4,040	2,990	9,730	3,500	3,670	26,000
10	629	5,300	6,810	11,900	28,700	14,500	3,700	2,580	8,050	3,000	2,690	27,600
11	600	3,900	7,430	10,100	14,100	11,400	3,360	2,840	6,950	3,390	4,090	20,800
12	579	8,870	8,250	8,890	11,800	9,570	3,270	2,180	6,780	3,520	2,260	10,600
13	565	20,100	8,480	8,050	10,800	7,890	10,800	1,840	e8,800	4,640	1,640	6,320
14	555	11,400	8,750	7,250	9,640	6,530	26,500	1,680	e7,560	3,700	1,690	4,260
15	567	8,360	10,800	6,050	8,750	5,470	34,200	1,650	6,260	2,780	2,070	3,040
16	706	7,550	11,200	5,070	8,010	4,550	27,400	1,550	6,120	2,480	2,010	2,400
17	1,300	7,570	14,100	4,370	7,470	4,260	17,100	1,540	7,110	5,830	1,610	29,600
18	1,510	8,960	13,900	6,210	6,990	4,490	11,500	2,090	7,050	4,350	1,240	44,600
19	1,450	19,700	14,200	13,400	5,880	4,430	8,540	2,700	5,000	2,740	1,010	47,000
20	1,360	23,200	13,000	19,400	4,320	4,170	6,940	3,780	3,910	1,940	873	42,500
21	1,250	29,600	10,900	16,100	3,520	6,540	5,960	3,570	3,290	1,530	1,430	18,400
22	1,070	21,800	8,900	12,300	3,360	6,230	9,340	2,840	2,720	2,270	1,400	9,720
23	939	13,300	7,970	9,260	3,140	5,600	16,800	2,350	2,380	3,740	1,050	7,850
24	828	10,400	11,000	7,170	2,940	5,230	14,100	1,900	2,170	2,830	847	6,560
25	742	9,310	14,000	6,100	2,740	4,800	9,360	1,850	4,300	2,280	1,080	5,740
26	721	7,990	13,800	6,880	2,550	4,350	9,020	2,280	15,600	2,150	1,870	5,200
27	1,110	6,760	12,100	8,550	2,400	4,000	10,500	6,530	9,950	5,750	2,270	4,380
28	2,000	16,400	9,770	7,530	2,280	3,690	8,830	35,400	6,280	11,700	1,730	3,440
29	1,830	21,400	7,790	6,600	2,210	3,420	7,620	41,200	4,530	8,330	2,910	2,780
30	1,900	16,500	8,660	6,000	---	9,290	6,270	44,500	3,390	4,880	1,620	2,280
31	2,000	---	9,340	5,360	---	10,000	---	64,000	---	4,940	1,480	---
TOTAL	34,066	320,810	301,820	444,240	382,810	286,460	302,290	281,500	416,830	118,880	83,920	341,923
MEAN	1,099	10,690	9,736	14,330	13,200	9,241	10,080	9,081	13,890	3,835	2,707	11,400
MAX	2,000	29,600	14,200	42,000	54,600	38,200	34,200	64,000	62,100	11,700	7,800	47,000
MIN	555	1,260	5,750	4,370	2,210	2,140	3,270	1,540	2,170	1,530	847	775

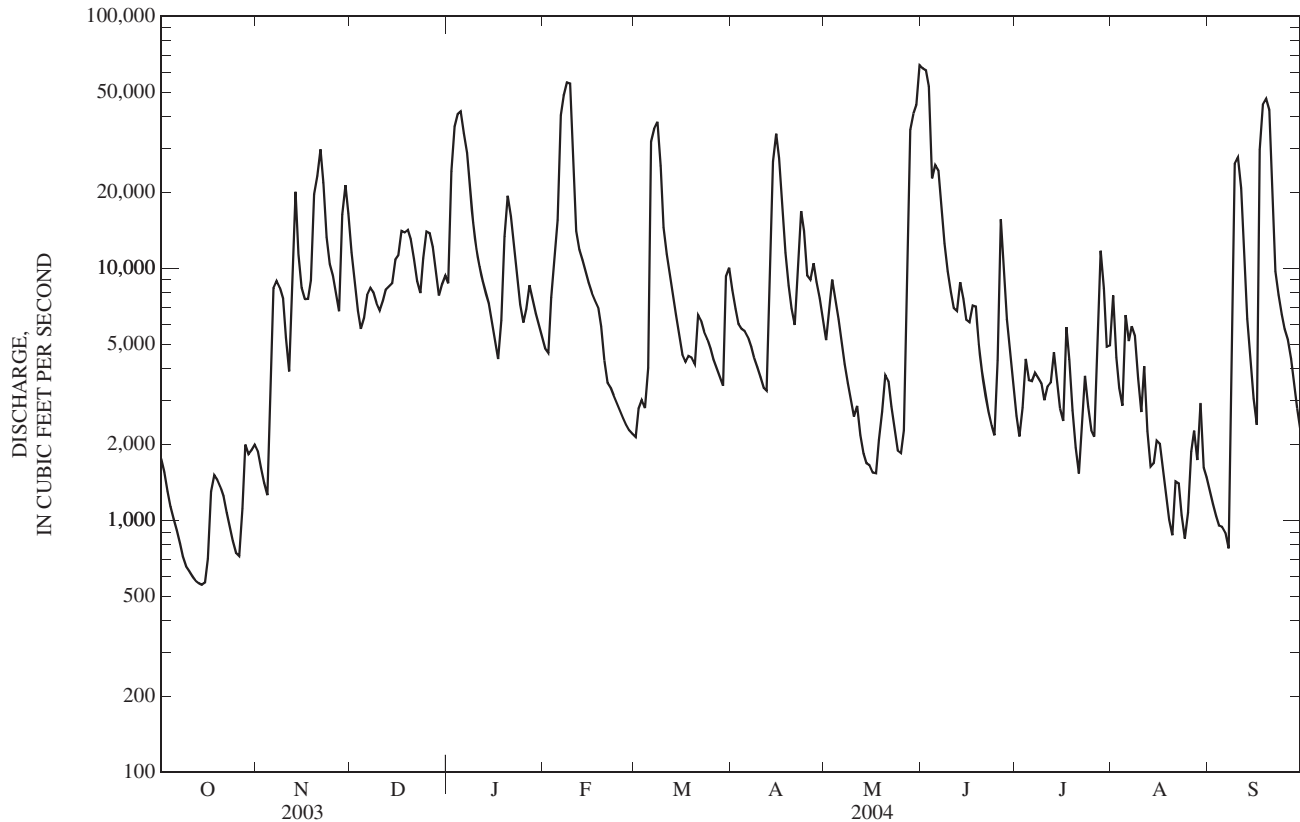
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2004, BY WATER YEAR (WY)

MEAN	722	2,710	6,116	9,125	12,500	13,410	9,703	5,825	3,332	2,616	1,802	1,144
MAX	3,448	10,690	18,790	27,160	31,030	39,250	19,030	16,600	14,380	9,455	10,480	11,400
(WY)	(2003)	(2004)	(1952)	(1950)	(1956)	(1955)	(1948)	(1971)	(2003)	(1942)	(1942)	(2004)
MIN	45.8	63.5	92.4	1,192	1,081	3,971	2,909	814	417	95.0	137	87.8
(WY)	(1954)	(1954)	(1954)	(1940)	(1954)	(1969)	(1963)	(1941)	(1966)	(1944)	(1957)	(1955)

03284500 KENTUCKY RIVER AT LOCK 8 NEAR CAMP NELSON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1926 - 2004	
ANNUAL TOTAL	3,175,855		3,315,549		5,722	
ANNUAL MEAN	8,701		9,059		2,119	
HIGHEST ANNUAL MEAN					9,059	
LOWEST ANNUAL MEAN					2,119	
HIGHEST DAILY MEAN	77,100	Feb 19	64,000	May 31	92,300	Mar 2, 1962
LOWEST DAILY MEAN	463	Aug 29	555	Oct 14	35	Oct 12, 1953
ANNUAL SEVEN-DAY MINIMUM	593	Oct 9	593	Oct 9	38	Oct 10, 1953
MAXIMUM PEAK FLOW			67,800	May 31	92,800	Mar 2, 1962
MAXIMUM PEAK STAGE			34.40	May 31	40.30	Mar 2, 1962
10 PERCENT EXCEEDS	21,400		22,100		14,700	
50 PERCENT EXCEEDS	4,950		5,750		2,130	
90 PERCENT EXCEEDS	1,090		1,350		255	

e Estimated



03284520 EAST HICKMAN CREEK AT ANDOVER VILLAGE NEAR CADENTOWN, KY

LOCATION.--Lat 37°59'50", long 84°24'20", Fayette County, Hydrologic Unit 05100205, on right wingwall, downstream side of culvert in Andover Village, 1.6 mi west of intersection of Todds Road and Walnut Hill-Chilesburg Road, and at mile 12.4.

DRAINAGE AREA.--1.58 mi².

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder with telemetry. Elevation of gage is 972.712 ft above NGVD of 1929.

REMARKS.--Records fair except for December and January, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 65 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1630	178	4.15	Jun 25	1305	125	3.70
Jan 2	0630	96	3.39	Jul 22	0745	143	3.87
Mar 5	1920	133	3.78	Jul 31	1215	91	3.32
Apr 23	0905	91	3.32	Aug 20	2200	159	4.01
May 27	2310	162	4.03	Aug 28	2320	181	4.17
May 30	2155	*209	*4.36	Sep 17	0805	184	4.19
Jun 12	1630	86	3.26				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	0.68	3.2	2.6	1.2	2.1	2.0	1.1	11	0.51	8.2	2.2
2	0.60	0.76	2.4	32	2.9	3.3	1.6	9.9	16	0.64	3.1	1.5
3	0.51	0.77	2.0	8.7	7.2	3.3	1.2	4.0	6.0	0.46	1.6	1.9
4	0.54	0.84	3.9	8.2	3.5	1.6	0.94	2.5	4.6	0.37	1.3	1.1
5	0.51	11	4.2	16	11	25	0.75	1.8	2.9	0.32	7.0	0.97
6	0.52	4.0	3.5	7.0	11	19	0.84	1.3	2.1	0.33	2.1	0.78
7	0.50	2.4	2.8	4.5	5.2	6.8	0.72	0.93	1.6	0.40	1.2	0.72
8	0.48	1.7	2.3	3.5	3.4	4.4	0.65	0.73	1.2	0.26	0.82	8.4
9	0.54	1.1	2.2	3.0	2.7	3.2	0.51	0.60	1.0	0.22	0.61	3.2
10	0.55	0.92	5.4	2.4	2.3	2.5	0.49	0.88	0.89	0.26	0.54	2.0
11	0.53	0.87	3.8	2.0	1.8	1.9	0.48	0.63	0.70	0.82	0.50	1.4
12	0.59	41	2.7	2.2	1.4	1.4	3.4	0.46	9.7	0.48	0.45	5.3
13	0.61	12	2.2	2.1	1.2	1.2	8.7	0.39	4.0	0.30	0.46	2.0
14	1.7	5.4	5.0	1.8	1.0	1.2	8.7	0.41	2.3	0.58	0.35	1.5
15	e0.97	6.1	4.0	1.5	0.92	1.0	4.4	1.6	1.4	0.28	0.26	1.2
16	e0.76	4.2	12	1.3	0.75	1.6	3.2	0.72	1.5	0.20	0.21	1.1
17	e0.65	3.1	10	1.3	0.68	1.0	2.3	0.56	1.3	6.3	0.18	58
18	e0.58	12	5.7	6.0	0.63	0.87	1.6	3.8	1.5	2.1	0.13	12
19	e0.55	17	4.1	3.7	0.61	0.73	1.2	7.5	5.7	0.73	0.12	6.4
20	e0.53	7.5	2.9	2.7	0.65	2.9	1.3	2.9	1.9	0.46	12	4.0
21	e0.50	4.2	2.4	2.2	0.58	2.7	2.6	1.4	1.2	0.35	12	2.9
22	e0.48	2.9	2.1	1.8	e0.55	1.5	7.4	1.2	1.4	14	2.8	2.3
23	e0.61	2.3	3.6	1.3	e0.52	1.2	17	0.78	1.1	2.3	1.4	1.7
24	e0.71	3.4	4.8	1.2	e0.50	0.96	6.6	0.50	0.62	1.1	2.2	1.2
25	e0.56	2.2	3.0	1.1	e0.48	0.80	4.6	0.55	17	0.70	2.6	1.2
26	5.7	1.7	2.3	3.4	e0.45	0.73	3.6	5.5	4.8	0.96	5.1	1.0
27	4.9	3.3	1.9	4.0	0.42	0.72	2.6	23	2.2	0.56	2.7	0.75
28	1.1	25	1.6	2.5	1.1	0.62	1.5	26	1.6	0.39	17	0.72
29	0.99	8.6	2.9	2.0	1.6	1.4	1.5	6.5	0.91	0.31	24	0.61
30	0.64	4.8	6.6	1.6	---	5.9	0.77	44	0.64	0.30	6.2	0.50
31	0.52	---	3.3	1.3	---	2.7	---	51	---	23	3.5	---
TOTAL	30.13	191.74	118.8	134.9	66.24	104.23	93.15	203.14	108.76	59.99	120.63	128.55
MEAN	0.97	6.39	3.83	4.35	2.28	3.36	3.10	6.55	3.63	1.94	3.89	4.29
MAX	5.7	41	12	32	11	25	17	51	17	23	24	58
MIN	0.48	0.68	1.6	1.1	0.42	0.62	0.48	0.39	0.62	0.20	0.12	0.50

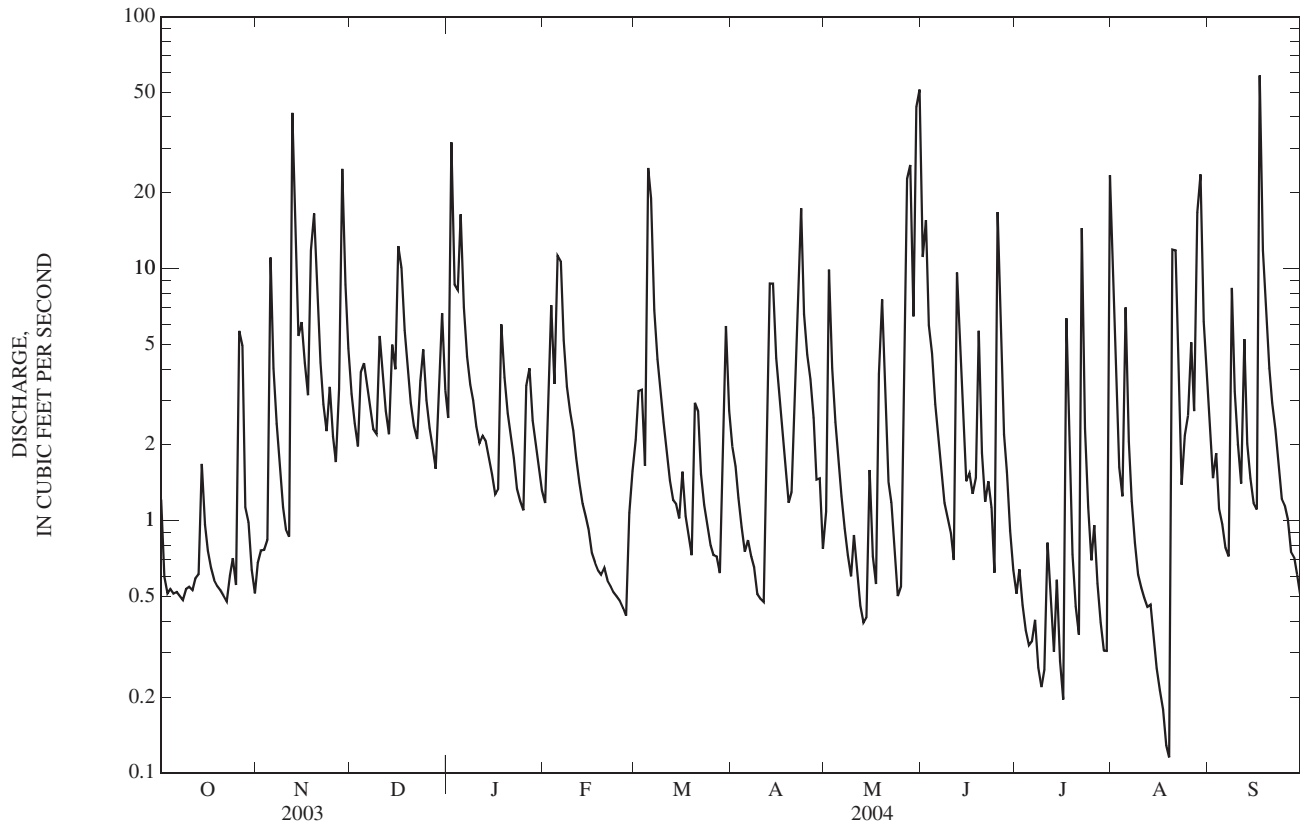
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	1.52	2.05	2.29	3.08	3.83	3.61	2.71	3.71	2.59	1.69	1.14	1.80
MAX	5.19	6.39	3.83	5.69	7.84	6.57	5.34	7.39	6.73	4.78	3.89	4.38
(WY)	(2003)	(2004)	(2004)	(1998)	(2003)	(2002)	(1998)	(2003)	(1998)	(1998)	(2004)	(2003)
MIN	0.19	0.37	1.02	1.18	1.00	2.00	0.82	0.31	0.41	0.20	0.05	0.01
(WY)	(2001)	(1999)	(2000)	(2001)	(2002)	(2003)	(2001)	(1999)	(1999)	(2002)	(1999)	(1999)

03284520 EAST HICKMAN CREEK AT ANDOVER VILLAGE NEAR CADENTOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	1,364.03		1,360.26		2.49	
ANNUAL MEAN	3.74		3.72		1.48	
HIGHEST ANNUAL MEAN					3.94	
LOWEST ANNUAL MEAN					1.48	
HIGHEST DAILY MEAN	47	Feb 15	58	Sep 17	63	Mar 20, 2002
LOWEST DAILY MEAN	0.17	Jul 8	0.12	Aug 19	0.00	Sep 20, 1998
ANNUAL SEVEN-DAY MINIMUM	0.22	Jul 2	0.24	Aug 13	0.00	Aug 31, 1999
MAXIMUM PEAK FLOW			209	May 30	269	Aug 31, 2003
MAXIMUM PEAK STAGE			4.36	May 30	4.78	Aug 31, 2003
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 1999
10 PERCENT EXCEEDS	9.0		8.5		6.2	
50 PERCENT EXCEEDS	1.5		1.6		0.78	
90 PERCENT EXCEEDS	0.37		0.50		0.06	

e Estimated



03284525 EAST HICKMAN CREEK TRIBUTARY AT CHILESBURO ROAD NEAR LEXINGTON, KY

LOCATION.--Lat 37°59'18", long 84°24'40", Fayette County, Hydrologic Unit 05100205, on left bank, downstream side of bridge on Walnut Hill-Chilesburg Road, 0.9 mi northeast of Athens Road (#418), and 0.9 mi southwest of Todds Road (1927) and 3.1 mi east of Lexington.

DRAINAGE AREA.--0.96 mi².

PERIOD OF RECORD.--October 1997 to 2000, 2003.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 976.847 ft above NGVD of 1929.

REMARKS.--Records poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1625	195	3.84	Jun 25	1540	44	2.65
Jan 2	0835	48	2.69	Jul 22	0720	67	2.85
Mar 5	2050	80	2.97	Aug 28	2240	96	3.12
May 27	2250	78	2.95	Sep 17	0905	*232	*4.06
May 31	0325	157	3.59				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.29	0.12	2.5	2.1	0.62	0.36	1.1	0.56	19	0.46	4.9	1.3
2	0.24	0.12	1.6	13	1.3	0.49	0.92	5.7	16	0.49	2.3	0.94
3	0.19	0.17	1.2	7.2	4.9	0.57	0.74	3.4	6.0	0.32	1.2	0.91
4	0.15	0.18	2.6	5.0	3.3	0.61	0.55	2.3	3.7	0.24	0.72	0.43
5	0.12	5.0	3.1	10	4.9	10	0.45	1.4	2.1	0.20	4.1	0.33
6	0.10	3.2	2.4	5.5	10	14	0.40	0.83	1.2	0.35	1.2	0.25
7	0.05	4.8	1.7	3.8	5.4	6.6	0.35	0.58	1.3	0.28	0.26	0.21
8	0.06	3.7	1.3	2.5	3.8	3.6	0.30	0.47	0.73	0.19	0.12	5.0
9	0.07	3.6	0.98	2.0	2.9	2.5	0.25	0.37	0.50	0.19	0.34	1.8
10	0.06	3.8	2.8	1.5	2.2	1.7	0.23	0.59	1.3	0.15	0.34	0.94
11	0.07	1.9	2.8	1.2	1.6	1.2	0.21	0.72	0.30	0.16	0.33	0.58
12	0.05	27	1.8	1.5	1.3	0.86	0.44	0.45	3.7	0.30	0.46	1.2
13	0.04	10	1.4	1.3	e1.1	0.66	3.1	0.42	5.5	0.21	0.30	0.51
14	0.20	5.6	2.8	1.1	e1.0	1.9	5.5	0.33	2.2	0.25	0.05	0.42
15	0.09	4.6	3.2	0.87	e0.88	0.55	3.4	0.63	1.4	0.13	0.04	0.27
16	0.05	3.8	5.1	0.70	e0.68	0.65	4.2	0.43	1.7	0.18	0.26	0.17
17	0.05	2.6	7.2	0.73	0.51	0.50	1.3	0.43	1.5	2.1	0.12	50
18	0.04	4.1	4.6	3.8	0.46	0.43	0.89	0.87	1.8	1.4	0.18	9.9
19	0.04	9.7	3.7	3.4	e0.42	0.35	0.67	2.9	2.5	1.1	0.16	5.5
20	0.04	5.4	2.5	1.9	e0.54	1.5	0.54	1.2	1.2	0.26	1.4	3.5
21	0.03	3.8	1.8	1.4	e0.48	1.8	0.56	0.55	0.76	0.19	6.7	1.6
22	0.03	3.6	1.8	1.1	e0.43	0.89	5.4	0.28	0.98	9.4	0.94	0.88
23	0.58	1.4	2.2	0.72	e0.40	0.67	8.2	0.26	0.81	2.3	0.69	2.1
24	1.6	1.7	4.1	0.67	e0.35	0.55	6.2	0.29	0.46	0.93	1.2	3.8
25	0.11	1.1	2.7	0.54	e0.32	0.44	3.9	0.20	14	0.53	1.3	0.39
26	0.29	0.83	1.9	2.0	e0.29	0.39	3.0	3.1	11	0.69	3.5	0.33
27	0.57	1.7	1.6	3.2	e0.25	0.37	1.7	9.8	4.2	0.54	1.3	0.27
28	0.21	9.8	1.3	1.7	0.22	0.35	0.49	33	2.1	0.45	5.6	0.24
29	0.20	6.2	1.5	1.3	0.22	0.54	0.66	6.9	1.1	0.32	27	0.28
30	0.15	4.1	4.8	1.0	---	3.5	1.5	23	0.55	0.24	6.2	0.17
31	0.33	---	2.9	0.72	---	1.5	---	63	---	7.9	2.8	---
TOTAL	6.10	133.62	81.88	83.45	50.77	60.03	57.15	164.96	109.59	32.45	76.01	94.22
MEAN	0.20	4.45	2.64	2.69	1.75	1.94	1.91	5.32	3.65	1.05	2.45	3.14
MAX	1.6	27	7.2	13	10	14	8.2	63	19	9.4	27	50
MIN	0.03	0.12	0.98	0.54	0.22	0.35	0.21	0.20	0.30	0.13	0.04	0.17

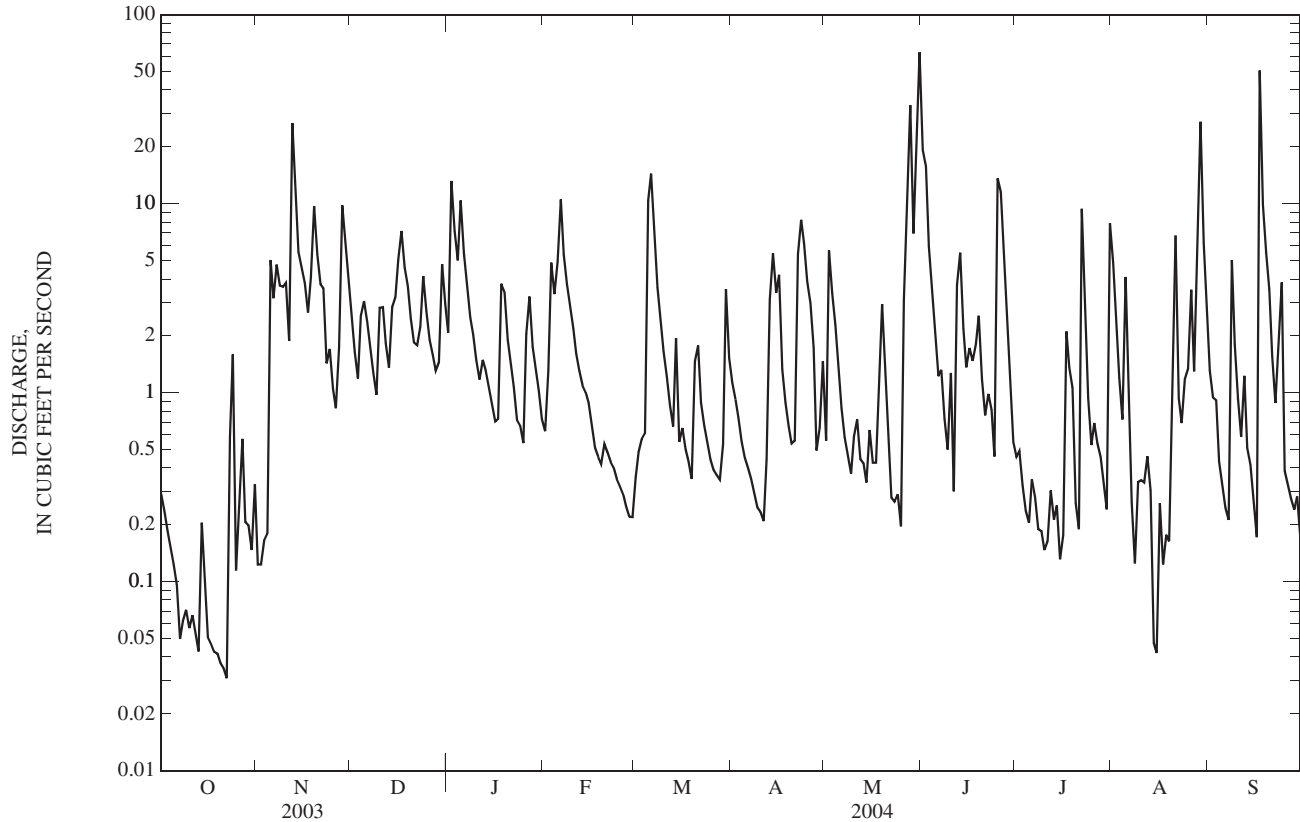
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MEAN	1.87	3.42	1.06	2.36	3.69	3.54	1.63	3.10	1.71	5.69	6.49	5.82
MAX	11.7	12.7	2.64	4.38	8.80	13.0	3.28	7.38	3.65	26.9	25.4	27.9
(WY)	(2002)	(2002)	(2004)	(2001)	(2001)	(2002)	(1998)	(2001)	(2004)	(2002)	(2002)	(2002)
MIN	0.00	0.00	0.04	0.11	1.54	1.00	0.18	0.07	0.03	0.04	0.00	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(1999)	(2003)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)

03284525 EAST HICKMAN CREEK TRIBUTARY AT CHILESBURG ROAD NEAR LEXINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	768.15		950.23		1.44	
ANNUAL MEAN	2.10		2.60		0.54	
HIGHEST ANNUAL MEAN					2.60	
LOWEST ANNUAL MEAN					0.54	
HIGHEST DAILY MEAN	27	Nov 12	63	May 31	75	Mar 20, 2002
LOWEST DAILY MEAN	0.03	Jun 2	0.03	Oct 21	0.00	Sep 17, 1998
ANNUAL SEVEN-DAY MINIMUM	0.04	Oct 16	0.04	Oct 16	0.00	Sep 27, 1998
MAXIMUM PEAK FLOW			232	Sep 17	232	Aug 31, 2003
MAXIMUM PEAK STAGE			4.06	Sep 17	4.06	Aug 31, 2003
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 1998
10 PERCENT EXCEEDS	5.3		5.5		3.7	
50 PERCENT EXCEEDS	0.65		1.0		0.27	
90 PERCENT EXCEEDS	0.10		0.19		0.00	

e Estimated



03284530 EAST HICKMAN CREEK AT DELONG ROAD 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 current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 913.491 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated and those below 1.0 ft³/s, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1745	1,190	6.13	Jun 12	1705	835	5.38
Jan 2	0855	512	4.50	Jun 25	1410	*1,940	*7.24
Mar 6	0035	685	5.00	Aug 29	0020	1,400	6.48
May 28	0100	1,100	5.96	Sep 17	1000	1,060	5.88
May 31	0325	1,710	6.93				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	4.9	36	29	13	4.3	18	9.5	140	4.7	97	13
2	6.0	5.5	27	255	18	13	15	85	140	5.0	27	6.3
3	1.9	5.2	24	107	55	12	14	47	53	3.9	8.3	6.1
4	1.5	4.5	32	62	41	14	11	25	31	2.9	5.3	4.2
5	1.6	48	43	172	80	122	8.3	16	18	2.7	49	3.3
6	1.5	46	39	76	147	310	7.0	7.2	10	3.0	18	2.6
7	1.5	26	29	44	68	80	6.7	5.2	6.1	2.6	7.4	2.9
8	1.5	17	23	32	42	42	6.5	4.4	4.4	1.9	4.9	20
9	1.7	13	21	29	31	30	5.8	3.8	12	2.0	3.9	12
10	1.6	5.8	40	21	25	21	5.9	7.1	9.7	2.8	4.6	5.9
11	2.4	5.9	45	17	21	16	6.8	8.6	4.5	2.3	3.5	4.3
12	4.0	356	31	17	18	14	19	4.5	132	2.0	3.0	9.1
13	4.3	210	25	18	16	13	55	3.6	88	1.6	2.5	3.7
14	5.6	65	38	16	e15	11	73	3.4	34	2.3	2.1	2.9
15	5.6	55	39	15	e14	12	39	7.2	17	1.3	1.9	2.5
16	3.3	43	80	13	e12	14	25	6.6	13	1.1	1.8	2.4
17	4.3	33	118	12	11	10	19	5.1	19	16	1.6	478
18	2.2	64	64	42	9.9	8.6	14	9.1	22	4.9	1.4	115
19	1.3	160	46	39	7.3	8.1	11	35	44	2.7	1.3	38
20	1.1	83	34	27	e6.6	16	9.6	34	23	2.0	12	17
21	1.2	49	27	21	e6.0	32	15	13	11	1.5	31	8.7
22	1.4	33	24	17	e5.1	17	60	7.5	10	e52	8.0	5.2
23	1.5	31	28	15	e4.9	13	140	5.6	9.0	e30	4.7	3.9
24	1.2	33	54	13	e4.8	11	81	3.6	5.1	12	5.3	3.1
25	1.4	25	38	12	e4.6	11	41	3.1	314	4.7	4.7	2.6
26	20	19	29	27	e4.2	9.0	31	20	103	3.4	13	2.6
27	27	25	24	35	3.8	8.5	21	133	32	2.6	11	2.4
28	15	193	21	26	3.3	7.9	14	402	17	2.2	71	2.4
29	12	99	22	21	3.2	9.1	11	85	9.0	1.8	432	2.3
30	7.3	52	63	18	---	46	10	322	6.1	2.3	64	2.3
31	5.1	---	40	16	---	26	---	821	---	98	26	---
TOTAL	153.4	1,809.8	1,204	1,264	690.7	961.5	793.6	2,143.1	1,336.9	278.2	927.2	784.7
MEAN	4.95	60.3	38.8	40.8	23.8	31.0	26.5	69.1	44.6	8.97	29.9	26.2
MAX	27	356	118	255	147	310	140	821	314	98	432	478
MIN	1.1	4.5	21	12	3.2	4.3	5.8	3.1	4.4	1.1	1.3	2.3

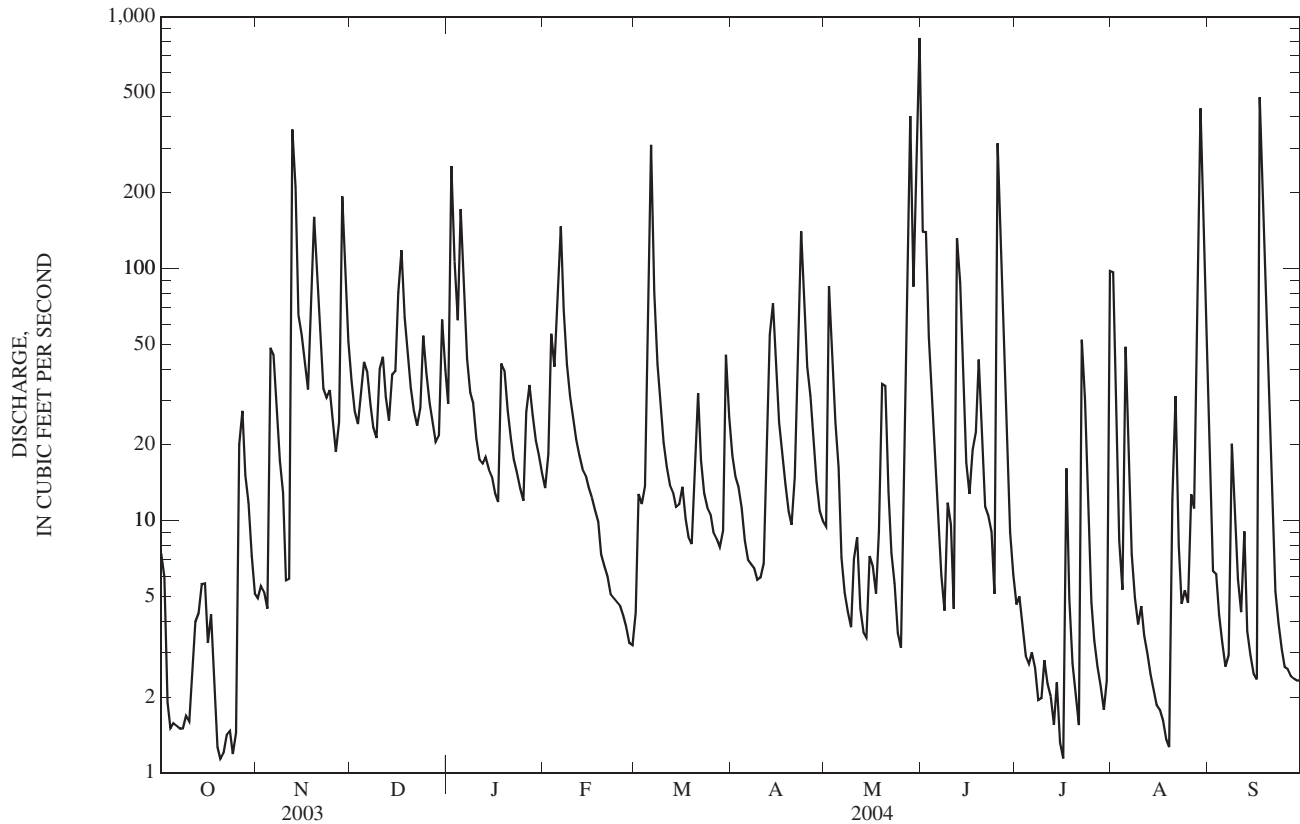
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	6.86	17.1	20.6	20.3	38.6	30.5	20.5	35.0	21.4	10.9	9.43	14.2
MAX	34.3	60.3	38.8	40.8	83.2	54.7	34.3	69.1	48.3	28.7	29.9	43.3
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2002)	(2004)	(2003)	(1998)	(2004)	(2003)
MIN	1.00	1.25	1.70	3.94	23.8	12.9	7.25	1.86	1.24	3.40	0.09	0.18
(WY)	(1998)	(1999)	(2000)	(2000)	(2004)	(1998)	(1999)	(2000)	(1999)	(1999)	(1999)	(1999)

03284530 EAST HICKMAN CREEK AT DELONG ROAD NEAR EAST HICKMAN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	12,593.90		12,347.1		20.3	
ANNUAL MEAN	34.5		33.7		35.9	
HIGHEST ANNUAL MEAN					9.86	
LOWEST ANNUAL MEAN					0.00	
HIGHEST DAILY MEAN	500	Feb 16	821	May 31	821	May 31, 2004
LOWEST DAILY MEAN	0.84	Aug 25	1.1	Oct 20	0.00	Aug 1, 1999
ANNUAL SEVEN-DAY MINIMUM	0.92	Aug 22	1.3	Oct 19	0.00	Aug 17, 1999
MAXIMUM PEAK FLOW			1,940	Jun 25	1,940	Jun 25, 2004
MAXIMUM PEAK STAGE			7.24	Jun 25	7.24	Jun 25, 2004
INSTANTANEOUS LOW FLOW					0.00	Sep 13, 2002
10 PERCENT EXCEEDS	80		74		49	
50 PERCENT EXCEEDS	14		13		5.2	
90 PERCENT EXCEEDS	1.8		2.3		0.50	

e Estimated



03284555 WEST HICKMAN CREEK AT ASH GROVE PIKE 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 Macker 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 current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 868.402 ft above NGVD of 1929.

REMARKS.--Records fair except those estimated, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1750	2,380	6.35	May 30	2310	*3,140	*7.59
May 28	0105	2,610	6.73	Sep 17	0910	2,100	5.86

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	41	93	82	48	45	60	49	324	37	227	62
2	42	40	74	527	76	53	57	320	320	45	132	52
3	36	38	62	216	170	52	52	134	177	42	95	50
4	36	38	102	177	98	49	47	89	136	36	89	45
5	34	141	120	400	250	392	42	72	101	42	389	41
6	31	84	102	183	262	447	39	59	81	40	121	39
7	29	64	84	123	154	190	38	51	67	41	89	37
8	29	54	71	95	109	124	38	49	60	33	69	134
9	28	48	62	80	87	91	36	46	62	32	58	72
10	28	43	152	69	71	71	37	44	63	43	59	55
11	30	43	114	62	62	59	36	41	55	55	50	49
12	31	789	87	60	56	51	120	41	259	42	47	92
13	30	258	74	56	50	47	233	40	137	35	42	51
14	59	131	114	54	49	44	221	40	89	44	40	47
15	40	137	111	48	46	40	122	99	67	33	38	40
16	34	108	285	44	44	51	90	53	57	31	36	37
17	33	86	237	45	39	42	74	47	72	181	35	712
18	34	227	156	120	36	39	64	64	81	64	35	196
19	34	263	124	90	e37	36	56	125	106	47	33	109
20	31	149	100	68	e39	96	52	78	64	40	103	76
21	32	104	86	59	e38	79	98	61	53	36	152	59
22	32	83	76	52	e36	54	236	67	60	218	66	50
23	32	69	107	46	e36	e50	372	54	53	83	52	42
24	32	86	143	45	e36	e44	190	47	42	62	66	37
25	34	73	101	39	e35	e43	129	44	299	52	54	35
26	101	63	85	110	e34	e39	99	152	117	43	68	33
27	62	97	73	105	e33	e36	72	360	74	38	57	30
28	50	410	65	74	32	e34	61	724	59	35	180	27
29	48	190	85	62	32	e50	52	195	46	32	241	26
30	42	124	172	56	---	152	48	810	41	51	108	25
31	41	---	97	51	---	72	---	1,270	---	539	79	---
TOTAL	1,209	4,081	3,414	3,298	2,095	2,672	2,871	5,325	3,222	2,152	2,910	2,360
MEAN	39.0	136	110	106	72.2	86.2	95.7	172	107	69.4	93.9	78.7
MAX	101	789	285	527	262	447	372	1,270	324	539	389	712
MIN	28	38	62	39	32	34	36	40	41	31	33	25

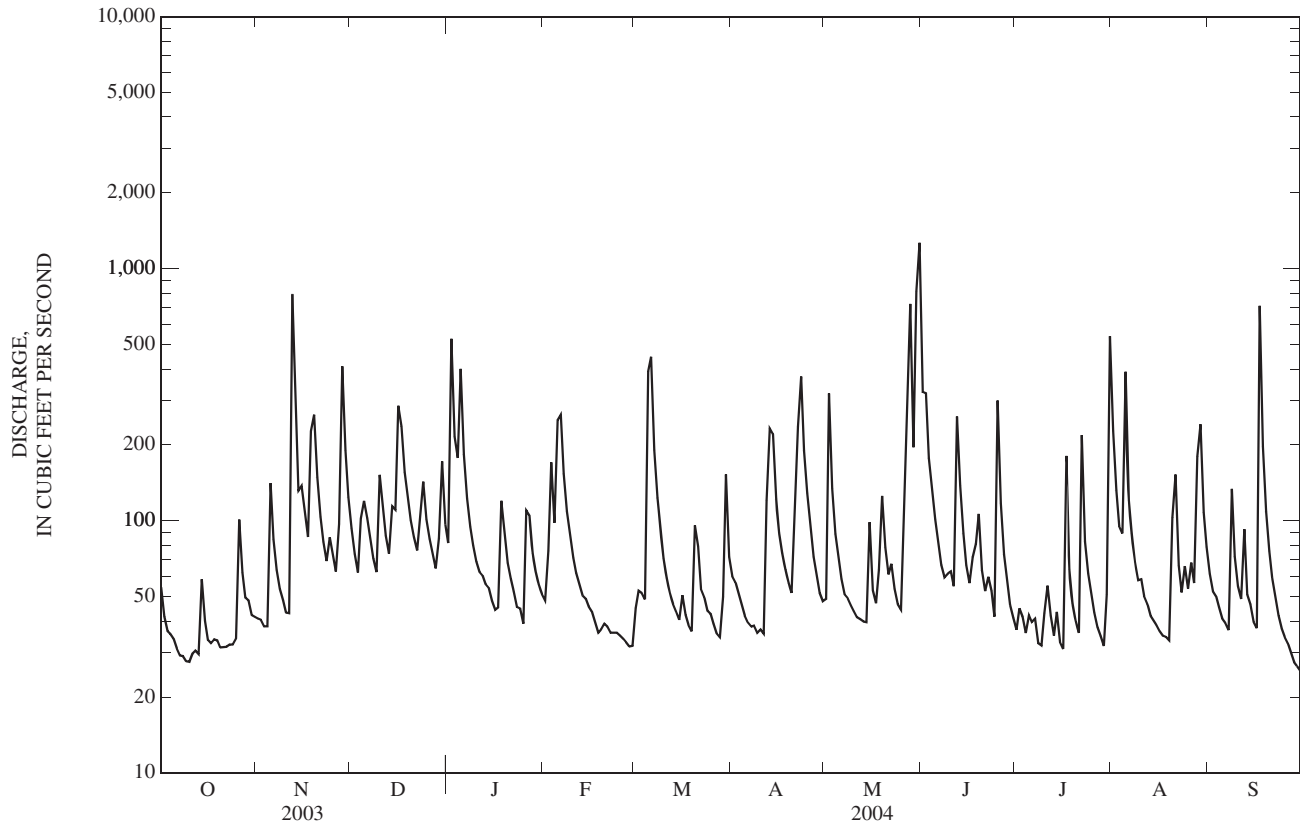
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	41.4	58.1	65.9	73.0	90.4	87.6	73.6	99.1	70.9	56.7	49.4	51.9
MAX	99.6	136	110	106	163	152	110	172	135	105	93.9	94.3
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(1998)	(2004)	(1998)	(1998)	(2004)	(2003)
MIN	26.3	23.6	33.4	42.6	37.5	49.1	39.6	31.0	26.7	25.6	20.6	18.9
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2003)	(2001)	(1999)	(1999)	(1999)	(1999)	(1999)

03284555 WEST HICKMAN CREEK AT ASH GROVE PIKE NEAR EAST HICKMAN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	33,092		35,609		68.0	
ANNUAL MEAN	90.7		97.3		97.3	
HIGHEST ANNUAL MEAN					45.0	
LOWEST ANNUAL MEAN					12	
HIGHEST DAILY MEAN	789	Nov 12	1,270	May 31	1,270	May 31, 2004
LOWEST DAILY MEAN	20	Sep 19	25	Sep 30	12	Nov 5, 1998
ANNUAL SEVEN-DAY MINIMUM	21	Sep 15	29	Oct 7	17	Aug 16, 1999
MAXIMUM PEAK FLOW			3,140	May 30	3,140	May 30, 2004
MAXIMUM PEAK STAGE			7.59	May 30	7.59	May 30, 2004
INSTANTANEOUS LOW FLOW					1.4	Nov 5, 1998
10 PERCENT EXCEEDS	189		190		131	
50 PERCENT EXCEEDS	53		59		40	
90 PERCENT EXCEEDS	30		35		22	

e Estimated



03285000 DIX RIVER NEAR DANVILLE, KY

LOCATION.--Lat 3738'31", long 8439'39", 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 at 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 with telemetry. Datum of gage is 750.10 ft above NGVD of 1929. 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.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources, Environmental Protection Cabinet, and Kentucky Utilities.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	1900	10,200	10.35	Mar 6	0600	10,300	10.39
Feb 6	0900	12,400	11.19	Sep 17	1700	*13,900	*11.74

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	56	701	800	e351	95	653	308	1,710	42	1,360	60
2	39	45	462	5,400	391	458	478	1,110	923	37	436	46
3	34	38	346	e4,600	1,850	502	406	1,500	667	391	231	42
4	28	32	325	1,790	1,620	345	331	771	1,200	169	150	43
5	25	73	593	2,530	2,520	482	270	531	1,670	92	761	62
6	23	323	799	1,910	10,300	7,190	228	395	802	157	e1,050	65
7	21	311	631	1,120	e4,200	2,380	201	303	505	1,130	443	43
8	19	202	480	818	1,510	1,170	183	239	354	495	267	109
9	16	144	384	655	1,050	819	164	194	264	231	182	947
10	14	109	776	529	812	600	141	162	213	143	135	374
11	13	87	e1,400	420	632	463	128	136	171	413	103	217
12	11	100	861	e344	511	379	161	119	145	587	87	164
13	9.3	814	608	e299	426	310	2,210	105	199	387	74	124
14	8.2	474	749	e273	363	267	2,600	91	208	430	74	116
15	8.9	326	1,260	e247	318	243	1,480	96	144	393	63	82
16	9.6	603	1,300	e226	271	252	878	116	184	202	49	65
17	15	451	2,480	210	236	342	609	92	465	207	41	7,130
18	21	523	1,320	758	218	280	453	74	300	323	35	e4,500
19	24	3,760	1,030	1,630	197	235	354	64	194	179	29	1,240
20	24	1,780	811	826	189	207	290	68	136	114	26	680
21	21	892	626	588	180	776	260	82	102	83	130	446
22	19	580	554	475	170	582	2,560	74	81	71	130	317
23	16	418	550	375	150	394	3,020	54	68	202	68	240
24	15	366	1,900	328	140	319	1,860	44	79	167	52	187
25	14	477	1,270	1,270	132	270	1,110	39	80	90	61	151
26	16	358	861	1,020	120	232	1,160	43	162	63	121	125
27	28	288	645	e850	111	208	953	4,070	170	100	87	102
28	128	3,220	519	e689	104	192	619	4,180	96	116	96	86
29	136	2,770	437	e555	96	180	452	1,560	65	74	159	75
30	79	1,120	1,440	e466	---	1,630	353	819	51	54	140	67
31	66	---	1,160	e404	---	1,260	---	2,960	---	432	89	---
TOTAL	949.0	20,740	27,278	32,405	29,168	23,062	24,565	20,399	11,408	7,574	6,729	17,905
MEAN	30.6	691	880	1,045	1,006	744	819	658	380	244	217	597
MAX	136	3,760	2,480	5,400	10,300	7,190	3,020	4,180	1,710	1,130	1,360	7,130
MIN	8.2	32	325	210	96	95	128	39	51	37	26	42
CFSM	0.10	2.17	2.77	3.29	3.16	2.34	2.57	2.07	1.20	0.77	0.68	1.88
IN.	0.11	2.43	3.19	3.79	3.41	2.70	2.87	2.39	1.33	0.89	0.79	2.09

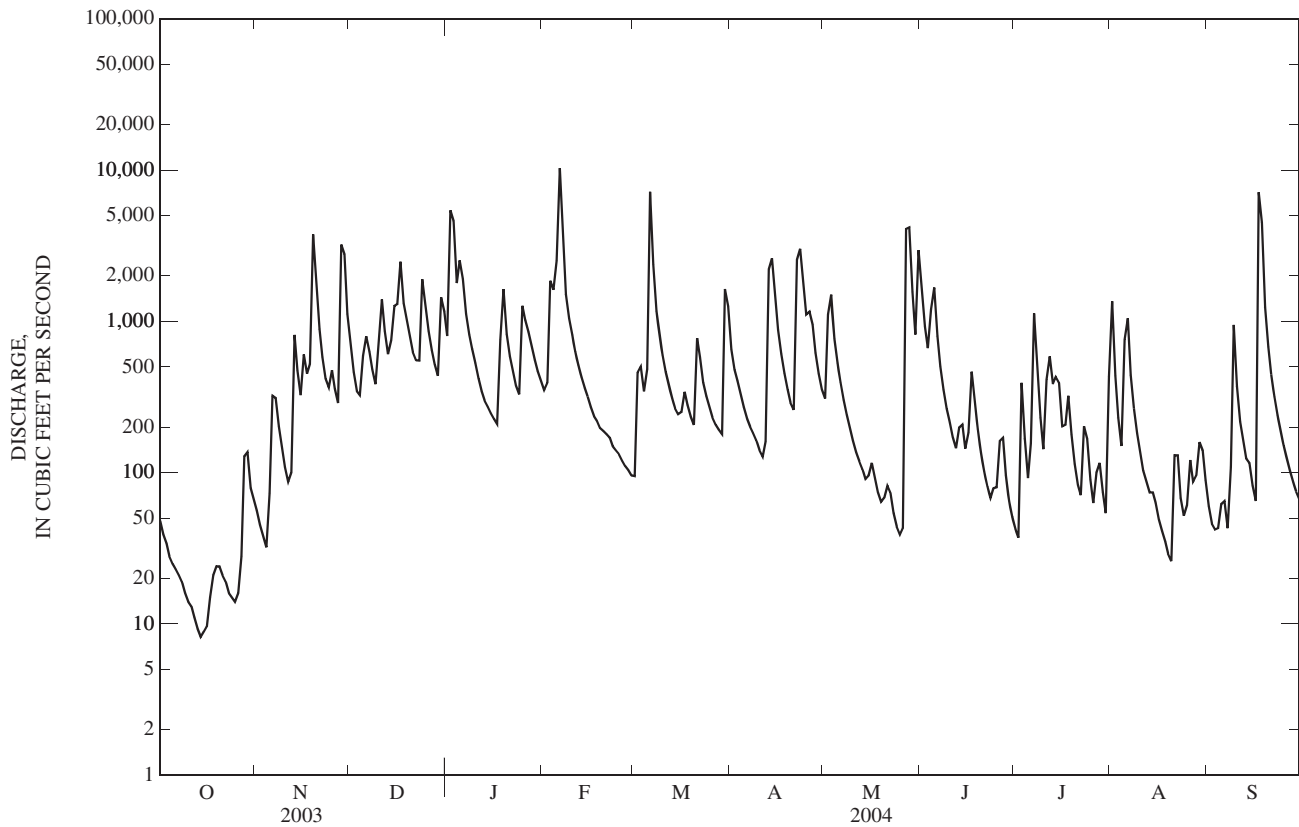
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	101	306	652	792	984	998	673	480	291	174	95.1	156
MAX	1,323	1,471	3,656	3,140	4,129	3,059	2,736	2,618	1,732	1,692	527	3,430
(WY)	(1980)	(1987)	(1979)	(1950)	(1989)	(1997)	(1972)	(1983)	(1997)	(1996)	(1958)	(1979)
MIN	0.00	0.03	0.69	17.0	72.1	174	57.1	51.8	8.83	0.31	0.93	0.01
(WY)	(1953)	(1954)	(1954)	(1981)	(1954)	(1983)	(1986)	(1976)	(1988)	(1944)	(1952)	(1953)

03285000 DIX RIVER NEAR DANVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	220,866.0		222,182.0		473	
ANNUAL MEAN	605		607		1,184	
HIGHEST ANNUAL MEAN					119	
LOWEST ANNUAL MEAN					35,100	
HIGHEST DAILY MEAN	13,100	Feb 16	10,300	Feb 6	0.00	Jul 20, 1996
LOWEST DAILY MEAN	5.9	Aug 30	8.2	Oct 14	0.00	Jul 21, 1944
ANNUAL SEVEN-DAY MINIMUM	10	Aug 25	11	Oct 10	0.00	Jul 29, 1944
MAXIMUM PEAK FLOW			13,900	Sep 17	52,400	Jul 20, 1996
MAXIMUM PEAK STAGE			11.74	Sep 17	21.81	Dec 9, 1978
ANNUAL RUNOFF (CFSM)	1.90		1.91		1.49	
ANNUAL RUNOFF (INCHES)	25.84		25.99		20.20	
10 PERCENT EXCEEDS	1,270		1,450		1,060	
50 PERCENT EXCEEDS	269		268		125	
90 PERCENT EXCEEDS	24		43		3.1	

e Estimated



03286500 KENTUCKY RIVER AT LOCK 7 NEAR HIGH BRIDGE, KY

LOCATION.--Lat 37°48'53", long 84°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 with telemetry. Datum of gage is 503.92 ft above sea level, Kentucky River datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Sept. 30. Discharge computed using percent of drainage area of Kentucky River at Lock #8 and Lock #6. Record fair above 1,000 ft³/s and poor below. 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.

COOPERATION.--Kentucky Utilities.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2,080	e2,070	e13,500	e10,500	e6,150	e3,080	e9,800	e6,650	e71,000	e3,220	e9,950	e1,680
2	e1,900	e1,810	e10,100	e24,400	e5,850	e3,600	e8,450	e7,950	e69,000	e2,700	e6,000	e1,540
3	e1,540	e1,600	e8,000	e39,900	e8,600	e4,060	e7,200	e11,000	e61,500	e3,100	e4,230	e1,340
4	e1,320	e1,460	e7,050	e45,400	e12,400	e3,820	e6,800	e9,400	e30,300	e4,760	e3,660	e1,380
5	e1,180	e2,740	e7,500	e48,400	e16,200	e4,680	e6,550	e7,900	e26,900	e4,210	e7,150	e1,160
6	e1,100	e8,500	e8,950	e40,600	e42,900	e33,000	e6,050	e6,500	e27,600	e4,070	e5,800	e1,080
7	e1,240	e10,100	e9,600	e33,000	e54,000	e38,800	e5,600	e4,950	e20,700	e4,360	e6,500	e1,060
8	e1,160	e9,150	e9,350	e25,000	e61,000	e42,400	e5,050	e4,210	e14,900	e4,290	e6,400	e3,010
9	e1,020	e8,600	e8,700	e18,000	e61,500	e30,400	e4,640	e3,660	e11,600	e4,170	e4,590	e24,800
10	e925	e6,450	e8,400	e14,200	e37,500	e17,400	e4,260	e3,040	e9,750	e3,600	e3,400	e29,700
11	e840	e4,860	e9,150	e12,100	e17,100	e13,600	e3,880	e3,230	e8,450	e3,920	e4,560	e23,400
12	e690	e7,900	e9,750	e10,600	e14,000	e11,400	e3,740	e2,660	e7,700	e3,960	e3,000	e12,800
13	e660	e23,900	e10,200	e9,700	e12,700	e9,650	e10,100	e2,230	e10,200	e5,200	e2,080	e7,700
14	e755	e13,600	e10,200	e8,850	e11,400	e8,100	e27,300	e2,020	e8,950	e4,540	e1,920	e5,350
15	e975	e9,900	e12,400	e7,500	e10,400	e6,900	e36,800	e1,940	e7,400	e3,430	e2,270	e3,900
16	e1,080	e8,650	e13,100	e6,450	e9,600	e5,900	e31,400	e1,840	e7,000	e2,940	e2,400	e3,360
17	e1,580	e8,450	e16,600	e5,650	e9,000	e5,450	e20,300	e1,770	e8,000	e7,450	e2,180	e28,200
18	e1,650	e9,450	e16,200	e6,850	e8,500	e5,600	e13,900	e2,240	e8,300	e6,050	e1,860	e51,000
19	e1,580	e20,700	e16,300	e14,300	e7,450	e5,600	e10,400	e2,960	e6,100	e3,590	e1,510	e53,000
20	e1,720	e24,500	e15,200	e21,000	e5,800	e5,250	e8,050	e4,120	e4,700	e2,440	e1,290	e49,400
21	e1,660	e31,100	e13,100	e18,800	e4,730	e7,250	e6,900	e4,260	e3,940	e1,890	e1,720	e23,800
22	e1,360	e25,000	e10,800	e14,600	e4,480	e7,750	e9,700	e3,400	e3,460	e2,440	e1,650	e11,800
23	e1,260	e15,400	e9,650	e11,400	e4,240	e7,000	e19,000	e2,810	e3,070	e4,440	e1,300	e9,500
24	e1,200	e11,800	e12,200	e8,900	e4,010	e6,550	e17,600	e2,290	e2,620	e3,490	e1,080	e8,050
25	e920	e10,400	e15,800	e7,650	e3,790	e6,100	e11,800	e2,120	e3,880	e2,700	e1,380	e7,100
26	e845	e9,100	e15,800	e8,000	e3,580	e5,600	e10,600	e2,560	e16,200	e2,460	e2,180	e6,450
27	e1,180	e7,700	e14,300	e10,100	e3,400	e5,200	e12,200	e6,600	e11,900	e5,400	e2,600	e5,600
28	e2,330	e16,100	e11,800	e9,400	e3,240	e4,840	e10,800	e36,400	e7,500	e12,300	e2,270	e4,530
29	e2,250	e24,200	e9,600	e8,250	e3,150	e4,520	e9,300	e46,300	e5,400	e9,850	e4,180	e3,820
30	e2,040	e19,000	e10,100	e7,500	---	e9,600	e7,850	e51,000	e4,160	e6,000	e2,460	e3,250
31	e2,140	---	e11,200	e6,800	---	e12,200	---	e71,500	---	e6,100	e1,980	---
TOTAL	42,180	354,190	354,600	513,800	446,670	335,300	346,020	319,510	482,180	139,070	103,550	388,760
MEAN	1,361	11,810	11,440	16,570	15,400	10,820	11,530	10,310	16,070	4,486	3,340	12,960
MAX	2,330	31,100	16,600	48,400	61,500	42,400	36,800	71,500	71,000	12,300	9,950	53,000
MIN	660	1,460	7,050	5,650	3,150	3,080	3,740	1,770	2,620	1,890	1,080	1,060

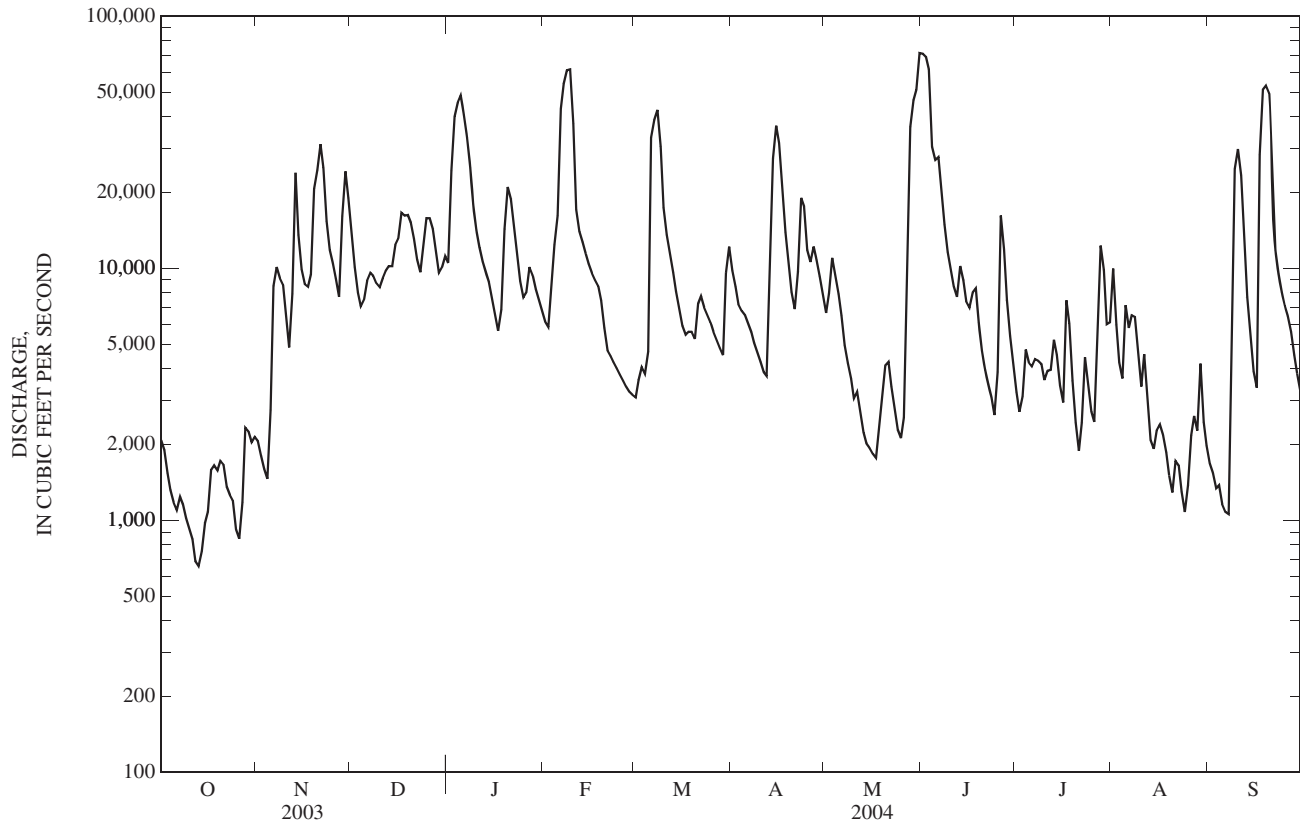
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	1,396	3,823	6,344	10,730	12,860	14,940	11,080	9,436	7,067	2,634	1,970	2,060	
MAX	4,022	11,810	12,670	22,370	27,360	29,500	21,390	22,020	18,360	4,867	4,660	12,960	
(WY)	(2003)	(2004)	(1994)	(1994)	(2003)	(1997)	(1994)	(1995)	(1997)	(1998)	(2001)	(2004)	
MIN	324	456	1,567	1,876	4,614	5,553	3,730	1,973	417	435	306	153	
(WY)	(1998)	(2002)	(2000)	(2000)	(2002)	(2000)	(1999)	(2001)	(1999)	(1999)	(1999)	(1999)	

03286500 KENTUCKY RIVER AT LOCK 7 NEAR HIGH BRIDGE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	3,562,360		3,825,830		6,995	
ANNUAL MEAN	9,760		10,450		11,250	
HIGHEST ANNUAL MEAN					3,371	
LOWEST ANNUAL MEAN					87,900	
HIGHEST DAILY MEAN	82,000	Feb 18	71,500	May 31	87,900	Mar 2, 1997
LOWEST DAILY MEAN	590	Aug 29	660	Oct 13	79	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	761	Aug 24	838	Oct 9	109	Sep 9, 2002
MAXIMUM PEAK FLOW			76,500	May 31	92,800	Mar 10, 1994
MAXIMUM PEAK STAGE			31.60	May 31	37.90	Mar 10, 1994
10 PERCENT EXCEEDS	23,700		24,600		17,500	
50 PERCENT EXCEEDS	6,250		6,820		3,100	
90 PERCENT EXCEEDS	1,340		1,650		478	

e Estimated



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 with telemetry. Datum of gage is 489.90 ft, Kentucky River datum or 487.89 ft. above NGVD of 1929. Prior to November 1934, nonrecording gage at same site and datum. Auxiliary water-stage recorder with telemetry at lock 5, 14 mi downstream. Prior to Sept. 30, 1981, nonrecording gage at same site and datum.

REMARKS.--Records good above 1,000 ft³/s, fair below. 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.

COOPERATION.--Kentucky River Authority, U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,170	2,010	13,900	11,200	6,870	3,750	10,400	7,420	72,100	3,530	11,100	1,880
2	2,060	1,790	10,400	21,300	6,530	4,080	9,110	8,190	69,300	2,990	6,990	1,790
3	1,630	1,600	8,330	38,700	8,520	4,740	7,610	11,700	63,800	3,030	4,690	1,510
4	1,350	1,500	7,630	44,600	12,700	4,480	7,160	10,300	35,100	4,580	e4,100	1,680
5	1,210	2,020	7,820	49,400	14,900	4,830	6,740	8,770	24,700	4,340	e6,940	1,260
6	1,160	7,620	e9,080	42,600	39,900	30,000	6,120	7,210	27,800	4,110	e5,800	1,150
7	1,570	10,100	e9,760	33,600	53,400	37,100	5,670	5,200	21,300	4,370	6,400	1,240
8	1,530	8,830	e9,620	26,100	60,000	41,800	5,160	4,470	15,800	4,440	6,730	1,740
9	1,290	8,590	9,210	19,000	62,100	32,000	4,720	3,950	12,300	4,390	5,050	20,300
10	1,140	6,940	9,100	15,000	42,700	18,600	4,350	3,160	10,400	3,820	3,770	28,200
11	1,010	5,310	9,920	12,800	18,300	14,200	3,970	3,250	9,090	4,030	4,490	23,200
12	727	5,740	10,200	11,200	14,700	12,100	3,780	2,860	7,740	3,940	3,460	13,600
13	688	25,200	10,700	10,300	13,200	10,400	7,960	2,380	10,600	5,180	2,320	8,250
14	889	14,300	10,500	9,490	12,000	8,850	24,600	2,150	9,340	4,920	1,920	5,920
15	1,310	10,400	12,500	8,130	11,000	7,680	34,900	2,010	7,720	3,730	2,200	4,380
16	1,360	8,740	13,500	7,210	10,200	6,690	31,800	1,930	7,050	3,070	2,540	4,030
17	1,690	8,320	17,400	6,360	9,590	6,070	21,300	1,800	7,940	8,320	2,550	22,800
18	1,600	8,750	16,800	6,690	9,100	6,130	14,800	2,130	8,640	7,200	2,320	51,200
19	1,540	19,100	16,600	13,400	8,250	6,260	11,100	2,870	6,540	4,100	1,890	52,700
20	1,900	22,800	15,800	20,000	6,720	5,820	8,280	3,960	4,980	2,710	e1,600	50,900
21	1,920	28,800	13,900	19,400	5,510	7,080	7,030	4,480	4,180	2,060	e1,840	26,800
22	1,530	25,400	11,600	15,400	5,190	8,510	8,880	3,590	3,860	2,310	e1,720	12,700
23	1,450	15,800	10,300	12,200	4,960	7,650	19,000	2,970	3,460	4,670	e1,410	10,100
24	1,480	11,800	11,900	9,760	4,720	7,200	19,200	2,430	2,790	3,790	e1,210	8,710
25	1,000	10,300	15,700	8,420	4,510	6,770	13,100	2,140	2,900	2,840	e1,560	7,690
26	877	9,130	16,200	8,220	4,290	6,260	11,000	2,540	14,700	2,500	e2,240	7,030
27	1,110	7,820	14,900	10,600	4,090	5,860	12,600	5,780	12,600	4,280	e2,630	6,320
28	2,400	13,600	12,700	10,300	3,920	5,520	11,500	32,700	7,950	11,400	2,600	5,190
29	2,430	24,100	10,400	9,070	3,820	5,200	10,000	46,100	5,710	10,300	5,090	4,510
30	1,930	19,400	10,400	8,280	---	8,660	8,670	52,300	4,500	6,480	3,110	3,940
31	2,030	---	11,800	7,590	---	13,000	---	70,300	---	6,660	2,300	---
TOTAL	45,981	345,810	368,570	526,320	461,690	347,290	350,510	321,040	494,890	144,090	112,570	390,720
MEAN	1,483	11,530	11,890	16,980	15,920	11,200	11,680	10,360	16,500	4,648	3,631	13,020
MAX	2,430	28,800	17,400	49,400	62,100	41,800	34,900	70,300	72,100	11,400	11,100	52,700
MIN	688	1,500	7,630	6,360	3,820	3,750	3,780	1,800	2,790	2,060	1,210	1,150

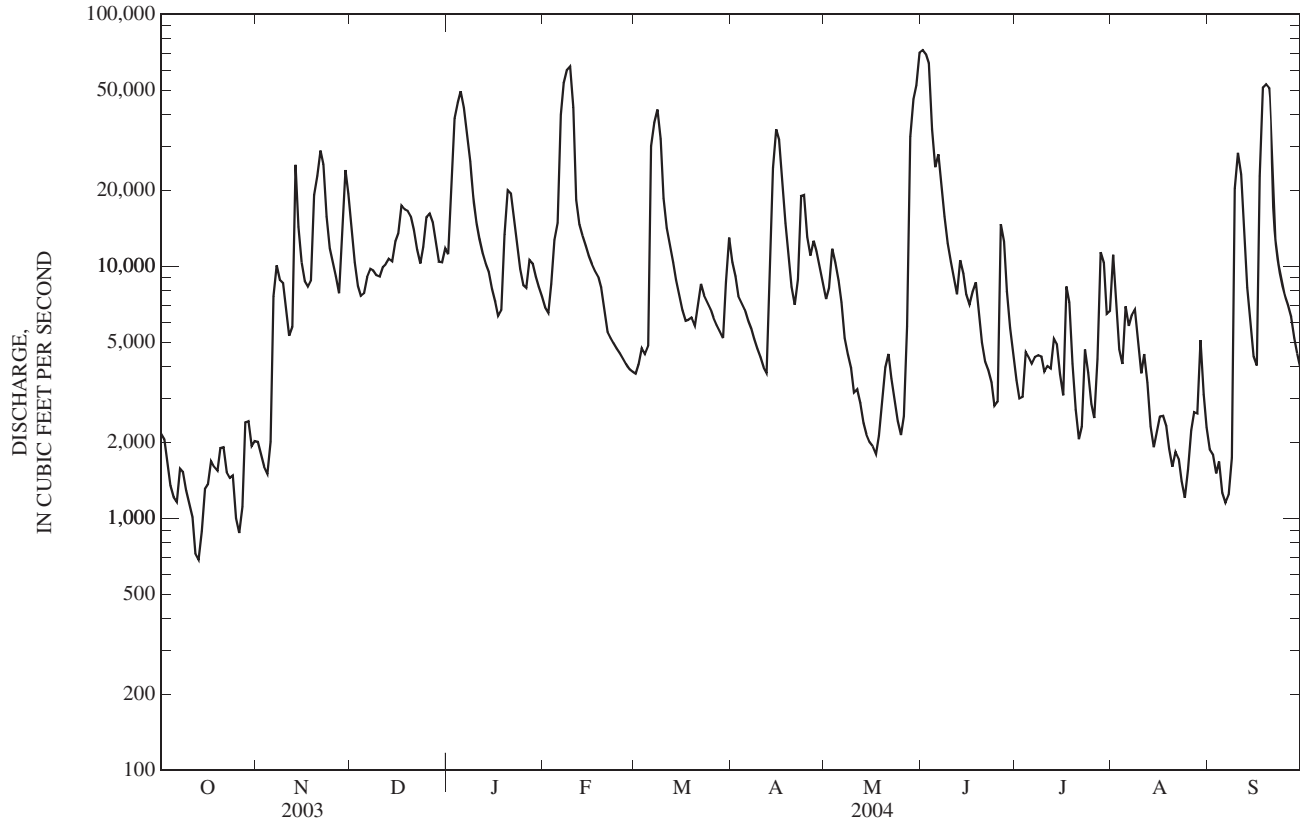
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	1,885	4,152	8,656	10,750	12,670	14,720	11,480	8,428	4,917	2,310	2,004	1,923
MAX	13,680	12,450	31,030	31,910	34,850	33,640	35,920	26,910	18,890	5,441	6,238	13,020
(WY)	(1990)	(1987)	(1979)	(1974)	(1989)	(1975)	(1972)	(1983)	(1997)	(1998)	(1992)	(2004)
MIN	312	467	525	502	2,655	3,769	1,491	1,127	362	420	277	188
(WY)	(1981)	(2002)	(1966)	(1981)	(1968)	(1983)	(1986)	(1976)	(1988)	(1999)	(1986)	(1999)

03287000 KENTUCKY RIVER AT LOCK 6, NEAR SALVISA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	3,602,116		3,909,481		6,963	
ANNUAL MEAN	9,869		10,680		11,050	
HIGHEST ANNUAL MEAN					2,826	
LOWEST ANNUAL MEAN					125,000	
HIGHEST DAILY MEAN	77,000	Feb 19	72,100	Jun 1	125,000	Dec 10, 1978
LOWEST DAILY MEAN	614	Aug 30	688	Oct 13	83	Sep 4, 1984
ANNUAL SEVEN-DAY MINIMUM	792	Aug 24	1,010	Oct 9	112	Nov 8, 1991
MAXIMUM PEAK FLOW			76,400	May 31	130,000	Dec 10, 1978
MAXIMUM PEAK STAGE			30.54	May 31	49.04	Dec 10, 1978
10 PERCENT EXCEEDS	23,300		24,200		17,500	
50 PERCENT EXCEEDS	6,060		7,180		3,050	
90 PERCENT EXCEEDS	1,510		1,780		474	

e Estimated



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.

WATER DISCHARGE RECORDS

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 with telemetry. Datum of gage is 462.10 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Jan. 28, 1982.

REMARKS.--Record fair except those for estimated daily discharges and flow below 1000 ft³/s, which are poor. 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.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District, Kentucky River Authority, and City of Frankfort.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,260	2,190	16,200	11,600	e7,120	3,670	10,700	7,450	73,800	3,790	12,900	2,030
2	2,270	2,020	11,400	20,600	e6,890	3,870	9,110	8,670	71,500	3,130	8,760	2,010
3	1,910	1,780	8,770	38,100	9,570	4,630	7,520	12,100	67,400	2,960	5,420	1,580
4	1,510	1,680	8,090	42,600	13,000	5,540	6,950	11,000	46,300	4,090	4,400	1,810
5	1,300	1,830	8,360	49,500	15,700	6,230	6,620	9,090	25,100	4,550	6,920	1,400
6	1,160	6,040	9,550	46,600	35,500	27,500	5,960	7,570	28,900	4,370	9,200	1,160
7	1,510	10,100	10,600	35,600	50,500	36,300	5,520	5,500	23,300	5,000	6,590	1,140
8	1,670	8,960	10,500	28,800	58,500	39,900	5,050	4,520	17,600	4,560	6,980	1,430
9	1,430	8,680	9,770	21,400	61,800	35,200	4,650	4,220	13,200	4,480	5,650	14,300
10	1,050	7,180	10,400	16,300	51,100	21,500	4,300	3,350	10,900	4,120	4,240	28,500
11	1,160	5,750	11,200	13,300	23,100	15,300	3,980	3,150	9,180	4,370	4,250	25,400
12	792	6,780	10,600	11,600	15,700	12,600	3,840	3,100	7,850	3,980	4,090	16,500
13	721	26,100	11,000	10,400	13,600	10,600	6,230	2,470	10,100	e4,720	2,690	8,740
14	835	17,600	10,800	9,530	12,300	8,910	22,400	2,330	9,830	e5,220	2,030	6,250
15	1,340	11,700	12,600	8,260	11,100	7,650	33,000	2,770	7,950	4,170	2,150	4,630
16	1,500	9,380	15,200	7,220	10,100	6,750	33,200	2,540	7,070	3,350	2,480	4,080
17	1,760	8,610	20,100	6,380	9,390	6,000	24,100	2,060	7,720	11,100	2,690	9,350
18	1,790	8,940	18,900	7,020	8,850	5,850	16,500	2,180	8,800	9,110	2,480	46,700
19	1,700	19,100	18,200	12,400	8,160	6,000	11,700	2,960	7,410	4,960	2,100	50,900
20	1,870	24,100	17,400	19,700	6,820	5,720	8,480	3,800	5,380	3,250	1,730	51,500
21	2,130	28,600	15,100	21,000	5,490	6,210	7,060	4,520	4,360	2,340	1,480	34,400
22	1,710	28,200	12,500	16,800	5,020	8,240	8,520	3,830	4,070	2,230	2,240	14,800
23	1,620	18,600	10,900	12,900	4,820	7,490	20,300	3,130	3,660	4,270	2,220	10,400
24	1,610	12,900	13,000	10,000	4,590	6,980	22,200	2,570	3,030	4,260	1,790	8,770
25	1,190	10,800	16,600	8,330	4,410	6,580	15,500	2,240	2,970	3,130	1,550	7,620
26	1,040	9,550	17,500	7,950	4,200	6,080	11,500	3,000	12,000	2,600	2,290	6,910
27	1,200	8,900	16,000	10,900	4,020	5,680	12,500	8,600	14,700	3,360	3,190	6,290
28	2,230	14,200	13,500	10,800	3,850	5,350	11,900	32,900	8,790	9,610	3,180	5,320
29	2,810	26,300	10,900	9,310	3,720	5,060	10,100	44,600	6,020	11,400	4,430	4,550
30	2,140	22,300	11,100	e8,510	---	6,710	8,810	50,500	4,780	7,370	3,990	4,030
31	2,160	---	12,300	e7,840	---	13,100	---	69,200	---	10,100	2,580	---
TOTAL	49,378	368,870	399,040	541,250	468,920	347,200	358,200	325,920	523,670	155,950	126,690	382,500
MEAN	1,593	12,300	12,870	17,460	16,170	11,200	11,940	10,510	17,460	5,031	4,087	12,750
MAX	2,810	28,600	20,100	49,500	61,800	39,900	33,200	69,200	73,800	11,400	12,900	51,500
MIN	721	1,680	8,090	6,380	3,720	3,670	3,840	2,060	2,970	2,230	1,480	1,140

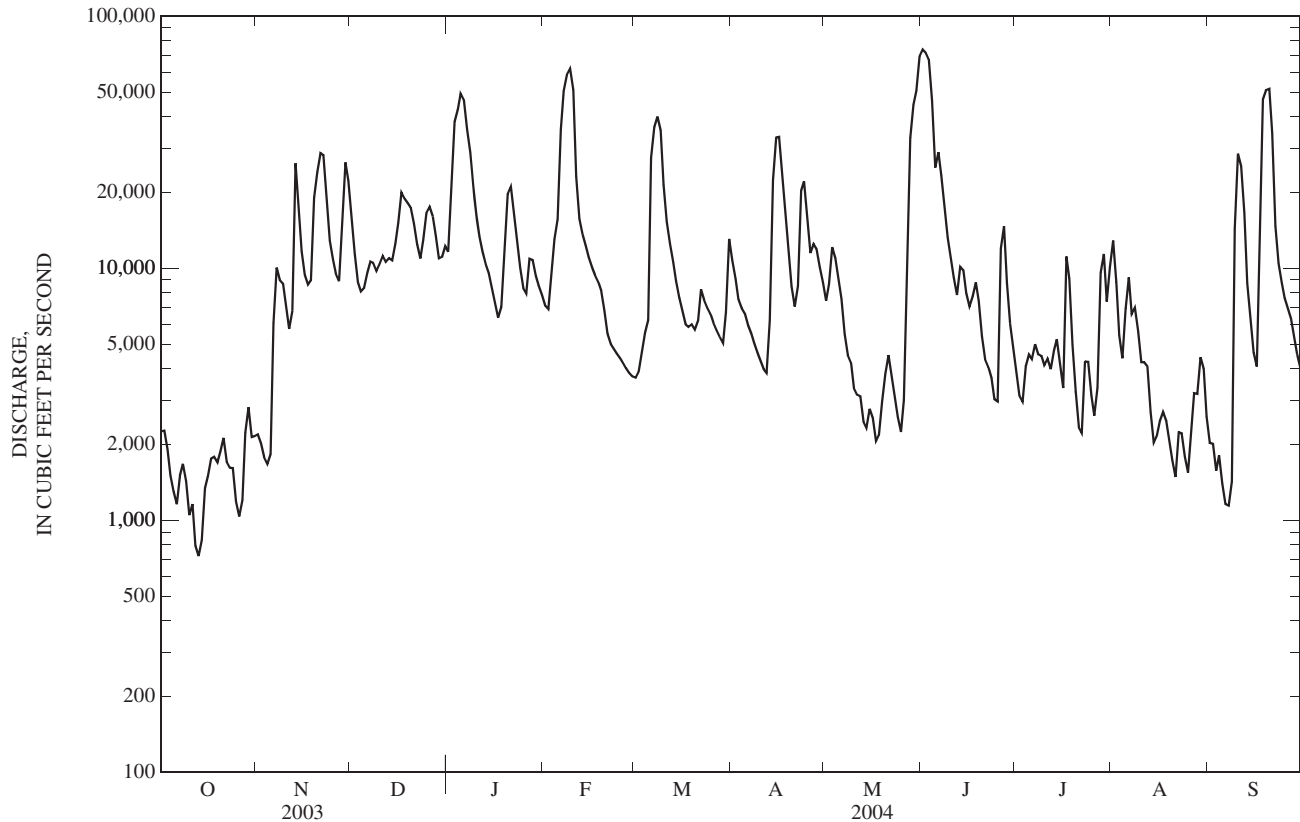
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

	1995	4,464	9,219	11,350	13,350	15,630	11,950	8,853	5,177	2,470	2,157	2,048
MEAN												
MAX	13,240	13,700	33,220	33,500	35,680	34,760	36,690	28,200	20,840	6,446	6,433	12,750
(WY)	(1990)	(1987)	(1979)	(1974)	(1989)	(1975)	(1972)	(1983)	(1997)	(1998)	(1992)	(2004)
MIN	289	542	566	540	2,885	4,175	1,518	1,142	417	568	260	207
(WY)	(1981)	(1966)	(1966)	(1981)	(1968)	(1983)	(1986)	(1976)	(1988)	(1970)	(2002)	(1999)

03287500 KENTUCKY RIVER AT LOCK 4, AT FRANKFORT, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	3,896,900		4,047,588		7,359	
ANNUAL MEAN	10,680		11,060		11,860	
HIGHEST ANNUAL MEAN					3,182	
LOWEST ANNUAL MEAN					116,000	
HIGHEST DAILY MEAN	82,000	Feb 19	73,800	Jun 1	116,000	Dec 10, 1978
LOWEST DAILY MEAN	702	Aug 29	721	Oct 13	78	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	905	Aug 25	1,050	Oct 9	88	Sep 8, 2002
MAXIMUM PEAK FLOW			75,100	Jun 1	118,000	Dec 9, 1978
MAXIMUM PEAK STAGE			34.41	Jun 1	48.47	Dec 10, 1978
10 PERCENT EXCEEDS	24,300		25,200		18,300	
50 PERCENT EXCEEDS	6,780		7,390		3,340	
90 PERCENT EXCEEDS	1,590		1,900		515	

e Estimated



03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

COOPERATION.--Kentucky River Authority

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 2001 to current water year.

pH: June 2001 to current water year.

WATER TEMPERATURES: June 2001 to current water year.

DISSOLVED OXYGEN: June 2001 to current water year.

INSTRUMENTATION.-- Water-quality monitor with telemetry.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated excellent except for the following period: Jun. 3-9 rated good.

pH: Records rated excellent except for the following periods: Mar. 8-11, Aug. 8-18 rated good.

WATER TEMPERATURES: Records rated excellent.

DISSOLVED OXYGEN: Records rated poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 634 microsiemens, Dec 28-29, 2001; minimum recorded, 96 microsiemens, Feb. 20, 2003.

pH: Maximum recorded, 9.9 units, Aug. 19, 2003; minimum recorded, 6.7 units, Aug 31, and Sept 1, 3-5, 2001.

WATER TEMPERATURES: Maximum recorded, 31.3°C, Aug 5, 2002; minimum recorded, 2.5°C, Feb. 1, 2004.

DISSOLVED OXYGEN: Maximum recorded, 15.4 mg/L, Jan 23, 2002; minimum recorded, 0.2 mg/L, Sept 13, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 565 microsiemens, Nov. 6, 2003; minimum recorded, 137 microsiemens, Feb. 9, 2004.

pH: Maximum recorded, 8.1 units, Dec. 11, 17, 18, 2003, Jan. 27-31 and Feb. 1-6, 2004.; minimum recorded, 7.1 units, Mar. 12, Sept. 20-21, 2004.

WATER TEMPERATURES: Maximum recorded, 26.4°C, Jul. 11, 2004; minimum recorded, 2.5°C, Feb. 1, 2004.

DISSOLVED OXYGEN: Maximum recorded, 14.7 mg/L, Feb. 6, 2004; minimum recorded, 4.4 mg/L, Jul. 15, 2004.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	305	297	299	393	387	390	286	274	281	301	289	292
2	310	305	308	403	390	393	277	265	272	310	289	304
3	322	310	317	463	403	434	278	263	270	307	258	283
4	321	310	315	482	463	476	285	270	277	275	248	260
5	310	308	309	481	466	471	300	284	292	262	177	214
6	314	310	312	565	477	520	304	296	301	230	181	212
7	320	314	317	563	519	544	297	283	290	230	227	229
8	324	320	323	553	484	531	290	287	288	228	225	226
9	328	324	325	553	467	490	303	290	296	232	225	229
10	334	328	331	563	473	521	316	303	309	232	229	230
11	342	334	338	483	463	472	319	316	318	252	232	241
12	342	341	342	498	470	483	319	315	317	266	252	261
13	342	339	340	495	370	441	326	315	319	266	257	262
14	339	336	338	412	286	331	329	326	327	257	255	256
15	341	339	340	308	288	300	326	324	325	264	257	260
16	343	341	341	328	281	303	330	321	324	270	264	267
17	343	342	343	322	301	314	341	330	335	274	269	272
18	345	343	344	319	288	300	348	330	341	290	274	283
19	345	341	344	348	295	312	330	318	323	298	277	294
20	341	337	339	363	345	352	325	320	323	308	297	303
21	344	338	342	350	325	337	321	304	311	312	301	307
22	344	342	343	327	276	289	304	296	299	329	301	314
23	353	343	349	295	248	272	307	298	303	381	325	351
24	354	343	350	252	238	246	307	300	304	378	297	336
25	343	333	336	253	249	251	300	293	295	297	277	283
26	336	331	333	257	251	254	311	296	306	312	260	283
27	343	336	339	258	251	255	305	299	302	316	279	306
28	364	343	352	266	255	261	302	291	294	309	303	307
29	396	364	385	277	265	271	291	285	288	314	303	308
30	396	378	387	288	274	278	297	285	291	329	314	322
31	392	378	387	---	---	---	295	291	294	324	289	317
MONTH	396	297	338	565	238	370	348	263	304	381	177	278

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	328	292	318	312	310	311	375	347	366	302	293	297
2	323	318	319	317	312	315	370	352	357	310	294	304
3	330	297	328	321	316	318	363	350	355	309	293	302
4	333	313	330	330	321	327	359	353	355	303	292	295
5	356	302	343	337	323	330	356	353	355	312	303	308
6	366	298	351	385	306	331	354	343	348	321	312	317
7	307	265	291	389	313	345	352	345	350	324	320	321
8	283	147	212	380	324	348	354	336	346	323	317	320
9	147	137	140	388	226	286	337	332	334	317	310	313
10	191	142	161	239	224	230	351	334	344	318	312	314
11	207	190	199	241	232	239	361	350	356	327	318	322
12	221	206	214	240	232	235	363	360	361	348	327	338
13	229	204	225	234	231	232	361	355	358	355	347	352
14	241	229	235	242	233	237	355	337	346	354	341	349
15	255	241	247	259	235	245	350	324	338	342	320	336
16	268	255	262	259	256	257	330	311	319	340	332	337
17	274	268	272	264	259	262	321	245	288	332	327	329
18	281	274	278	270	263	266	257	239	246	327	322	324
19	289	281	285	273	267	270	246	244	245	326	323	324
20	290	288	289	281	271	275	245	240	243	325	322	323
21	289	288	289	283	277	280	245	241	243	328	321	325
22	292	289	290	288	283	285	253	245	247	328	326	327
23	293	291	292	289	287	287	268	253	258	326	322	323
24	297	292	295	294	287	290	277	250	263	322	313	317
25	301	297	299	299	289	296	292	249	270	314	308	313
26	302	300	301	318	299	307	304	271	289	319	312	316
27	305	302	303	335	318	327	304	292	299	326	313	320
28	309	305	307	342	334	338	302	290	298	351	291	319
29	311	308	310	346	342	343	293	287	288	371	299	338
30	---	---	---	347	342	345	293	287	290	380	211	276
31	---	---	---	349	345	347	---	---	---	217	198	208
MONTH	366	137	275	389	224	294	375	239	312	380	198	316
	JUNE			JULY			AUGUST			SEPTEMBER		
1	218	208	213	325	308	314	385	301	335	365	362	363
2	210	163	189	346	325	336	416	385	405	362	350	355
3	169	158	163	352	346	350	415	394	401	350	345	347
4	229	169	192	352	346	350	402	397	399	347	343	345
5	228	209	210	352	309	334	400	367	387	350	344	346
6	226	210	218	310	302	305	367	339	357	357	349	353
7	243	225	234	344	310	325	339	300	317	361	352	359
8	242	198	220	384	344	365	300	274	282	362	349	358
9	211	196	202	417	384	401	277	257	264	398	332	357
10	225	211	218	418	404	413	277	268	272	450	376	410
11	242	225	233	404	388	399	278	275	276	479	418	434
12	292	242	264	388	361	373	302	276	290	433	228	338
13	303	279	296	361	350	356	311	302	308	228	194	207
14	281	254	266	341	337	339	323	311	316	204	194	199
15	260	253	256	363	335	344	333	323	328	216	204	209
16	266	253	259	402	363	387	337	333	336	237	216	225
17	276	266	272	412	309	379	336	328	332	277	237	252
18	291	276	286	347	287	306	328	319	322	322	232	265
19	292	286	291	326	274	291	334	320	327	262	211	249
20	295	292	293	399	326	365	344	334	339	211	160	171
21	304	295	301	405	378	395	361	344	353	207	177	194
22	312	304	306	409	371	388	368	361	366	207	200	204
23	318	312	316	415	374	402	367	354	360	208	201	205
24	326	318	322	374	314	346	363	352	358	215	208	212
25	332	326	329	314	303	306	364	360	362	223	215	219
26	332	306	324	331	308	319	362	357	360	234	223	228
27	358	302	332	351	331	344	359	352	357	242	234	238
28	412	348	372	351	333	344	352	331	339	252	241	247
29	412	304	352	376	341	361	365	334	347	258	252	256
30	309	297	303	373	315	333	389	365	381	265	258	262
31	---	---	---	334	313	322	374	365	366	---	---	---
MONTH	412	158	268	418	274	351	416	257	340	479	160	280
YEAR	565	137	311									

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.5	7.8	7.7	8.0	7.9	8.0	8.0	8.1	8.1	7.8	7.7
2	7.7	7.6	7.8	7.7	7.9	7.9	8.0	8.0	8.1	8.1	7.7	7.7
3	7.7	7.6	7.7	7.7	7.9	7.9	8.0	7.9	8.1	8.1	7.7	7.7
4	7.7	7.5	7.8	7.7	8.0	7.9	7.9	7.7	8.1	8.1	7.7	7.7
5	7.8	7.6	7.7	7.7	8.0	8.0	7.8	7.6	8.1	8.1	7.7	7.7
6	7.7	7.5	7.9	7.7	8.0	7.9	7.8	7.6	8.1	7.9	7.7	7.7
7	7.8	7.6	7.9	7.9	8.0	7.8	7.8	7.8	7.9	7.8	7.7	7.6
8	7.8	7.6	7.9	7.9	8.0	7.9	7.8	7.8	7.8	7.6	7.6	7.4
9	7.7	7.6	7.9	7.8	8.0	7.9	7.8	7.8	7.6	7.5	7.5	7.4
10	7.7	7.5	7.9	7.8	8.0	7.9	7.8	7.8	7.6	7.5	7.4	7.4
11	7.6	7.5	7.8	7.8	8.1	8.0	7.8	7.7	7.7	7.6	7.5	7.4
12	7.7	7.5	8.0	7.8	8.0	8.0	7.8	7.8	7.8	7.7	7.7	7.1
13	8.0	7.5	8.0	7.8	8.0	7.9	7.9	7.8	7.8	7.8	7.7	7.7
14	7.8	7.6	7.8	7.7	8.0	7.8	7.8	7.8	7.8	7.8	7.7	7.6
15	7.8	7.6	7.8	7.8	8.0	7.8	7.8	7.8	7.8	7.8	7.8	7.6
16	7.8	7.6	7.9	7.8	8.0	8.0	7.8	7.8	7.8	7.8	7.7	7.7
17	7.7	7.6	7.9	7.8	8.1	8.0	7.8	7.8	7.8	7.8	7.7	7.7
18	7.8	7.6	7.8	7.8	8.1	7.9	7.8	7.8	7.8	7.8	7.7	7.7
19	7.8	7.6	8.0	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.7
20	7.8	7.7	8.0	7.9	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.7
21	7.7	7.6	8.0	7.9	8.0	7.9	7.9	7.8	7.8	7.8	7.9	7.8
22	7.7	7.6	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8
23	7.7	7.7	7.8	7.7	7.9	7.9	7.9	7.5	7.8	7.7	7.9	7.8
24	7.8	7.7	7.8	7.7	7.9	7.9	8.0	7.9	7.8	7.7	7.9	7.8
25	7.8	7.7	7.8	7.7	7.9	7.8	8.0	7.9	7.8	7.8	7.9	7.8
26	7.8	7.7	7.8	7.8	7.9	7.8	8.0	8.0	7.8	7.8	7.9	7.7
27	7.8	7.7	7.9	7.8	7.8	7.8	8.1	8.0	7.8	7.8	7.9	7.8
28	7.8	7.7	8.0	7.9	7.8	7.8	8.1	8.0	7.8	7.8	7.9	7.8
29	7.8	7.7	8.0	7.9	7.9	7.7	8.1	8.1	7.8	7.8	7.8	7.7
30	7.8	7.7	7.9	7.9	8.0	7.9	8.1	8.1	---	---	7.8	7.7
31	7.8	7.7	---	---	8.0	7.9	8.1	8.1	---	---	7.8	7.8
MONTH	8.0	7.5	8.0	7.7	8.1	7.7	8.1	7.5	8.1	7.5	7.9	7.1
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	7.8	7.8	7.5	7.6	7.5	7.6	7.5	7.6	7.5	7.6	7.5
2	7.8	7.8	7.8	7.8	7.5	7.3	7.6	7.5	7.6	7.5	7.5	7.4
3	7.9	7.8	7.8	7.8	7.3	7.3	7.6	7.5	7.6	7.5	7.6	7.5
4	7.9	7.9	8.0	7.8	7.4	7.3	7.6	7.5	7.6	7.5	7.6	7.4
5	7.9	7.8	8.0	7.9	7.5	7.4	7.6	7.5	7.6	7.5	7.6	7.4
6	7.9	7.8	7.9	7.9	7.5	7.4	7.6	7.5	7.6	7.5	7.6	7.4
7	7.9	7.7	7.9	7.8	7.5	7.4	7.6	7.5	7.6	7.4	7.5	7.4
8	7.9	7.8	7.9	7.8	7.5	7.4	7.7	7.6	7.5	7.4	7.4	7.3
9	7.9	7.8	7.9	7.7	7.6	7.5	7.7	7.6	7.5	7.4	7.6	7.3
10	7.9	7.8	7.8	7.6	7.7	7.6	7.7	7.6	7.5	7.4	7.5	7.3
11	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.5	7.4	7.3	7.3
12	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.5	7.5	7.4	7.3	7.2
13	7.9	7.9	7.8	7.7	7.7	7.7	7.6	7.5	7.5	7.4	7.3	7.2
14	7.9	7.9	7.8	7.7	7.7	7.7	7.7	7.5	7.5	7.4	7.3	7.2
15	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.5	7.5	7.4	7.3	7.2
16	7.8	7.7	7.8	7.7	7.6	7.6	7.6	7.5	7.5	7.4	7.3	7.3
17	7.7	7.7	7.8	7.6	7.7	7.6	7.6	7.4	7.5	7.4	7.4	7.3
18	7.7	7.6	7.7	7.6	7.7	7.7	7.5	7.4	7.6	7.4	7.3	7.2
19	7.7	7.6	7.7	7.7	7.7	7.7	7.5	7.3	7.6	7.5	7.3	7.2
20	7.7	7.6	7.8	7.6	7.7	7.7	7.6	7.4	7.5	7.5	7.2	7.1
21	7.7	7.6	7.8	7.6	7.7	7.6	7.5	7.4	7.6	7.5	7.2	7.1
22	7.7	7.6	7.8	7.6	7.6	7.6	7.5	7.3	7.6	7.5	7.2	7.2
23	7.8	7.7	7.7	7.6	7.6	7.5	7.5	7.4	7.5	7.4	7.3	7.2
24	7.8	7.6	7.6	7.4	7.6	7.5	7.5	7.4	7.6	7.4	7.4	7.3
25	7.8	7.5	7.7	7.5	7.6	7.5	7.5	7.4	7.7	7.4	7.4	7.3
26	7.8	7.6	7.6	7.5	7.6	7.5	7.5	7.4	7.6	7.5	7.4	7.4
27	7.8	7.8	7.7	7.5	7.6	7.5	7.5	7.4	7.6	7.5	7.4	7.4
28	7.9	7.8	7.7	7.6	7.6	7.5	7.6	7.5	7.5	7.5	7.5	7.4
29	7.8	7.8	7.6	7.5	7.6	7.5	7.6	7.5	7.6	7.5	7.6	7.4
30	7.8	7.5	7.6	7.4	7.6	7.5	7.6	7.4	7.6	7.5	7.6	7.6
31	---	---	7.6	7.5	---	---	7.5	7.5	7.5	7.5	---	---
MONTH	7.9	7.5	8.0	7.4	7.7	7.3	7.7	7.3	7.7	7.4	7.6	7.1
YEAR	8.1	7.1										

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.1	18.5	18.8	16.4	15.9	16.2	9.3	8.7	9.0	5.3	4.9	5.0
2	18.7	18.2	18.4	16.7	16.1	16.4	8.7	8.1	8.3	6.5	5.3	5.7
3	18.6	18.0	18.3	17.1	16.4	16.7	8.1	7.9	8.0	7.1	5.8	6.5
4	18.6	18.2	18.3	17.4	16.5	16.9	7.9	7.6	7.8	7.3	6.9	7.1
5	19.1	18.1	18.5	17.0	16.8	16.9	7.6	7.5	7.6	8.6	7.0	7.7
6	19.7	18.0	18.7	16.9	16.0	16.7	8.2	7.6	8.1	9.0	8.6	8.9
7	19.3	18.3	18.7	16.0	15.6	15.8	8.2	7.8	8.0	8.9	8.4	8.6
8	19.4	18.3	18.8	15.7	15.2	15.5	7.8	7.6	7.7	8.4	7.8	8.1
9	19.3	18.4	18.8	15.2	14.6	14.8	7.7	7.6	7.7	7.8	7.2	7.6
10	19.6	19.0	19.2	15.0	14.6	14.8	7.7	7.6	7.6	7.2	6.4	6.8
11	20.2	19.2	19.6	14.7	14.5	14.5	7.6	7.3	7.5	6.4	5.7	6.0
12	20.1	19.5	19.8	14.7	14.4	14.6	7.3	6.9	7.1	5.7	5.5	5.5
13	20.5	19.1	19.7	14.4	13.3	13.9	6.9	6.4	6.7	5.5	5.0	5.3
14	19.7	19.0	19.4	13.7	13.4	13.6	6.4	6.0	6.2	5.0	4.7	4.8
15	19.6	18.6	19.0	13.4	13.0	13.1	6.3	6.0	6.1	4.7	4.5	4.6
16	18.8	18.1	18.4	13.1	12.8	13.0	6.3	6.1	6.2	4.5	4.2	4.4
17	18.3	17.9	18.0	12.8	12.6	12.7	6.2	6.1	6.1	4.4	4.2	4.3
18	18.4	18.0	18.1	12.9	12.6	12.8	6.4	6.0	6.2	4.5	4.2	4.4
19	18.5	17.6	18.0	12.8	12.4	12.6	6.4	5.9	6.2	4.5	4.3	4.4
20	18.0	17.3	17.6	12.5	12.0	12.3	5.9	5.3	5.6	4.5	4.0	4.2
21	17.5	17.2	17.3	12.5	11.8	12.2	5.3	5.0	5.1	4.3	3.7	3.9
22	17.6	17.1	17.3	11.8	11.5	11.7	5.2	4.9	5.0	3.7	3.4	3.5
23	17.4	17.1	17.3	12.6	11.8	12.1	5.4	5.2	5.3	3.4	3.1	3.2
24	17.4	16.7	17.0	12.6	12.0	12.4	5.5	5.4	5.4	3.5	3.2	3.4
25	17.0	16.3	16.6	12.0	11.4	11.6	5.5	5.2	5.4	3.6	3.3	3.4
26	16.7	16.2	16.4	11.4	11.2	11.3	5.2	5.0	5.1	3.9	3.3	3.6
27	16.4	15.9	16.1	11.2	11.0	11.1	5.0	4.7	4.8	4.0	3.8	3.9
28	15.9	15.6	15.8	11.0	10.3	10.7	4.7	4.5	4.6	3.9	3.4	3.6
29	16.2	15.4	15.8	10.3	9.7	10.1	4.7	4.5	4.6	3.5	3.2	3.4
30	16.3	15.9	16.1	9.7	9.3	9.5	4.8	4.6	4.7	3.5	3.1	3.4
31	16.2	15.8	16.0	---	---	---	5.0	4.7	4.8	3.1	2.7	2.8
MONTH	20.5	15.4	17.9	17.4	9.3	13.6	9.3	4.5	6.4	9.0	2.7	5.1
FEBRUARY			MARCH			APRIL			MAY			
1	2.8	2.5	2.7	7.0	6.7	6.8	11.9	10.8	11.5	16.2	15.6	15.8
2	2.9	2.8	2.8	7.4	7.0	7.2	12.0	11.8	11.9	16.2	15.6	15.8
3	3.2	2.9	3.1	7.4	7.2	7.3	12.6	11.8	12.2	15.6	14.9	15.1
4	3.4	3.1	3.2	7.7	7.4	7.5	12.3	11.4	11.7	15.6	14.4	15.0
5	3.4	3.0	3.1	8.5	7.7	8.0	12.0	11.3	11.6	15.7	15.3	15.6
6	3.9	3.4	3.6	9.6	8.5	8.8	12.0	11.5	11.7	16.5	15.5	15.9
7	4.1	3.5	3.9	10.6	9.1	10.3	12.2	11.8	12.0	16.8	16.3	16.5
8	4.6	3.5	4.1	10.6	9.8	10.2	13.0	12.2	12.7	17.5	16.8	17.2
9	5.0	4.6	4.7	10.3	9.7	10.1	13.6	13.0	13.3	17.9	17.0	17.5
10	5.2	5.0	5.1	10.2	9.9	10	13.8	13.2	13.5	19.1	17.6	18.3
11	5.1	4.9	5.0	9.9	9.5	9.6	13.9	13.4	13.7	19.4	18.9	19.2
12	5.1	5.0	5.0	9.5	8.9	9.1	13.9	13.2	13.5	20.2	19.4	19.8
13	5.0	4.8	4.9	8.9	8.5	8.6	13.2	12.6	12.8	20.4	20.0	20.2
14	4.9	4.7	4.8	8.7	8.5	8.6	12.6	12.3	12.5	20.3	19.7	20.0
15	4.8	4.5	4.7	8.9	8.3	8.6	12.3	11.4	11.6	19.9	19.6	19.7
16	4.5	4.3	4.4	8.9	8.4	8.6	12.6	11.3	11.8	20.1	19.6	19.8
17	4.7	4.4	4.5	8.4	8.2	8.3	12.1	11.3	11.6	21.1	19.8	20.3
18	4.9	4.5	4.7	8.7	8.2	8.5	12.5	11.6	12.0	21.0	20.3	20.7
19	5.1	4.7	4.9	8.8	8.2	8.5	12.8	12.4	12.6	21.5	20.9	21.2
20	5.4	5.0	5.2	9.0	8.6	8.8	13.3	12.8	13.0	21.9	21.3	21.6
21	5.5	5.3	5.4	9.0	8.4	8.7	13.5	13.2	13.3	22.1	21.6	21.9
22	5.8	5.3	5.6	8.4	8.2	8.3	14.0	13.4	13.7	23.0	21.9	22.4
23	5.8	5.5	5.7	8.9	8.1	8.5	14.3	13.9	14.1	23.2	22.7	23.0
24	6.3	5.8	6.1	9.4	8.8	9.0	14.6	14.0	14.2	23.4	22.9	23.1
25	6.2	5.8	6.0	9.8	9.3	9.5	15.1	14.6	14.8	23.8	23.1	23.5
26	6.3	6.0	6.1	10.3	9.8	10.0	15.4	15.0	15.2	23.7	23.5	23.6
27	6.6	6.0	6.3	10.8	10.3	10.6	15.4	15.1	15.2	23.5	22.6	23.0
28	6.8	6.2	6.5	11.1	10.5	10.8	15.5	14.8	15.1	22.6	21.1	21.7
29	6.9	6.3	6.6	11.2	11.0	11.1	15.8	15.3	15.5	22.5	21.1	21.7
30	---	---	---	11.5	11.0	11.3	15.8	15.7	15.7	21.8	19.0	20.2
31	---	---	---	11.4	10.8	11.1	---	---	---	19.0	18.6	18.8
MONTH	6.9	2.5	4.8	11.5	6.7	9.1	15.8	10.8	13.1	23.8	14.4	19.6

03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.9	8.3	8.5	9.2	8.1	8.7	11.8	10.6	11.3	12.3	10.3	12.0
2	9.0	8.5	8.7	9.2	7.9	8.5	11.8	10.8	11.5	12.2	11.0	12.0
3	9.0	8.3	8.6	8.5	7.8	8.2	11.9	11.3	11.6	12.4	11.6	11.9
4	9.0	8.2	8.5	8.6	7.7	8.2	11.8	11.2	11.6	11.9	11.5	11.7
5	9.1	8.3	8.6	8.4	7.7	8.0	11.9	11.2	11.7	11.6	10.4	11.0
6	9.1	8.1	8.6	9.1	8.1	8.5	11.7	11.0	11.3	10.7	10.1	10.3
7	9.3	8.3	8.6	9.5	9.1	9.4	---	---	---	11.5	10.7	11.1
8	9.3	8.4	8.6	9.7	7.5	8.7	---	---	---	11.9	11.4	11.8
9	9.0	8.3	8.6	8.2	7.4	7.8	---	---	---	12.1	11.8	11.9
10	9.0	8.1	8.5	9.2	7.5	7.8	---	---	---	12.3	11.9	12.1
11	8.8	8.0	8.4	8.3	7.4	7.7	---	---	---	12.5	12.1	12.4
12	9.4	8.2	8.6	8.9	7.4	7.8	---	---	---	12.6	12.4	12.5
13	10.2	8.2	8.8	9.5	8.2	8.8	---	---	---	12.7	12.5	12.6
14	9.1	8.0	8.5	9.2	8.2	8.6	---	---	---	12.8	12.6	12.7
15	8.8	7.7	8.2	9.6	6.3	8.5	---	---	---	12.9	12.6	12.8
16	9.0	8.1	8.5	8.9	6.8	8.6	13.0	12.9	13.0	12.9	12.7	12.8
17	9.4	8.3	8.8	10.2	8.5	8.8	13.1	12.9	13.0	13.1	12.8	12.9
18	9.6	8.8	9.2	9.1	8.6	8.8	13.0	12.6	12.9	13.1	12.7	12.9
19	9.6	8.9	9.2	9.6	8.7	9.1	12.9	12.6	12.7	13.0	12.7	12.8
20	9.7	9.1	9.3	9.9	9.5	9.7	13.1	12.8	13.0	13.6	13.0	13.4
21	9.7	9.4	9.5	10.4	9.6	10	13.3	13.1	13.2	14.1	13.5	13.9
22	10.0	9.3	9.6	10.3	9.3	10.0	13.2	12.9	13.1	14.1	13.8	14.0
23	9.8	9.4	9.6	10.1	7.9	9.2	12.9	12.5	12.7	14.2	13.9	14.0
24	9.8	9.2	9.5	9.7	9.2	9.5	12.5	12.3	12.4	14.1	13.7	13.9
25	9.9	9.0	9.4	9.9	9.2	9.7	12.7	12.3	12.5	13.8	13.6	13.7
26	9.5	9.1	9.3	10.1	9.5	9.8	12.9	12.6	12.7	13.6	13.4	13.5
27	9.5	9.2	9.3	10.2	9.6	9.9	12.9	12.8	12.9	13.4	13.3	13.3
28	9.5	9.2	9.3	10.4	9.5	10.1	12.9	12.7	12.8	13.8	13.3	13.6
29	9.9	9.4	9.5	10.9	9.5	10.6	12.8	12.1	12.5	13.9	13.7	13.8
30	9.7	8.4	9.1	11.9	6.7	8.9	12.2	12.1	12.2	13.9	13.6	13.7
31	9.3	8.1	8.8	---	---	---	12.3	11.9	12.1	14.0	13.7	13.9
MONTH	10.2	7.7	8.9	11.9	6.3	8.9	13.3	10.6	12.4	14.2	10.1	12.7
FEBRUARY			MARCH			APRIL			MAY			
1	14.1	13.9	14.0	10.9	10.7	10.8	10.6	8.6	9.2	9.2	6.9	7.6
2	14.1	14.0	14.1	10.8	10.6	10.7	9.2	8.2	8.7	9.1	7.0	7.5
3	14.1	13.8	13.9	10.8	10.5	10.7	10.3	8.4	9.1	9.3	7.4	7.8
4	14.2	13.9	14.0	10.7	10.5	10.6	9.8	8.8	9.2	10.8	7.7	8.8
5	14.4	14.2	14.3	10.7	10.3	10.6	9.6	8.5	8.9	10.0	9.6	9.8
6	14.7	14.1	14.4	10.8	10.1	10.4	10.4	8.3	8.8	9.6	9.1	9.4
7	14.3	13.8	14.0	10.8	10.0	10.2	10.1	8.3	8.8	9.2	6.5	8.7
8	14.0	12.3	13.1	10.7	10.2	10.4	10.0	8.2	8.7	8.4	6.3	7.1
9	12.3	11.9	12.1	10.7	10.3	10.5	9.1	7.8	8.2	8.3	6.0	7.0
10	12.5	12.0	12.2	10.8	10.5	10.6	9.9	7.7	8.5	7.8	5.6	6.3
11	13.5	12.5	13.1	10.9	10.6	10.7	10.2	7.4	8.5	7.6	5.7	6.2
12	13.6	13.4	13.5	11.0	9.7	10.6	10.1	8.1	9.1	7.4	5.5	6.2
13	13.8	13.5	13.6	10.4	9.4	10	9.8	8.2	8.8	7.3	5.6	6.1
14	13.7	13.6	13.7	10.6	8.8	9.4	9.9	8.3	9.0	7.1	5.2	5.9
15	13.7	13.6	13.6	11.6	8.4	9.4	11.0	9.6	10.3	6.2	5.5	5.9
16	13.8	13.6	13.7	10.4	9.4	9.9	10.7	9.6	10.2	---	---	---
17	13.8	13.6	13.7	9.9	8.9	9.5	10.8	9.4	9.8	---	---	---
18	13.7	13.6	13.7	10.3	8.2	9.3	11.1	9.3	9.8	---	---	---
19	14.0	11.9	13.2	10.5	8.2	9.2	10.0	8.7	9.1	---	---	---
20	12.1	10.7	11.1	11.6	8.1	9.7	10.0	8.2	8.6	---	---	---
21	10.9	10.6	10.7	11.2	9.9	10.5	9.5	7.5	8.2	---	---	---
22	10.8	10.6	10.7	10.6	10.0	10.2	9.1	7.3	7.9	---	---	---
23	10.9	10.6	10.8	10.6	9.3	10.2	8.7	8.0	8.3	---	---	---
24	10.8	10.5	10.7	11.6	9.1	10.0	8.8	8.1	8.5	---	---	---
25	10.8	10.6	10.7	11.3	8.9	9.8	8.7	7.8	8.2	---	---	---
26	10.8	10.6	10.7	11.3	8.9	9.6	9.2	6.7	7.6	---	---	---
27	10.8	10.6	10.7	11.1	9.1	9.6	9.2	7.2	8.1	---	---	---
28	10.8	10.5	10.7	11.3	8.8	9.6	9.4	7.7	8.1	---	---	---
29	10.9	10.7	10.8	9.3	8.2	8.6	9.5	7.4	8.0	---	---	---
30	---	---	---	9.7	8.1	8.8	8.9	7.1	7.7	---	---	---
31	---	---	---	9.5	8.6	9.0	---	---	---	---	---	---
MONTH	14.7	10.5	12.6	11.6	8.1	10.0	11.1	6.7	8.7	10.8	5.2	7.4

THIS PAGE IS INTENTIONALLY BLANK.

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 current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 942.109 ft above NGVD of 1929.

REMARKS.--Records fair except for those below 2.0 ft³/s and those estimated, which are poor.

COOPERATION.--Lexington-Fayette County Urban Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1650	91	3.80	Jul 22	0825	55	2.65
Nov 28	0725	56	2.94	Jul 31	2110	87	3.44
Jan 2	0650	81	3.53	Aug 5	0255	71	3.04
Mar 5	2035	82	3.58	Aug 20	2320	80	3.26
Apr 23	1050	52	2.84	Aug 28	2355	121	4.29
May 28	0045	87	3.70	Sep 17	0830	121	4.30
May 30	2230	*140	*4.71				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	0.13	4.3	3.9	e2.5	1.3	3.0	0.95	19	0.75	15	2.7
2	1.5	0.12	3.5	40	3.1	1.7	2.8	6.5	21	3.0	5.0	2.4
3	1.4	0.12	3.1	17	7.8	1.6	2.6	4.0	7.1	1.5	3.2	2.5
4	1.4	0.11	3.7	10	4.7	2.0	2.4	2.6	4.2	1.0	3.0	2.4
5	1.3	3.8	4.8	27	14	16	2.4	2.0	3.0	0.93	24	2.2
6	1.1	2.5	4.6	12	24	36	2.0	1.8	2.3	0.95	6.1	1.0
7	0.49	2.2	3.8	6.0	11	13	1.4	1.1	1.7	0.95	3.6	1.1
8	0.42	1.6	3.3	4.2	5.5	5.7	1.3	0.87	1.0	0.81	2.6	4.3
9	0.35	1.3	3.1	3.7	4.2	4.0	1.2	0.78	0.96	0.70	2.3	3.9
10	0.33	1.2	5.6	3.2	3.7	3.3	1.1	0.93	1.1	0.73	2.2	2.4
11	0.30	1.1	5.4	2.9	3.3	2.9	1.0	0.70	1.0	1.0	1.9	2.0
12	0.17	30	3.9	2.9	3.1	2.7	2.1	0.59	5.2	0.98	1.4	2.0
13	0.08	16	3.4	2.9	2.9	2.5	8.8	0.53	6.0	0.76	1.3	2.1
14	0.11	5.4	4.7	2.8	e2.8	2.3	14	0.51	3.3	0.93	1.1	2.3
15	0.18	5.1	5.5	2.7	e2.7	1.6	5.5	0.68	2.2	0.69	1.00	2.9
16	0.11	4.2	16	2.5	e2.6	1.7	3.7	0.77	2.0	0.56	0.87	2.8
17	0.10	3.6	23	2.6	2.5	1.5	3.0	0.67	1.8	3.7	0.73	50
18	0.10	10	12	4.2	2.5	1.5	2.7	1.1	1.4	2.4	0.64	11
19	0.09	29	7.1	3.8	2.4	1.5	2.5	3.8	2.2	1.3	0.53	4.9
20	0.06	12	4.7	3.2	2.4	1.8	2.1	2.9	2.2	0.97	6.0	3.1
21	0.04	5.4	3.8	3.0	2.4	2.7	1.8	1.8	2.0	0.77	18	2.3
22	0.02	3.8	3.5	2.8	e2.2	2.5	5.9	1.6	1.9	11	4.3	2.4
23	0.03	3.2	4.1	2.7	e1.9	2.4	21	1.5	1.5	4.5	2.6	2.2
24	0.02	3.4	7.2	2.6	e1.6	2.3	9.7	1.0	0.80	2.8	2.8	1.8
25	0.00	3.0	5.1	2.5	e1.4	1.4	4.0	0.59	4.6	2.4	2.9	0.94
26	0.29	2.9	4.0	3.4	e1.3	1.3	2.8	0.99	3.9	2.4	3.9	0.93
27	0.40	3.4	3.5	3.8	1.2	1.3	2.2	19	2.3	2.3	3.4	1.2
28	0.29	33	3.2	3.3	1.2	1.2	1.9	34	2.0	2.2	11	1.7
29	0.29	17	3.4	e2.9	1.2	1.8	1.7	6.3	1.6	1.5	31	1.7
30	0.21	7.2	10	e2.7	---	5.2	1.1	39	0.84	0.76	6.9	0.84
31	0.15	---	5.6	e2.6	---	3.6	---	66	---	20	3.8	---
TOTAL	12.93	211.78	178.9	189.8	122.1	130.3	117.7	205.56	110.10	75.24	173.07	124.01
MEAN	0.42	7.06	5.77	6.12	4.21	4.20	3.92	6.63	3.67	2.43	5.58	4.13
MAX	1.6	33	23	40	24	36	21	66	21	20	31	50
MIN	0.00	0.11	3.1	2.5	1.2	1.2	1.0	0.51	0.80	0.56	0.53	0.84

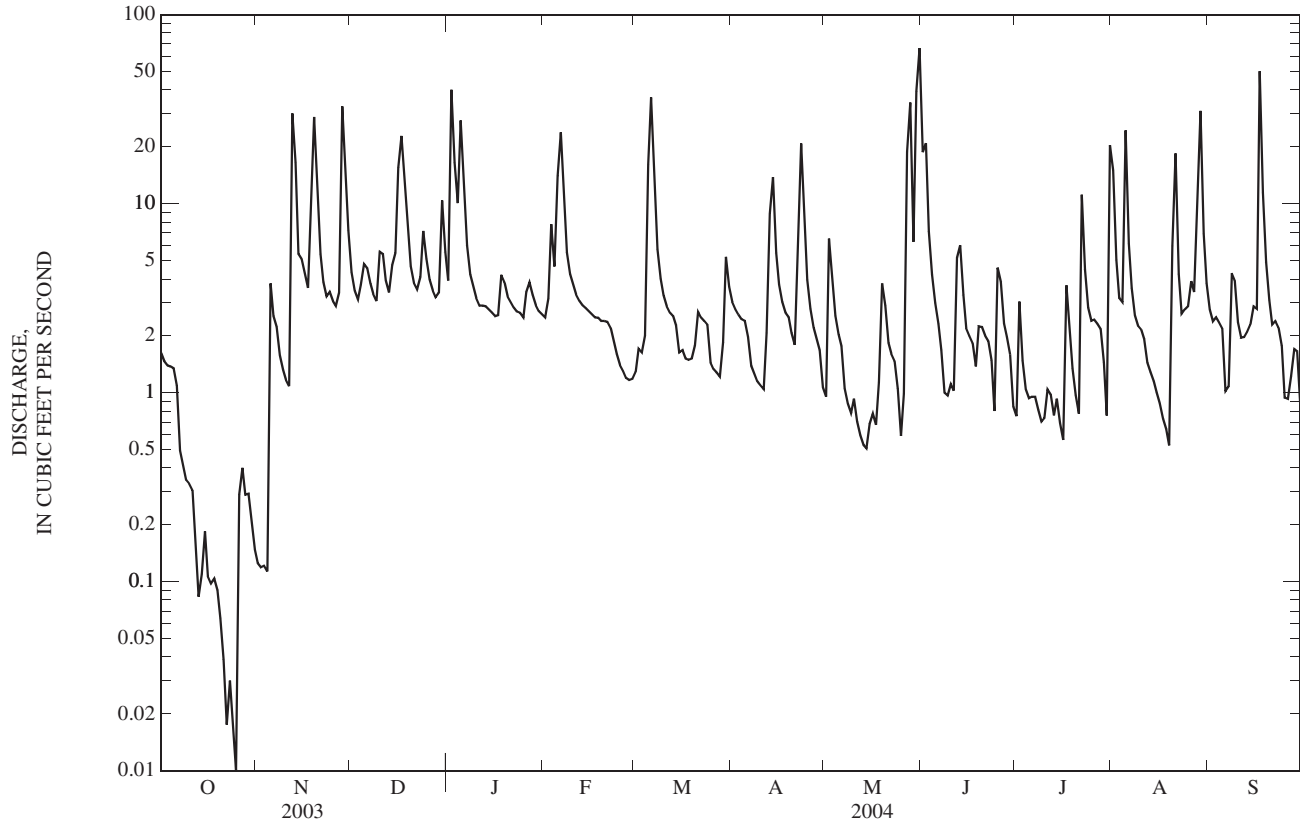
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	0.54	2.09	2.62	3.46	5.13	4.37	2.84	4.42	2.57	1.46	1.09	1.39
MAX	2.39	7.06	6.31	6.35	12.7	7.99	6.19	12.3	7.61	6.20	5.58	4.55
(WY)	(2003)	(2004)	(2003)	(1998)	(2003)	(2002)	(1998)	(2003)	(1998)	(1998)	(2004)	(2003)
MIN	0.00	0.00	0.07	0.25	0.48	2.19	0.73	0.20	0.03	0.02	0.00	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(2002)	(2003)	(2001)	(1999)	(1999)	(1999)	(1999)	(1999)

03287580 NORTH ELKHORN CREEK AT BRYANT ROAD NEAR CADENTOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	1,787.01		1,651.49		2.65	
ANNUAL MEAN	4.90		4.51		5.05	
HIGHEST ANNUAL MEAN					0.83	
LOWEST ANNUAL MEAN					98	
HIGHEST DAILY MEAN	75	Feb 16	66	May 31	98	Mar 20, 2002
LOWEST DAILY MEAN	0.00	Aug 28	0.00	Oct 25	0.00	Oct 1, 1997
ANNUAL SEVEN-DAY MINIMUM	0.04	Oct 19	0.04	Oct 19	0.00	Oct 1, 1997
MAXIMUM PEAK FLOW			140	May 30	281	Jun 29, 1998
MAXIMUM PEAK STAGE			4.71	May 30	5.11	Jun 29, 1998
INSTANTANEOUS LOW FLOW					0.00	Jul 1, 2001
10 PERCENT EXCEEDS	12		10		6.0	
50 PERCENT EXCEEDS	1.7		2.5		0.71	
90 PERCENT EXCEEDS	0.29		0.66		0.00	

e Estimated



03287590 NORTH ELKHORN CREEK AT WINCHESTER ROAD NEAR 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 current year.

REVISIONS.--Maximum discharge for the water year 1998 has been revised to 720 ft³/s, July 20, 1998, gage height, 6.78 ft.

GAGE.--Water-stage recorder with telemetry. Elevation of gage is 921.258 ft above NGVD of 1929.

REMARKS.--Records good except for discharges below 8.0 cfs, above 250 cfs, and those estimated, which are poor.

COOPERATION.--Lexington-Fayette County Urban Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 30	1945	*779	*6.95	Sep 17	0905	651	6.57
Aug 28	2345	768	6.92				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	1.1	8.3	7.7	e3.6	3.3	5.6	2.1	30	e2.1	32	6.1
2	2.7	1.0	6.1	120	e7.0	3.2	5.0	30	37	e3.1	10	4.3
3	e2.3	0.94	5.0	30	22	3.9	4.2	12	16	e2.5	5.2	4.9
4	e2.6	0.83	9.8	20	12	3.5	3.7	6.8	11	e2.2	4.9	3.5
5	e2.1	16	12	60	34	71	3.3	4.7	7.6	e1.9	66	3.2
6	e1.3	7.7	9.9	22	43	82	2.8	3.7	5.8	e1.8	13	2.0
7	e0.99	5.7	7.5	12	20	23	1.8	2.3	4.4	e2.3	6.4	1.5
8	e0.80	4.1	6.1	8.2	11	12	1.6	1.9	2.4	e2.1	4.1	14
9	e0.65	3.5	5.1	6.9	8.5	8.1	1.4	1.5	4.5	e1.9	3.3	6.4
10	e0.51	2.9	14	5.8	7.0	6.1	1.3	1.6	2.8	e1.7	2.9	3.5
11	e0.79	2.9	11	5.3	5.8	5.0	1.2	1.4	2.1	e1.6	2.5	2.5
12	e0.72	94	7.6	5.1	5.1	4.3	9.4	1.1	17	1.4	2.2	3.1
13	e0.50	34	5.9	5.0	4.5	3.9	25	1.0	14	0.97	1.7	2.4
14	4.6	12	11	4.4	4.1	3.5	30	1.0	8.2	3.1	1.4	2.2
15	1.8	14	12	4.2	3.8	2.3	14	4.1	4.5	0.84	1.2	3.3
16	1.1	9.4	36	3.8	3.6	3.3	8.2	2.0	3.9	0.58	1.2	3.5
17	1.0	6.9	36	4.0	3.5	2.3	5.9	1.5	3.4	21	1.1	202
18	0.87	27	19	15	3.4	2.0	4.7	7.5	3.4	7.3	0.94	27
19	0.78	53	13	9.3	3.3	1.9	4.1	19	9.9	2.5	0.89	12
20	e0.75	23	9.0	6.4	3.2	4.4	3.5	8.3	4.5	1.4	18	7.7
21	e0.72	11	7.0	5.4	3.1	4.8	6.8	4.1	3.6	0.99	40	5.1
22	e0.70	7.3	6.2	4.7	2.8	3.8	19	3.0	3.3	40	7.4	4.4
23	e0.68	5.7	9.7	4.2	2.0	3.3	50	2.5	2.9	8.3	4.1	4.3
24	e0.65	9.2	16	3.9	1.8	3.1	22	2.0	1.3	4.3	6.3	3.4
25	0.61	5.7	10	3.6	1.5	1.9	12	1.4	24	3.3	6.0	2.0
26	6.3	4.8	7.6	9.6	1.5	1.6	7.7	6.0	10	3.1	8.6	1.6
27	4.5	9.3	6.3	11	1.5	1.5	5.5	52	5.1	2.8	5.8	1.6
28	2.8	75	5.5	7.1	1.3	1.5	4.2	91	e3.3	2.5	67	2.6
29	2.4	27	7.4	5.7	1.3	3.3	3.5	16	e2.7	1.8	117	2.7
30	1.6	14	20	e5.0	---	e23	2.4	185	e2.3	2.2	16	1.6
31	1.2	---	11	e4.0	---	7.6	---	212	---	90	8.9	---
TOTAL	53.32	488.97	351.0	419.3	225.2	304.4	269.8	688.5	250.9	221.58	466.03	344.4
MEAN	1.72	16.3	11.3	13.5	7.77	9.82	8.99	22.2	8.36	7.15	15.0	11.5
MAX	6.3	94	36	120	43	82	50	212	37	90	117	202
MIN	0.50	0.83	5.0	3.6	1.3	1.5	1.2	1.0	1.3	0.58	0.89	1.5

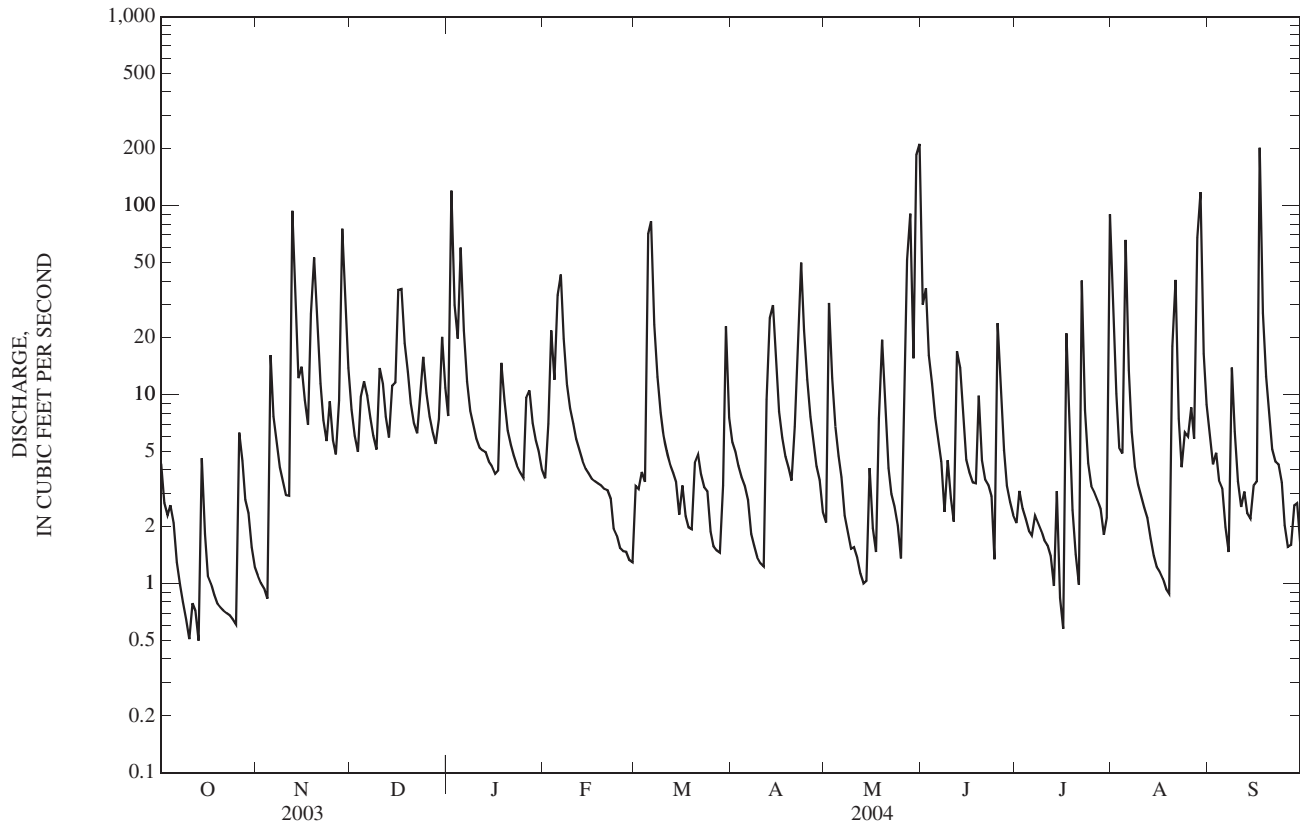
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	1.84	5.00	6.30	8.38	12.1	10.7	6.95	11.2	5.51	4.98	3.37	3.98
MAX	7.06	16.3	11.3	13.7	24.4	21.5	12.3	26.3	15.3	18.6	15.0	11.5
(WY)	(2003)	(2004)	(2004)	(1999)	(2003)	(2002)	(1998)	(2003)	(1998)	(1998)	(2004)	(2004)
MIN	0.33	0.67	1.40	2.25	2.66	5.74	1.49	0.49	0.78	0.24	0.16	0.14
(WY)	(1998)	(2000)	(2000)	(2000)	(2002)	(2003)	(1999)	(1999)	(2001)	(2002)	(1999)	(1999)

03287590 NORTH ELKHORN CREEK AT WINCHESTER ROAD NEAR LEXINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	3,814.34		4,083.40		6.67	
ANNUAL MEAN	10.5		11.2		11.2	
HIGHEST ANNUAL MEAN					3.11	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	162	Feb 16	212	May 31	357	Jul 20, 1998
LOWEST DAILY MEAN	0.45	Aug 25	0.50	Oct 13	0.00	Oct 5, 1997
ANNUAL SEVEN-DAY MINIMUM	0.54	Aug 22	0.70	Oct 19	0.00	Oct 5, 1997
MAXIMUM PEAK FLOW			779	May 30	779	May 30, 2004
MAXIMUM PEAK STAGE			6.95	May 30	6.95	May 30, 2004
INSTANTANEOUS LOW FLOW					0.00	Nov 8, 2000
10 PERCENT EXCEEDS	23		23		14	
50 PERCENT EXCEEDS	4.1		4.3		2.0	
90 PERCENT EXCEEDS	0.89		1.3		0.09	

e Estimated



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 current year.

REVISIONS.--Maximum discharge for the water year 1998 has been revised to 2480 ft³/s, June 29, 1998, gage height, 10.23 ft.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 892.042 ft above NGVD of 1929.

REMARKS.--Records good except for those below 10 ft³/s, and those estimated, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1955	1,500	6.75	May 30	2220	*4,310	*10.69
Jan 2	1025	1,440	6.63	Jun 25	1505	1,480	6.70
Mar 5	2255	1,680	7.09	Aug 29	0230	2,230	8.05
May 28	0255	1,060	5.78	Sep 17	1120	2,530	8.49

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	3.4	48	45	e15	11	22	13	191	9.5	195	18
2	6.4	3.2	29	556	e20	22	19	151	237	14	48	12
3	5.4	2.8	21	184	125	16	15	72	90	13	21	13
4	6.2	3.1	38	102	67	21	13	42	62	10	24	9.3
5	5.6	47	57	356	161	266	11	28	38	8.6	293	7.9
6	4.8	29	52	135	258	539	10	20	23	7.9	74	7.5
7	3.6	17	39	75	116	144	9.8	16	16	10	33	6.7
8	2.7	11	29	54	68	76	9.9	14	13	8.2	20	51
9	2.4	7.5	22	42	52	51	9.6	13	89	7.1	15	22
10	2.3	6.0	65	e32	39	33	8.9	11	47	6.9	13	12
11	2.9	5.8	68	e25	29	24	8.4	12	19	6.5	12	8.6
12	2.9	693	44	21	23	19	46	11	193	6.5	11	8.7
13	2.5	188	31	21	18	15	129	9.5	116	6.3	9.8	8.0
14	12	64	49	19	17	14	157	9.2	58	8.4	9.0	7.2
15	8.9	e70	61	17	15	12	76	34	29	6.1	8.7	6.5
16	3.5	48	202	15	14	17	47	14	20	5.3	8.0	6.7
17	2.9	33	240	15	13	12	32	8.5	26	52	7.9	791
18	2.7	25	113	e70	12	11	24	25	21	31	7.5	165
19	2.4	259	78	58	e12	9.5	19	68	93	10	7.5	66
20	2.3	119	54	40	12	13	17	31	37	8.1	11	35
21	3.3	63	40	27	11	20	32	14	19	7.1	122	19
22	3.4	37	33	21	9.8	12	109	11	15	110	21	13
23	3.4	24	44	20	9.0	9.8	245	11	13	25	13	11
24	3.5	43	101	15	8.7	9.6	127	7.2	9.9	14	15	9.1
25	3.3	23	64	14	8.1	8.7	72	9.1	315	10	9.1	7.6
26	29	17	46	38	7.6	8.1	46	38	85	9.0	18	6.5
27	15	39	34	60	7.3	8.3	29	307	34	8.8	12	5.7
28	7.5	340	27	43	7.0	8.2	20	440	18	8.1	73	5.6
29	8.9	157	26	e28	7.0	9.2	16	74	13	7.3	573	5.4
30	4.7	79	117	e22	---	84	14	743	11	9.3	70	5.2
31	3.8	---	64	e18	---	34	---	1,380	---	322	33	---
TOTAL	179.2	2,456.8	1,936	2,188	1,161.5	1,537.4	1,393.6	3,636.5	1,950.9	766.0	1,787.5	1,350.2
MEAN	5.78	81.9	62.5	70.6	40.1	49.6	46.5	117	65.0	24.7	57.7	45.0
MAX	29	693	240	556	258	539	245	1,380	315	322	573	791
MIN	2.3	2.8	21	14	7.0	8.1	8.4	7.2	9.9	5.3	7.5	5.2

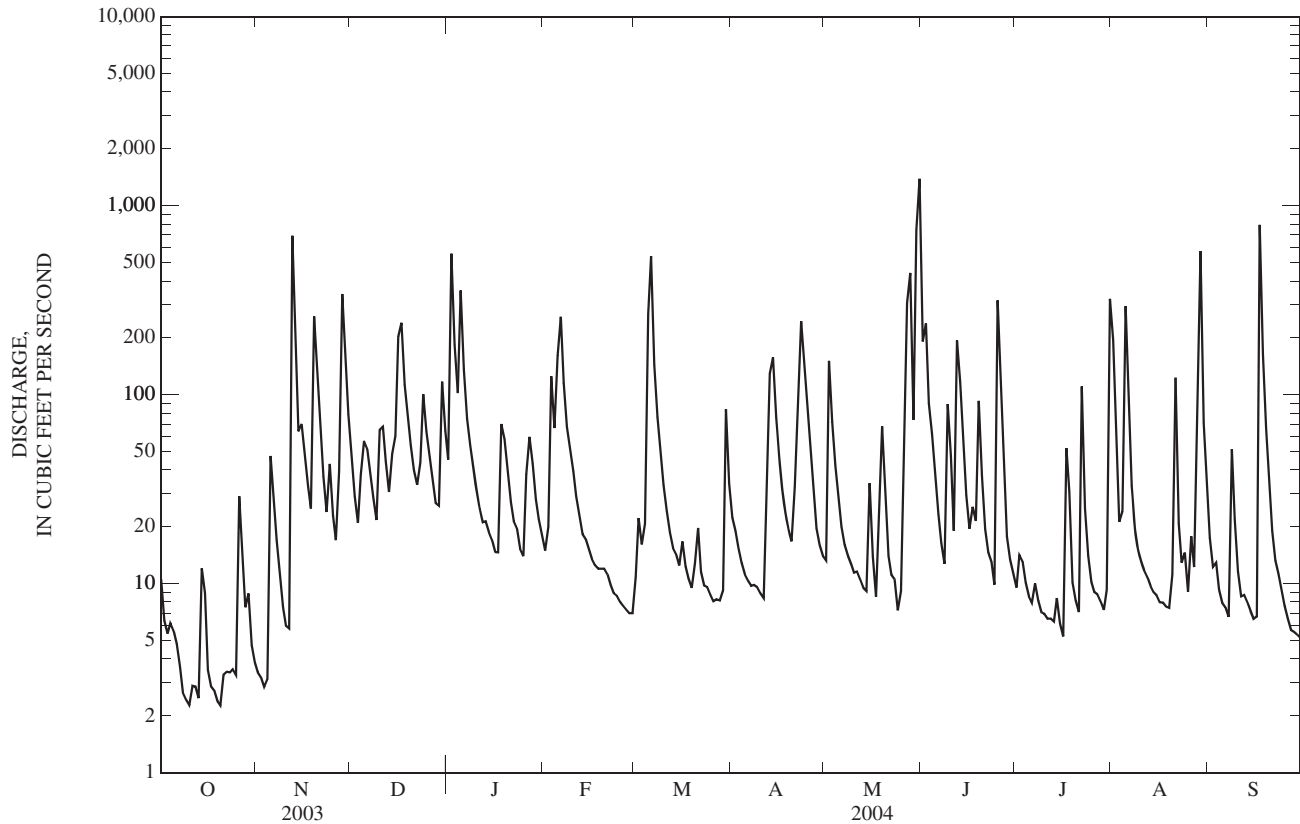
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	6.98	23.4	28.3	36.4	54.6	52.5	33.5	50.8	35.6	19.7	11.5	14.7
MAX	31.1	81.9	62.5	70.6	114	126	57.0	117	118	84.5	57.7	45.0
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(1998)	(2004)	(1998)	(1998)	(2004)	(2004)
MIN	1.03	2.26	6.78	15.8	13.6	22.7	8.29	4.00	3.22	0.72	1.13	0.01
(WY)	(1998)	(2000)	(2000)	(2000)	(2002)	(2003)	(1999)	(1999)	(2001)	(2002)	(1998)	(1999)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	15,967.7		20,343.6		33.2	
ANNUAL MEAN	43.7		55.6		16.2	
HIGHEST ANNUAL MEAN					55.6	
LOWEST ANNUAL MEAN					16.2	
HIGHEST DAILY MEAN	693	Nov 12	1,380	May 31	1,830	Jul 20, 1998
LOWEST DAILY MEAN	1.1	Aug 25	2.3	Oct 10	0.00	Oct 8, 1997
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 23	2.8	Oct 7	0.00	Sep 8, 1998
MAXIMUM PEAK FLOW			4,310	May 30	4,310	May 30, 2004
MAXIMUM PEAK STAGE			10.69	May 30	10.69	May 30, 2004
INSTANTANEOUS LOW FLOW					0.00	Aug 7, 1999
10 PERCENT EXCEEDS	103		123		72	
50 PERCENT EXCEEDS	16		18		9.5	
90 PERCENT EXCEEDS	2.9		6.4		0.39	

e Estimated



03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY

LOCATION.--Lat 38°13'10", long 84°33'47", Scott County, Hydrologic Unit 05100205, on right bank, 400 ft upstream of bridge on Highway 25 at Georgetown, 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 with telemetry. Datum of gage is 803.40 ft above NGVD of 1929. Prior to Oct. 1, 1994 at datum 3.40 ft. lower.

REMARKS.--Records good except for those below 80 ft³/s and those estimated, which are poor.

COOPERATION.--City of Georgetown.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 6	1800	3,360	8.13	Jun 1	0000	*7,990	*11.76
May 28	0400	3,410	8.18	Sep 18	0800	3,040	7.84

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	28	380	347	e140	53	150	122	4,830	67	1,220	93
2	38	22	256	1,100	e210	85	117	447	1,290	53	501	68
3	35	19	194	1,560	702	106	100	590	841	42	281	86
4	26	16	172	733	551	358	86	383	558	88	177	69
5	18	16	232	1,190	481	504	76	270	418	89	599	44
6	15	34	272	1,010	1,370	2,890	69	200	305	60	671	29
7	15	97	246	633	924	1,220	64	155	212	73	345	20
8	14	72	213	453	592	637	60	121	160	55	204	27
9	12	54	184	355	439	444	53	105	128	59	139	81
10	10	40	296	268	352	327	45	90	257	161	105	82
11	9.5	31	473	212	279	246	40	85	173	155	87	54
12	7.3	236	376	185	226	200	58	77	121	78	75	61
13	7.1	844	287	170	194	165	262	67	560	53	66	54
14	13	434	256	155	170	142	632	56	403	51	54	38
15	22	253	273	139	152	127	492	139	258	37	43	25
16	e40	246	e555	122	130	123	321	150	186	31	34	20
17	e30	199	1,210	111	116	118	227	100	159	43	27	502
18	e28	170	772	262	108	102	177	75	141	76	22	1,850
19	12	512	555	374	99	90	142	280	139	85	17	444
20	e15	646	424	302	96	81	122	351	281	45	19	230
21	9.0	383	329	243	89	80	120	176	151	27	75	141
22	e9.2	245	276	206	82	89	219	109	113	155	220	102
23	e9.6	175	296	e160	76	76	546	83	113	288	90	82
24	9.1	153	612	145	72	71	714	70	101	120	62	76
25	8.2	151	535	129	69	64	476	71	104	82	43	67
26	33	120	410	158	63	59	367	218	640	63	46	55
27	e69	173	318	401	60	54	259	1,170	256	48	47	49
28	e80	844	251	e346	55	52	197	2,380	138	39	59	41
29	69	1,100	214	254	50	52	163	998	97	28	509	32
30	50	568	438	e210	---	132	137	1,690	80	23	399	28
31	36	---	453	e175	---	224	---	6,860	---	493	149	---
TOTAL	804.0	7,881	11,758	12,108	7,947	8,971	6,491	17,688	13,213	2,767	6,385	4,550
MEAN	25.9	263	379	391	274	289	216	571	440	89.3	206	152
MAX	80	1,100	1,210	1,560	1,370	2,890	714	6,860	4,830	493	1,220	1,850
MIN	7.1	16	172	111	50	52	40	56	80	23	17	20
CFSM	0.18	1.79	2.58	2.66	1.86	1.97	1.47	3.88	3.00	0.61	1.40	1.03
IN.	0.20	1.99	2.98	3.06	2.01	2.27	1.64	4.48	3.34	0.70	1.62	1.15

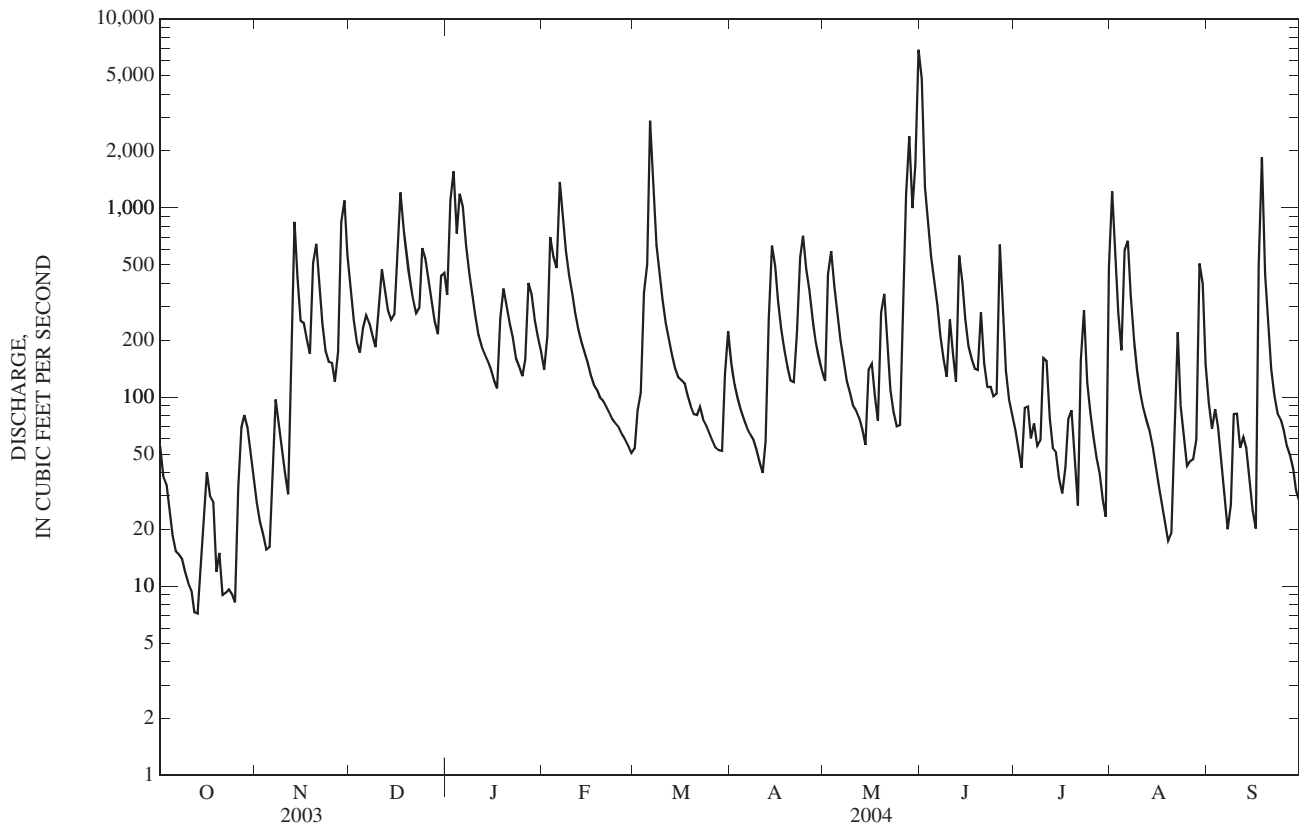
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	56.4	162	244	355	403	513	225	352	255	111	65.9	52.9
MAX	301	540	564	631	758	1,574	408	786	768	560	206	152
(WY)	(2003)	(2003)	(1997)	(1994)	(2003)	(1997)	(1994)	(1995)	(1997)	(1998)	(2004)	(2004)
MIN	6.82	9.49	29.7	55.1	136	224	62.7	25.0	19.6	12.8	4.39	2.63
(WY)	(2000)	(2000)	(2000)	(2000)	(2002)	(2003)	(1999)	(1999)	(1994)	(1999)	(2002)	(1999)

03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	95,997.9		100,563.0		235	
ANNUAL MEAN	263		275		371	
HIGHEST ANNUAL MEAN					114	
LOWEST ANNUAL MEAN					11,000	
HIGHEST DAILY MEAN	3,610	Feb 16	6,860	May 31	11,000	Mar 3, 1997
LOWEST DAILY MEAN	7.1	Oct 13	7.1	Oct 13	1.3	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	10	Oct 19	10	Oct 19	1.6	Sep 14, 1999
MAXIMUM PEAK FLOW			7,990	Jun 1	19,300	Mar 2, 1997
MAXIMUM PEAK STAGE			11.76	Jun 1	19.01	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	1.79		1.87		1.60	
ANNUAL RUNOFF (INCHES)	24.29		25.45		21.68	
10 PERCENT EXCEEDS	644		575		558	
50 PERCENT EXCEEDS	140		134		80	
90 PERCENT EXCEEDS	17		28		9.7	

e Estimated



03288110 ROYAL SPRINGS AT GEORGETOWN, KY

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

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

GAGE.--Water-stage recorder with telemetry. Datum of gage is 797.16 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--City of Georgetown.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	4.2	28	28	32	6.4	10	15	32	26	38	e8.6
2	7.8	3.6	29	42	30	10	8.4	44	43	31	53	e8.1
3	5.9	2.6	23	30	48	11	7.8	31	31	32	53	e7.5
4	5.3	2.3	22	32	41	18	6.5	23	25	29	56	e7.0
5	4.5	9.3	24	42	43	27	5.5	14	21	20	62	e6.7
6	3.6	12	23	36	35	27	5.0	8.5	15	17	53	e6.5
7	3.0	10	21	29	31	20	4.5	4.6	8.7	23	47	e6.6
8	2.5	7.9	19	23	25	22	3.8	13	5.9	15	40	e24
9	2.3	6.1	18	20	19	28	3.4	18	29	12	30	e13
10	2.0	4.6	25	16	15	24	3.6	13	41	20	26	e11
11	2.1	4.2	38	12	12	21	3.4	9.7	37	13	23	e9.3
12	1.8	24	33	9.1	9.9	16	10	7.9	43	8.4	20	e9.3
13	1.3	22	29	19	7.7	14	33	6.6	64	6.9	18	e12
14	3.0	28	29	36	6.4	10	15	6.1	60	11	17	e14
15	5.2	37	32	34	5.2	7.2	25	24	46	7.8	16	e11
16	3.8	31	33	31	16	16	26	23	42	6.0	13	e9.4
17	3.6	25	26	31	28	18	21	13	41	28	11	e78
18	3.1	25	36	38	24	15	17	13	41	24	4.4	e45
19	2.8	30	45	40	20	12	13	29	51	14	7.8	e30
20	1.9	28	39	39	17	11	10	20	44	9.2	8.9	e20
21	1.4	17	34	38	15	12	12	21	37	6.5	19	e16
22	0.96	11	29	36	12	9.3	38	16	35	42	12	e14
23	0.71	8.4	30	33	9.9	7.9	49	13	34	38	7.3	e13
24	0.48	18	46	31	9.4	6.9	49	9.0	32	27	6.1	e12
25	0.54	24	44	30	8.6	6.2	43	14	41	19	5.9	35
26	9.1	20	39	33	8.0	5.7	36	32	46	13	7.4	32
27	9.8	23	34	45	7.2	5.6	30	51	36	10	7.2	29
28	7.1	41	28	41	7.2	5.2	24	41	32	8.1	7.1	27
29	6.4	29	25	40	6.8	4.9	19	25	30	6.7	40	22
30	5.0	20	36	40	---	21	16	45	29	9.5	9.7	20
31	4.1	---	31	36	---	14	---	51	---	49	e8.9	---
TOTAL	120.19	528.2	948	990.1	549.3	432.3	547.9	654.4	1,072.6	582.1	727.7	557.0
MEAN	3.88	17.6	30.6	31.9	18.9	13.9	18.3	21.1	35.8	18.8	23.5	18.6
MAX	9.8	41	46	45	48	28	49	51	64	49	62	78
MIN	0.48	2.3	18	9.1	5.2	4.9	3.4	4.6	5.9	6.0	4.4	6.5

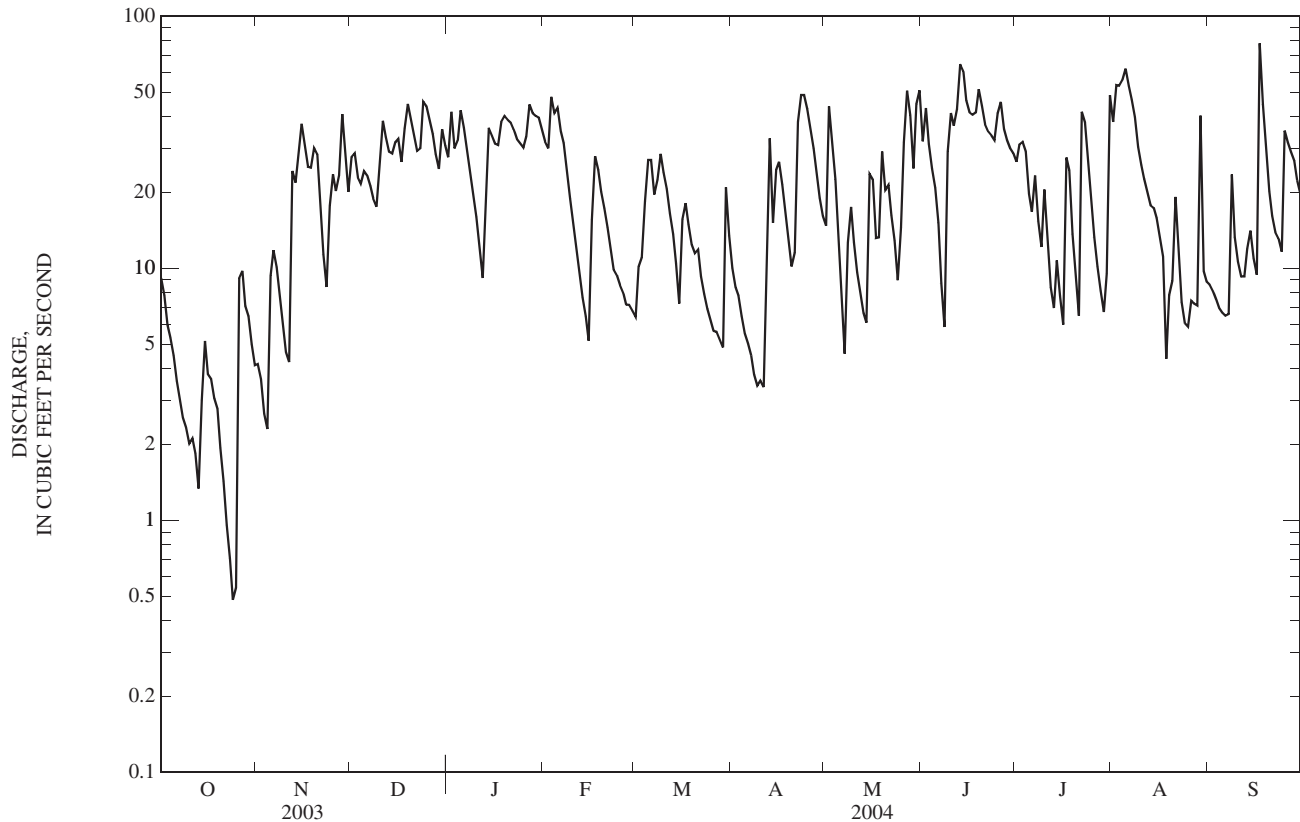
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	6.08	13.5	24.9	32.2	31.5	38.0	26.2	26.7	24.6	10.6	8.62	6.47
MAX	15.0	35.9	48.3	49.0	52.5	77.5	47.5	55.9	65.1	44.1	23.5	18.6
(WY)	(2003)	(1994)	(1997)	(1996)	(1994)	(1997)	(1994)	(1996)	(1997)	(1998)	(2004)	(2004)
MIN	1.57	0.98	6.00	5.67	13.7	13.9	13.5	5.26	3.04	0.75	0.04	0.26
(WY)	(1999)	(2000)	(1999)	(2000)	(2000)	(2004)	(2001)	(1999)	(1994)	(2002)	(2002)	(1998)

03288110 ROYAL SPRINGS AT GEORGETOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	6,104.95		7,709.79		20.6	
ANNUAL MEAN	16.7		21.1		30.5	
HIGHEST ANNUAL MEAN					9.07	
LOWEST ANNUAL MEAN					313	
HIGHEST DAILY MEAN	49	Jun 7	78	Sep 17	0.00	Mar 1, 1997
LOWEST DAILY MEAN	0.02	Aug 29	0.48	Oct 24	0.00	Oct 15, 1993
ANNUAL SEVEN-DAY MINIMUM	0.88	Aug 24	1.3	Oct 19	0.00	Oct 4, 1997
MAXIMUM PEAK FLOW			108	May 31	2,240	Mar 1, 1997
MAXIMUM PEAK STAGE			5.94	May 31	7.30	Mar 1, 1997
10 PERCENT EXCEEDS	34		41		49	
50 PERCENT EXCEEDS	16		19		14	
90 PERCENT EXCEEDS	2.8		5.0		1.0	

e Estimated



03288200 CANE RUN AT BERE A ROAD NEAR DONERAIL, KY

LOCATION.--Lat 38°08'19", long 84°31'02", Fayette County, Hydrologic Unit 05100205, on right bank, upstream side of bridge on Berea Road, 0.2 mi southwest of Ironworks Road (Hwy 1973), 0.8 mi northeast of Georgetown Road (U.S. Hwy 25), 1.0 mi southeast of Donerail, Ky., and 9.0 mi upstream from North Elkhorn Creek.

DRAINAGE AREA.--19.9 mi².

PERIOD OF RECORD.--February 1999 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 850 ft above NGVD of 1929, (from topographic map).

REMARKS.--Records fair, except those estimated, which are poor.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	2255	239	4.70	Jun 2	0225	216	4.61
Jan 2	1135	347	5.06	Jun 12	2155	350	5.07
Mar 5	2340	448	5.37	Jul 31	1440	1,450	7.21
May 27	0640	297	4.98	Aug 5	0725	437	5.34
May 28	0535	695	5.95	Sep 17	1210	236	4.69
May 30	2315	*3,420	*9.63				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	8.7	1.5	0.00	0.00	0.00	0.00	146	0.00	121	0.00
2	0.00	0.00	3.7	154	0.10	0.00	0.00	39	119	5.8	36	0.00
3	0.00	0.00	2.0	67	17	0.00	0.00	12	46	0.03	11	0.00
4	0.00	0.00	1.5	31	6.3	0.00	0.00	2.6	23	0.00	12	0.00
5	0.00	0.00	1.4	88	12	53	0.00	0.30	8.3	0.00	174	0.00
6	0.00	0.00	1.1	41	61	176	0.00	0.00	2.2	0.00	45	0.00
7	0.00	0.00	0.46	20	33	47	0.00	0.00	0.81	0.00	15	0.00
8	0.00	0.00	0.00	11	16	22	0.00	0.00	0.00	0.00	3.6	0.00
9	0.00	0.00	0.00	4.9	7.2	11	0.00	0.00	0.00	0.00	1.4	0.00
10	0.00	0.00	7.7	2.3	3.5	3.6	0.00	0.00	0.08	0.00	0.54	0.00
11	0.00	0.00	7.4	1.4	1.8	1.4	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	e65	3.4	0.23	1.1	0.13	2.5	0.00	59	0.00	0.00	0.00
13	0.00	49	2.2	0.00	0.07	0.00	11	0.00	44	0.00	0.00	0.00
14	0.00	8.9	2.7	0.00	0.00	0.00	9.8	0.00	10	0.00	0.00	0.00
15	0.00	4.7	3.2	0.00	0.00	0.00	0.78	2.3	0.84	0.00	0.00	0.00
16	0.00	0.71	38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	73	0.00	0.00	0.00	0.00	0.00	0.00	6.2	0.00	88
18	0.00	5.6	35	1.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21
19	0.00	29	21	1.1	0.00	0.00	0.00	6.3	10	0.00	0.00	2.2
20	0.00	11	10	0.88	0.00	0.00	0.00	0.31	0.15	0.00	0.00	0.20
21	0.00	2.3	3.9	0.24	0.00	0.00	3.9	0.00	0.00	0.00	0.00	0.00
22	0.00	0.55	2.9	0.00	0.00	0.00	20	0.00	0.00	28	0.00	0.00
23	0.00	0.00	5.2	0.00	0.00	0.00	20	0.00	0.00	0.15	0.00	0.00
24	0.00	0.12	28	0.00	0.00	0.00	9.1	0.00	0.00	0.00	0.00	0.00
25	0.00	0.01	16	0.00	0.00	0.00	5.4	0.00	16	0.00	0.00	0.00
26	0.00	0.00	6.9	1.3	0.00	0.00	1.4	35	0.71	0.00	0.00	0.00
27	0.00	1.1	3.3	2.9	0.00	0.00	0.02	169	0.00	0.00	0.00	0.00
28	0.00	67	1.8	1.3	0.00	0.00	0.00	313	0.00	0.00	1.5	0.00
29	0.00	45	1.1	0.89	0.00	0.00	0.00	64	0.00	0.00	20	0.00
30	0.00	22	9.7	0.22	---	0.93	0.00	371	0.00	0.21	0.00	0.00
31	0.00	---	2.0	0.00	---	0.00	---	1,180	---	546	0.00	---
TOTAL	0.00	311.99	303.26	432.36	159.07	315.06	83.90	2,194.81	486.09	586.39	441.04	111.40
MEAN	0.00	10.4	9.78	13.9	5.49	10.2	2.80	70.8	16.2	18.9	14.2	3.71
MAX	0.00	67	73	154	61	176	20	1,180	146	546	174	88
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

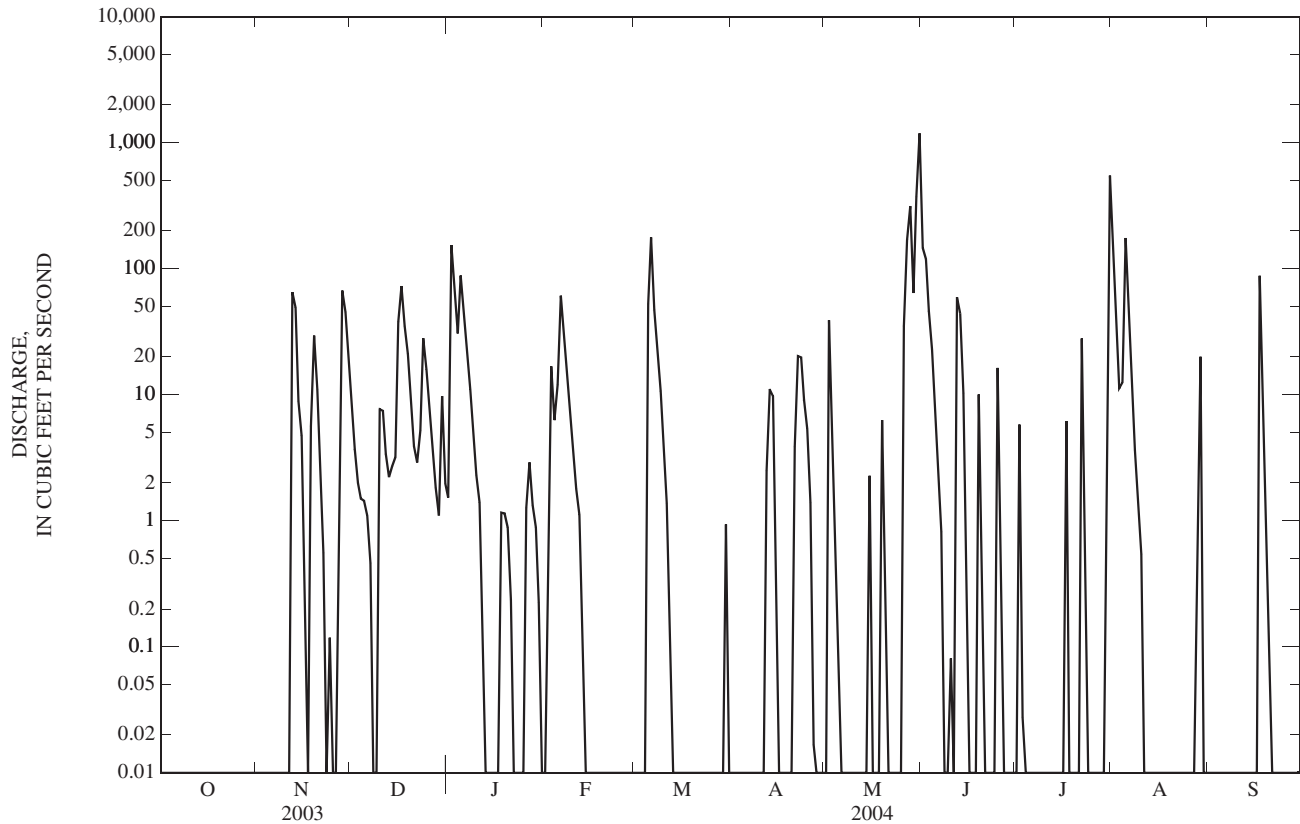
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	1.59	7.17	6.31	4.89	12.2	13.5	2.73	17.6	4.60	3.65	2.52	1.77
MAX	7.88	23.7	14.6	13.9	35.0	50.3	11.3	70.8	16.2	18.9	14.2	3.71
(WY)	(2003)	(2003)	(2003)	(2004)	(2003)	(2002)	(2002)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	0.00	0.00	0.00	0.00	0.15	0.30	0.00	0.03	0.01	0.00	0.00	0.00
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2003)	(1999)	(2000)	(2001)	(1999)	(1999)	(1999)

03288200 CANE RUN AT BERE A ROAD NEAR DONERAIL, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	2,839.88		5,425.37		7.18	
ANNUAL MEAN	7.78		14.8		14.8	
HIGHEST ANNUAL MEAN					1.99	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	299	Feb 16	1,180	May 31	1,180	May 31, 2004
LOWEST DAILY MEAN	0.00	Jan 8	0.00	Oct 1	0.00	Feb 17, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 8	0.00	Oct 1	0.00	Feb 17, 1999
MAXIMUM PEAK FLOW			3,420	May 30	3,420	May 30, 2004
MAXIMUM PEAK STAGE			9.63	May 30	9.63	May 30, 2004
INSTANTANEOUS LOW FLOW					0.00	Oct 1, 2001
10 PERCENT EXCEEDS	22		28		12	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated



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 current year.

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

GAGE.--Water-stage recorder with telemetry. Datum of gage is 834.25 ft above NGVD of 1929. Prior to Aug. 12, 1952, and Feb. 18 to Nov. 16, 1965, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.- Records fair.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	2035	958	9.13	May 28	0345	1,440	10.23
Nov 28	0955	535	7.86	May 30	1425	737	8.52
Dec 16	2125	502	7.74	May 31	0120	*1,960	*11.17
Jan 2	1145	669	8.31	Jul 2	1900	641	8.22
Mar 5	2350	1,060	9.38	Jul 31	1135	962	9.14
May 27	0535	524	7.82				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

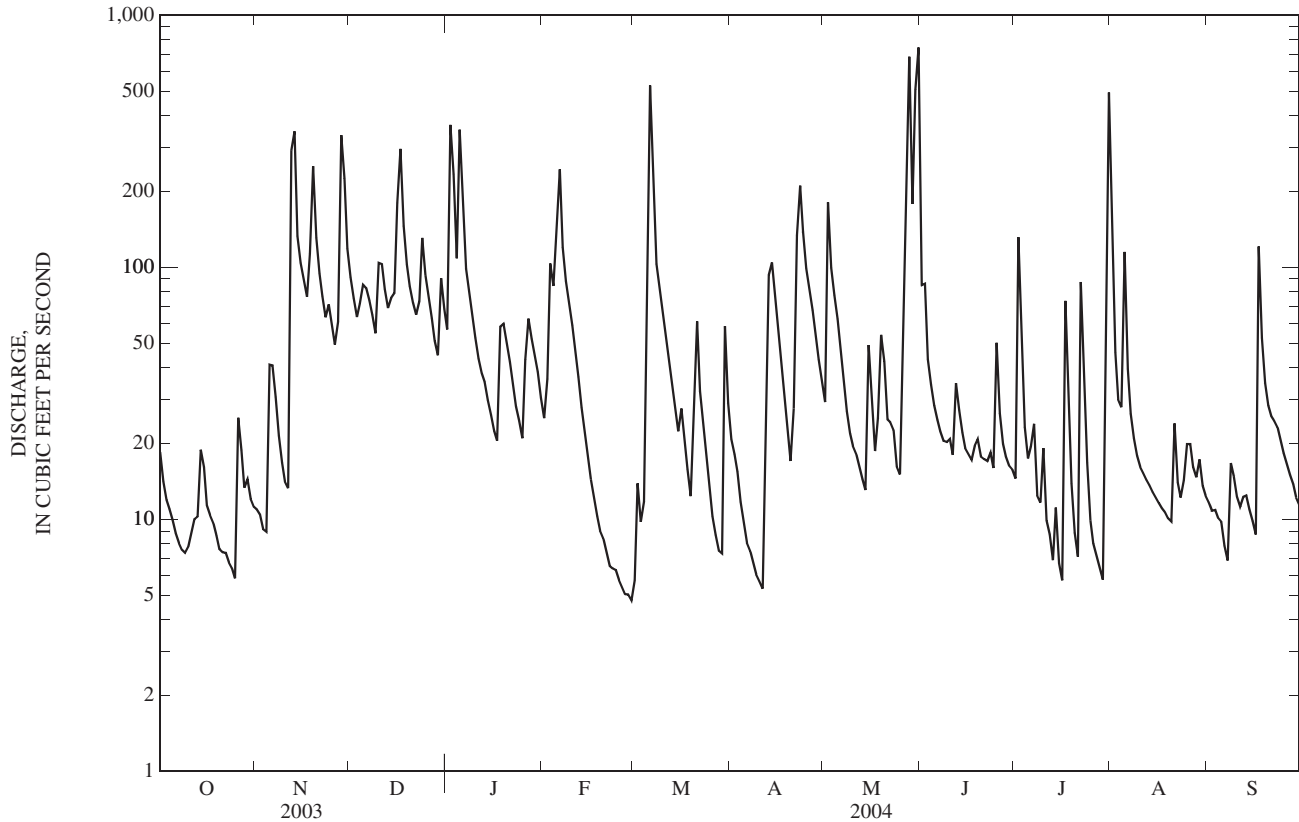
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	11	91	57	25	5.7	21	29	85	15	106	12
2	14	10	75	367	36	14	18	181	86	132	46	11
3	12	9.2	64	234	103	9.8	15	99	43	48	30	11
4	11	8.9	72	109	84	12	12	77	34	23	28	10
5	9.9	41	85	351	143	146	9.8	63	28	17	115	9.8
6	8.8	41	83	173	244	525	8.1	47	25	19	39	7.9
7	8.1	31	74	99	120	205	7.5	35	22	24	26	6.9
8	7.6	21	65	79	88	103	6.8	27	21	12	21	17
9	7.4	17	55	66	72	82	6.0	22	20	12	18	15
10	7.8	14	104	53	59	67	5.7	20	21	19	16	12
11	8.8	13	103	43	47	54	5.3	18	18	9.9	15	11
12	10	291	82	38	37	43	36	16	35	8.7	14	12
13	10	346	69	35	28	34	93	14	27	6.9	14	12
14	19	133	76	30	22	28	104	13	22	11	13	11
15	16	104	79	26	18	22	78	49	19	6.7	12	9.8
16	11	89	180	22	14	28	58	28	18	5.7	12	8.7
17	10	76	294	21	12	21	43	19	17	73	11	121
18	9.7	113	146	58	10	16	31	25	20	31	11	52
19	8.6	251	102	60	9.0	12	23	54	21	14	10	35
20	7.6	131	84	50	8.4	24	17	42	18	8.9	9.8	28
21	7.4	94	72	42	7.4	61	28	25	17	7.1	24	26
22	7.4	77	65	35	6.5	32	134	24	17	87	14	25
23	6.7	63	73	28	6.4	24	210	23	18	38	12	23
24	6.4	71	131	25	6.3	18	139	16	16	17	14	21
25	5.8	59	93	21	5.7	13	99	15	50	9.9	20	18
26	25	49	76	43	5.4	10	82	55	26	8.0	20	17
27	19	61	63	63	5.1	8.7	68	255	20	7.2	16	15
28	13	334	51	52	5.0	7.5	55	683	18	6.4	15	14
29	14	225	45	44	4.8	7.3	43	178	16	5.8	17	12
30	12	119	90	39	---	58	35	506	16	18	14	11
31	11	---	68	30	---	29	---	744	---	493	12	---
TOTAL	344.0	2,903.1	2,810	2,393	1,232.0	1,720.0	1,491.2	3,402	814	1,194.2	744.8	595.1
MEAN	11.1	96.8	90.6	77.2	42.5	55.5	49.7	110	27.1	38.5	24.0	19.8
MAX	25	346	294	367	244	525	210	744	86	493	115	121
MIN	5.8	8.9	45	21	4.8	5.7	5.3	13	16	5.7	9.8	6.9
CFSM	0.52	4.56	4.28	3.64	2.00	2.62	2.34	5.18	1.28	1.82	1.13	0.94
IN.	0.60	5.09	4.93	4.20	2.16	3.02	2.62	5.97	1.43	2.10	1.31	1.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	9.67	24.1	51.1	49.7	65.8	68.6	43.8	36.4	21.3	16.1	11.9	10.4
MAX	68.7	137	198	159	227	172	145	156	83.2	97.0	68.0	81.4
(WY)	(2003)	(2003)	(1979)	(1951)	(1989)	(1964)	(1972)	(1983)	(1960)	(1958)	(1974)	(1979)
MIN	0.00	0.09	0.86	4.43	6.48	11.0	10.3	3.92	1.14	0.66	0.01	0.02
(WY)	(1954)	(1954)	(1954)	(1981)	(1954)	(1954)	(1971)	(1952)	(1954)	(1951)	(1965)	(1953)

03289000 SOUTH ELKHORN CREEK AT FORT SPRING, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	23,733.8		19,643.4		33.9	
ANNUAL MEAN	65.0		53.7		74.6	
HIGHEST ANNUAL MEAN					6.75	
LOWEST ANNUAL MEAN					1,470	
HIGHEST DAILY MEAN	1,470	Feb 16	744	May 31	1,470	Feb 16, 2003
LOWEST DAILY MEAN	4.6	Jan 28	4.8	Feb 29	0.00	Aug 6, 1951
ANNUAL SEVEN-DAY MINIMUM	5.3	Jan 22	5.4	Feb 24	0.00	Aug 19, 1951
MAXIMUM PEAK FLOW			1,960	May 31	2,280	Feb 15, 1989
MAXIMUM PEAK STAGE			11.17	May 31	12.13	Sep 21, 1979
INSTANTANEOUS LOW FLOW					0.00	Aug 6, 1951
ANNUAL RUNOFF (CFSM)	3.07		2.53		1.60	
ANNUAL RUNOFF (INCHES)	41.65		34.47		21.72	
10 PERCENT EXCEEDS	131		110		83	
50 PERCENT EXCEEDS	31		23		12	
90 PERCENT EXCEEDS	8.7		8.1		1.5	



03289193 WOLF RUN AT OLD FRANKFORT PIKE AT LEXINGTON, KY

LOCATION.--Lat 38°04'00", long 84°33'16", Fayette County, Hydrologic Unit 05100205, on left bank, downstream side of bridge on Old Frankfort Pike (1681), at Lexington 0.3 mile southeast of the intersection of Old Frankfort Pike and Viley Road, 0.7 mile northwest of the intersection of Old Frankfort Pike and New Circle Road (Hwy 4), and 0.5 mile above mouth.

DRAINAGE AREA.--9.57 mi².

PERIOD OF RECORD.--October 1997 to current year.

REVISED RECORDS.--The maximum discharges for some water years have been revised as shown in the following table. They supersede figures published in WRD 1998, 1999, 2000, 2001, 2002 and 2003.

GAGE.--Water-stage recorder with telemetry. Elevation of gage is 862.31 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--Lexington-Fayette Urban County Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1650	1,730	6.27	Jun 12	1655	1,300	5.68
Mar 5	1945	1,270	5.63	Jul 22	0830	1,270	5.64
May 19	1630	1,520	5.99	Jul 31	0730	1,310	5.70
May 28	0010	1,760	6.31	Jul 31	1230	2,030	6.63
May 30	2035	*2,710	*7.32	Aug 5	0225	1,020	5.23
May 31	0220	2,120	6.73				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e13	3.6	22	15	9.5	13	9.3	9.7	109	6.2	100	5.8
2	e9.8	3.1	16	155	22	9.6	9.4	85	113	53	50	4.8
3	e7.6	2.5	12	62	40	15	7.8	29	54	19	27	4.8
4	e6.5	2.3	25	52	23	9.2	6.9	19	40	14	38	4.2
5	e5.1	34	25	98	57	186	6.2	15	26	13	158	3.7
6	e3.9	13	18	52	63	114	5.6	12	19	18	42	3.4
7	e3.0	7.6	14	35	42	53	5.1	9.7	16	14	23	3.1
8	e2.4	5.7	12	25	29	33	4.6	8.3	12	7.7	15	26
9	e2.0	4.6	11	21	22	23	4.4	7.4	24	25	11	7.4
10	e2.3	3.9	41	16	17	17	4.3	6.8	18	11	9.4	5.7
11	e3.3	3.5	26	13	14	13	4.1	6.2	10	8.0	8.0	4.7
12	e4.7	230	18	12	11	11	35	5.7	129	7.3	7.6	5.8
13	e5.2	64	15	11	9.8	9.6	44	5.3	45	6.4	6.8	6.4
14	22	31	27	9.5	8.6	9.1	35	7.7	31	10	6.1	4.7
15	5.0	36	25	8.6	7.7	8.2	21	47	18	5.8	5.5	3.9
16	3.7	21	68	7.9	7.0	13	15	13	17	5.5	5.2	3.7
17	3.3	16	65	8.5	6.5	8.3	12	9.7	19	71	4.9	197
18	2.9	44	46	32	5.8	7.4	9.8	43	18	15	4.1	45
19	2.5	54	33	16	5.5	6.6	8.4	184	34	8.9	3.0	22
20	2.2	33	23	14	5.1	17	7.6	54	13	7.3	20	14
21	1.9	22	19	12	4.8	11	32	27	11	6.5	25	11
22	1.8	16	15	8.9	4.5	7.2	62	23	11	146	6.7	8.9
23	1.6	12	36	8.2	4.5	6.4	61	15	10	22	5.2	7.6
24	1.5	26	39	7.4	4.3	5.8	37	15	8.7	12	13	6.7
25	1.4	12	26	6.8	4.0	5.5	33	13	52	8.9	27	6.0
26	25	9.8	20	24	3.9	5.2	21	41	13	7.5	15	5.3
27	7.4	31	16	23	3.7	4.8	16	192	8.8	6.6	8.9	4.8
28	5.9	93	13	14	3.6	4.6	12	268	7.6	5.9	30	4.3
29	5.7	50	23	12	3.4	11	10	65	7.0	5.5	26	3.9
30	4.0	32	33	11	---	32	8.8	591	6.7	34	9.5	3.7
31	3.4	---	17	10	---	11	---	580	---	557	7.0	---
TOTAL	170.0	916.6	799	800.8	442.2	680.5	548.3	2,407.5	900.8	1,138.0	717.9	438.3
MEAN	5.48	30.6	25.8	25.8	15.2	22.0	18.3	77.7	30.0	36.7	23.2	14.6
MAX	25	230	68	155	63	186	62	591	129	557	158	197
MIN	1.4	2.3	11	6.8	3.4	4.6	4.1	5.3	6.7	5.5	3.0	3.1
CFSM	0.57	3.19	2.69	2.70	1.59	2.29	1.91	8.12	3.14	3.84	2.42	1.53
IN.	0.66	3.56	3.11	3.11	1.72	2.65	2.13	9.36	3.50	4.42	2.79	1.70

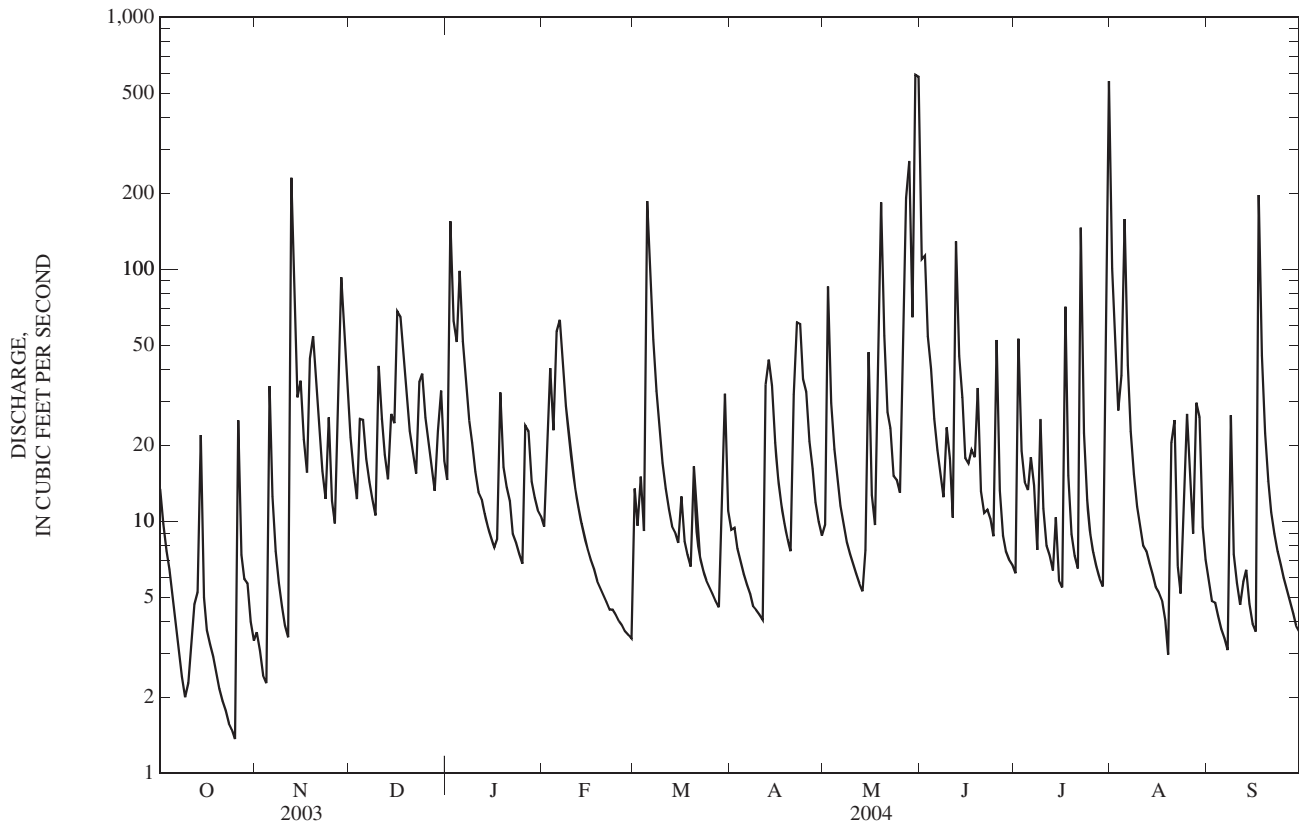
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	7.11	13.0	15.4	18.5	23.0	22.5	16.9	31.1	22.8	18.7	9.56	10.2
MAX	22.9	33.3	25.8	37.7	51.3	47.3	30.5	77.7	61.8	44.6	24.1	24.8
(WY)	(2003)	(2003)	(2004)	(1999)	(2003)	(2002)	(2002)	(2004)	(1998)	(1998)	(2003)	(2003)
MIN	1.59	2.45	5.19	6.31	6.35	11.2	5.84	5.82	5.10	2.21	1.58	1.37
(WY)	(2001)	(2000)	(2000)	(2001)	(2002)	(2003)	(2001)	(1999)	(2002)	(2002)	(2002)	(1999)

03289193 WOLF RUN AT OLD FRANKFORT PIKE AT LEXINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	9,361.8		9,959.9		17.4	
ANNUAL MEAN	25.6		27.2		27.2	
HIGHEST ANNUAL MEAN					9.93	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	421	May 9	591	May 30	717	Jul 20, 1998
LOWEST DAILY MEAN	1.4	Oct 25	1.4	Oct 25	0.34	Oct 13, 1997
ANNUAL SEVEN-DAY MINIMUM	1.8	Oct 19	1.8	Oct 19	0.42	Oct 7, 1997
MAXIMUM PEAK FLOW			2,710	May 30	3,120	Jun 29, 1998
MAXIMUM PEAK STAGE			7.32	May 30	7.97	Jun 29, 1998
INSTANTANEOUS LOW FLOW					0.00	Dec 9, 1999
ANNUAL RUNOFF (CFSM)	2.68		2.84		1.82	
ANNUAL RUNOFF (INCHES)	36.39		38.72		24.66	
10 PERCENT EXCEEDS	58		52		36	
50 PERCENT EXCEEDS	12		12		6.9	
90 PERCENT EXCEEDS	4.0		4.0		1.2	

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03289200 TOWN BRANCH AT YARNALLTON ROAD AT YARNALLTON, KY

LOCATION.--Lat 38°06'13", long 84°35'17", Fayette County, Hydrologic Unit 05100205, on the left bank, downstream side of bridge on Yarnallton Road (1977), 0.5 mile southwest of Leestown Road (HWY 421), 1.1 miles northeast of Old Frankfort Pike (HWY 1681), 0.2 mile Southwest of Yarnallton, KY.

DRAINAGE AREA.--30.0 mi².

PERIOD OF RECORD.--October 1997 to current year.

REVISED RECORDS.--The maximum discharges for some water years have been revised as shown in the following table. They supersede figures published in WRD 1998, 1999, 2000, 2001, 2002, and 2003.

Date	Discharge (ft ³ /s)	Gage height (ft)	Date	Discharge (ft ³ /s)	Gage height (ft)
Jun 29, 1998	5,390	9.12	Dec 16, 2000	1,520	5.48
Jan 9, 1999	995	4.34	Mar 20, 2002	2,440	6.81
Feb 18, 2000	2,040	6.29	May 9, 2003	2,320	6.65

GAGE.--Water-stage recorder with telemetry. Elevation of gage is 822.365 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are poor. Flow regulated by a Sewage Treatment Plant and Federal Correctional Institute upstream.

COOPERATION.--Lexington-Fayette County Urban Government.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	0920	1,170	4.84	Jun 12	2010	1,470	5.39
Mar 5	2310	1,800	5.94	Jul 22	1135	1,350	5.19
May 19	1935	1,460	5.38	Jul 31	1535	3,500	7.83
May 27	0450	1,190	4.88	Aug 5	0540	1,620	5.65
May 28	0350	2,370	6.72	Sep 17	1040	1,330	5.14
May 30	2340	*5,890	*9.38				

03289200 TOWN BRANCH AT YARNALLTON ROAD AT YARNALLTON, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	37	120	89	68	55	64	67	571	40	433	52
2	49	35	94	524	93	74	63	342	516	126	234	46
3	43	33	80	291	190	75	57	185	290	94	157	47
4	41	35	102	204	136	73	52	136	219	69	174	41
5	37	e105	114	401	214	307	51	112	158	57	564	37
6	38	e76	94	239	293	555	51	94	122	66	220	34
7	37	59	83	179	217	259	49	83	102	88	145	35
8	36	49	77	140	163	182	49	73	85	54	108	96
9	35	43	71	119	135	138	48	67	92	75	87	60
10	33	40	147	98	116	110	44	66	97	77	74	49
11	33	42	135	85	97	91	42	66	68	52	64	42
12	31	e430	107	81	87	80	124	66	298	47	60	49
13	32	e661	90	74	77	69	177	61	204	43	53	59
14	65	e300	111	69	70	63	165	59	146	61	48	60
15	53	e145	120	65	64	61	120	171	99	43	42	47
16	43	e120	243	61	62	71	96	86	89	38	42	39
17	39	e100	283	58	60	59	82	69	91	201	41	562
18	36	e120	210	125	55	55	73	145	91	105	39	236
19	33	e324	166	97	54	54	69	364	140	69	37	137
20	33	e160	128	86	52	62	66	208	81	56	44	102
21	33	113	107	79	49	68	116	126	69	47	125	80
22	33	87	94	74	46	55	233	107	64	328	51	67
23	32	73	130	67	46	53	234	83	59	125	45	59
24	31	103	192	63	46	48	169	76	50	83	58	52
25	29	74	139	60	45	46	153	86	147	64	75	46
26	e92	66	116	112	45	45	123	213	82	57	78	42
27	e65	104	97	129	44	43	102	652	59	50	60	41
28	48	341	84	103	42	42	88	973	52	46	113	39
29	51	223	86	91	41	44	77	333	47	42	152	37
30	42	156	159	83	---	141	73	936	43	87	75	36
31	39	---	103	74	---	73	---	2,240	---	1,440	61	---
TOTAL	1,305	4,254	3,882	4,020	2,707	3,151	2,910	8,345	4,231	3,830	3,559	2,329
MEAN	42.1	142	125	130	93.3	102	97.0	269	141	124	115	77.6
MAX	92	661	283	524	293	555	234	2,240	571	1,440	564	562
MIN	29	33	71	58	41	42	42	59	43	38	37	34
CFSM	1.40	4.73	4.17	4.32	3.11	3.39	3.23	8.97	4.70	4.12	3.83	2.59
IN.	1.62	5.27	4.81	4.98	3.36	3.91	3.61	10.35	5.25	4.75	4.41	2.89

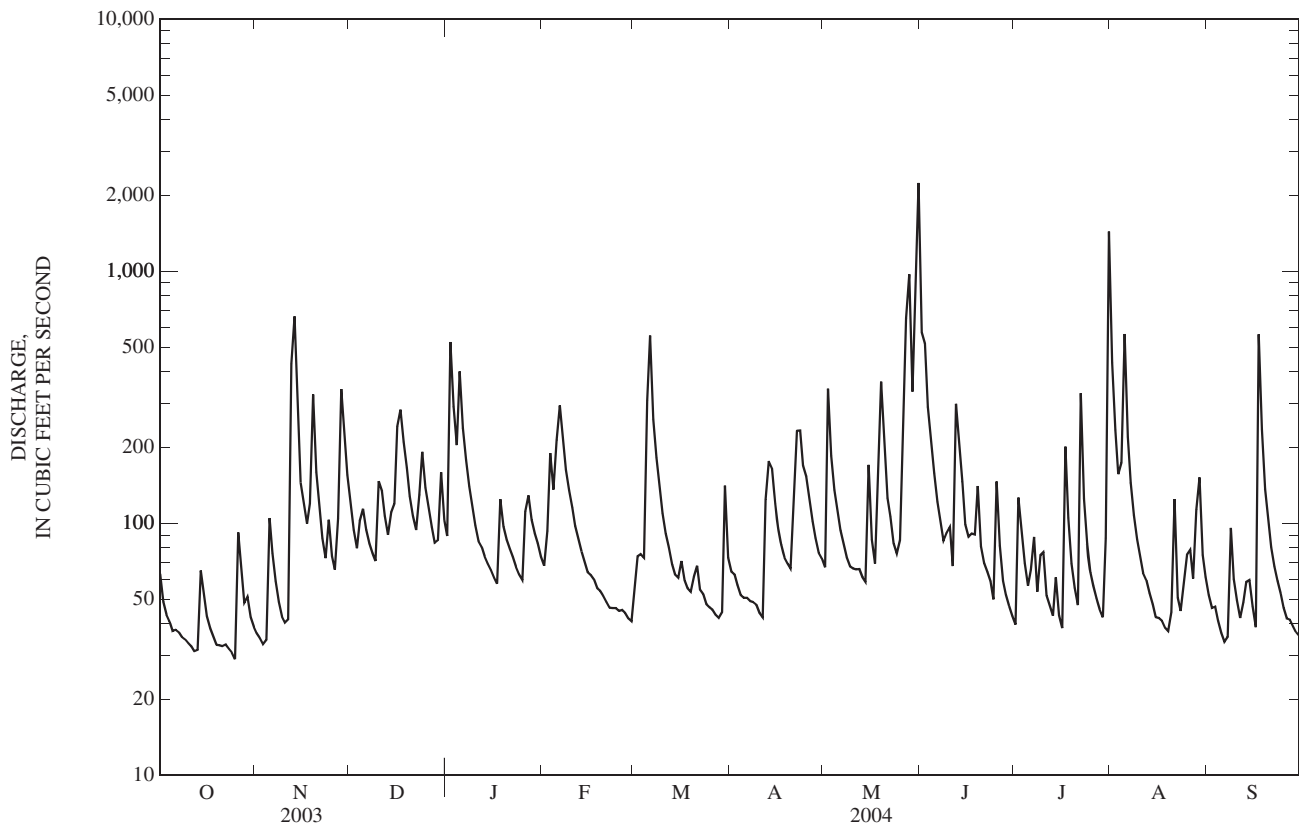
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	48.6	69.0	78.3	85.1	114	108	86.8	137	113	85.4	56.6	58.3
MAX	108	152	125	130	193	190	127	269	284	199	115	89.0
(WY)	(2003)	(2003)	(2004)	(2004)	(2003)	(2002)	(1998)	(2004)	(1998)	(1998)	(2004)	(2003)
MIN	32.1	32.0	41.2	47.8	51.5	67.5	49.6	46.5	46.4	32.3	30.3	24.9
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2003)	(1999)	(2000)	(2001)	(2002)	(2002)	(1999)

03289200 TOWN BRANCH AT YARNALLTON ROAD AT YARNALLTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	38,303		44,523		86.5	
ANNUAL MEAN	105		122		122	
HIGHEST ANNUAL MEAN					60.8	
LOWEST ANNUAL MEAN					2,240	
HIGHEST DAILY MEAN	904	May 9	2,240	May 31	2,240	May 31, 2004
LOWEST DAILY MEAN	29	Sep 21	29	Oct 25	17	Nov 29, 1997
ANNUAL SEVEN-DAY MINIMUM	31	Jan 22	32	Oct 19	22	Sep 13, 1999
MAXIMUM PEAK FLOW			5,890	May 30	5,890	May 30, 2004
MAXIMUM PEAK STAGE			9.38	May 30	9.38	May 30, 2004
INSTANTANEOUS LOW FLOW					13	Jul 16, 2001
ANNUAL RUNOFF (CFSM)	3.50		4.05		2.88	
ANNUAL RUNOFF (INCHES)	47.50		55.21		39.17	
10 PERCENT EXCEEDS	218		221		166	
50 PERCENT EXCEEDS	67		74		54	
90 PERCENT EXCEEDS	35		41		27	

e Estimated



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 62/421, 2.2 mi southeast of Midway, 6.5 mi downstream from Town Branch, and at mile 27.6.

DRAINAGE AREA.--95.0 mi², of which about 12 mi² does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 790 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records good except for those estimated, which are 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.

COOPERATION.--Kentucky River Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 13	0430	1,730	11.39	May 28	1530	3,130	15.47
Nov 28	1900	1,090	9.26	May 31	1400	*8,120	*22.47
Dec 17	0500	1,140	9.45	Jun 13	0200	1,020	9.01
Jan 2	1830	1,740	11.42	Aug 1	0000	3,530	16.38
Jan 5	1330	1,120	9.36	Aug 5	1200	1,540	10.78
Mar 6	0930	2,370	13.37	Sep 17	1730	1,470	10.53
May 27	1400	1,700	11.27				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

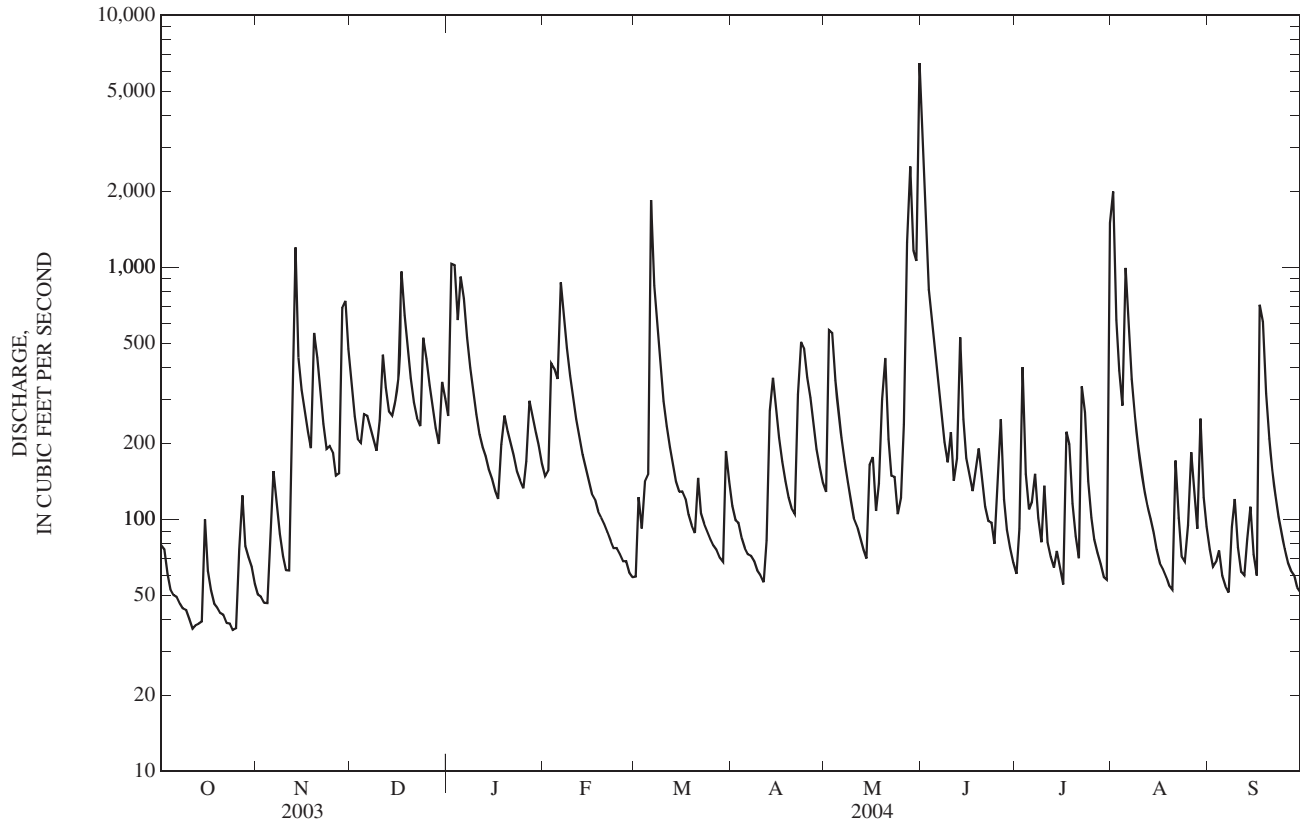
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	50	340	257	148	59	113	128	2,750	61	2,000	76
2	76	49	257	1,030	156	122	99	563	1,390	92	616	65
3	61	47	207	1,020	416	92	97	548	817	401	390	68
4	53	47	201	618	396	142	85	356	571	152	283	75
5	50	81	261	917	360	151	77	267	420	110	993	60
6	49	155	257	752	872	1,840	73	211	316	117	577	54
7	46	116	231	527	660	846	72	170	252	152	361	51
8	44	88	209	399	479	550	69	141	203	101	256	93
9	44	71	187	324	372	386	63	119	168	81	196	120
10	40	63	247	261	305	294	60	101	222	136	158	78
11	37	63	450	217	250	235	56	94	142	81	132	62
12	38	275	334	193	213	193	82	85	174	71	113	60
13	38	1,200	268	178	181	163	270	76	527	64	101	83
14	39	438	258	157	159	141	364	70	250	75	88	112
15	100	326	296	145	143	129	275	165	175	64	76	73
16	63	268	360	130	126	129	211	176	150	55	67	60
17	52	222	962	120	120	121	170	108	130	223	63	710
18	46	192	644	199	107	105	142	139	159	199	59	609
19	45	549	482	258	102	95	122	300	191	115	55	316
20	43	438	363	223	96	88	111	436	149	86	53	210
21	42	318	291	199	89	146	105	209	112	70	171	157
22	39	239	253	179	82	105	314	149	98	337	102	125
23	39	191	235	155	77	96	506	147	97	266	71	103
24	36	196	525	142	77	89	478	105	80	142	68	87
25	37	184	435	133	73	83	366	122	141	102	95	76
26	76	149	341	170	68	79	304	238	249	83	184	67
27	124	152	276	295	68	76	234	1,250	120	74	131	63
28	78	689	230	257	61	71	190	2,510	91	66	92	60
29	71	735	199	221	59	68	161	1,160	77	59	251	54
30	65	476	351	196	---	187	140	1,060	67	58	122	51
31	55	---	301	166	---	142	---	6,460	---	1,500	94	---
TOTAL	1,705	8,067	10,251	10,038	6,315	7,023	5,409	17,663	10,288	5,193	8,018	3,878
MEAN	55.0	269	331	324	218	227	180	570	343	168	259	129
MAX	124	1,200	962	1,030	872	1,840	506	6,460	2,750	1,500	2,000	710
MIN	36	47	187	120	59	59	56	70	67	55	53	51
CFSM	0.52	2.56	3.15	3.08	2.07	2.16	1.72	5.43	3.27	1.60	2.46	1.23
IN.	0.60	2.86	3.63	3.56	2.24	2.49	1.92	6.26	3.64	1.84	2.84	1.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)

MEAN	66.5	136	227	229	287	299	183	232	180	101	75.1	64.8
MAX	198	354	673	405	1,030	1,165	366	718	606	443	259	158
(WY)	(2003)	(2003)	(1991)	(1996)	(1989)	(1997)	(1984)	(1983)	(1997)	(1998)	(2004)	(2003)
MIN	24.5	21.1	42.6	50.4	114	60.1	61.0	35.9	39.5	30.7	22.5	16.4
(WY)	(2000)	(2000)	(2000)	(1986)	(1993)	(1983)	(1986)	(1999)	(1988)	(2002)	(1999)	(1999)

03289300 SOUTH ELKHORN CREEK NEAR MIDWAY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004	
ANNUAL TOTAL	81,736		93,848		173	
ANNUAL MEAN	224		256		276	
HIGHEST ANNUAL MEAN					99.6	
LOWEST ANNUAL MEAN					10,700	
HIGHEST DAILY MEAN	1,700	Feb 16	6,460	May 31	10,700	Mar 2, 1997
LOWEST DAILY MEAN	33	Sep 20	36	Oct 24	3.1	Oct 8, 1994
ANNUAL SEVEN-DAY MINIMUM	40	Oct 8	40	Oct 8	8.5	Nov 18, 2000
MAXIMUM PEAK FLOW			8,120	May 31	12,300	Mar 2, 1997
MAXIMUM PEAK STAGE			22.47	May 31	26.37	Mar 2, 1997
INSTANTANEOUS LOW FLOW					0.00	Oct 7, 1992
ANNUAL RUNOFF (CFSM)	2.13		2.44		1.65	
ANNUAL RUNOFF (INCHES)	28.96		33.25		22.38	
10 PERCENT EXCEEDS	500		526		364	
50 PERCENT EXCEEDS	146		142		90	
90 PERCENT EXCEEDS	48		59		29	



03289500 ELKHORN CREEK NEAR FRANKFORT, KY

LOCATION.--Lat 38°16'07", long 84°48'53", Franklin County, Hydrologic Unit 05100205, on right bank, 50 ft downstream from bridge on State Highway 1900, 4.2 mi northeast of city limits of Frankfort, 7.4 mi downstream from confluence of North and South Elkhorn Creeks, and at mile 10.4.

DRAINAGE AREA.--473 mi² of which about 70 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--May 1915 to December 1920 (gage heights only, October 1918 to December 1920), December 1939 to August 1984, October 1987 to current year. Published as "at Forks of Elkhorn" 1915-20.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is approximately 540.20 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Aug. 31, 1970.

REMARKS.--Records good. City of Lexington diverts water from Hickman Creek in Kentucky River Basin for municipal water supply; return flow of which enters tributary above station.

COOPERATION.--Kentucky River Authority.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1932, reached a stage of about 17.5 ft, from information by local resident. Flood of January 1937 was about 0.3 ft lower.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 6	1530	7,610	9.30	Jun 1	0200	*18,600	*13.67
May 28	1630	8,320	9.70				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

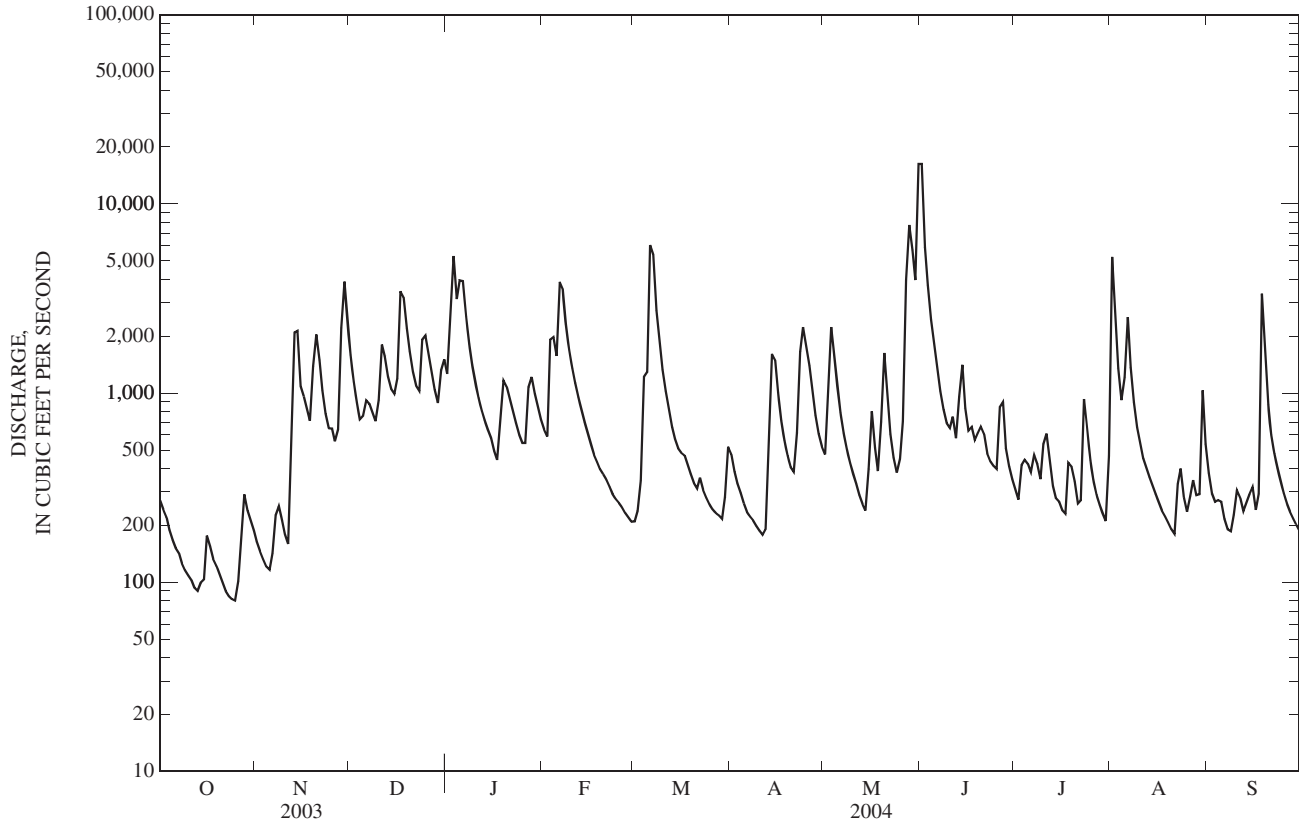
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	163	1,590	1,260	642	209	475	473	16,300	308	5,230	378
2	242	146	1,140	2,580	589	238	383	1,050	5,900	273	2,540	294
3	221	132	885	5,310	1,920	345	332	2,230	3,720	415	1,350	265
4	188	121	727	3,150	1,980	1,220	296	1,490	2,450	444	916	271
5	167	116	759	3,950	1,570	1,290	261	1,050	1,810	421	1,210	266
6	151	142	914	3,910	3,860	6,060	235	789	1,320	382	2,520	216
7	142	226	876	2,540	3,560	5,380	221	614	1,020	470	1,370	190
8	126	252	791	1,820	2,320	2,730	212	504	818	420	895	186
9	116	212	710	1,420	1,690	1,840	199	425	693	351	658	227
10	108	179	916	1,150	1,350	1,330	187	378	654	537	537	306
11	102	159	1,800	940	1,130	1,020	178	331	749	610	452	281
12	93	529	1,560	804	947	817	190	288	576	437	402	237
13	90	2,090	1,220	718	810	660	483	259	958	322	357	262
14	100	2,130	1,050	642	698	571	1,610	239	1,410	278	322	290
15	104	1,080	991	580	619	510	1,490	397	833	267	291	318
16	176	959	1,190	492	537	483	1,010	802	631	240	264	241
17	154	817	3,460	443	472	467	715	513	661	230	238	293
18	132	713	3,210	733	430	419	561	387	564	428	222	3,350
19	122	1,390	2,200	1,170	396	373	464	702	612	407	207	1,760
20	111	2,040	1,660	1,080	371	334	407	1,630	665	341	191	870
21	100	1,490	1,300	927	348	313	383	995	607	260	180	602
22	90	1,030	1,090	810	319	355	616	606	478	271	330	477
23	84	777	1,030	692	292	307	1,660	455	433	927	399	400
24	81	652	1,910	602	274	280	2,230	378	412	655	282	341
25	80	648	2,010	544	261	258	1,760	448	397	441	236	295
26	101	556	1,580	544	248	243	1,400	709	838	349	285	261
27	173	640	1,260	1,070	233	233	1,020	3,950	893	290	347	236
28	290	2,210	1,040	1,220	221	226	761	7,740	509	255	288	217
29	239	3,880	886	987	209	216	608	5,700	410	230	292	202
30	211	2,440	1,320	850	---	282	522	3,960	349	211	1,030	188
31	187	---	1,500	724	---	519	---	16,300	---	465	538	---
TOTAL	4,551	27,919	42,575	43,662	28,296	29,528	20,869	55,792	47,670	11,935	24,379	13,720
MEAN	147	931	1,373	1,408	976	953	696	1,800	1,589	385	786	457
MAX	290	3,880	3,460	5,310	3,860	6,060	2,230	16,300	16,300	927	5,230	3,350
MIN	80	116	710	443	209	209	178	239	349	211	180	186
CFSM	0.36	2.31	3.41	3.50	2.42	2.37	1.73	4.47	3.95	0.96	1.95	1.14
IN.	0.42	2.58	3.94	4.04	2.62	2.73	1.93	5.16	4.41	1.10	2.25	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

MEAN	137	344	869	1,111	1,296	1,401	898	705	453	260	184	165
MAX	1,012	1,467	3,138	4,630	4,438	4,309	3,332	3,747	2,686	1,708	963	2,101
(WY)	(1976)	(2003)	(1979)	(1950)	(1989)	(1964)	(1948)	(1983)	(1997)	(1998)	(1992)	(1979)
MIN	5.94	12.1	17.3	33.8	64.5	145	119	51.8	31.7	15.9	17.7	9.21
(WY)	(1944)	(1944)	(1944)	(1944)	(1944)	(1941)	(1918)	(1941)	(1944)	(1944)	(1948)	(1953)

03289500 ELKHORN CREEK NEAR FRANKFORT, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004	
ANNUAL TOTAL	334,262		350,896		650	
ANNUAL MEAN	916		959		1,103	
HIGHEST ANNUAL MEAN					126	
LOWEST ANNUAL MEAN					25,000	
HIGHEST DAILY MEAN	7,660	Feb 17	16,300	May 31	25,000	Feb 16, 1989
LOWEST DAILY MEAN	69	Sep 21	80	Oct 25	0.00	Jan 7, 1940
ANNUAL SEVEN-DAY MINIMUM	92	Oct 20	92	Oct 20	0.00	Jan 7, 1940
MAXIMUM PEAK FLOW			18,600	Jun 1	35,900	Mar 4, 1997
MAXIMUM PEAK STAGE			13.67	Jun 1	17.96	Mar 3, 1997
ANNUAL RUNOFF (CFSM)	2.28		2.38		1.61	
ANNUAL RUNOFF (INCHES)	30.90		32.44		21.94	
10 PERCENT EXCEEDS	2,270		2,020		1,620	
50 PERCENT EXCEEDS	477		510		213	
90 PERCENT EXCEEDS	122		188		35	



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 September 1930, March 1931 to September 1931, December 1931 to April 1932, October 1933 to September 1937, and July 1939 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 with telemetry located in the lower pool at Lock 3. Datum of gage is 433.36 ft above NGVD of 1929. Prior to August 29, 1975, nonrecording gage at same site and datum. Auxiliary water-stage recorder with telemetry.

REMARKS.--Records good. Flow regulated by Herrington Lake beginning November 1925 (station 03286000), Buckhorn Lake beginning December 1960 (station 03280800), Carr Fork Lake beginning January 1976 (station 03277446), and by hydroelectric plant at lock 7.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

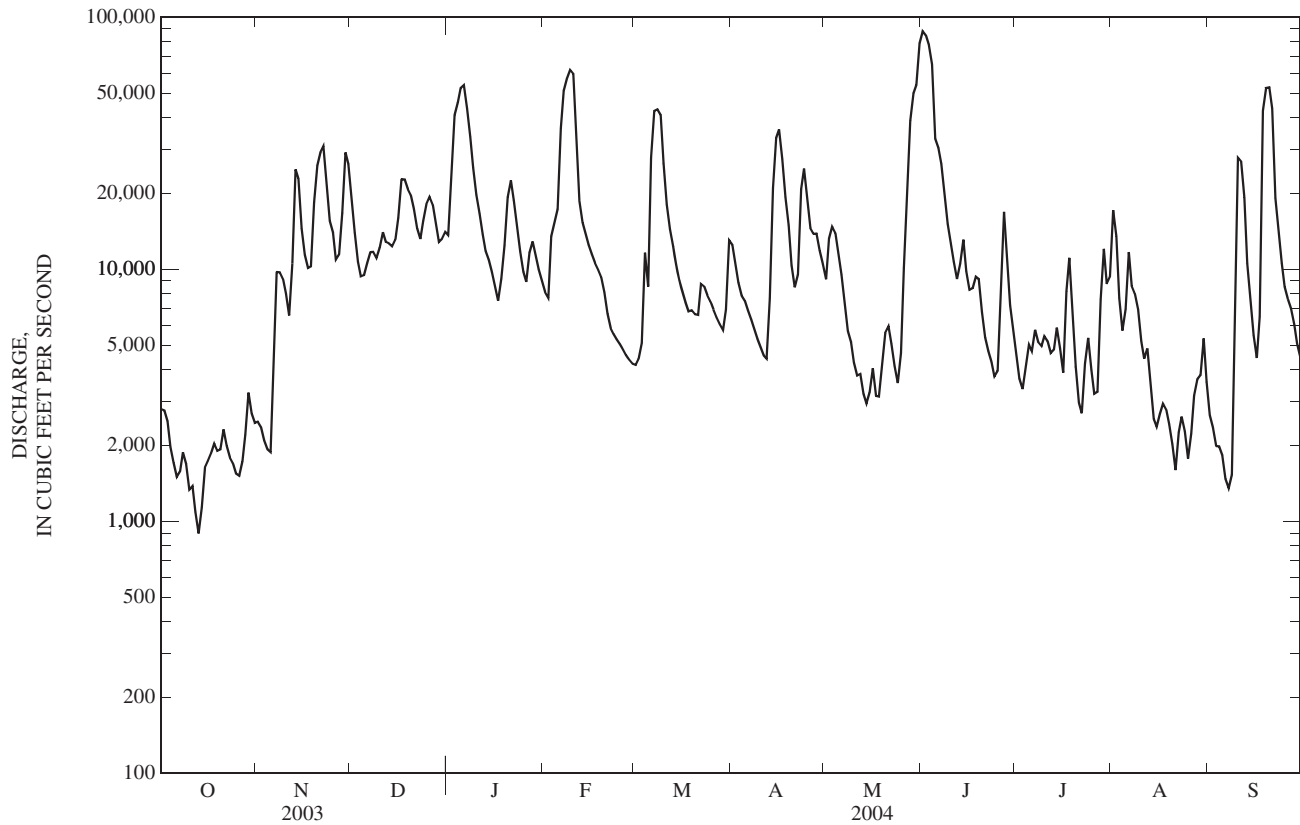
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,790	2,480	19,600	13,700	8,110	4,170	12,500	9,120	88,000	4,440	17,100	2,640
2	2,760	2,370	14,000	22,300	7,690	4,410	10,400	13,200	84,700	3,680	13,500	2,350
3	2,490	2,090	10,700	40,900	13,500	5,100	8,830	14,800	77,700	3,350	7,710	1,990
4	1,970	1,940	9,370	45,900	15,200	11,600	7,860	13,900	65,100	4,130	5,720	1,980
5	1,700	1,880	9,490	52,400	17,300	8,530	7,500	11,400	32,900	5,040	6,960	1,830
6	1,500	4,360	10,600	53,800	36,200	27,700	6,860	9,530	30,300	4,750	11,700	1,470
7	1,580	9,770	11,700	43,500	51,000	42,400	6,310	7,270	26,200	5,760	8,610	1,350
8	1,880	9,730	11,700	33,500	57,000	43,100	5,830	5,690	20,300	5,130	8,010	1,530
9	1,690	9,160	11,100	25,300	61,800	41,000	5,320	5,130	15,100	4,960	6,930	8,210
10	1,340	8,030	12,200	19,700	59,700	26,400	4,930	4,260	12,700	5,430	5,180	27,700
11	1,380	6,560	14,000	16,700	33,500	18,100	4,560	3,790	10,700	5,190	4,420	26,800
12	1,090	10,500	12,800	13,800	18,700	14,500	4,420	3,840	9,150	4,660	4,860	19,300
13	895	24,900	12,700	11,800	15,300	12,300	7,640	3,200	10,500	4,810	3,440	10,600
14	1,140	22,800	12,300	10,900	13,800	10,500	21,000	2,940	13,100	5,870	2,540	7,420
15	1,640	14,500	13,100	9,700	12,500	9,060	33,200	3,260	9,810	4,860	2,370	5,460
16	1,740	11,400	16,000	8,430	11,400	8,200	35,900	4,060	8,290	3,880	2,670	4,440
17	1,860	10,100	22,800	7,510	10,600	7,380	27,400	3,150	8,420	8,200	2,940	6,490
18	2,040	10,300	22,700	9,180	9,950	6,810	19,300	3,130	9,350	11,100	2,780	42,500
19	1,900	18,500	20,800	12,400	9,330	6,870	14,900	4,240	9,140	6,330	2,430	52,400
20	1,930	25,800	19,700	19,300	8,130	6,640	10,400	5,600	6,770	4,120	2,020	52,600
21	2,320	29,200	17,300	22,500	6,660	6,600	8,490	5,940	5,370	2,950	1,600	43,500
22	1,990	30,800	14,500	18,800	5,830	8,760	9,540	5,080	4,720	2,680	2,260	19,200
23	1,790	22,100	13,200	14,900	5,530	8,560	20,800	4,130	4,280	4,230	2,610	14,200
24	1,700	15,500	15,600	11,800	5,260	7,880	25,100	3,540	3,760	5,350	2,280	10,600
25	1,550	14,000	18,200	9,770	5,040	7,430	19,500	4,670	3,950	3,990	1,780	8,500
26	1,520	10,900	19,400	8,920	4,800	6,940	14,600	10,100	8,630	3,200	2,230	7,620
27	1,730	11,400	18,000	11,600	4,560	6,440	13,800	17,600	16,800	3,260	3,150	6,980
28	2,210	16,800	15,500	12,900	4,370	6,060	13,800	38,900	10,700	7,590	3,660	6,050
29	3,250	29,100	12,800	11,200	4,220	5,750	11,900	49,800	7,190	12,100	3,800	5,050
30	2,680	26,100	13,200	9,970	---	6,940	10,500	53,900	5,580	8,770	5,320	4,470
31	2,460	---	14,100	8,970	---	13,000	---	78,700	---	9,340	3,590	---
TOTAL	58,515	413,070	459,160	612,050	516,980	399,130	403,090	403,870	619,210	169,150	154,170	405,230
MEAN	1,888	13,770	14,810	19,740	17,830	12,880	13,440	13,030	20,640	5,456	4,973	13,510
MAX	3,250	30,800	22,800	53,800	61,800	43,100	35,900	78,700	88,000	12,100	17,100	52,600
MIN	895	1,880	9,370	7,510	4,220	4,170	4,420	2,940	3,760	2,680	1,600	1,350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	2,291	5,045	10,670	13,130	15,260	18,280	13,840	10,450	6,129	2,871	2,479	2,420
MAX	14,120	13,960	39,510	37,850	40,180	40,410	41,540	34,340	23,380	8,458	8,589	14,740
(WY)	(1990)	(1987)	(1979)	(1974)	(1989)	(1975)	(1972)	(1983)	(1997)	(1998)	(1992)	(1979)
MIN	421	511	668	770	4,073	4,423	2,074	1,518	508	545	307	187
(WY)	(2000)	(2000)	(1966)	(1981)	(1968)	(1983)	(1986)	(1976)	(1988)	(1999)	(1999)	(1999)

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	4,388,692		4,613,625		8,541	
ANNUAL MEAN	12,020		12,610		14,030	
HIGHEST ANNUAL MEAN					3,891	
LOWEST ANNUAL MEAN					121,000	
HIGHEST DAILY MEAN	83,900	Feb 20	88,000	Jun 1	125	Dec 11, 1978
LOWEST DAILY MEAN	895	Oct 13	895	Oct 13	112	Sep 16, 1999
ANNUAL SEVEN-DAY MINIMUM	1,310	Oct 9	1,310	Oct 9	123,000	Sep 10, 1999
MAXIMUM PEAK FLOW			89,400	Jun 1	56.85	Jan 26, 1937
MAXIMUM PEAK STAGE			41.20	Jun 1	21,600	Jan 24, 1937
10 PERCENT EXCEEDS	26,600		27,500		3,880	
50 PERCENT EXCEEDS	7,180		8,540		626	
90 PERCENT EXCEEDS	1,880		2,220			



03291500 EAGLE CREEK AT GLENCOE, KY

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

DRAINAGE AREA.--437 mi².

PERIOD OF RECORD.--April 1915 to September 1918, October 1918 to December 1920 (gage heights only), May 1928 to September 1931, June 1938 to 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 with telemetry. Datum of gage is 508.52 ft above NGVD of 1929. 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.--Records fair except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 4	0500	*17,400	*15.81	May 31	1300	14,100	14.09
May 28	2100	13,500	13.78				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	98	471	556	e150	177	693	592	3,450	43	927	15
2	e92	84	339	6,420	e240	259	459	6,250	628	37	374	15
3	e70	87	278	3,600	4,750	328	406	3,350	351	99	232	24
4	56	88	245	8,810	3,010	5,810	340	847	257	73	227	26
5	47	86	245	7,230	1,440	3,230	285	476	202	41	742	174
6	37	73	334	2,470	7,890	5,740	250	358	167	32	453	106
7	32	74	393	852	3,330	2,010	232	290	140	32	231	53
8	24	68	294	565	1,030	707	222	244	119	60	151	35
9	17	60	247	462	585	462	205	212	121	49	92	28
10	13	59	1,120	373	e495	365	188	186	112	47	66	30
11	13	56	3,180	331	e460	311	175	167	86	67	49	28
12	9.5	2,570	943	302	e425	278	195	154	106	112	38	37
13	8.7	6,310	449	277	e405	249	1,800	142	243	84	32	27
14	12	942	358	252	e350	234	4,930	132	1,420	49	27	20
15	838	388	316	244	e315	225	1,490	187	869	35	23	15
16	254	511	400	218	e275	245	562	763	1,630	30	20	12
17	147	389	3,100	207	e262	416	382	453	457	28	18	13
18	109	715	1,190	1,190	247	363	309	312	1,570	32	16	559
19	86	3,950	570	2,230	238	296	264	1,100	479	29	14	376
20	79	2,030	447	e573	245	254	240	1,600	636	26	13	134
21	69	620	e384	e310	327	235	237	760	273	22	12	64
22	63	355	359	e200	298	218	732	307	157	26	11	37
23	57	271	618	e150	258	214	2,310	205	107	45	9.2	24
24	51	313	3,700	e140	243	207	2,680	155	82	214	8.9	17
25	51	369	1,460	e130	237	197	791	241	64	146	8.8	13
26	59	293	600	e180	218	187	1,000	4,830	59	101	14	10
27	286	1,370	430	e310	200	182	560	10,100	254	84	19	8.1
28	338	5,790	364	e590	186	178	356	12,400	132	55	18	6.5
29	225	3,490	336	e435	175	180	284	5,130	78	41	18	5.1
30	161	892	2,410	e270	---	1,160	328	1,570	55	47	18	4.2
31	126	---	1,490	e135	---	1,480	---	11,600	---	2,560	18	---
TOTAL	3,544.2	32,401	27,070	40,012	28,284	26,397	22,905	65,113	14,304	4,346	3,899.9	1,915.9
MEAN	114	1,080	873	1,291	975	852	764	2,100	477	140	126	63.9
MAX	838	6,310	3,700	8,810	7,890	5,810	4,930	12,400	3,450	2,560	927	559
MIN	8.7	56	245	130	150	177	175	132	55	22	8.8	4.2
CFSM	0.26	2.47	2.00	2.95	2.23	1.95	1.75	4.81	1.09	0.32	0.29	0.15
IN.	0.30	2.76	2.30	3.41	2.41	2.25	1.95	5.54	1.22	0.37	0.33	0.16

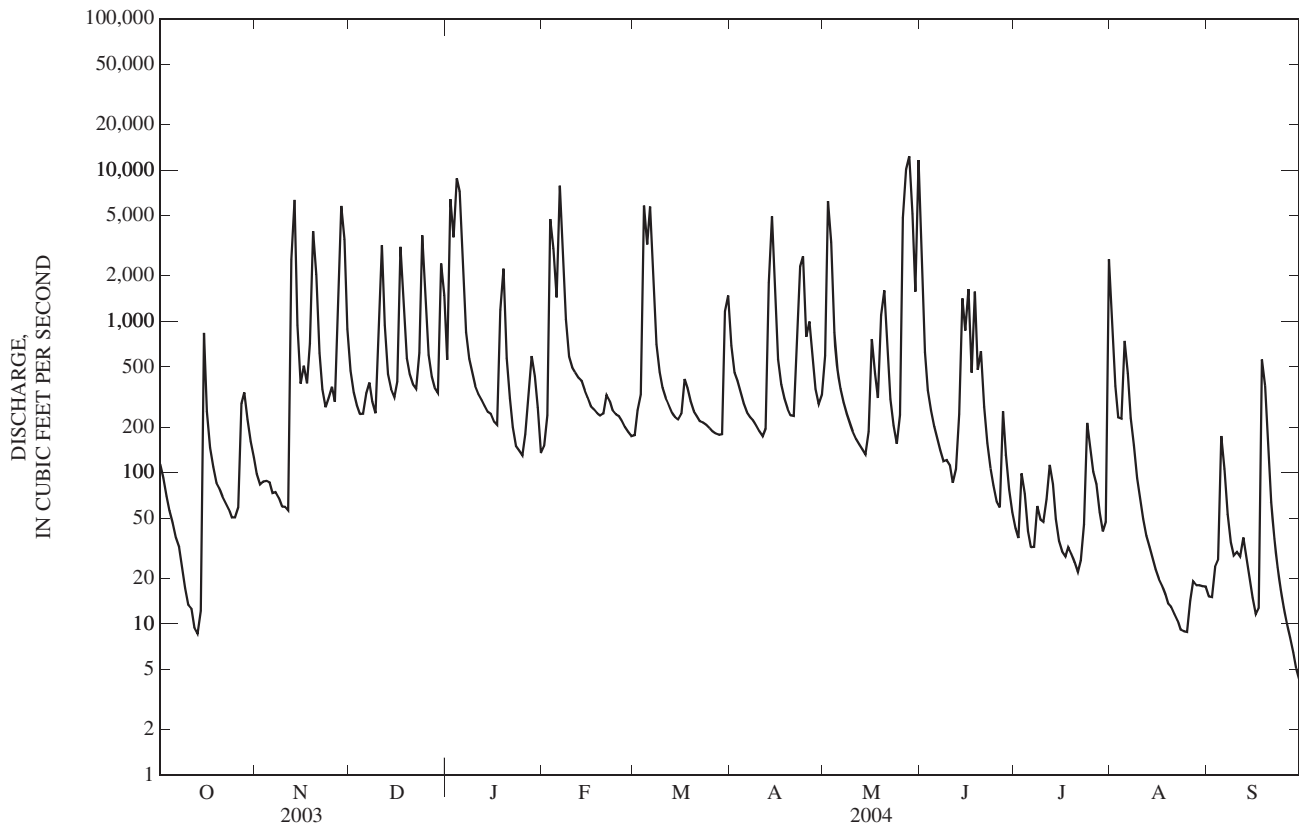
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

	MEAN	114	353	650	940	1,076	1,257	911	709	474	247	134	121
MAX	1,005	1,641	1,874	3,170	3,295	5,197	2,910	3,190	2,673	1,016	755	1,355	
(WY)	(1976)	(1973)	(1952)	(1950)	(1956)	(1964)	(1948)	(1996)	(1997)	(1957)	(1977)	(1965)	
MIN	0.00	0.00	0.00	2.85	44.6	120	131	25.5	1.56	0.14	0.00	0.00	
(WY)	(1931)	(1931)	(1931)	(1931)	(1954)	(1941)	(1976)	(1930)	(1930)	(1930)	(1930)	(1930)	

03291500 EAGLE CREEK AT GLENCOE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004	
ANNUAL TOTAL	307,305.2		270,192.0		578	
ANNUAL MEAN	842		738		1,059	
HIGHEST ANNUAL MEAN					117	
LOWEST ANNUAL MEAN					39,300	
HIGHEST DAILY MEAN	12,300	Sep 2	12,400	May 28	0.00	Mar 10, 1964
LOWEST DAILY MEAN	8.7	Oct 13	4.2	Sep 30	0.00	Jul 15, 1930
ANNUAL SEVEN-DAY MINIMUM	14	Oct 8	9.1	Sep 24	0.00	Jul 15, 1930
MAXIMUM PEAK FLOW			17,400	Jan 4	58,300	Mar 2, 1997
MAXIMUM PEAK STAGE			15.81	Jan 4	29.08	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	1.93		1.69		1.32	
ANNUAL RUNOFF (INCHES)	26.16		23.00		17.98	
10 PERCENT EXCEEDS	2,400		1,860		1,320	
50 PERCENT EXCEEDS	281		240		101	
90 PERCENT EXCEEDS	58		23		1.4	

e Estimated



03292470 HARRODS CREEK AT HIGHWAY 329 NEAR GOSHEN, KY

LOCATION.--Lat 38°21'42", long 85°34'30", Oldham County, Hydrologic Unit 05140101, on downstream side of bridge on Highway 329 (Covered Bridge Road) 0.8 mi upstream from South Fork, 3.1 mi south of Goshen, and at mile 7.29.

DRAINAGE AREA.--70.3 mi².

PERIOD OF RECORD.--December 15, 1998 to current year.

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

REMARKS.--Records good except those for estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 2	0935	4,850	7.19	May 28	0025	*19,000	*16.34
Jan 5	0230	6,040	7.91	May 30	2025	12,800	12.33
May 27	0735	8,470	9.36	Jul 17	0835	9,570	10.05

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	17	143	177	e40	33	93	754	497	2.0	92	2.4
2	59	15	99	2,360	167	63	74	2,290	253	2.9	36	2.0
3	41	14	80	542	1,620	54	61	494	135	2.3	18	1.8
4	33	13	74	1,620	301	1,490	51	236	87	1.9	11	1.7
5	26	13	116	e2,400	579	418	42	161	59	2.7	316	1.5
6	21	14	132	e367	1,530	550	37	114	42	3.6	45	1.6
7	17	16	90	e188	391	240	36	85	28	6.6	14	1.6
8	14	15	75	e136	211	160	34	65	20	5.7	7.1	1.1
9	12	12	66	e106	163	122	29	52	15	227	5.0	1.1
10	10	10	416	e78	e113	94	24	52	17	284	4.1	1.0
11	9.2	9.9	437	e63	e99	82	23	228	12	38	3.3	0.91
12	8.7	1,440	195	e56	e83	69	34	64	11	15	2.8	0.87
13	8.3	374	134	e54	e70	57	731	42	14	7.0	2.5	0.93
14	29	144	116	e51	e56	54	1,110	34	8.3	1,040	2.2	1.1
15	143	116	94	e49	e49	50	262	165	6.4	89	2.0	1.3
16	45	118	162	e43	e39	83	154	161	5.6	26	1.7	1.4
17	27	85	297	e43	e40	102	108	124	5.2	3,520	1.4	1.4
18	20	259	171	e340	e41	76	84	276	5.6	318	1.3	1.5
19	17	696	e126	e131	52	62	68	190	7.0	214	1.4	1.8
20	14	224	e81	e78	54	57	60	597	7.8	95	1.7	2.0
21	11	136	e78	e56	55	62	69	115	5.1	59	2.3	2.0
22	9.5	96	e103	e45	46	51	105	63	3.9	43	1.9	1.9
23	8.8	72	e301	e36	42	45	304	40	3.2	36	1.6	1.8
24	8.8	267	752	e30	41	43	221	27	2.6	30	1.8	1.6
25	9.3	166	259	e27	37	39	584	35	2.4	24	1.7	1.5
26	35	107	168	e52	33	36	295	1,950	2.2	34	4.6	1.4
27	70	426	127	e82	30	37	158	4,970	1.9	33	4.8	1.3
28	39	1,220	103	e58	27	36	106	6,720	1.7	21	2.7	1.2
29	31	410	182	e43	25	41	81	456	1.6	15	2.2	1.1
30	26	219	887	e35	---	133	89	3,060	1.6	19	3.1	1.1
31	21	---	259	e28	---	109	---	4,820	---	308	3.4	---
TOTAL	898.6	6,723.9	6,323	9,374	6,034	4,548	5,127	28,440	1,262.1	6,522.7	598.6	43.91
MEAN	29.0	224	204	302	208	147	171	917	42.1	210	19.3	1.46
MAX	143	1,440	887	2,400	1,620	1,490	1,110	6,720	497	3,520	316	2.4
MIN	8.3	9.9	66	27	25	33	23	27	1.6	1.9	1.3	0.87

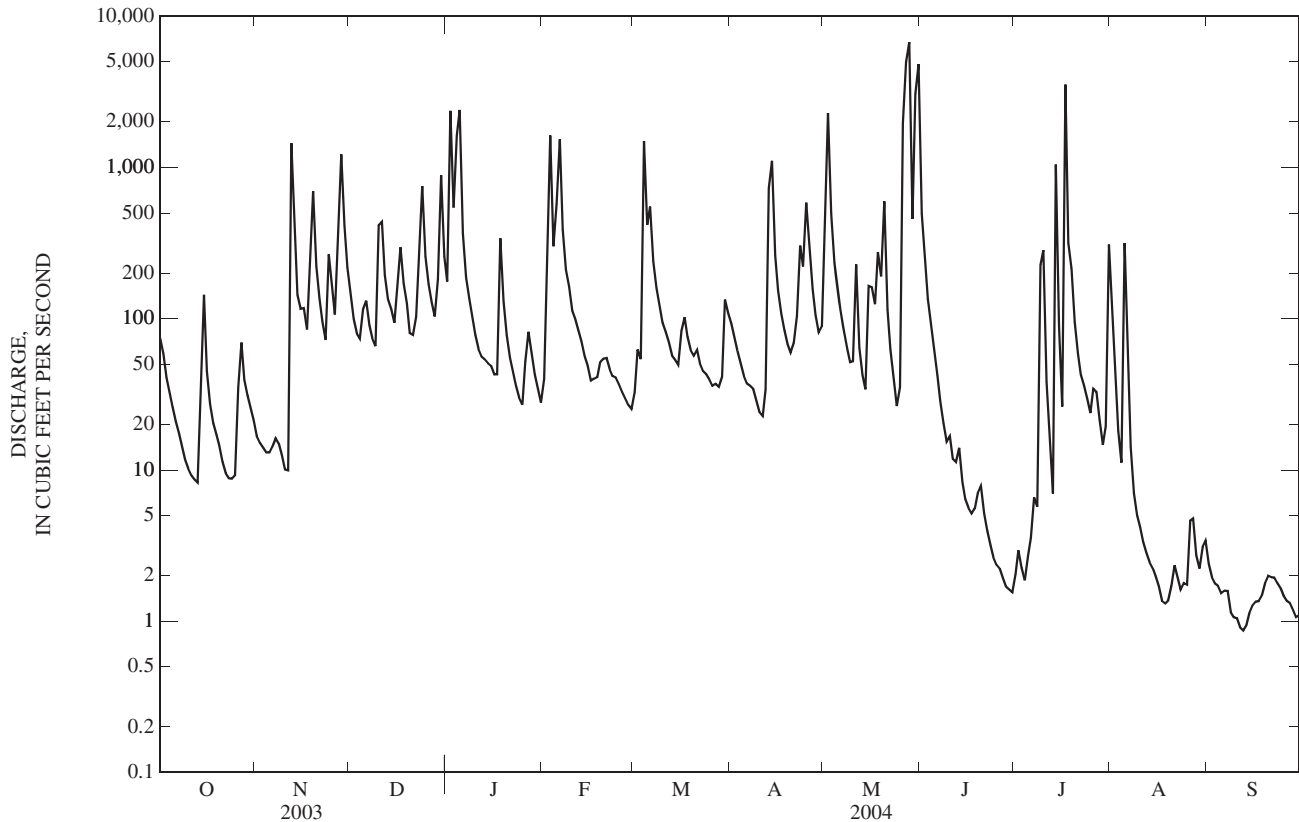
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	69.1	135	236	196	265	173	133	321	84.7	49.9	28.5	76.9
MAX	233	253	359	302	526	417	242	917	192	210	127	245
(WY)	(2002)	(2002)	(2002)	(2004)	(2000)	(2002)	(2002)	(2004)	(2002)	(2004)	(2003)	(2003)
MIN	1.99	3.33	83.5	40.6	121	77.0	25.9	16.5	32.4	6.81	0.29	0.09
(WY)	(2000)	(2000)	(2000)	(2001)	(1999)	(2003)	(2001)	(1999)	(2003)	(1999)	(1999)	(1999)

03292470 HARRODS CREEK AT HIGHWAY 329 NEAR GOSHEN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	59,543.62		75,895.81		160	
ANNUAL MEAN	163		207		226	
HIGHEST ANNUAL MEAN					75.2	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	3,890	May 5	6,720	May 28	7,360	Feb 18, 2000
LOWEST DAILY MEAN	0.76	Aug 21	0.87	Sep 12	0.00	Sep 2, 1999
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 15	1.0	Sep 8	0.00	Sep 2, 1999
MAXIMUM PEAK FLOW			19,000	May 28	19,000	May 28, 2004
MAXIMUM PEAK STAGE			16.34	May 28	16.34	May 28, 2004
10 PERCENT EXCEEDS	359		379		292	
50 PERCENT EXCEEDS	55		45		33	
90 PERCENT EXCEEDS	9.9		1.9		2.7	

e Estimated



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

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

DRAINAGE AREA.--6.0 mi².

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

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 571.08 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 19	1840	468	4.24	Jul 17	0135	370	3.57
May 25	2215	340	3.39	Jul 17	0455	422	3.94
Jul 10	1955	*716	*4.90	Jul 26	0235	368	3.56

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	6.2	12	14	7.2	4.8	7.1	20	e38	0.78	13	0.91
2	6.3	5.9	10	60	15	5.0	6.2	33	e20	2.9	9.5	0.86
3	4.8	5.6	9.1	30	38	6.9	5.5	19	15	1.1	7.5	0.95
4	4.3	6.0	8.6	46	20	42	5.0	15	12	0.86	7.0	0.92
5	3.6	6.1	9.0	66	30	20	4.5	12	10	0.83	6.0	0.83
6	3.2	6.6	7.6	30	41	20	4.2	11	8.5	3.9	4.7	0.70
7	3.0	6.1	6.2	21	25	15	4.2	8.9	7.1	4.1	3.8	0.57
8	2.4	5.3	5.7	17	18	13	4.1	7.5	5.9	1.7	3.1	0.55
9	2.1	4.9	5.3	15	16	12	3.7	6.4	6.7	4.1	2.3	0.58
10	2.5	4.8	15	13	14	10	3.3	4.9	6.2	69	2.0	0.55
11	2.1	5.3	13	12	12	9.9	3.4	4.4	4.5	25	1.7	0.50
12	2.1	53	10	11	11	8.6	7.1	4.0	11	9.2	1.4	0.48
13	2.1	20	9.6	9.7	10	7.9	27	4.2	7.4	e9.8	1.1	0.49
14	16	13	9.4	9.0	9.3	7.6	23	5.0	4.8	e14	0.95	0.47
15	8.1	13	8.1	7.9	8.6	6.9	15	16	4.4	7.0	0.85	0.46
16	5.2	11	11	7.2	7.7	11	13	10	5.0	5.2	0.78	0.40
17	4.5	8.7	11	8.4	7.2	8.9	11	6.5	3.6	163	0.73	0.39
18	4.5	17	11	20	6.7	7.2	10	4.9	2.9	41	0.63	0.30
19	4.0	19	11	13	6.0	6.4	9.1	59	4.9	18	0.57	0.20
20	3.6	13	9.0	11	6.0	6.3	8.2	51	3.0	13	1.4	0.27
21	3.5	11	8.3	11	5.6	5.8	10	17	2.3	9.9	2.0	0.50
22	3.5	9.7	8.1	9.7	5.0	5.2	10	11	1.9	8.0	1.2	0.29
23	3.3	8.5	22	8.4	4.8	4.9	17	9.2	1.6	7.2	0.87	0.16
24	3.2	16	20	7.6	4.4	4.7	11	7.8	1.1	5.7	0.95	0.15
25	3.0	9.9	15	7.4	4.0	4.5	19	36	0.90	4.6	0.99	0.12
26	12	8.5	13	11	3.9	4.2	13	51	0.88	61	3.9	0.11
27	8.1	19	11	14	3.8	4.1	11	e116	0.73	12	2.8	0.10
28	6.6	29	10	10	3.5	3.8	9.1	e127	0.62	8.8	1.6	0.10
29	6.4	19	19	9.6	3.3	6.0	7.9	47	0.50	6.9	1.2	0.06
30	6.0	15	23	8.8	---	9.9	10	32	0.47	8.1	1.6	0.05
31	6.3	---	15	7.8	---	8.1	---	87	---	32	1.3	---
TOTAL	154.6	376.1	356.0	526.5	347.0	290.6	292.6	843.7	191.90	558.67	87.42	13.02
MEAN	4.99	12.5	11.5	17.0	12.0	9.37	9.75	27.2	6.40	18.0	2.82	0.43
MAX	16	53	23	66	41	42	27	127	38	163	13	0.95
MIN	2.1	4.8	5.3	7.2	3.3	3.8	3.3	4.0	0.47	0.78	0.57	0.05
CFSM	0.83	2.09	1.91	2.83	1.99	1.56	1.63	4.54	1.07	3.00	0.47	0.07
IN.	0.96	2.33	2.21	3.26	2.15	1.80	1.81	5.23	1.19	3.46	0.54	0.08

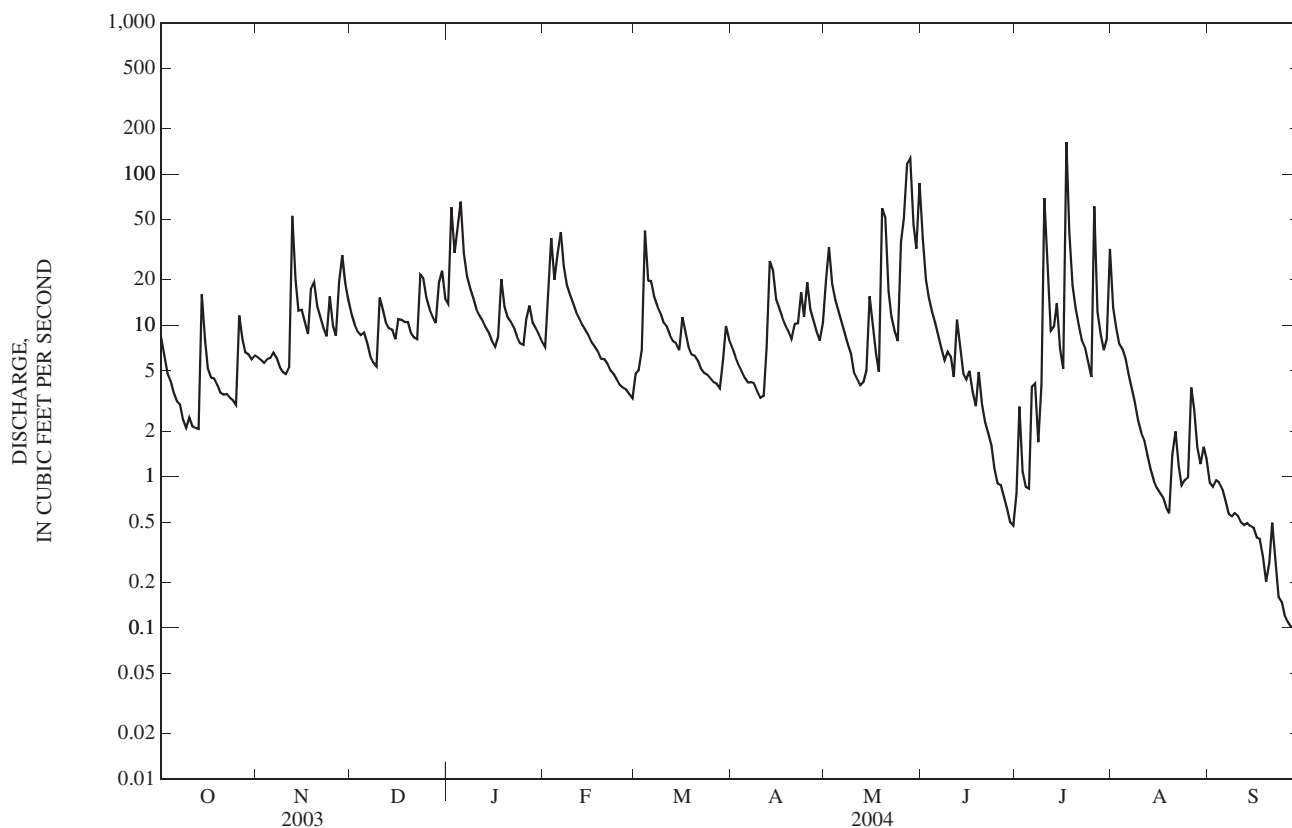
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	MEAN	4.03	5.37	11.9	12.4	13.5	19.2	8.63	12.7	11.6	6.05	3.34	3.77
MAX	13.4	12.5	21.8	19.4	27.5	77.1	16.5	27.6	26.4	18.0	9.88	15.5	
(WY)	(2002)	(2004)	(1997)	(1999)	(2000)	(1997)	(2002)	(2003)	(2003)	(2004)	(2003)	(2003)	
MIN	0.57	0.48	3.74	3.16	7.37	6.83	3.56	2.46	2.74	0.84	0.15	0.32	
(WY)	(1998)	(2000)	(1999)	(2001)	(2002)	(2001)	(2001)	(1999)	(2001)	(2002)	(1999)	(1999)	

03292474 GOOSE CREEK AT OLD WESTPORT ROAD NEAR ST. MATTHEWS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	4,840.5		4,038.11		9.37	
ANNUAL MEAN	13.3		11.0		14.8	
HIGHEST ANNUAL MEAN					5.00	
LOWEST ANNUAL MEAN					1997	
HIGHEST DAILY MEAN	266	Jun 14	163	Jul 17	800	Mar 2, 1997
LOWEST DAILY MEAN	1.6	Jul 30	0.05	Sep 30	0.01	Aug 16, 1999
ANNUAL SEVEN-DAY MINIMUM	2.3	Oct 7	0.10	Sep 24	0.02	Sep 12, 1999
MAXIMUM PEAK FLOW			716	Jul 10	4,050	Jun 14, 2003
MAXIMUM PEAK STAGE			4.90	Jul 10	6.03	Jun 14, 2003
ANNUAL RUNOFF (CFSM)	2.21		1.84		1.56	
ANNUAL RUNOFF (INCHES)	30.01		25.04		21.22	
10 PERCENT EXCEEDS	25		20		19	
50 PERCENT EXCEEDS	7.9		7.2		4.1	
90 PERCENT EXCEEDS	3.2		0.84		0.53	

e Estimated



03292475 GOOSE CREEK AT HIGHWAY 42 AT GLENVIEW ACRES, KY

LOCATION.--Lat 3818'12", long 8537'41", Jefferson County, Hydrologic Unit 05140101, on downstream side of culvert on U.S. Highway 42, 0.5 mi northeast of Glenview Acres, 1.7 mi above Little Goose Creek, and at mile 2.1.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--November 1999 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 430.06 ft above NGVD of 1929.

REMARKS.--Records good, except those for estimated daily discharges which are rated poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul 17	0545	*538	*5.59				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.0	14	14	8.4	7.7	11	43	27	1.7	13	2.0
2	7.9	3.8	11	55	17	8.0	9.4	47	18	3.2	10	1.7
3	6.3	3.7	10	29	44	10	8.5	27	13	2.5	8.9	2.1
4	5.6	3.6	9.8	45	24	48	7.8	20	11	2.1	8.1	1.5
5	4.8	3.7	10	e64	34	24	7.2	17	9.4	2.1	7.6	1.3
6	4.3	4.6	9.2	e33	46	23	6.8	14	8.3	4.6	6.5	1.1
7	3.9	4.2	7.8	e22	29	19	6.7	12	7.2	7.3	5.8	1.0
8	3.6	3.5	7.0	e17	22	17	6.6	10	6.4	4.2	5.1	1.1
9	3.3	3.2	6.7	e16	19	16	6.0	8.9	7.3	5.0	4.5	0.94
10	4.1	3.1	17	e13	17	14	5.5	7.5	7.2	51	4.0	0.89
11	3.6	3.2	15	e11	15	13	5.5	6.7	5.5	26	3.5	0.84
12	3.5	63	11	11	14	12	11	6.2	12	12	3.3	0.77
13	3.3	24	10	9.7	13	11	36	5.9	8.5	12	2.9	0.73
14	18	15	10	9.0	12	10	32	7.5	6.2	18	2.6	0.62
15	11	15	9.2	8.3	11	9.6	19	21	5.2	9.8	2.3	0.55
16	7.5	13	12	7.5	10	17	15	14	5.6	8.2	2.2	0.56
17	5.9	11	13	8.4	9.6	13	13	9.7	4.6	161	2.0	0.55
18	5.1	21	12	22	8.9	11	11	7.9	4.0	36	2.1	0.54
19	4.6	24	12	14	8.5	9.7	10	33	7.9	e20	2.0	0.62
20	4.1	16	10	12	8.5	9.5	9.6	41	4.6	e13	2.9	0.60
21	3.9	13	9.3	11	8.0	9.3	13	17	3.7	11	3.7	0.52
22	3.8	12	9.0	10	7.4	8.5	13	13	3.2	10	2.6	0.63
23	3.6	10	23	8.9	7.0	8.1	21	10	2.9	9.7	2.1	0.69
24	3.4	19	23	8.3	6.8	7.8	15	10	2.5	8.7	1.9	0.69
25	3.3	12	16	8.3	6.4	7.4	27	34	2.3	7.5	2.1	0.65
26	12	10	13	10	6.1	7.1	17	48	2.3	44	5.2	0.58
27	8.4	24	12	14	5.9	7.1	14	103	2.1	13	4.2	0.56
28	6.5	35	11	11	5.6	6.8	12	111	2.0	10	3.1	0.56
29	5.7	22	19	10	5.6	9.1	11	34	1.8	9.0	2.6	0.53
30	4.8	17	25	9.7	---	13	14	26	1.7	10	2.6	0.53
31	4.3	---	16	8.7	---	12	---	72	---	26	2.7	---
TOTAL	180.1	416.6	393.0	530.8	429.7	398.7	394.6	837.3	203.4	558.6	132.1	25.95
MEAN	5.81	13.9	12.7	17.1	14.8	12.9	13.2	27.0	6.78	18.0	4.26	0.86
MAX	18	63	25	64	46	48	36	111	27	161	13	2.1
MIN	3.3	3.1	6.7	7.5	5.6	6.8	5.5	5.9	1.7	1.7	1.9	0.52
CFSM	0.58	1.37	1.26	1.70	1.47	1.27	1.30	2.67	0.67	1.78	0.42	0.09
IN.	0.66	1.53	1.45	1.96	1.58	1.47	1.45	3.08	0.75	2.06	0.49	0.10

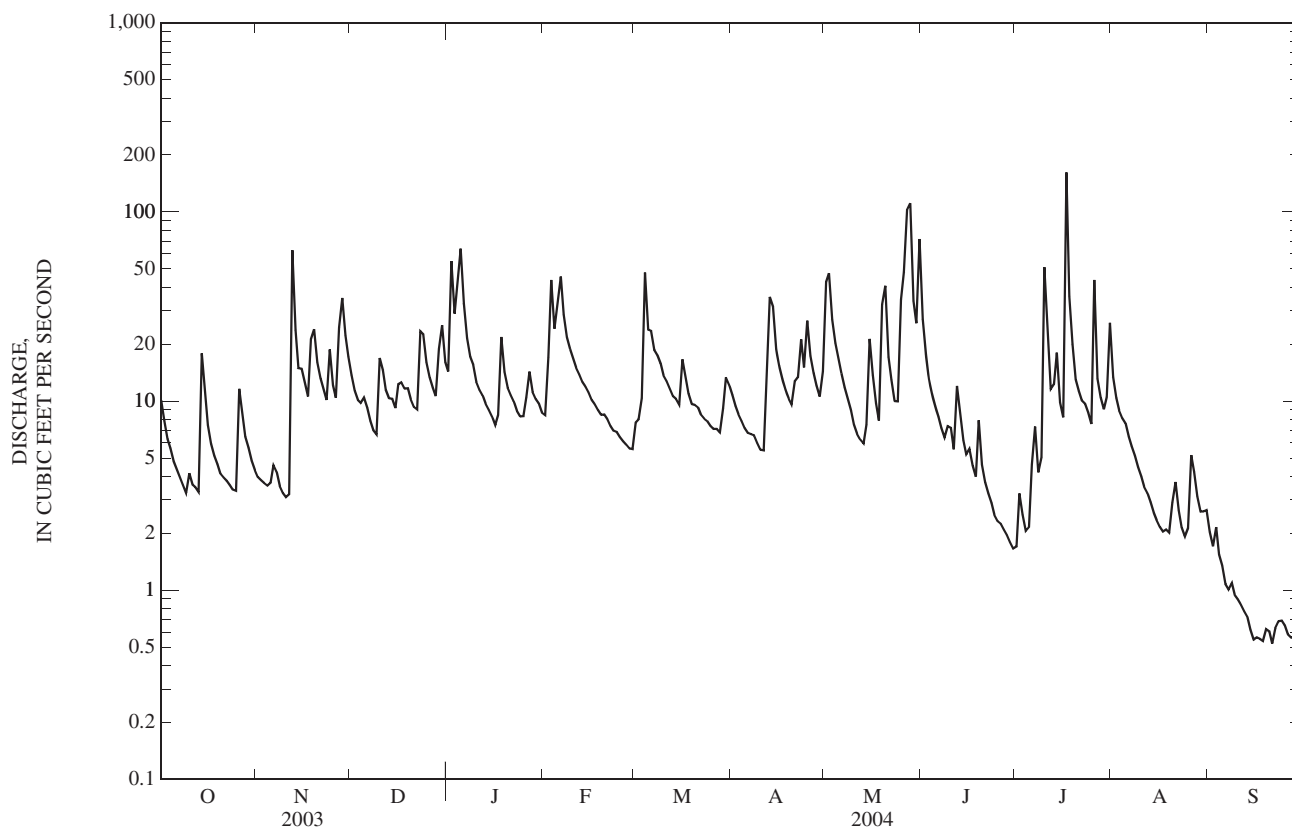
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	10.8	12.7	21.0	16.9	26.0	19.2	17.7	27.7	11.3	6.91	4.50	11.0
MEAN	21.8	15.8	34.1	24.3	41.5	37.2	30.8	49.5	20.4	18.0	8.36	19.4
MAX	(2002)	(2000)	(2003)	(2003)	(2000)	(2002)	(2002)	(2003)	(2003)	(2004)	(2003)	(2000)
MIN	2.17	4.19	12.7	1.99	14.8	10.3	6.85	5.09	5.23	1.64	0.71	0.86
(WY)	(2001)	(2001)	(2004)	(2001)	(2004)	(2001)	(2001)	(2000)	(2000)	(2002)	(2002)	(2004)

03292475 GOOSE CREEK AT HIGHWAY 42 AT GLENVIEW ACRES, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	7,012.29		4,500.85		15.8	
ANNUAL MEAN	19.2		12.3		21.8	
HIGHEST ANNUAL MEAN					8.28	
LOWEST ANNUAL MEAN					560	
HIGHEST DAILY MEAN	169	May 11	161	Jul 17	560	Feb 18, 2000
LOWEST DAILY MEAN	0.99	Sep 21	0.52	Sep 21	0.04	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 15	0.56	Sep 15	0.08	Aug 29, 2002
MAXIMUM PEAK FLOW			538	Jul 17	2,460	Jan 24, 2002
MAXIMUM PEAK STAGE			5.59	Jul 17	7.83	Feb 18, 2000
ANNUAL RUNOFF (CFSM)	1.90		1.22		1.57	
ANNUAL RUNOFF (INCHES)	25.83		16.58		21.29	
10 PERCENT EXCEEDS	46		24		39	
50 PERCENT EXCEEDS	11		9.0		7.5	
90 PERCENT EXCEEDS	2.3		2.1		1.1	

e Estimated



03292480 LITTLE GOOSE CREEK NEAR HARRODS CREEK, KY

LOCATION.--Lat 38°18'45", long 85°37'33", Jefferson County, Hydrologic Unit 05140101, at downstream side of culvert on U.S. Highway 42, 1.1 mi south of Harrods Creek, and at mile 2.0.

DRAINAGE AREA.--5.8 mi².

PERIOD OF RECORD.--December 1998 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 459.93 ft above NAGVD of 1988.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	0935	432	6.32	May 31	0210	317	5.74
Jan 4	2220	266	5.47	Jul 17	0630	450	6.41
May 25	2345	343	5.87	Jul 26	0410	341	5.86
May 27	2205	*486	*6.58				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.0	3.6	16	15	7.0	5.8	8.6	56	35	1.0	16	1.3
2	e12	3.4	12	71	19	5.7	6.4	63	23	1.7	9.0	0.99
3	9.2	3.2	9.6	34	53	8.7	5.2	30	14	1.4	5.4	1.4
4	8.5	3.2	9.6	67	25	66	4.4	17	11	1.2	4.3	1.1
5	7.7	3.0	12	76	39	28	3.8	13	8.9	1.9	4.5	0.81
6	6.5	5.6	10	35	52	22	3.5	10	7.5	4.9	2.7	0.74
7	5.4	5.0	8.2	20	27	15	3.4	7.9	6.2	8.7	2.2	0.72
8	4.0	3.7	7.2	16	18	11	3.1	6.4	5.2	2.9	1.8	1.1
9	4.3	3.2	6.6	13	15	9.6	2.8	5.3	6.2	12	1.6	0.84
10	5.5	3.0	24	11	13	7.9	2.6	4.4	7.5	20	1.5	0.69
11	3.0	2.6	20	9.6	11	7.0	2.5	3.8	4.5	15	1.3	0.62
12	3.0	122	14	8.6	9.6	6.1	8.2	3.3	18	9.7	1.2	0.70
13	3.8	43	10	7.5	8.4	5.3	45	4.3	11	11	1.1	0.80
14	33	22	10	6.8	7.7	5.1	47	5.6	5.9	21	1.1	0.68
15	17	19	9.3	6.1	6.9	4.6	21	27	4.3	11	1.0	0.60
16	8.3	14	15	5.4	6.0	13	14	15	4.6	5.4	0.87	0.56
17	6.5	11	16	7.5	5.6	10	11	8.4	3.7	162	0.90	0.57
18	4.9	36	13	30	5.1	7.3	8.7	6.3	3.6	27	0.86	0.48
19	4.3	33	13	15	4.8	5.7	7.3	12	24	18	0.80	0.41
20	3.5	21	11	11	4.7	5.4	6.5	17	6.9	11	3.6	0.32
21	3.5	14	9.5	8.8	4.1	5.1	12	9.2	4.0	6.4	4.5	0.42
22	3.3	12	8.9	7.8	3.6	4.2	13	4.9	3.0	5.0	1.9	0.48
23	3.0	9.6	33	6.6	3.3	3.8	26	3.7	2.3	4.7	1.3	0.50
24	2.8	24	29	6.2	3.0	3.7	17	2.9	1.8	4.0	2.0	0.48
25	2.4	16	20	6.1	2.8	3.4	35	32	1.7	2.9	2.0	0.48
26	17	11	15	11	2.6	3.2	20	69	1.5	64	8.9	0.42
27	12	36	11	18	2.5	3.3	13	145	1.3	17	7.9	0.45
28	6.6	53	9.7	11	2.4	3.1	8.7	140	1.2	11	3.5	0.48
29	6.5	29	26	9.5	2.4	6.3	6.9	38	1.1	5.1	2.3	0.31
30	4.9	22	33	8.6	---	12	12	46	1.0	9.1	3.0	0.47
31	4.2	---	20	7.5	---	11	---	102	---	32	2.1	---
TOTAL	224.6	587.1	461.6	566.6	364.5	308.3	378.6	908.4	229.9	508.0	101.13	19.92
MEAN	7.25	19.6	14.9	18.3	12.6	9.95	12.6	29.3	7.66	16.4	3.26	0.66
MAX	33	122	33	76	53	66	47	145	35	162	16	1.4
MIN	2.4	2.6	6.6	5.4	2.4	3.1	2.5	2.9	1.0	1.0	0.80	0.31
CFSM	1.25	3.37	2.57	3.15	2.17	1.71	2.18	5.05	1.32	2.83	0.56	0.11
IN.	1.44	3.77	2.96	3.63	2.34	1.98	2.43	5.83	1.47	3.26	0.65	0.13

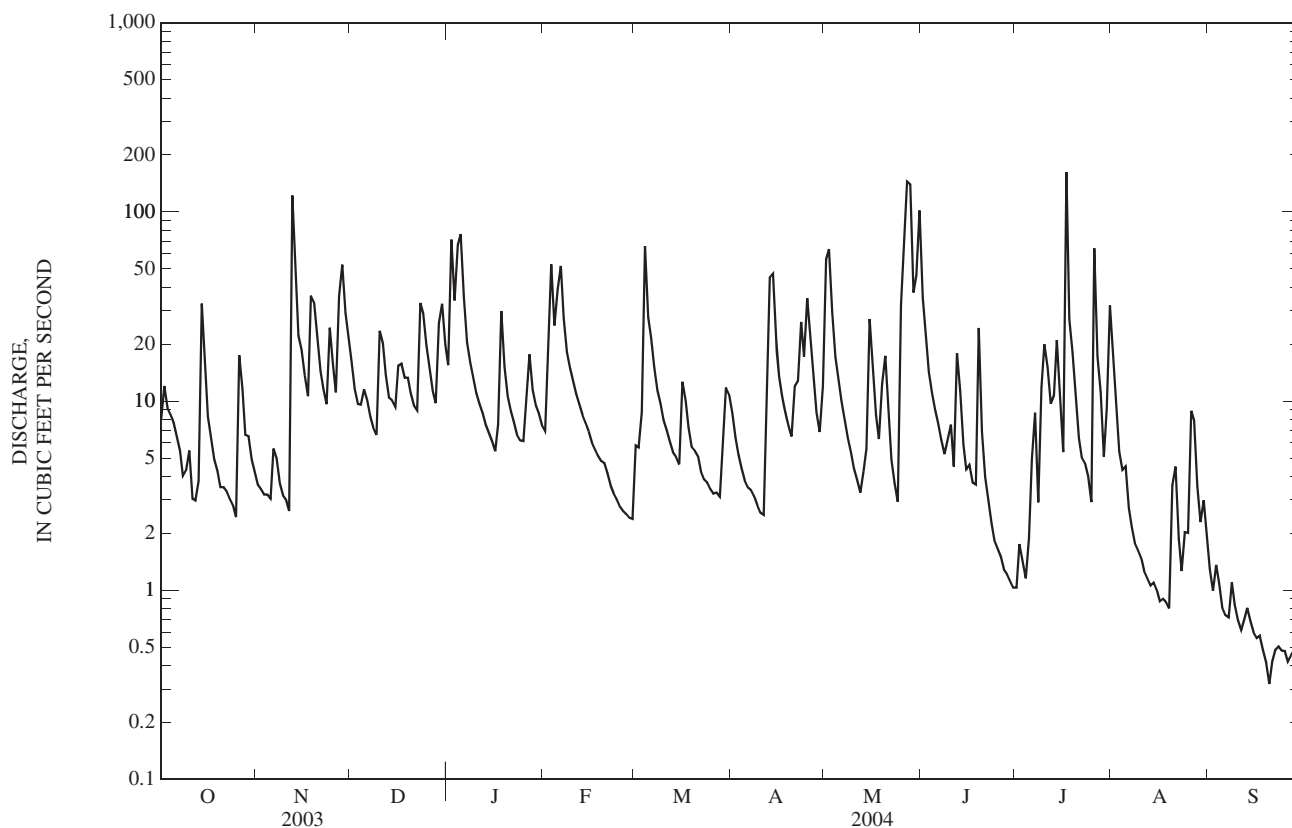
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
1999	7.87	17.6	0.77	(2001)
2000	10.7	19.6	3.06	(2000)
2001	18.7	27.4	9.84	(1999)
2002	16.3	32.7	2.06	(2001)
2003	16.8	26.6	12.1	(2002)
2004	14.2	31.1	5.08	(2001)
2005	11.2	23.6	2.38	(2001)
2006	17.1	29.3	3.49	(2000)
2007	9.31	14.9	5.52	(2001)
2008	8.22	23.4	1.77	(1999)
2009	4.30	10.9	0.41	(1999)
2010	7.20	15.0	0.66	(2004)

03292480 LITTLE GOOSE CREEK NEAR HARRODS CREEK, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	4,903.5		4,658.65		12.2	
ANNUAL MEAN	13.4		12.7		7.96	
HIGHEST ANNUAL MEAN					16.2	
LOWEST ANNUAL MEAN					7.96	
HIGHEST DAILY MEAN	194	May 11	162	Jul 17	322	Feb 18, 2000
LOWEST DAILY MEAN	1.0	Sep 21	0.31	Sep 29	0.00	Aug 31, 1999
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 15	0.44	Sep 18	0.00	Aug 31, 1999
MAXIMUM PEAK FLOW			486	May 27	694	Feb 18, 2000
MAXIMUM PEAK STAGE			6.58	May 27	7.54	Feb 18, 2000
ANNUAL RUNOFF (CFSM)	2.32		2.19		2.10	
ANNUAL RUNOFF (INCHES)	31.45		29.88		28.57	
10 PERCENT EXCEEDS	29		29		28	
50 PERCENT EXCEEDS	6.7		6.9		4.8	
90 PERCENT EXCEEDS	1.9		1.1		0.92	

e Estimated



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.

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 with telemetry and crest stage gage. 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.--Records good except for those estimated which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

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, Louisville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2240	*1140	10.79	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	7.2	16	19	12	15	11	109	e89	e4.6	14	5.4
2	5.9	7.1	13	229	70	8.5	8.5	142	75	4.4	9.6	4.4
3	4.9	7.7	11	51	119	40	7.4	41	31	5.1	7.3	4.7
4	5.1	8.5	12	122	36	264	8.7	26	21	5.8	23	4.2
5	4.6	11	15	184	88	77	9.2	19	17	25	87	3.4
6	4.5	13	11	48	97	66	8.1	16	14	50	9.6	3.1
7	3.8	9.2	8.4	30	41	29	8.6	14	12	27	6.7	4.1
8	4.0	6.8	8.1	22	27	21	8.8	13	11	8.4	5.6	4.2
9	4.0	6.8	7.3	21	23	17	9.1	12	141	18	4.8	4.2
10	7.5	6.8	75	17	19	13	9.3	12	53	128	5.0	4.9
11	3.8	6.6	25	15	17	11	10	13	15	59	7.2	4.2
12	3.7	161	15	14	13	9.3	41	15	44	16	6.5	4.1
13	3.9	24	12	13	12	8.0	156	18	20	41	6.4	4.1
14	65	11	14	11	11	7.6	75	28	13	134	6.5	3.8
15	12	22	13	9.5	9.7	6.9	26	113	15	16	7.5	e3.4
16	6.1	12	27	8.8	9.0	37	18	22	27	11	8.1	e3.3
17	5.8	8.7	18	23	8.5	15	14	14	15	244	8.3	e3.1
18	5.1	99	16	66	8.4	11	11	18	11	29	9.3	e3.2
19	4.6	52	16	22	7.9	8.2	9.7	21	11	17	13	e3.0
20	4.4	19	12	15	8.4	10	8.4	12	7.5	13	23	e3.4
21	5.2	13	11	12	8.8	9.7	32	9.8	6.7	10	9.7	e3.0
22	7.7	10	9.6	10	7.8	7.2	23	11	6.7	e9.0	5.6	e2.8
23	7.0	8.3	95	8.8	6.8	6.5	70	11	6.2	e22	5.7	e3.0
24	7.0	68	43	8.5	6.9	6.6	21	13	5.4	7.8	6.7	e2.3
25	6.7	16	22	9.4	6.2	6.1	71	132	5.2	5.1	11	e2.6
26	55	12	17	47	6.1	6.6	25	e280	5.1	e251	49	e2.6
27	8.5	100	14	44	5.7	8.0	22	e310	4.6	16	9.3	e2.7
28	5.9	114	12	20	5.3	7.7	29	e517	5.0	9.3	6.3	e2.7
29	5.7	35	63	17	5.3	26	28	e96	4.9	7.1	39	e2.7
30	4.3	22	59	14	---	39	61	e158	5.0	28	44	e2.7
31	6.8	---	21	13	---	17	---	e253	---	100	8.1	---
TOTAL	292.5	897.7	711.4	1,144.0	695.8	814.9	839.8	2,468.8	697.3	1,321.6	462.8	105.3
MEAN	9.44	29.9	22.9	36.9	24.0	26.3	28.0	79.6	23.2	42.6	14.9	3.51
MAX	65	161	95	229	119	264	156	517	141	251	87	5.4
MIN	3.7	6.6	7.3	8.5	5.3	6.1	7.4	9.8	4.6	4.4	4.8	2.3
CFSM	0.55	1.74	1.33	2.15	1.39	1.53	1.63	4.63	1.35	2.48	0.87	0.20
IN.	0.63	1.94	1.54	2.47	1.50	1.76	1.82	5.34	1.51	2.86	1.00	0.23

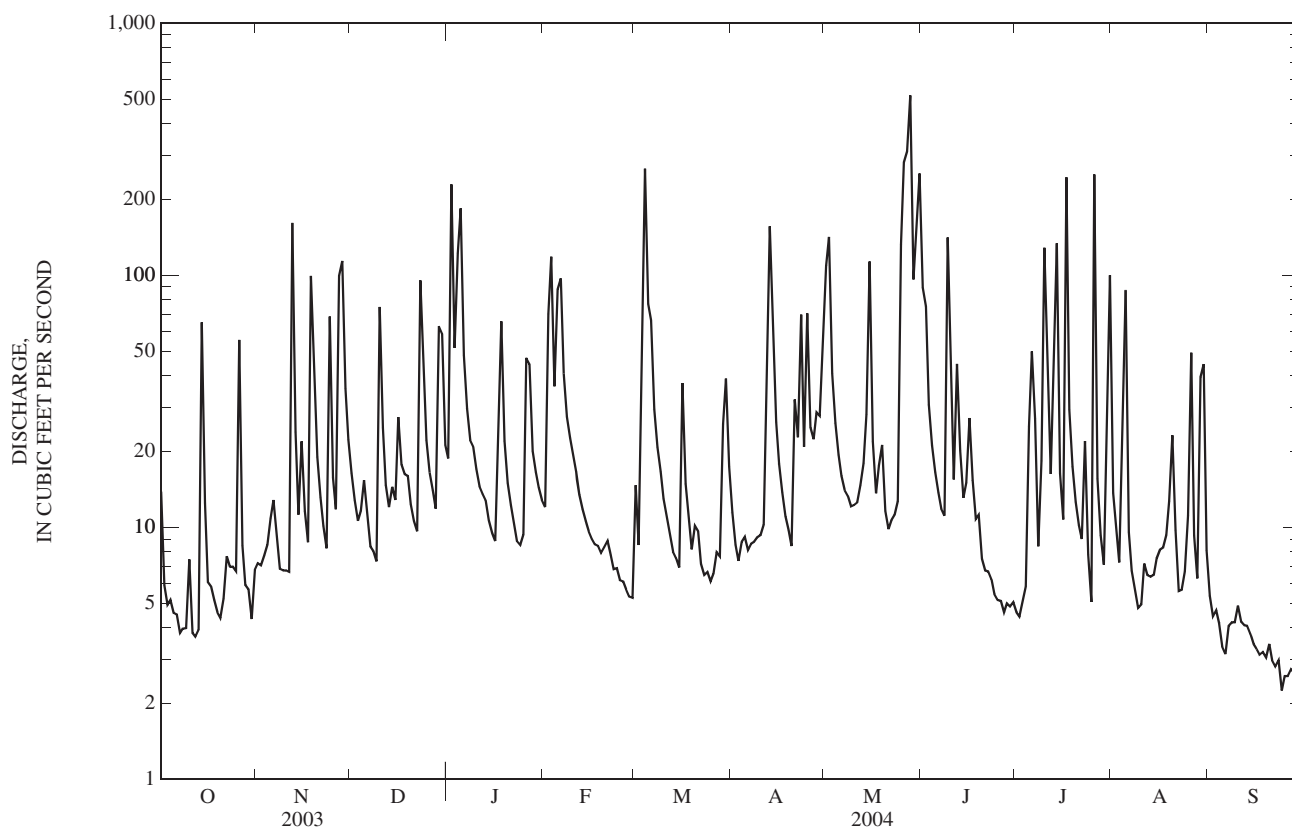
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	8.53	14.4	24.4	31.8	39.1	43.3	32.1	30.2	20.0	16.0	10.4	9.01
MAX	46.7	53.9	73.6	125	107	201	95.2	103	78.3	126	54.7	86.3
(WY)	(1978)	(1974)	(1979)	(1950)	(1989)	(1997)	(1948)	(1961)	(1950)	(1973)	(1974)	(1979)
MIN	0.30	0.84	1.32	0.71	8.52	6.41	3.13	5.51	1.11	0.89	0.23	0.00
(WY)	(1953)	(1953)	(1977)	(1940)	(1953)	(1983)	(1976)	(1962)	(1959)	(1956)	(1952)	(1953)

03292500 SOUTH FORK BEARGRASS CREEK AT LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	10,607.6		10,451.9		23.4	
ANNUAL MEAN	29.1		28.6		41.6	
HIGHEST ANNUAL MEAN					9.35	
LOWEST ANNUAL MEAN					1,960	
HIGHEST DAILY MEAN	440	Sep 2	517	May 28	1,960	Mar 2, 1997
LOWEST DAILY MEAN	1.9	Jul 27	2.3	Sep 24	0.00	Sep 4, 1940
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 24	2.6	Sep 24	0.00	Sep 4, 1940
MAXIMUM PEAK FLOW			1,140	May 25	5,290	Mar 2, 1997
MAXIMUM PEAK STAGE			10.79	May 25	17.81	Mar 2, 1997
INSTANTANEOUS LOW FLOW			3.2	Oct 11	0.00	Sep 4, 1940
ANNUAL RUNOFF (CFSM)	1.69		1.66		1.36	
ANNUAL RUNOFF (INCHES)	22.94		22.61		18.49	
10 PERCENT EXCEEDS	78		70		50	
50 PERCENT EXCEEDS	12		11		8.0	
90 PERCENT EXCEEDS	4.5		4.5		1.2	

e Estimated



03292550 SOUTH FORK BEARGRASS CREEK AT WINTER AVENUE AT LOUISVILLE, KY

LOCATION.--Lat 38°14'04", long 85°45'50", Jefferson County, Hydrologic Unit 05140101, on left bank of floodwall, 150 ft. upstream of Winter Avenue, at Louisville, 1.4 mi above Middle Fork Beargrass Creek, and at mile 3.3

DRAINAGE AREA.--22.6 mi².

PERIOD OF RECORD.--October 1998 to current year.

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

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2335	1,690	7.32	May 28	0055	*2,350	*7.91

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	e8.5	20	24	15	16	16	144	79	4.2	22	10
2	9.6	e8.4	16	279	74	12	12	181	85	3.3	16	9.0
3	7.8	e8.9	14	58	135	40	10	58	38	3.5	12	8.5
4	7.4	e10	14	137	41	337	8.2	37	27	3.3	32	7.8
5	6.9	e13	18	252	97	69	8.1	28	21	21	103	7.1
6	6.0	e15	15	56	107	71	6.8	22	17	52	18	6.7
7	e5.0	e14	11	36	46	33	6.8	18	16	43	12	5.3
8	e4.9	e10	10	28	33	25	6.3	15	14	7.3	9.6	4.0
9	e4.9	e9.0	8.7	24	28	20	5.8	14	154	12	8.0	3.7
10	e10	e8.4	74	20	24	16	5.3	12	64	122	7.5	4.0
11	e5.6	e8.5	29	17	20	15	5.4	10	19	82	6.6	3.7
12	e5.4	205	18	16	17	13	45	9.3	54	21	5.9	3.6
13	e5.5	e26	15	16	15	12	201	9.3	26	31	5.7	3.7
14	103	e16	17	14	14	11	90	21	17	135	5.5	3.5
15	31	e32	16	12	13	11	33	143	16	25	5.4	3.4
16	e9.5	e15	31	11	12	41	24	29	36	14	5.5	3.5
17	e8.3	e12	22	23	11	17	20	17	21	250	5.5	3.2
18	e7.1	111	19	69	10	14	17	15	14	31	6.0	3.3
19	e6.4	e73	20	27	9.7	11	16	27	16	18	5.9	3.3
20	e6.4	e29	16	19	9.6	12	14	16	10	13	25	3.7
21	e6.5	17	14	17	9.7	13	45	12	9.0	10	16	3.2
22	e9.6	14	13	15	8.5	9.0	36	10	8.6	11	6.2	3.2
23	e8.5	11	100	13	6.9	7.7	90	8.1	7.9	26	5.3	3.2
24	e8.1	72	49	12	6.8	7.6	30	7.7	7.0	9.4	5.0	2.6
25	e7.8	19	27	12	5.9	6.7	94	175	6.8	5.5	9.2	2.8
26	e60	15	20	44	5.6	6.5	34	315	6.6	255	65	2.8
27	e12	106	17	47	5.1	6.7	23	375	6.0	24	18	3.1
28	e9.1	112	15	24	4.8	6.3	19	631	5.9	15	8.0	2.9
29	e7.8	40	65	20	4.6	24	16	84	5.1	11	21	2.9
30	e5.9	27	70	18	---	40	56	158	4.7	34	70	2.9
31	e7.3	---	27	16	---	21	---	301	---	120	15	---
TOTAL	412.3	1,065.7	820.7	1,376	789.2	944.5	993.7	2,902.4	811.6	1,412.5	555.8	130.6
MEAN	13.3	35.5	26.5	44.4	27.2	30.5	33.1	93.6	27.1	45.6	17.9	4.35
MAX	103	205	100	279	135	337	201	631	154	255	103	10
MIN	4.9	8.4	8.7	11	4.6	6.3	5.3	7.7	4.7	3.3	5.0	2.6

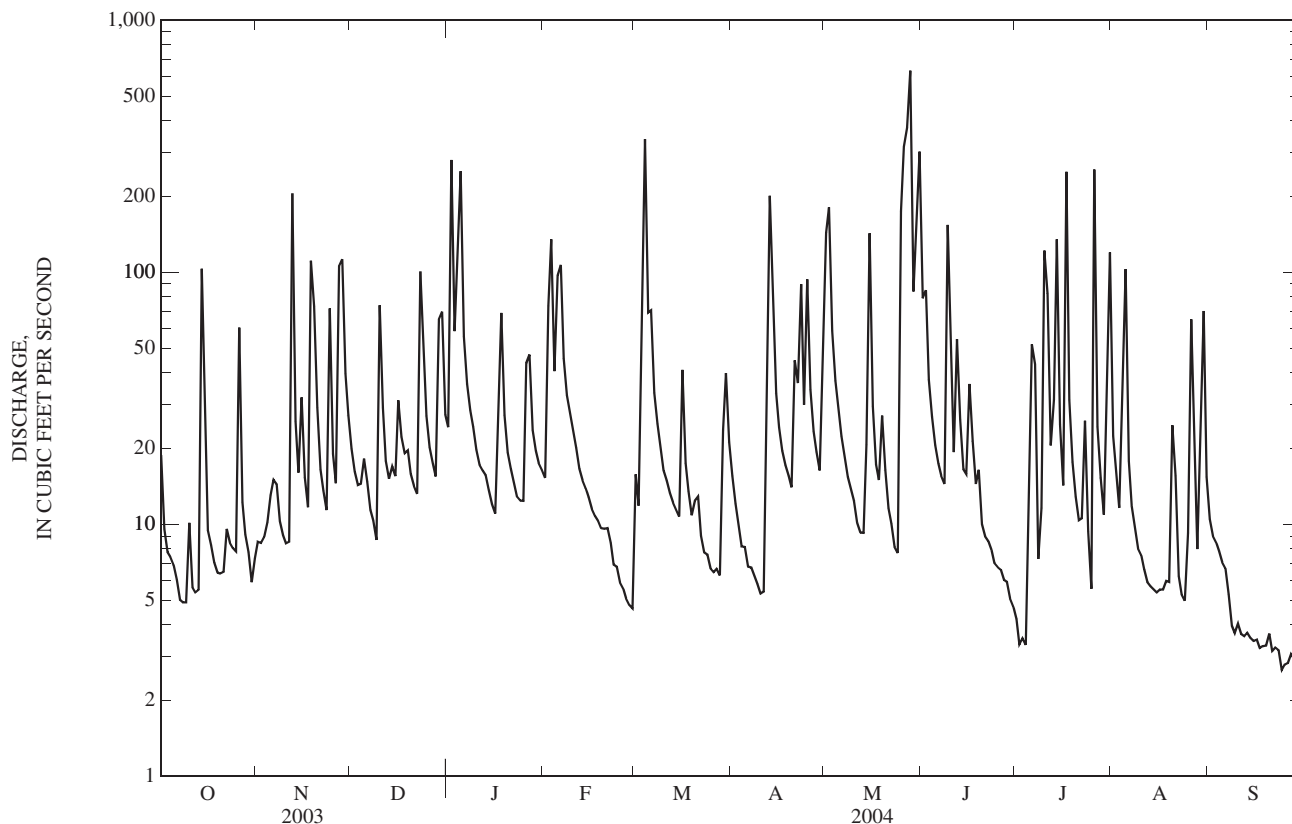
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

	19.7	21.7	41.2	46.3	48.8	39.1	38.4	55.5	27.2	20.1	14.5	26.2
MEAN	19.7	21.7	41.2	46.3	48.8	39.1	38.4	55.5	27.2	20.1	14.5	26.2
MAX	51.6	50.2	79.1	73.5	125	103	83.0	101	41.6	45.6	30.3	65.4
(WY)	(2002)	(2002)	(2003)	(2000)	(2000)	(2002)	(2002)	(2002)	(1999)	(2004)	(2003)	(2002)
MIN	4.80	4.05	17.1	9.40	22.9	19.1	10.1	16.1	13.8	4.55	2.78	3.29
(WY)	(2001)	(2000)	(1999)	(2001)	(1999)	(2003)	(2001)	(1999)	(2001)	(1999)	(1999)	(1999)

03292550 SOUTH FORK BEARGRASS CREEK AT WINTER AVENUE AT LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	12,820.6		12,215.0		33.2	
ANNUAL MEAN	35.1		33.4		52.5	
HIGHEST ANNUAL MEAN					20.2	
LOWEST ANNUAL MEAN					2,230	
HIGHEST DAILY MEAN	465	Jan 1	631	May 28	2,230	Feb 18, 2000
LOWEST DAILY MEAN	1.5	Aug 26	2.6	Sep 24	0.47	Jul 23, 2002
ANNUAL SEVEN-DAY MINIMUM	3.3	Aug 15	2.9	Sep 24	1.3	Nov 6, 1999
MAXIMUM PEAK FLOW			2,350	May 28	8,470	Feb 18, 2000
MAXIMUM PEAK STAGE			7.91	May 28	10.89	Feb 18, 2000
10 PERCENT EXCEEDS	86		80		70	
50 PERCENT EXCEEDS	15		15		10	
90 PERCENT EXCEEDS	5.4		5.2		2.8	

e Estimated



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, and 5.4 mi upstream from mouth.

DRAINAGE AREA.--18.9 mi², of which about 0.5 mi² does not contribute directly to surface runoff.

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 with telemetry 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.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	5.1	26	30	14	12	14	83	79	7.6	25	1.9
2	11	5.4	19	278	56	11	10	135	53	9.0	15	0.97
3	8.5	5.8	15	79	133	28	7.9	57	32	3.4	10	1.6
4	7.8	6.1	15	135	55	216	7.3	e33	23	2.5	32	1.0
5	6.3	6.0	19	225	93	68	7.0	e25	16	29	18	0.71
6	5.1	8.6	15	73	112	67	6.3	e20	13	39	7.9	0.62
7	4.4	7.5	12	49	62	37	5.8	e17	9.7	32	5.6	0.53
8	3.9	6.0	10	38	45	28	5.7	e15	8.0	9.0	4.5	0.62
9	5.8	5.1	9.1	32	35	21	4.8	e12	112	27	3.1	0.34
10	16	4.1	67	24	29	16	4.6	e16	31	314	2.3	0.40
11	5.0	3.5	35	19	24	14	4.5	e16	16	168	2.0	0.36
12	4.1	160	22	17	20	12	31	e12	36	36	1.6	0.33
13	3.8	45	17	15	16	9.9	127	e12	22	40	1.2	0.38
14	79	23	18	14	14	9.0	87	e11	13	71	1.1	0.35
15	23	30	16	12	13	8.2	39	e32	14	19	0.99	0.47
16	12	19	31	9.7	11	36	27	e31	16	12	0.65	0.59
17	9.0	14	27	20	10	18	20	e20	11	507	0.74	0.58
18	7.4	77	24	78	9.6	13	15	e21	8.6	63	0.59	0.64
19	6.1	61	24	35	9.1	10	12	e38	15	32	0.55	0.55
20	5.2	31	18	24	8.9	13	11	e62	8.0	20	9.6	0.59
21	4.6	22	15	18	8.2	14	34	e29	5.6	14	5.9	0.33
22	4.2	18	14	15	7.4	8.2	28	15	4.7	10	1.8	0.36
23	3.9	13	85	12	6.9	7.0	65	10	3.8	10	1.0	0.14
24	3.4	63	62	11	6.6	6.5	29	7.9	3.2	7.7	4.2	0.16
25	3.5	23	36	12	5.2	7.8	69	87	3.1	4.2	1.8	0.11
26	43	16	27	38	5.6	6.1	32	237	2.5	246	32	0.38
27	13	84	21	53	8.2	4.4	22	327	2.5	32	9.6	0.44
28	8.4	109	17	30	8.7	5.2	16	419	2.0	17	3.4	0.39
29	7.7	53	62	23	4.6	20	13	86	2.0	11	5.2	0.23
30	5.6	36	76	20	---	31	39	90	1.5	18	14	0.10
31	5.7	---	35	16	---	21	---	272	---	106	3.8	---
TOTAL	347.4	960.2	889.1	1,454.7	831.0	778.3	793.9	2,247.9	567.2	1,916.4	225.12	16.17
MEAN	11.2	32.0	28.7	46.9	28.7	25.1	26.5	72.5	18.9	61.8	7.26	0.54
MAX	79	160	85	278	133	216	127	419	112	507	32	1.9
MIN	3.4	3.5	9.1	9.7	4.6	4.4	4.5	7.9	1.5	2.5	0.55	0.10
CFSM	0.61	1.74	1.56	2.55	1.56	1.36	1.44	3.94	1.03	3.36	0.39	0.03
IN.	0.70	1.94	1.80	2.94	1.68	1.57	1.61	4.54	1.15	3.87	0.46	0.03

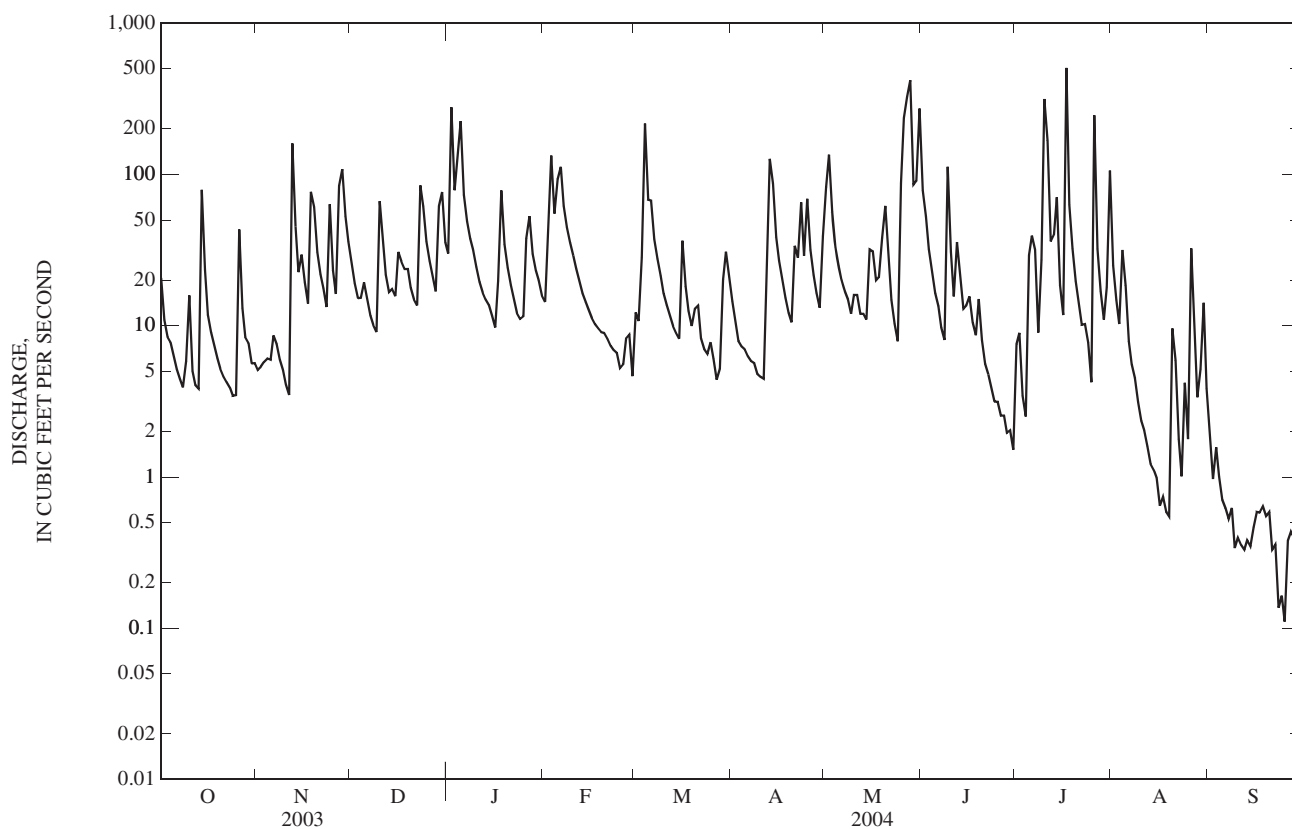
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

	MEAN	9.16	16.7	27.9	34.1	42.5	49.5	37.6	31.9	20.6	18.2	11.2	10.3
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	0.15	0.71	1.90	3.31	3.44	4.20	5.27	3.04	0.93	0.37	0.52	0.03	
(WY)	(1954)	(1954)	(1954)	(1981)	(1954)	(1954)	(1954)	(1954)	(1954)	(1954)	(1999)	(1953)	

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	12,166.55		11,027.39		25.7	
ANNUAL MEAN	33.3		30.1		49.2	
HIGHEST ANNUAL MEAN					3.76	
LOWEST ANNUAL MEAN					2,000	
HIGHEST DAILY MEAN	517	Sep 2	507	Jul 17	0.00	Mar 9, 1964
LOWEST DAILY MEAN	0.89	Aug 26	0.10	Sep 30	0.00	Aug 27, 1952
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 15	0.26	Sep 24	0.00	Sep 28, 1952
MAXIMUM PEAK FLOW			1,680	Jul 10	5,900	Mar 2, 1997
MAXIMUM PEAK STAGE			6.60	Jul 10	8.70	Mar 2, 1997
INSTANTANEOUS LOW FLOW			0.09	Sep 25	0.00	Aug 27, 1952
ANNUAL RUNOFF (CFSM)	1.81		1.64		1.40	
ANNUAL RUNOFF (INCHES)	24.60		22.29		19.00	
10 PERCENT EXCEEDS	84		70		54	
50 PERCENT EXCEEDS	14		14		10	
90 PERCENT EXCEEDS	4.0		1.4		1.9	

e Estimated



03293500 MIDDLE FORK BEARGRASS CREEK AT LEXINGTON ROAD AT LOUISVILLE, KY

LOCATION.--Lat 38°15'01", long 85°43'00", Jefferson County, Hydrologic Unit 05140101, on right bank 7at bridge on Lexington Road at Louisville, 0.86 miles upstream from South Fork Beagrass Creek.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--Water-stage recorder with telemetry.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	2.7	6.3	266
2	---	---	---	---	---	---	---	---	---	2.5	398	890
3	---	---	---	---	---	---	---	---	---	2.2	303	402
4	---	---	---	---	---	---	---	---	---	2.1	346	254
5	---	---	---	---	---	---	---	---	---	2.2	124	e183
6	---	---	---	---	---	---	---	---	---	2.0	49	e145
7	---	---	---	---	---	---	---	---	---	4.0	25	e104
8	---	---	---	---	---	---	---	---	---	2.2	29	e74
9	---	---	---	---	---	---	---	---	---	51	10	48
10	---	---	---	---	---	---	---	---	---	209	8.0	25
11	---	---	---	---	---	---	---	---	---	112	8.5	14
12	---	---	---	---	---	---	---	---	---	17	13	8.4
13	---	---	---	---	---	---	---	---	---	7.5	6.1	6.8
14	---	---	---	---	---	---	---	---	---	5.0	5.1	43
15	---	---	---	---	---	---	---	---	---	e4.2	4.7	155
16	---	---	---	---	---	---	---	---	---	e4.1	4.5	34
17	---	---	---	---	---	---	---	---	---	e4.1	9.6	11
18	---	---	---	---	---	---	---	---	---	3.0	5.5	7.7
19	---	---	---	---	---	---	---	---	---	2.6	4.2	6.8
20	---	---	---	---	---	---	---	---	---	2.2	4.2	6.6
21	---	---	---	---	---	---	---	---	---	6.2	3.9	6.3
22	---	---	---	---	---	---	---	---	---	5.3	30	241
23	---	---	---	---	---	---	---	---	---	4.5	48	109
24	---	---	---	---	---	---	---	---	---	8.6	6.6	43
25	---	---	---	---	---	---	---	---	---	3.6	4.6	17
26	---	---	---	---	---	---	---	---	---	2.5	3.9	11
27	---	---	---	---	---	---	---	---	---	2.0	18	475
28	---	---	---	---	---	---	---	---	---	2.8	44	145
29	---	---	---	---	---	---	---	---	---	6.9	35	78
30	---	---	---	---	---	---	---	---	---	2.5	423	48
31	---	---	---	---	---	---	---	---	---	11	204	---
TOTAL	---	---	---	---	---	---	---	---	---	497.5	2,184.7	3,857.6
MEAN	---	---	---	---	---	---	---	---	---	16.0	70.5	129
MAX	---	---	---	---	---	---	---	---	---	209	423	890
MIN	---	---	---	---	---	---	---	---	---	2.0	3.9	6.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	---	16.0	37.4	129
MAX	---	---	---	---	---	---	---	---	---	16.0	70.5	129
(WY)	---	---	---	---	---	---	---	---	---	(2003)	(2003)	(2003)
MIN	---	---	---	---	---	---	---	---	---	16.0	4.27	129
(WY)	---	---	---	---	---	---	---	---	---	(2003)	(1996)	(2003)

03293500 MIDDLE FORK BEARGRASS CREEK AT LEXINGTON ROAD AT LOUISVILLE, KY—Continued

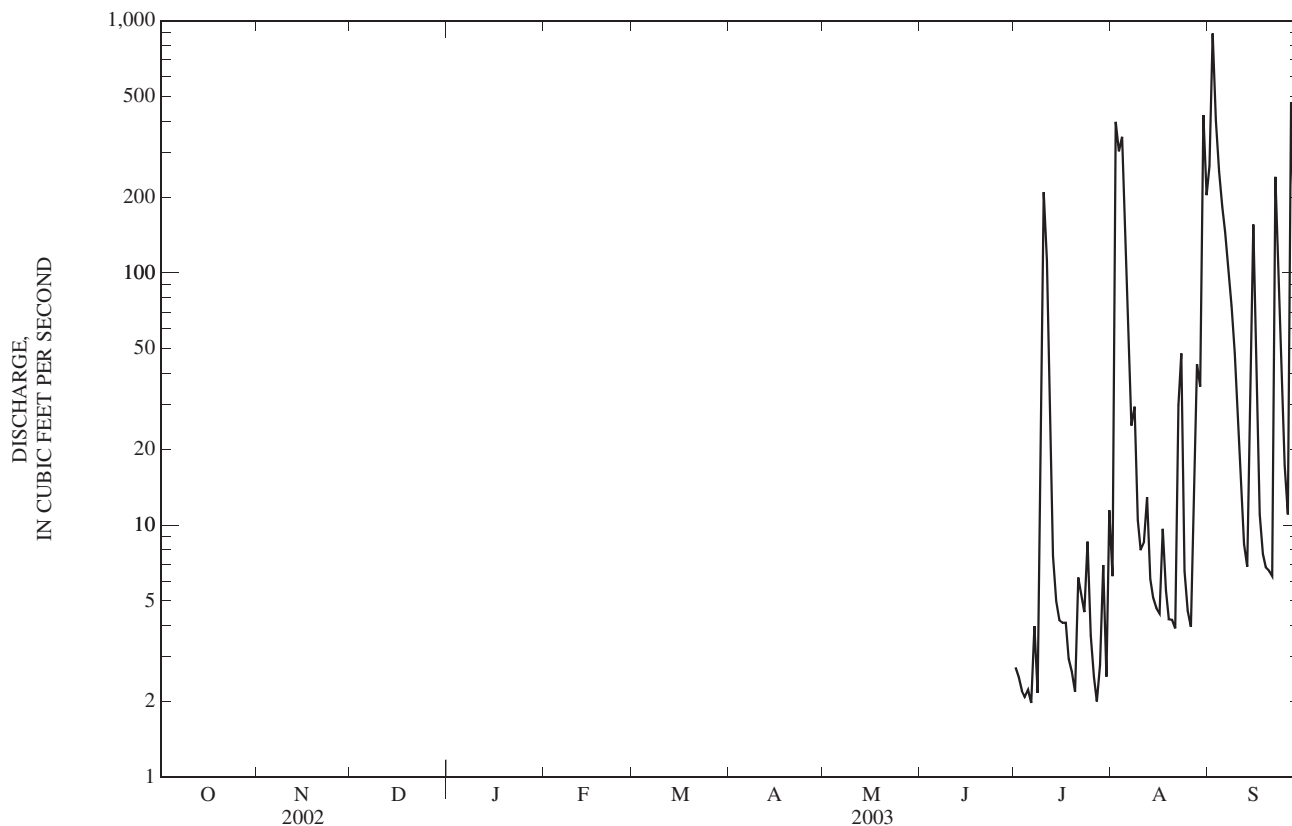
SUMMARY STATISTICS

WATER YEARS 1996 - 2003

HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
MAXIMUM PEAK FLOW
MAXIMUM PEAK STAGE

890	Sep 2, 2003
0.36	Sep 3, 1996
0.76	Aug 30, 1996
1,020	Sep 2, 2003
10.51	Sep 2, 2003

e Estimated



03293500 MIDDLE FORK BEARGRASS CREEK AT LEXINGTON ROAD AT LOUISVILLE, KY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	15	44	51	e19	e34	30	118	115	7.5	33	6.4
2	40	15	27	396	87	e17	18	166	84	9.9	20	5.4
3	18	16	19	146	261	53	14	74	54	4.5	15	5.4
4	12	16	16	192	109	332	12	48	38	3.3	48	5.4
5	9.1	18	23	424	141	89	12	34	26	30	33	4.7
6	7.3	23	22	125	e175	109	11	25	20	33	13	4.3
7	7.1	22	15	82	e103	72	10	19	15	43	10	4.1
8	6.6	17	11	e59	e72	e51	9.3	15	12	8.2	9.5	4.3
9	6.3	15	9.8	e46	e59	e39	8.2	12	120	18	8.4	4.3
10	32	15	69	e40	e45	e32	7.3	11	34	154	7.4	3.8
11	7.2	14	58	e32	e38	e26	7.7	9.5	13	319	6.9	3.8
12	6.5	436	29	e26	e34	21	40	8.3	35	38	6.3	3.6
13	6.1	190	18	e23	e27	17	156	7.9	20	29	5.8	3.6
14	219	34	17	e21	e24	15	111	14	11	99	5.6	3.7
15	120	23	17	e18	e20	14	54	97	9.4	23	5.3	3.4
16	29	19	28	e17	e19	65	35	34	14	16	4.9	3.2
17	15	12	48	24	e17	38	25	19	9.4	551	4.6	3.2
18	13	75	32	116	e16	23	18	14	7.5	74	4.7	3.3
19	12	121	40	e66	e14	17	15	39	11	38	4.5	3.2
20	9.9	49	30	e39	e14	18	13	112	7.5	23	11	3.3
21	8.8	29	23	e27	e12	31	38	27	5.6	e18	12	3.3
22	8.5	19	19	e22	e12	15	38	17	5.0	e14	7.1	3.6
23	9.1	14	93	e18	e11	13	71	13	4.5	16	5.7	3.5
24	9.0	76	121	e16	e9.6	13	35	11	3.9	13	6.1	3.6
25	9.0	37	64	e17	e8.4	15	81	82	3.8	9.4	7.2	4.3
26	139	19	48	e54	e11	12	41	301	3.6	277	59	4.0
27	60	111	35	e75	e16	11	26	352	3.5	37	18	3.7
28	21	195	26	e43	e22	9.6	20	498	3.3	20	8.5	3.4
29	20	85	52	e31	e13	31	16	101	3.0	15	6.6	4.2
30	15	60	142	e26	---	61	42	94	3.0	27	21	4.7
31	13	---	64	e20	---	45	---	357	---	166	e11	---
TOTAL	965.5	1,790	1,259.8	2,292	1,409.0	1,338.6	1,014.5	2,729.7	695.0	2,133.8	419.1	120.7
MEAN	31.1	59.7	40.6	73.9	48.6	43.2	33.8	88.1	23.2	68.8	13.5	4.02
MAX	219	436	142	424	261	332	156	498	120	551	59	6.4
MIN	6.1	12	9.8	16	8.4	9.6	7.3	7.9	3.0	3.3	4.5	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	31.1	59.7	40.6	73.9	48.6	43.2	33.8	88.1	23.2	42.4	29.4	66.3
MAX	31.1	59.7	40.6	73.9	48.6	43.2	33.8	88.1	23.2	68.8	70.5	129
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)
MIN	31.1	59.7	40.6	73.9	48.6	43.2	33.8	88.1	23.2	16.0	4.27	4.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(1996)	(2004)

03293500 MIDDLE FORK BEARGRASS CREEK AT LEXINGTON ROAD AT LOUISVILLE, KY—Continued

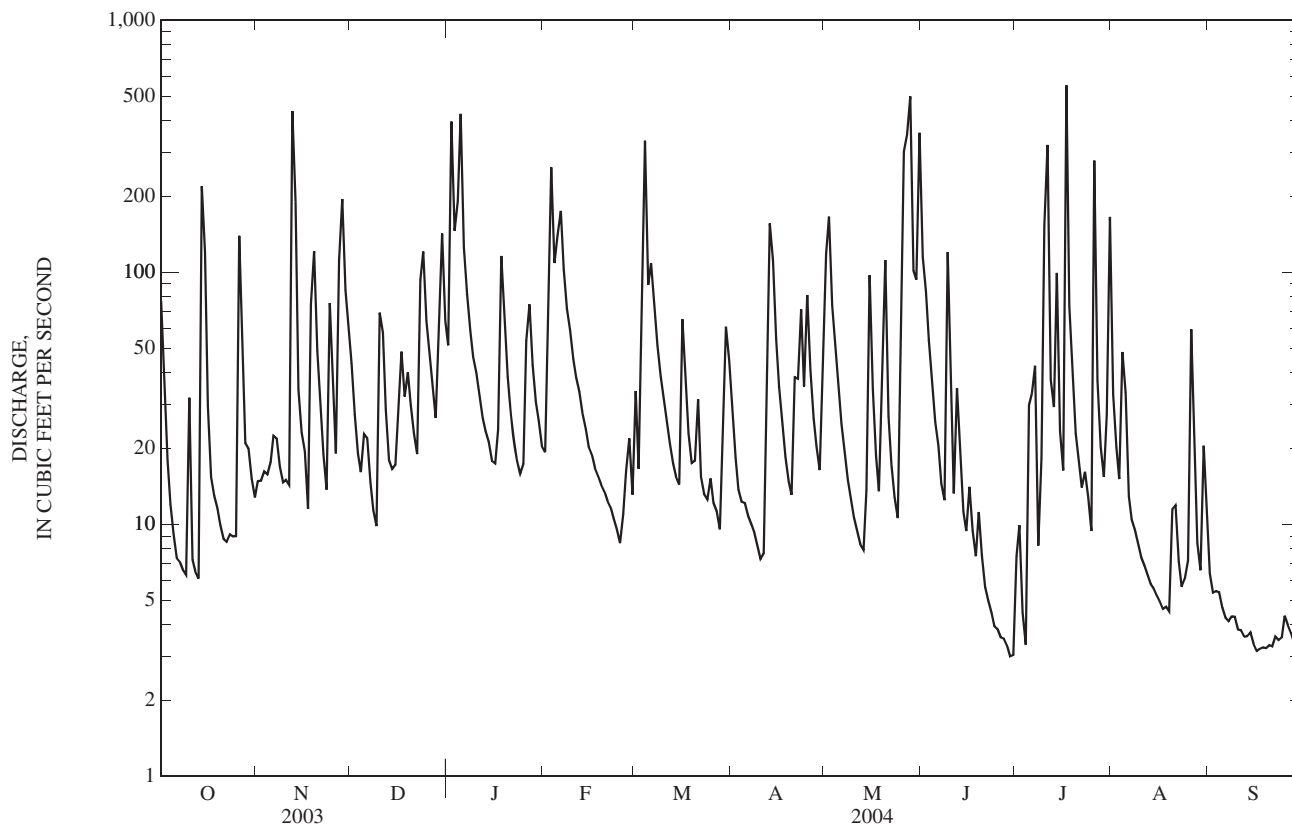
SUMMARY STATISTICS

FOR 2004 WATER YEAR

WATER YEARS 1996 - 2004

ANNUAL TOTAL	16,167.7			
ANNUAL MEAN	44.2		44.2	
HIGHEST ANNUAL MEAN			44.2	2004
LOWEST ANNUAL MEAN			44.2	2004
HIGHEST DAILY MEAN	551	Jul 17	890	Sep 2, 2003
LOWEST DAILY MEAN	3.0	Jun 29	0.36	Sep 3, 1996
ANNUAL SEVEN-DAY MINIMUM	3.3	Sep 15	0.76	Aug 30, 1996
MAXIMUM PEAK FLOW	1,120	Jul 11	1,120	Jul 11, 2004
MAXIMUM PEAK STAGE	10.96	Jul 11	10.96	Jul 11, 2004
10 PERCENT EXCEEDS	110		110	
50 PERCENT EXCEEDS	19		19	
90 PERCENT EXCEEDS	4.7		4.7	

e Estimated



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, KY-92-1 peak.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 373.18 ft above NGVD of 1929 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 NGVD of 1929 or 373.67 ft above Ohio River Datum.

REMARKS.--Records good except for estimated periods and those below 20,000 ft³/s, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144,000	117,000	306,000	202,000	67,900	87,800	210,000	194,000	468,000	48,100	137,000	e51,500
2	136,000	107,000	296,000	238,000	69,600	97,700	232,000	213,000	457,000	51,900	110,000	e45,000
3	112,000	94,800	273,000	285,000	100,000	97,600	262,000	226,000	444,000	46,700	119,000	e42,300
4	91,500	70,900	241,000	393,000	155,000	153,000	311,000	186,000	393,000	32,700	117,000	e31,400
5	81,700	67,600	203,000	516,000	211,000	203,000	341,000	157,000	308,000	44,300	113,000	e30,700
6	68,300	76,100	178,000	524,000	275,000	242,000	331,000	173,000	235,000	43,700	93,900	e33,600
7	70,400	124,000	164,000	521,000	375,000	330,000	291,000	155,000	216,000	38,000	91,600	e34,800
8	77,500	150,000	164,000	519,000	428,000	410,000	251,000	131,000	212,000	51,100	74,200	e22,700
9	70,800	160,000	169,000	517,000	474,000	447,000	205,000	107,000	167,000	31,800	61,800	e134,000
10	43,200	146,000	157,000	504,000	499,000	449,000	172,000	91,000	123,000	45,800	34,900	e272,000
11	51,500	109,000	151,000	472,000	495,000	413,000	151,000	82,600	86,500	31,000	32,900	e336,000
12	46,500	123,000	160,000	401,000	435,000	352,000	146,000	66,900	90,300	40,400	39,200	e341,000
13	34,500	203,000	203,000	315,000	340,000	291,000	141,000	80,200	151,000	33,600	37,100	e325,000
14	46,200	305,000	238,000	265,000	267,000	247,000	225,000	90,700	195,000	42,900	32,400	e260,000
15	45,200	375,000	258,000	230,000	211,000	200,000	317,000	94,000	214,000	62,500	27,500	e158,000
16	90,400	378,000	251,000	204,000	167,000	172,000	415,000	83,700	228,000	51,300	27,200	e123,000
17	110,000	313,000	243,000	177,000	140,000	143,000	462,000	78,200	229,000	56,000	27,100	e118,000
18	101,000	236,000	252,000	161,000	120,000	132,000	468,000	78,100	240,000	50,800	26,900	e264,000
19	107,000	192,000	254,000	158,000	106,000	133,000	439,000	95,100	233,000	49,800	25,200	e390,000
20	104,000	215,000	251,000	178,000	97,900	149,000	376,000	143,000	213,000	39,900	23,900	e475,000
21	88,700	313,000	230,000	198,000	92,700	152,000	267,000	186,000	215,000	48,700	47,300	e492,000
22	77,300	422,000	198,000	191,000	103,000	164,000	234,000	213,000	198,000	55,400	83,400	e480,000
23	65,900	464,000	172,000	156,000	121,000	195,000	215,000	221,000	162,000	59,200	124,000	e465,000
24	62,400	466,000	174,000	134,000	138,000	223,000	225,000	244,000	114,000	51,400	143,000	e423,000
25	58,200	436,000	184,000	116,000	139,000	229,000	218,000	280,000	103,000	45,400	104,000	e250,000
26	53,800	371,000	212,000	97,500	135,000	216,000	223,000	313,000	95,500	35,900	e48,800	e175,000
27	47,600	301,000	238,000	75,300	131,000	184,000	199,000	337,000	97,800	41,300	e44,200	e130,000
28	77,200	278,000	254,000	86,200	118,000	158,000	179,000	370,000	93,600	79,000	e47,900	e108,000
29	91,100	302,000	247,000	105,000	100,000	151,000	204,000	380,000	92,500	121,000	e38,900	e92,000
30	104,000	314,000	229,000	94,600	---	154,000	218,000	422,000	72,400	116,000	e82,800	e107,000
31	118,000	---	222,000	90,000	---	193,000	---	467,000	---	140,000	e64,800	---
TOTAL	2,475,900	7,229,400	6,772,000	8,123,600	6,111,100	6,768,100	7,928,000	5,958,500	6,146,600	1,685,600	2,080,900	6,210,000
MEAN	79,870	241,000	218,500	262,100	210,700	218,300	264,300	192,200	204,900	54,370	67,130	207,000
MAX	144,000	466,000	306,000	524,000	499,000	449,000	468,000	467,000	468,000	140,000	143,000	492,000
MIN	34,500	67,600	151,000	75,300	67,900	87,800	141,000	66,900	72,400	31,000	23,900	22,700

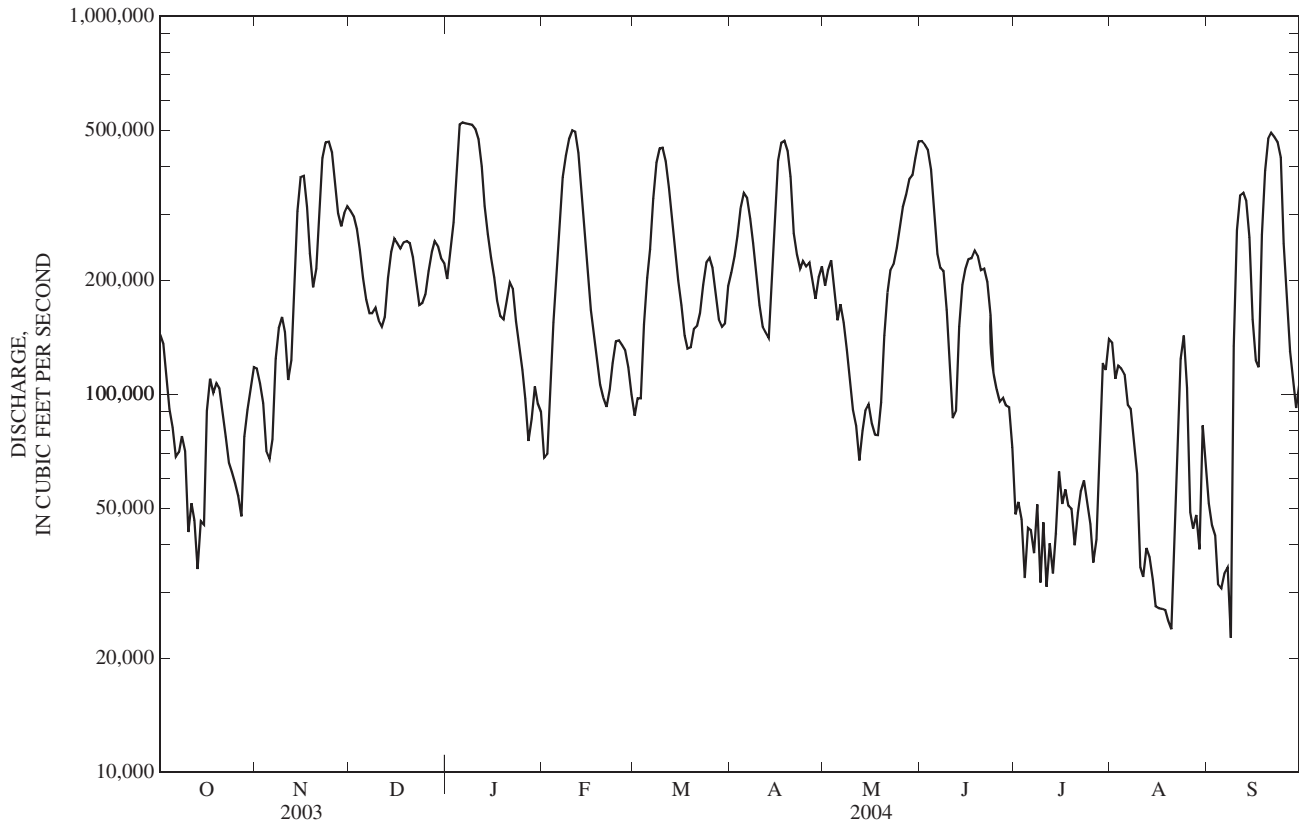
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	37,780	70,530	122,600	164,800	193,800	241,000	204,400	147,000	89,120	56,390	44,700	36,250
MAX	153,500	245,900	321,300	595,800	430,400	524,300	403,300	392,900	234,400	163,400	151,300	207,000
(WY)	(1980)	(1986)	(1973)	(1937)	(1939)	(1945)	(1948)	(1996)	(1981)	(1958)	(1958)	(2004)
MIN	4,377	6,660	14,090	21,630	38,010	69,390	66,480	29,350	16,400	8,035	4,924	6,005
(WY)	(1931)	(1931)	(1931)	(1931)	(1934)	(1969)	(1986)	(1941)	(1988)	(1930)	(1930)	(1930)

03294500 OHIO RIVER AT LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	62,761,100		67,489,700		117,000	
ANNUAL MEAN	171,900		184,400		184,400	
HIGHEST ANNUAL MEAN					184,400	
LOWEST ANNUAL MEAN					57,390	
HIGHEST DAILY MEAN	471,000	Feb 27	524,000	Jan 6	1,110,000	Jan 27, 1937
LOWEST DAILY MEAN	14,200	Jan 29	22,700	Sep 8	949	Sep 4, 2002
ANNUAL SEVEN-DAY MINIMUM	19,600	Jan 24	27,200	Aug 14	3,530	Oct 15, 1930
MAXIMUM PEAK FLOW			527,000	Jan 7	1,110,000	Jan 27, 1937
MAXIMUM PEAK STAGE			55.07	Jan 8	85.44	Jan 27, 1937
10 PERCENT EXCEEDS	313,000		393,000		281,000	
50 PERCENT EXCEEDS	151,000		155,000		73,400	
90 PERCENT EXCEEDS	51,500		45,700		16,800	

e Estimated



03294550 MILL CREEK CUTOFF NEAR LOUISVILLE, KY

LOCATION.--Lat 38°10'39", long 85°52'01", Jefferson County, Hydrologic Unit 05140101, on left bank at bridge on Highway 1230, 0.8 mi downstream from Big Run Creek, 1.5 mi upstream from Ohio River, and 6.0 mi southwest of Louisville.

DRAINAGE AREA.--24.4 mi².

PERIOD OF RECORD.--May 1988 to January 1995, August 1999 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 414.276 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated periods, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2245	1,750	10.00	Aug 5	0210	1,890	10.38
May 27	2355	*2,080	*10.86				

Minimum discharge, 0.34 ft³/s, Mar. 1, gage height, 2.50 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.8	3.1	3.6	2.6	3.4	3.3	95	e40	1.2	3.0	1.1
2	1.1	2.8	2.0	157	83	3.3	1.8	120	e250	1.6	1.4	8.9
3	1.1	2.6	1.8	12	97	25	2.6	11	e37	1.5	1.2	11
4	1.2	2.4	2.2	114	10	242	2.6	4.9	e6.5	1.5	1.7	1.9
5	1.1	2.5	4.1	514	88	23	2.1	2.8	2.4	17	280	1.3
6	1.2	3.2	3.1	e107	66	18	0.85	1.6	1.7	10	4.9	1.2
7	1.1	2.8	2.1	e26	12	7.1	1.5	1.2	1.7	11	2.0	1.2
8	2.1	2.5	1.9	e11	6.2	5.1	2.1	1.2	1.6	1.6	1.6	1.5
9	2.1	2.5	1.7	e7.0	e5.4	e3.7	2.2	1.1	1.7	18	1.4	1.2
10	2.3	2.5	32	e5.1	e3.7	e3.1	1.9	1.1	1.8	19	1.9	1.1
11	2.2	2.6	6.6	e4.2	e3.9	e2.6	1.2	0.79	1.8	2.0	1.6	1.4
12	2.1	92	2.9	e3.0	e3.7	2.8	17	0.56	52	20	1.9	1.5
13	2.0	11	2.2	2.5	e3.3	2.4	131	0.56	6.6	3.8	2.7	1.4
14	49	3.6	3.4	2.2	3.2	2.4	39	12	1.7	12	2.0	1.1
15	6.1	10	3.4	2.1	3.1	2.4	7.6	119	1.3	2.2	1.7	1.0
16	2.5	4.4	29	1.9	2.7	21	4.4	9.5	43	1.8	1.4	1.0
17	2.1	2.5	9.9	9.8	2.6	6.5	e2.9	4.7	6.2	8.5	1.6	1.1
18	2.7	62	4.5	50	2.5	3.9	e2.3	3.7	1.6	2.2	1.8	1.0
19	2.8	25	3.8	7.6	2.8	3.0	e1.9	26	1.9	1.8	3.6	1.0
20	2.9	4.7	2.5	4.3	3.1	2.9	2.1	15	1.5	1.6	4.9	0.99
21	3.1	2.7	2.2	3.6	3.0	3.6	13	2.2	1.2	1.5	4.5	e1.1
22	2.6	2.1	2.1	3.4	2.7	2.6	17	1.1	1.1	1.7	1.3	e1.1
23	3.2	14	59	2.9	2.6	1.7	46	0.76	1.1	106	1.1	e1.1
24	3.2	e36	18	2.9	2.6	1.5	8.3	0.67	1.2	15	1.3	e1.1
25	3.2	e13	4.5	3.3	2.0	0.85	82	148	1.5	2.4	5.9	1.2
26	33	2.7	3.0	19	1.9	0.64	8.7	172	1.6	1.9	79	1.1
27	5.1	66	2.5	24	1.8	0.60	3.1	334	1.3	1.4	8.3	1.1
28	3.3	48	2.2	6.1	1.8	0.61	1.8	357	1.1	1.3	2.1	1.0
29	3.0	6.9	44	4.4	0.63	5.2	1.8	10	1.1	1.4	1.3	1.0
30	2.5	3.5	29	4.3	---	12	30	82	1.0	4.9	1.2	1.1
31	2.4	---	5.3	3.0	---	5.2	---	e405	---	54	1.1	---
TOTAL	154.9	439.3	294.0	1,121.2	423.83	418.10	442.05	1,944.44	474.2	329.8	429.4	52.79
MEAN	5.00	14.6	9.48	36.2	14.6	13.5	14.7	62.7	15.8	10.6	13.9	1.76
MAX	49	92	59	514	97	242	131	405	250	106	280	11
MIN	1.1	2.1	1.7	1.9	0.63	0.60	0.85	0.56	1.0	1.2	1.1	0.99
CFSM	0.20	0.60	0.39	1.48	0.60	0.55	0.60	2.57	0.65	0.44	0.57	0.07
IN.	0.24	0.67	0.45	1.71	0.65	0.64	0.67	2.96	0.72	0.50	0.65	0.08

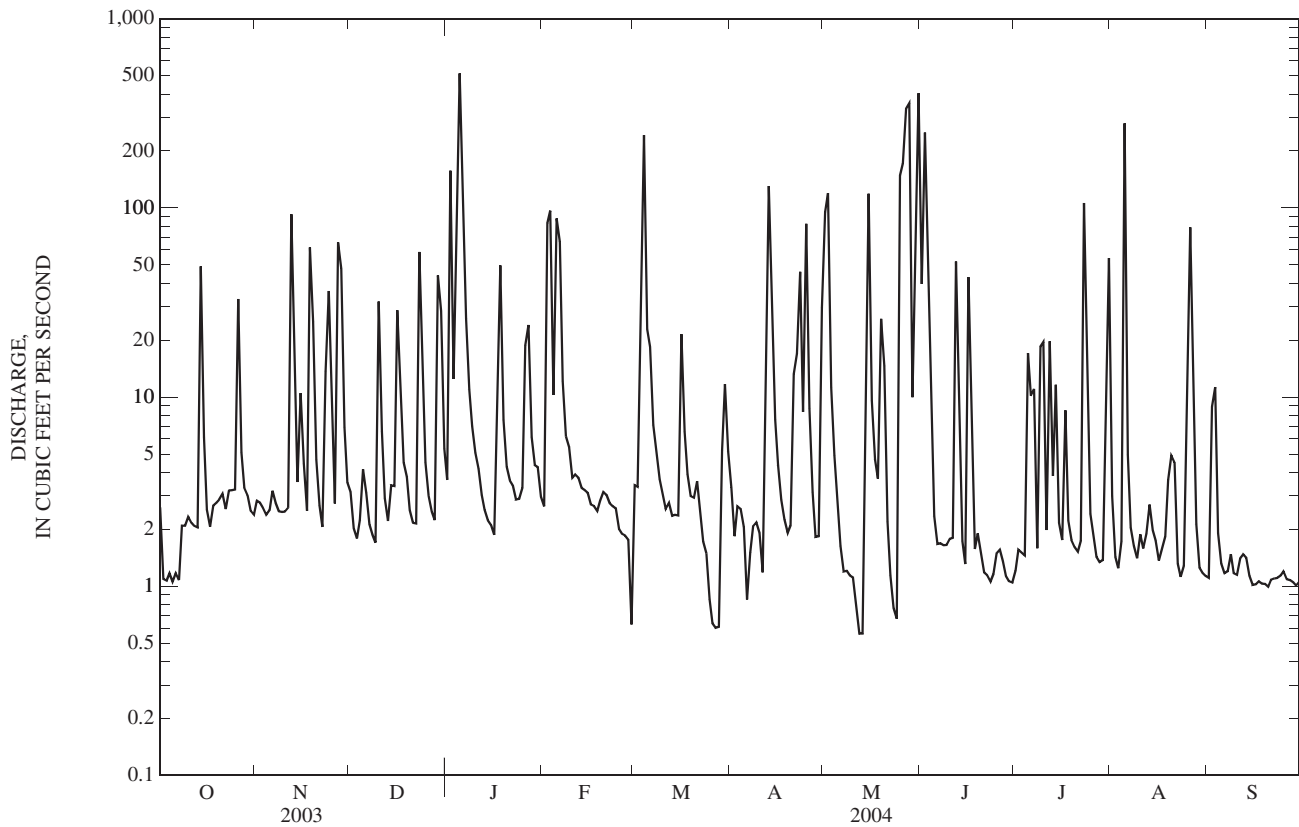
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

	MEAN	6.21	10.0	19.3	23.4	32.0	29.0	13.5	22.0	10.5	7.58	7.68	8.40
MAX	19.4	21.7	73.0	72.3	87.0	89.2	31.6	69.8	49.1	23.5	33.4	28.6	
(WY)	(2002)	(2002)	(1991)	(1991)	(1989)	(2002)	(2002)	(1990)	(1990)	(1989)	(1992)	(2002)	
MIN	0.18	0.31	1.35	3.26	3.97	1.78	0.93	3.21	0.04	0.18	0.83	0.07	
(WY)	(1989)	(2000)	(1990)	(2001)	(1992)	(2003)	(2001)	(2000)	(1988)	(2002)	(2001)	(1988)	

03294550 MILL CREEK CUTOFF NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	3,766.31		6,524.01		16.0	
ANNUAL MEAN	10.3		17.8		25.5	
HIGHEST ANNUAL MEAN					7.41	
LOWEST ANNUAL MEAN					1,070	
HIGHEST DAILY MEAN	316	Sep 2	514	Jan 5	1,070	Feb 15, 1990
LOWEST DAILY MEAN	0.00	Jan 11	0.56	May 12	0.00	May 15, 1988
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 14	0.93	May 7	0.00	May 28, 1988
MAXIMUM PEAK FLOW			2,080	May 27	4,310	Aug 8, 1992
MAXIMUM PEAK STAGE			10.86	May 27	15.83	Aug 8, 1992
ANNUAL RUNOFF (CFSM)	0.423		0.731		0.655	
ANNUAL RUNOFF (INCHES)	5.74		9.95		8.90	
10 PERCENT EXCEEDS	28		41		30	
50 PERCENT EXCEEDS	2.1		2.7		1.6	
90 PERCENT EXCEEDS	0.17		1.1		0.00	

e Estimated



03294570 MILL CREEK AT ORELL ROAD NEAR LOUISVILLE, KY

LOCATION.--Lat 38°04'41", long 85°53'24", Jefferson County, Hydrologic Unit 05140101, on right bank at bridge on Orell Road, 5.0 mi southwest of Louisville, and at mile 1.5

DRAINAGE AREA.--13.5 mi².

PERIOD OF RECORD.--August 1999 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 405.63 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated, which are rated poor.

Cooperation.--Louisville and Jefferson County Metropolitan Sewer District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.1	3.9	5.3	2.0	1.8	3.2	64	e78	1.6	5.5	1.8
2	0.79	1.1	2.7	194	80	3.9	1.9	145	e151	2.1	1.7	2.4
3	0.61	1.2	2.2	31	160	15	1.3	21	e23	1.8	1.3	8.8
4	0.62	1.4	2.6	e93	21	418	0.99	6.4	e8.6	1.6	1.2	4.1
5	0.48	1.7	6.1	e147	65	35	1.4	3.2	e4.8	13	386	2.2
6	0.49	2.3	5.9	e43	116	26	2.4	1.9	3.5	22	16	2.1
7	0.45	3.0	2.9	e15	e37	e19	0.87	1.3	3.1	15	5.1	2.2
8	0.66	2.2	2.0	e10	e24	e12	0.81	1.2	3.4	2.9	2.7	2.5
9	1.1	1.6	1.9	e7.7	e15	e8.1	0.73	0.87	4.1	36	2.1	2.3
10	1.5	1.5	18	e5.6	e9.1	e6.1	0.73	0.67	3.7	72	2.1	2.5
11	1.7	1.7	12	e4.9	e6.0	e4.3	0.87	0.65	3.7	6.1	2.3	2.3
12	1.6	132	4.8	e3.5	e4.6	e3.1	10	0.78	24	46	2.2	e2.4
13	1.5	38	2.9	e3.0	e3.9	e1.9	113	0.81	16	13	2.0	e3.0
14	40	11	2.9	2.3	e2.7	1.2	55	3.9	5.3	29	2.0	e3.4
15	16	e8.5	3.5	1.7	2.1	1.1	9.7	133	3.7	6.5	1.8	3.4
16	1.6	e7.3	23	1.5	1.8	11	e7.7	22	28	2.5	1.8	2.9
17	1.0	e6.3	21	3.4	1.7	6.6	e5.0	5.3	18	1.9	2.0	2.8
18	1.0	46	7.9	46	1.8	2.3	e3.4	5.5	4.2	1.2	2.3	2.7
19	0.84	45	7.5	14	1.7	1.3	e2.5	17	3.1	1.2	2.1	2.4
20	1.0	10	4.7	5.5	1.4	3.6	e2.2	36	1.9	1.2	7.3	e2.5
21	1.3	4.2	3.0	3.5	1.4	3.5	e3.7	5.5	1.7	1.2	7.9	e2.6
22	1.3	e4.2	2.5	2.6	1.3	1.6	12	2.1	1.8	6.5	2.9	e2.8
23	1.5	e3.4	44	1.8	1.1	1.6	40	1.2	1.9	11	2.4	e2.9
24	1.4	e23	33	1.8	0.97	1.4	13	1.0	1.3	6.9	1.9	e2.7
25	1.5	e17	8.8	2.0	1.1	1.2	82	9.9	1.1	1.9	8.1	e2.3
26	35	e13	4.6	8.4	1.2	1.1	17	197	1.4	1.2	75	e1.8
27	9.0	e36	3.1	24	1.1	1.1	4.7	e741	1.5	1.2	30	1.2
28	1.9	56	2.3	10	0.98	0.93	2.0	e1,170	1.6	1.2	7.0	1.3
29	1.2	15	25	7.9	0.83	3.9	1.5	e108	1.4	1.2	3.9	2.2
30	1.0	6.5	46	4.6	---	11	28	e238	1.3	1.4	3.1	2.2
31	0.99	---	10	2.1	---	6.5	---	e328	---	37	2.4	---
TOTAL	130.13	501.2	320.7	706.1	566.78	615.13	427.60	3,272.18	406.1	347.3	594.1	80.7
MEAN	4.20	16.7	10.3	22.8	19.5	19.8	14.3	106	13.5	11.2	19.2	2.69
MAX	40	132	46	194	160	418	113	1,170	151	72	386	8.8
MIN	0.45	1.1	1.9	1.5	0.83	0.93	0.73	0.65	1.1	1.2	1.2	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

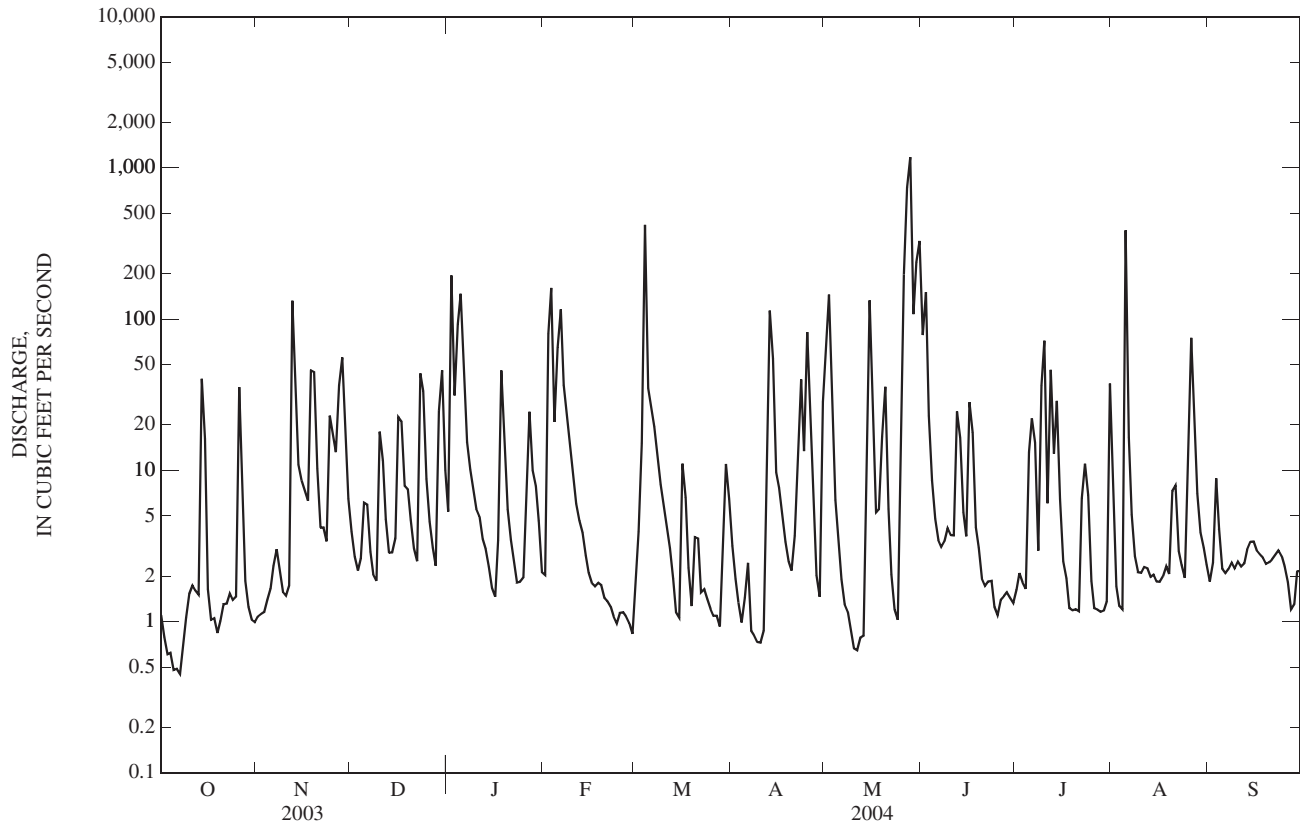
	MEAN	10.2	17.3	27.1	31.9	39.1	33.3	42.7	51.2	9.81	5.14	7.08	16.6
	MAX	27.5	40.7	41.4	71.3	75.2	111	121	106	14.8	11.2	19.2	51.8
	(WY)	(2002)	(2002)	(2002)	(2000)	(2000)	(2002)	(2000)	(2004)	(2003)	(2004)	(2004)	(2002)
	MIN	2.15	8.14	10.3	3.28	12.1	5.00	2.16	4.46	4.09	1.60	1.84	2.69
	(WY)	(2001)	(2001)	(2004)	(2001)	(2002)	(2003)	(2001)	(2000)	(2001)	(2002)	(2002)	(2004)

03294570 MILL CREEK AT ORELL ROAD NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	5,258.39		7,968.02		24.5	
ANNUAL MEAN	14.4		21.8		42.1	
HIGHEST ANNUAL MEAN					13.8	
LOWEST ANNUAL MEAN					1,680	
HIGHEST DAILY MEAN	359	Sep 2	1,170	May 28	1,680	Apr 9, 2000
LOWEST DAILY MEAN	0.45	Oct 7	0.45	Oct 7	0.08	Jan 1, 2000
ANNUAL SEVEN-DAY MINIMUM	0.59	Oct 2	0.59	Oct 2	0.15	Dec 26, 1999
MAXIMUM PEAK FLOW			1,170	May 28	7,430	Mar 26, 2002
MAXIMUM PEAK STAGE			b 14.84	Jun 2	16.53	Feb 19, 2000
10 PERCENT EXCEEDS	35		39		36	
50 PERCENT EXCEEDS	3.5		3.0		2.8	
90 PERCENT EXCEEDS	1.2		1.1		0.74	

e Estimated

b Backwater from Ohio River



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 with telemetry. Datum of gage is 593.39 ft above NGVD of 1929.

REMARKS.--Records good except those estimated, which are fair.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1900	6,800	9.14	May 31	0230	*15,200	*11.53
Mar 6	0015	6,100	8.85	Jul 17	1015	9,740	10.13
May 28	0500	8,010	9.58				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	32	510	301	e181	55	136	118	1,420	22	1,170	25
2	39	28	355	2,600	218	91	106	711	987	19	224	17
3	32	26	293	1,970	1,180	87	94	914	317	17	94	13
4	29	24	305	772	772	147	83	335	208	18	62	11
5	26	25	700	1,820	780	1,020	74	217	166	29	1,260	9.4
6	24	31	722	1,230	2,370	3,190	67	166	123	97	840	8.3
7	21	75	533	542	1,110	1,060	63	132	96	136	194	7.6
8	19	83	434	328	524	417	59	108	79	41	90	7.7
9	17	59	375	254	337	252	55	91	67	26	59	8.7
10	16	46	1,140	200	264	188	50	78	62	43	45	8.1
11	14	40	1,650	168	219	154	47	69.0	58	170	35	7.1
12	14	2,000	893	154	184	130	99	61	75	46.0	28	9.5
13	13	2,430	635	156	159	112	417	57	235	30.0	24	9.1
14	14	641	563	140	142	104	1,300	54	90	368	22	7.7
15	28	387	614	130	129	97	570	867	69	78	19	6.3
16	27	385	1,470	114	113	102	262	337	67	48	16	5.5
17	23	309	e2,000	108	103	101	182	142	71	4,270	14	29
18	24	447	972	e531	95	93	142	111	167	714	12	796
19	22	1,540	630	568	91	82	116	113	174	155	10	183
20	18	1,140	407	288	89	108	101	175	88	71	9.9	77
21	15	548	296	207	84	335	117	111	59	46	10	47
22	13	332	260	173	76	238	692	78	45	36	13	34
23	12	247	361	147	71	144	1,800	61	63	37	48	27
24	11	274	1,080	130	68	118	e1,170	50	40	43	31	21
25	11	269	604	120	64	103	548	60	45	34	22	18
26	46	237	349	303	60	92	376	369	87	23	19	15
27	94	567	256	758	58	84	241	2,060	71	19	30	12
28	64	1,920	209	429	55	78	181	4,130	45	16	24	11
29	66	1,760	194	267	52	78	145	1,000	33	13	21	9.6
30	51	823	909	217	---	191	128	3,140	26	12	18	8.7
31	39	---	533	e197	---	175	---	7,310	---	2,030	29	---
TOTAL	888	16,725	20,252	15,322	9,648	9,226	9,421	23,225.0	5,133	8,707.0	4,492.9	1,449.3
MEAN	28.6	558	653	494	333	298	314	749	171	281	145	48.3
MAX	94	2,430	2,000	2,600	2,370	3,190	1,800	7,310	1,420	4,270	1,260	796
MIN	11	24	194	108	52	55	47	50	26	12	9.9	5.5
CFSM	0.17	3.24	3.80	2.87	1.93	1.73	1.83	4.36	0.99	1.63	0.84	0.28
IN.	0.19	3.62	4.38	3.31	2.09	2.00	2.04	5.02	1.11	1.88	0.97	0.31

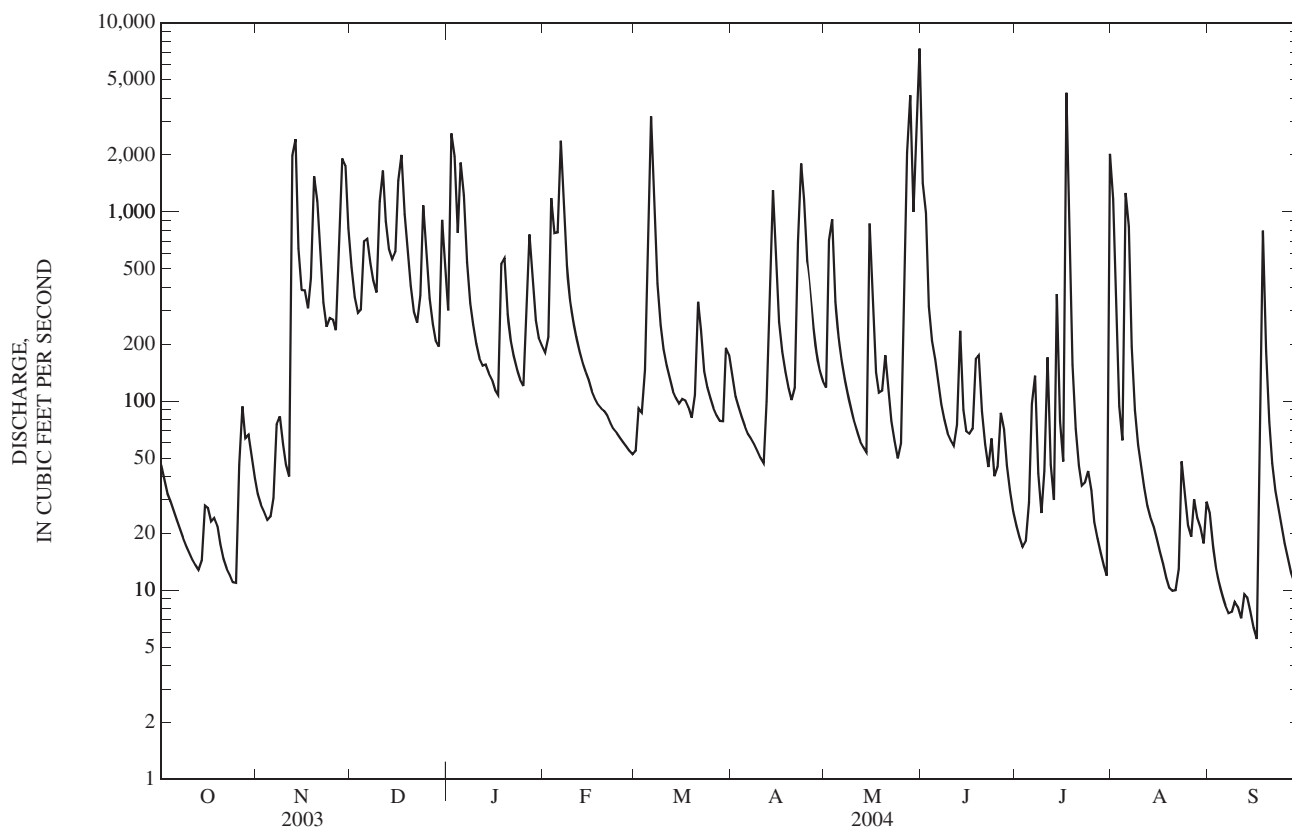
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	71.4	191	363	414	452	545	227	360	275	133	60.2	71.1
MAX	351	558	1,360	675	1,041	1,845	480	925	926	528	145	383
(WY)	(2003)	(2004)	(1991)	(1994)	(2003)	(1997)	(1998)	(1995)	(1997)	(1998)	(2004)	(2003)
MIN	6.13	7.28	29.1	111	124	99.9	71.4	18.4	13.8	4.29	0.53	0.46
(WY)	(1995)	(2000)	(2000)	(2001)	(2002)	(1990)	(1997)	(2000)	(2000)	(2000)	(1999)	(1999)

03295400 SALT RIVER AT GLENSBORO, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	136,838		124,489.2		262	
ANNUAL MEAN	375		340		403	
HIGHEST ANNUAL MEAN					103	
LOWEST ANNUAL MEAN					16,400	
HIGHEST DAILY MEAN	7,000	Feb 16	7,310	May 31	16,400	Mar 2, 1997
LOWEST DAILY MEAN	11	Oct 24	5.5	Sep 16	0.00	Aug 5, 1999
ANNUAL SEVEN-DAY MINIMUM	15	Oct 19	7.6	Sep 10	0.00	Sep 6, 1999
MAXIMUM PEAK FLOW			15,200	May 31	22,000	Mar 2, 1997
MAXIMUM PEAK STAGE			11.53	May 31	12.91	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	2.18		1.98		1.53	
ANNUAL RUNOFF (INCHES)	29.60		26.92		20.73	
10 PERCENT EXCEEDS	949		931		593	
50 PERCENT EXCEEDS	116		100		76	
90 PERCENT EXCEEDS	24		16		5.5	

e Estimated



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 current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 671.98 ft above NGVD of 1929.

REMARKS.--Records fair except for those below 2.0 ft³/s and those estimated, which are poor.

COOPERATION.--City of Simpsonville.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	15	101	109	e99	22	45	209	317	1.9	84	3.4
2	21	14	75	1,150	e287	39	37	1,210	179	1.6	36	1.8
3	16	13	64	338	982	35	32	319	105	1.4	20	1.4
4	15	13	61	326	192	1,340	27	159	74	1.4	33	1.2
5	14	12	84	1,230	303	466	23	105	56	2.0	564	0.98
6	11	13	87	260	838	590	20	74	41	4.5	58	0.84
7	9.7	15	73	152	222	212	19	55	31	8.6	22	0.68
8	8.5	12	65	113	130	121	18	43	23	4.7	12	0.67
9	7.4	10	58	95	100	88	16	33	18	5.5	8.2	0.72
10	6.2	9.8	409	74	84	65	15	31	17	179	6.0	0.66
11	7.9	9.8	286	63	76	55	13	44	14	158	4.2	0.61
12	8.1	1,220	148	60	68	45	15	28	12	42	3.2	0.54
13	7.0	403	105	55	62	37	124	22	22	27	2.4	0.53
14	59	152	92	48	57	36	309	21	20	446	2.0	0.53
15	117	132	74	45	52	32	106	72	13	90	1.5	0.46
16	50	122	138	38	45	47	69	92	11	40	1.2	0.59
17	34	94	203	40	40	57	51	53	12	1,870	0.99	0.93
18	27	441	133	296	36	45	40	42	16	264	0.82	0.99
19	22	566	128	169	35	38	33	203	18	145	0.62	0.87
20	18	189	101	104	36	36	30	287	14	72	0.58	0.81
21	15	118	87	82	33	37	42	98	8.7	42	0.72	0.91
22	13	85	84	69	29	30	94	62	6.5	29	0.62	0.97
23	12	67	e418	56	27	28	390	41	5.2	21	0.56	0.46
24	11	112	e700	49	27	26	221	29	4.1	17	13	0.33
25	10	85	174	e32	24	24	355	33	7.5	12	4.2	0.30
26	23	68	115	e139	22	22	230	719	8.7	9.8	56	0.18
27	43	370	90	e337	20	22	120	1,550	4.6	11	28	0.08
28	26	641	75	e232	19	21	78	2,370	3.5	9.1	9.5	0.04
29	23	263	79	e127	18	24	58	271	2.7	6.8	4.9	0.00
30	19	151	350	e129	---	75	72	1,170	2.2	6.5	16	0.03
31	16	---	151	e139	---	51	---	2,500	---	240	7.4	---
TOTAL	695.8	5,415.6	4,808	6,156	3,963	3,766	2,702	11,945	1,066.7	3,768.8	1,001.61	22.51
MEAN	22.4	181	155	199	137	121	90.1	385	35.6	122	32.3	0.75
MAX	117	1,220	700	1,230	982	1,340	390	2,500	317	1,870	564	3.4
MIN	6.2	9.8	58	32	18	21	13	21	2.2	1.4	0.56	0.00

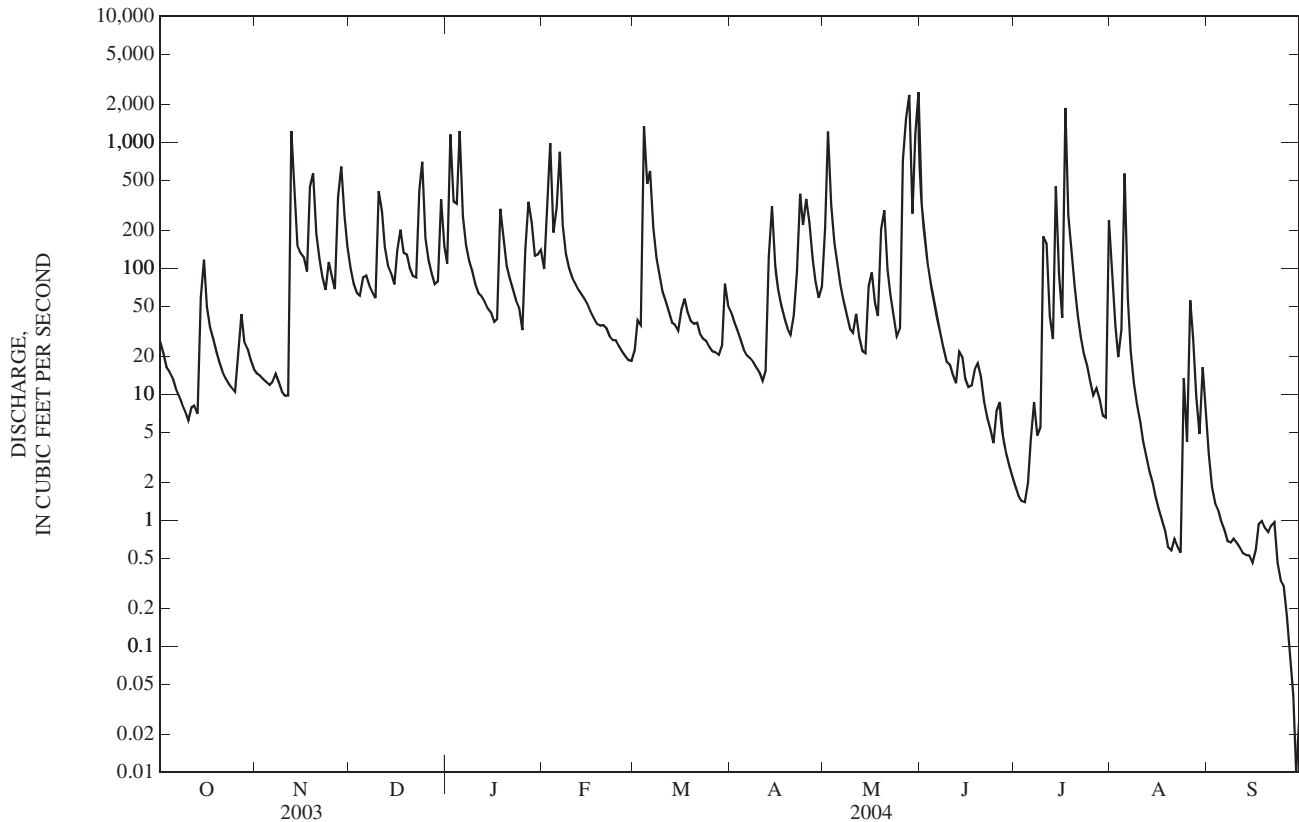
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	32.7	67.5	112	139	170	132	85.3	138	78.3	29.2	18.7	31.8
MAX	152	181	206	211	316	296	142	385	293	122	87.9	142
(WY)	(2003)	(2004)	(2003)	(2002)	(2000)	(2002)	(2003)	(2004)	(1998)	(2004)	(2003)	(2003)
MIN	0.00	0.18	5.20	44.3	67.4	54.2	28.4	2.61	8.99	0.25	0.00	0.00
(WY)	(2000)	(2000)	(1999)	(2001)	(1999)	(2003)	(1999)	(1999)	(2000)	(2001)	(1999)	(1999)

03295702 BULLSKIN CREEK NEAR SIMPSONVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	44,938.3		45,311.02		83.4	
ANNUAL MEAN	123		124		133	
HIGHEST ANNUAL MEAN					31.9	
LOWEST ANNUAL MEAN					3,830	
HIGHEST DAILY MEAN	2,350	Feb 22	2,500	May 31		Feb 18, 2000
LOWEST DAILY MEAN	2.7	Aug 21	0.00	Sep 29	0.00	Aug 25, 1998
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 3	0.14	Sep 24	0.00	Sep 5, 1998
MAXIMUM PEAK FLOW			5,250	May 28	8,990	Feb 18, 2000
MAXIMUM PEAK STAGE			15.24	May 28	21.05	Feb 18, 2000
10 PERCENT EXCEEDS	265		290		163	
50 PERCENT EXCEEDS	43		36		18	
90 PERCENT EXCEEDS	8.0		1.4		0.01	

e Estimated



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 with telemetry and crest-stage gage. Datum of gage is 466.85 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

COOPEARTION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Army Corps of Engineers, Louisville, District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	1100	10,200	18.65	Jul 17	1900	6,770	15.49
May 31	1100	*15,100	*22.21				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	102	682	522	e211	81	220	343	2,580	20	1,230	56
2	145	91	483	2,520	e239	111	191	2,230	2,090	16	432	42
3	125	85	356	2,130	2,730	144	164	1,760	885	13	246	35
4	104	78	314	1,240	1,320	2,190	144	867	574	14	163	36
5	94	73	351	3,570	989	1,920	125	612	376	14	1,680	33
6	85	72	424	1,660	3,050	3,580	110	418	277	27	781	25
7	75	72	374	973	1,590	1,520	102	292	209	683	377	21
8	72	71	341	714	911	872	95	225	158	215	230	19
9	e67	67	307	544	690	633	85	174	121	110	150	16
10	63	61	783	430	533	470	77	139	113	151	104	13
11	61	56	1,630	338	426	349	73	124	106	808	77	14
12	57	410	910	303	359	284	82	128	101	377	59	14
13	50	2,440	685	273	313	237	286	101	85	202	47	12
14	63	792	553	240	282	205	1,180	87	85	1,080	38	11
15	205	591	422	219	257	189	767	119	87	610	31	9.2
16	264	538	422	194	222	202	536	294	76	279	26	8.1
17	176	445	939	176	190	245	396	217	156	5,190	22	13
18	138	443	743	580	177	215	298	166	198	1,850	20	15
19	118	1,670	664	867	161	184	223	190	71	803	22	28
20	102	963	554	e473	153	169	182	713	103	455	21	22
21	87	662	456	e306	146	187	196	369	71	282	19	17
22	76	450	405	e242	132	164	530	223	49	194	18	13
23	65	340	448	e200	118	141	1,350	155	39	145	20	10
24	62	343	1,550	e175	115	132	1,610	115	31	105	18	8.8
25	58	404	967	e163	109	123	1,060	98	213	79	67	7.7
26	85	302	699	e377	101	113	1,130	947	143	63	58	6.4
27	178	492	558	e977	92	107	677	3,660	92	50	123	7.5
28	191	2,280	424	556	86	101	453	7,550	49	44	106	13
29	153	1,680	349	e340	79	108	332	2,020	33	41	117	20
30	147	943	785	e254	---	248	280	1,910	25	37	119	20
31	138	---	662	217	---	274	---	12,000	---	1,170	74	---
TOTAL	3,455	17,016	19,240	21,773	15,781	15,498	12,954	38,246	9,196	15,127	6,495	565.7
MEAN	111	567	621	702	544	500	432	1,234	307	488	210	18.9
MAX	264	2,440	1,630	3,570	3,050	3,580	1,610	12,000	2,580	5,190	1,680	56
MIN	50	56	307	163	79	81	73	87	25	13	18	6.4
CFSM	0.43	2.19	2.40	2.71	2.10	1.93	1.67	4.76	1.18	1.88	0.81	0.07
IN.	0.50	2.44	2.76	3.13	2.27	2.23	1.86	5.49	1.32	2.17	0.93	0.08

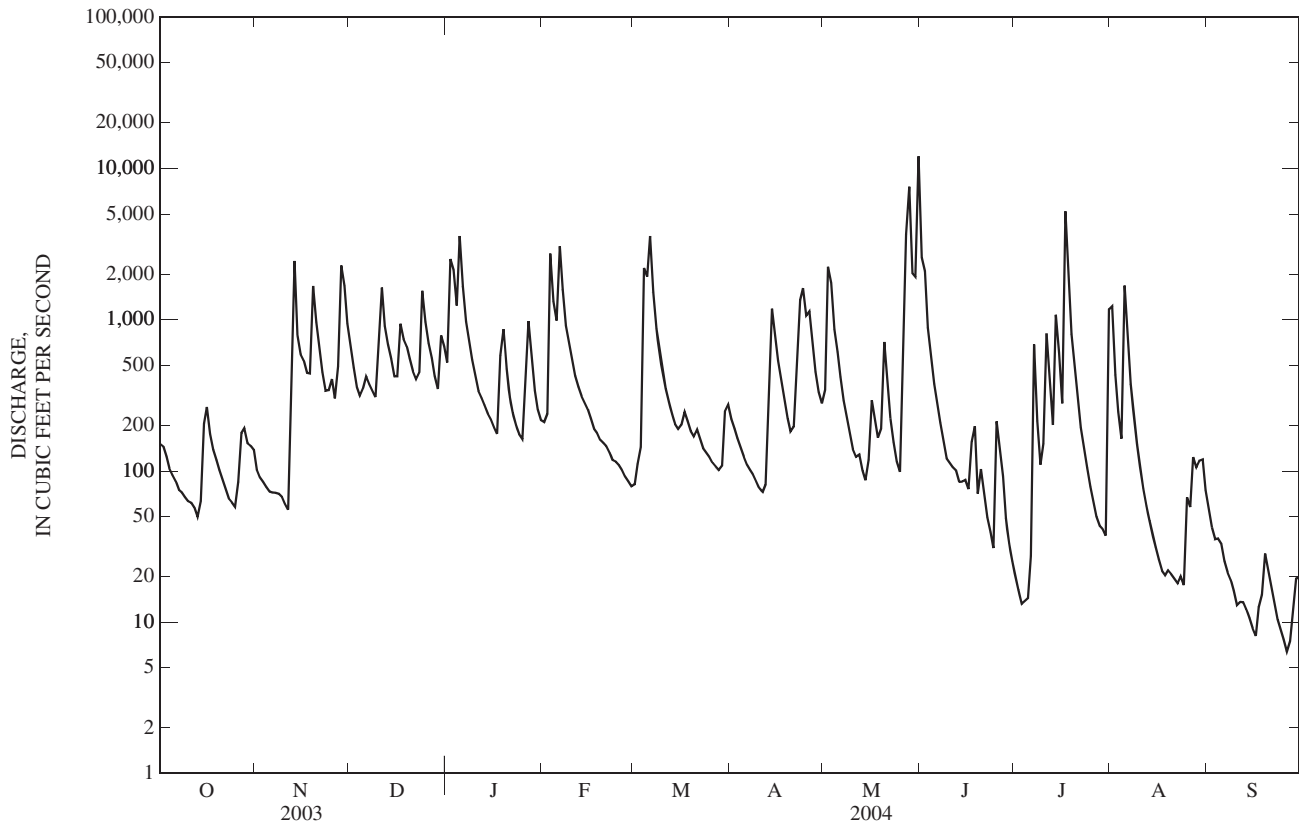
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2004, BY WATER YEAR (WY)

	MEAN	56.6	204	466	552	762	697	440	513	303	110	61.1	51.8
MAX	433	586	1,806	1,140	1,984	3,025	841	1,912	1,318	584	291	659	
(WY)	(2003)	(1986)	(1991)	(1999)	(1989)	(1997)	(1996)	(1983)	(1997)	(1998)	(1992)	(2003)	
MIN	0.01	2.76	51.1	47.0	212	80.5	48.4	37.2	1.90	4.44	0.03	0.00	
(WY)	(1989)	(2000)	(2000)	(1986)	(1992)	(1983)	(1986)	(2000)	(1988)	(1994)	(1983)	(1983)	

03295890 BRASHEARS CREEK AT TAYLORSVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1981 - 2004	
ANNUAL TOTAL	175,704		175,346.7		350	
ANNUAL MEAN	481		479		184	
HIGHEST ANNUAL MEAN					642	
LOWEST ANNUAL MEAN					184	
HIGHEST DAILY MEAN	5,760	Jan 1	12,000	May 31	39,600	Mar 2, 1997
LOWEST DAILY MEAN	22	Jul 8	6.4	Sep 26	0.00	Aug 19, 1983
ANNUAL SEVEN-DAY MINIMUM	32	Jul 3	9.5	Sep 22	0.00	Aug 19, 1983
MAXIMUM PEAK FLOW			15,100	May 31	44,800	Mar 2, 1997
MAXIMUM PEAK STAGE			22.21	May 31	31.54	Mar 2, 1997
INSTANTANEOUS LOW FLOW					0.08	Oct 1, 1994
ANNUAL RUNOFF (CFSM)	1.86		1.85		1.35	
ANNUAL RUNOFF (INCHES)	25.24		25.18		18.36	
10 PERCENT EXCEEDS	1,090		1,140		853	
50 PERCENT EXCEEDS	236		190		98	
90 PERCENT EXCEEDS	60		24		2.4	

e Estimated



03297800 CEDAR CREEK AT HIGHWAY 1442 NEAR SHEPHERDSVILLE, KY

LOCATION.--Lat 37°59'28", long 85°38'28", Bullitt County, Hydrologic Unit 05140102, on upstream side of bridge on Highway 1442, 1.1 mi upstream from Licksillet Creek, 1.4 mi upstream from the mouth, and 4.2 mi east of Shepherdsville, Ky.

DRAINAGE AREA.--12.1 mi².

PERIOD OF RECORD.--April 26, 2002 to current year.

REVISIONS.--Maximum gage heights for water years 2002 and 2003 have been revised to 11.95 and 10.31 because of adjustments to the gage datum.

GAGE.--Water-stage recorder with telemetry and crest-stage. Datum of gage is 410 ft above NGVD of 1929 from topographic map. Gage datum raised 1 ft. beginning in Oct. 1, 2003 based on 2004 level findings.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	15	19	e13.4	4.6	12	26	e168	0.74	20	0.35
2	1.5	1.6	11	160	62	7.2	9.1	147	e110	0.93	9.9	0.24
3	1.2	1.4	9.3	51	121	5.7	7.3	40	29	0.82	6.2	0.24
4	1.2	1.2	16	97	35	17	5.7	25	19	1.6	4.2	0.24
5	1.1	1.2	24	148	90	125	4.8	19	15	15	226	0.23
6	0.93	1.4	20	42	126	78	5.1	14	12	8.5	25	0.19
7	0.83	2.8	14	27	43	30	4.4	11	9.2	3.7	14	0.18
8	0.70	1.4	11	22	28	20	4.0	9.2	7.1	1.8	9.2	0.17
9	0.61	0.96	9.7	19	23	15	3.1	7.5	58	67	6.5	0.21
10	0.67	0.85	75	15	19	11	2.9	6.0	20	34	5.0	0.15
11	0.75	0.96	33	13	16	9.7	2.7	5.0	8.8	15	3.4	0.13
12	0.82	110	20	13	13	7.6	19	4.1	54	79	2.8	0.14
13	0.73	29	15	11	e11	6.5	149	4.0	27	37	2.2	0.12
14	6.5	12	16	9.5	e9.0	6.7	63	4.2	14	63	2.0	0.12
15	6.0	17	15	8.0	e7.8	5.7	26	21	9.3	19	1.5	0.39
16	1.5	13	47	6.7	e6.6	12	17	12	14	12	1.1	0.41
17	1.0	9.2	36	8.2	e6.2	9.3	13	6.5	17	12	0.83	0.43
18	0.90	99	25	55	e5.6	6.9	9.7	5.4	21	10	0.66	0.59
19	0.85	48	23	23	e5.4	5.2	7.9	21	8.2	4.8	0.58	0.50
20	0.71	21	17	e14.5	e5.0	23	7.1	19	4.7	3.5	0.63	0.31
21	0.71	14	14	e12	e4.7	24	54	6.9	3.6	2.6	1.5	0.22
22	0.69	9.7	13	e10	4.1	11	57	4.2	3.7	2.5	0.85	0.15
23	0.68	7.4	46	e9.1	4.1	9.1	159	2.9	3.3	6.9	0.52	0.12
24	0.73	37	47	e8.1	4.0	7.3	52	2.4	2.0	3.2	0.62	0.10
25	0.79	16	25	e8.0	3.2	6.0	80	3.3	4.4	1.9	0.62	0.08
26	13	11	18	e72	3.0	5.3	39	73	3.0	1.8	2.2	0.06
27	8.0	69	15	57	2.8	5.0	25	209	1.5	1.7	2.7	0.04
28	3.4	83	13	26	2.6	4.6	18	e640	1.1	1.2	1.1	0.04
29	2.9	35	32	e17.7	2.5	15	14	e164	0.95	0.90	0.61	0.02
30	2.1	22	60	e16	---	27	21	270	0.80	1.4	0.49	0.02
31	1.6	---	25	e14	---	14	---	e400	---	130	0.44	---
TOTAL	64.80	677.57	760.0	1,011.8	677.0	534.4	891.8	2,182.6	649.65	543.49	353.35	6.19
MEAN	2.09	22.6	24.5	32.6	23.3	17.2	29.7	70.4	21.7	17.5	11.4	0.21
MAX	13	110	75	160	126	125	159	640	168	130	226	0.59
MIN	0.61	0.85	9.3	6.7	2.5	4.6	2.7	2.4	0.80	0.74	0.44	0.02

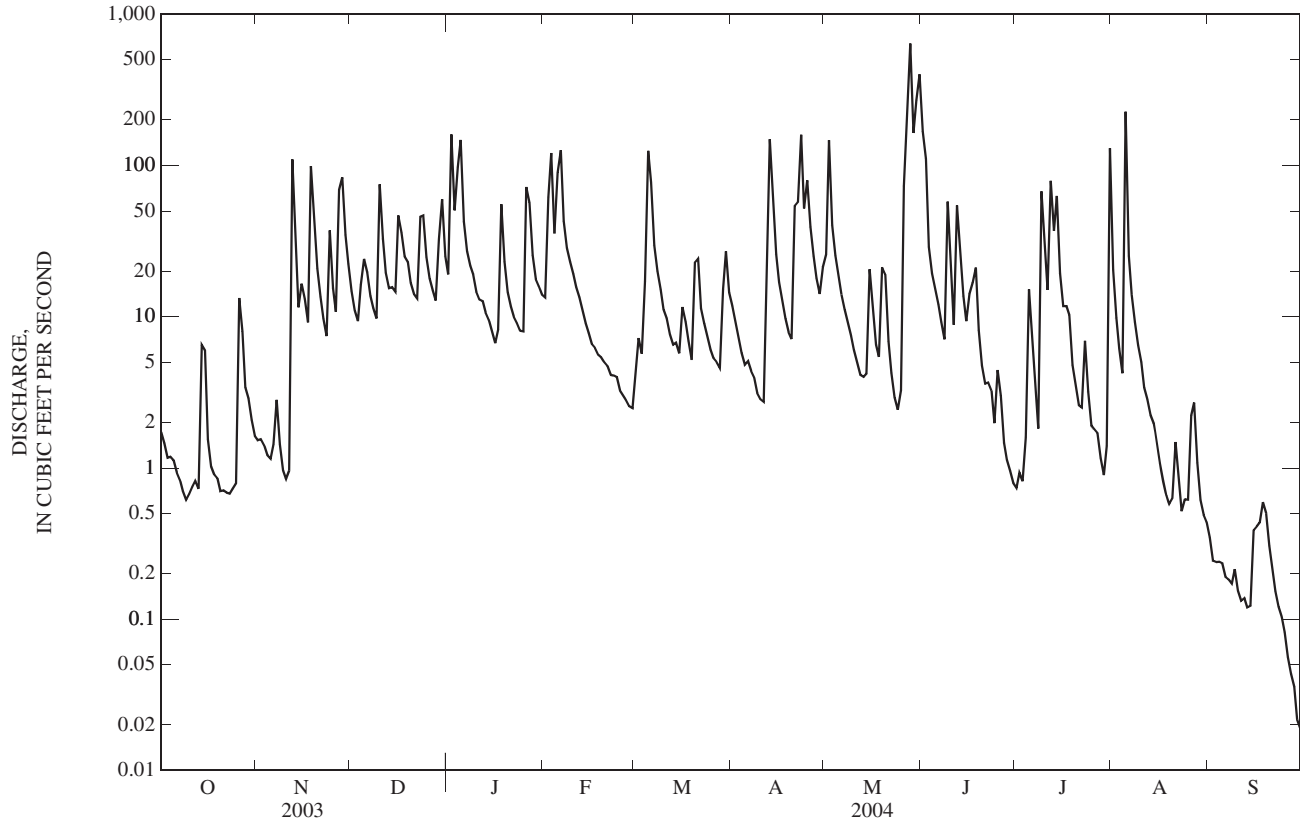
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	8.71	20.1	31.4	28.3	52.9	13.4	26.0	47.3	14.5	7.75	6.41	15.1
MAX	15.3	22.6	38.4	32.6	83.5	17.2	29.7	70.4	21.7	17.5	11.4	27.0
(WY)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)
MIN	2.09	17.6	24.5	23.9	23.3	9.54	22.2	28.9	1.02	0.13	0.01	0.21
(WY)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2004)

03297800 CEDAR CREEK AT HIGHWAY 1442 NEAR SHEPHERDSVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	8,283.58		8,352.65		23.7	
ANNUAL MEAN	22.7		22.8		24.6	
HIGHEST ANNUAL MEAN					22.8	
LOWEST ANNUAL MEAN					2003	
HIGHEST DAILY MEAN	659	Feb 23	640	May 28	758	Apr 28, 2002
LOWEST DAILY MEAN	0.13	Aug 28	0.02	Sep 29	0.00	Aug 13, 2002
ANNUAL SEVEN-DAY MINIMUM	0.29	Jul 24	0.05	Sep 24	0.00	Aug 13, 2002
MAXIMUM PEAK FLOW			2,170	May 28	2,260	May 6, 2002
MAXIMUM PEAK STAGE			12.26	Jun 1	12.26	Jun 1, 2004
10 PERCENT EXCEEDS	47		57		54	
50 PERCENT EXCEEDS	7.7		8.1		7.6	
90 PERCENT EXCEEDS	0.79		0.62		0.73	

e Estimated



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 with telemetry. Datum of gage is 599.892 ft above NGVD of 1929.

REMARKS.--Records fair except for discharges below 5.0 ft³/s and those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1800	5,210	16.77	May 31	0900	6,480	18.61
May 28	0900	*8,090	*20.52	Jul 17	1400	5,050	16.51

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	12	127	139	e80	26	78	e305	424	3.4	141	4.1
2	36	11	96	1,210	e339	61	61	e2,100	232	3.6	29	2.5
3	22	11	76	449	e1,690	49	50	e470	112	3.5	12	2.1
4	17	9.7	73	502	&229	e2,350	41	190	63	3.2	7.3	1.9
5	14	9.0	124	e1,460	e445	e742	34	122	41	3.1	516	1.7
6	11	9.2	153	e339	e1,400	e942	30	88	30	6.2	83	1.4
7	9.8	11	94	e174	&240	e306	28	64	23	10	20	1.3
8	9.5	11	79	e139	&186	136	26	48	19	5.4	9.8	1.3
9	9.3	8.8	68	e104	&143	102	21	37	17	23	6.2	1.3
10	9.0	7.9	449	&94	&117	78	19	28	19	366	4.5	1.2
11	9.2	7.3	500	e68	&111	65	18	40	12	561	3.5	1.2
12	8.9	2,060	185	73	&96	54	21	21	12	36	2.8	1.1
13	8.9	798	123	65	&92	45	e187	17	18	14	2.4	1.1
14	196	199	108	&54	&87	41	e458	15	12	944	2.1	1.1
15	e103	148	89	&50	&85	40	e152	82	9.9	147	2.0	1.1
16	e55	152	147	41	e70	61	112	112	9.3	32	1.8	1.1
17	e36	105	359	41	e50	98	76	48	8.1	2,420	1.7	1.1
18	e29	307	154	e516	e44	63	57	66	7.3	351	1.5	1.1
19	e22	1,110	189	e221	42	51	45	76	11	212	1.4	1.1
20	e17	262	136	e127	44	44	38	693	9.5	58	1.4	1.1
21	e13	138	114	&112	45	55	42	121	7.2	24	1.7	1.1
22	e11	98	110	&80	39	44	153	61	5.9	15	1.7	1.0
23	e9.3	74	391	&71	34	38	e576	34	4.9	10	1.4	1.0
24	e8.2	267	835	&66	33	37	e293	21	4.4	7.9	1.4	1.0
25	e7.2	160	252	&53	31	33	e540	40	4.1	5.9	1.4	1.0
26	e22	100	151	&58	26	30	e316	1,500	3.8	17	2.2	1.0
27	e47	373	116	e256	24	29	120	2,140	3.5	10	5.0	1.0
28	e27	1,000	95	&138	22	29	81	4,130	3.4	7.1	3.3	1.0
29	e24	403	100	e127	21	31	60	391	3.2	5.1	17	1.0
30	e18	193	774	e91	---	169	71	447	3.2	4.1	113	1.0
31	e14	---	227	e91	---	95	---	3,850	---	455	10	---
TOTAL	871.3	8,054.9	6,494	7,009	5,865	5,944	3,804	17,357	1,132.7	5,763.5	1,007.5	40.0
MEAN	28.1	268	209	226	202	192	127	560	37.8	186	32.5	1.33
MAX	196	2,060	835	1,460	1,690	2,350	576	4,130	424	2,420	516	4.1
MIN	7.2	7.3	68	41	21	26	18	15	3.2	3.1	1.4	1.0
CFSM	0.35	3.36	2.62	2.83	2.53	2.40	1.59	7.01	0.47	2.33	0.41	0.02
IN.	0.41	3.75	3.02	3.26	2.73	2.77	1.77	8.08	0.53	2.68	0.47	0.02

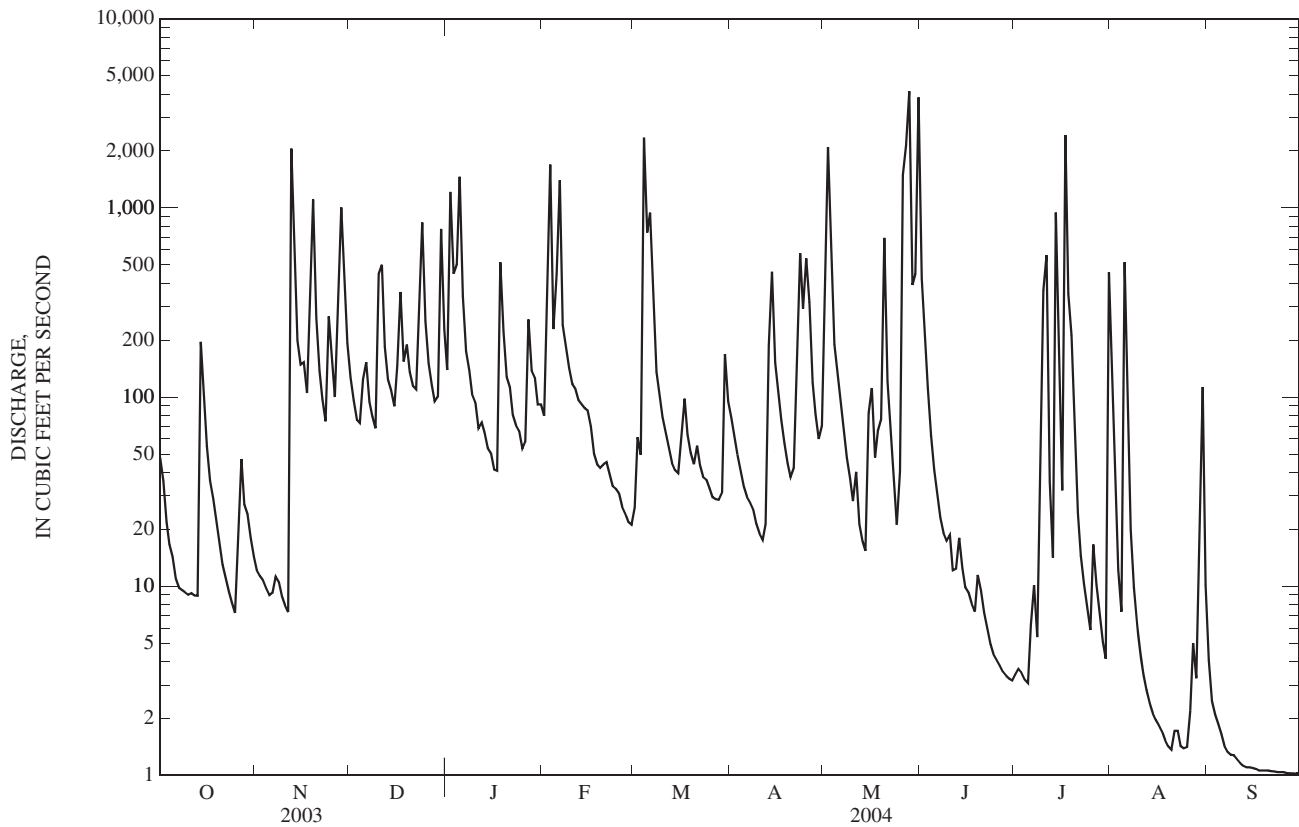
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	29.4	80.0	146	206	192	242	137	194	124	39.1	33.7	35.2
MAX	132	268	331	320	448	958	306	560	381	186	149	215
(WY)	(2003)	(2004)	(1997)	(1996)	(2000)	(1997)	(1996)	(2004)	(1997)	(2004)	(2003)	(2003)
MIN	1.03	3.14	35.8	46.9	43.3	79.0	27.8	12.1	4.07	1.89	0.86	0.09
(WY)	(2000)	(1992)	(1999)	(2001)	(1992)	(2001)	(2001)	(1999)	(1991)	(1991)	(1999)	(1999)

03297900 FLOYDS FORK NEAR PEWEE VALLEY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	68,388.48		63,342.9		120	
ANNUAL MEAN	187		173		198	
HIGHEST ANNUAL MEAN					57.5	
LOWEST ANNUAL MEAN					10,500	
HIGHEST DAILY MEAN	2,890	Sep 2	4,130	May 28	18,800	Mar 2, 1997
LOWEST DAILY MEAN	0.86	Aug 21	1.0	Sep 22	0.00	Sep 2, 1999
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 16	1.0	Sep 22	0.01	Sep 23, 1999
MAXIMUM PEAK FLOW			8,090	May 28	28.60	Mar 2, 1997
MAXIMUM PEAK STAGE			20.52	May 28	1.51	
ANNUAL RUNOFF (CFSM)	2.35		2.17		20.47	
ANNUAL RUNOFF (INCHES)	31.84		29.49		234	
10 PERCENT EXCEEDS	497		409		31	
50 PERCENT EXCEEDS	63		43		2.1	
90 PERCENT EXCEEDS	7.4		1.9			

e Estimated



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.

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 with telemetry. Datum of gage is 542.60 ft above NGVD of 1929, from benchmark elevation supplied by Park Aerial Survey.

REMARKS.--Records fair except for discharges below 2.0 ft³/s and those estimated, which are poor. Diversions by local golf course for irrigation.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 16.8 ft, from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	1205	*7,750	*11.38	Jul 17	0845	6,430	10.65
May 31	0450	7,170	11.09				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	34	228	261	e159	45	138	523	634	3.1	285	13
2	87	31	169	1,960	350	97	111	2,020	407	3.7	90	3.3
3	59	29	138	732	1,670	126	95	634	264	8.5	43	1.8
4	46	27	130	827	523	2,140	83	320	184	7.9	50	1.4
5	39	26	198	2,100	569	800	71	204	135	10	646	1.2
6	33	28	253	621	1,510	942	60	144	104	18	176	1.0
7	27	32	162	376	601	444	53	105	91	122	62	0.79
8	25	33	138	262	342	266	51	87	77	39	32	0.75
9	23	29	122	214	250	195	44	64	69	81	17	0.74
10	22	27	689	168	206	152	38	99	81	948	10	0.56
11	22	25	727	136	183	124	35	101	57	872	4.5	0.34
12	21	2,130	335	135	157	108	52	65	56	e209	2.5	0.22
13	20	991	220	121	144	92	622	59	89	101	1.8	0.22
14	181	330	192	106	126	84	1,090	50	57	1,070	1.4	0.42
15	485	255	162	100	113	81	389	302	42	e316	1.2	0.77
16	153	261	279	88	97	130	207	293	100	153	0.91	0.85
17	90	177	559	94	89	174	142	140	68	4,030	0.79	0.80
18	64	742	305	e840	e85	118	109	161	40	630	0.66	0.67
19	51	1,340	351	460	e77	98	92	402	68	403	0.49	0.68
20	43	449	253	229	79	90	82	910	55	161	0.42	0.61
21	35	250	197	172	79	104	142	269	34	88	1.1	0.62
22	29	173	186	142	71	88	295	148	26	54	1.5	0.41
23	26	131	675	115	61	78	803	97	21	44	1.4	0.33
24	24	438	1,080	106	59	71	514	68	17	31	1.3	0.36
25	24	297	444	e87	52	64	558	187	e15	21	1.1	0.33
26	61	177	280	e195	45	57	455	1,800	e13	47	17	0.55
27	126	640	205	499	40	55	224	2,850	e11	50	28	0.81
28	78	1,350	169	e292	37	53	147	4,990	e7.0	25	14	1.3
29	56	635	254	e189	34	77	114	643	e3.8	15	18	2.0
30	47	351	1,040	e189	---	277	148	1,430	3.6	10	140	2.0
31	38	---	413	e201	---	175	---	4,310	---	623	46	---
TOTAL	2,137	11,438	10,553	12,017	7,808	7,405	6,964	23,475	2,829.4	10,194.2	1,695.07	38.83
MEAN	68.9	381	340	388	269	239	232	757	94.3	329	54.7	1.29
MAX	485	2,130	1,080	2,100	1,670	2,140	1,090	4,990	634	4,030	646	13
MIN	20	25	122	87	34	45	35	50	3.6	3.1	0.42	0.22
CFSM	0.50	2.76	2.47	2.81	1.95	1.73	1.68	5.49	0.68	2.38	0.40	0.01
IN.	0.58	3.08	2.84	3.24	2.10	2.00	1.88	6.33	0.76	2.75	0.46	0.01

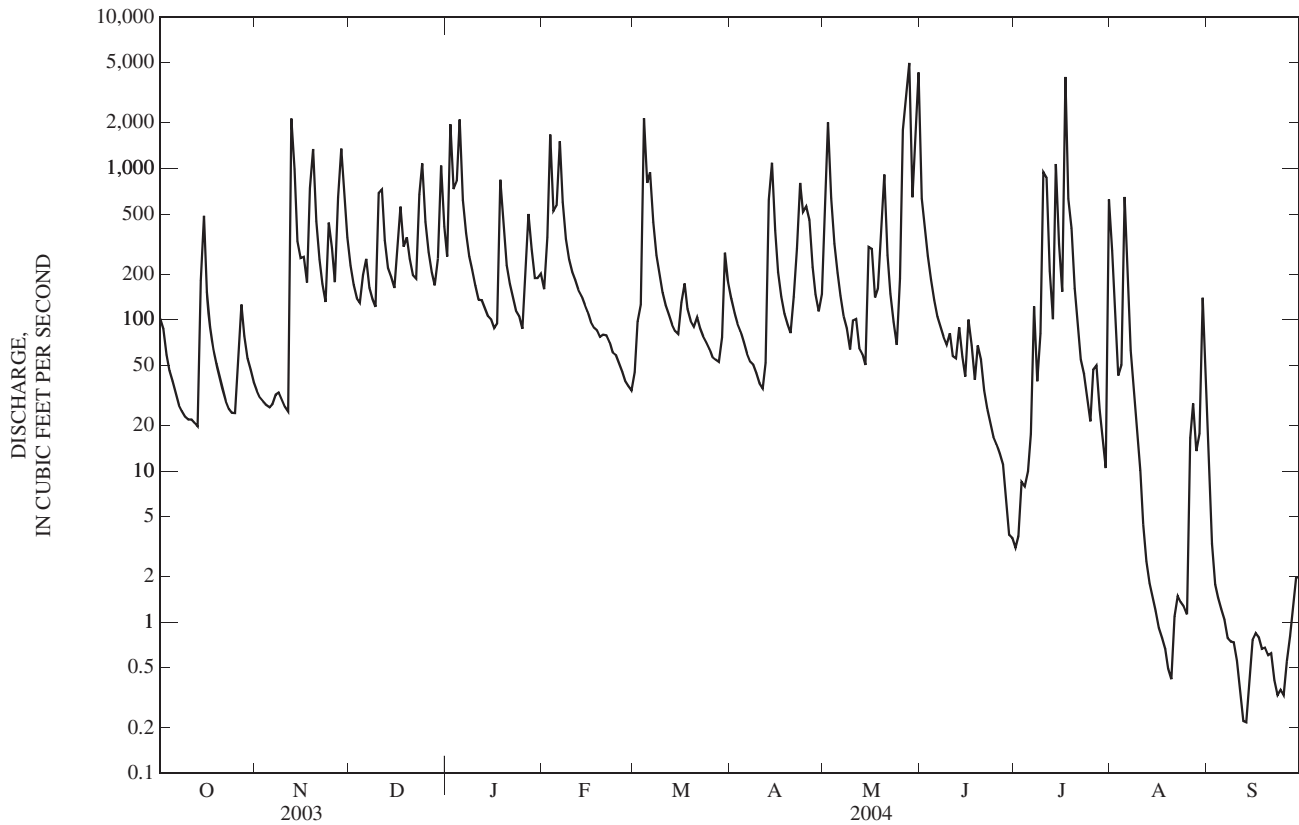
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	37.5	112	237	297	365	395	276	225	131	67.5	45.8	44.8
MAX	423	485	1,025	1,252	990	1,639	1,021	971	622	331	290	1,020
(WY)	(1978)	(1974)	(1991)	(1950)	(1956)	(1997)	(1970)	(1983)	(1997)	(1973)	(1979)	(1979)
MIN	0.00	0.00	0.00	3.54	12.4	40.3	34.0	12.2	0.90	1.73	0.05	0.00
(WY)	(1949)	(1954)	(1954)	(1977)	(1954)	(1954)	(1959)	(1965)	(1988)	(1954)	(1962)	(1948)

03298000 FLOYDS FORK AT FISHERVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	104,690		96,554.50		185	
ANNUAL MEAN	287		264		382	
HIGHEST ANNUAL MEAN					29.0	
LOWEST ANNUAL MEAN					20,000	
HIGHEST DAILY MEAN	3,680	Feb 22	4,990	May 28	42,100	Mar 2, 1997
LOWEST DAILY MEAN	10	Jul 6	0.22	Sep 12	0.00	Sep 7, 1945
ANNUAL SEVEN-DAY MINIMUM	11	Jul 2	0.46	Sep 20	0.00	Sep 7, 1945
MAXIMUM PEAK FLOW			7,750	May 28	42,100	Mar 2, 1997
MAXIMUM PEAK STAGE			11.38	May 28	17.39	Mar 2, 1997
INSTANTANEOUS LOW FLOW			0.20	Sep 12	0.00	Sep 7, 1945
ANNUAL RUNOFF (CFSM)	2.08		1.91		1.34	
ANNUAL RUNOFF (INCHES)	28.22		26.03		18.24	
10 PERCENT EXCEEDS	717		636		383	
50 PERCENT EXCEEDS	126		97		37	
90 PERCENT EXCEEDS	22		1.5		0.53	

e Estimated



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, near Jeffersontown.

DRAINAGE AREA.--5.47 mi².

PERIOD OF RECORD.--May 5, 1993 to February 26, 1998; January 19, 1999 to current year.

GAGE.--Water-stage recorder with telemetry.

REMARKS.--Records good except for estimated records which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2200	*1,290	*6.35				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.3	2.9	4.6	10	e2.7	8.7	4.5	21	17	0.77	4.4	2.6
2	2.4	2.9	3.7	107	e13	3.5	3.3	62	15	0.73	3.0	2.0
3	e2.2	3.2	3.1	16	e18	24	2.8	11	7.3	0.65	2.3	1.8
4	e2.0	4.9	5.8	65	e7.5	116	2.4	6.6	5.7	0.87	14	1.3
5	e1.9	48	9.0	44	e16	51	2.2	4.9	4.7	19	12	0.98
6	e1.8	12	4.7	12	e15	20	2.0	3.8	4.0	57	2.9	0.84
7	e1.6	5.9	3.5	7.6	e11	8.7	2.0	3.1	3.4	9.6	2.4	0.80
8	e1.5	4.3	3.0	5.9	e8.9	5.7	1.9	2.6	3.0	3.0	1.9	0.85
9	1.2	3.9	2.7	5.9	e7.2	4.6	1.6	2.3	23	18	1.5	0.77
10	38	51	47	4.6	e5.7	3.7	1.5	2.0	5.6	33	1.3	0.71
11	106	15	11	4.0	e5.0	3.2	1.5	2.0	3.4	8.4	0.99	0.66
12	9.9	6.7	5.6	3.8	e4.3	2.7	24	1.7	19	3.7	0.89	0.62
13	5.3	4.8	4.4	e3.3	e4.5	2.4	77	3.6	5.8	42	0.78	0.64
14	3.6	3.9	6.0	e3.1	e4.1	2.4	27	11	3.4	19	0.70	0.53
15	2.9	8.7	5.6	e3.1	e3.5	2.2	8.3	57	5.1	3.9	0.66	0.47
16	2.4	5.4	17	e3.1	e3.1	16	5.8	7.9	17	4.5	0.63	0.46
17	2.0	3.7	8.2	e6.5	e2.9	4.2	4.7	3.8	4.5	133	0.62	0.51
18	1.6	2.9	10	e13	e2.7	3.1	3.7	11	2.9	7.7	0.53	0.46
19	4.1	3.5	7.8	e7.5	e2.6	2.5	3.0	9.9	4.2	4.5	0.51	0.42
20	6.3	2.6	5.1	e5.2	2.6	5.0	2.7	5.3	2.3	3.4	4.8	0.38
21	2.1	e4.1	4.3	e3.6	2.3	3.3	23	2.6	2.0	2.7	3.4	0.42
22	1.8	3.5	3.9	e3.2	2.1	2.4	11	2.1	2.1	2.7	1.2	0.37
23	1.3	2.9	55	e3.1	2.1	2.2	44	2.0	1.4	3.2	0.79	0.37
24	1.3	32	17	e3.3	2.0	2.1	8.2	3.8	1.1	2.2	0.81	0.36
25	5.6	5.4	8.1	e3.5	1.7	1.8	36	93	0.93	1.6	0.92	0.37
26	2.3	3.8	5.6	e8.5	1.5	1.8	8.6	59	0.86	38	35	0.53
27	1.7	46	4.5	e9.5	1.5	1.8	5.2	149	0.78	3.6	4.2	0.59
28	12	46	3.9	e6.1	1.4	1.8	4.0	103	0.76	2.6	2.4	0.58
29	27	11	38	e4.6	1.4	19	3.2	13	0.72	2.2	23	0.57
30	7.2	6.4	21	e3.6	---	9.8	22	117	0.80	12	22	0.66
31	3.9	---	7.9	e3.5	---	6.2	---	110	---	27	3.8	---
TOTAL	266.2	357.3	337.0	383.1	156.3	341.8	347.1	887.0	167.75	470.52	154.33	22.62
MEAN	8.59	11.9	10.9	12.4	5.39	11.0	11.6	28.6	5.59	15.2	4.98	0.75
MAX	106	51	55	107	18	116	77	149	23	133	35	2.6
MIN	1.2	2.6	2.7	3.1	1.4	1.8	1.5	1.7	0.72	0.65	0.51	0.36

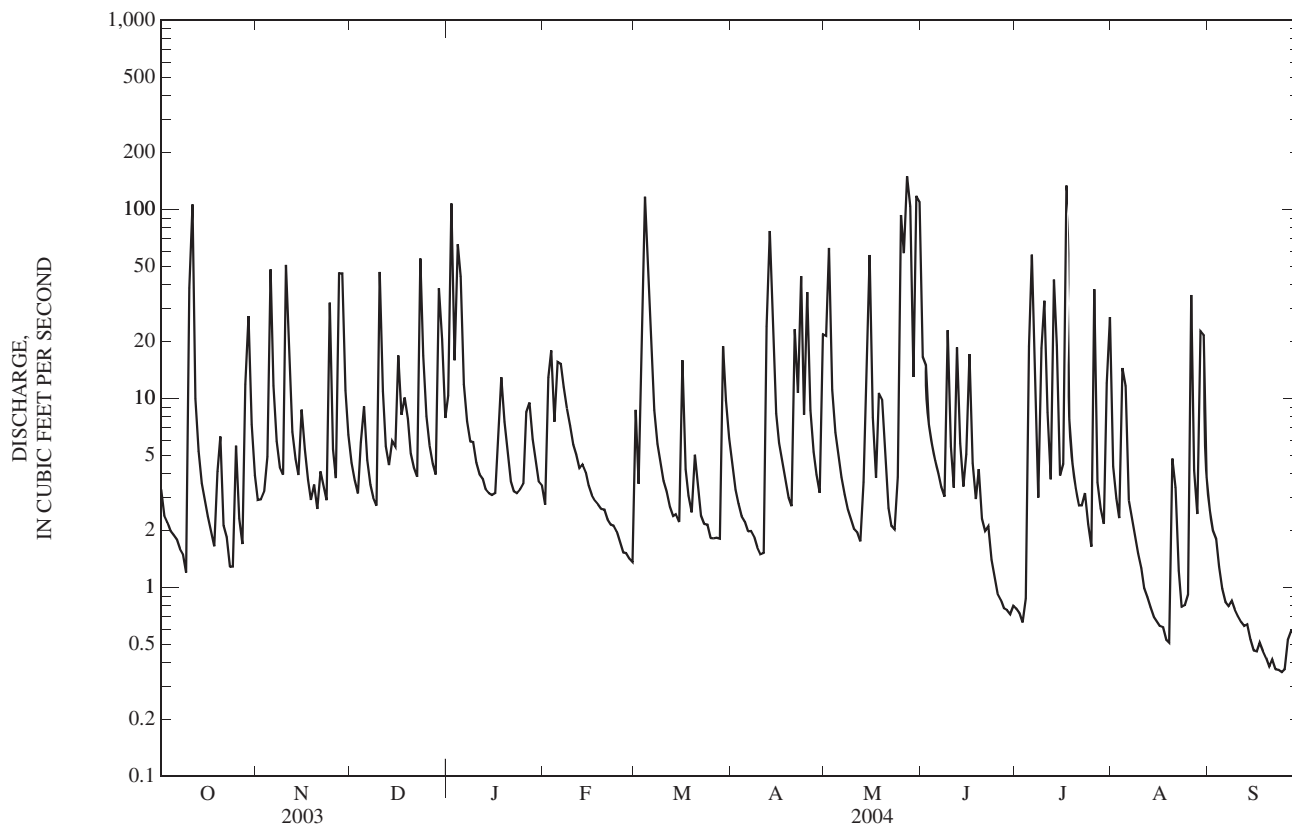
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	7.83	8.35	15.4	10.5	11.9	11.3	12.3	13.7	6.64	4.26	3.87	6.65
MEAN												
MAX	14.3	15.3	26.0	17.6	21.5	25.6	22.8	28.6	12.3	15.2	10.1	15.1
(WY)	(2002)	(2002)	(2002)	(2002)	(2000)	(2002)	(2002)	(2004)	(1999)	(2004)	(2003)	(2003)
MIN	2.36	1.80	8.57	2.94	5.39	4.56	2.45	3.40	1.44	0.80	0.47	0.31
(WY)	(2001)	(2000)	(2000)	(2001)	(2004)	(2001)	(2001)	(2000)	(2001)	(1999)	(1999)	(1999)

03298135 CHENOWETH RUN AT RUCKRIEGAL PARKWAY NEAR JEFFERSONTOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	4,104.24		3,891.02		9.69	
ANNUAL MEAN	11.2		10.6		14.5	
HIGHEST ANNUAL MEAN					4.37	
LOWEST ANNUAL MEAN					402	
HIGHEST DAILY MEAN	137	Sep 2	149	May 27	402	Feb 18, 2000
LOWEST DAILY MEAN	0.80	Aug 25	0.36	Sep 24	0.02	Jul 17, 2000
ANNUAL SEVEN-DAY MINIMUM	1.1	Jun 29	0.38	Sep 19	0.03	Jul 21, 2000
MAXIMUM PEAK FLOW			1,290	May 25	4,680	Mar 1, 1997
MAXIMUM PEAK STAGE					6.35	May 25, 2004
10 PERCENT EXCEEDS	29		24		20	
50 PERCENT EXCEEDS	4.3		3.7		2.8	
90 PERCENT EXCEEDS	1.3		0.80		0.51	

e Estimated



03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY

LOCATION.--Lat 38°09'36", long 85°32'32", Jefferson County, Hydrologic Unit 05140102, at bridge on Gelhaus Lane, 100 ft above Razor Branch, near Fern Creek, and at mile 2.3.

DRAINAGE AREA.--11.6 mi².

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

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

REMARKS.--Records good except for periods of estimated records which are poor. Diversions by a package treatment plant about 2.0 miles upstream.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 4	0145	*1,670	*8.93	May 25	2220	1,510	8.53

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	8.8	22	26	19	22	26	81	38	e2.1	11	6.4
2	10	8.7	18	219	87	17	20	218	47	e2.1	7.6	5.8
3	8.9	8.9	15	50	129	43	18	48	17	e2.0	6.4	5.5
4	9.1	9.2	20	138	43	352	16	24	12	e1.7	17	5.0
5	8.3	9.2	29	136	100	160	15	17	10	e23	22	4.6
6	8.2	11	21	45	97	106	14	13	8.8	e90	7.7	4.4
7	8.2	10	16	33	46	56	15	11	7.8	e10	6.3	4.6
8	7.9	9.0	15	27	34	39	14	9.6	7.0	6.9	5.6	4.6
9	7.9	8.4	14	25	30	32	13	8.2	41	25	5.4	4.6
10	9.1	8.5	87	21	26	26	13	8.3	16	29	5.3	4.3
11	8.7	8.7	39	19	23	23	13	8.2	8.6	15	5.0	4.1
12	8.7	136	26	18	21	19	52	7.5	e7.1	8.4	4.8	4.1
13	9.1	32	20	17	18	17	183	9.0	e7.0	6.8	4.7	4.0
14	63	18	23	15	17	16	107	11	e5.4	25	4.4	4.0
15	18	30	22	14	16	15	45	110	e7.3	10	4.2	3.9
16	11	20	43	13	14	46	34	23	e27	8.5	4.3	3.9
17	9.8	16	34	29	14	26	28	11	e10	192	4.4	4.1
18	9.1	143	33	80	13	19	23	49	7.3	19	4.2	3.9
19	8.6	55	32	34	13	16	20	34	7.1	11	4.3	3.7
20	8.4	29	24	24	13	20	20	17	4.7	8.2	8.0	3.7
21	8.8	21	20	20	12	19	62	9.3	4.1	6.8	7.8	3.8
22	8.5	17	19	18	12	15	51	6.9	4.0	6.2	5.1	3.7
23	8.4	14	112	15	11	14	154	5.7	3.9	6.8	4.7	3.4
24	8.2	64	55	15	11	14	56	12	3.5	5.7	4.9	3.6
25	8.1	25	33	16	11	13	121	159	3.5	5.0	5.3	3.6
26	36	18	26	53	11	13	56	144	3.2	40	41	3.7
27	14	96	21	62	10	13	39	284	2.7	7.6	9.8	3.8
28	11	105	18	33	10	13	31	233	3.3	6.3	6.4	3.8
29	11	41	72	27	10	48	26	32	3.4	5.6	29	3.9
30	9.5	29	64	23	---	44	68	269	e2.8	12	31	3.9
31	9.1	---	32	26	---	29	---	240	---	47	8.5	---
TOTAL	382.6	1,009.4	1,025	1,291	871	1,305	1,353	2,112.7	330.5	644.7	296.1	126.4
MEAN	12.3	33.6	33.1	41.6	30.0	42.1	45.1	68.2	11.0	20.8	9.55	4.21
MAX	63	143	112	219	129	352	183	284	47	192	41	6.4
MIN	7.9	8.4	14	13	10	13	13	5.7	2.7	1.7	4.2	3.4

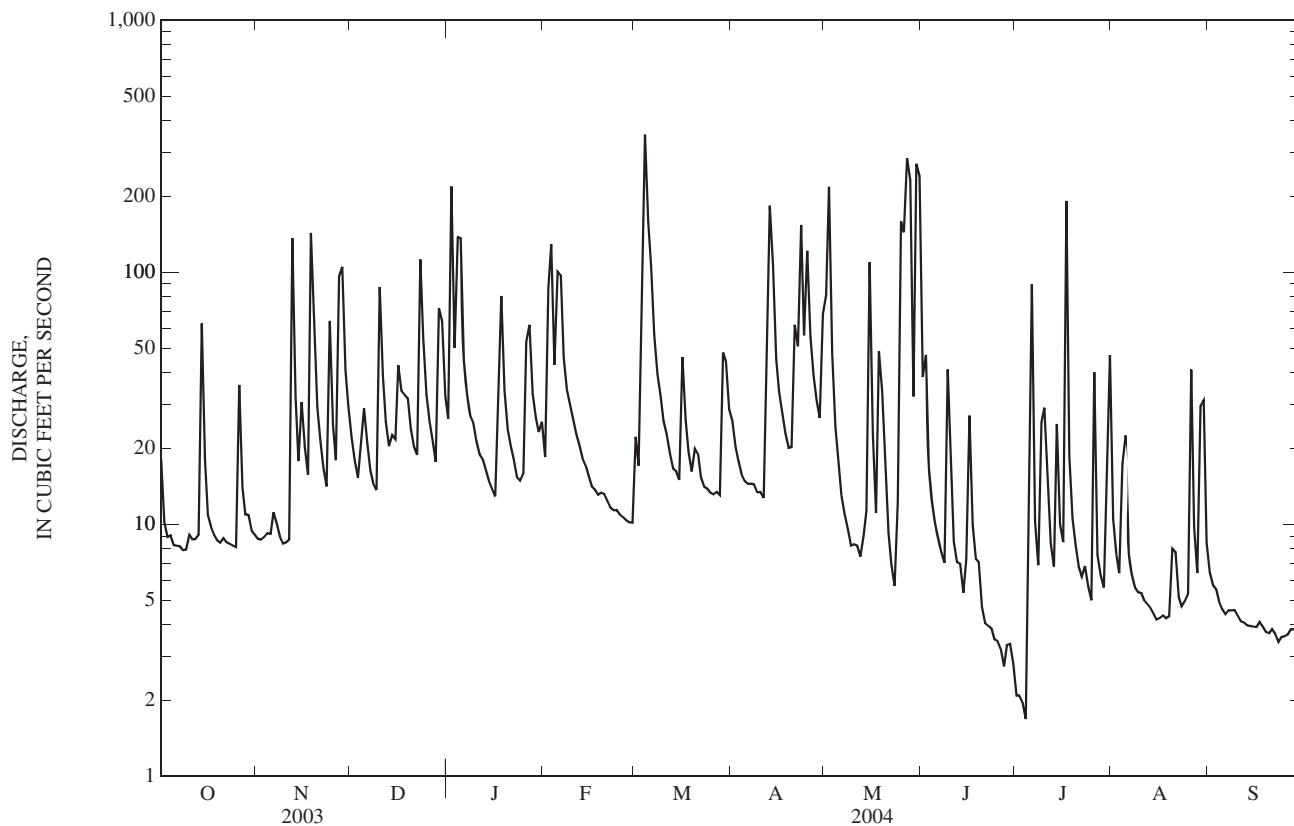
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	12.6	17.3	30.1	33.4	33.3	43.7	34.0	33.5	26.7	11.0	10.4	14.4
MEAN	12.6	17.3	30.1	33.4	33.3	43.7	34.0	33.5	26.7	11.0	10.4	14.4
MAX	26.3	33.6	47.5	54.1	54.3	119	57.7	68.2	73.4	20.8	20.7	30.2
(WY)	(2003)	(2004)	(2003)	(1999)	(2000)	(1997)	(2002)	(2004)	(1997)	(2004)	(2003)	(2003)
MIN	3.81	7.23	15.6	9.24	17.4	15.7	9.17	11.3	9.29	5.52	4.76	3.73
(WY)	(1998)	(2000)	(1999)	(2001)	(2002)	(2001)	(2001)	(1999)	(2001)	(2002)	(1999)	(1999)

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	10,219.2		10,747.4		25.0	
ANNUAL MEAN	28.0		29.4		32.3	
HIGHEST ANNUAL MEAN					13.7	
LOWEST ANNUAL MEAN					1,590	
HIGHEST DAILY MEAN	326	Jan 1	352	Mar 4	1,590	Mar 1, 1997
LOWEST DAILY MEAN	5.6	Jul 5	1.7	Jul 4	1.7	Jul 4, 2004
ANNUAL SEVEN-DAY MINIMUM	6.7	Jun 29	2.5	Jun 28	2.3	Mar 4, 2000
MAXIMUM PEAK FLOW			1,670	Mar 4	4,810	Mar 2, 1997
MAXIMUM PEAK STAGE					8.93	Mar 4, 2004
10 PERCENT EXCEEDS	64		63		49	
50 PERCENT EXCEEDS	13		15		10	
90 PERCENT EXCEEDS	7.6		4.3		4.3	

e Estimated



03298200 FLOYDS FORK AT BARDSTOWN ROAD NEAR MOUNT WASHINGTON, KY

LOCATION.--Lat 38°05'07", long 85°33'18", Jefferson County, Hydrologic Unit 05140102, on right downstream side of bridge on U.S. Highway 31E, 0.2 mi below Old Mans Run, 2.0 mi north of Mount Washington, and 18.7 miles above the mouth.

DRAINAGE AREA.--213 mi².

PERIOD OF RECORD.--November 2000 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 457.23 ft above NGVD of 1929.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	67	340	376	327	109	247	599	1,020	24	512	63
2	105	64	265	3,310	487	167	208	3,790	1,120	23	191	47
3	82	61	224	1,060	2,730	240	177	1,000	412	22	113	40
4	68	60	215	941	731	4,030	154	500	296	24	87	36
5	60	59	283	3,950	749	1,470	136	358	235	29	632	33
6	54	59	342	813	2,470	1,610	126	274	193	115	282	30
7	49	63	255	499	815	622	119	216	162	204	122	28
8	45	61	218	385	488	417	114	175	140	75	82	26
9	42	60	196	e305	391	324	107	147	597	126	66	25
10	41	57	874	e256	338	264	97	370	195	420	56	24
11	40	55	1,060	e225	e294	224	93	292	103	1,440	49	23
12	39	2,270	446	e212	e259	196	134	165	195	225	44	21
13	35	2,300	325	e194	e235	170	1,000	126	147	116	39	20
14	148	423	e258	e181	e215	159	1,750	117	104	1,260	36	18
15	539	351	e221	e167	e195	152	559	463	79	415	33	18
16	203	350	399	157	e177	228	347	451	255	156	31	19
17	126	265	678	158	e163	276	258	259	199	5,970	29	18
18	98	1,240	415	1,070	e153	211	208	249	94	1,040	27	17
19	85	2,220	445	646	e145	176	175	438	89	447	28	17
20	76	567	360	e333	e139	161	158	1,160	92	246	25	17
21	69	359	297	e244	e132	184	287	350	64	146	36	18
22	62	269	278	e202	e127	161	516	221	54	115	31	19
23	57	216	823	e177	125	147	1,540	158	46	95	31	20
24	55	543	1,750	e152	119	138	941	127	38	77	30	20
25	54	440	567	e144	e114	129	771	205	102	63	38	11
26	100	276	394	e276	e109	120	712	2,960	50	94	81	12
27	146	904	313	727	e104	117	389	5,530	35	91	89	13
28	127	2,150	266	457	98	115	283	8,730	31	68	60	11
29	96	892	355	e290	95	158	227	922	28	56	49	10
30	82	471	1,510	e219	---	412	335	2,170	25	89	182	9.2
31	72	---	540	373	---	307	---	7,840	---	2,640	121	---
TOTAL	2,975	17,172	14,912	18,499	12,524	13,194	12,168	40,362	6,200	15,911	3,232	683.2
MEAN	96.0	572	481	597	432	426	406	1,302	207	513	104	22.8
MAX	539	2,300	1,750	3,950	2,730	4,030	1,750	8,730	1,120	5,970	632	63
MIN	35	55	196	144	95	109	93	117	25	22	25	9.2

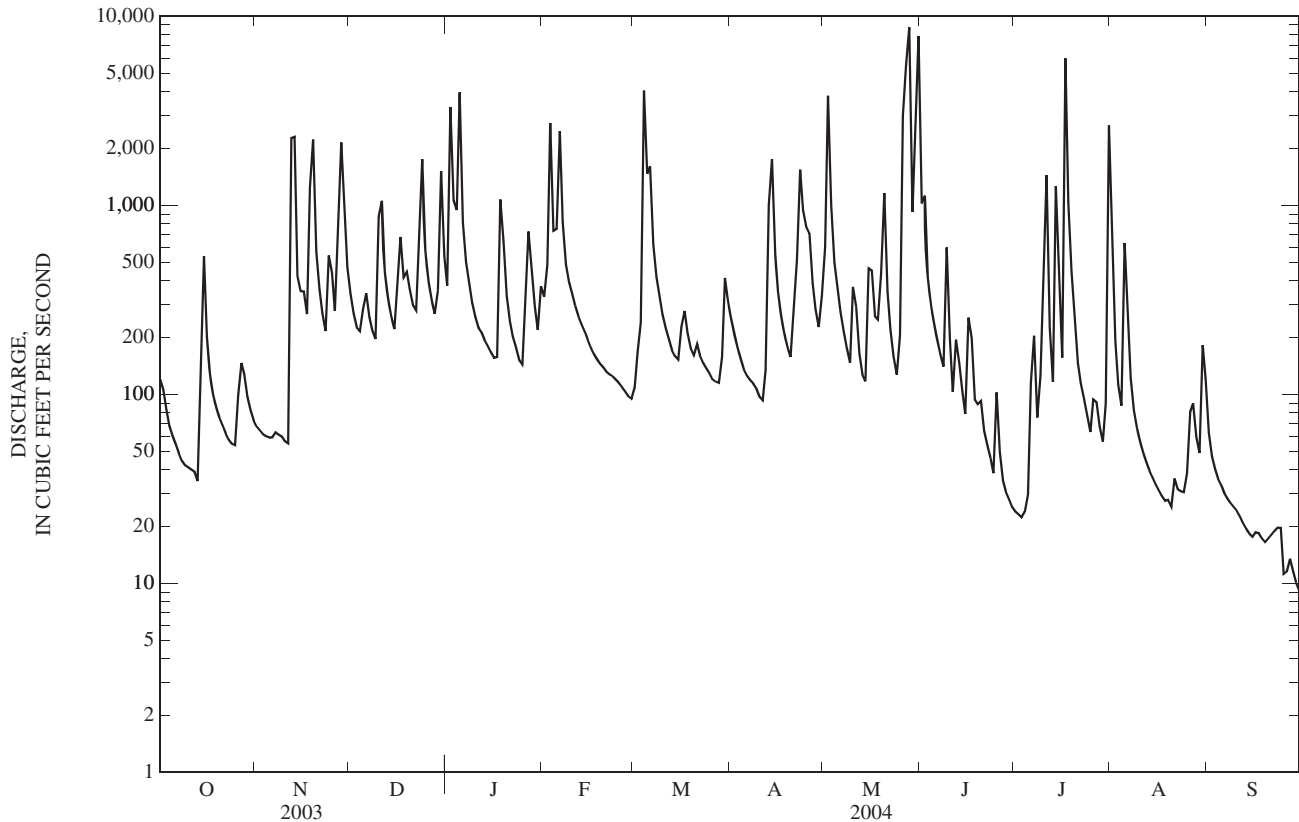
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	227	369	560	415	509	494	464	767	256	176	117	234
MAX	367	572	800	597	900	1,018	676	1,302	349	513	331	579
(WY)	(2003)	(2004)	(2003)	(2004)	(2003)	(2002)	(2002)	(2004)	(2002)	(2004)	(2003)	(2003)
MIN	96.0	94.1	402	122	186	263	116	166	137	34.8	10.7	11.0
(WY)	(2004)	(2001)	(2001)	(2001)	(2002)	(2001)	(2001)	(2001)	(2001)	(2002)	(2002)	(2001)

03298200 FLOYDS FORK AT BARDSTOWN ROAD NEAR MOUNT WASHINGTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	167,786		157,832.2		450	
ANNUAL MEAN	460		431		493	
HIGHEST ANNUAL MEAN					425	
LOWEST ANNUAL MEAN					8,730	
HIGHEST DAILY MEAN	7,420	Sep 2	8,730	May 28	8,730	May 28, 2004
LOWEST DAILY MEAN	20	Jul 6	9.2	Sep 30	3.0	Sep 30, 2001
ANNUAL SEVEN-DAY MINIMUM	24	Jul 2	12	Sep 24	4.1	Sep 13, 2001
MAXIMUM PEAK FLOW			9,750		13,900	
MAXIMUM PEAK STAGE			16.89		19.65	
10 PERCENT EXCEEDS	1,090		941	May 31	950	Jan 24, 2002
50 PERCENT EXCEEDS	197		172		152	
90 PERCENT EXCEEDS	45		30		23	

e Estimated



03298300 PENNSYLVANIA RUN AT MOUNT WASHINGTON ROAD NEAR LOUISVILLE, KY

LOCATION.--Lat 38°05'15", long 85°38'33", Jefferson County, Hydrologic Unit 05140102, at bridge on Mt. Washington Road, near Louisville, Ky. and at mile 1.9.

DRAINAGE AREA.--6.4 mi².

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 430.38 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are rated poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

PEAKS ABOVE BASE.--Peak discharges above base of 400 ft³/s and maximum*.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 27	0110	421	4.38	May 28	0115	*650	*5.15

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	2.1	9.4	11	5.6	3.6	5.7	19	41	0.54	15	0.78
2	e2.3	2.0	6.8	69	21	4.4	4.5	67	76	0.55	5.5	0.60
3	e1.9	1.9	5.5	29	62	12	3.4	28	23	0.56	3.2	0.46
4	e1.4	1.6	5.9	48	22	117	2.9	17	14	0.63	2.1	0.38
5	e1.1	1.6	7.9	84	34	52	2.5	12	11	2.3	49	0.34
6	e0.89	2.0	7.4	26	52	49	2.4	8.4	8.2	2.2	6.8	0.36
7	e0.76	2.1	5.5	18	24	22	2.4	8.5	6.8	2.5	3.1	0.34
8	e0.66	1.7	4.7	14	16	16	2.2	5.1	5.9	1.5	2.0	0.38
9	0.66	1.6	4.2	12	13	12	1.9	3.9	26	2.3	1.5	0.63
10	0.83	1.4	29	9.3	11	8.9	1.6	3.3	27	1.8	1.2	0.58
11	0.96	1.7	19	8.0	9.0	7.6	1.6	2.9	8.2	1.2	0.89	0.56
12	0.86	82	11	7.3	7.6	6.2	5.3	2.4	26	3.6	0.75	0.58
13	0.64	27	8.1	6.2	6.4	5.1	51	2.2	21	5.3	0.62	0.63
14	13	9.3	8.1	5.2	5.8	4.9	41	2.2	9.9	25	0.50	0.59
15	7.2	8.3	6.9	4.4	5.2	4.7	17	23	5.5	5.3	0.47	0.51
16	2.5	6.8	13	3.8	4.2	9.8	10	13	12	2.3	0.47	0.63
17	1.9	4.7	16	5.1	3.9	7.3	7.3	5.5	13	12	0.47	0.88
18	1.6	48	11	24	3.6	5.6	5.2	e4.2	6.1	4.4	0.50	0.72
19	1.4	34	10	14	3.6	4.4	4.6	e15	7.1	2.2	0.53	0.64
20	1.3	13	7.4	8.5	3.7	4.6	4.1	9.0	3.9	1.5	0.81	0.67
21	1.6	7.5	6.0	6.9	3.3	5.0	13	4.3	2.5	0.95	2.0	0.61
22	1.6	5.4	5.5	5.9	2.9	3.8	18	2.7	1.9	0.91	1.2	0.55
23	1.2	4.2	34	4.7	2.8	3.4	73	1.9	1.5	2.6	0.87	0.50
24	0.84	21	34	4.5	2.9	3.4	28	1.5	1.2	2.3	1.8	0.45
25	0.74	10	16	5.6	2.5	3.2	34	7.1	1.4	1.1	8.5	0.39
26	6.7	6.9	11	17	2.3	3.0	21	63	1.4	2.4	24	0.41
27	4.3	35	8.3	31	2.2	3.3	13	158	1.1	1.7	11	0.39
28	2.5	50	7.0	16	2.1	3.0	8.8	168	0.89	1.2	3.5	0.38
29	2.3	23	18	11	2.1	6.9	6.6	26	0.71	0.78	2.1	0.33
30	1.9	15	33	9.0	---	11	20	80	0.62	2.2	1.7	0.32
31	1.9	---	16	6.8	---	6.8	---	105	---	68	1.1	---
TOTAL	70.44	430.8	385.6	525.2	336.7	409.9	412.0	869.1	364.82	161.82	153.18	15.59
MEAN	2.27	14.4	12.4	16.9	11.6	13.2	13.7	28.0	12.2	5.22	4.94	0.52
MAX	13	82	34	84	62	117	73	168	76	68	49	0.88
MIN	0.64	1.4	4.2	3.8	2.1	3.0	1.6	1.5	0.62	0.54	0.47	0.32

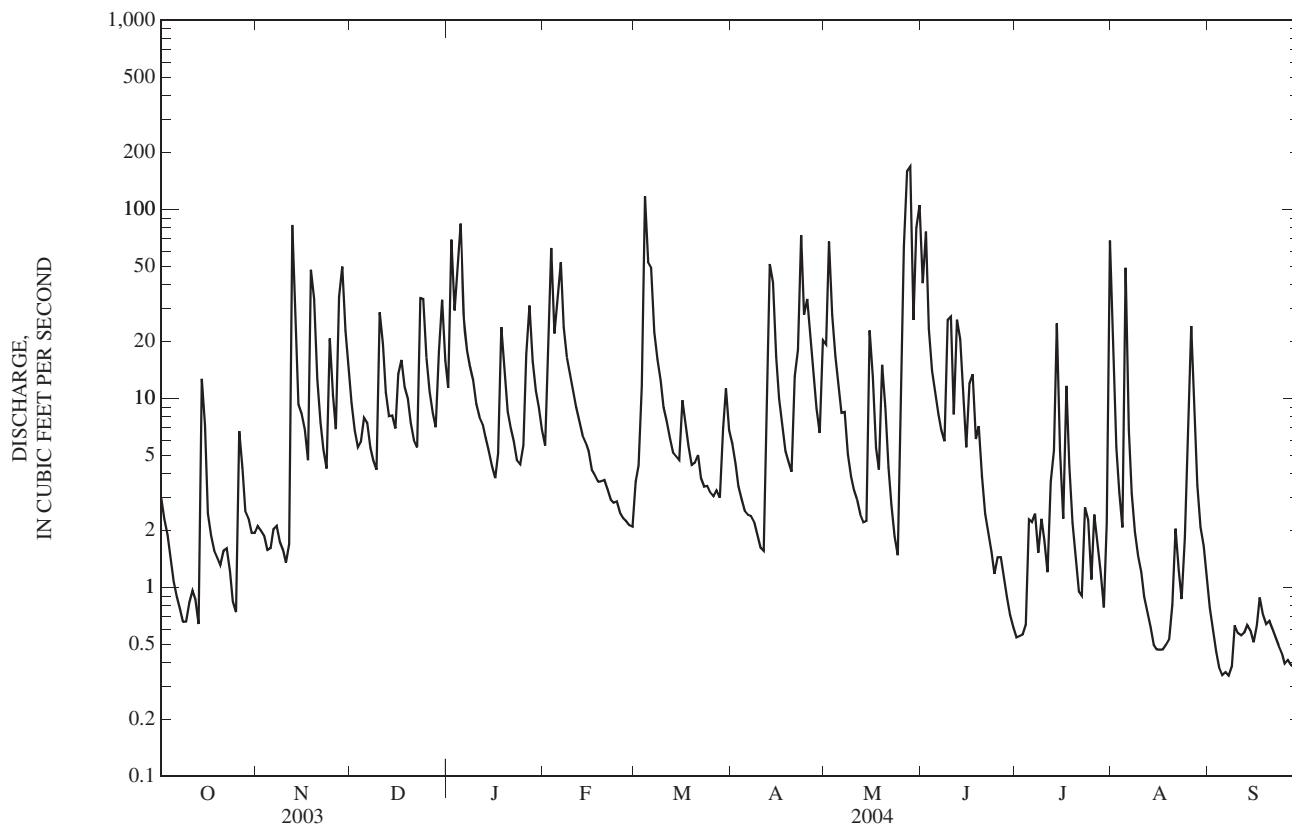
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	3.63	6.63	11.4	13.7	14.6	13.4	14.3	15.1	6.48	1.81	2.64	4.06
MEAN	3.63	6.63	11.4	13.7	14.6	13.4	14.3	15.1	6.48	1.81	2.64	4.06
MAX	9.05	14.4	21.1	21.5	24.7	30.6	35.9	28.9	14.9	5.22	8.60	14.1
(WY)	(2002)	(2004)	(2003)	(1999)	(2000)	(2002)	(2002)	(2002)	(1999)	(2004)	(2003)	(2003)
MIN	0.66	0.45	4.34	2.85	6.92	5.80	1.58	0.94	0.92	0.30	0.34	0.52
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2003)	(2001)	(2000)	(2001)	(2002)	(1999)	(2004)

03298300 PENNSYLVANIA RUN AT MOUNT WASHINGTON ROAD NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	3,970.76		4,135.15		8.94	
ANNUAL MEAN	10.9		11.3		13.7	
HIGHEST ANNUAL MEAN					3.69	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	147	Jan 1	168	May 28	353	Feb 18, 2000
LOWEST DAILY MEAN	0.45	Jul 15	0.32	Sep 30	0.17	Jul 31, 2002
ANNUAL SEVEN-DAY MINIMUM	0.67	Jun 29	0.38	Sep 24	0.22	Jun 20, 2002
MAXIMUM PEAK FLOW			650	May 28	1,540	Jun 28, 1999
MAXIMUM PEAK STAGE			5.15	May 28	8.22	Jun 28, 1999
10 PERCENT EXCEEDS	29		27		20	
50 PERCENT EXCEEDS	4.1		4.6		2.4	
90 PERCENT EXCEEDS	0.93		0.63		0.45	

e Estimated



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 with telemetry. Datum of gage is 406.58 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Oct. 16, 1969. Auxillary gage is a water-stage recorder with telemetry, located at mouth of Floyds Fork 2.6 mi upstream.

REMARKS.--Records fair. Flow regulated since January 1983 by Taylorsville Lake (station 03295597). Diversions for water supply by Sheperdsville and other municipalities.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and Kentucky Natural Resources and Environmental Protection Cabinet.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572	480	2,770	2,860	1,610	529	1,740	1,850	e14,700	261	3,990	281
2	445	431	3,500	7,790	2,100	688	1,640	7,430	e9,600	245	1,450	211
3	392	403	3,260	7,330	7,530	752	1,150	6,180	e5,100	240	1,940	175
4	340	317	3,140	4,260	5,570	5,080	965	4,490	4,340	217	2,140	163
5	300	238	3,060	10,900	4,730	5,960	877	4,010	3,950	527	5,180	155
6	279	236	2,640	5,690	8,620	9,690	817	2,210	3,110	825	4,210	145
7	266	246	2,300	3,090	5,670	5,110	782	1,450	2,910	1,160	2,630	135
8	252	240	1,840	2,810	3,740	4,040	760	1,160	2,770	937	1,620	130
9	234	233	1,680	2,410	3,230	3,650	728	986	3,180	593	628	121
10	198	223	3,020	2,380	2,700	3,090	649	863	3,920	1,300	409	117
11	170	216	5,160	2,780	2,420	3,170	568	1,220	2,730	2,840	338	111
12	189	1,790	3,720	3,710	2,740	3,310	627	888	3,240	2,250	287	111
13	188	8,170	3,560	3,940	3,490	2,410	2,920	770	3,220	1,490	249	167
14	236	3,940	3,350	3,450	2,580	2,170	6,050	717	2,010	2,570	214	107
15	788	4,070	3,070	3,310	1,760	1,590	4,570	1,260	1,540	3,100	180	97
16	736	3,850	2,600	3,220	1,220	1,180	3,870	2,060	2,630	2,070	161	90
17	565	3,790	3,650	3,100	1,040	1,270	2,700	1,760	3,380	6,390	144	97
18	424	3,910	4,000	4,070	976	1,170	1,380	2,640	4,570	7,320	132	118
19	355	7,670	3,900	4,720	939	945	1,100	3,140	2,930	2,460	124	114
20	320	4,520	3,560	3,530	915	905	1,530	4,050	2,670	2,890	137	1,210
21	282	3,700	3,230	3,050	887	1,400	1,690	2,470	2,530	2,760	139	e681
22	234	3,520	3,000	2,230	839	1,050	2,880	1,610	2,400	2,560	148	e1,200
23	210	2,960	2,140	1,620	796	908	5,990	889	2,310	2,740	139	e1,500
24	198	3,420	5,530	1,120	1,150	834	5,790	664	2,240	2,430	142	e771
25	190	3,210	3,550	e990	886	862	4,760	613	1,780	2,240	201	e1,340
26	293	2,740	3,480	e1,610	634	843	5,280	4,360	1,430	1,320	287	112
27	608	2,860	3,070	3,550	557	803	4,370	e9,400	932	613	417	83
28	601	6,820	2,800	3,290	525	777	3,770	e9,900	790	370	342	79
29	553	5,730	2,570	2,970	521	809	2,660	e10,100	394	273	286	77
30	530	3,730	4,180	2,170	---	1,640	1,740	e6,800	282	287	300	77
31	524	---	3,600	1,600	---	1,610	---	e15,900	---	3,900	418	---
TOTAL	11,472	83,663	100,930	109,550	70,375	68,245	74,353	111,840	97,588	59,178	28,982	9,775
MEAN	370	2,789	3,256	3,534	2,427	2,201	2,478	3,608	3,253	1,909	935	326
MAX	788	8,170	5,530	10,900	8,620	9,690	6,050	15,900	14,700	7,320	5,180	1,500
MIN	170	216	1,680	990	521	529	568	613	282	217	124	77

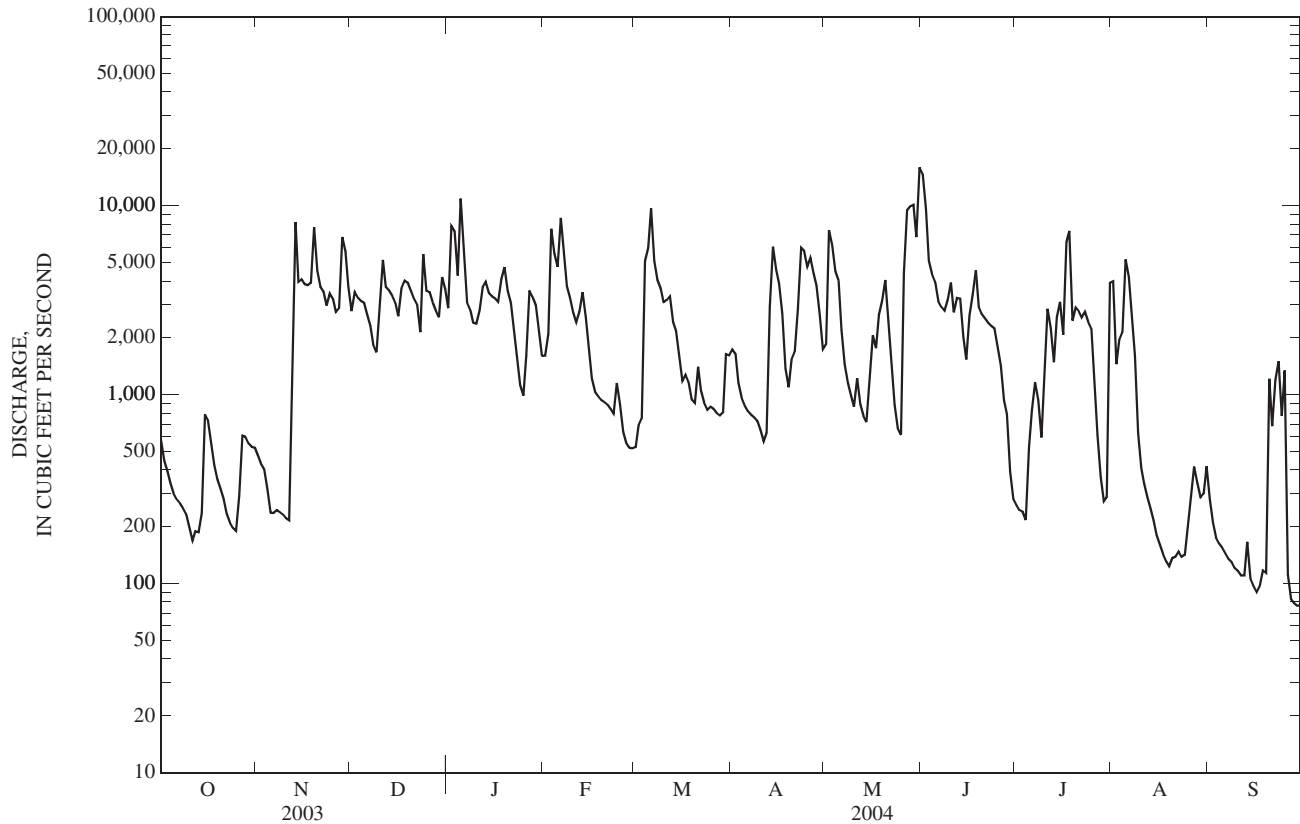
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	328	1,063	2,095	2,538	3,619	3,218	2,119	2,078	1,524	572	317	351
MAX	1,698	2,789	6,329	5,728	12,370	11,410	3,683	5,768	5,192	1,976	1,052	2,949
(WY)	(2003)	(2004)	(1991)	(1991)	(1989)	(1997)	(2002)	(1995)	(1997)	(1998)	(2003)	(2003)
MIN	25.9	48.1	258	335	996	1,113	377	201	38.9	63.6	29.9	30.6
(WY)	(1989)	(2000)	(1990)	(1986)	(1992)	(1990)	(1986)	(2000)	(1988)	(1994)	(2002)	(1999)

03298500 SALT RIVER AT SHEPHERDSVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	828,794		825,951		1,642	
ANNUAL MEAN	2,271		2,257		772	
HIGHEST ANNUAL MEAN					2,809	
LOWEST ANNUAL MEAN					772	
HIGHEST DAILY MEAN	17,200	Jan 1	15,900	May 31	65,600	Mar 2, 1997
LOWEST DAILY MEAN	130	Aug 21	77	Sep 29	7.7	Jul 1, 1988
ANNUAL SEVEN-DAY MINIMUM	179	Aug 16	111	Sep 11	9.3	Jun 26, 1988
MAXIMUM PEAK FLOW			18,500	May 31	78,200	Mar 10, 1964
MAXIMUM PEAK STAGE			25.23	Jun 1	41.50	Mar 11, 1964
INSTANTANEOUS LOW FLOW			73	Sep 29	73	Sep 29, 2004
10 PERCENT EXCEEDS	4,900		4,740		4,110	
50 PERCENT EXCEEDS	1,470		1,620		548	
90 PERCENT EXCEEDS	234		196		47	

e Estimated



03298550 LONG LICK AT 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 with telemetry. Datum of gage is 450 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records fair except for those estimated, which are poor. Slight regulation from Jim Beam Distillery.

COOPERATION.--Bullitt County.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 17	2130	*871	*6.22				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.51	e2.2	5.3	9.4	6.4	2.3	12	16	24	1.1	7.1	1.6
2	0.77	e2.3	5.1	110	35	2.5	8.7	112	14	1.2	2.6	2.0
3	1.0	e2.1	4.5	33	85	2.6	7.5	23	9.5	1.4	1.4	2.1
4	1.1	e1.8	8.5	41	21	15	7.7	12	8.2	2.4	1.1	0.97
5	0.87	e1.7	18	85	60	104	3.3	8.4	7.0	3.0	e32	0.88
6	0.57	e2.0	11	22	92	64	3.1	5.7	7.3	3.2	e4.9	0.84
7	0.47	3.9	8.4	13	25	22	3.4	3.9	3.1	3.1	e1.8	1.6
8	0.73	e2.6	5.5	11	17	14	3.3	3.3	2.5	2.6	e1.0	1.9
9	0.73	e1.5	3.3	9.4	11	10	3.1	4.2	2.3	6.3	e0.69	1.7
10	1.1	e1.2	55	7.3	9.1	8.2	3.2	1.4	3.0	5.9	0.64	1.3
11	0.97	1.1	23	6.9	7.6	7.3	4.7	2.0	2.4	0.53	0.49	0.56
12	1.1	24	9.7	5.5	6.4	5.7	28	1.2	4.1	10	0.35	0.83
13	1.7	8.5	7.0	6.1	6.3	3.4	141	1.6	5.2	5.0	0.28	0.38
14	6.1	0.76	8.0	4.9	4.6	1.7	58	1.8	1.9	14	0.18	0.37
15	6.1	0.52	6.1	4.5	6.1	3.7	21	10	2.0	4.0	0.18	0.41
16	3.6	1.5	38	4.3	4.5	7.8	13	6.6	10	1.7	0.20	0.50
17	e1.6	0.86	26	4.2	3.6	4.9	9.6	2.1	e53	0.98	0.52	1.5
18	e1.3	55	14	42	1.4	4.7	9.3	1.2	e15	0.79	1.0	1.7
19	e1.2	33	11	17	1.3	3.8	5.9	39	e7.2	0.91	0.88	1.2
20	e1.1	10	8.9	8.7	1.8	9.3	5.6	23	e2.6	0.40	0.98	1.4
21	e0.94	5.5	7.0	6.7	2.5	21	44	4.8	e2.2	0.53	1.1	1.6
22	e0.92	4.3	5.0	6.2	2.4	8.6	53	1.9	e2.0	11	1.2	1.5
23	e0.88	5.2	23	5.8	1.4	4.9	111	2.4	e1.5	11	1.3	1.7
24	e0.90	31	33	5.3	1.5	4.8	32	0.80	e0.62	1.9	1.8	1.9
25	5.4	11	15	5.7	1.3	4.2	45	1.1	2.1	0.84	2.3	1.6
26	14	5.4	9.1	42	1.8	3.8	22	32	1.3	0.55	4.2	1.5
27	10	52	7.1	37	2.0	3.8	12	119	1.1	0.49	3.8	1.3
28	8.5	69	6.3	15	1.9	5.1	8.6	112	1.0	0.35	2.4	1.0
29	3.9	21	12	10	1.9	14	6.9	20	1.0	0.49	1.9	1.5
30	e3.0	12	44	8.3	---	31	8.0	93	0.95	1.6	1.8	1.5
31	e2.6	---	15	6.6	---	14	---	173	---	45	2.3	---
TOTAL	83.66	372.94	452.8	593.8	421.8	412.1	693.9	838.40	198.07	142.26	82.39	38.84
MEAN	2.70	12.4	14.6	19.2	14.5	13.3	23.1	27.0	6.60	4.59	2.66	1.29
MAX	14	69	55	110	92	104	141	173	53	45	32	2.1
MIN	0.47	0.52	3.3	4.2	1.3	1.7	3.1	0.80	0.62	0.35	0.18	0.37

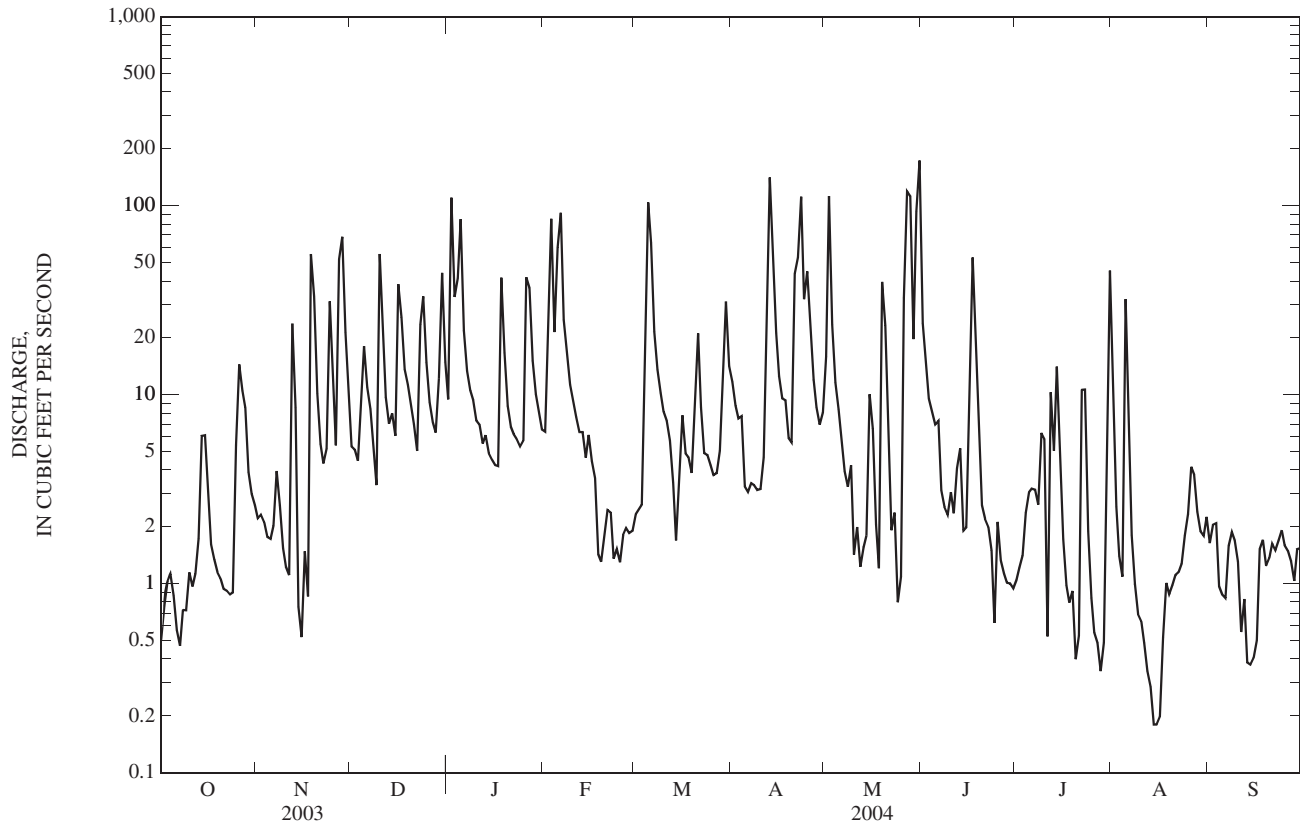
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	MEAN	2.13	4.62	8.73	16.2	18.3	27.6	19.3	18.4	9.01	1.37	1.53	2.02
	MAX	7.37	12.4	23.4	29.2	37.1	101	42.2	47.2	35.0	4.59	9.21	11.9
	(WY)	(2003)	(2004)	(2003)	(1996)	(2003)	(1997)	(1998)	(1995)	(1997)	(2004)	(1995)	(2003)
	MIN	0.10	0.68	0.83	1.79	6.43	10.0	2.40	1.34	0.05	0.04	0.06	0.13
	(WY)	(1998)	(1995)	(1999)	(2001)	(2002)	(2001)	(2001)	(2000)	(2001)	(2001)	(1998)	(1998)

03298550 LONG LICK AT CLERMONT, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	4,688.25		4,330.96		10.9	
ANNUAL MEAN	12.8		11.8		19.1	
HIGHEST ANNUAL MEAN					3.59	
LOWEST ANNUAL MEAN					680	
HIGHEST DAILY MEAN	255	Feb 15	173	May 31	2,820	Mar 1, 1997
LOWEST DAILY MEAN	0.04	Sep 26	0.18	Aug 14	0.00	Nov 13, 2001
ANNUAL SEVEN-DAY MINIMUM	0.31	Sep 7	0.31	Aug 11	0.01	Aug 20, 1999
MAXIMUM PEAK FLOW			871	Jun 17	11.44	May 6, 2002
MAXIMUM PEAK STAGE			6.22	Jun 17	0.01	Sep 26, 2003
INSTANTANEOUS LOW FLOW			0.08	Nov 14	23	
10 PERCENT EXCEEDS	32		32		1.6	
50 PERCENT EXCEEDS	4.1		4.2		0.11	
90 PERCENT EXCEEDS	0.52		0.87			

e Estimated



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 with telemetry. Datum of gage is 530.00 ft above NGVD of 1929.

REMARKS.--Records good except those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 13	0930	11,600	18.00	May 31	0815	*14,500	19.40
Jan 3	0100	11,200	17.81	Aug 1	0145	8110	16.27
Mar 6	1330	12,400	18.40	Aug 5	2000	9490	16.95
May 28	1815	10,800	17.62				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	107	781	813	e430	150	426	320	4,290	39	4,120	153
2	145	90	545	5,750	e400	196	315	1,550	1,140	31	514	94
3	119	77	429	7,190	2,870	275	269	2,550	689	26	266	66
4	100	68	389	1,950	2,300	245	241	912	469	28	163	49
5	86	91	797	4,410	1,630	1,050	218	551	392	68	6,170	37
6	75	258	1,200	3,360	6,340	10,200	198	423	327	119	3,590	29
7	67	432	848	1,270	2,910	3,470	184	344	267	73	773	23
8	60	305	601	836	1,180	1,040	176	288	218	72	368	22
9	52	221	491	647	806	642	168	245	180	49	233	22
10	50	176	1,620	557	670	487	156	215	153	44	162	19
11	43	149	4,130	473	571	398	146	191	133	33	121	17
12	38	3,320	1,360	410	492	344	185	171	124	62	99	21
13	34	8,920	739	382	434	305	1,330	162	318	52	81	117
14	38	1,630	626	350	390	274	3,740	164	309	113	68	51
15	92	726	833	322	358	255	1,760	2,850	232	186	55	29
16	132	801	1,870	298	325	258	752	2,230	167	109	44	18
17	121	660	5,910	275	293	262	507	569	167	2,190	37	404
18	98	691	2,330	625	272	253	397	357	362	2,040	30	2,580
19	83	3,430	1,220	1,710	257	230	330	314	431	247	25	847
20	66	2,670	949	829	249	225	290	722	232	150	21	347
21	54	1,040	726	518	241	1,090	291	429	161	101	73	213
22	48	623	618	435	226	832	1,990	256	119	79	201	146
23	42	458	664	388	207	424	5,870	194	108	74	382	104
24	36	521	2,550	343	196	328	2,980	155	111	61	186	78
25	31	765	1,610	320	186	288	1,180	138	432	63	109	61
26	69	536	877	576	177	258	983	1,300	290	52	91	48
27	383	701	648	1,910	168	237	640	8,550	132	43	95	40
28	322	4,100	535	1,180	158	223	491	9,930	105	40	241	33
29	217	4,580	478	698	150	220	394	3,380	69	30	302	27
30	167	1,420	2,180	e510	---	420	343	8,130	50	24	156	23
31	131	---	1,640	e460	---	633	---	12,500	---	2,460	276	---
TOTAL	3,183	39,566	40,194	39,795	24,886	25,512	26,950	60,090	12,177	8,758	19,052	5,718
MEAN	103	1,319	1,297	1,284	858	823	898	1,938	406	283	615	191
MAX	383	8,920	5,910	7,190	6,340	10,200	5,870	12,500	4,290	2,460	6,170	2,580
MIN	31	68	389	275	150	150	146	138	50	24	21	17
CFSM	0.24	3.02	2.97	2.94	1.97	1.89	2.06	4.45	0.93	0.65	1.41	0.44
IN.	0.27	3.38	3.43	3.40	2.12	2.18	2.30	5.13	1.04	0.75	1.63	0.49

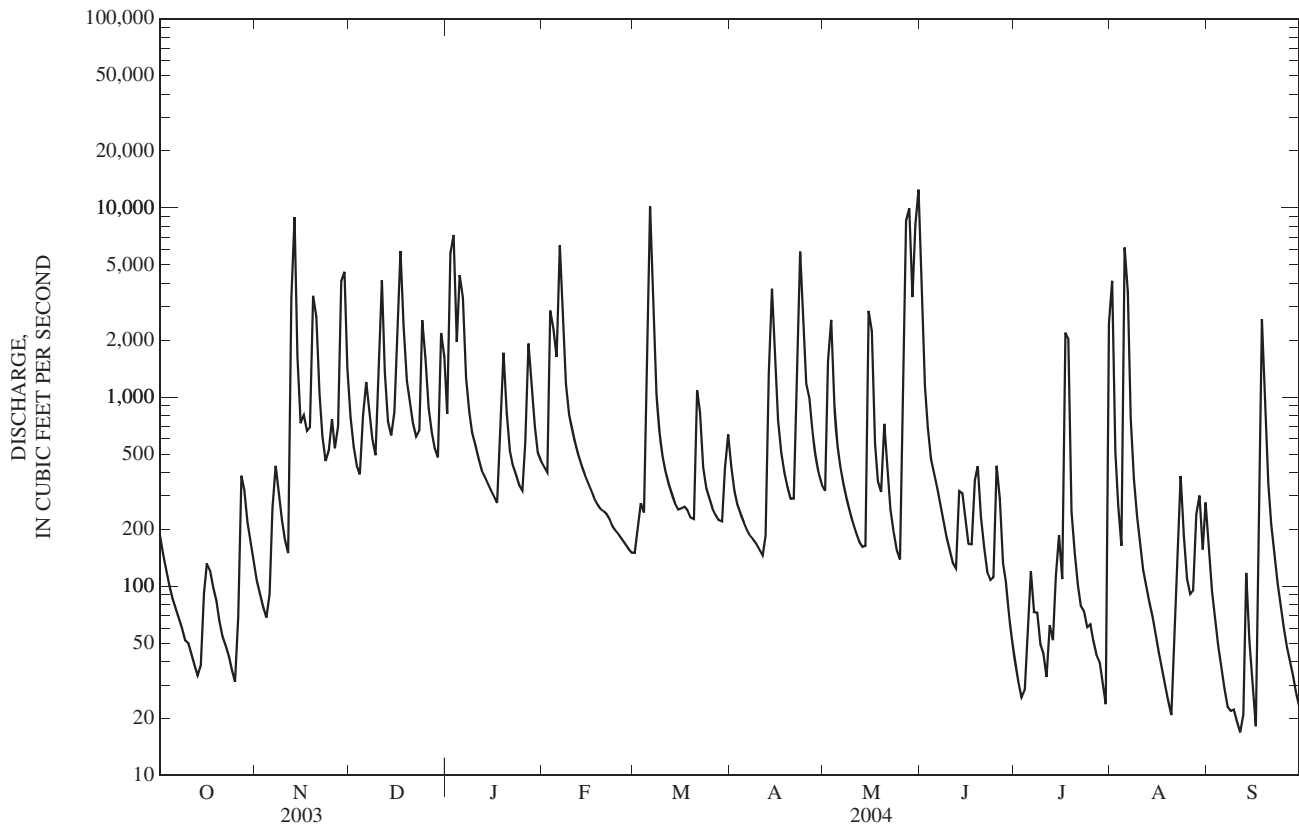
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

MEAN	174	517	997	940	1,187	1,219	745	746	497	198	176	256
MAX	1,042	1,699	3,691	2,461	5,071	4,663	2,022	2,359	2,499	764	939	2,284
(WY)	(1976)	(1989)	(1979)	(1974)	(1989)	(1997)	(1979)	(1995)	(1997)	(1998)	(1978)	(1979)
MIN	0.01	0.06	37.2	16.2	203	134	103	43.6	3.32	2.45	0.87	0.02
(WY)	(1988)	(2000)	(2000)	(1981)	(1980)	(1983)	(1986)	(1976)	(1988)	(1975)	(1986)	(1999)

03300400 BEECH FORK AT MAUD, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004	
ANNUAL TOTAL	360,644		305,881		635	
ANNUAL MEAN	988		836		1,243	
HIGHEST ANNUAL MEAN					256	
LOWEST ANNUAL MEAN					39,800	
HIGHEST DAILY MEAN	18,100	Feb 16	12,500	May 31	0.00	Mar 2, 1997
LOWEST DAILY MEAN	18	Aug 21	17	Sep 11	0.00	Oct 8, 1983
ANNUAL SEVEN-DAY MINIMUM	39	Jul 17	22	Sep 6	0.00	Oct 23, 1987
MAXIMUM PEAK FLOW			14,500	May 31	41,500	Mar 2, 1997
MAXIMUM PEAK STAGE			19.40	May 31	27.60	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	2.27		1.92		1.46	
ANNUAL RUNOFF (INCHES)	30.77		26.10		19.79	
10 PERCENT EXCEEDS	2,520		2,250		1,370	
50 PERCENT EXCEEDS	375		289		170	
90 PERCENT EXCEEDS	52		47		4.2	

e Estimated



03301000 BEECH FORK AT BARDSTOWN, KY

LOCATION.--Lat 37°47'49", long 85°28'51", Nelson County, Hydrologic Unit 05140103 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 September 1999 and January 2001 to current year.

REVISIONS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 439.3 ft above mean sea level.

REMARKS.--Records good except for periods of estimated, record which are fair. At times during periods of low flow, City of Bardstown diverts flow above station for municipal water supply. Some of this water is returned to stream by sewer outfall 300 ft above gage.

COOPERATION.--City of Bardstown.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 13	1800	9,980	24.56	May 27	1400	13,400	29.03
Jan 3	0600	10,600	25.40	May 31	1700	*17,600	*33.00
Mar 6	2200	10,500	25.27				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	266	1,420	1,430	596	104	465	463	7,840	102	5,140	297
2	198	123	958	8,670	910	166	313	2,290	2,910	96	1,110	180
3	145	112	722	9,700	3,900	209	236	3,640	1,250	106	481	140
4	127	103	696	3,840	3,400	243	185	1,660	836	120	336	105
5	120	122	994	5,950	3,080	1,260	152	870	651	218	7,700	89
6	121	316	1,690	4,870	6,940	10,700	129	638	561	580	5,090	72
7	105	613	1,360	2,500	4,390	5,000	117	513	526	536	1,650	57
8	105	607	973	1,500	1,970	1,760	108	433	434	447	642	53
9	73	363	776	1,170	1,130	843	100	375	382	449	443	54
10	55	287	2,160	951	876	589	92	326	329	429	344	56
11	51	224	4,860	775	710	460	85	287	304	1,580	267	54
12	49	2,990	2,650	685	592	379	122	268	263	1,440	206	70
13	46	9,520	1,270	627	500	320	1,970	257	368	712	162	74
14	54	3,390	1,070	571	438	281	4,240	295	579	565	133	202
15	88	1,320	1,220	527	394	248	2,860	5,500	414	580	114	304
16	94	1,230	2,490	478	347	267	987	3,990	346	572	99	510
17	109	1,090	6,600	448	313	256	593	1,250	455	674	86	1,830
18	102	1,580	3,820	1,140	274	229	447	682	1,730	4,110	77	3,380
19	89	4,280	2,080	2,210	254	196	370	1,000	708	886	68	2,840
20	88	3,890	1,560	1,530	240	237	326	1,260	505	614	63	1,800
21	78	2,020	1,190	864	224	895	389	891	360	537	101	e970
22	71	1,140	1,000	710	198	989	2,550	507	316	476	228	e618
23	54	838	1,150	589	174	489	7,800	387	239	276	375	e397
24	46	1,020	3,480	552	157	333	4,490	313	219	224	359	e306
25	40	1,160	2,820	536	141	265	2,070	278	189	172	221	e276
26	122	962	1,510	1,260	128	219	1,460	1,510	601	178	199	e256
27	432	1,280	1,070	2,520	120	184	972	13,700	299	101	423	e226
28	530	5,540	871	2,050	113	162	707	12,600	213	67	335	e206
29	379	6,220	808	1,200	105	197	554	5,680	141	61	473	e186
30	284	2,910	2,910	869	---	413	496	12,400	120	57	449	e165
31	253	---	2,860	641	---	593	---	17,000	---	3,000	370	---
TOTAL	4,391	55,516	59,038	61,363	32,614	28,486	35,385	91,263	24,088	19,965	27,744	15,773
MEAN	142	1,851	1,904	1,979	1,125	919	1,180	2,944	803	644	895	526
MAX	530	9,520	6,600	9,700	6,940	10,700	7,800	17,000	7,840	4,110	7,700	3,380
MIN	40	103	696	448	105	104	85	257	120	57	63	53

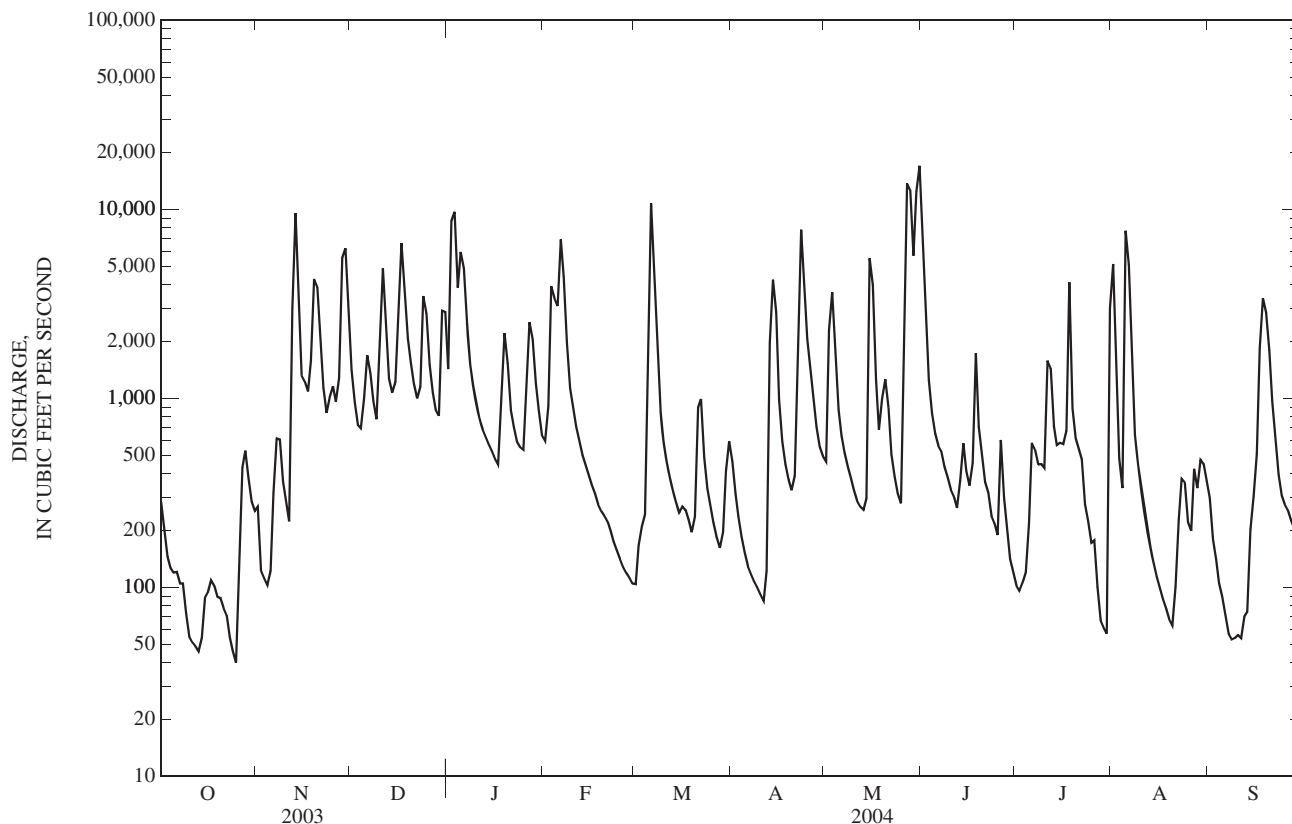
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	136	578	1,126	1,610	1,840	1,957	1,367	977	593	459	219	220
MAX	1,973	2,682	3,631	7,384	5,269	6,277	6,321	3,372	2,565	2,946	1,115	2,206
(WY)	(1963)	(1958)	(1952)	(1950)	(1956)	(1964)	(1972)	(1967)	(1998)	(1958)	(1974)	(1974)
MIN	0.27	0.70	1.40	42.7	123	153	145	46.1	22.2	1.36	3.44	0.39
(WY)	(1954)	(1964)	(1944)	(1944)	(1954)	(1941)	(1963)	(1941)	(1948)	(1954)	(1999)	(1953)

03301000 BEECH FORK AT BARDSTOWN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	557,809		455,626		931	
ANNUAL MEAN	1,528		1,245		1,733	
HIGHEST ANNUAL MEAN					245	
LOWEST ANNUAL MEAN					32,200	
HIGHEST DAILY MEAN	22,500	Feb 16	17,000	May 31	32,200	Mar 5, 1964
LOWEST DAILY MEAN	40	Oct 25	40	Oct 25	0.00	Sep 29, 1948
ANNUAL SEVEN-DAY MINIMUM	59	Oct 9	59	Oct 9	0.03	Sep 28, 1948
MAXIMUM PEAK FLOW			17,600	May 31	33,900	Mar 5, 1964
MAXIMUM PEAK STAGE			33.00	May 31	43.50	Mar 5, 1964
10 PERCENT EXCEEDS	3,850		3,390		2,160	
50 PERCENT EXCEEDS	697		464		215	
90 PERCENT EXCEEDS	105		101		6.0	

e Estimated



03301500 ROLLING FORK NEAR BOSTON, KY

LOCATION.--Lat 37°46'02", long 85°42'14", Nelson Cty, 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 with telemetry. Datum of gage is 400.42 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Sept. 30, 1971. Datum of Auxiliary gage (Rolling Fork at Lebanon Junction) 385.06 ft above sea level.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 55.2 ft, former site, from floodmarks (backwater from Ohio River).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 4	0600	16,000	35.31	Jun 1	1645	22,100	39.93
May 29	1345	*22,800	*40.35				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	723	438	3,470	3,250	e1,200	444	1,670	1,160	21,800	251	6,760	522
2	607	373	2,170	6,500	1,390	559	1,260	2,420	18,800	236	3,610	375
3	501	333	1,690	14,800	4,740	818	1,040	5,690	11,600	211	1,070	274
4	425	301	1,490	15,700	e6,470	1,080	918	4,240	5,290	362	673	217
5	374	280	1,670	13,000	5,030	1,460	875	2,100	2,510	330	4,410	178
6	326	376	2,290	e7,330	9,560	10,300	818	1,530	1,610	270	11,000	156
7	290	655	2,540	e4,820	12,600	14,000	682	e1,220	1,290	379	5,460	186
8	263	1,020	2,070	e3,870	9,950	10,500	604	975	1,080	393	1,450	163
9	243	774	1,690	e3,130	e4,440	e3,830	556	803	916	354	899	130
10	226	609	2,350	e2,510	e3,220	e2,410	506	672	797	440	649	111
11	219	508	6,280	e2,040	e2,340	e1,610	466	585	692	1,650	499	100
12	228	1,460	6,440	e1,900	e1,930	e1,180	523	e516	631	3,060	393	e112
13	205	9,560	2,850	e1,560	e1,660	e979	2,530	e493	706	1,410	324	e257
14	203	10,300	2,120	e1,160	e1,390	992	7,670	621	1,150	798	277	e190
15	293	3,580	2,280	1,140	1,230	890	8,600	2,270	900	570	240	155
16	327	e1,910	3,230	1,020	1,090	922	4,400	10,000	744	510	212	120
17	314	e1,540	7,300	936	979	951	e1,890	5,020	738	401	185	169
18	311	e1,820	9,730	1,420	892	897	e1,410	1,620	2,680	2,740	160	3,030
19	279	5,640	5,230	e3,210	833	802	e1,070	1,290	2,030	1,450	144	4,080
20	251	7,960	2,980	e2,360	795	790	e936	2,400	1,370	477	131	e1,290
21	233	5,070	2,350	1,920	763	1,680	e1,000	2,200	881	331	138	e911
22	214	2,610	1,960	1,540	709	2,190	2,850	1,240	660	801	573	e836
23	200	e2,170	1,840	1,320	657	1,670	9,520	864	890	2,110	821	e761
24	188	e2,110	3,770	1,190	617	1,200	12,900	659	e637	703	699	e537
25	177	e2,290	5,080	e1,120	579	1,010	8,040	550	507	422	458	e387
26	268	e1,940	3,190	e1,950	542	885	3,340	1,570	691	292	330	254
27	580	e2,160	2,220	e3,500	507	796	2,360	12,300	652	243	414	171
28	848	5,230	1,840	e3,300	474	731	1,770	21,200	405	e209	402	e146
29	790	9,360	1,650	e2,420	449	729	1,410	22,400	352	182	402	131
30	639	8,690	3,220	e1,500	---	1,450	1,230	20,500	297	163	478	115
31	525	---	5,010	e1,320	---	1,660	---	20,400	---	3,230	603	---
TOTAL	11,270	91,067	102,000	112,736	77,036	69,415	82,844	149,508	83,306	24,978	43,864	16,064
MEAN	364	3,036	3,290	3,637	2,656	2,239	2,761	4,823	2,777	806	1,415	535
MAX	848	10,300	9,730	15,700	12,600	14,000	12,900	22,400	21,800	3,230	11,000	4,080
MIN	177	280	1,490	936	449	444	466	493	297	163	131	100
CFSM	0.28	2.34	2.53	2.80	2.04	1.72	2.13	3.71	2.14	0.62	1.09	0.41
IN.	0.32	2.61	2.92	3.23	2.21	1.99	2.37	4.28	2.39	0.72	1.26	0.46

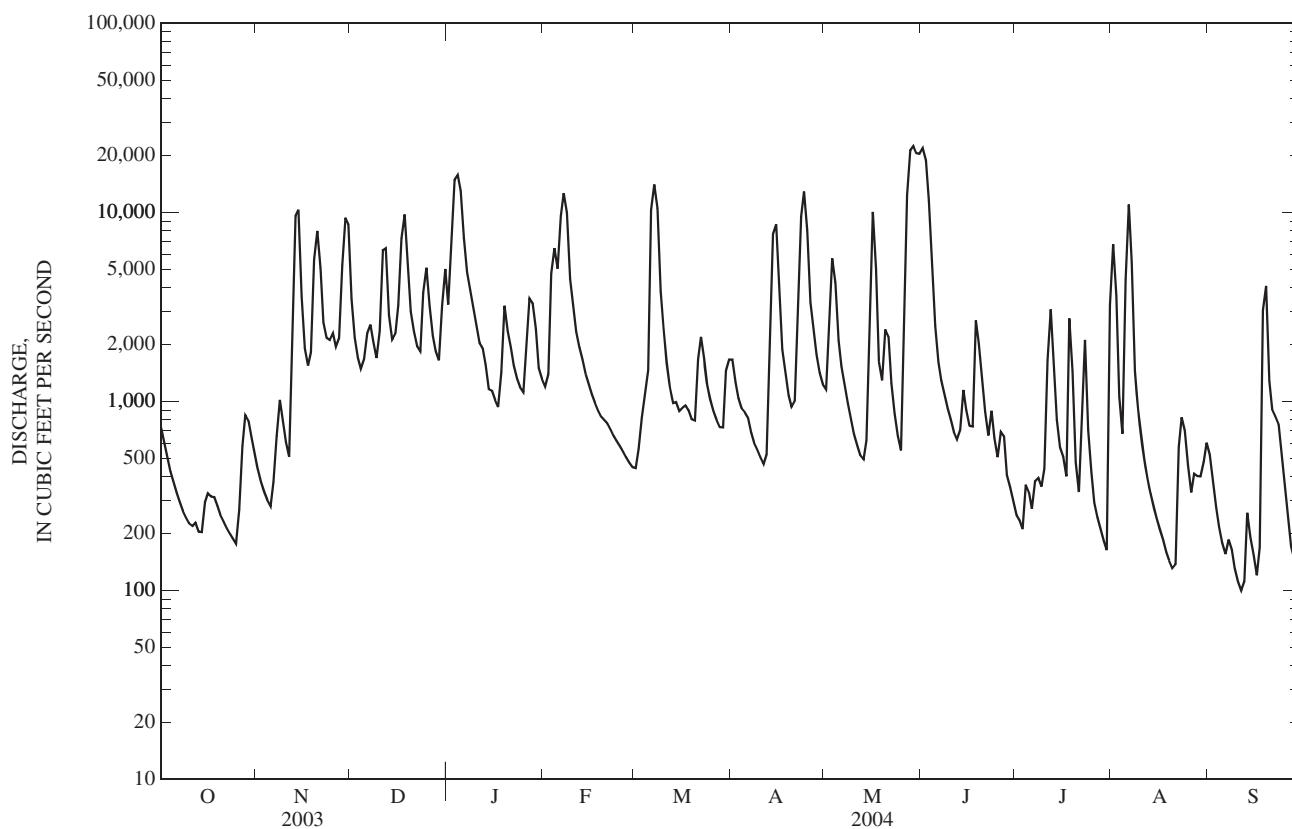
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

	326	1,065	2,362	2,958	3,765	3,827	2,759	1,998	1,174	728	425	490
MEAN	326	1,065	2,362	2,958	3,765	3,827	2,759	1,998	1,174	728	425	490
MAX	2,778	5,310	11,050	13,420	16,320	13,540	11,350	11,810	6,865	5,339	2,806	8,265
(WY)	(1976)	(1958)	(1979)	(1950)	(1989)	(1997)	(1972)	(1983)	(1997)	(1958)	(1977)	(1979)
MIN	0.57	4.32	5.84	77.0	288	344	353	150	24.4	6.78	12.9	1.89
(WY)	(1954)	(1944)	(1944)	(1981)	(1954)	(1941)	(1986)	(1941)	(1988)	(1954)	(1999)	(1953)

03301500 ROLLING FORK NEAR BOSTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	976,820		864,088		1,813	
ANNUAL MEAN	2,676		2,361		4,268	
HIGHEST ANNUAL MEAN					473	
LOWEST ANNUAL MEAN					68,400	
HIGHEST DAILY MEAN	25,000	Feb 18	22,400	May 29	68,400	Mar 4, 1997
LOWEST DAILY MEAN	131	Aug 22	100	Sep 11	0.40	Oct 20, 1939
ANNUAL SEVEN-DAY MINIMUM	209	Aug 16	137	Sep 6	0.40	Oct 3, 1953
MAXIMUM PEAK FLOW			22,800	May 29	69,800	Mar 3, 1997
MAXIMUM PEAK STAGE			40.35	May 29	53.22	Mar 3, 1997
INSTANTANEOUS LOW FLOW			98	Sep 11	0.40	Oct 20, 1939
ANNUAL RUNOFF (CFSM)	2.06		1.82		1.40	
ANNUAL RUNOFF (INCHES)	27.97		24.75		18.97	
10 PERCENT EXCEEDS	7,060		6,330		4,810	
50 PERCENT EXCEEDS	1,300		996		510	
90 PERCENT EXCEEDS	266		232		27	

e Estimated



03301700 MILL CREEK NEAR FORT KNOX, KY

LOCATION.--Lat 37°53'00", long 85°54'52", Hardin County, Hydrologic Unit 05140104, on wooden bridge on Poorman Road, 2.2 miles southeast of Fort Knox and at mile 8.0.

DRAINAGE AREA.--38.2 mi².

PERIOD OF RECORD.--May 1998 to current year.

GAGE.--Water-stage recorder with telemetry. Elevation of gage is 440 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records good except for those estimated, which are fair.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	60	73	e74	18	51	88	275	5.5	71	3.5
2	11	11	45	405	140	28	43	456	159	5.2	31	3.8
3	10	11	39	203	445	24	39	196	98	5.1	20	9.2
4	9.6	10	44	138	163	44	33	117	62	5.7	14	4.8
5	9.0	10	60	319	244	259	29	88	49	5.6	16	3.4
6	e8.7	12	56	141	387	362	26	67	40	10	9.2	3.0
7	8.0	14	45	97	177	139	26	54	33	7.5	6.8	2.8
8	7.8	11	40	78	112	89	23	45	27	5.5	5.5	3.2
9	e8.0	11	35	66	89	70	21	37	73	4.5	4.8	2.8
10	e7.8	10	117	52	75	54	19	e30	120	4.3	4.4	2.6
11	11	10	91	45	62	46	18	e29	43	14	3.8	2.4
12	9.5	271	61	42	52	40	47	25	39	151	3.7	3.0
13	8.9	164	49	36	46	33	402	23	55	44	3.3	5.3
14	23	60	48	32	43	31	397	22	30	40	3.2	2.8
15	28	53	43	29	39	28	167	93	23	20	2.8	2.3
16	13	46	119	27	33	33	106	62	27	12	2.7	2.3
17	9.4	35	131	27	29	29	76	37	144	9.9	2.5	2.4
18	8.8	197	85	89	27	25	58	28	218	7.5	2.5	2.6
19	8.7	201	69	69	26	23	47	67	63	6.4	2.6	2.3
20	8.3	85	55	49	26	71	41	118	36	5.2	2.6	2.2
21	8.1	56	46	43	24	150	131	47	26	4.5	6.3	2.1
22	8.2	42	41	39	21	66	231	32	22	54	3.4	2.2
23	8.2	34	141	34	19	50	631	25	17	85	2.7	2.3
24	7.7	131	178	32	19	43	309	20	13	21	3.0	2.2
25	8.0	70	94	33	17	37	304	22	12	11	20	2.2
26	48	50	69	115	16	33	184	422	10	7.7	22	2.2
27	37	204	57	130	15	30	117	1,100	8.1	6.4	19	2.2
28	22	295	48	79	14	28	87	545	7.0	4.5	5.9	2.2
29	18	140	83	64	14	35	67	231	6.4	4.2	4.0	2.2
30	15	88	202	e55	---	67	78	934	5.8	13	22	2.1
31	12	---	97	e47	---	67	---	750	---	309	4.5	---
TOTAL	413.7	2,344	2,348	2,688	2,448	2,052	3,808	5,810	1,741.3	889.2	325.2	88.6
MEAN	13.3	78.1	75.7	86.7	84.4	66.2	127	187	58.0	28.7	10.5	2.95
MAX	48	295	202	405	445	362	631	1,100	275	309	71	9.2
MIN	7.7	10	35	27	14	18	18	20	5.8	4.2	2.5	2.1

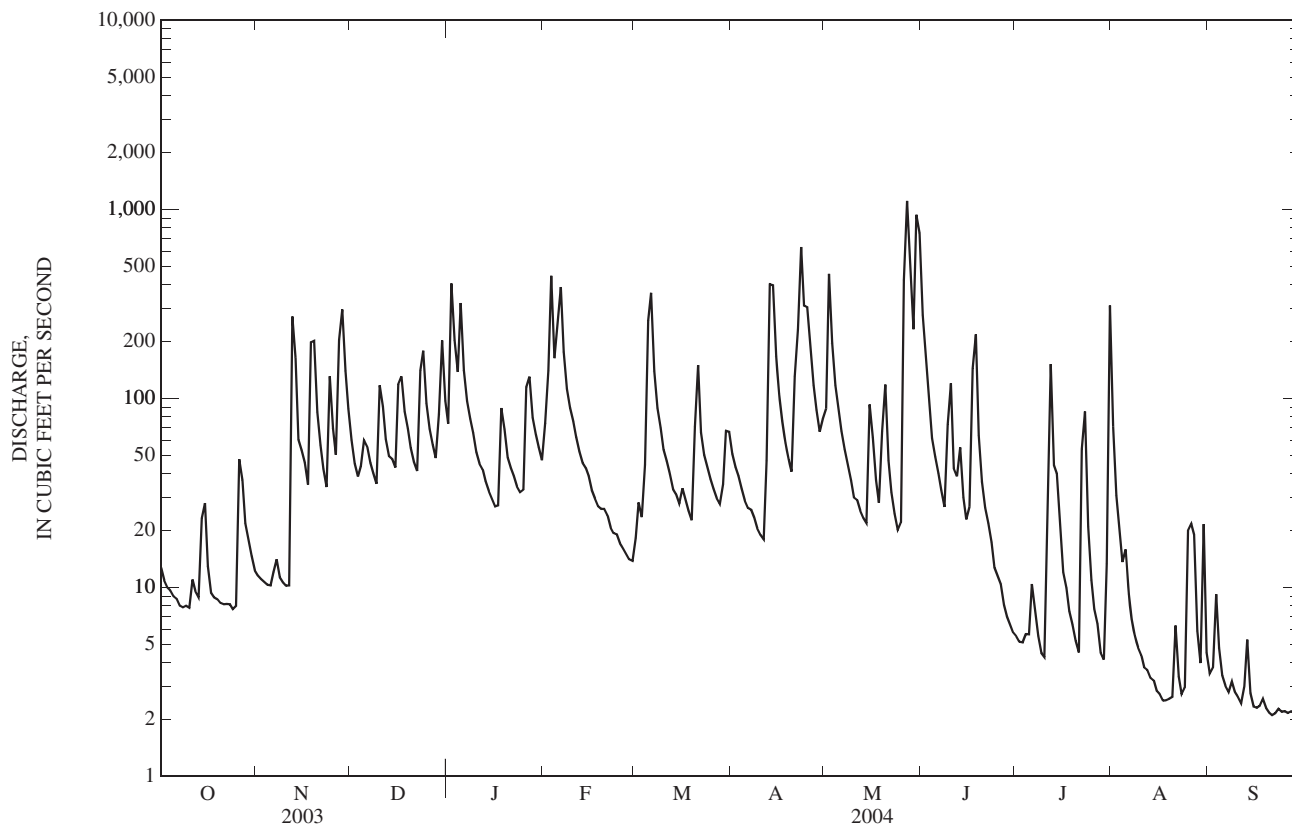
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	25.8	45.0	76.8	80.1	105	103	100	120	28.7	16.5	12.5	27.2
MEAN	65.5	90.6	136	119	189	280	207	226	62.0	28.7	25.7	66.7
(WY)	(2003)	(2002)	(2003)	(1999)	(2003)	(2002)	(2002)	(2002)	(2003)	(2004)	(2000)	(2003)
MIN	6.50	4.67	26.4	21.1	50.2	54.6	29.4	16.2	9.16	4.56	3.28	2.95
(WY)	(2001)	(2000)	(1999)	(2001)	(2002)	(2003)	(2001)	(2001)	(2001)	(1999)	(1999)	(2004)

03301700 MILL CREEK NEAR FORT KNOX, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	28,074.3		24,956.0		61.5	
ANNUAL MEAN	76.9		68.2		31.6	
HIGHEST ANNUAL MEAN					99.9	
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	1,240	Feb 15	1,100	May 27	2,730	Mar 26, 2002
LOWEST DAILY MEAN	5.2	Jul 27	2.1	Sep 21	2.1	Sep 21, 2004
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 15	2.2	Sep 24	2.2	Sep 24, 2004
MAXIMUM PEAK FLOW			4,160	May 30	9,220	Mar 26, 2002
MAXIMUM PEAK STAGE			9.35	May 30	10.29	Jan 4, 2000
10 PERCENT EXCEEDS	185		163		131	
50 PERCENT EXCEEDS	32		32		20	
90 PERCENT EXCEEDS	8.4		3.5		4.4	

e Estimated



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, at Louisville, and at mile 3.2.

DRAINAGE AREA.--3.5 mi².

PERIOD OF RECORD.--February 1991 to October 1995, (medium and high flows only), September 1997 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage 550.74 ft. above NGVD of 1929.

REMARKS.--Records good. Flow partially regulated by sewage treatment plant upstream.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	2200	*564	*3.43				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.9	e1.8	6.1	8.0	5.3	3.4	3.9	9.8	29	1.8	5.0	2.3
2	e2.9	e1.5	4.9	42	19	2.7	3.5	32	25	1.9	3.7	1.9
3	2.6	e2.9	4.3	16	31	8.8	3.3	14	15	1.8	3.1	1.8
4	2.7	e3.6	4.6	33	14	65	3.0	9.7	12	1.8	3.7	1.6
5	2.5	e1.4	5.4	35	26	29	2.7	7.6	9.4	5.0	12	1.5
6	2.3	e1.8	4.5	16	28	22	2.6	6.2	7.8	8.8	3.5	1.5
7	2.1	e1.8	4.0	12	16	13	2.6	5.1	6.6	3.8	3.0	1.4
8	2.0	e1.6	3.6	9.4	11	9.3	2.5	4.5	5.6	2.5	2.6	1.4
9	2.0	e1.4	3.4	8.0	9.6	7.4	2.4	4.0	26	7.4	2.3	1.4
10	2.6	e1.5	21	6.7	8.2	6.1	2.3	3.3	12	8.4	2.2	1.2
11	2.5	e1.7	8.9	6.1	6.9	5.6	2.3	2.9	7.2	4.7	2.0	1.1
12	2.7	e1.4	6.2	5.4	6.1	4.8	5.9	2.8	21	4.0	1.9	1.2
13	2.9	e6.7	5.2	4.7	5.4	4.3	33	3.1	12	12	1.8	1.1
14	16	e4.6	5.3	4.4	5.1	4.1	19	4.1	8.3	15	1.8	1.1
15	3.1	e5.3	4.7	3.7	4.6	3.7	9.6	19	6.8	5.4	1.7	0.99
16	2.3	e4.6	8.1	3.4	4.0	6.3	7.2	7.1	10	3.9	1.6	1.0
17	2.3	e2.5	6.6	6.9	3.7	4.4	6.0	4.9	6.3	28	1.5	1.1
18	2.1	28	6.3	17	3.6	3.7	5.1	11	5.0	7.5	1.5	0.98
19	1.9	13	5.9	8.2	3.5	3.3	4.6	8.3	5.0	5.0	1.5	0.99
20	1.8	6.8	5.1	6.2	3.4	3.6	4.7	6.1	3.9	3.9	2.2	0.98
21	1.7	5.1	4.7	5.5	3.1	3.3	9.5	4.5	3.5	3.2	2.1	0.93
22	1.6	4.2	4.3	4.9	2.9	2.9	7.3	3.8	3.2	3.0	1.6	0.95
23	1.6	3.7	24	4.2	2.7	2.9	23	3.4	2.9	3.1	1.4	0.96
24	1.4	13	14	4.0	2.6	3.2	9.5	3.1	2.6	2.7	1.3	0.98
25	1.4	5.3	9.0	4.2	2.5	3.0	21	43	2.6	2.4	1.6	0.96
26	5.4	4.5	7.0	13	2.3	3.0	11	36	2.4	11	8.4	0.98
27	2.1	20	6.0	14	2.3	3.0	8.0	71	2.2	3.5	2.7	0.88
28	1.6	25	5.2	8.1	2.2	2.8	6.4	63	2.1	2.9	2.1	0.87
29	1.5	12	16	6.8	2.2	5.8	5.4	23	1.9	2.5	10	0.89
30	1.4	8.5	14	5.9	---	5.3	11	59	1.8	7.2	6.5	0.90
31	1.3	---	8.5	5.5	---	4.3	---	62	---	13	2.9	---
TOTAL	84.2	207.8	236.8	328.2	237.2	250.0	238.3	537.3	259.1	187.1	99.2	35.84
MEAN	2.72	6.93	7.64	10.6	8.18	8.06	7.94	17.3	8.64	6.04	3.20	1.19
MAX	16	28	24	42	31	65	33	71	29	28	12	2.3
MIN	1.3	1.4	3.4	3.4	2.2	2.7	2.3	2.8	1.8	1.8	1.3	0.87
CFSM	0.78	1.98	2.18	3.02	2.34	2.30	2.27	4.95	2.47	1.72	0.91	0.34
IN.	0.89	2.21	2.52	3.49	2.52	2.66	2.53	5.71	2.75	1.99	1.05	0.38

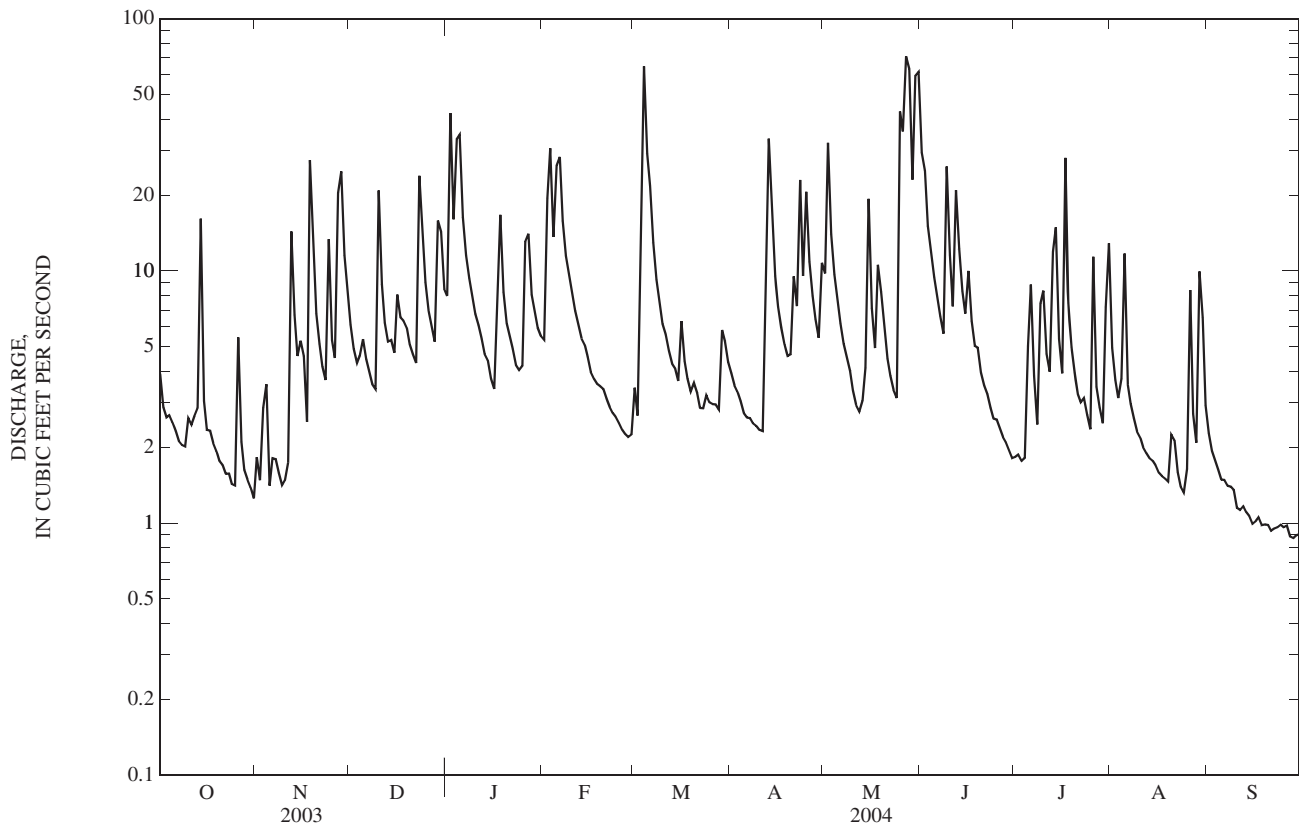
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1998	3.44	7.34	(2002)	1.18	(1998)
1999	4.52	9.22	(2002)	1.74	(2000)
2000	8.19	17.4	(2003)	3.37	(1999)
2001	9.01	11.7	(2002)	1.48	(2001)
2002	9.32	16.1	(2003)	4.92	(2001)
2003	9.19	20.6	(2002)	3.26	(2001)
2004	9.00	16.2	(2002)	2.32	(2001)
2005	9.90	19.5	(2002)	2.31	(2000)
2006	5.77	8.64	(2004)	1.77	(2001)
2007	3.07	6.04	(2004)	1.32	(2002)
2008	2.33	4.55	(2003)	0.75	(1999)
2009	3.27	8.65	(2003)	0.80	(1999)

03301900 FERN CREEK AT OLD BARDSTOWN ROAD AT LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	2,925.1		2,701.04		6.40	
ANNUAL MEAN	8.01		7.38		9.92	
HIGHEST ANNUAL MEAN					2.86	
LOWEST ANNUAL MEAN					163	
HIGHEST DAILY MEAN	105	Feb 22	71	May 27	163	Feb 18, 2000
LOWEST DAILY MEAN	1.1	Aug 27	0.87	Sep 28	0.40	Oct 6, 1997
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 15	0.92	Sep 24	0.61	Oct 3, 1997
MAXIMUM PEAK FLOW			564	May 25	933	Jun 28, 2000
MAXIMUM PEAK STAGE			3.43	May 25	4.16	Jun 28, 2000
ANNUAL RUNOFF (CFSM)	2.29		2.11		1.83	
ANNUAL RUNOFF (INCHES)	31.09		28.71		24.85	
10 PERCENT EXCEEDS	16		16		14	
50 PERCENT EXCEEDS	4.5		4.2		3.0	
90 PERCENT EXCEEDS	1.7		1.5		1.1	

e Estimated



03301940 NORTHERN DITCH AT OKOLONA, KY

LOCATION.--Lat 38°09'01", long 85°41'37", Jefferson County, Hydrologic Unit 05140102, at Okolona on, bridge on Preston Highway, 0.1 mi above Spring Ditch, and at mile 5.1.

DRAINAGE AREA.--11.1 mi².

PERIOD OF RECORD.--June 1974 to Sept. 1976, Mar. 1988 to Feb. 1991, Oct. 1992 to Sept. 1993, Oct. 1994 to Sept. 1995, and Oct. 1997 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 447.32 ft above NGVD of 1929.

REMARKS.--Records good except for periods of estimated records, which are fair.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	0045	*923	*9.67				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

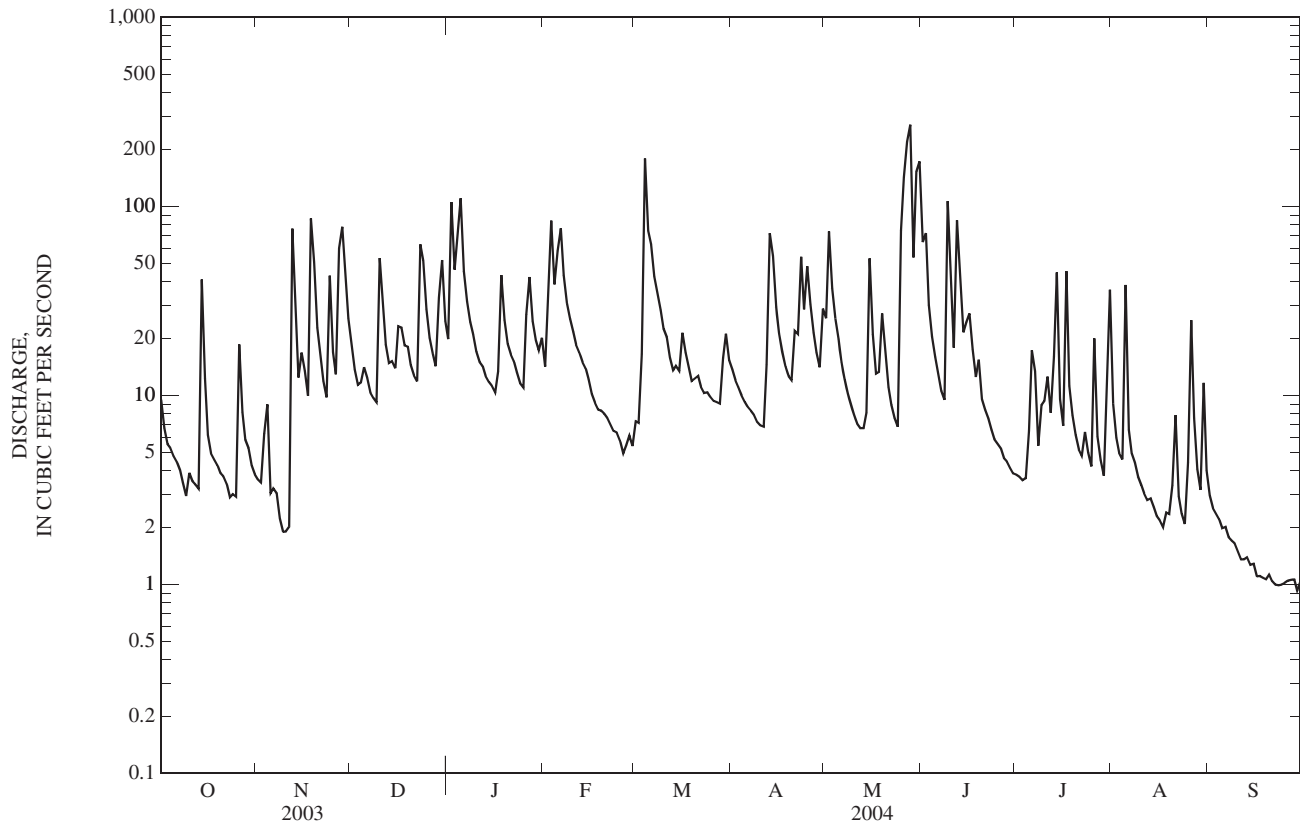
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	3.6	18	20	14	7.3	14	26	65	3.8	9.0	2.9
2	6.7	3.5	14	105	36	7.1	12	73	72	3.7	6.0	2.5
3	5.5	6.2	11	46	84	17	11	37	30	3.6	5.0	2.4
4	5.3	9.0	12	70	39	179	10	25	20	3.6	4.6	2.2
5	4.8	3.0	14	110	58	74	9.2	20	16	6.5	38	2.0
6	4.5	3.2	12	45	76	63	8.7	15	13	17	6.6	2.0
7	4.0	3.0	10	31	43	43	8.2	12	11	13	4.9	1.8
8	3.4	2.2	9.7	24	31	35	7.9	10	9.5	5.4	4.4	1.7
9	2.9	1.9	9.2	21	25	28	7.2	8.9	106	8.9	3.7	1.7
10	3.9	1.9	53	17	22	23	6.9	7.9	47	9.3	3.4	1.5
11	3.5	2.0	31	15	18	20	6.8	7.1	18	13	3.0	1.4
12	3.4	76	19	14	17	16	15	6.7	84	8.1	2.8	1.4
13	3.2	27	15	13	15	14	72	6.7	43	16	2.8	1.4
14	41	12	15	12	14	14	55	8.1	22	45	2.6	1.3
15	12	17	14	11	12	13	29	53	24	9.6	2.3	1.3
16	6.2	13	23	10	10	21	21	21	27	6.9	2.2	1.1
17	4.9	10	23	13	9.1	17	17	13	18	45	2.0	1.1
18	4.6	86	18	43	8.4	14	14	13	13	11	2.4	1.1
19	4.3	51	18	25	8.3	12	13	27	15	7.8	2.3	1.1
20	3.9	23	14	19	8.0	12	12	18	9.5	6.2	3.3	1.1
21	3.7	16	13	16	7.6	13	22	11	8.4	5.2	7.8	1.0
22	3.4	12	12	15	7.0	11	21	8.9	7.5	4.8	2.9	1.00
23	2.9	9.7	63	13	6.5	10	54	7.6	6.5	6.4	2.4	0.99
24	3.0	43	52	12	6.4	10	28	6.8	5.9	5.0	2.1	1.00
25	2.9	17	29	11	5.8	9.7	48	74	5.5	4.2	4.4	1.0
26	19	13	20	27	4.9	9.3	30	142	5.2	20	25	1.0
27	8.2	60	17	42	5.4	9.2	21	219	4.6	6.1	7.6	1.1
28	5.8	78	14	25	6.1	9.0	17	270	4.5	4.5	4.1	1.1
29	5.3	40	33	20	5.4	16	14	54	4.1	3.8	3.2	0.93
30	4.3	26	52	17	---	21	29	152	3.9	9.3	12	1.0
31	3.8	---	25	20	---	15	---	172	---	36	4.0	---
TOTAL	199.8	669.2	682.9	882	602.9	762.6	633.9	1,525.7	719.1	348.7	186.8	43.12
MEAN	6.45	22.3	22.0	28.5	20.8	24.6	21.1	49.2	24.0	11.2	6.03	1.44
MAX	41	86	63	110	84	179	72	270	106	45	38	2.9
MIN	2.9	1.9	9.2	10	4.9	7.1	6.8	6.7	3.9	3.6	2.0	0.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

	8.94	12.4	21.9	27.8	34.2	25.8	26.5	27.3	17.6	9.88	8.27	8.56
MEAN												
MAX	21.6	22.3	58.7	40.5	75.1	84.5	62.7	59.7	36.9	20.7	25.3	25.9
(WY)	(1991)	(2004)	(1991)	(1976)	(1989)	(1975)	(1975)	(1990)	(1990)	(1989)	(1993)	(2003)
MIN	2.47	3.20	6.39	6.50	12.6	11.1	5.34	4.49	4.08	2.17	0.70	0.61
(WY)	(1998)	(2000)	(1999)	(2001)	(1999)	(1999)	(2001)	(2000)	(2001)	(2002)	(1999)	(1999)

03301940 NORTHERN DITCH AT OKOLONA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	7,889.4		7,256.72		18.9	
ANNUAL MEAN	21.6		19.8		28.6	
HIGHEST ANNUAL MEAN					8.31	
LOWEST ANNUAL MEAN					1975	
HIGHEST DAILY MEAN	248	Sep 2	270	May 28	608	May 18, 1995
LOWEST DAILY MEAN	1.9	Nov 9	0.93	Sep 29	0.18	Aug 16, 1999
ANNUAL SEVEN-DAY MINIMUM	2.5	Nov 5	1.0	Sep 20	0.24	Aug 12, 1999
MAXIMUM PEAK FLOW			923	May 28	1,590	Jun 28, 1999
MAXIMUM PEAK STAGE			9.67	May 28	13.19	Jun 28, 1999
10 PERCENT EXCEEDS	52		46		42	
50 PERCENT EXCEEDS	12		11		8.9	
90 PERCENT EXCEEDS	3.5		2.4		2.4	



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.

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 430.38 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Nov. 16, 1962.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1820	1,340	11.82	May 28	0310	*3,270	*18.19
Jan 5	0150	1,650	13.12	May 31	0445	1,710	13.36
May 27	0345	1,960	14.30	Aug 5	0340	2,110	14.86

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	11	67	101	e58	e43	63	169	329	8.4	84	14
2	20	10	57	729	e169	e72	42	483	641	8.5	44	18
3	16	10	44	249	e447	e63	33	153	195	8.9	30	19
4	15	16	53	350	e151	e563	27	95	104	8.2	24	13
5	14	11	104	867	e246	e326	23	69	76	56	917	11
6	14	14	60	234	e398	e291	21	51	60	101	114	10
7	13	13	46	142	e144	e143	20	39	50	108	58	9.4
8	12	10	41	98	e110	e89	19	32	45	27	34	9.4
9	12	8.9	39	79	e88	e70	18	27	121	118	23	9.2
10	e15	8.3	289	57	e74	e57	16	23	183	108	18	9.1
11	e16	8.5	147	50	e71	e51	16	21	62	42	14	8.3
12	e10	486	84	51	e67	e45	77	19	258	80	13	11
13	e19	196	62	47	e64	e41	594	19	162	42	11	7.8
14	e107	62	69	42	e62	e38	442	27	81	187	10	7.8
15	55	89	71	40	e62	e38	134	329	60	44	9.7	7.7
16	19	59	148	37	e54	e50	85	101	104	24	9.4	8.3
17	15	41	164	76	e43	e82	56	51	76	97	9.5	8.0
18	13	324	102	329	e37	e48	42	46	38	36	12	7.9
19	11	293	96	98	e38	e43	35	92	54	22	21	7.7
20	10	93	72	e72	e39	36	32	85	27	18	28	7.7
21	9.4	55	60	e66	e39	49	93	40	20	15	49	7.7
22	9.1	42	57	e55	e38	33	118	26	19	18	16	7.9
23	8.5	34	377	e53	e34	27	340	20	17	109	12	8.0
24	8.1	207	314	e50	e36	26	148	18	16	69	11	8.3
25	8.1	77	132	e45	e32	23	320	76	13	25	48	8.5
26	114	52	95	e48	e30	22	135	611	12	217	194	8.9
27	38	333	80	e140	e28	22	77	1,170	10	48	81	9.0
28	22	430	72	e89	e28	21	53	1,920	10	28	30	8.7
29	22	151	181	e78	e29	66	41	406	10	19	20	8.2
30	14	92	335	e64	---	135	134	606	9.2	52	25	8.2
31	12	---	136	e66	---	92	---	1,090	---	373	17	---
TOTAL	710.2	3,236.7	3,654	4,502	2,716	2,705	3,254	7,914	2,862.2	2,117.0	1,986.6	287.7
MEAN	22.9	108	118	145	93.7	87.3	108	255	95.4	68.3	64.1	9.59
MAX	114	486	377	867	447	563	594	1,920	641	373	917	19
MIN	8.1	8.3	39	37	28	21	16	18	9.2	8.2	9.4	7.7
CFSM	0.36	1.69	1.84	2.27	1.46	1.36	1.69	3.99	1.49	1.07	1.00	0.15
IN.	0.41	1.88	2.12	2.62	1.58	1.57	1.89	4.60	1.66	1.23	1.15	0.17

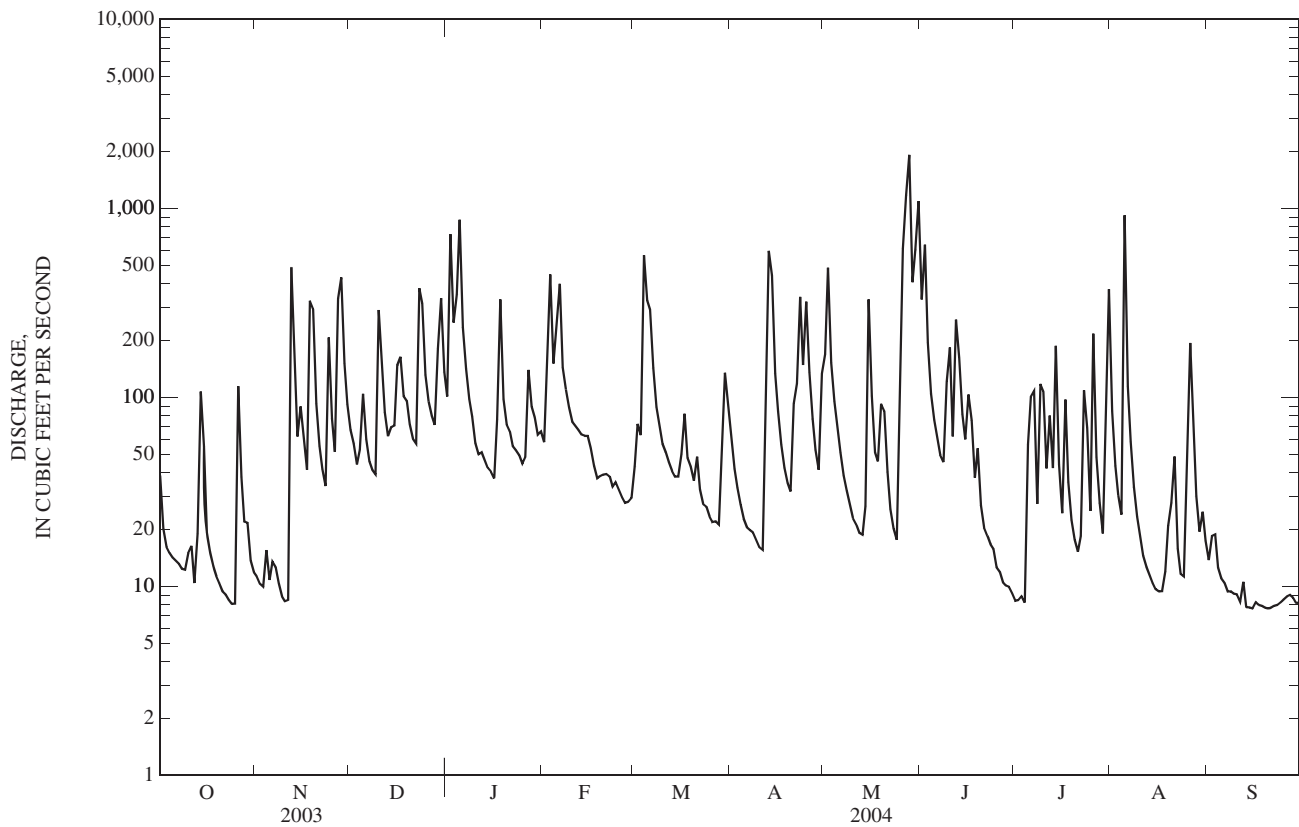
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	29.3	58.9	99.7	132	155	184	132	115	69.2	46.2	35.0	34.6
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	21.2	10.6	4.54	2.96	0.78	1.15
(WY)	(1947)	(1945)	(1954)	(1977)	(1954)	(1954)	(2001)	(1954)	(1954)	(1952)	(1945)	(1945)

03302000 POND CREEK NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	37,702.5		35,945.4		90.7	
ANNUAL MEAN	103		98.2		159	
HIGHEST ANNUAL MEAN					11.4	
LOWEST ANNUAL MEAN					7,200	
HIGHEST DAILY MEAN	1,570	Jan 1	1,920	May 28	0.10	Mar 2, 1997
LOWEST DAILY MEAN	8.1	Oct 24	7.7	Sep 15	0.19	Sep 3, 1945
ANNUAL SEVEN-DAY MINIMUM	9.2	Oct 19	7.8	Sep 17	8,020	Sep 17, 1945
MAXIMUM PEAK FLOW			3,270	May 28	25.74	Mar 9, 1964
MAXIMUM PEAK STAGE			18.19	May 28	0.10	Mar 2, 1997
INSTANTANEOUS LOW FLOW					1.42	Sep 3, 1945
ANNUAL RUNOFF (CFSM)	1.61		1.53		19.25	
ANNUAL RUNOFF (INCHES)	21.91		20.89		190	
10 PERCENT EXCEEDS	220		247		27	
50 PERCENT EXCEEDS	46		45		6.0	
90 PERCENT EXCEEDS	13		9.4			

e Estimated



03302030 POND CREEK AT PENDELTON ROAD NEAR LOUISVILLE, KY

LOCATION.--Lat 38°03'15", long 85°52'18", Jefferson County, Hydrologic Unit 05140102, at bridge on Pendleton Road near Louisville, 1.3 mi above Brier Creek and at mile 7.1.

DRAINAGE AREA.--80.3 mi².

PERIOD OF RECORD.--December 1998 to current year.

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

REMARKS.--Records good except those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	0605	*3,880	*18.51				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	18	e80	101	71	34	98	275	e535	15	125	26
2	29	17	e66	1,150	292	63	65	886	3,110	15	58	24
3	22	15	e52	359	1,390	108	50	255	e398	15	39	42
4	20	18	e55	389	273	2,190	42	128	e153	15	31	24
5	17	20	e165	2,700	370	602	35	91	e109	39	1,550	21
6	16	15	e68	e411	1,090	859	32	68	85	117	187	18
7	15	21	e52	e203	312	252	30	52	68	204	88	17
8	15	15	e45	e129	e163	260	28	42	60	45	54	16
9	14	13	e46	e94	e121	812	26	36	79	88	38	15
10	18	11	e480	e67	e101	1,200	23	32	347	357	32	15
11	19	11	221	e62	e94	898	21	29	85	57	26	14
12	14	791	95	e64	e86	253	58	27	272	132	22	15
13	13	523	66	e59	e75	58	899	25	305	70	20	15
14	138	91	66	53	58	52	995	28	114	266	19	13
15	118	105	70	49	53	47	219	495	75	70	17	12
16	36	103	145	42	44	146	185	182	104	39	16	12
17	25	58	212	58	41	110	e72	74	136	99	16	12
18	23	336	111	472	39	e80	e53	56	57	54	15	11
19	20	677	101	185	37	54	e43	121	66	32	32	11
20	18	e117	73	95	38	55	e38	141	45	26	23	e11
21	17	e65	57	73	36	81	100	63	33	22	82	e11
22	16	e48	52	70	32	52	182	42	30	35	30	e11
23	14	e38	428	54	29	44	507	33	28	111	19	e11
24	14	e365	623	49	29	41	253	28	27	153	19	e11
25	13	e105	162	46	27	37	506	27	23	38	78	e12
26	140	e69	103	128	25	34	231	895	21	260	304	12
27	69	e469	80	411	24	33	110	1,990	19	65	180	12
28	35	e810	68	150	24	32	75	3,180	18	38	60	12
29	34	e189	139	101	23	57	57	e586	17	27	39	11
30	25	e107	556	88	---	193	149	e687	16	38	39	11
31	19	---	157	85	---	156	---	e1,790	---	658	34	---
TOTAL	1,030	5,240	4,694	7,997	4,997	8,893	5,182	12,364	6,435	3,200	3,292	458
MEAN	33.2	175	151	258	172	287	173	399	214	103	106	15.3
MAX	140	810	623	2,700	1,390	2,190	995	3,180	3,110	658	1,550	42
MIN	13	11	45	42	23	32	21	25	16	15	15	11

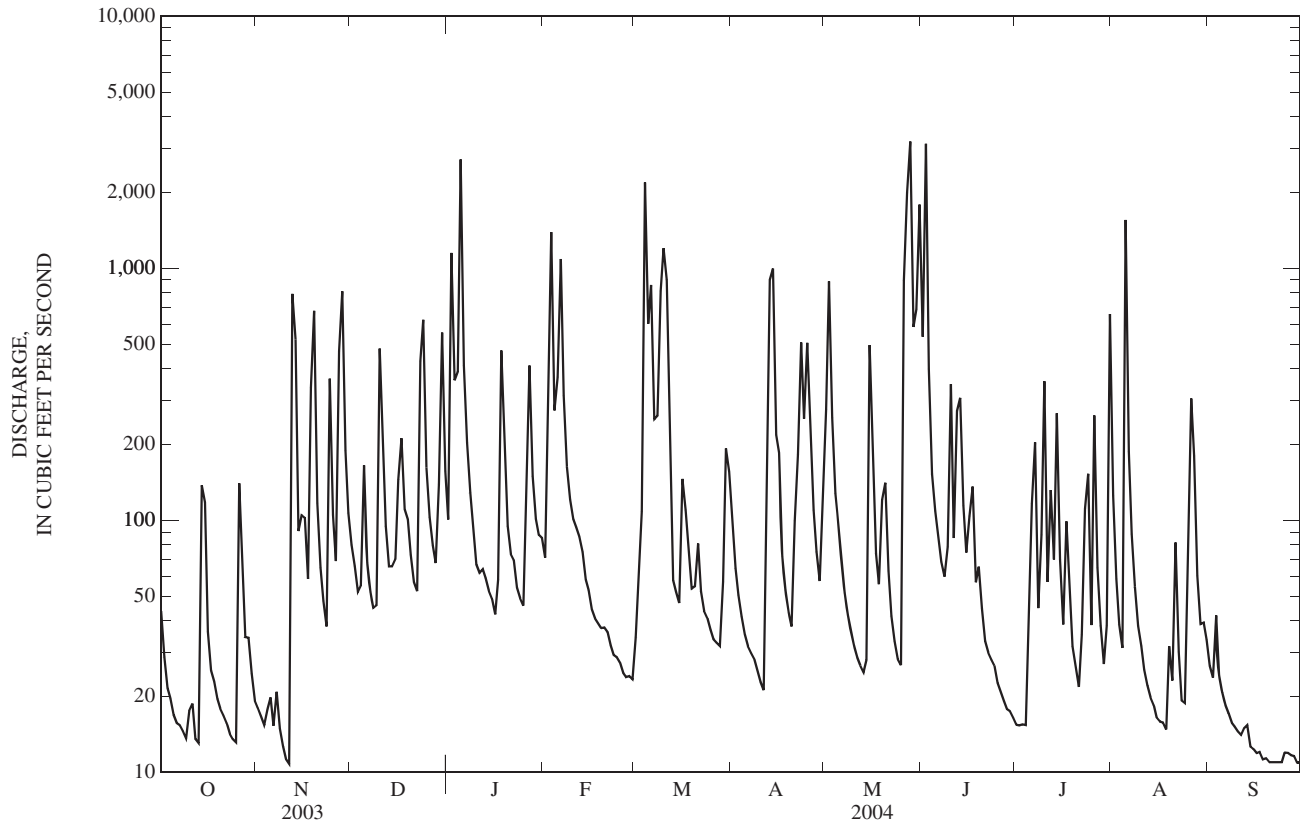
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	67.1	104	180	248	193	205	156	196	100	42.7	41.0	78.6
MAX	131	189	302	440	315	451	287	399	214	103	106	169
(WY)	(2003)	(2002)	(2003)	(1999)	(2003)	(2002)	(2002)	(2004)	(2004)	(2004)	(2004)	(2003)
MIN	26.9	21.3	100	44.0	104	84.8	33.0	23.4	22.0	12.8	11.6	15.3
(WY)	(2001)	(2000)	(2000)	(2001)	(2002)	(2001)	(2001)	(2000)	(2001)	(2002)	(2002)	(2004)

03302030 POND CREEK AT PENDELTON ROAD NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	54,559		63,782		136	
ANNUAL MEAN	149		174		176	
HIGHEST ANNUAL MEAN					60.9	
LOWEST ANNUAL MEAN					1.7	
HIGHEST DAILY MEAN	2,480	Jan 1	3,180	May 28	6,220	Jan 4, 2000
LOWEST DAILY MEAN	10	Jul 28	11	Nov 10	4.1	Jul 17, 2001
ANNUAL SEVEN-DAY MINIMUM	14	Jun 30	11	Sep 18	4.1	Jul 11, 2001
MAXIMUM PEAK FLOW			3,880	May 28	10,500	Jan 4, 2000
MAXIMUM PEAK STAGE			18.51	May 28	19.82	Mar 26, 2002
10 PERCENT EXCEEDS	373		416		260	
50 PERCENT EXCEEDS	52		57		38	
90 PERCENT EXCEEDS	15		15		11	

e Estimated



03302050 BRIER CREEK AT PENDLETON ROAD NEAR LOUISVILLE, KY

LOCATION.--Lat 38°02'52", long 85°51'26", Jefferson County, Hydrologic Unit 05140102, at bridge on Pendleton Road, 0.4 mi below Headley Hollow, 10 miles south of Louisville, and at mile 1.64

DRAINAGE AREA.--4.01 mi².

PERIOD OF RECORD.--January 1999 to current year.

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

REMARKS.--Records fair except those estimated, which are poor.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 360 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1540	424	3.98	May 28	0145	*3,330	*7.47
Mar 4	0230	720	4.66	Jun 2	0145	413	3.95
May 27	0105	933	5.04				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	1.2	5.3	7.1	4.4	1.5	7.7	6.9	39	0.09	2.2	0.11
2	e0.95	1.2	4.1	48	25	1.5	6.4	25	74	0.09	0.68	0.11
3	e0.70	1.1	3.4	22	52	4.3	5.5	13	10	0.08	0.37	0.11
4	e0.65	1.1	3.5	41	19	109	4.6	7.9	4.5	0.08	0.25	0.10
5	e0.55	1.2	3.9	57	27	36	4.0	5.5	2.3	1.3	28	0.09
6	e0.49	1.2	3.4	18	39	35	3.6	3.9	1.3	0.83	1.8	0.08
7	e0.42	1.2	3.0	10	19	16	3.3	2.7	0.83	0.61	0.61	0.08
8	0.36	1.0	2.8	7.6	11	9.7	3.0	1.8	0.62	0.22	0.34	0.09
9	0.38	0.96	2.6	6.3	8.3	7.2	2.5	1.2	1.9	5.1	0.23	0.09
10	0.42	0.93	11	4.9	6.7	5.5	2.1	0.91	1.5	2.2	0.18	0.06
11	0.44	0.95	8.2	4.4	5.5	4.8	1.9	0.67	0.63	0.37	0.13	0.06
12	0.47	39	5.7	4.2	4.8	4.1	4.6	0.53	12	7.8	0.11	0.05
13	0.55	9.5	4.7	3.7	4.1	3.5	53	0.49	7.0	4.3	0.09	0.05
14	3.0	4.4	4.5	3.4	3.8	3.4	43	0.57	2.6	7.0	0.07	0.05
15	1.3	4.5	4.2	3.0	3.4	3.1	17	12	1.1	0.93	0.06	0.04
16	0.84	3.8	7.9	2.6	2.8	5.3	9.9	4.5	1.5	0.46	0.05	0.04
17	0.73	3.1	8.2	3.4	2.6	4.4	6.9	2.3	1.7	0.30	0.05	0.04
18	0.67	20	7.0	13	2.3	3.7	5.2	1.4	1.9	0.21	0.05	0.03
19	0.59	16	6.2	8.0	2.3	3.2	4.2	16	1.0	0.15	0.04	0.03
20	0.52	6.9	5.0	5.9	2.2	7.7	3.6	14	0.61	0.12	0.06	0.03
21	0.50	4.8	4.4	5.2	1.8	9.6	5.8	5.1	0.45	0.10	0.09	0.03
22	0.50	3.7	4.0	4.5	1.5	6.5	7.0	3.0	0.38	0.41	0.05	0.02
23	0.51	3.0	24	3.7	1.4	5.5	26	1.7	0.33	0.47	0.04	0.02
24	0.47	13	24	3.5	1.4	4.9	16	1.1	0.24	0.31	0.04	0.02
25	0.46	6.4	11	3.4	1.2	4.3	23	0.90	0.21	0.19	3.4	0.02
26	2.6	4.7	7.3	8.1	1.1	3.9	14	17	0.17	0.82	8.1	0.02
27	1.7	22	5.7	13	1.0	3.6	8.5	173	0.13	0.30	1.4	0.02
28	1.4	33	4.8	7.7	0.94	3.4	5.8	e540	0.12	0.19	0.39	0.02
29	1.3	13	11	6.6	0.92	5.1	4.3	e17	0.11	0.13	0.23	0.02
30	1.1	7.8	17	6.0	---	8.5	8.9	e66	0.09	0.42	0.19	0.02
31	1.2	---	9.3	5.0	---	9.2	---	89	---	19	0.14	---
TOTAL	27.47	230.64	227.1	340.2	256.46	333.4	311.3	1,035.07	168.22	54.58	49.44	1.55
MEAN	0.89	7.69	7.33	11.0	8.84	10.8	10.4	33.4	5.61	1.76	1.59	0.05
MAX	3.0	39	24	57	52	109	53	540	74	19	28	0.11
MIN	0.36	0.93	2.6	2.6	0.92	1.5	1.9	0.49	0.09	0.08	0.04	0.02

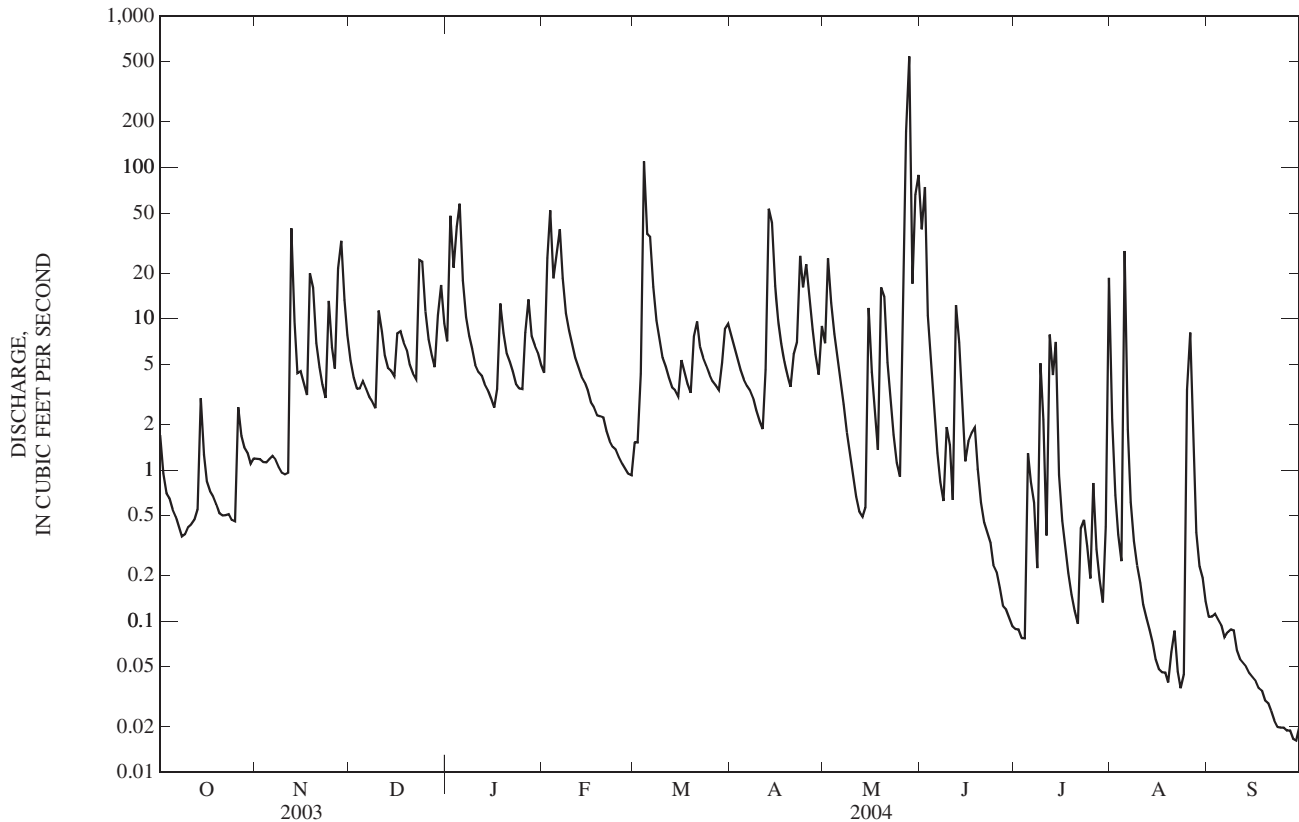
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

	1.00	3.85	7.15	11.3	12.5	10.9	9.46	10.1	2.33	0.55	0.42	1.25
MEAN												
MAX	2.29	7.69	14.2	23.2	30.7	25.0	17.2	33.4	5.61	1.76	1.59	5.52
(WY)	(2003)	(2004)	(2003)	(2000)	(2000)	(2002)	(2002)	(2004)	(2004)	(2004)	(2004)	(2003)
MIN	0.00	0.00	0.68	1.32	5.27	4.19	1.91	1.42	0.26	0.03	0.02	0.00
(WY)	(2000)	(2000)	(2000)	(2001)	(2002)	(2001)	(2001)	(2000)	(2001)	(2002)	(2002)	(1999)

03302050 BRIER CREEK AT PENDLETON ROAD NEAR LOUISVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	2,324.53		3,035.43		6.17	
ANNUAL MEAN	6.37		8.29		8.29	
HIGHEST ANNUAL MEAN					1.76	
LOWEST ANNUAL MEAN					0.00	
HIGHEST DAILY MEAN	104	Jan 1	540	May 28	685	Feb 18, 2000
LOWEST DAILY MEAN	0.09	Aug 21	0.02	Sep 22	0.00	Aug 21, 1999
ANNUAL SEVEN-DAY MINIMUM	0.17	Aug 15	0.02	Sep 22	0.00	Aug 21, 1999
MAXIMUM PEAK FLOW			3,330	May 28	3,330	May 28, 2004
MAXIMUM PEAK STAGE			7.47	May 28	7.61	Feb 18, 2000
10 PERCENT EXCEEDS	14		17		11	
50 PERCENT EXCEEDS	2.6		2.8		1.1	
90 PERCENT EXCEEDS	0.35		0.09		0.05	

e Estimated



03302110 OTTER CREEK AT OTTER CREEK PARK NEAR ROCK HAVEN, KY

LOCATION.--Lat 37°56'37", long 86°01'47", Meade County, Hydrologic Unit 05140104, at downstream side of bridge on Highway 1638, 1.4 mi east of Rock Haven, and at mile 3.3.

DRAINAGE AREA.--99.2 mi².

PERIOD OF RECORD.--January 1999 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 440.037 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--Louisville and Jefferson County Metropolitan Sewer District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 30	1117	*6,020	*8.24				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	27	164	184	107	64	110	285	932	55	119	27
2	35	26	128	887	272	73	101	1,030	576	54	71	26
3	32	25	111	550	1,050	69	93	591	391	52	54	32
4	32	25	108	382	433	96	85	357	297	52	46	27
5	30	25	119	887	480	292	79	259	244	55	76	25
6	28	25	115	411	887	754	73	199	204	59	48	24
7	27	26	101	277	476	311	72	164	174	52	42	23
8	26	25	95	222	303	203	71	141	144	49	39	22
9	25	25	90	189	246	166	65	125	374	45	37	22
10	26	24	158	158	209	136	60	111	581	45	35	22
11	27	24	157	140	179	121	59	101	185	54	34	22
12	28	359	116	131	159	110	81	91	197	484	33	22
13	26	365	105	119	140	98	566	85	203	e167	32	21
14	52	130	105	110	131	95	812	84	142	e121	31	21
15	51	102	99	103	121	90	411	277	122	84	29	21
16	36	94	184	94	107	94	245	195	141	70	29	21
17	31	80	260	92	100	89	180	125	143	59	28	21
18	29	386	178	173	94	84	148	103	357	53	27	20
19	27	527	155	153	93	77	128	116	155	50	27	19
20	26	215	126	118	94	82	116	233	120	46	29	19
21	24	147	111	109	88	204	151	122	104	43	39	18
22	25	114	107	104	79	120	289	101	93	42	29	19
23	23	94	362	95	77	102	1,150	89	87	104	26	19
24	22	269	555	93	74	94	779	101	79	54	26	19
25	22	163	277	92	68	88	821	124	76	44	25	18
26	47	122	195	255	66	84	552	653	71	43	64	18
27	52	421	160	308	62	81	345	2,310	64	42	50	18
28	40	688	140	178	60	78	246	1,370	61	40	31	18
29	36	353	181	151	59	87	193	715	58	36	29	18
30	32	223	457	135	---	120	343	2,060	56	36	40	19
31	28	---	235	118	---	131	---	1,910	---	323	28	---
TOTAL	982	5,129	5,454	7,018	6,314	4,293	8,424	14,227	6,431	2,513	1,253	641
MEAN	31.7	171	176	226	218	138	281	459	214	81.1	40.4	21.4
MAX	52	688	555	887	1,050	754	1,150	2,310	932	484	119	32
MIN	22	24	90	92	59	64	59	84	56	36	25	18

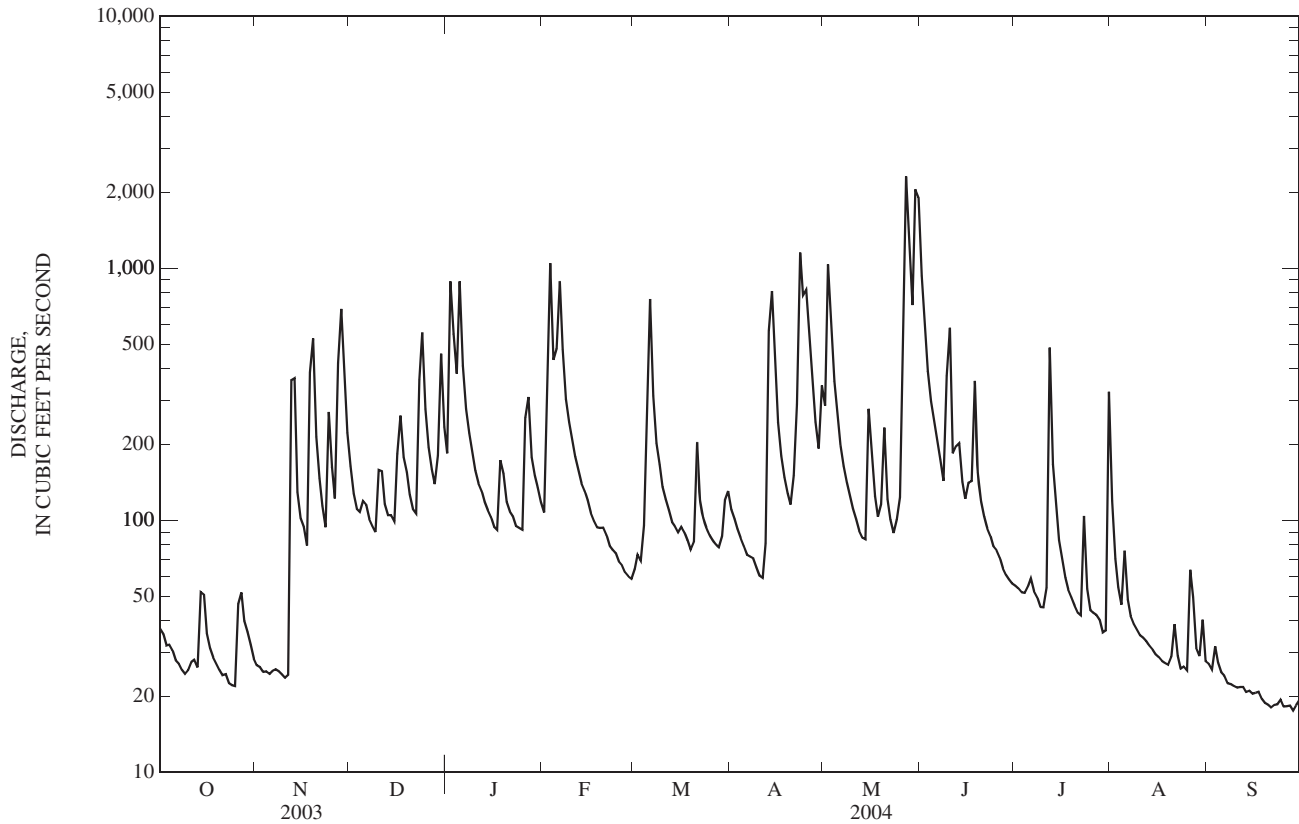
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	53.8	109	209	198	239	211	200	282	93.7	41.9	30.5	54.8
MAX	111	183	351	324	447	509	391	552	214	81.1	50.4	169
(WY)	(2003)	(2002)	(2002)	(1999)	(2003)	(2002)	(2002)	(2002)	(2004)	(2004)	(2000)	(2003)
MIN	15.5	11.9	58.6	33.4	126	130	45.6	46.7	36.1	21.5	10.9	5.82
(WY)	(2001)	(2000)	(2000)	(2001)	(2002)	(2001)	(2001)	(2001)	(2001)	(1999)	(1999)	(1999)

03302110 OTTER CREEK AT OTTER CREEK PARK NEAR ROCK HAVEN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	64,587		62,679		148	
ANNUAL MEAN	177		171		216	
HIGHEST ANNUAL MEAN					60.3	
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	1,800	Jan 1	2,310	May 27	3,590	Mar 26, 2002
LOWEST DAILY MEAN	15	Aug 19	18	Sep 21	4.9	Sep 6, 1999
ANNUAL SEVEN-DAY MINIMUM	18	Aug 15	18	Sep 23	5.4	Sep 10, 1999
MAXIMUM PEAK FLOW			6,020	May 30	8,810	Jan 4, 2000
MAXIMUM PEAK STAGE			8.24	May 30	8.63	Mar 26, 2002
10 PERCENT EXCEEDS	398		383		341	
50 PERCENT EXCEEDS	89		94		56	
90 PERCENT EXCEEDS	26		25		16	

e Estimated



03303205 SINKING CREEK NEAR LODIBURG, KY

LOCATION.--Lat 37°52'06", long 86°23'16", Breckinridge County, Hydrologic Unit 05140104, on bridge located 2.3 miles south of Lodiburg on County Road #86, 0.75 mile downstream from Boiling Spring.

DRAINAGE AREA.--125 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--May 27, 2004 to current year.

GAGE.--Water-stage recorder and four parameter water-quality monitor with telemetry. Datum of gage is 410 ft above NGVD of 1929, (from topographic map).

REMARKS.--Records rated good.

COOPERATION.--Kentucky Department of Agriculture.

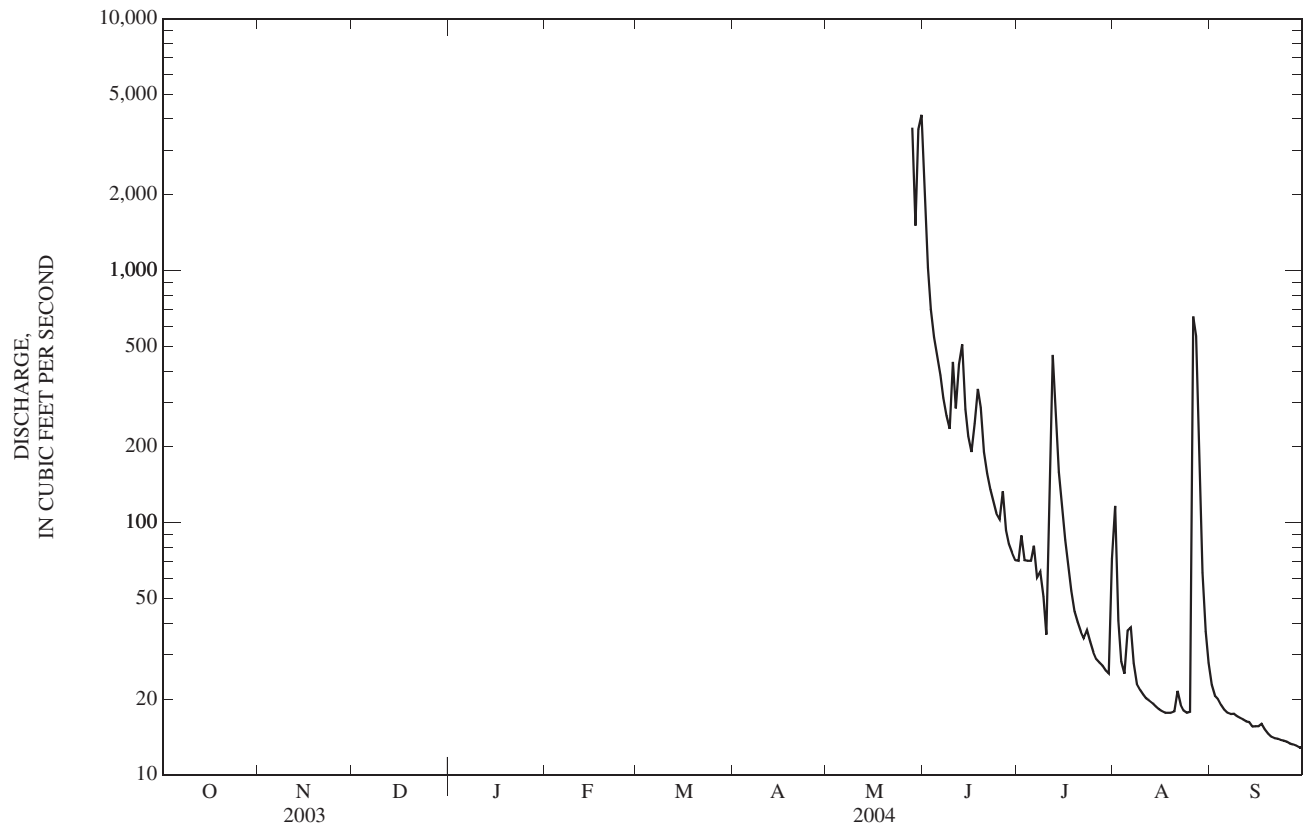
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	2,010	71	116	23
2	---	---	---	---	---	---	---	---	1,030	89	41	21
3	---	---	---	---	---	---	---	---	704	71	28	20
4	---	---	---	---	---	---	---	---	546	71	25	19
5	---	---	---	---	---	---	---	---	454	71	37	18
6	---	---	---	---	---	---	---	---	385	81	38	18
7	---	---	---	---	---	---	---	---	313	61	28	17
8	---	---	---	---	---	---	---	---	266	64	23	17
9	---	---	---	---	---	---	---	---	235	51	22	17
10	---	---	---	---	---	---	---	---	434	36	21	17
11	---	---	---	---	---	---	---	---	284	185	20	17
12	---	---	---	---	---	---	---	---	425	461	20	16
13	---	---	---	---	---	---	---	---	510	261	19	16
14	---	---	---	---	---	---	---	---	283	159	19	16
15	---	---	---	---	---	---	---	---	220	119	18	16
16	---	---	---	---	---	---	---	---	191	85	18	16
17	---	---	---	---	---	---	---	---	247	68	18	16
18	---	---	---	---	---	---	---	---	340	54	18	15
19	---	---	---	---	---	---	---	---	286	45	18	15
20	---	---	---	---	---	---	---	---	191	40	18	14
21	---	---	---	---	---	---	---	---	157	37	22	14
22	---	---	---	---	---	---	---	---	136	35	19	14
23	---	---	---	---	---	---	---	---	121	37	18	14
24	---	---	---	---	---	---	---	---	109	34	18	14
25	---	---	---	---	---	---	---	---	103	31	18	14
26	---	---	---	---	---	---	---	---	133	29	657	13
27	---	---	---	---	---	---	---	---	93	28	550	13
28	---	---	---	---	---	---	---	3,680	82	27	149	13
29	---	---	---	---	---	---	---	1,510	76	26	63	13
30	---	---	---	---	---	---	---	3,630	71	25	37	13
31	---	---	---	---	---	---	---	4,140	---	72	28	---
MEAN	---	---	---	---	---	---	---	---	348	81.4	69.2	16.0
MAX	---	---	---	---	---	---	---	2,010	461	657	23	
MIN	---	---	---	---	---	---	---	71	25	18	13	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	348	81.4	69.2	16.0
MAX	---	---	---	---	---	---	---	---	348	81.4	69.2	16.0
(WY)	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	---	348	81.4	69.2	16.0
(WY)	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)

03303205 SINKING CREEK NEAR LODIBURG, KY—Continued



03303205 SINKING CREEK NEAR LODIBURG, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 27, 2004 to current water year.

INSTRUMENTATION.--Four parameter water-quality monitor with telemetry.

REMARKS.--

SPECIFIC CONDUCTANCE.--Records rated good.

PH.--Records rated excellent except for the following periods: July 6, July 17-31 rated good.

WATER TEMPERATURE.--Records rated excellent.

DISSOLVED OXYGEN.--Records rated good.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 662 microseimens, Sep. 30; minimum recorded, 174 microseimens, May 30.

PH.--Maximum recorded, 8.3 units, July 9; minimum recorded, 6.7 units, July 31.

WATER TEMPERATURE.--Maximum recorded, 25.1°C, July 19; minimum recorded 14.9°C, June 5.

DISSOLVED OXYGEN.--Maximum recorded, 11.5 mg/L, Sep. 30; minimum recorded, 6.9 mg/L, Sep. 28.

COOPERATION.--Kentucky Department of Agriculture.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[illegible]

03303205 SINKING CREEK NEAR LODIBURG, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
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	---	---	---	---	---	---	---	---	---	246	196	224
29	---	---	---	---	---	---	---	---	---	307	246	277
30	---	---	---	---	---	---	---	---	---	310	174	214
31	---	---	---	---	---	---	---	---	---	201	177	190
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	261	201	236	---	---	---	---	---	---	434	415	424
2	290	261	277	---	---	---	568	543	554	446	430	439
3	303	290	297	---	---	---	546	525	534	459	442	450
4	310	303	307	---	---	---	525	512	518	472	455	466
5	314	310	312	---	---	---	514	509	512	486	469	478
6	320	314	317	---	---	---	523	514	519	505	484	492
7	328	320	325	---	---	---	537	522	531	533	499	516
8	334	328	332	---	---	---	537	527	530	551	526	539
9	341	334	338	---	---	---	527	518	521	559	541	552
10	348	288	312	---	---	---	524	516	519	572	553	562
11	300	291	294	---	---	---	541	524	533	575	560	568
12	309	281	300	---	---	---	547	536	541	577	569	573
13	290	276	281	432	370	395	561	545	552	584	575	580
14	297	277	286	384	368	374	570	558	564	589	583	586
15	322	297	310	404	384	394	579	570	575	596	589	592
16	337	322	330	424	404	415	585	579	582	607	596	600
17	340	329	335	---	---	---	590	583	588	620	603	612
18	329	316	322	---	---	---	593	589	591	626	613	620
19	319	308	312	---	---	---	593	591	592	629	618	622
20	---	---	---	---	---	---	602	586	593	633	617	622
21	329	321	325	505	494	501	601	587	597	625	618	621
22	343	329	336	514	500	508	606	601	604	629	624	626
23	352	336	348	522	510	517	608	606	607	633	628	630
24	360	352	356	531	522	527	606	599	605	636	633	634
25	363	357	360	535	531	534	602	597	599	639	636	637
26	369	363	367	544	535	540	---	---	---	646	634	639
27	373	359	363	552	544	549	---	---	---	659	637	646
28	---	---	---	560	552	556	---	---	---	656	649	652
29	---	---	---	566	559	563	---	---	---	660	651	654
30	---	---	---	572	566	569	397	359	380	662	652	657
31	---	---	---	585	568	576	417	394	408	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	662	415	576
YEAR	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

03303205 SINKING CREEK NEAR LODIBURG, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	7.4	7.4	---	---	7.3	7.2	7.2	7.1
2	---	---	---	---	7.4	7.4	---	---	7.3	7.2	7.2	7.1
3	---	---	---	---	7.4	7.3	---	---	7.3	7.2	7.2	7.1
4	---	---	---	---	7.4	7.3	---	---	7.3	7.2	7.2	7.1
5	---	---	---	---	7.3	7.3	---	---	7.2	7.2	7.2	7.2
6	---	---	---	---	7.3	7.3	7.2	7.1	7.3	7.2	7.2	7.1
7	---	---	---	---	7.3	7.3	7.2	7.2	7.3	7.3	7.2	7.1
8	---	---	---	---	7.4	7.3	7.8	7.1	7.3	7.3	7.3	7.2
9	---	---	---	---	7.4	7.4	8.3	7.4	7.3	7.3	7.3	7.1
10	---	---	---	---	7.5	7.3	8.2	7.9	7.3	7.3	7.3	7.1
11	---	---	---	---	7.3	7.2	8.1	7.2	7.3	7.3	7.3	7.3
12	---	---	---	---	7.4	7.3	7.5	7.2	7.3	7.3	7.3	7.3
13	---	---	---	---	7.3	7.2	7.2	7.0	7.3	7.3	7.3	7.3
14	---	---	---	---	7.2	7.2	7.1	7.0	7.3	7.3	7.3	7.3
15	---	---	---	---	7.3	7.2	7.0	7.0	7.3	7.3	7.3	7.3
16	---	---	---	---	7.3	7.3	7.1	7.0	7.3	7.3	7.3	7.3
17	---	---	---	---	7.4	7.2	7.0	7.0	7.3	7.3	7.3	7.3
18	---	---	---	---	7.2	7.1	7.8	7.0	7.3	7.2	7.4	7.3
19	---	---	---	---	7.3	7.1	8.1	7.4	7.3	7.2	7.4	7.3
20	---	---	---	---	7.2	7.1	8.1	6.7	7.2	7.2	7.4	7.3
21	---	---	---	---	7.2	7.2	6.9	6.8	7.3	7.2	7.4	7.3
22	---	---	---	---	7.2	7.2	6.9	6.8	7.3	7.2	7.4	7.3
23	---	---	---	---	7.3	7.2	6.8	6.8	7.3	7.2	7.4	7.3
24	---	---	---	---	7.3	7.3	6.8	6.8	7.3	7.2	7.4	7.3
25	---	---	---	---	7.3	7.2	6.8	6.8	7.3	7.2	7.4	7.3
26	---	---	---	---	7.3	7.2	6.8	6.8	7.4	7.0	7.4	7.3
27	---	---	7.4	7.3	---	---	6.8	6.8	7.2	7.0	7.3	7.2
28	---	---	7.4	7.3	---	---	6.8	6.8	7.2	7.0	7.4	7.3
29	---	---	7.4	7.4	---	---	6.8	6.8	7.1	7.0	7.4	7.3
30	---	---	7.4	7.3	---	---	6.8	6.8	7.1	7.1	7.4	7.3
31	---	---	7.4	7.3	---	---	7.2	6.7	7.1	7.1	---	---
MONTH	---	---	---	---	---	---	---	---	7.4	7.0	7.4	7.1
YEAR	---	---										

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[illegible]

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[illegible]

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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.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorders with telemetry. 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.--Records good except those below 20,000 ft³/s, which are poor and extreme events, which can be affected by high flows on the Mississippi River. All extreme high flow periods should be scrutinized for this reason. Daily discharge computed from head, gate openings, and lockages furnished by U.S. Army Corps of Engineers, Louisville District. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142,000	127,000	285,000	231,000	95,200	105,000	205,000	218,000	512,000	75,500	170,000	80,900
2	144,000	121,000	285,000	230,000	83,000	111,000	220,000	241,000	520,000	69,700	142,000	68,900
3	131,000	107,000	283,000	271,000	129,000	115,000	234,000	244,000	517,000	70,600	127,000	58,900
4	106,000	94,400	272,000	e340,000	161,000	152,000	266,000	226,000	504,000	56,400	133,000	53,000
5	96,100	82,900	246,000	448,000	200,000	193,000	290,000	186,000	e451,000	54,200	131,000	37,600
6	83,800	81,800	212,000	508,000	e270,000	234,000	291,000	176,000	e353,000	71,700	126,000	36,300
7	77,500	114,000	190,000	535,000	358,000	274,000	285,000	171,000	e296,000	61,300	124,000	49,200
8	84,900	145,000	182,000	544,000	410,000	e353,000	266,000	154,000	e281,000	66,300	103,000	50,000
9	91,700	155,000	178,000	548,000	446,000	429,000	233,000	132,000	198,000	63,100	84,900	60,300
10	63,500	158,000	179,000	546,000	477,000	455,000	192,000	113,000	163,000	67,900	62,700	159,000
11	54,900	133,000	178,000	538,000	500,000	464,000	167,000	105,000	127,000	56,300	41,600	241,000
12	62,000	121,000	178,000	516,000	505,000	e440,000	157,000	90,700	113,000	72,500	58,600	290,000
13	46,000	175,000	196,000	473,000	e460,000	e353,000	157,000	90,200	151,000	67,000	54,800	291,000
14	53,300	242,000	231,000	e367,000	e369,000	273,000	197,000	104,000	182,000	61,400	44,200	282,000
15	55,200	352,000	254,000	257,000	264,000	234,000	262,000	118,000	203,000	82,200	39,900	273,000
16	79,600	389,000	266,000	225,000	208,000	195,000	e334,000	120,000	219,000	83,300	35,000	201,000
17	122,000	e366,000	262,000	197,000	167,000	169,000	412,000	109,000	227,000	67,900	38,700	139,000
18	116,000	284,000	264,000	180,000	147,000	151,000	459,000	101,000	228,000	88,100	38,800	146,000
19	109,000	239,000	271,000	171,000	127,000	144,000	470,000	102,000	240,000	85,200	39,800	239,000
20	117,000	212,000	269,000	177,000	116,000	154,000	462,000	139,000	227,000	69,000	28,800	316,000
21	103,000	242,000	261,000	193,000	113,000	163,000	e393,000	174,000	214,000	67,600	54,000	420,000
22	93,400	303,000	239,000	197,000	113,000	165,000	281,000	195,000	208,000	71,700	86,500	458,000
23	79,700	418,000	207,000	179,000	130,000	183,000	241,000	209,000	185,000	82,600	119,000	477,000
24	69,200	454,000	195,000	157,000	142,000	202,000	238,000	228,000	152,000	82,200	142,000	475,000
25	75,400	470,000	200,000	138,000	150,000	215,000	248,000	251,000	122,000	72,800	139,000	e440,000
26	72,200	e455,000	211,000	123,000	151,000	219,000	246,000	297,000	118,000	70,000	93,000	e335,000
27	59,300	e380,000	236,000	106,000	146,000	201,000	229,000	e355,000	116,000	58,800	66,100	221,000
28	74,700	279,000	250,000	99,600	137,000	176,000	196,000	e413,000	115,000	84,000	53,000	152,000
29	101,000	277,000	262,000	121,000	124,000	161,000	191,000	451,000	112,000	124,000	65,600	122,000
30	108,000	285,000	257,000	122,000	---	162,000	207,000	464,000	105,000	135,000	60,400	106,000
31	125,000	---	247,000	111,000	---	171,000	---	490,000	---	136,000	96,600	---
TOTAL	2,796,400	7,262,100	7,246,000	8,848,600	6,698,200	7,016,000	8,029,000	6,466,900	7,159,000	2,374,300	2,599,000	6,278,100
MEAN	90,210	242,100	233,700	285,400	231,000	226,300	267,600	208,600	238,600	76,590	83,840	209,300
MAX	144,000	470,000	285,000	548,000	505,000	464,000	470,000	490,000	520,000	136,000	170,000	477,000
MIN	46,000	81,800	178,000	99,600	83,000	105,000	157,000	90,200	105,000	54,200	28,800	36,300

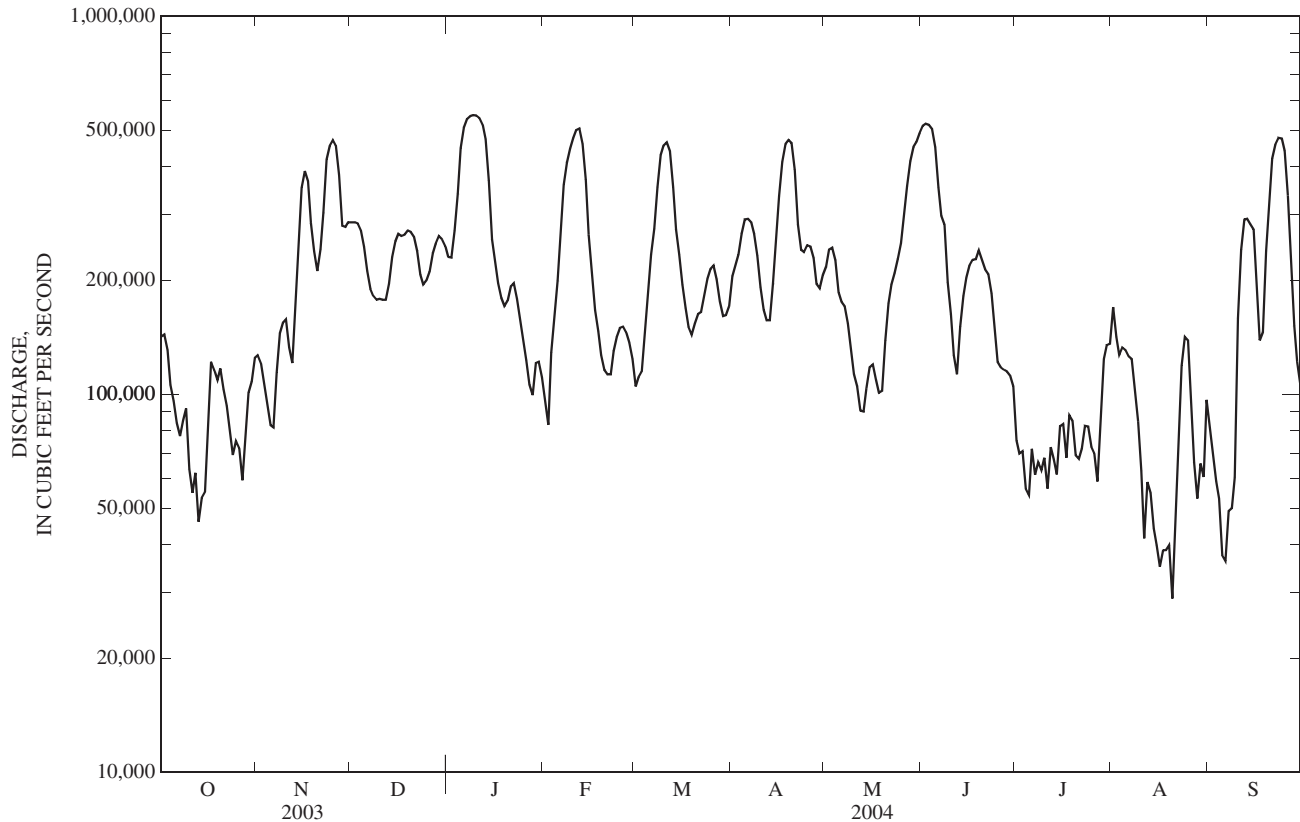
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	56,690	94,380	155,000	165,700	205,000	234,500	204,700	170,500	114,300	68,920	55,780	51,380
MAX	155,800	242,100	334,000	368,700	358,600	443,300	360,400	415,100	238,600	125,500	148,200	209,300
(WY)	(1980)	(2004)	(1979)	(1991)	(1994)	(1997)	(1994)	(1996)	(2004)	(1998)	(1980)	(2004)
MIN	13,980	24,350	47,120	36,500	94,740	125,500	72,990	46,020	16,490	18,760	13,130	11,630
(WY)	(1992)	(1999)	(1999)	(1977)	(1992)	(1983)	(1986)	(1976)	(1988)	(1988)	(1988)	(1999)

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1976 - 2004	
ANNUAL TOTAL	68,292,800		72,773,600		131,000	
ANNUAL MEAN	187,100		198,800		198,800	
HIGHEST ANNUAL MEAN					72,150	
LOWEST ANNUAL MEAN					3,180	
HIGHEST DAILY MEAN	475,000	Feb 28	548,000	Jan 9	735,000	Mar 8, 1997
LOWEST DAILY MEAN	35,700	Jan 28	28,800	Aug 20	3,180	Aug 28, 1995
ANNUAL SEVEN-DAY MINIMUM	46,100	Jan 24	37,900	Aug 14	7,650	Jul 12, 1988
MAXIMUM PEAK FLOW			549,000	Jan 9	736,000	Mar 8, 1997
MAXIMUM PEAK STAGE			43.55	Jan 9	52.42	Mar 8, 1997
10 PERCENT EXCEEDS	303,000		423,000		284,000	
50 PERCENT EXCEEDS	164,000		170,000		94,600	
90 PERCENT EXCEEDS	66,200		66,000		23,400	

e Estimated



03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum daily recorded, 691 microsiemens, Nov. 14, 1978; minimum daily recorded, 176 microsiemens, Dec. 15, 1978.

WATER TEMPERATURES.--Maximum daily recorded, 30.0°C, July 23, 24, 1977, Aug. 5, 1982, several days in July and August; minimum daily recorded, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	THIS PAGE IS INTENTIONALLY BLANK									
			Instantaneous discharge, cfs (00061)	Turbidity, wat unit lab. Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
NOV												
04...	1400	Environmental	81,100	16	0.083	0.061	9.3	96	7.5	401	16.0	150
04...	1410	Replicate	--	--	--	--	--	--	--	--	--	--
DEC												
16...	1400	Environmental	267,000	65	.072	.054	12.9	105	7.7	328	5.5	130
16...	1408	Field Blank	--	--	--	--	--	--	--	--	--	--
JAN												
08...	1600	Environmental	550,000	250	.100	.077	--	--	7.7	269	5.5	110
14...	1200	Environmental	411,000	120	.085	.065	13.1	102	7.6	283	4.0	120
FEB												
12...	1420	Environmental	473,000	E210	.063	.048	13.3	99	7.3	304	3.0	110
MAR												
09...	1230	Environmental	426,000	96	.078	.059	--	--	7.6	397	8.0	140
09...	1238	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
25...	1310	Environmental	216,000	44	.051	.038	12.8	110	7.5	322	8.5	120
25...	1320	Replicate	--	49	.054	.041	--	--	--	--	--	120
APR												
16...	1255	Environmental	322,000	63	.070	.052	11.1	--	7.7	340	11.5	130
16...	1303	Field Blank	--	--	--	--	--	--	--	--	--	--
27...	1245	Environmental	219,000	86	.086	.065	9.7	97	7.6	318	15.0	130
MAY												
13...	1440	Environmental	92,500	9.9	.067	.050	9.8	109	7.6	364	20.0	150
25...	1240	Environmental	246,000	98	.084	.063	7.7	93	7.5	393	23.5	160
JUN												
03...	1030	Environmental	518,000	230	.143	.108	6.3	71	7.5	282	21.0	110
JUL												
01...	1230	Environmental	66,900	18	.095	.070	7.7	95	7.4	374	26.0	140
01...	1238	Field Blank	--	--	--	--	--	--	--	--	--	--
AUG												
26...	1230	Environmental	91,800	21	.085	.062	6.7	85	7.4	420	27.0	150
26...	1238	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
SEP												
23...	1310	Environmental	470,000	--	.149	.111	6.9	78	7.3	226	21.0	76
23...	1320	Replicate	--	340	.148	.110	--	--	--	--	--	77

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
NOV													
04...	40.3	12.7	3.00	19.5	92	112	27.1	0.2	5.28	58.3	242	0.27	0.35
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	35.6	10.4	2.51	12.6	64	78	16.6	<.2	6.68	48.5	191	.27	.50
16...	0.03	<0.008	<0.16	<0.10	--	--	1.31	<.01	<0.04	<0.01	--	--	--
JAN													
08...	30.4	7.94	2.40	9.48	70	85	14.7	<.2	5.71	35.4	162	.24	1.3
14...	33.3	8.35	2.38	9.98	66	80	14.2	<.2	6.66	39.0	169	.19	.79
FEB													
12...	29.2	8.31	2.21	17.2	46	E55	23.1	<.2	5.73	52.3	183	.32	1.1
MAR													
09...	37.9	10.9	2.38	19.7	67	82	28.2	<.2	5.90	54.8	216	.28	.88
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	31.8	9.64	2.18	16.5	55	67	24.4	<.2	5.37	50.1	190	.19	.39
25...	32.3	9.53	1.82	15.6	56	68	23.5	<.2	5.30	50.3	193	.18	.39
APR													
16...	36.2	10.1	2.11	15.3	71	86	21.3	<.2	5.93	48.8	209	.21	.60
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	36.4	8.91	2.08	12.5	84	102	15.9	<.2	5.91	41.8	190	.19	.68
MAY													
13...	40.4	11.5	2.24	14.3	82	100	19.8	<.2	5.22	52.1	218	.29	.30
25...	42.2	12.1	2.85	18.6	74	90	24.5	.2	4.05	60.2	245	.26	.77
JUN													
03...	30.9	6.86	2.83	8.29	63	77	9.61	<.2	6.26	30.7	155	.33	.97
JUL													
01...	39.2	11.2	2.93	15.1	79	97	18.4	.2	6.49	55.9	228	.20	.31
01...	<.01	<.008	<.008	<.10	--	--	.24	<.01	<.04	<.01	--	--	--
AUG													
26...	40.2	12.1	2.97	22.2	80	98	28.8	.2	5.31	71.0	243	.24	.31
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
23...	22.1	5.06	2.57	7.46	48	59	7.99	<.2	6.25	32.6	133	.25	1.2
23...	22.3	5.04	2.63	7.45	50	60	8.07	<.2	6.31	32.6	130	.26	1.2

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitro- gen, susp, water, mg/L (49570)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)
NOV 04...	<0.04	1.16	0.015	0.09	0.035	0.049	0.078	0.8	<0.1	0.8	3.0	2.9	3.2
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	E.03	1.13	.008	.18	.026	.034	.150	2.1	<.1	2.1	2.5	E1.8	E0.7
16...	<.010	E0.009	<.002	--	<.006	--	--	--	--	--	--	--	--
JAN 08...	<.04	.93	.019	.87	.030	.041	.52	10.2	<.1	10.1	3.8	4.7	2.0
14...	<.04	1.20	.009	.15	.013	.032	.25	1.8	.2	1.7	3.2	1.6	0.8
FEB 12...	.05	.89	E.007	.54	.006	.018	.34	6.3	.3	5.9	2.3	2.8	1.7
MAR 09...	.05	1.23	.015	.44	.027	.040	.40	5.1	.1	4.9	2.9	3.7	3.2
09...	--	--	--	.02	--	--	--	.2	<.1	.2	0.7	--	--
25...	E.02	1.13	.015	.20	.007	.019	.111	2.1	.1	2.0	2.1	1.9	2.5
25...	E.04	1.14	.016	.12	.009	.018	.114	1.6	<.1	1.6	2.1	1.6	2.1
APR 16...	<.04	1.05	.016	.29	.018	.032	.24	3.4	<.1	3.4	2.7	3.7	3.3
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.04	1.00	.024	.29	.020	.036	.20	3.4	<.1	3.3	3.3	3.9	3.6
MAY 13...	<.04	1.33	.022	.10	.014	.034	.052	.6	<.1	.5	2.8	2.4	5.8
25...	<.04	1.38	.020	.44	.023	.040	.24	4.1	<.1	4.0	2.6	9.7	7.2
JUN 03...	<.04	1.22	E.004	.57	.038	.055	.43	5.6	<.1	5.5	4.9	4.0	1.4
JUL 01...	<.04	1.66	E.004	.08	.034	.044	.075	.6	<.1	.6	3.2	1.7	2.5
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	<.04	1.17	.024	.09	.037	.049	.078	.7	<.1	.7	2.8	3.0	2.6
26...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	E.2	--	--
SEP 23...	<.04	.60	<.008	.82	.018	.027	.41	9.1	.2	8.9	4.8	5.8	1.4
23...	<.04	.59	<.008	.44	.018	.029	.40	5.7	.2	5.4	4.5	6.6	2.2

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Arsenic water, fltrd, ug/L (01000)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Lithium water, fltrd, ug/L (01130)	Selen- ium, water, fltrd, ug/L (01145)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)
NOV													
04...	0.7	57	E5	5.9	<0.4	275	0.5	<0.006	E0.007	0.009	<0.005	<0.005	0.067
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	.5	29	18	3.8	E.3	208	.7	<.006	E.013	.013	<.005	<.005	.070
16...	<.2	<8	<6	<0.6	<.4	<0.40	<.1	--	--	--	--	--	--
JAN													
08...	.5	22	22	2.6	E.3	145	.5	<.006	E.014	.013	<.005	<.005	.051
14...	.5	24	19	2.3	E.3	159	.4	<.006	E.012	.015	<.005	<.005	.034
FEB													
12...	.3	23	20	3.7	E.2	156	.3	<.006	E.006	E.005	<.005	<.005	.019
MAR													
09...	.5	35	12	5.2	E.4	212	.5	<.006	E.008	.009	.008	<.005	.044
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	.3	28	10	3.8	E.4	178	1.1	<.006	E.008	.011	<.005	<.005	.035
25...	.3	28	9	3.8	.4	178	1.1	<.006	E.009	.011	<.005	<.005	.036
APR													
16...	.4	29	8	3.6	E.4	189	.5	<.006	E.009	<.010	<.005	<.005	.096
16...	--	--	--	--	--	--	--	<.006	<.006	<.006	<.005	<.005	<.007
27...	.6	32	8	3.3	E.2	188	.5	<.006	E.015	.029	<.005	<.005	.390
MAY													
13...	.5	36	E6	4.6	E.3	228	.7	<.006	E.022	.101	.007	<.005	.673
25...	.8	42	<6	5.7	.5	240	.7	<.006	E.112	.341	.021	<.005	3.42
JUN													
03...	.6	27	12	2.6	E.2	131	.7	<.006	E.116	.164	.009	<.005	1.34
JUL													
01...	.7	44	E4	4.7	<.4	245	.8	<.006	E.086	.130	.009	<.005	.908
01...	<.2	<8	<6	<.6	<.4	<.40	<.1	--	--	--	--	--	--
AUG													
26...	.9	68	E5	7.4	.7	241	.8	<.006	E.021	.043	<.005	<.005	.203
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
23...	.5	36	19	2.7	<.4	104	.5	<.006	<.006	<.006	<.005	<.005	.034
23...	.6	35	23	2.7	E.3	104	.6	<.006	E.007	<.006	<.005	<.005	.031

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)
NOV 04...	<0.050	<0.010	<0.004	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	E0.004	<0.009	<0.02	<0.007
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	<.050	<.010	<.004	E.006	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
14...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
FEB 12...	<.050	<.010	<.004	E.011	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
MAR 09...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.050	<.010	<.004	E.005	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
25...	<.050	<.010	<.004	E.005	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
APR 16...	<.050	<.010	<.004	E.006	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
16...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
27...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
MAY 13...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
25...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
JUN 03...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	E.002	<.005	<.009	<.02	<.004
JUL 01...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.011
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.044
23...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.005

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)
NOV 04...	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.015	0.017	<0.006	<0.003	<0.007	<0.003	<0.010
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.014	.008	<.003	<.007	<.003	<.010
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.016	<.010	<.003	<.007	<.003	<.010
14...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.017	<.006	<.003	<.007	<.003	<.010
FEB 12...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.008	<.006	<.003	<.007	<.003	<.010
MAR 09...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.015	<.006	<.003	<.007	<.005	<.010
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.018	<.006	<.003	<.007	<.003	<.010
25...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.018	<.006	<.003	<.007	<.003	<.010
APR 16...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.018	<.006	<.003	<.007	<.003	<.010
16...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010
27...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.036	<.010	<.003	<.007	<.003	<.010
MAY 13...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.105	<.010	<.003	<.007	<.003	<.010
25...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.486	.021	<.003	<.007	<.003	<.010
JUN 03...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.284	.011	<.003	<.007	<.003	<.010
JUL 01...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.268	.007	<.003	<.007	<.003	<.010
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.044	<.006	<.003	<.007	<.003	<.010
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	<.009	<.006	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010
23...	<.009	<.005	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)
NOV 04...	<0.004	<0.022	<0.011	0.01	<0.004	<0.025	<0.011	<0.02	0.031	<0.02	<0.034	<0.02	<0.010
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	.020	<.02	<.034	<.02	<.010
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.044	<.02	<.034	<.02	<.010
14...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.025	<.02	<.034	<.02	<.010
FEB 12...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.011	<.02	<.034	<.02	<.010
MAR 09...	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.014	<.02	<.034	<.02	<.010
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008	<.02	<.034	<.02	<.010
25...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008	<.02	<.034	<.02	<.010
APR 16...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.024	<.02	<.034	<.02	<.010
16...	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02	<.010
27...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.112	<.02	<.034	<.02	<.010
MAY 13...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.061	<.02	<.034	<.02	<.010
25...	<.004	<.022	<.011	E.02	<.004	<.025	<.011	<.02	.381	<.02	<.034	<.02	<.010
JUN 03...	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.218	E.02	<.034	<.02	<.010
JUL 01...	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.145	<.02	<.034	<.02	<.010
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	<.004	<.022	<.011	.02	<.006	<.025	<.011	<.02	.018	<.02	<.034	<.02	<.010
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.013	<.02	<.034	<.02	<.010
23...	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.008	<.02	<.034	<.02	<.010

03303280 OHIO RIVER AT CANNELTON DAM, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
NOV				
04...	<0.002	<0.009	100	17
04...	--	--	100	18
DEC				
16...	<.002	<.009	90	93
16...	--	--	--	--
JAN				
08...	<.002	<.009	80	416
14...	<.002	<.009	87	167
FEB				
12...	<.002	<.009	87	328
MAR				
09...	<.002	<.009	97	272
09...	--	--	--	--
25...	<.002	<.009	90	81
25...	<.002	<.009	95	75
APR				
16...	<.002	<.009	74	179
16...	<.002	<.009	--	--
27...	<.002	<.009	94	67
MAY				
13...	<.002	<.009	95	12
25...	<.002	<.009	94	180
JUN				
03...	<.002	<.009	92	332
JUL				
01...	<.002	<.009	99	16
01...	--	--	--	--
AUG				
26...	<.002	<.009	98	22
26...	--	--	--	--
SEP				
23...	<.002	<.009	92	502
23...	<.002	<.009	92	495

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03306000 GREEN RIVER NEAR CAMPBELLSVILLE, KY

LOCATION.--Lat 37°14'25", long 85°20'50", Taylor County, Hydrologic Unit 05110001, on right bank on downstream side of pier of bridge on State Highway 55, 0.6 mi downstream from Green River Dam, 0.8 mi upstream from Pinch Creek, 6.9 mi south of Campbellsville, and at mile 305.1.

DRAINAGE AREA.--682 mi² (1,733 sq km).

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--Water-temperature: Oct. 1964 to Sept. 1989, Oct. 1994 to current year.

GAGE.--Water Temperature recorder with telemetry.

REMARKS.--Records good.

COOPERATION.--Nature Conservancy and U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 31.0°C, August. 3-5, 1964; minimum recorded, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 26.6°C, Sept. 1,6, minimum recorded, 4.8°C, Feb. 13-16.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.8	19.4	19.6	16.4	16.2	16.3	13.5	13.2	13.3	7.8	7.6	7.7
2	19.4	19.1	19.2	16.5	16.3	16.4	13.2	13.0	13.1	7.7	7.6	7.6
3	19.1	18.8	18.9	16.4	16.3	16.4	13.0	12.9	12.9	7.7	7.6	7.7
4	18.8	18.6	18.7	16.4	16.3	16.4	12.9	12.7	12.8	7.6	7.5	7.6
5	18.6	18.5	18.5	16.4	16.3	16.3	12.7	12.6	12.6	7.6	7.5	7.5
6	18.5	18.4	18.4	16.4	16.4	16.4	12.6	12.5	12.5	8.0	7.6	7.8
7	18.4	18.1	18.2	16.4	16.4	16.4	12.5	12.3	12.3	8.0	7.9	8.0
8	18.1	17.9	18.0	16.4	16.1	16.2	12.3	12.0	12.2	7.9	7.7	7.8
9	18.0	17.8	17.9	16.1	15.9	15.9	12.0	11.7	11.9	7.7	7.5	7.6
10	18.0	17.8	17.9	15.9	15.8	15.8	11.7	11.4	11.6	7.5	7.0	7.2
11	17.9	17.7	17.8	15.8	15.7	15.8	11.4	11.2	11.3	7.0	6.6	6.8
12	17.9	17.6	17.7	15.8	15.7	15.7	11.2	10.9	11.1	6.6	6.5	6.6
13	17.7	17.4	17.6	15.7	15.4	15.6	10.9	10.6	10.8	6.5	6.5	6.5
14	17.7	17.5	17.6	15.4	15.2	15.3	10.6	10.5	10.6	6.6	6.5	6.6
15	17.8	17.6	17.6	15.2	15.1	15.2	10.5	10.4	10.4	6.6	6.6	6.6
16	17.7	17.6	17.7	15.1	15.0	15.1	10.4	10.3	10.4	6.7	6.5	6.6
17	17.7	17.6	17.6	15.1	15.0	15.0	10.5	10.3	10.4	6.5	6.4	6.4
18	17.6	17.5	17.5	15.0	15.0	15.0	10.5	10.0	10.2	6.5	6.4	6.4
19	17.5	17.4	17.4	15.1	15.0	15.0	10.0	9.6	9.8	6.6	6.6	6.6
20	17.5	17.4	17.4	15.1	14.9	15.0	9.6	9.3	9.4	6.6	6.6	6.6
21	17.5	17.2	17.3	14.9	14.8	14.9	9.3	9.1	9.2	6.6	6.6	6.6
22	17.3	16.9	17.0	14.8	14.7	14.7	9.1	9.1	9.1	6.6	6.4	6.5
23	17.0	16.6	16.8	14.7	14.6	14.6	9.1	9.0	9.0	6.4	6.4	6.4
24	16.9	16.4	16.6	14.6	14.4	14.5	9.0	8.9	9.0	6.4	6.3	6.4
25	16.9	16.5	16.6	14.4	14.3	14.3	8.9	8.7	8.8	6.4	6.3	6.3
26	16.9	16.6	16.8	14.3	14.1	14.2	8.7	8.5	8.6	6.4	6.3	6.4
27	16.6	16.3	16.4	14.1	14.0	14.0	8.5	8.3	8.4	6.4	6.3	6.3
28	16.3	15.9	16.1	14.0	13.9	14.0	8.3	8.2	8.2	6.3	6.1	6.2
29	16.3	16.2	16.2	13.9	13.7	13.8	8.2	8.0	8.1	6.1	5.9	6.0
30	16.4	16.3	16.3	13.7	13.5	13.6	8.0	8.0	8.0	6.0	5.9	5.9
31	16.4	16.3	16.3	---	---	---	8.0	7.8	7.9	6.1	5.9	6.0
MONTH	19.8	15.9	17.5	16.5	13.5	15.3	13.5	7.8	10.4	8.0	5.9	6.8

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.0	6.0	6.0	6.2	6.1	6.1	10.3	10.1	10.2	13.0	12.6	12.8
2	6.0	5.9	5.9	6.3	6.1	6.2	10.3	10.1	10.2	13.3	13.0	13.2
3	6.0	5.7	6.0	6.4	6.2	6.3	10.3	10.2	10.3	13.5	13.3	13.4
4	5.7	5.4	5.6	6.4	6.3	6.4	10.4	10.2	10.3	13.3	13.2	13.2
5	6.2	5.3	5.5	6.3	6.2	6.2	10.6	10.3	10.4	13.4	13.2	13.3
6	7.0	6.2	6.7	6.6	6.3	6.5	10.7	10.5	10.6	13.3	13.1	13.2
7	6.7	6.2	6.4	6.7	6.6	6.7	10.8	10.5	10.6	14.0	13.3	13.7
8	6.2	5.9	6.0	6.7	6.7	6.7	10.8	10.7	10.7	14.5	14.0	14.3
9	5.9	5.3	5.6	6.8	6.7	6.7	11.1	10.7	10.9	14.8	14.5	14.7
10	5.3	5.1	5.2	6.9	6.8	6.8	11.5	11.1	11.3	15.2	14.8	15.0
11	5.1	5.1	5.1	7.0	6.9	7.0	11.9	11.5	11.6	15.3	14.7	15.1
12	5.1	4.9	5.0	7.2	7.0	7.1	12.0	11.9	12.0	14.7	14.2	14.4
13	4.9	4.8	4.9	7.5	7.2	7.4	12.0	11.3	11.7	14.9	14.2	14.4
14	4.9	4.8	4.8	7.7	7.5	7.6	11.3	11.0	11.1	15.6	14.9	15.3
15	4.8	4.8	4.8	8.1	7.7	7.9	11.2	11.1	11.1	15.8	15.3	15.6
16	4.9	4.8	4.8	8.3	8.1	8.2	11.2	11.1	11.2	15.9	15.2	15.5
17	5.0	4.9	4.9	8.5	8.3	8.4	11.3	11.1	11.2	15.9	15.3	15.7
18	5.2	5.0	5.1	8.7	8.4	8.5	11.3	11.1	11.2	16.4	15.9	16.1
19	5.3	5.2	5.2	9.0	8.6	8.7	11.2	11.1	11.1	16.7	16.4	16.5
20	5.5	5.2	5.4	9.0	8.9	8.9	11.3	11.1	11.2	17.0	16.7	16.9
21	5.6	5.5	5.6	9.0	8.8	8.9	11.3	11.3	11.3	17.2	16.9	17.0
22	6.0	5.6	5.7	8.9	8.7	8.8	11.5	11.3	11.4	17.5	17.2	17.3
23	6.1	6.0	6.1	8.9	8.7	8.8	11.7	11.4	11.5	17.7	17.5	17.6
24	6.2	6.1	6.1	9.1	8.9	8.9	12.0	11.7	11.9	17.8	17.6	17.7
25	6.2	6.1	6.1	9.3	9.0	9.1	12.2	12.0	12.1	17.8	17.8	17.8
26	6.1	6.1	6.1	9.6	9.2	9.3	12.4	12.2	12.3	17.8	17.6	17.7
27	6.2	6.0	6.1	9.8	9.5	9.6	12.6	12.4	12.6	17.6	17.2	17.3
28	6.2	6.1	6.2	10.3	9.8	10	12.7	12.6	12.6	17.5	17.2	17.3
29	6.2	6.2	6.2	10.3	10.2	10.2	12.9	12.7	12.8	17.6	16.5	17.2
30	---	---	---	10.3	10.0	10.3	12.9	12.8	12.8	16.5	15.6	16.0
31	---	---	---	10.1	10.0	10.0	---	---	---	15.6	15.4	15.5
MONTH	7.0	4.8	5.6	10.3	6.1	8.0	12.9	10.1	11.3	17.8	12.6	15.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.4	15.2	15.3	22.0	21.8	21.9	23.8	23.5	23.6	26.6	23.6	24.7
2	15.2	15.1	15.1	22.0	21.9	21.9	23.8	23.6	23.7	24.8	23.9	24.2
3	15.2	15.2	15.2	22.1	21.9	22.0	23.8	23.5	23.6	24.6	23.7	24.1
4	15.2	15.0	15.1	22.2	22.0	22.1	23.8	23.7	23.8	25.3	23.9	24.3
5	15.0	14.8	14.9	22.3	22.1	22.2	24.7	23.6	24.1	26.4	23.7	24.5
6	15.1	14.8	14.9	22.4	22.2	22.3	24.9	23.5	24.0	26.6	23.8	24.7
7	15.5	15.1	15.3	22.4	20.6	21.9	24.5	23.3	23.7	25.2	24.2	24.7
8	16.1	15.5	15.8	20.6	19.1	19.9	24.4	23.3	23.7	24.8	23.7	24.4
9	16.5	16.1	16.4	19.1	18.4	18.7	24.1	23.3	23.5	24.3	23.1	23.5
10	16.9	16.5	16.7	20.2	18.2	18.8	24.1	17.9	21.7	25.7	23.1	23.9
11	17.4	16.9	17.2	21.5	20.2	21.0	18.6	17.5	18.1	25.5	23.2	23.8
12	17.7	17.4	17.5	22.0	11.4	21.8	18.6	16.3	18.0	25.4	23.2	23.8
13	18.1	17.7	17.9	22.2	21.9	22.0	18.9	17.9	18.4	25.4	23.2	23.8
14	18.2	18.0	18.1	22.3	22.2	22.2	19.0	18.3	18.6	25.2	23.1	23.9
15	18.0	17.0	17.7	22.6	22.3	22.4	19.0	18.3	18.5	25.6	23.2	24.0
16	17.0	16.0	16.5	22.8	22.5	22.6	25.2	18.2	21.4	24.1	23.7	23.9
17	17.1	15.7	16.0	23.1	22.8	22.9	25.4	22.7	23.5	24.0	22.7	23.3
18	19.0	17.1	18.2	23.1	23.0	23.1	25.2	22.7	23.6	22.7	17.6	20.2
19	19.6	19.0	19.3	23.1	22.8	22.9	25.7	23.1	24.0	18.9	18.3	18.6
20	19.9	19.6	19.7	23.2	22.8	23.0	23.9	23.0	23.5	22.5	16.9	19.3
21	20.3	19.9	20.1	23.3	23.1	23.2	24.0	22.8	23.4	23.1	22.0	22.4
22	20.5	20.3	20.4	23.3	23.2	23.3	25.3	23.0	23.8	23.1	22.0	22.4
23	20.8	20.5	20.7	23.4	23.1	23.2	25.3	23.1	23.9	23.1	21.9	22.4
24	21.0	20.8	20.9	23.7	23.4	23.5	24.9	23.1	23.8	22.9	22.1	22.3
25	21.2	21.0	21.1	23.7	23.6	23.7	24.0	23.2	23.5	23.1	22.1	22.4
26	21.4	21.2	21.3	23.7	23.5	23.6	24.5	23.4	23.8	23.0	22.1	22.4
27	21.4	21.3	21.4	23.5	23.3	23.4	25.6	23.8	24.4	22.8	22.0	22.3
28	21.6	21.4	21.5	23.4	23.0	23.2	26.4	23.8	24.6	22.1	16.9	19.7
29	21.7	21.6	21.6	23.5	23.2	23.3	25.5	23.8	24.4	20.6	17.9	19.4
30	21.9	21.7	21.8	23.5	23.3	23.4	24.5	24.0	24.3	20.5	20.4	20.4
31	---	---	---	23.5	23.4	23.5	26.5	23.8	24.6	---	---	---
MONTH	21.9	14.8	18.1	23.7	11.4	22.4	26.5	16.3	22.8	26.6	16.9	22.8
YEAR	26.6	4.8	14.7									

03306500 GREEN RIVER AT GREENSBURG, KY

LOCATION.--Lat 37°15'12", long 85°03'11", Green County, Hydrologic Unit 05110001, at bridge on State Highway 61 and 70, 300 ft upstream from Clover Lick Creek, 0.25 mi south of Greensburg, 2.6 mi upstream from Russell Creek, and at mile 279.7.

DRAINAGE AREA.--736 mi².

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--Water-temperature: December 22, 1999 to curent year.

GAGE.--Water-temperature recorder with telemetry.

REMARKS.--Records good.

COOPERATION.--Green County and U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum water-temperature discharge, 31.2°C, July 25, 2001; minimum water-temperature, 5.1°C, many days in winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 27.7°C, Aug. 3, minimum recorded, 2.7°C, Jan. 31-Feb. 1.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.1	17.5	17.9	16.2	15.3	15.8	11.3	10.9	11.0	7.1	6.2	6.6
2	17.7	16.8	17.1	16.5	15.6	16.1	11.7	11.2	11.4	8.5	7.1	7.8
3	16.8	15.7	16.2	16.3	15.5	15.9	11.8	11.6	11.7	8.6	8.3	8.5
4	17.4	16.4	16.8	16.0	15.2	15.7	11.7	11.5	11.6	8.4	8.1	8.2
5	17.6	16.8	17.2	16.3	15.8	16.0	11.5	10.7	11.3	8.3	7.1	7.6
6	17.9	16.9	17.4	16.2	15.0	15.6	10.7	10.2	10.4	7.1	5.4	6.4
7	18.3	17.4	17.9	15.0	13.8	14.3	10.2	9.6	9.8	5.4	4.4	4.7
8	18.7	17.7	18.2	13.8	12.6	13.0	10.2	9.6	9.8	5.3	4.6	4.9
9	18.6	17.8	18.2	12.6	11.7	12.1	10.9	10.2	10.4	5.2	4.9	5.0
10	18.5	17.9	18.3	12.9	11.9	12.3	10.9	10.3	10.7	5.0	4.2	4.5
11	19.2	18.0	18.6	14.1	12.9	13.5	10.3	9.9	10.0	5.6	3.9	4.5
12	19.3	18.4	18.9	15.1	14.1	14.7	9.9	9.7	9.8	6.0	5.4	5.7
13	19.1	17.9	18.6	14.8	12.4	13.6	9.7	9.4	9.6	6.0	5.5	5.7
14	18.6	16.7	17.8	12.4	11.1	11.4	9.4	9.2	9.3	6.1	5.6	5.8
15	16.7	15.5	16.1	11.4	11.0	11.1	9.2	9.0	9.1	6.1	5.8	6.0
16	16.1	15.1	15.6	12.3	11.4	11.8	9.3	8.9	9.0	6.1	5.7	5.9
17	16.0	15.6	15.7	13.7	12.3	12.9	8.9	8.2	8.4	6.3	5.9	6.1
18	15.6	15.0	15.3	14.3	13.7	14.1	8.4	7.9	8.1	6.4	6.1	6.2
19	15.8	14.8	15.3	14.3	13.6	14.1	8.4	8.0	8.2	6.1	5.0	5.6
20	16.3	15.3	15.8	13.6	12.5	12.8	8.0	7.6	7.7	5.0	4.3	4.6
21	16.9	16.2	16.5	12.5	11.8	12.2	7.7	7.2	7.5	5.0	4.4	4.7
22	16.9	15.5	16.4	12.9	11.9	12.3	7.7	7.2	7.4	4.8	4.3	4.6
23	15.6	14.6	15.0	13.6	12.9	13.2	7.7	7.4	7.6	4.7	3.7	4.2
24	14.6	13.4	14.1	13.6	11.7	12.8	7.4	6.8	7.0	5.1	4.4	4.8
25	15.4	13.6	14.3	11.7	11.0	11.2	6.8	6.1	6.6	4.9	4.4	4.6
26	15.1	14.4	14.8	12.0	11.3	11.5	6.5	5.5	6.1	6.0	4.8	5.4
27	14.4	13.4	13.9	12.5	12.0	12.3	6.5	5.7	6.2	6.0	4.4	5.2
28	13.4	12.4	12.7	12.5	11.1	12.0	6.6	6.0	6.3	4.4	3.8	4.1
29	12.8	11.9	12.4	11.1	10.6	10.8	6.9	6.5	6.7	4.8	3.7	4.2
30	14.1	12.3	13.0	11.2	10.6	10.9	6.9	6.2	6.4	4.8	3.7	4.1
31	15.5	14.1	14.7	---	---	---	6.8	5.7	6.1	3.7	2.7	3.1
MONTH	19.3	11.9	16.2	16.5	10.6	13.2	11.8	5.5	8.7	8.6	2.7	5.5

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.7	2.7	3.2	7.4	6.8	7.0	13.0	11.8	12.2	14.6	13.8	14.2
2	4.8	3.7	4.2	8.1	7.1	7.6	11.8	11.0	11.3	14.7	14.3	14.6
3	5.1	4.6	4.9	7.9	7.3	7.5	12.7	10.9	11.8	14.3	13.4	13.7
4	4.9	4.0	4.2	8.4	6.9	7.6	12.8	11.6	12.2	14.4	12.7	13.5
5	5.3	4.3	4.6	9.2	7.7	8.0	12.3	11.1	11.8	15.3	13.7	14.5
6	7.4	5.3	6.7	9.6	8.8	9.2	12.8	11.1	12.0	15.5	14.1	14.9
7	7.4	4.8	6.0	8.8	7.3	7.6	14.3	12.3	13.2	17.6	15.2	15.9
8	4.8	4.2	4.5	7.5	6.3	6.9	15.7	14.1	14.8	19.7	16.9	18.2
9	4.6	4.1	4.2	7.3	6.8	7.1	15.6	14.2	14.9	20.8	19.0	19.9
10	5.0	4.4	4.6	7.6	6.8	7.2	15.0	13.7	14.1	20.7	19.8	20.2
11	4.8	4.3	4.6	7.6	7.1	7.3	13.9	13.4	10.7	20.9	19.7	20.3
12	4.8	4.6	4.7	7.9	6.9	7.4	13.7	12.0	12.9	20.6	17.9	19.3
13	4.7	4.4	4.5	7.9	6.5	7.3	12.0	10.3	11.0	17.9	16.7	17.3
14	4.8	4.4	4.6	7.9	7.5	7.8	12.2	10.0	10.7	18.2	16.5	17.2
15	4.7	4.5	4.6	8.8	7.5	8.1	12.7	11.4	12.0	18.8	18.2	18.5
16	4.8	4.1	4.3	9.2	8.8	9.0	12.8	11.7	12.2	18.7	17.5	17.9
17	4.6	4.0	4.3	8.9	8.2	8.6	13.1	11.7	12.4	18.4	16.2	17.3
18	4.5	3.5	4.1	10.7	8.7	9.6	13.5	11.7	12.6	21.1	18.1	19.4
19	5.0	3.9	4.4	11.8	9.8	10.8	13.5	12.8	13.0	22.0	20.7	21.3
20	5.2	4.7	4.9	12.4	10.9	11.7	13.0	12.4	12.8	22.7	21.3	21.9
21	5.2	5.0	5.2	12.2	9.7	11.0	13.1	12.7	13.0	23.4	21.9	22.6
22	5.4	4.6	5.0	9.7	8.5	9.2	13.7	12.5	13.0	23.3	22.3	22.8
23	6.0	4.9	5.4	10.1	8.1	9.1	13.6	12.5	13.0	23.7	22.2	22.9
24	6.6	5.8	6.1	12.2	10.0	11.0	14.1	13.1	13.5	23.8	22.9	23.3
25	6.5	5.7	6.0	14.2	11.6	12.9	14.2	13.3	13.8	23.4	22.6	23.0
26	5.9	5.4	5.6	16.3	13.6	14.9	14.3	13.4	13.8	22.8	20.3	21.5
27	6.4	5.2	5.8	17.3	15.8	16.5	14.3	13.4	13.9	20.3	18.8	19.5
28	6.5	5.2	5.9	17.9	16.0	17.0	14.4	13.0	13.8	20.4	19.6	20.0
29	7.1	5.7	6.4	17.5	15.4	16.3	15.3	13.6	14.3	21.1	19.7	20.4
30	---	---	---	15.4	14.5	14.9	14.8	13.7	14.2	21.1	18.0	19.1
31	---	---	---	14.5	13.0	13.8	---	---	---	18.0	17.7	17.8
MONTH	7.4	2.7	4.9	17.9	6.3	10.0	15.7	10.0	12.8	23.8	12.7	18.8
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.7	16.9	17.3	25.4	24.3	24.9	26.5	24.7	25.7	25.4	23.8	24.4
2	17.4	16.2	16.8	26.0	24.5	25.2	27.4	25.4	26.4	24.8	24.0	23.3
3	17.1	16.3	16.7	26.9	25.1	26.0	27.7	26.1	26.8	24.6	23.5	24.1
4	17.0	16.1	16.4	27.6	25.9	26.7	27.6	26.6	27.1	25.0	23.9	24.4
5	16.5	15.5	16.0	27.3	26.2	26.7	26.8	25.1	25.6	26.0	23.8	24.9
6	16.6	15.7	16.2	26.9	25.2	26.1	25.1	23.7	24.3	26.3	24.3	25.3
7	17.5	16.3	16.8	26.5	25.2	25.9	24.2	22.8	23.5	25.8	24.7	25.3
8	18.1	16.9	17.5	26.1	21.5	23.5	24.4	23.0	23.7	24.7	23.0	23.8
9	18.5	17.6	18.1	21.5	21.0	21.1	24.5	23.5	24.0	23.4	22.4	22.9
10	18.7	17.9	18.3	22.4	20.8	21.5	25.0	23.7	24.3	23.6	21.9	22.7
11	19.6	18.6	19.0	22.7	21.4	22.0	24.8	21.0	23.5	23.9	21.8	22.9
12	19.5	19.1	19.3	25.0	22.7	23.8	21.0	19.5	19.8	24.6	22.6	23.6
13	20.4	19.2	19.7	26.4	24.7	25.4	19.5	18.6	19.0	24.8	23.2	24.0
14	20.7	19.8	20.2	26.5	25.3	25.9	20.0	18.7	19.3	24.9	23.4	24.1
15	20.4	19.0	19.3	26.2	25.2	25.7	20.6	19.6	20.0	24.9	23.1	24.0
16	19.1	18.2	18.6	26.2	24.8	25.5	20.6	19.5	20.0	24.4	23.5	24.0
17	20.6	18.8	19.8	26.5	25.1	25.8	21.6	19.5	20.4	23.5	21.3	22.3
18	21.5	19.7	20.5	26.4	25.3	25.8	23.1	20.9	21.9	21.3	20.4	20.9
19	23.1	21.3	22.0	26.6	24.9	25.7	25.0	22.7	23.8	21.3	19.4	20.0
20	24.8	22.2	23.3	27.1	25.0	26.1	24.7	23.9	24.1	19.4	18.9	19.2
21	25.1	22.9	24.0	27.5	25.5	26.5	23.9	23.1	23.4	19.7	18.9	19.3
22	25.7	24.0	24.9	27.2	26.3	26.7	23.8	22.3	23.0	21.0	18.8	19.7
23	25.4	24.2	24.9	26.6	25.1	26.0	24.6	22.8	23.7	22.1	20.8	21.4
24	25.9	24.0	24.7	27.2	25.6	26.4	25.0	23.7	24.3	22.6	21.6	22.1
25	25.7	24.4	24.8	26.7	25.6	26.3	26.0	24.4	25.1	22.9	22.1	22.5
26	25.1	23.5	24.2	26.3	24.9	25.5	26.1	25.3	25.7	22.7	21.8	22.2
27	24.6	23.1	23.9	25.0	23.9	24.5	26.4	25.2	25.8	22.0	21.2	21.6
28	24.7	22.8	23.7	25.1	23.2	24.1	27.2	25.6	26.3	22.0	21.3	21.7
29	24.9	23.3	24.1	24.5	23.5	24.0	26.9	25.8	26.3	21.9	18.9	20.0
30	25.4	23.9	24.6	---	---	---	26.2	24.5	25.3	20.6	19.1	20.0
31	---	---	---	---	---	---	25.6	23.8	24.6	---	---	---
MONTH	25.9	15.5	20.5	27.6	20.8	25.1	27.7	18.6	23.8	26.3	18.8	22.6
YEAR	27.7	2.7	15.2									

03307000 RUSSELL CREEK NEAR COLUMBIA, KY

LOCATION.--Lat 37°07'09", long 85°23'38", Adair County, Hydrologic Unit 05110001, on left bank at downstream side of bridge on State Highway 61, 0.3 mi upstream from Butlers Fork, 5.0 mi west of Columbia, and at mile 26.9. Records include flow of Butlers Fork.

DRAINAGE AREA.--188 mi² (includes Butlers Fork), of which about 15 mi² does not contribute directly to surface runoff.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Prior to December 1939, monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1940. WSP 1335: 1953. WSP 1555: Drainage area. WRD KY-75-1: 1949(M), 1952(M), 1955(M), 1962(M), 1967(M), 1974(M).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 610.96 ft above NGVD of 1929. Prior to June 25, 1953, nonrecording gage at same site and datum.

REMARKS.--Records fair.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Army Corps of Engineers, Louisville District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Jan. 1937 reached a stage of about 23 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	0600	*10,700	*18.13	Sep 17	2130	4,790	13.52
Mar 6	0930	5,910	15.07				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	65	435	414	197	108	223	210	615	119	398	34
2	103	60	309	1,820	209	499	187	456	1,220	96	122	36
3	86	56	255	1,300	803	304	165	457	693	69	69	940
4	76	53	275	747	660	227	146	285	768	62	52	258
5	71	53	413	1,150	2,510	532	129	231	611	65	1,760	351
6	65	201	474	857	7,830	3,940	118	194	393	75	698	146
7	59	160	368	562	1,440	1,030	120	162	287	149	311	89
8	55	120	301	438	817	627	117	137	221	98	192	75
9	51	92	258	377	600	466	102	120	192	78	132	244
10	49	77	535	302	484	358	92	106	199	58	101	142
11	50	69	724	252	390	289	89	97	176	55	88	93
12	49	71	442	243	324	253	370	87	155	54	90	75
13	47	118	336	228	276	219	1,640	83	e341	50	82	66
14	46	115	689	208	247	202	1,630	89	e335	48	73	58
15	51	86	668	193	228	197	737	123	e270	43	60	51
16	64	113	590	169	199	219	478	133	232	41	52	47
17	51	148	1,270	156	178	249	345	99	185	39	47	2,700
18	47	627	720	897	164	213	269	78	390	38	44	1,260
19	44	1,660	567	921	154	196	224	71	255	36	42	538
20	43	691	440	517	153	198	194	64	165	35	40	356
21	42	425	345	379	149	478	190	59	127	33	97	253
22	40	304	305	306	133	319	1,680	56	109	37	105	189
23	39	234	326	250	133	250	1,830	53	123	84	67	147
24	38	317	815	227	119	218	1,300	53	161	70	53	104
25	38	364	559	266	112	192	717	47	125	42	52	101
26	47	260	407	609	105	172	725	292	109	36	53	88
27	183	218	324	423	100	160	496	1,730	96	41	43	78
28	198	2,470	278	320	95	152	389	1,070	77	45	37	73
29	114	1,160	255	291	90	146	278	674	68	34	38	68
30	93	637	911	271	---	351	231	369	62	30	36	64
31	73	---	568	218	---	292	---	920	---	293	34	---
TOTAL	2,127	11,024	15,162	15,311	18,899	13,056	15,211	8,605	8,760	2,053	5,068	8,724
MEAN	68.6	367	489	494	652	421	507	278	292	66.2	163	291
MAX	198	2,470	1,270	1,820	7,830	3,940	1,830	1,730	1,220	293	1,760	2,700
MIN	38	53	255	156	90	108	89	47	62	30	34	34
CFSM	0.40	2.12	2.83	2.85	3.77	2.43	2.93	1.60	1.69	0.38	0.94	1.68
IN.	0.46	2.37	3.26	3.29	4.06	2.81	3.27	1.85	1.88	0.44	1.09	1.88

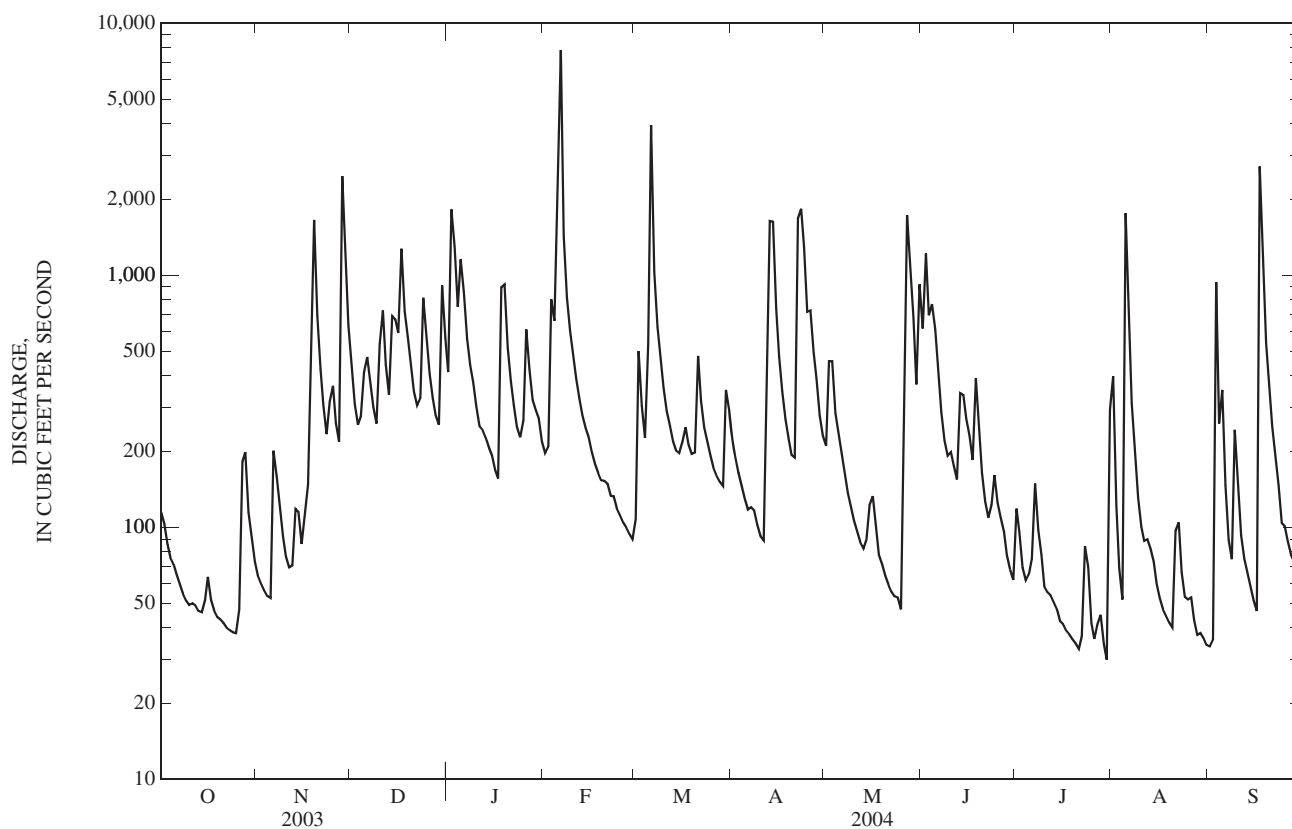
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

	73.4	206	402	470	581	573	389	276	205	123	86.8	111
MAX	636	1,047	2,540	1,779	1,588	1,787	856	1,464	800	751	502	1,114
(WY)	(1976)	(1952)	(1979)	(1950)	(1989)	(1975)	(1972)	(1983)	(1950)	(1967)	(1967)	(1979)
MIN	1.38	8.92	18.6	26.5	61.1	91.0	70.1	39.8	14.6	10.0	4.25	2.09
(WY)	(1954)	(1954)	(1954)	(1981)	(1941)	(1941)	(1986)	(1941)	(1988)	(1944)	(1991)	(1953)

03307000 RUSSELL CREEK NEAR COLUMBIA, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	129,691		124,000		290	
ANNUAL MEAN	355		339		651	
HIGHEST ANNUAL MEAN					118	
LOWEST ANNUAL MEAN					25,000	
HIGHEST DAILY MEAN	9,520	Feb 16	7,830	Feb 6	Dec 9, 1978	
LOWEST DAILY MEAN	23	Aug 29	30	Jul 30	Sep 25, 1952	
ANNUAL SEVEN-DAY MINIMUM	28	Aug 23	37	Aug 27	Oct 19, 1953	
MAXIMUM PEAK FLOW			10,700	Feb 6	Sep 1, 1982	
MAXIMUM PEAK STAGE			18.13	Feb 6	Sep 1, 1982	
INSTANTANEOUS LOW FLOW					Sep 2, 1993	
ANNUAL RUNOFF (CFSM)	2.05		1.96			
ANNUAL RUNOFF (INCHES)	27.89		26.66			
10 PERCENT EXCEEDS	719		724			
50 PERCENT EXCEEDS	158		184			
90 PERCENT EXCEEDS	46		47			

e Estimated



03307000 RUSSELL CREEK NEAR COLUMBIA, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--December 22, 1999 to current year.

GAGE.--Water-temperature recorder with telemetry.

REMARKS.--Records good.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR CURRENT YEAR.--Maximum recorded water-temperature discharge, 27.1°C, July 13, minimum recorded water-temperature, 1.2°C, Feb. 1.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum recorded water-temperature, 31.3°C, Sept. 10, 2003; minimum recorded 0.0°C, many days in Dec. and Jan.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.1	14.3	14.7	14.8	13.4	14.0	8.8	8.6	8.7	6.8	5.9	6.3
2	14.4	13.1	13.6	15.4	13.8	14.5	8.6	7.7	8.0	9.0	6.8	7.8
3	13.3	12.0	12.7	15.4	13.6	14.5	7.8	7.4	7.7	11.6	9.0	10.3
4	14.2	13.0	13.5	15.3	13.4	14.4	7.8	7.2	7.4	12.9	11.6	12.4
5	14.2	13.0	13.6	15.9	15.0	15.4	7.8	7.5	7.6	13.0	9.5	11.6
6	15.0	13.3	14.1	15.9	15.1	15.5	7.7	7.3	7.5	9.5	6.5	7.9
7	15.5	13.8	14.6	15.1	13.8	14.5	7.6	7.0	7.2	6.5	4.8	5.4
8	16.0	14.0	15.0	13.8	11.6	12.7	7.1	6.6	6.9	4.9	4.5	4.7
9	16.3	14.5	15.4	11.6	10.6	10.9	8.3	7.1	7.6	5.0	4.6	4.8
10	17.2	16.1	16.5	11.2	10.3	10.7	9.0	8.3	8.6	4.9	4.0	4.5
11	18.0	16.6	17.2	12.2	11.1	11.5	8.8	7.4	8.2	4.0	3.1	3.5
12	18.2	17.2	17.7	13.7	12.2	13.0	7.4	6.4	6.8	4.3	3.1	3.7
13	18.3	16.8	17.6	13.3	10.9	12.0	6.4	5.2	6.0	5.0	4.0	4.5
14	18.1	15.5	16.9	10.9	10.1	10.4	5.5	4.6	4.9	5.3	4.3	4.8
15	15.9	13.9	15.0	10.1	9.4	9.7	6.6	5.5	6.0	5.4	5.0	5.2
16	15.2	13.6	14.4	9.7	9.2	9.4	7.3	6.6	6.9	5.1	4.6	4.8
17	14.4	13.8	14.1	11.1	9.7	10.3	7.4	6.9	7.2	5.3	4.5	4.8
18	14.0	12.6	13.2	13.9	11.1	12.2	6.9	6.4	6.7	6.5	5.3	5.9
19	14.0	11.6	12.8	14.0	13.3	13.8	6.4	5.4	6.0	6.5	5.0	5.8
20	14.4	11.8	13.2	13.3	11.9	12.3	5.4	4.3	4.8	5.0	4.0	4.3
21	15.1	14.0	14.5	11.9	11.2	11.4	4.3	3.7	4.0	4.2	3.8	4.0
22	14.9	12.2	13.8	11.9	11.1	11.5	5.6	4.0	4.7	4.3	3.7	3.9
23	13.9	11.5	12.7	12.3	11.6	11.9	6.9	5.6	6.3	3.7	2.9	3.2
24	13.1	9.6	11.5	12.3	9.9	11.3	---	---	6.4	4.0	2.7	3.3
25	14.2	11.5	12.8	9.9	8.5	9.0	6.0	5.5	5.7	4.1	3.5	3.8
26	14.0	12.8	13.5	8.5	8.1	8.3	5.5	4.8	5.0	7.0	4.1	5.5
27	13.3	12.6	13.0	8.9	8.5	8.7	5.0	4.3	4.7	7.2	5.9	6.8
28	12.6	12.1	12.3	9.8	8.9	9.5	5.5	4.4	4.9	5.9	4.1	4.8
29	12.6	11.8	12.2	9.3	8.2	8.6	---	---	6.0	4.1	3.3	3.8
30	12.9	11.6	12.2	8.6	8.0	8.2	---	---	6.8	4.1	3.4	3.8
31	14.1	12.6	13.3	---	---	---	6.6	5.9	6.2	3.4	2.3	2.6
MONTH	18.3	9.6	14.1	15.9	8.0	11.7	9.0	3.7	6.5	13.0	2.3	5.4

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.6	1.2	1.9	8.9	8.0	8.3	13.1	12.3	12.6	17.3	16.2	16.6
2	3.9	2.2	2.9	10.8	8.9	10	12.6	11.7	12.0	17.4	16.1	16.9
3	4.9	3.9	4.5	10.6	9.9	10.1	12.7	11.5	12.1	16.1	14.2	14.9
4	5.2	4.6	4.9	11.1	9.9	10.3	12.6	11.9	12.3	14.2	13.3	13.8
5	5.2	3.6	4.4	12.8	11.1	11.8	12.6	11.5	12.1	15.6	14.1	14.5
6	7.3	4.2	6.4	12.8	11.2	12.0	12.9	11.5	12.2	17.2	15.5	16.1
7	7.0	6.0	6.5	11.2	10.1	10.5	---	---	13.0	18.4	17.0	17.5
8	6.0	5.5	5.7	10.1	9.2	9.5	---	---	14.7	19.4	18.0	18.6
9	5.6	5.3	5.4	9.4	8.8	9.1	15.8	14.4	15.1	20.3	18.9	19.4
10	6.8	5.5	6.1	8.8	7.9	8.4	15.5	14.5	14.8	20.3	19.5	19.9
11	6.7	6.1	6.5	8.6	8.1	8.4	14.7	14.2	14.4	20.7	19.7	20.1
12	7.1	6.5	6.8	8.4	7.7	8.1	14.5	11.6	13.4	21.2	19.9	20.5
13	6.9	6.2	6.5	8.5	7.6	8.1	---	---	10.3	21.1	20.7	20.8
14	6.5	6.0	6.2	8.8	8.4	8.6	11.3	8.9	9.8	21.0	20.4	20.7
15	6.4	6.0	6.2	9.6	8.4	8.9	13.1	11.0	11.9	20.9	20.5	20.6
16	6.0	5.3	5.6	9.8	9.6	9.7	14.5	12.6	13.4	20.7	20.0	20.3
17	6.0	5.4	5.6	9.7	9.2	9.5	15.6	14.1	14.7	---	---	20.7
18	6.0	5.5	5.8	10.7	9.4	9.9	16.8	15.0	15.8	---	---	21.5
19	6.3	5.5	5.9	11.4	10.3	10.8	17.0	16.1	16.6	22.8	21.5	22.0
20	7.0	6.3	6.5	12.1	11.0	11.4	17.0	16.6	16.8	23.5	21.9	22.6
21	7.2	7.0	7.1	12.1	9.9	11.0	16.9	16.4	16.6	23.9	22.6	23.2
22	7.4	6.8	7.1	9.9	8.8	9.2	16.6	15.1	15.8	24.1	22.7	23.4
23	---	---	7.1	9.5	8.1	8.8	15.3	14.8	15.1	24.8	23.0	23.7
24	8.1	7.4	7.7	10.9	9.5	10	---	---	15.1	24.6	23.3	23.9
25	8.0	7.5	7.7	12.5	10.8	11.4	---	---	15.7	24.5	23.1	23.7
26	---	---	7.5	14.1	12.5	13.1	16.3	16.1	16.2	23.5	21.8	23.0
27	7.8	7.1	7.4	15.2	14.1	14.6	16.1	15.1	15.4	21.8	19.4	19.9
28	7.7	6.8	7.3	16.1	14.8	15.4	---	---	14.5	20.3	19.6	20.0
29	8.2	7.2	7.6	16.0	15.0	15.5	---	---	15.1	20.3	19.5	19.8
30	---	---	---	15.0	14.3	14.7	16.4	15.5	15.8	21.0	20.1	20.4
31	---	---	---	14.3	13.1	13.5	---	---	---	21.1	20.5	20.9
MONTH	8.2	1.2	6.1	16.1	7.6	10.7	17.0	8.9	14.1	24.8	13.3	20.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.5	19.5	19.9	23.3	22.4	22.9	24.2	23.1	23.7	23.0	19.1	21.1
2	20.1	19.1	19.4	23.6	22.4	22.9	24.9	23.4	24.1	22.5	21.1	21.8
3	19.7	19.1	19.4	24.6	22.8	23.6	25.7	24.0	24.7	22.6	21.2	21.5
4	19.7	18.8	19.3	25.7	23.9	24.7	25.7	24.3	25.0	21.9	21.2	21.5
5	19.0	18.2	18.6	25.7	24.5	25.1	25.5	21.8	23.3	22.5	21.6	22.0
6	19.3	18.4	18.8	25.4	23.8	24.5	21.8	20.9	21.3	23.3	21.9	22.5
7	20.4	19.1	19.6	25.2	24.4	24.8	21.4	20.1	20.8	23.1	22.7	22.9
8	21.5	20.0	20.6	25.6	23.8	24.6	21.6	20.1	20.9	22.8	21.8	22.2
9	22.6	21.2	21.7	26.0	24.2	25.0	22.0	20.9	21.4	21.8	21.3	21.5
10	22.5	21.7	22.1	26.4	24.5	25.5	22.8	21.2	21.9	21.6	20.7	21.1
11	23.4	22.2	22.7	26.7	25.1	25.9	22.7	21.8	22.2	21.8	20.6	21.2
12	---	---	---	26.2	25.4	25.7	22.2	20.8	21.5	22.3	21.0	21.6
13	---	---	---	27.1	24.8	25.7	20.8	19.3	20.1	22.5	20.9	21.7
14	---	---	---	26.2	24.7	25.4	20.5	18.6	19.6	22.5	20.4	21.5
15	---	---	---	25.6	23.2	24.4	20.8	18.2	19.5	22.5	19.5	21.2
16	---	---	22.0	25.3	23.1	24.2	21.2	18.1	19.6	22.0	21.5	21.7
17	23.5	22.4	22.8	25.2	23.5	24.2	21.6	18.1	19.9	21.6	19.7	20.6
18	24.1	22.9	23.5	24.2	22.5	23.4	22.6	19.2	20.8	19.7	18.7	19.0
19	23.9	22.9	23.3	24.5	21.4	22.9	23.8	21.0	22.3	18.7	17.9	18.3
20	23.4	22.1	22.8	24.8	21.1	23.0	23.0	21.7	22.4	18.4	17.5	18.0
21	23.2	21.8	22.6	25.2	21.9	23.6	22.7	22.0	22.4	18.5	17.3	17.9
22	23.5	22.5	23.1	---	---	23.5	22.5	21.2	21.8	18.9	17.7	18.3
23	23.2	22.5	22.9	---	---	25.3	22.9	21.3	22.0	19.6	18.2	18.9
24	23.3	22.2	22.8	25.6	24.6	25.1	23.4	22.0	22.6	---	---	19.4
25	---	---	22.6	25.0	23.5	24.2	24.3	22.7	23.4	20.8	19.6	20.1
26	22.9	21.7	22.3	24.4	23.2	23.7	24.8	23.5	24.1	20.5	19.4	19.9
27	22.5	21.3	21.8	24.0	22.7	23.3	25.3	23.3	24.3	20.3	18.7	19.6
28	22.5	20.9	21.6	---	---	22.4	25.4	23.1	24.2	20.4	19.6	19.9
29	22.8	21.4	22.0	23.8	20.6	22.2	24.7	23.5	24.1	19.6	17.3	18.8
30	23.4	22.0	22.6	24.4	21.6	23.1	23.5	22.2	22.8	18.3	16.2	17.2
31	---	---	---	24.4	23.5	24.0	22.7	20.6	22.0	---	---	---
MONTH	24.1	18.2	21.6	27.1	20.6	24.2	25.7	18.1	22.2	23.3	16.2	20.4
YEAR	27.1	1.2	14.7									

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 Munfordville, and at mile 225.9.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--February 1915 to December 1922, October 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 with telemetry. Datum of gage is 451.70 ft above NGVD of 1929. See WRD-KY-90-1 for history of changes prior to Nov. 29, 1940.

REMARKS.--Records good. Flow regulated by Green River Lake beginning February 1969 (station 03305990).

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1913 reached a stage of 54.0 ft at former site, discharge, 67,000 ft/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

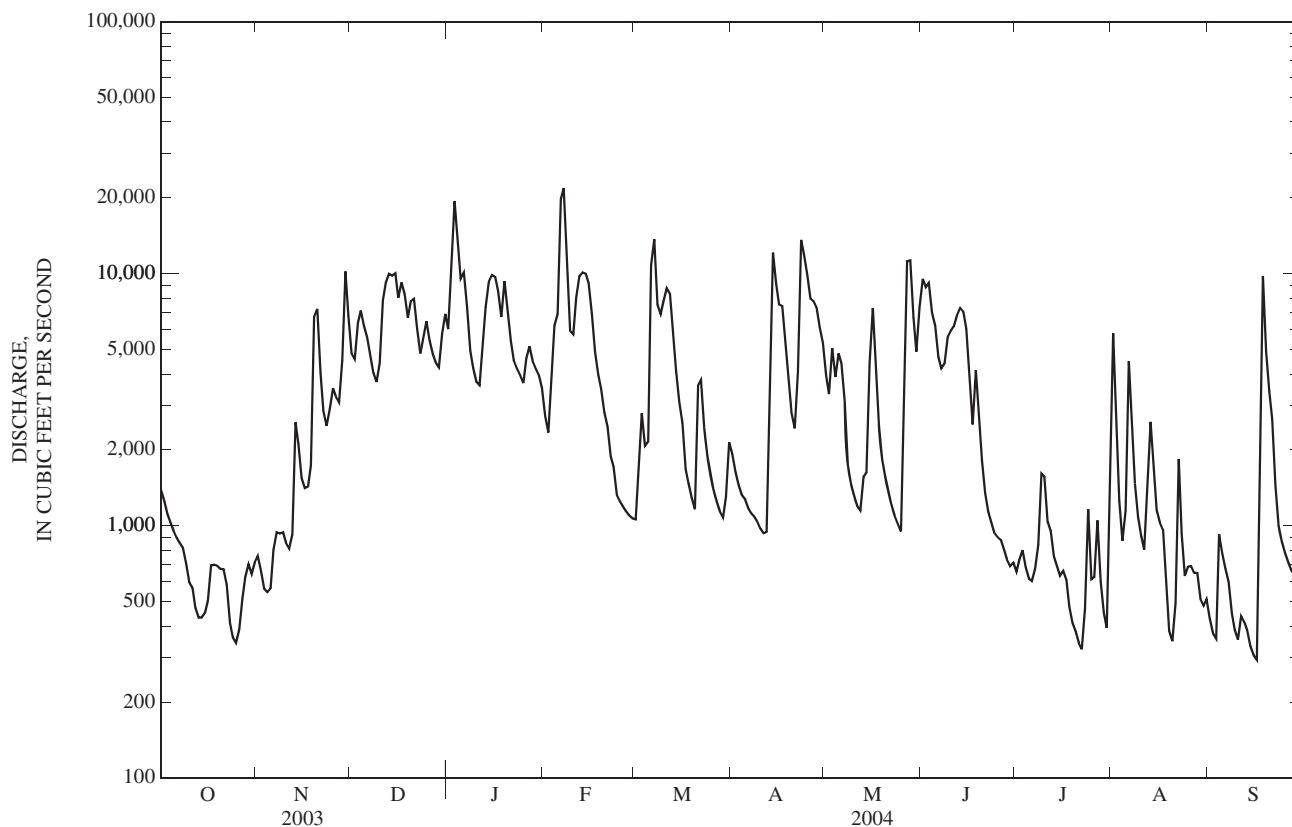
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,380	757	4,840	6,020	2,730	1,060	1,920	3,950	9,520	656	5,800	428
2	1,250	663	4,590	10,400	2,340	1,590	1,630	3,330	8,820	735	2,560	375
3	1,110	562	6,380	19,400	3,500	2,790	1,460	5,060	9,180	799	1,260	357
4	1,030	545	7,140	13,800	6,210	2,070	1,330	3,900	6,980	682	872	925
5	954	565	6,190	9,520	6,900	2,150	1,280	4,820	6,200	616	1,150	776
6	895	803	5,560	10,100	19,700	10,800	1,180	4,390	4,660	603	4,490	674
7	852	940	4,730	7,370	21,800	13,700	1,120	3,130	4,200	674	2,800	597
8	817	929	4,050	4,950	12,200	7,510	1,090	1,740	4,390	839	1,470	449
9	709	941	3,720	4,230	5,930	6,910	1,040	1,460	5,600	1,610	1,080	386
10	596	856	4,420	3,730	5,740	7,780	974	1,320	5,940	1,570	906	353
11	567	812	7,860	3,610	8,050	8,760	933	1,200	6,160	1,040	804	439
12	472	922	9,210	5,100	9,780	8,330	945	1,150	6,830	952	1,580	415
13	433	2,570	9,990	7,360	10,100	5,970	4,960	1,560	7,310	754	2,580	384
14	433	2,110	9,820	9,290	9,990	4,130	12,100	1,620	7,050	694	1,630	332
15	451	1,540	10,000	9,870	9,140	3,110	9,080	4,440	6,050	633	1,150	306
16	504	1,410	8,020	9,700	6,930	2,560	7,540	7,300	3,970	660	1,030	294
17	697	1,430	9,230	8,520	4,880	1,680	7,420	3,970	2,520	609	962	2,130
18	701	1,740	8,280	6,750	3,980	1,470	5,280	2,510	4,140	478	613	9,770
19	692	6,730	6,690	9,340	3,490	1,290	3,790	1,840	2,800	411	383	4,910
20	674	7,230	7,760	6,970	2,820	1,160	2,800	1,560	1,820	380	348	3,410
21	672	4,050	7,950	5,380	2,470	3,600	2,430	1,370	1,350	342	493	2,650
22	582	2,850	6,030	4,530	1,880	3,780	4,090	1,210	1,130	324	1,840	1,450
23	413	2,490	4,820	4,210	1,710	2,450	13,600	1,100	1,020	470	936	1,000
24	361	2,910	5,580	3,960	1,330	1,890	11,900	1,020	934	1,160	632	868
25	343	3,510	6,480	3,690	1,250	1,610	9,920	948	901	612	688	787
26	387	3,260	5,420	4,600	1,190	1,390	7,970	2,520	881	625	692	723
27	516	3,090	4,800	5,140	1,140	1,250	7,790	11,200	804	1,050	651	668
28	627	4,540	4,440	4,510	1,100	1,140	7,370	11,300	737	601	650	642
29	702	10,200	4,250	4,200	1,070	1,080	6,130	6,700	692	450	512	690
30	643	6,820	5,780	3,980	---	1,300	5,310	4,900	712	393	482	2,960
31	717	---	6,920	3,520	---	2,140	---	7,360	---	1,720	511	---
TOTAL	21,180	77,775	200,950	213,750	169,350	116,450	144,382	109,878	123,301	23,142	41,555	40,148
MEAN	683	2,592	6,482	6,895	5,840	3,756	4,813	3,544	4,110	747	1,340	1,338
MAX	1,380	10,200	10,000	19,400	21,800	13,700	13,600	11,300	9,520	1,720	5,800	9,770
MIN	343	545	3,720	3,520	1,070	1,060	933	948	692	324	348	292

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	1,256	2,430	4,084	4,569	5,466	4,950	3,697	3,278	2,449	1,045	858	1,224
MAX	5,337	5,414	12,800	12,130	13,610	12,040	8,632	13,250	7,209	3,132	3,642	6,104
(WY)	(1976)	(2003)	(1979)	(1974)	(1989)	(1975)	(1994)	(1983)	(1997)	(1973)	(1977)	(1979)
MIN	193	210	545	255	1,952	1,066	552	487	214	280	202	152
(WY)	(2001)	(1972)	(1981)	(1981)	(1992)	(1983)	(1986)	(1988)	(1988)	(1993)	(1993)	(1999)

03308500 GREEN RIVER AT MUNFORDVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	1,355,204		1,281,861		2,929	
ANNUAL MEAN	3,713		3,502		1,233	
HIGHEST ANNUAL MEAN					5,285	
LOWEST ANNUAL MEAN					1,233	
HIGHEST DAILY MEAN	27,000	Feb 17	21,800	Feb 7	62,800	May 8, 1984
LOWEST DAILY MEAN	343	Oct 25	294	Sep 16	136	Oct 4, 2001
ANNUAL SEVEN-DAY MINIMUM	396	Aug 17	360	Sep 10	142	Sep 9, 1999
MAXIMUM PEAK FLOW			22,600	Feb 7	76,800	Mar 1, 1962
MAXIMUM PEAK STAGE			28.66	Feb 7	57.72	Mar 1, 1962
INSTANTANEOUS LOW FLOW					157	Jul 8, 1988
10 PERCENT EXCEEDS	8,750		8,590		7,080	
50 PERCENT EXCEEDS	2,290		1,860		1,440	
90 PERCENT EXCEEDS	584		536		285	



03308500 GREEN RIVER AT MUNFORDVILLE, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--WATER-TEMPERATURE; Water years 1950-77, 1980, 1983-90, August 1992 to September 1994, December 22, 1999 to September 30, 2000.

GAGE.--Water-temperature recorder with telemetry.

REMARKS.--Records fair.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum daily, 29C, July 13-17, 1980; minimum daily 0.0C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum recorded water temperature 25.3C, July 9 and Aug. 28, minimum recorded, 5.4C, Jan. 31.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.6	18.0	18.2	13.7	13.4	13.5	9.5	9.4	9.4	7.5	7.3	7.4
2	18.0	17.2	17.5	13.9	13.7	13.8	9.5	9.3	9.3	8.6	7.4	7.8
3	17.2	16.5	16.7	14.2	13.9	14.0	10.1	9.3	9.6	9.5	8.6	9.1
4	16.6	16.5	16.6	14.4	14.2	14.3	10.6	10.1	10.4	10.5	9.5	10.1
5	16.7	16.5	16.6	14.5	14.4	14.5	10.6	10.4	10.5	10.7	10.5	10.6
6	16.5	16.4	16.5	14.7	14.5	14.6	10.4	9.8	10.1	10.6	9.3	10.0
7	16.5	16.4	16.5	14.8	14.2	14.5	9.8	9.2	9.4	9.3	7.9	8.5
8	16.7	16.5	16.6	14.2	13.3	13.7	9.2	8.7	8.9	7.9	7.1	7.4
9	16.8	16.6	16.7	13.3	12.6	12.8	9.2	8.7	8.9	7.1	6.9	6.9
10	16.8	16.7	16.8	12.6	12.4	12.5	10.1	9.2	9.7	6.9	6.7	6.8
11	16.9	16.8	16.9	12.8	12.5	12.6	10.1	9.6	10.0	6.7	6.1	6.4
12	17.0	16.9	16.9	13.1	12.8	12.9	9.6	9.0	9.2	6.2	6.0	6.1
13	17.1	16.9	17.0	13.3	13.1	13.2	9.0	8.8	8.9	6.6	6.2	6.4
14	17.1	17.0	17.0	13.2	12.2	12.7	8.8	8.5	8.6	6.6	6.4	6.5
15	17.0	16.4	16.7	12.2	11.3	11.7	8.5	8.1	8.3	6.6	6.4	6.5
16	16.4	15.9	16.1	11.3	11.2	11.3	8.4	8.1	8.2	6.6	6.3	6.4
17	16.0	15.8	15.9	11.6	11.3	11.4	8.7	8.4	8.6	6.5	6.3	6.3
18	15.8	15.3	15.5	12.4	11.6	12.0	8.7	8.3	8.5	6.8	6.5	6.6
19	15.3	15.0	15.1	15.0	12.4	13.6	8.3	8.0	8.1	6.9	6.8	6.9
20	15.1	15.0	15.0	14.4	9.9	12.3	8.0	7.5	7.7	6.9	6.3	6.6
21	15.2	15.0	15.1	13.3	9.0	12.0	7.5	7.1	7.3	6.3	6.0	6.1
22	15.2	15.1	15.2	12.8	12.5	12.6	7.3	7.1	7.2	6.0	5.9	5.9
23	15.1	14.8	14.9	12.7	12.6	12.6	7.8	7.3	7.6	6.0	5.7	5.9
24	14.8	14.3	14.4	12.8	12.5	12.7	8.0	7.8	8.0	5.7	5.5	5.6
25	14.3	14.1	14.2	12.5	10.8	11.6	7.9	7.4	7.6	5.9	5.6	5.8
26	14.4	14.2	14.3	10.8	10.0	10.2	7.4	7.0	7.2	6.4	5.9	6.1
27	14.3	13.6	13.8	10.3	10.0	10.1	7.0	6.7	6.8	7.0	6.4	6.7
28	13.6	13.1	13.2	11.0	10.3	10.7	6.8	6.7	6.7	7.1	6.7	6.9
29	13.1	13.0	13.0	10.8	9.8	10.3	7.4	6.8	7.0	6.7	6.0	6.3
30	13.1	12.9	13.0	9.8	9.4	9.5	7.9	7.4	7.7	6.0	5.8	5.9
31	13.4	13.1	13.2	---	---	---	7.9	7.5	7.7	5.8	5.4	5.6
MONTH	18.6	12.9	15.6	15.0	9.0	12.5	10.6	6.7	8.5	10.7	5.4	7.0

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.9	5.6	5.8	9.8	9.3	9.5	14.8	14.4	14.6	16.4	16.0	16.2
2	6.1	5.9	6.0	10.4	9.8	10.1	14.4	14.0	14.2	16.6	16.4	16.5
3	6.5	6.1	6.3	10.8	10.4	10.6	14.1	13.8	13.9	16.6	16.5	16.6
4	6.6	6.5	6.6	10.9	10.8	10.8	13.8	13.8	13.8	16.5	16.0	16.2
5	6.6	6.4	6.5	11.4	10.9	11.2	13.8	13.6	13.7	16.2	16.1	16.1
6	6.5	6.4	6.4	12.0	11.4	11.8	13.7	13.6	13.7	16.2	16.1	16.2
7	7.1	6.5	6.8	12.0	11.8	11.9	13.8	13.6	13.7	16.6	16.2	16.4
8	7.2	7.1	7.2	11.8	11.2	11.5	14.1	13.8	14.0	17.0	16.6	16.9
9	7.2	7.1	7.1	11.2	10.3	10.7	14.6	14.1	14.4	17.3	17.0	17.2
10	7.1	7.1	7.1	10.3	9.7	9.9	14.9	14.6	14.8	17.7	17.3	17.5
11	7.1	6.7	6.9	9.7	9.5	9.6	15.0	14.9	15.0	18.1	17.7	17.9
12	6.7	6.4	6.5	9.5	9.3	9.4	15.1	15.0	15.0	18.4	18.1	18.3
13	6.4	6.1	6.2	9.4	9.2	9.3	15.0	14.1	14.6	18.7	18.4	18.6
14	6.1	5.8	5.9	9.8	9.3	9.5	14.1	12.9	13.4	19.1	18.7	18.9
15	5.9	5.8	5.8	10.1	9.8	9.9	13.0	12.8	12.9	19.3	19.1	19.2
16	5.9	5.8	5.9	---	---	---	13.6	13.0	13.4	19.1	18.7	18.9
17	6.1	5.9	5.9	---	---	---	14.0	13.6	13.9	18.8	18.7	18.7
18	6.5	6.1	6.3	11.2	10.8	11.0	14.6	14.0	14.3	18.8	18.7	18.8
19	6.6	6.4	6.5	11.7	11.2	11.5	15.2	14.6	14.8	18.8	18.8	18.8
20	7.2	6.6	6.9	12.1	11.7	11.9	15.5	15.2	15.3	19.0	18.8	18.9
21	7.8	7.2	7.6	12.6	12.1	12.4	15.7	15.5	15.6	19.2	19.0	19.1
22	8.1	7.8	7.9	12.6	12.1	12.4	16.1	15.7	16.0	19.4	19.2	19.3
23	8.3	8.1	8.2	12.1	11.7	11.9	16.1	15.9	16.0	19.6	19.4	19.5
24	8.8	8.3	8.6	11.8	11.7	11.8	15.9	15.9	15.9	19.8	19.6	19.7
25	9.0	8.8	9.0	12.2	11.8	12.0	16.1	15.9	16.0	20.0	19.8	19.9
26	9.0	9.0	9.0	12.8	12.2	12.5	16.2	16.1	16.1	20.1	20.0	20.0
27	9.1	8.9	9.0	13.4	12.8	13.1	16.2	16.1	16.2	20.4	20.1	20.3
28	9.2	9.0	9.1	14.0	13.4	13.8	16.1	15.9	16.0	20.2	20.1	20.1
29	9.3	9.1	9.2	14.6	14.0	14.3	15.9	15.8	15.9	20.2	20.1	20.2
30	---	---	---	15.0	14.6	14.8	16.0	15.8	15.9	20.3	20.1	20.2
31	---	---	---	15.0	14.8	14.9	---	---	---	20.3	20.2	20.2
MONTH	9.3	5.6	7.1	15.0	9.2	11.5	16.2	12.8	14.8	20.4	16.0	18.4
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.2	20.1	20.2	22.0	21.0	21.5	22.3	21.4	22.0	23.4	21.6	22.6
2	20.1	20.0	20.1	23.2	21.4	22.2	23.4	22.1	22.7	22.7	21.9	22.2
3	20.0	19.8	19.9	23.9	22.3	23.1	24.3	22.6	23.4	22.4	21.7	22.1
4	19.8	19.7	19.8	24.4	22.7	23.6	24.5	22.9	23.7	23.6	21.8	22.7
5	19.7	19.6	19.7	24.2	23.1	23.6	24.0	23.5	23.7	24.0	22.6	23.3
6	19.7	19.6	19.6	24.3	22.2	23.3	23.6	21.5	22.4	24.2	22.3	23.3
7	19.7	19.6	19.7	24.1	22.9	23.5	21.6	20.6	21.1	23.8	22.9	23.2
8	19.8	19.7	19.8	24.6	22.7	23.6	21.7	20.4	21.1	23.1	21.9	22.4
9	20.1	19.8	20.0	25.3	23.9	24.6	21.9	20.8	21.3	21.9	21.0	21.5
10	20.3	20.1	20.2	25.0	23.3	23.9	22.4	20.8	21.6	22.1	20.5	21.4
11	20.4	20.2	20.3	24.0	22.8	23.4	22.3	21.4	21.9	22.3	20.5	21.5
12	20.7	20.4	20.6	23.9	23.0	23.4	22.1	21.3	21.8	22.7	21.3	22.0
13	20.9	20.7	20.8	25.1	23.1	24.0	22.0	18.4	19.6	22.7	21.6	22.3
14	21.0	20.8	20.9	24.9	23.3	24.1	19.1	18.0	18.5	22.9	21.5	22.2
15	21.4	21.0	21.2	24.6	23.2	24.0	19.7	18.1	18.9	23.2	21.3	22.4
16	21.5	21.4	21.4	24.9	23.3	24.1	20.4	18.6	19.5	22.5	21.6	22.1
17	21.4	21.4	21.4	24.7	23.4	24.1	21.2	19.2	20.2	21.9	19.8	21.1
18	21.7	21.4	21.5	24.2	23.1	23.7	21.8	19.7	20.8	19.9	19.4	19.7
19	21.9	21.7	21.8	24.1	22.4	23.3	22.8	20.7	21.8	19.4	18.8	19.1
20	21.8	21.7	21.8	24.0	22.3	23.3	22.3	21.5	21.7	19.2	18.5	18.9
21	21.8	21.7	21.7	24.1	22.6	23.5	21.8	21.1	21.4	19.0	18.0	18.5
22	21.8	21.8	21.8	24.1	23.0	23.5	21.8	21.1	21.5	19.4	18.2	18.8
23	22.2	21.8	21.9	24.8	22.7	23.5	22.1	20.7	21.4	20.1	18.5	19.3
24	22.6	21.0	21.8	24.8	23.5	24.0	23.0	21.3	22.1	20.4	19.1	19.8
25	22.2	21.6	21.8	23.6	22.7	23.2	23.7	21.7	22.8	21.2	19.8	20.5
26	22.3	21.0	21.6	23.3	21.7	22.3	23.7	22.2	23.2	21.3	20.0	20.7
27	21.9	20.5	21.3	22.9	22.0	22.4	23.9	21.9	22.8	20.9	19.8	20.4
28	21.9	20.2	21.1	22.7	21.0	21.9	25.3	23.3	24.3	21.3	19.9	20.5
29	22.0	20.4	21.3	22.8	20.9	21.9	24.9	23.9	24.4	20.6	19.7	20.0
30	21.9	20.9	21.3	22.8	21.6	22.3	24.4	22.9	23.6	20.0	18.2	19.2
31	---	---	---	22.5	19.8	21.1	23.7	22.2	23.0	---	---	---
MONTH	22.6	19.6	20.9	25.3	19.8	23.2	25.3	18.0	21.9	24.2	18.0	21.1
YEAR	25.3	5.4	15.3									

03309000 GREEN RIVER AT MAMMOTH CAVE, KY

LOCATION.--Lat 37°10'48", long 86°06'45", Edmonson County, Hydrologic Unit 05110001, on right bank, upstream side of road (Echo River Road) at ferry landing, five hundred feet downstream from Echo River, 0.75 miles southwest of Mammoth Cave, and at mile 197.2.

DRAINAGE AREA.--2,020 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to Sept. 1950. Oct. 1, 2003 to current year.

GAGE.--Water-stage recorder with telemetry and crest-stage gage Datum of gage is 416.52 above NGVD of 1929.

REMARKS.--Records fair.

COOPERATION.--Mammoth Cave National Park, Western Kentucky University, Barren River Area Development District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 52.5 ft. Jan. 24, 1937, at former site (discharge, 75,000 second feet). Flood of 1913 reached a stage of 50.5 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,720	e898	5,730	6,670	3,300	1,400	2,300	4,760	10,800	878	4,190	410
2	1,430	893	4,660	10,300	2,860	1,560	1,990	4,230	10,400	784	3,910	319
3	1,230	788	5,580	19,000	4,180	2,580	1,790	4,930	10,700	928	2,300	262
4	1,050	728	7,110	19,400	e6,090	2,570	1,660	4,880	8,410	974	1,530	209
5	945	743	6,670	12,800	7,730	2,370	1,530	4,940	7,700	1,060	1,230	755
6	849	862	5,930	11,200	16,200	e8,930	1,440	5,160	6,330	1,220	2,650	558
7	802	1,160	5,230	9,280	22,500	15,700	1,360	4,060	5,410	1,170	3,680	541
8	779	1,100	4,440	6,150	19,000	10,500	1,300	2,530	5,350	1,100	2,130	424
9	729	1,130	3,980	4,860	e8,350	7,200	1,240	1,880	6,000	1,280	1,700	327
10	605	1,070	4,100	4,240	6,150	7,950	1,180	1,770	6,650	1,600	1,460	277
11	517	998	6,650	3,930	7,990	8,640	1,110	1,700	6,560	1,320	1,100	267
12	484	1,020	8,940	4,600	10,100	8,960	1,140	1,570	7,280	1,100	955	328
13	441	1,900	9,920	6,770	10,500	6,940	3,260	1,610	7,890	788	2,040	308
14	407	2,870	10,100	9,000	10,400	4,940	11,500	1,800	7,700	680	1,850	253
15	446	2,110	10,400	10,200	9,780	3,690	10,900	4,420	6,900	615	1,280	135
16	713	1,850	9,380	10,200	7,990	2,920	7,950	9,120	5,250	526	1,050	119
17	819	1,590	9,290	9,590	5,690	2,280	7,800	5,840	3,660	653	964	199
18	918	2,180	9,830	7,640	4,240	1,940	6,070	3,930	3,450	1,040	827	7,090
19	912	5,490	7,450	9,050	3,910	1,740	4,290	2,770	3,840	422	417	6,570
20	893	8,720	7,490	8,290	3,180	1,700	3,200	2,210	2,590	255	325	3,600
21	876	5,680	8,380	6,140	2,880	3,050	2,790	1,980	2,210	195	810	2,890
22	868	3,880	6,840	4,960	2,290	4,680	e3,760	1,660	1,860	204	1,110	1,930
23	821	3,180	5,390	4,460	2,060	e3,200	12,700	1,480	1,500	576	1,470	1,210
24	649	3,380	5,290	4,170	1,790	2,500	14,100	1,330	1,340	925	827	940
25	607	3,650	6,660	4,030	1,610	2,130	11,700	1,240	1,330	1,160	604	804
26	644	3,670	5,980	4,380	e1,540	1,900	9,130	1,840	1,290	873	793	699
27	695	3,410	5,200	5,580	1,490	1,730	8,020	8,360	1,100	1,000	997	709
28	772	4,460	4,730	4,950	1,450	1,610	8,050	13,500	889	863	676	788
29	857	8,810	4,470	4,600	1,400	1,520	6,690	8,510	838	448	561	771
30	872	9,090	5,730	4,290	---	1,650	5,910	6,310	834	331	525	1,240
31	827	---	7,460	3,990	---	2,110	---	7,600	---	755	504	---
TOTAL	25,177	87,310	209,010	234,720	186,650	130,590	155,860	127,920	146,061	25,723	44,465	34,932
MEAN	812	2,910	6,742	7,572	6,436	4,213	5,195	4,126	4,869	830	1,434	1,164
MAX	1,720	9,090	10,400	19,400	22,500	15,700	14,100	13,500	10,800	1,600	4,190	7,090
MIN	407	728	3,980	3,930	1,400	1,400	1,110	1,240	834	195	325	119

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	320	1,019	2,745	5,992	7,060	6,181	4,847	2,425	2,182	1,320	1,048	747
MAX	910	2,910	7,683	19,220	16,080	12,010	9,467	5,354	7,008	3,276	3,103	3,758
(WY)	(1945)	(2004)	(1950)	(1950)	(1939)	(1943)	(1948)	(1947)	(1950)	(1947)	(1938)	(1950)
MIN	124	181	271	390	870	851	1,547	547	496	202	225	170
(WY)	(1941)	(1940)	(1940)	(1940)	(1941)	(1941)	(1946)	(1941)	(1944)	(1944)	(1945)	(1945)

03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

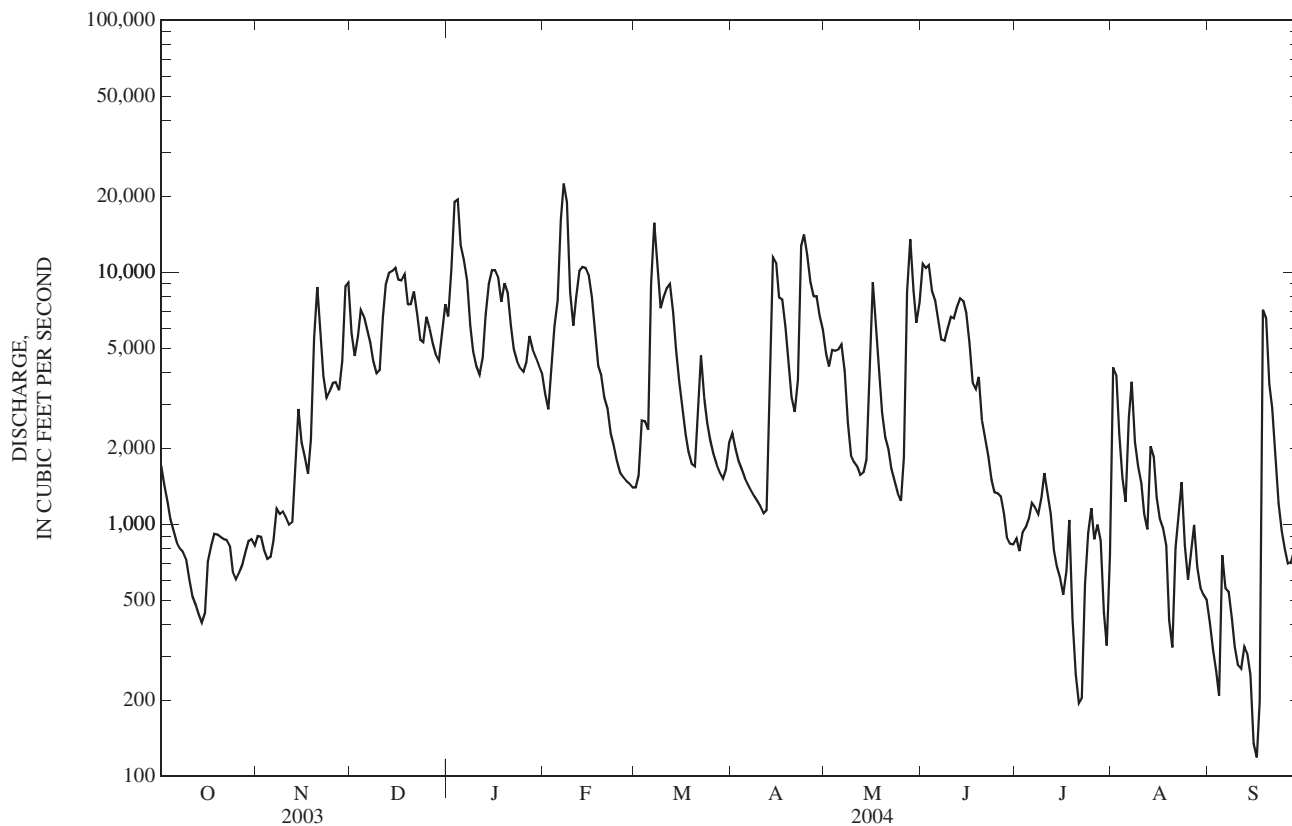
SUMMARY STATISTICS

FOR 2004 WATER YEAR

WATER YEARS 1938 - 2004

ANNUAL TOTAL	1,408,418			
ANNUAL MEAN	3,848			
HIGHEST ANNUAL MEAN			2,956	
LOWEST ANNUAL MEAN			5,680	1950
HIGHEST DAILY MEAN	22,500	Feb 7	1,170	1941
LOWEST DAILY MEAN	119	Sep 16	50,300	Feb 18, 1949
ANNUAL SEVEN-DAY MINIMUM	230	Sep 11	92	Nov 2, 1945
MAXIMUM PEAK FLOW	23,300	Feb 7	104	Oct 21, 1940
MAXIMUM PEAK STAGE	30.03	Feb 7	51,400	Feb 18, 1949
10 PERCENT EXCEEDS	9,060		43.00	Feb 18, 1949
50 PERCENT EXCEEDS	2,210		7,520	
90 PERCENT EXCEEDS	606		1,100	
			202	

e Estimated



03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 2003 to current water year.

COOPERATION.--National Park Service.

INSTRUMENTATION.--Five parameter water-quality monitor with telemetry since Aug. 2003.

REMARKS.--

SPECIFIC CONDUCTANCE: Records rated good

pH: Records rated good.

WATER TEMPERATURE: Records rated good.

DISSOLVED OXYGEN: Records rated poor.

TURBIDITY: Records rated poor.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 411 microsiemens, Aug. 10; minimum recorded, 167 microsiemens, Jun. 12.

pH: Maximum recorded, 8.3 units, Apr. 9-11; minimum recorded, 7.1 units, Jan. 2, 3, Feb. 25.

WATER TEMPERATURES: Maximum recorded, 25.9°C, Jul. 10; minimum recorded, 3.8°C, Feb. 1.

DISSOLVED OXYGEN: Maximum recorded, 15.1 mg/L, Feb. 1; minimum recorded, 5.9 mg/L, Jul. 29, 30.

TURBIDITY: Maximum recorded, 480 FNU, May 27; minimum recorded, 2.1 FNU, Apr. 12.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	320	315	317	384	368	375	---	---	---	267	260	263
2	323	319	322	369	363	368	---	---	---	260	233	249
3	323	320	322	363	328	344	---	---	---	---	---	---
4	320	319	320	328	314	318	---	---	---	---	---	---
5	322	320	321	315	312	314	---	---	---	---	---	---
6	322	321	322	321	314	316	---	---	---	---	---	---
7	322	320	321	334	321	330	---	---	---	---	---	---
8	320	319	319	328	316	321	---	---	---	---	---	---
9	319	316	318	338	324	332	---	---	---	---	---	---
10	317	315	316	337	321	327	---	---	---	---	---	---
11	324	317	321	326	317	322	---	---	---	---	---	---
12	333	324	329	318	302	311	---	---	---	---	---	---
13	340	333	336	302	278	289	---	---	---	---	---	---
14	350	340	346	290	243	262	---	---	---	---	---	---
15	357	350	354	275	255	266	---	---	---	---	---	---
16	365	357	361	304	275	293	---	---	---	---	---	---
17	372	365	368	309	304	307	---	---	---	---	---	---
18	373	360	367	311	285	300	---	---	---	---	---	---
19	360	349	355	327	270	299	271	267	270	---	---	---
20	349	309	324	275	238	254	271	238	251	---	---	---
21	309	306	307	309	266	287	238	215	220	---	---	---
22	307	305	306	330	309	315	230	218	224	---	---	---
23	305	303	304	350	321	334	243	230	239	---	---	---
24	311	303	307	365	343	352	255	243	249	234	232	233
25	325	311	318	364	330	345	270	253	262	234	225	230
26	331	324	328	---	---	---	---	---	---	249	226	240
27	342	331	337	---	---	---	---	---	---	270	246	258
28	363	342	356	---	---	---	---	---	---	255	250	252
29	370	363	366	---	---	---	---	---	---	251	244	248
30	365	359	361	---	---	---	264	254	260	244	241	242
31	384	361	377	---	---	---	271	259	266	242	240	241
MONTH	384	303	333	384	238	315	271	215	249	270	225	246

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	259	242	248	299	290	294	329	320	325	203	171	184
2	273	259	262	295	287	290	322	313	317	223	203	214
3	278	258	269	307	275	291	313	305	308	266	223	223
4	288	268	280	312	278	292	305	302	303	300	266	291
5	278	237	256	293	287	279	303	300	301	312	297	305
6	239	208	226	---	---	---	301	298	300	301	255	277
7	---	---	---	---	---	---	299	298	299	266	226	243
8	---	---	---	---	---	---	299	297	298	256	235	242
9	---	---	---	---	---	---	299	297	298	292	256	275
10	---	---	---	---	---	---	299	297	298	311	292	303
11	282	211	240	---	---	---	299	297	299	315	311	313
12	211	181	188	---	---	---	299	293	297	314	312	314
13	181	176	177	---	---	---	293	274	284	324	307	315
14	176	171	173	---	---	---	304	227	248	315	279	298
15	173	170	171	---	---	---	248	228	236	279	248	262
16	183	173	181	---	---	---	247	241	245	277	233	251
17	202	183	196	258	239	248	248	211	232	268	253	259
18	217	200	210	298	258	276	288	224	257	292	268	284
19	216	213	214	303	290	298	289	261	277	308	278	293
20	238	214	223	309	295	305	297	267	287	325	308	318
21	242	238	240	295	287	290	311	283	293	332	325	329
22	252	240	244	276	267	271	299	276	289	336	332	334
23	273	252	265	280	267	275	---	---	---	337	335	336
24	274	269	272	296	280	290	---	---	---	337	335	336
25	286	274	280	308	296	303	---	---	---	335	332	334
26	300	294	298	317	308	312	---	---	---	336	286	324
27	302	298	299	322	316	320	---	---	---	286	193	241
28	301	297	298	326	322	325	---	---	---	216	187	195
29	300	295	297	329	323	326	---	---	---	264	216	244
30	---	---	---	324	318	319	---	---	---	265	253	262
31	---	---	---	326	320	324	---	---	---	277	250	263
MONTH	302	170	240	329	239	296	329	211	286	337	171	279
	JUNE			JULY			AUGUST			SEPTEMBER		
1	266	238	249	384	380	382	350	267	319	334	329	331
2	256	236	248	381	368	373	370	323	350	343	334	340
3	251	237	241	378	370	375	---	---	---	355	342	349
4	248	239	244	383	364	372	---	---	---	357	355	356
5	251	238	243	381	364	368	---	---	---	365	330	353
6	261	239	248	375	363	366	---	---	---	330	312	321
7	261	254	257	377	372	375	290	249	266	341	300	326
8	254	232	243	376	364	370	357	290	325	308	293	298
9	232	197	218	364	350	358	387	357	373	322	308	319
10	198	186	190	351	289	332	411	375	394	325	320	322
11	187	184	186	289	263	271	---	---	---	335	325	329
12	186	167	177	282	265	273	---	---	---	340	335	338
13	184	173	180	295	281	287	---	---	---	340	331	334
14	198	179	186	321	294	302	---	---	---	338	331	333
15	187	180	183	335	321	330	---	---	---	332	327	328
16	219	183	203	339	331	334	---	---	---	334	327	330
17	249	219	234	341	337	339	---	---	---	337	331	334
18	278	248	265	342	333	336	---	---	---	196	196	254
19	279	244	256	352	335	344	---	---	---	245	204	222
20	311	277	301	354	351	352	---	---	---	249	204	232
21	346	311	329	363	354	358	292	266	281	245	225	229
22	363	344	355	372	363	364	345	292	316	232	225	228
23	377	356	366	377	365	371	334	308	319	251	232	240
24	---	---	---	396	366	377	342	309	327	273	251	262
25	376	373	374	404	356	373	310	304	306	286	273	281
26	377	375	376	378	354	363	336	310	323	288	286	287
27	382	376	379	360	351	355	340	299	317	288	287	288
28	381	378	380	364	331	343	376	340	358	288	287	288
29	385	381	382	350	333	342	360	340	347	308	288	299
30	385	383	384	349	328	334	343	334	337	303	277	298
31	---	---	---	341	329	335	340	327	333	---	---	---
MONTH	385	167	272	404	263	347	411	249	329	365	196	302
YEAR	411	167	297									

03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.7	7.6	7.9	7.8	7.7	7.7	7.3	7.2	7.6	7.5	7.4	7.3
2	7.7	7.7	7.9	7.8	7.7	7.6	7.2	7.1	7.6	7.5	7.4	7.3
3	7.7	7.7	7.8	7.7	7.6	7.6	7.4	7.1	7.5	7.5	7.4	7.3
4	7.7	7.6	7.8	7.7	7.6	7.6	7.6	7.4	---	---	7.4	7.2
5	7.7	7.6	7.8	7.7	7.7	7.6	7.6	7.6	---	---	7.3	7.2
6	7.7	7.7	7.7	7.7	7.6	7.6	7.7	7.6	7.4	7.2	---	---
7	7.7	7.6	7.7	7.6	7.6	7.5	7.7	7.7	---	---	7.4	7.2
8	7.7	7.6	7.7	7.6	7.5	7.5	7.7	7.7	---	---	7.5	7.4
9	7.7	7.6	7.8	7.7	7.5	7.5	7.7	7.7	---	---	7.5	7.5
10	7.6	7.6	7.8	7.7	7.6	7.5	7.7	7.7	---	---	7.6	7.5
11	7.6	7.5	7.8	7.7	7.6	7.6	7.7	7.6	7.4	7.4	7.6	7.6
12	7.6	7.6	7.8	7.7	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6
13	7.6	7.5	7.7	7.5	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6
14	7.7	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6
15	7.7	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6
16	7.7	7.6	7.7	7.6	7.6	7.5	7.6	7.6	7.4	7.3	7.6	7.5
17	7.7	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.3	7.3	7.6	7.6
18	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.5	7.3	7.3	7.7	7.6
19	7.7	7.7	7.6	7.4	7.7	7.4	7.5	7.5	7.3	7.2	7.7	7.7
20	7.7	7.6	7.4	7.3	7.6	7.5	7.5	7.5	7.3	7.2	7.7	7.7
21	7.7	7.6	---	---	7.6	7.6	7.5	7.5	7.3	7.2	7.7	7.6
22	7.7	7.6	---	---	7.6	7.6	7.5	7.5	7.3	7.2	7.6	7.6
23	7.7	7.6	---	---	7.6	7.6	7.6	7.4	7.4	7.2	7.6	7.5
24	7.7	7.6	7.5	7.4	7.6	7.6	7.6	7.6	7.4	7.2	7.6	7.5
25	7.8	7.6	7.5	7.5	7.6	7.6	7.6	7.6	7.3	7.1	7.7	7.6
26	7.7	7.6	7.5	7.3	7.6	7.6	7.6	7.6	7.3	7.2	7.7	7.6
27	7.8	7.6	7.5	7.4	7.6	7.4	7.7	7.6	7.4	7.2	7.8	7.6
28	7.7	7.7	7.6	7.5	7.4	7.4	7.6	7.6	7.5	7.2	7.8	7.7
29	7.7	7.6	7.7	7.6	7.4	7.4	7.7	7.6	7.5	7.3	7.8	7.6
30	7.8	7.7	7.7	7.7	7.4	7.3	7.7	7.6	---	---	7.8	7.7
31	7.9	7.8	---	---	7.3	7.3	7.7	7.6	---	---	7.8	7.7
MONTH	7.9	7.5	7.9	7.3	7.7	7.3	7.7	7.1	7.6	7.1	7.8	7.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.8	7.7	7.9	7.8	7.7	7.7	7.9	7.8	7.6	7.4	7.6	7.5
2	7.9	7.8	7.8	7.7	7.7	7.6	7.9	7.8	7.6	7.5	7.6	7.5
3	8.0	7.9	7.7	7.7	7.6	7.6	7.9	7.8	7.5	7.4	7.6	7.4
4	8.0	7.9	7.7	7.5	7.7	7.6	7.9	7.8	7.4	7.3	7.6	7.4
5	8.1	7.9	7.6	7.5	7.7	7.7	7.9	7.8	7.6	7.2	7.6	7.5

03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.2	15.5	16.0	15.2	14.1	14.6	9.6	9.4	9.5	7.7	7.3	7.4
2	15.5	14.7	15.1	15.6	14.5	15.1	9.4	9.1	9.3	9.6	7.5	8.4
3	14.7	14.2	14.5	15.9	14.9	15.5	9.9	9.0	9.4	10.1	9.6	9.8
4	15.2	14.4	14.7	16.1	14.9	15.6	10.9	9.9	10.5	11.6	10.1	10.9
5	14.9	14.4	14.7	16.3	15.7	16.0	10.9	10.6	10.8	11.7	11.3	11.6
6	15.5	14.6	15.0	16.1	15.2	15.7	10.6	10.0	10.4	11.3	9.2	10.3
7	16.0	15.1	15.5	15.2	14.0	14.6	10.0	9.2	9.6	9.2	7.4	8.1
8	16.4	15.4	15.9	14.0	12.7	13.5	9.2	8.8	8.9	7.4	6.6	6.9
9	16.7	15.9	16.3	12.7	12.0	12.4	9.4	9.0	9.1	6.6	6.3	6.4
10	17.3	16.5	16.9	12.4	11.9	12.1	10.2	9.4	9.8	6.3	6.1	6.2
11	17.9	16.9	17.4	12.8	12.2	12.6	10.2	9.8	10.1	6.1	5.6	5.8
12	17.9	17.1	17.5	13.8	12.8	13.3	9.8	8.8	9.2	5.7	5.2	5.4
13	18.1	17.3	17.8	13.4	12.3	12.8	8.8	8.5	8.6	5.8	5.0	5.4
14	17.9	16.6	17.3	12.3	12.1	12.2	8.5	8.3	8.4	5.8	5.5	5.6
15	16.6	15.7	16.2	12.2	11.4	11.9	8.3	8.1	8.2	5.7	5.6	5.7
16	15.9	14.9	15.6	11.4	11.2	11.3	8.6	8.0	8.2	5.7	5.5	5.6
17	15.7	15.1	15.3	11.9	11.3	11.6	8.9	8.6	8.8	5.9	5.5	5.6
18	15.4	14.7	15.1	13.1	11.9	12.4	8.9	8.5	8.8	6.3	5.9	6.2
19	15.3	14.3	14.8	14.1	13.1	13.7	8.5	7.8	8.3	6.4	6.1	6.3
20	15.6	14.4	15.0	14.2	13.9	14.1	7.8	6.9	7.3	6.3	5.6	5.9
21	15.9	14.9	15.4	13.9	13.1	13.4	6.9	6.6	6.8	5.6	5.0	5.2
22	15.9	15.2	15.6	13.1	12.6	12.8	7.2	6.8	6.9	5.0	4.8	4.9
23	15.6	14.7	15.2	13.0	12.7	12.9	7.8	7.2	7.6	4.8	4.3	4.6
24	15.2	14.2	14.8	13.0	11.8	12.5	8.0	7.8	7.9	4.9	4.4	4.7
25	15.2	14.3	14.8	11.8	11.1	11.5	7.8	7.1	7.4	5.3	4.6	4.8
26	15.2	14.6	14.9	11.1	10.2	10.5	7.1	6.6	6.8	6.6	5.3	6.3
27	14.7	13.9	14.4	10.4	10.1	10.2	6.6	6.2	6.4	6.4	6.1	6.3
28	13.9	13.3	13.5	10.9	10.4	10.8	6.7	6.0	6.3	6.5	6.2	6.4
29	13.7	13.0	13.4	10.9	9.9	10.5	7.5	6.6	7.0	6.2	5.4	5.6
30	13.9	12.9	13.5	9.9	9.6	9.7	8.3	7.5	8.0	5.4	4.6	4.9
31	14.5	13.3	14.0	---	---	---	8.1	7.6	7.8	4.6	4.0	4.3
MONTH	18.1	12.9	15.4	16.3	9.6	12.9	10.9	6.0	8.5	11.7	4.0	6.5
FEBRUARY			MARCH			APRIL			MAY			
1	4.2	3.8	4.1	9.6	9.0	9.2	14.1	13.3	13.8	16.2	15.2	15.6
2	4.9	4.2	4.4	10.6	9.6	10.0	13.3	12.8	13.0	16.1	15.2	15.5
3	6.7	4.9	6.2	10.5	10.1	10.3	13.5	12.3	12.9	15.3	14.8	15.0
4	6.4	6.0	6.3	11.4	10.4	10.9	13.4	12.5	13.0	14.8	14.1	14.5
5	7.0	5.8	6.2	11.9	11.4	11.7	13.4	12.2	12.8	15.1	14.2	14.6
6	7.4	5.8	6.7	12.4	11.8	12.1	13.8	12.4	13.1	16.4	14.8	15.5
7	6.8	5.8	6.3	11.9	11.5	11.7	14.4	13.0	13.7	17.6	16.1	16.6
8	7.4	6.8	7.1	11.5	10.5	10.9	15.5	14.2	14.8	18.2	17.2	17.7
9	7.4	7.1	7.2	10.5	8.8	9.6	15.8	14.7	15.3	19.5	17.9	18.7
10	7.2	7.0	7.1	8.8	8.1	8.3	15.5	15.1	15.3	20.2	19.0	19.6
11	7.0	6.0	6.2	8.1	7.5	7.7	15.6	15.1	15.3	20.8	19.7	20.3
12	6.0	5.3	5.5	7.7	7.3	7.5	15.3	13.7	14.6	21.1	20.0	20.5
13	5.3	4.9	5.1	7.9	7.5	7.7	13.7	11.9	12.6	21.0	20.7	20.8
14	4.9	4.5	4.7	8.7	7.9	8.3	11.9	10.1	10.6	21.2	20.7	20.9
15	4.8	4.6	4.7	9.8	8.4	8.9	11.4	9.8	10.4	20.8	16.4	18.6
16	4.9	4.6	4.8	9.8	9.6	9.7	13.1	11.4	12.2	17.1	16.5	16.8
17	5.3	4.8	5.1	10.3	9.6	9.8	13.7	13.1	13.3	17.8	16.6	17.1
18	5.9	5.1	5.5	11.5	10.3	10.9	14.8	13.7	14.3	18.8	17.7	18.2
19	6.2	5.4	5.8	12.1	11.0	11.6	15.9	14.6	15.3	19.2	18.4	18.8
20	6.9	6.1	6.4	12.6	11.7	12.1	16.1	15.2	15.6	20.3	19.1	19.6
21	7.1	6.9	7.0	12.4	11.7	12.0	16.2	15.6	16.1	21.1	20.0	20.4
22	7.6	6.9	7.3	11.7	11.1	11.3	15.6	14.5	15.0	21.8	20.6	21.2
23	7.9	7.3	7.6	11.1	10.2	10.6	14.7	14.5	14.6	22.3	21.2	21.7
24	8.7	7.8	8.2	11.5	10.7	11.1	14.9	14.5	14.6	22.5	21.8	21.1
25	8.5	8.0	8.2	12.8	11.4	12.1	15.1	14.7	14.9	22.5	21.8	22.1
26	8.3	8.0	8.2	14.5	12.7	13.6	15.2	15.0	15.1	22.0	19.8	21.3
27	8.8	7.8	8.3	15.7	14.3	14.9	15.2	14.8	15.0	19.8	18.3	18.7
28	8.9	7.9	8.4	16.3	15.0	15.5	14.8	14.3	14.4	18.3	17.9	18.1
29	9.2	8.4	8.7	16.2	15.4	15.9	14.9	14.3	14.6	18.8	18.2	18.4
30	---	---	---	15.4	14.7	14.9	15.2	14.9	15.1	18.9	18.7	18.8
31	---	---	---	14.7	14.1	14.4	---	---	---	18.9	17.9	18.4
MONTH	9.2	3.8	6.5	16.3	7.3	11.1	16.2	9.8	14.0	22.5	14.1	18.6

03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.0	9.7	9.9	9.9	9.2	9.5	---	---	---	11.8	11.6	11.7
2	10.2	9.9	10.1	9.8	9.0	9.4	---	---	---	11.9	11.0	11.5
3	10.5	10.0	10.4	9.5	8.6	9.2	---	---	---	---	---	---
4	10.5	10.2	10.4	9.4	8.5	9.2	---	---	---	---	---	---
5	10.5	10.0	10.3	9.0	8.5	8.8	---	---	---	---	---	---
6	10.4	10.1	10.3	8.6	8.2	8.6	---	---	---	---	---	---
7	10.3	10.0	10.2	8.9	8.1	8.8	---	---	---	---	---	---
8	10.1	9.8	10.0	9.4	8.5	9.2	---	---	---	---	---	---
9	10.1	9.6	9.9	10.0	8.9	9.8	---	---	---	---	---	---
10	9.8	9.2	9.5	10.3	9.5	10.2	---	---	---	---	---	---
11	9.5	8.8	9.3	10.3	9.7	10.0	---	---	---	---	---	---
12	9.3	8.4	9.1	9.8	9.4	9.7	---	---	---	---	---	---
13	9.2	8.0	8.7	9.6	9.2	9.4	---	---	---	---	---	---
14	8.9	8.1	8.6	9.4	8.9	9.1	---	---	---	---	---	---
15	9.3	8.3	8.8	9.5	8.8	9.2	---	---	---	---	---	---
16	9.7	8.9	9.3	10.0	9.5	9.8	---	---	---	---	---	---
17	9.6	8.9	9.4	10.2	9.9	10.1	---	---	---	---	---	---
18	9.7	9.1	9.4	10.2	9.7	10.1	---	---	---	---	---	---
19	10.0	9.2	9.7	9.7	8.2	9.3	---	---	---	---	---	---
20	10.0	9.4	9.7	8.3	8.0	8.2	11.6	11.1	11.4	---	---	---
21	9.9	9.2	9.6	---	---	---	11.9	11.6	11.8	---	---	---
22	9.8	9.0	9.5	---	---	---	11.9	11.8	11.9	---	---	---
23	9.8	9.0	9.4	---	---	---	11.8	11.4	11.6	13.9	13.7	13.8
24	10.0	9.2	9.6	---	---	---	11.4	11.2	11.3	14.2	13.8	14.0
25	9.9	9.3	9.6	---	---	---	11.6	11.3	11.4	14.3	13.8	14.1
26	9.4	8.9	9.2	---	---	---	11.9	11.6	11.8	13.8	13.2	13.5
27	9.8	8.9	9.3	---	---	---	12.1	11.9	12.1	13.6	13.3	13.5
28	9.8	8.9	9.4	---	---	---	12.2	12.1	12.2	13.7	13.0	13.3
29	---	---	---	---	---	---	12.1	11.8	11.9	14.5	13.4	14.0
30	9.9	9.3	9.7	---	---	---	11.8	11.4	11.5	14.7	14.2	14.4
31	10.0	9.2	9.6	---	---	---	11.6	11.4	11.5	14.9	14.3	14.7
MONTH	10.5	8.0	9.6	10.3	8.0	9.4	12.2	11.1	11.7	14.9	11.0	13.5
FEBRUARY			MARCH			APRIL			MAY			
1	15.1	14.7	14.9	11.5	10.8	11.3	10.2	8.8	9.6	9.7	9.3	9.5
2	15.0	14.4	14.8	11.2	10.7	11.0	10.6	9.7	10.2	9.3	9.2	9.3
3	14.5	13.3	13.7	11.0	10.5	10.9	11.0	10.4	10.7	9.2	9.0	9.2
4	13.7	13.3	13.5	10.7	10.2	10.5	11.2	10.4	10.8	9.1	8.9	9.0
5	13.6	12.7	13.4	10.4	9.7	10.2	11.3	10.5	10.9	---	---	---
6	---	---	---	10.1	9.6	9.9	11.4	10.5	10.9	---	---	---
7	---	---	---	---	---	---	11.3	10.2	10.7	---	---	---
8	---	---	---	---	---	---	11.0	10.0	10.4	9.8	9.4	9.6
9	---	---	---	---	---	---	10.8	9.7	10.2	9.4	9.0	9.2
10	---	---	---	---	---	---	10.5	9.5	10.0	9.0	8.6	8.8
11	12.6	11.9	12.3	---	---	---	10.5	9.2	9.8	8.8	8.4	8.6
12	13.0	12.6	12.9	---	---	---	9.7	8.9	9.3	8.7	8.0	8.4
13	13.2	13.0	13.1	---	---	---	9.1	8.7	8.9	8.3	7.7	8.0
14	13.3	13.2	13.3	---	---	---	9.1	8.7	8.9	7.8	7.2	7.6
15	13.3	13.2	13.2	---	---	---	9.4	9.0	9.3	7.2	6.8	7.0
16	13.2	13.1	13.2	10.6	10.3	10.5	9.2	8.5	8.9	7.0	6.4	6.7
17	13.1	12.9	13.0	10.5	10.3	10.4	8.9	8.1	8.5	---	---	---
18	12.9	12.6	12.8	10.5	10.1	10.3	8.8	8.3	8.6	---	---	---
19	12.8	12.4	12.6	10.5	10.2	10.3	8.6	8.0	8.3	---	---	---
20	12.5	11.8	12.3	10.4	9.7	10.2	---	---	---	8.8	8.6	8.7
21	12.0	11.7	11.9	10.2	9.6	10.0	---	---	---	8.8	8.4	8.6
22	11.9	11.7	11.8	10.0	9.6	9.8	---	---	---	8.9	8.4	8.6
23	11.9	11.6	11.8	10.4	9.6	10.1	---	---	---	9.0	8.3	8.6
24	11.7	11.4	11.6	10.6	10.0	10.4	---	---	---	9.2	8.2	8.7
25	11.6	11.3	11.5	10.7	9.5	10.3	---	---	---	9.6	8.3	8.9
26	11.6	11.3	11.5	10.4	9.1	10.0	10.2	10.0	10.1	8.7	8.0	8.3
27	11.7	11.3	11.6	10.2	9.0	9.6	10.2	10.0	10.1	---	---	---
28	11.8	11.4	11.7	9.9	8.9	9.3	10.2	10.0	10.1	---	---	---
29	11.8	11.4	11.6	9.9	8.6	9.1	10.2	10.0	10.0	---	---	---
30	---	---	---	9.9	8.6	9.3	10.0	9.7	9.8	---	---	---
31	---	---	---	9.9	8.5	9.4	---	---	---	---	---	---
MONTH	15.1	11.3	12.7	11.5	8.5	10.1	11.4	8.0	9.8	9.8	6.4	8.6

03309000 GREEN RIVER AT MAMMOTH CAVE, KY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	15	12	14	---	---	---	---	---	---	---	---	---
2	13	10	11	---	---	---	---	---	---	---	---	---
3	11	9.1	10	---	---	---	---	---	---	---	---	---
4	11	8.1	9.6	---	---	---	---	---	---	---	---	---
5	10	8.2	8.7	---	---	---	---	---	---	---	---	---
6	10	6.3	8.2	---	---	---	---	---	---	---	---	---
7	9.3	6.3	8.0	---	---	---	---	---	---	---	---	---
8	9.4	6.3	8.0	---	---	---	---	---	---	---	---	---
9	9.4	6.4	7.6	---	---	---	---	---	---	---	---	---
10	9.4	6.5	7.0	---	---	---	---	---	---	---	---	---
11	8.5	5.5	6.7	---	---	---	---	---	---	---	---	---
12	7.6	4.6	5.7	---	---	---	---	---	---	---	---	---
13	6.6	3.6	5.0	---	---	---	---	---	---	---	---	---
14	6.7	3.7	5.0	---	---	---	---	---	---	---	---	---
15	5.7	3.7	4.4	---	---	---	---	---	---	---	---	---
16	5.8	3.7	4.1	---	---	---	---	---	---	---	---	---
17	6.8	4.8	5.3	---	---	---	---	---	---	---	---	---
18	6.9	5.8	6.5	---	---	---	---	---	---	---	---	---
19	6.9	5.9	6.5	---	---	---	---	---	---	---	---	---
20	7.0	5.9	6.4	---	---	---	23	15	19	---	---	---
21	8.0	6.0	7.3	---	---	---	26	15	21	---	---	---
22	8.1	6.0	7.4	---	---	---	16	9.8	13	---	---	---
23	7.1	3.1	4.8	---	---	---	12	9.2	11	---	---	---
24	4.1	3.1	3.3	---	---	---	16	8.8	12	130	120	130
25	5.2	3.2	3.7	---	---	---	26	14	22	130	120	120
26	5.3	3.2	3.9	---	---	---	24	15	19	130	130	130
27	5.3	3.3	3.7	---	---	---	16	14	15	150	130	140
28	4.4	3.3	3.6	---	---	---	19	14	16	140	130	130
29	---	---	---	---	---	---	24	17	21	130	120	130
30	---	---	---	---	---	---	110	24	54	130	120	120
31	---	---	---	---	---	---	---	---	---	130	120	130
MONTH	15	3.1	6.6	---	---	---	110	8.8	20	150	120	130
FEBRUARY				MARCH			APRIL			MAY		
1	130	120	120	140	140	140	20	8.1	10	22	11	15
2	120	120	120	150	140	140	12	5.8	7.6	23	11	14
3	140	120	130	---	---	---	8.6	5.0	6.0	35	12	22
4	160	130	140	---	---	---	8.0	4.7	5.6	32	16	23
5	160	140	150	---	---	---	7.3	4.3	5.0	21	16	18
6	---	---	---	---	---	---	6.5	3.7	4.8	24	15	19
7	---	---	---	---	---	---	9.3	4.6	5.4	25	9.0	15
8	---	---	---	---	---	---	7.2	3.7	4.5	17	9.2	11
9	---	---	---	---	---	---	7.1	2.7	4.2	15	7.8	9.7
10	---	---	---	---	---	---	5.6	2.9	3.8	15	6.5	8.5
11	45	29	38	---	---	---	4.1	2.2	3.2	10	6.1	7.5
12	74	45	60	---	---	---	3.9	2.1	3.1	12	5.9	7.4
13	66	51	56	---	---	---	---	---	---	10	6.0	7.6
14	65	56	60	---	---	---	---	---	---	12	6.6	7.8
15	65	55	60	---	---	---	---	---	---	140	7.6	49
16	61	53	55	---	---	---	---	---	---	310	63	180
17	68	50	57	39	34	36	---	---	---	190	34	77
18	84	66	76	37	31	33	---	---	---	39	14	30
19	110	84	96	32	28	30	---	---	---	26	11	17
20	110	100	100	48	28	33	---	---	---	14	9.1	11
21	170	100	130	85	45	57	---	---	---	18	8.7	11
22	160	140	150	170	75	110	---	---	---	13	7.5	9.8
23	160	140	150	79	52	61	---	---	---	18	6.8	9.0
24	190	140	160	52	32	40	---	---	---	---	---	---
25	170	160	160	34	26	29	---	---	---	16	6.3	9.3
26	---	---	---	27	21	24	---	---	---	91	7.3	24
27	160	150	150	26	17	20	27	19	24	480	72	200
28	150	140	150	23	14	17	100	22	43	340	82	200
29	140	140	140	18	12	14	---	---	26	250	55	100
30	---	---	---	15	10	12	28	16	22	180	67	100
31	---	---	---	13	9.0	11	---	---	---	98	41	78
MONTH	190	29	110	170	9.0	47	100	2.1	11	480	5.9	43

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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 with telemetry. Datum of gage is 583.08 ft above NGVD of 1929. Prior to Jan. 8, 1960, nonrecording gage at same site and datum.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 3	1300	4820	16.40	May 31	1930	4550	15.70
Feb 6	1315	3070	11.68	Jul 31	2030	3660	13.30
Mar 6	1000	2570	10.25	Aug 6	1730	3180	12.00
May 28	0615	*8480	24.51				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e334	e207	e1,010	750	e398	246	345	605	3,460	253	2,170	165
2	e302	e89	e730	2,250	e678	288	313	1,490	1,880	242	904	159
3	e264	e60	e546	4,390	1,810	285	292	1,450	1,470	230	663	160
4	e237	e45	547	2,090	1,450	285	273	980	1,220	466	536	154
5	e224	e45	635	2,170	1,240	350	254	803	1,060	438	1,390	151
6	e213	e237	645	1,850	2,880	2,160	240	683	915	404	2,900	146
7	e188	e517	582	1,360	1,920	1,400	231	583	806	435	1,450	137
8	e180	e517	533	1,140	1,360	952	227	510	717	371	806	133
9	e153	e266	497	1,010	1,120	765	217	452	643	303	623	130
10	e130	e207	591	882	978	641	206	407	586	441	528	126
11	e111	e89	1,260	771	857	548	197	370	536	854	461	121
12	e97	e813	823	702	762	489	200	342	506	951	413	121
13	e91	e2,010	674	642	682	439	645	318	557	717	368	131
14	e113	e1,130	623	581	617	405	1,580	307	581	457	332	128
15	e133	e813	606	540	573	385	899	383	500	438	303	e200
16	e148	e672	666	491	512	385	664	1,040	473	349	279	e361
17	e137	e531	1,230	456	466	391	541	552	558	302	260	e946
18	e130	e1,020	966	579	436	352	460	460	2,030	270	244	e1,880
19	e130	e1,940	830	777	411	323	403	425	1,240	244	229	e1,390
20	e124	e1,410	719	591	397	313	369	408	765	224	216	e847
21	e113	e1,030	611	518	382	441	402	366	609	207	257	e569
22	e106	e801	557	484	353	405	975	327	520	199	344	e433
23	e86	e432	544	449	331	340	1,670	300	523	1,340	247	e291
24	e82	e712	965	420	316	316	1,500	276	458	746	217	e196
25	e62	e771	839	418	299	299	1,080	266	420	419	283	e114
26	e94	e624	688	590	282	284	975	1,820	393	316	230	e105
27	e316	e1,050	600	916	271	274	779	6,150	348	266	241	e101
28	e360	e2,210	547	e770	258	264	653	7,760	314	236	211	e91
29	e266	e2,490	522	e646	247	261	564	3,240	289	213	192	e87
30	e222	e1,680	1,070	e531	---	359	554	2,710	268	199	182	e82
31	e222	---	937	e450	---	395	---	4,110	---	2,360	176	---
TOTAL	5,368	24,418	22,593	30,214	22,286	15,040	17,708	39,893	24,645	14,890	17,655	9,655
MEAN	173	814	729	975	768	485	590	1,287	822	480	570	322
MAX	360	2,490	1,260	4,390	2,880	2,160	1,670	7,760	3,460	2,360	2,900	1,880
MIN	62	45	497	418	247	246	197	266	268	199	176	82
CFSM	0.73	3.43	3.08	4.11	3.24	2.05	2.49	5.43	3.47	2.03	2.40	1.36
IN.	0.84	3.83	3.55	4.74	3.50	2.36	2.78	6.26	3.87	2.34	2.77	1.52

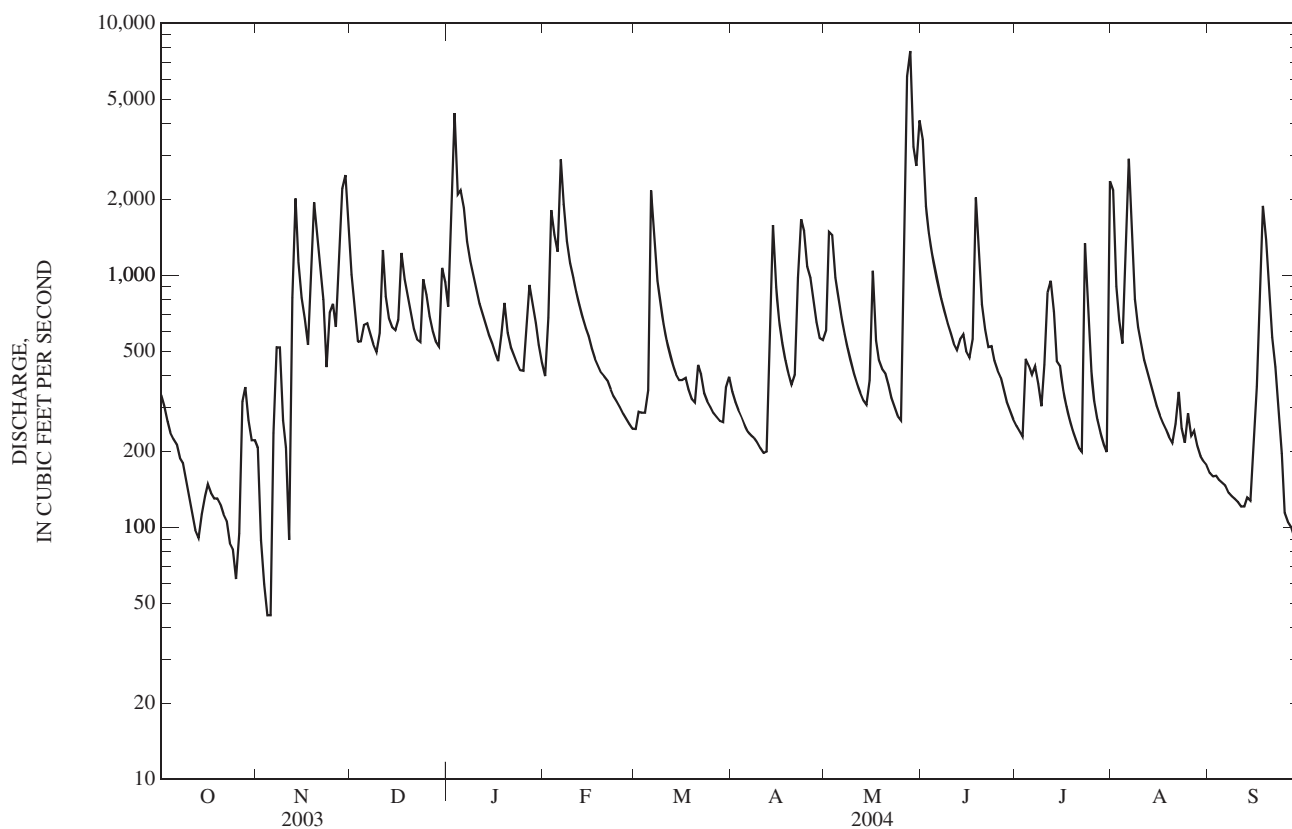
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	159	295	615	672	877	968	754	608	374	247	180	208
MAX	692	1,206	2,356	1,603	3,807	3,353	2,447	2,715	1,630	972	966	2,258
(WY)	(1978)	(1989)	(1979)	(1974)	(1989)	(1997)	(1972)	(1983)	(1997)	(1967)	(1967)	(1979)
MIN	37.0	44.3	44.7	55.5	156	228	200	131	71.9	83.2	48.6	35.6
(WY)	(1970)	(2000)	(1964)	(1981)	(1964)	(1983)	(1986)	(1976)	(1988)	(1994)	(1999)	(1999)

03310300 NOLIN RIVER AT WHITE MILLS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	281,454		244,365		495	
ANNUAL MEAN	771		668		971	
HIGHEST ANNUAL MEAN					217	
LOWEST ANNUAL MEAN					20,000	
HIGHEST DAILY MEAN	7,580	Feb 16	7,760	May 28	31	Mar 2, 1997
LOWEST DAILY MEAN	45	Nov 4	45	Nov 4	27	Oct 23, 1998
ANNUAL SEVEN-DAY MINIMUM	81	Aug 20	95	Oct 20	31	Oct 17, 1998
MAXIMUM PEAK FLOW			8,480	May 28	24,500	Mar 2, 1997
MAXIMUM PEAK STAGE			24.51	May 28	36.46	Mar 2, 1997
INSTANTANEOUS LOW FLOW					31	Oct 1, 1959
ANNUAL RUNOFF (CFSM)	3.25		2.82		2.09	
ANNUAL RUNOFF (INCHES)	44.18		38.36		28.35	
10 PERCENT EXCEEDS	1,680		1,400		1,080	
50 PERCENT EXCEEDS	489		450		247	
90 PERCENT EXCEEDS	134		147		60	

e Estimated



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.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to March 1932, July 1939 to September 1950, October 1960 to current year.

GAGE.--Water-stage recorder with telemetry and outflow gate dials. Datum of gage is 400 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--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, Louisville District.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

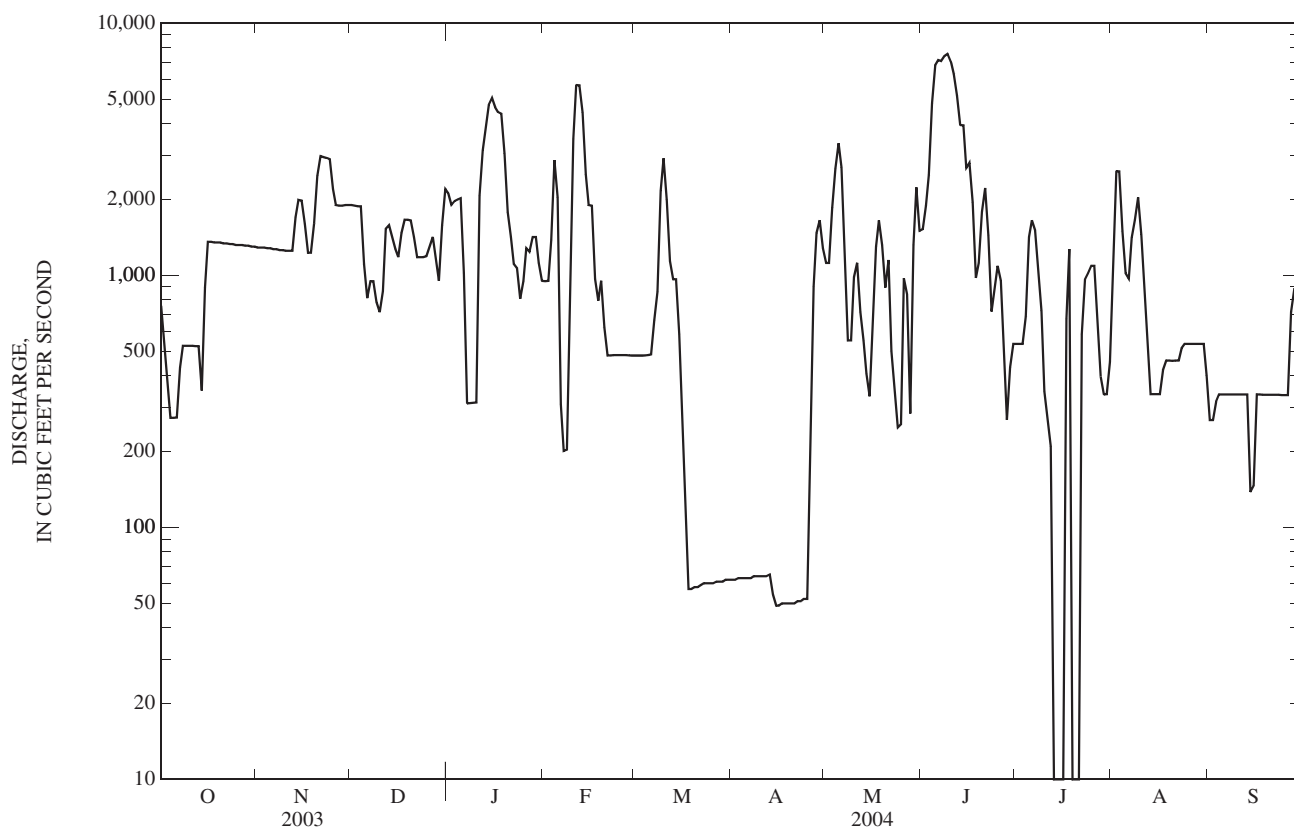
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	758	1,290	1,900	2,120	949	481	62	1,120	1,520	535	1,230	267
2	545	1,290	1,890	1,900	950	481	62	1,120	1,890	535	2,590	267
3	375	1,290	1,880	1,970	1,380	481	63	1,850	2,500	535	2,580	316
4	272	1,280	1,880	2,000	2,860	481	63	2,650	4,810	688	1,500	337
5	272	1,280	1,110	2,020	2,040	482	63	3,340	6,800	1,420	1,020	337
6	273	1,270	811	1,020	308	486	63	2,680	7,140	1,650	971	337
7	431	1,270	948	310	201	663	63	1,220	7,090	1,510	1,410	337
8	525	1,260	948	311	203	860	64	552	7,400	1,080	1,660	337
9	525	1,260	782	312	683	2,160	64	552	7,560	722	2,040	337
10	525	1,250	715	313	3,470	2,910	64	982	7,050	347	1,450	337
11	525	1,250	865	2,070	5,680	1,990	64	1,120	6,280	266	956	337
12	524	1,250	1,530	3,130	5,670	1,140	64	716	5,160	210	613	337
13	524	1,700	1,580	3,810	4,420	966	65	551	3,950	0.00	338	337
14	349	1,990	1,420	4,750	2,520	965	54	407	3,930	0.00	338	138
15	894	1,980	1,270	5,050	1,900	584	49	331	2,660	0.00	338	146
16	1,360	1,600	1,180	4,640	1,890	276	49	595	2,790	0.00	338	337
17	1,360	1,230	1,470	4,430	968	142	50	1,300	1,950	672	422	337
18	1,350	1,230	1,660	4,370	794	57	50	1,650	977	1,270	459	336
19	1,350	1,610	1,660	3,040	950	57	50	1,320	1,120	0.00	459	336
20	1,350	2,480	1,650	1,780	623	58	50	894	1,790	0.00	458	336
21	1,340	2,970	1,420	1,420	481	58	50	1,150	2,220	0.00	459	336
22	1,340	2,950	1,180	1,110	481	59	51	501	1,440	584	459	336
23	1,330	2,920	1,180	1,070	482	60	51	365	718	962	513	336
24	1,330	2,890	1,180	807	482	60	52	249	887	1,020	535	335
25	1,320	2,200	1,190	949	482	60	52	257	1,090	1,090	535	335
26	1,320	1,900	1,300	1,280	482	60	338	972	953	1,090	535	335
27	1,320	1,890	1,420	1,240	482	61	901	842	435	695	535	717
28	1,310	1,890	1,180	1,420	481	61	1,470	283	267	397	535	882
29	1,310	1,900	950	1,420	481	61	1,650	1,320	432	337	535	880
30	1,300	1,900	1,580	1,120	---	62	1,280	2,230	535	338	534	663
31	1,300	---	2,200	950	---	62	---	1,500	---	454	401	---
TOTAL	28,607	52,470	41,929	62,132	42,793	16,384	7,071	34,619	93,344	18,407.00	26,746	11,341
MEAN	923	1,749	1,353	2,004	1,476	529	236	1,117	3,111	594	863	378
MAX	1,360	2,970	2,200	5,050	5,680	2,910	1,650	3,340	7,560	1,650	2,590	882
MIN	272	1,230	715	310	201	57	49	249	267	0.00	338	138

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	938	1,336	1,232	1,479	1,563	1,209	864	1,090	882	496	306	508
MAX	4,959	3,393	4,491	4,852	4,541	5,533	4,777	4,161	4,437	2,009	1,335	2,266
(WY)	(1980)	(1973)	(1978)	(1979)	(1985)	(1989)	(1975)	(1984)	(1983)	(1967)	(1967)	(1982)
MIN	0.00	452	1.50	122	91.4	203	0.63	0.39	0.00	0.00	0.00	0.00
(WY)	(1976)	(1964)	(1985)	(1981)	(1992)	(1983)	(1966)	(1964)	(1964)	(1964)	(1964)	(1975)

03311000 NOLIN RIVER AT KYROCK, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	489,176		435,843.00		989	
ANNUAL MEAN	1,340		1,191		1,880	
HIGHEST ANNUAL MEAN					456	
LOWEST ANNUAL MEAN					10,300	
HIGHEST DAILY MEAN	6,200	May 12	7,560	Jun 9	22,700	May 28, 1983
LOWEST DAILY MEAN	35	Feb 10	0.00	Jul 13	0.00	May 2, 1964
ANNUAL SEVEN-DAY MINIMUM	49	Apr 2	50	Apr 15	0.00	May 2, 1964
MAXIMUM PEAK FLOW					59.27	Jan 30, 1932
MAXIMUM PEAK STAGE					2,520	Mar 2, 1962
10 PERCENT EXCEEDS	3,340		2,540		478	
50 PERCENT EXCEEDS	1,090		924		52	
90 PERCENT EXCEEDS	178		63			



03311000 NOLIN RIVER AT KYROCK, KY

WATER DISCHARGE RECORDS

WATER-QUALITY RECORDS--Water years 1950, 1963-82, August 1989-95, October 2003, to current water year.

PERIOD OF DAILY RECORD.--

INSTRUMENTATION.--Water-temperature recorder with telemetry since DCP was installed on Oct. 1989.

COOPERATION.--U. S. Army Corps of Engineers, Louisville District.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum 31.0°C, Jul. 19-22, 1969, minimum 0.0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--Maximum 22.4°C, Jul. 7, 2004 and Sept. 6-7, 2004; minimum 5.4°C, Feb. 11, 12 and 13.

REMARKS.--Water Temperature records rated excellent except the following periods: Jul. 29-Aug. 13 rated good.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.8	20.5	20.7	18.1	18.0	18.1	13.7	13.4	13.6	7.7	7.6	7.6
2	20.5	19.9	20.1	18.1	18.0	18.0	13.4	13.2	13.3	7.9	7.6	7.7
3	19.9	19.4	19.6	18.0	17.9	18.0	13.2	13.0	13.1	8.0	7.9	7.9
4	19.5	19.2	19.3	18.0	17.9	17.9	13.0	12.8	12.9	8.0	8.0	8.0
5	19.3	18.9	19.0	17.9	17.9	17.9	12.8	12.5	12.6	8.2	8.0	8.1
6	19.0	18.7	18.8	17.9	17.8	17.8	12.5	12.2	12.4	8.2	8.1	8.2
7	18.9	18.6	18.8	17.8	17.7	17.7	12.2	12.0	12.1	8.1	8.0	8.0
8	19.1	18.9	19.0	17.7	17.5	17.6	12.0	11.8	11.9	8.0	7.9	7.9
9	19.3	19.1	19.2	17.5	17.3	17.4	11.8	11.7	11.7	7.9	7.9	7.9
10	19.5	19.3	19.4	17.3	17.2	17.2	11.7	11.5	11.6	7.9	7.8	7.8
11	19.5	19.4	19.4	17.2	17.1	17.1	11.5	11.2	11.3	7.8	7.7	7.8
12	19.5	19.3	19.4	17.1	17.0	17.0	11.2	11.0	11.1	7.7	7.7	7.7
13	19.4	19.2	19.3	17.0	16.7	16.8	11.0	10.7	10.8	7.8	7.7	7.8
14	19.4	18.5	19.0	16.7	16.5	16.6	10.7	10.4	10.6	7.8	7.8	7.8
15	18.5	17.2	17.7	16.5	16.4	16.5	10.4	10.2	10.3	7.9	7.8	7.9
16	18.0	17.5	17.8	16.4	16.2	16.3	10.2	10.0	10.1	8.0	7.9	8.0
17	18.2	18.0	18.1	16.2	16.1	16.1	10.0	9.8	9.9	8.1	8.0	8.0
18	18.3	18.2	18.2	16.1	16.0	16.1	9.8	9.6	9.8	8.1	8.1	8.1
19	18.3	18.3	18.3	16.0	15.8	15.9	9.7	9.3	9.5	8.1	8.1	8.1
20	18.3	18.3	18.3	15.9	15.7	15.8	9.3	9.1	9.2	8.1	7.9	8.0
21	18.4	18.3	18.3	15.7	15.6	15.6	9.1	8.8	9.0	7.9	7.8	7.9
22	18.4	18.3	18.3	15.6	15.4	15.5	8.8	8.7	8.8	7.8	7.7	7.7
23	18.4	18.3	18.4	15.4	15.3	15.3	8.7	8.6	8.7	7.7	7.5	7.6
24	18.4	18.4	18.4	15.3	15.1	15.2	8.6	8.4	8.5	7.5	7.4	7.5
25	18.4	18.4	18.4	15.1	14.9	15.0	8.4	8.3	8.4	7.4	7.3	7.4
26	18.4	18.4	18.4	14.9	14.6	14.7	8.3	8.1	8.2	7.3	7.2	7.2
27	18.4	18.3	18.4	14.6	14.5	14.6	8.1	8.0	8.0	7.3	7.1	7.2
28	18.4	18.3	18.3	14.5	14.2	14.4	8.0	7.8	7.9	7.1	6.9	7.0
29	18.3	18.2	18.2	14.2	14.0	14.1	7.9	7.9	7.9	6.9	6.8	6.9
30	18.2	18.1	18.1	14.0	13.7	13.8	7.9	7.8	7.8	6.8	6.7	6.7
31	18.1	18.1	18.1	---	---	---	7.8	7.7	7.8	6.7	6.5	6.5
MONTH	20.8	17.2	18.7	18.1	13.7	16.3	13.7	7.7	10.3	8.2	6.5	7.7

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.5	6.3	6.4	7.1	7.0	7.0	11.6	11.4	11.5	12.1	12.0	12.0
2	6.4	6.3	6.3	7.2	7.1	7.1	11.5	11.3	11.4	12.0	12.0	12.0
3	6.3	6.2	6.2	7.3	7.2	7.2	11.6	11.4	11.5	12.0	12.0	12.0
4	6.2	6.1	6.1	7.4	7.3	7.3	11.6	11.4	11.5	12.2	12.0	12.1
5	6.1	5.9	6.0	7.8	7.4	7.5	11.6	11.2	11.4	12.5	12.2	12.4
6	6.0	5.9	5.9	7.9	7.8	7.9	11.5	11.2	11.3	12.8	12.5	12.7
7	5.9	5.9	5.9	7.9	7.7	7.8	11.9	11.5	11.6	12.8	12.8	12.8
8	5.9	5.8	5.8	7.8	7.7	7.7	12.6	11.9	12.2	12.8	12.6	12.7
9	5.8	5.7	5.7	8.0	7.8	7.8	12.6	12.2	12.4	12.6	12.6	12.6
10	5.7	5.5	5.6	8.2	8.0	8.1	12.6	12.4	12.5	12.6	12.5	12.6
11	5.5	5.4	5.4	8.3	8.2	8.3	12.8	12.5	12.6	12.8	12.6	12.7
12	5.4	5.4	5.4	8.4	8.3	8.3	12.8	12.3	12.6	12.9	12.8	12.9
13	5.5	5.4	5.4	8.5	8.4	8.4	12.3	11.4	11.8	12.9	12.9	12.9
14	5.6	5.5	5.5	8.7	8.5	8.6	11.4	11.2	11.2	13.0	12.9	12.9
15	5.8	5.6	5.7	8.9	8.7	8.8	11.3	11.1	11.2	13.3	13.0	13.2
16	5.9	5.8	5.8	9.0	8.8	8.9	12.0	11.3	11.6	13.2	13.0	13.1
17	6.0	5.9	5.9	9.3	9.0	9.1	12.8	12.0	12.4	13.3	13.0	13.2
18	6.0	6.0	6.0	9.5	9.3	9.3	13.6	12.8	13.2	13.7	13.3	13.5
19	6.1	6.0	6.1	9.7	9.5	9.6	14.2	13.6	14.0	13.9	13.7	13.8
20	6.3	6.1	6.2	---	---	9.9	14.7	14.2	14.4	14.0	13.9	13.9
21	6.3	6.3	6.3	---	---	---	14.8	14.7	14.8	14.3	14.0	14.1
22	6.4	6.3	6.4	---	---	---	14.7	14.2	14.4	14.9	14.3	14.6
23	6.5	6.4	6.5	---	---	---	14.2	13.9	14.0	15.3	14.9	15.1
24	6.7	6.5	6.6	---	---	---	13.9	13.8	13.8	15.8	15.3	15.5
25	6.8	6.7	6.8	---	---	---	13.9	13.7	13.8	16.3	15.8	16.0
26	6.9	6.8	6.8	---	---	10.7	14.0	13.6	13.9	16.9	16.1	16.5
27	6.9	6.9	6.9	11.4	10.7	11.1	13.6	12.5	13.0	16.5	16.4	16.4
28	6.9	6.9	6.9	11.9	11.4	11.7	12.5	12.2	12.3	16.4	16.2	16.3
29	7.0	6.9	6.9	12.2	11.9	12.1	12.2	12.1	12.1	16.3	15.9	16.2
30	---	---	---	12.2	11.9	12.0	12.1	12.0	12.1	15.9	15.8	15.9
31	---	---	---	11.9	11.6	11.7	---	---	---	15.8	15.7	15.8
MONTH	7.0	5.4	6.1	12.2	7.0	9.0	14.8	11.1	12.6	16.9	12.0	13.8
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.7	15.6	15.6	19.7	19.6	19.7	21.3	20.6	21.0	22.1	21.5	21.8
2	15.6	15.6	15.6	19.9	19.7	19.7	20.6	20.2	20.4	21.9	21.6	21.7
3	15.7	15.6	15.6	20.0	19.9	19.9	20.2	20.0	20.1	21.7	21.5	21.6
4	16.1	15.7	15.8	20.2	20.0	20.1	20.0	19.9	19.9	22.0	21.6	21.7
5	16.8	16.1	16.5	20.0	19.5	19.7	19.9	19.7	19.7	22.3	21.9	22.1
6	17.2	16.8	17.0	19.5	19.2	19.3	19.7	19.7	19.7	22.4	22.0	22.2
7	17.5	17.2	17.3	19.2	19.1	19.1	19.7	19.6	19.6	22.4	22.1	22.2
8	17.8	17.5	17.7	19.1	19.0	19.0	19.8	19.6	19.7	22.1	21.6	21.8
9	18.0	17.8	17.9	19.2	19.0	19.0	19.9	19.7	19.8	21.6	21.1	21.3
10	18.2	18.0	18.1	19.7	19.2	19.4	20.0	19.9	19.9	21.2	20.8	21.1
11	18.3	18.2	18.2	20.3	19.7	19.9	19.9	19.8	19.9	21.3	20.8	21.1
12	18.4	18.3	18.3	20.7	20.0	20.3	20.0	19.9	19.9	21.4	21.1	21.2
13	18.4	18.3	18.4	21.8	20.4	20.7	20.2	19.8	19.9	21.4	21.1	21.3
14	18.4	18.3	18.3	21.9	21.5	21.7	20.6	20.2	20.4	21.6	21.2	21.3
15	18.4	18.3	18.3	21.8	21.3	21.6	20.7	20.5	20.6	21.6	21.3	21.5
16	18.3	18.3	18.3	22.0	21.6	21.8	20.7	20.3	20.5	21.8	21.6	21.7
17	18.3	18.3	18.3	22.1	21.8	22.0	20.7	20.3	20.6	21.7	21.4	21.5
18	18.3	18.1	18.2	22.0	20.8	21.3	21.1	20.6	20.8	21.4	21.1	21.2
19	18.2	18.1	18.1	20.9	20.3	20.6	21.6	21.0	21.2	21.8	21.4	21.6
20	18.1	18.0	18.1	21.4	20.8	21.0	21.7	21.4	21.6	22.0	21.8	21.9
21	18.2	18.1	18.1	22.0	21.4	21.6	21.5	21.3	21.4	22.0	21.8	21.9
22	18.2	18.1	18.2	22.4	22.0	22.2	21.3	20.9	21.1	21.9	21.6	21.7
23	18.1	18.1	18.1	22.1	20.8	21.3	21.3	21.2	21.3	21.7	21.4	21.5
24	18.2	18.0	18.1	20.8	20.1	20.4	21.6	21.3	21.4	21.5	21.1	21.3
25	18.3	18.2	18.2	20.1	19.9	20.0	21.8	21.6	21.6	21.4	21.2	21.3
26	18.4	18.3	18.3	19.9	19.8	19.9	21.9	21.8	21.9	21.3	20.7	21.0
27	18.8	18.4	18.5	20.0	19.8	19.8	21.9	21.8	21.9	21.0	20.6	20.8
28	19.5	18.8	19.0	20.4	20.0	20.1	22.1	21.9	21.9	20.6	20.5	20.5
29	19.6	19.4	19.5	20.6	20.0	20.3	22.2	22.0	22.1	20.5	20.5	20.5
30	19.6	19.6	19.6	21.2	20.6	20.8	22.2	21.9	22.0	20.6	20.3	20.4
31	---	---	---	21.5	21.2	21.3	22.0	21.6	21.8	---	---	---
MONTH	19.6	15.6	17.8	22.4	19.0	20.4	22.2	19.6	20.8	22.4	20.3	21.4
YEAR	22.4	5.4	14.7									

03311500 GREEN RIVER AT LOCK 6, AT BROWNSVILLE, KY

LOCATION.--Lat 37°12'25", long 85°15'40", Edmonson County, Hydrologic Unit 05110001, on right bank 200 ft upstream from lock and dam 6, 0.8 mi downstream from Indian Creek, 1.0 mi northeast of Brownsville, 1.8 mi downstream from Nolin River, and at mile 181.7.

DRAINAGE AREA.--2,762 mi², of which about 600 mi² does not contribute directly to surface runoff.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--December 1999 to current water year.

INSTRUMENTATION.--Temperature recorder with telemetry since December 1999.

COOPERATION.--U. S. Army Corps of Engineers, Louisville District and Nature Conservancy.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum 29.0°C, July 7, 2002, minimum 2.0°C, Jan. 3, 4, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum 22.9°C, July 22, 23; minimum 6.9°C, Feb. 3.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.7	18.4	18.6	16.3	16.2	16.3	12.6	12.5	12.6	9.1	9.0	9.0
2	18.4	17.8	18.1	16.5	16.3	16.4	12.5	12.3	12.4	9.1	8.9	8.9
3	17.8	17.3	17.5	16.5	16.4	16.4	12.3	11.9	12.1	9.3	8.9	9.1
4	17.4	17.0	17.2	16.5	16.4	16.4	11.9	11.7	11.7	9.7	9.3	9.5
5	17.1	16.7	16.9	16.6	16.4	16.5	12.0	11.7	11.8	10.3	9.7	10.0
6	16.8	16.6	16.7	16.6	16.5	16.6	12.0	12.0	12.0	10.6	10.3	10.5
7	16.7	16.5	16.6	16.5	16.2	16.4	12.0	11.9	11.9	10.7	10.5	10.6
8	16.7	16.6	16.6	16.3	15.9	16.1	11.9	11.7	11.8	10.5	10.2	10.4
9	17.1	16.7	16.9	15.9	15.4	15.7	11.7	11.5	11.6	10.2	9.8	10.0
10	17.5	17.1	17.3	15.5	15.3	15.4	11.5	11.3	11.4	9.8	9.5	9.7
11	17.7	17.5	17.6	15.5	15.3	15.4	11.3	11.1	11.2	9.5	8.8	9.2
12	17.9	17.7	17.8	15.5	15.4	15.5	11.1	11.0	11.0	8.8	8.5	8.7
13	18.1	17.9	17.9	15.5	14.7	15.3	11.0	10.8	10.9	8.5	8.1	8.3
14	18.1	17.9	18.0	14.7	14.5	14.5	10.8	10.6	10.7	8.1	8.0	8.0
15	18.0	17.0	17.5	14.6	14.5	14.5	10.6	10.4	10.5	8.0	8.0	8.0
16	17.1	16.9	17.0	14.6	14.5	14.5	10.4	10.4	10.4	8.0	8.0	8.0
17	17.1	16.9	17.0	14.6	14.5	14.5	10.4	10.2	10.3	8.1	8.0	8.0
18	17.0	16.8	16.9	14.5	14.3	14.4	10.3	10.2	10.2	8.2	8.0	8.1
19	16.9	16.7	16.8	14.3	14.2	14.2	10.5	10.3	10.4	8.2	8.1	8.1
20	16.8	16.7	16.7	14.4	14.2	14.3	10.4	10.1	10.3	8.2	8.1	8.1
21	16.9	16.7	16.8	14.5	14.4	14.5	10.1	9.8	9.9	8.2	8.2	8.2
22	16.9	16.7	16.8	14.5	14.5	14.5	9.8	9.7	9.7	8.2	8.1	8.2
23	16.8	16.5	16.7	14.5	14.4	14.4	9.7	9.6	9.7	8.1	7.9	8.0
24	16.8	16.6	16.6	14.4	14.3	14.4	9.6	9.6	9.6	7.9	7.7	7.8
25	16.7	16.5	16.6	14.3	14.0	14.1	9.6	9.4	9.5	7.7	7.6	7.7
26	16.9	16.7	16.8	14.0	13.6	13.8	9.5	9.3	9.4	7.6	7.4	7.5
27	16.8	16.5	16.7	13.6	13.2	13.4	9.3	9.2	9.3	7.6	7.4	7.5
28	16.5	16.2	16.3	13.2	12.9	13.1	9.2	9.0	9.0	7.6	7.6	7.6
29	16.3	16.1	16.2	12.9	12.3	12.6	9.0	8.9	9.0	7.7	7.6	7.7
30	16.2	16.0	16.1	12.6	12.3	12.5	8.9	8.8	8.8	7.7	7.6	7.7
31	16.3	16.1	16.1	---	---	---	9.0	8.8	8.9	7.6	7.4	7.5
MONTH	18.7	16.0	17.0	16.6	12.3	14.9	12.6	8.8	10.6	10.7	7.4	8.6

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.4	7.2	7.3	8.7	8.5	8.6	12.7	12.2	12.5	13.4	13.4	13.4
2	7.2	7.1	7.2	8.8	8.7	8.7	12.3	12.2	12.2	13.4	13.4	13.4
3	7.1	6.9	7.0	9.0	8.8	8.9	12.3	12.0	12.2	13.5	13.3	13.4
4	7.0	7.0	7.0	9.3	9.0	9.2	12.2	12.0	12.1	13.5	13.2	13.4
5	7.2	7.0	7.1	9.6	9.3	9.4	12.1	11.7	11.9	13.4	13.2	13.3
6	7.3	7.1	7.2	10.1	9.6	9.9	11.9	11.7	11.8	13.5	13.3	13.4
7	7.4	7.3	7.4	10.4	10.1	10.3	12.0	11.8	11.9	13.5	13.3	13.4
8	7.6	7.4	7.5	10.5	10.4	10.4	12.3	12.0	12.1	13.6	13.4	13.5
9	8.2	7.6	8.0	10.5	10.4	10.5	12.4	12.3	12.3	13.8	13.5	13.7
10	8.2	7.9	8.1	---	---	---	12.5	12.4	12.4	14.1	13.8	13.9
11	7.9	7.6	7.7	---	---	---	12.7	12.4	12.6	14.3	14.1	14.2
12	7.6	7.4	7.4	---	---	9.5	12.8	12.5	12.7	14.5	14.3	14.4
13	7.4	7.2	7.3	9.4	9.2	9.3	13.1	12.0	12.4	14.9	14.5	14.7
14	7.3	7.2	7.2	9.2	9.2	9.2	12.0	11.5	11.7	15.3	14.9	15.1
15	7.3	7.2	7.3	9.3	9.2	9.3	11.7	11.6	11.6	16.3	15.3	15.8
16	7.2	7.2	7.2	9.5	9.3	9.4	11.6	11.6	11.6	16.4	16.1	16.3
17	7.4	7.2	7.3	9.7	9.5	9.6	11.8	11.6	11.7	16.1	15.7	15.9
18	7.5	7.4	7.4	9.9	9.7	9.8	12.0	11.8	11.9	15.7	15.5	15.6
19	7.4	7.3	7.4	10.1	9.9	10.0	12.3	12.0	12.1	15.5	15.4	15.4
20	7.5	7.4	7.4	10.4	10.1	10.3	12.5	12.3	12.4	15.4	15.4	15.4
21	7.7	7.5	7.6	10.7	10.4	10.6	12.8	12.5	12.7	15.7	15.4	15.5
22	7.8	7.7	7.7	10.9	10.7	10.8	13.6	12.8	13.2	15.7	15.5	15.6
23	8.0	7.8	7.9	10.9	10.8	10.9	13.5	13.3	13.4	16.1	15.7	15.9
24	8.1	8.0	8.0	10.8	10.6	10.8	13.5	13.4	13.4	16.5	16.1	16.3
25	8.3	8.1	8.2	10.8	10.7	10.7	13.4	13.4	13.4	16.9	16.5	16.7
26	8.4	8.3	8.3	11.0	10.8	10.9	13.5	13.4	13.4	17.7	16.9	17.3
27	8.4	8.4	8.4	11.3	11.0	11.2	13.5	13.5	13.5	18.4	17.7	18.2
28	8.5	8.4	8.5	11.8	11.3	11.5	13.5	13.4	13.5	18.4	17.9	18.2
29	8.5	8.5	8.5	12.1	11.8	12.0	13.5	13.4	13.4	17.9	17.5	17.7
30	---	---	---	12.4	12.1	12.2	13.4	13.4	13.4	17.6	17.1	17.4
31	---	---	---	12.7	12.2	12.4	---	---	---	17.2	17.1	17.1
MONTH	8.5	6.9	7.6	---	---	---	13.6	11.5	12.5	18.4	13.2	15.3
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.2	17.0	17.1	19.5	19.3	19.4	22.2	22.1	22.1	22.2	22.1	22.2
2	17.0	16.9	16.9	19.7	19.5	19.6	22.1	21.7	21.9	22.2	22.0	22.1
3	16.9	16.7	16.8	20.1	19.7	19.9	21.7	21.4	21.5	22.3	22.1	22.2
4	16.7	16.6	16.6	20.4	20.1	20.2	21.4	21.2	21.3	22.5	22.2	22.3
5	16.6	16.6	16.6	20.6	20.4	20.5	21.3	21.2	21.3	22.6	22.3	22.4
6	16.6	16.6	16.6	20.5	20.2	20.4	21.5	21.3	21.4	22.5	22.3	22.4
7	16.7	16.6	16.6	20.2	20.0	20.1	21.5	21.4	21.5	22.5	22.4	22.4
8	16.9	16.7	16.8	20.1	20.0	20.0	21.4	21.2	21.3	22.4	22.2	22.3
9	17.0	16.9	16.9	20.3	20.0	20.1	21.2	21.1	21.1	22.2	22.0	22.1
10	17.2	17.0	17.1	20.7	20.3	20.6	21.1	21.0	21.0	22.1	21.9	22.0
11	17.4	17.2	17.3	21.1	20.7	20.9	21.1	21.0	21.0	22.1	21.8	21.9
12	17.5	17.4	17.5	21.5	21.1	21.3	21.0	20.9	21.0	22.1	22.0	22.1
13	17.6	17.5	17.6	21.8	21.5	21.6	21.0	20.8	20.9	22.1	21.9	22.0
14	17.7	17.6	17.6	22.0	21.8	21.9	20.8	20.6	20.7	22.1	22.0	22.0
15	17.7	17.6	17.7	22.0	21.9	22.0	20.6	20.5	20.5	22.2	22.0	22.1
16	17.7	17.6	17.6	22.1	21.9	22.0	20.5	20.3	20.4	22.2	22.0	22.1
17	17.7	17.6	17.6	22.3	22.0	22.1	20.4	20.2	20.3	22.2	21.8	21.9
18	18.0	17.6	17.7	22.3	21.9	22.2	20.5	20.3	20.3	21.8	21.4	21.7
19	18.1	18.0	18.1	21.9	21.5	21.6	21.1	20.5	20.7	21.4	21.1	21.3
20	18.2	18.0	18.1	21.8	21.6	21.7	21.3	21.1	21.2	21.1	20.7	20.9
21	18.2	18.2	18.2	22.4	21.8	22.1	21.6	21.2	21.3	20.7	20.4	20.5
22	18.2	18.1	18.1	22.9	22.4	22.6	21.3	21.1	21.2	20.4	20.2	20.3
23	18.1	18.1	18.1	22.9	22.5	22.7	21.2	21.0	21.1	20.2	20.0	20.1
24	18.4	18.1	18.2	22.5	22.3	22.4	21.2	21.0	21.0	20.1	20.0	20.0
25	18.5	18.4	18.5	22.3	21.9	22.1	21.6	21.2	21.3	20.2	20.1	20.1
26	18.6	18.5	18.6	22.0	21.7	21.8	21.9	21.6	21.8	20.3	20.2	20.2
27	18.6	18.5	18.6	21.7	21.4	21.5	22.0	21.9	22.0	20.2	20.0	20.1
28	18.7	18.5	18.6	21.5	21.4	21.4	22.3	22.0	22.1	20.2	20.1	20.1
29	19.0	18.7	18.9	21.6	21.4	21.5	22.4	22.3	22.4	20.2	20.0	20.1
30	19.3	19.0	19.2	21.9	21.6	21.8	22.4	22.3	22.3	20.0	19.6	19.8
31	---	---	---	22.2	21.8	22.0	22.3	22.1	22.2	---	---	---
MONTH	19.3	16.6	17.7	22.9	19.3	21.3	22.4	20.2	21.3	22.6	19.6	21.4
YEAR	---	---	---									

03313000 BARREN RIVER NEAR FINNEY, KY

LOCATION.--Lat 36°53'42", long 86°08'02", Allen County, Hydrologic Unit 05110002, on left bank 1,200 ft upstream from lock and dam 6, 0.8 mi downstream from Port Oliver Ford, 2,500 ft upstream from Difficult Creek, 0.5 mi downstream from Barren River Dam, and at 2.1 mile southwest of Finney, and at mile 78.7.

DRAINAGE AREA.--942 mi² revised, of which about 77 mi² does not contribute directly to surface runoff.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--January 1990 to September 1994. October 2003 to September 2004.

INSTRUMENTATION.--Temperature recorder with telemetry since 1990.

COOPERATION.--U. S. Army Corps of Engineers, Louisville District.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum 26.0°C, Jul. 20, 1992, minimum 2.1°C, Jan. 20-22, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum 25.9°C, Jul. 24; minimum 2.5°C, Feb. 1.

EXTREMES OUTSIDE PUBLISHED RECORD.--Maximum 27.8°C, Aug. 19, 2000; minimum 1.4°C, Feb. 6, 1996.

REMARKS.--Water-temperature records rated excellent except the following periods: Dec. 20-Mar. 12 rated good.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.2	21.9	22.1	18.1	17.8	18.0	11.7	11.3	11.5	4.9	4.7	4.8
2	21.9	21.6	21.8	18.0	17.8	17.9	11.3	10.9	11.2	5.6	4.9	5.3
3	21.6	21.4	21.5	18.0	17.7	17.9	10.9	10.5	10.7	6.5	5.6	6.0
4	21.5	21.1	21.3	18.1	17.7	17.9	10.6	10.4	10.5	7.2	6.5	6.9
5	21.2	21.1	21.2	18.0	17.6	17.8	10.4	9.8	10.1	7.2	6.4	6.7
6	21.2	21.0	21.1	17.6	17.4	17.5	9.8	9.4	9.6	6.5	6.2	6.3
7	21.1	20.9	21.0	17.4	17.1	17.3	9.4	9.2	9.2	6.4	5.9	6.1
8	21.0	20.8	20.9	17.1	16.6	16.9	9.2	8.9	9.0	6.2	5.8	6.0
9	20.8	20.5	20.6	16.6	16.2	16.4	8.9	8.6	8.7	6.1	5.8	5.9
10	20.7	20.2	20.4	16.3	16.1	16.2	8.7	8.0	8.4	5.8	5.5	5.7
11	20.2	19.9	20.1	16.2	16.1	16.2	8.0	7.7	7.9	5.6	5.3	5.5
12	20.0	19.6	19.8	16.2	15.8	16.1	7.7	7.5	7.6	5.8	5.6	5.7
13	19.7	19.5	19.6	15.8	15.2	15.5	7.4	7.1	7.2	5.7	5.5	5.6
14	19.8	19.2	19.4	15.2	15.0	15.1	7.1	6.7	6.9	5.7	5.5	5.6
15	19.9	19.5	19.7	15.1	14.9	15.0	6.8	6.6	6.7	5.7	5.5	5.6
16	20.0	19.8	19.8	15.0	14.9	14.9	6.7	6.3	6.5	5.7	5.5	5.6
17	19.8	19.7	19.7	15.2	14.8	14.9	6.3	6.1	6.2	5.9	5.6	5.7
18	19.8	19.6	19.7	15.2	15.0	15.1	6.1	5.8	6.1	5.8	5.5	5.6
19	19.7	19.5	19.6	15.0	14.4	14.6	5.8	5.3	5.6	5.5	4.9	5.1
20	19.6	19.5	19.5	14.8	14.4	14.6	5.3	5.0	5.2	4.9	4.7	4.8
21	19.5	19.2	19.4	14.7	14.5	14.5	5.1	4.9	5.0	4.7	4.3	4.5
22	19.2	19.0	19.1	14.5	14.3	14.4	5.0	4.8	4.8	4.3	3.8	4.1
23	19.0	18.9	19.0	14.5	14.3	14.4	5.2	4.9	5.0	3.8	3.5	3.6
24	19.0	18.8	18.9	14.4	13.5	13.8	5.1	4.8	4.9	3.8	3.6	3.7
25	19.1	19.0	19.0	13.5	13.2	13.3	4.9	4.7	4.8	3.7	3.5	3.6
26	19.1	18.7	18.9	13.2	13.0	13.1	4.8	4.6	4.7	4.1	3.7	3.9
27	18.7	18.4	18.6	13.1	13.0	13.0	4.7	4.5	4.6	4.1	3.6	3.8
28	18.4	18.3	18.3	13.0	12.3	12.7	4.8	4.5	4.7	3.6	3.4	3.5
29	18.3	18.0	18.1	12.3	11.9	12.1	4.9	4.7	4.8	3.7	3.3	3.5
30	18.1	17.9	18.0	11.9	11.7	11.8	4.8	4.7	4.8	3.6	3.1	3.3
31	18.1	18.0	18.0	---	---	---	4.8	4.6	4.7	3.1	2.6	2.8
MONTH	22.2	17.9	19.8	18.1	11.7	15.3	11.7	4.5	7.0	7.2	2.6	5.0

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	2.5	2.7	6.3	5.8	6.0	11.9	10.3	10.9	13.8	13.0	13.4
2	3.3	2.9	3.1	6.3	6.1	6.2	12.0	10.3	11.0	13.7	13.1	13.4
3	3.3	3.2	3.3	7.0	6.0	6.3	12.6	10.3	11.1	14.0	13.3	13.6
4	3.2	3.0	3.1	8.3	7.0	7.6	12.0	10.4	10.9	13.9	13.4	13.7
5	3.6	3.1	3.2	8.3	7.7	8.1	12.8	10.5	11.4	14.3	13.5	14.0
6	3.9	3.6	3.8	7.8	7.2	7.5	13.7	11.4	12.3	14.3	13.8	14.1
7	4.1	3.6	3.8	8.0	7.4	7.8	13.2	11.6	12.2	14.6	13.8	14.1
8	3.9	3.5	3.7	8.7	7.6	8.1	13.1	10.9	12.1	14.4	13.8	14.2
9	3.6	3.2	3.4	9.0	8.5	8.8	13.6	10.6	11.9	14.4	14.0	14.2
10	3.6	3.2	3.4	9.3	8.6	9.0	13.8	12.0	12.8	14.6	14.1	14.4
11	3.6	3.4	3.6	9.4	9.0	9.2	13.9	12.4	13.0	14.6	14.1	14.4
12	3.7	3.6	3.7	9.0	8.8	8.9	13.6	12.5	13.0	14.7	14.3	14.5
13	3.8	3.6	3.7	9.3	8.9	9.1	12.6	11.3	11.8	15.0	14.4	14.7
14	3.9	3.7	3.8	9.6	9.2	9.4	13.5	11.3	12.2	15.0	14.4	14.7
15	4.0	3.7	3.9	9.9	9.3	9.6	13.5	11.5	12.3	15.2	14.6	14.8
16	4.1	3.7	3.8	9.8	9.1	9.4	14.0	11.8	12.7	14.8	13.3	14.0
17	4.1	3.9	4.0	9.5	9.1	9.3	13.8	11.7	12.6	14.6	13.2	14.0
18	4.2	3.9	4.0	10.0	9.4	9.7	13.6	11.7	12.5	15.4	14.3	14.9
19	4.5	3.9	4.2	10.7	9.5	9.9	12.8	11.6	12.0	15.5	15.2	15.3
20	4.8	4.5	4.6	11.7	9.9	11.0	13.8	11.5	12.4	15.7	15.3	15.5
21	4.7	4.4	4.4	10.5	9.1	9.8	12.6	11.4	11.9	15.7	15.5	15.6
22	4.7	4.4	4.5	11.0	9.1	9.9	13.9	11.7	12.4	15.8	15.5	15.6
23	5.1	4.6	4.8	11.4	9.2	10.1	13.0	11.5	12.0	15.9	15.4	15.7
24	5.2	4.6	5.0	11.6	10.4	10.7	12.0	11.5	11.7	16.0	14.9	15.3
25	5.1	4.5	4.8	12.0	10.4	11.0	11.9	11.5	11.7	16.4	14.4	15.6
26	5.1	4.9	5.0	12.7	11.0	11.6	13.1	11.4	12.1	21.0	16.0	18.5
27	5.4	5.1	5.2	12.4	10.9	11.6	13.1	12.0	12.4	21.2	19.2	20.2
28	5.7	5.1	5.3	13.2	10.9	12.0	13.0	12.3	12.6	20.5	19.1	20.0
29	5.9	5.4	5.6	12.4	10.8	11.1	13.4	12.3	12.8	20.8	14.9	17.3
30	---	---	---	12.5	10.5	11.5	13.6	12.7	13.3	15.2	14.0	14.8
31	---	---	---	11.8	10.3	10.7	---	---	---	14.9	14.2	14.5
MONTH	5.9	2.5	4.0	13.2	5.8	9.4	14.0	10.3	12.1	21.2	13.0	15.1
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.0	14.2	15.1	23.9	23.2	23.6	24.7	20.3	22.3	24.6	23.9	24.3
2	16.9	15.8	16.4	24.2	23.4	23.8	20.4	19.3	19.9	24.6	24.3	24.5
3	17.1	16.8	16.9	24.9	23.2	24.0	19.9	19.2	19.7	24.5	24.0	24.3
4	17.4	16.9	17.1	24.4	23.4	23.8	20.2	19.8	20.0	24.1	20.5	22.1
5	17.5	17.1	17.3	25.3	22.6	23.8	20.5	19.9	20.2	21.6	20.8	21.2
6	17.6	17.0	17.3	24.9	23.7	24.2	20.7	20.2	20.5	21.7	21.3	21.5
7	17.9	17.4	17.6	24.1	23.7	23.9	21.0	20.2	20.6	21.7	20.8	21.3
8	18.2	17.6	17.9	24.1	20.9	22.1	21.0	20.5	20.8	23.7	20.8	22.1
9	18.7	17.8	18.1	21.2	20.4	21.0	21.1	20.8	21.0	24.0	23.7	23.8
10	18.6	17.7	17.9	21.4	20.7	21.0	21.1	19.7	20.5	24.2	23.4	23.9
11	18.0	17.1	17.6	21.4	20.8	21.1	20.9	20.1	20.6	24.3	23.8	24.0
12	17.5	16.6	17.0	21.5	21.0	21.2	20.7	19.2	19.9	24.2	23.8	24.0
13	17.5	16.7	17.1	21.4	20.6	21.2	23.6	19.1	21.8	24.5	23.8	24.1
14	17.5	16.9	17.2	22.5	20.7	21.3	23.5	22.1	23.1	24.4	23.9	24.1
15	17.3	16.6	16.9	21.7	21.1	21.4	24.1	22.1	22.9	24.5	24.0	24.2
16	17.0	16.6	16.8	21.7	21.4	21.6	24.3	22.2	23.1	24.5	24.1	24.3
17	17.1	16.7	16.9	21.9	21.5	21.7	24.4	22.4	23.2	24.4	23.8	23.9
18	17.2	16.9	17.0	21.9	21.5	21.7	24.7	22.6	23.5	23.8	21.2	22.7
19	17.2	16.8	17.0	24.9	21.4	23.4	24.3	22.8	23.4	22.6	22.1	22.4
20	17.4	16.7	17.0	25.2	24.6	24.9	24.1	23.0	23.5	23.3	21.1	22.7
21	17.4	16.9	17.1	25.2	24.7	25.0	23.5	20.2	22.0	23.1	21.4	22.6
22	24.4	17.1	21.2	25.1	23.8	24.7	21.4	20.8	21.2	22.5	22.3	22.4
23	24.4	23.3	23.9	25.8	24.1	25.1	21.6	21.2	21.4	22.3	22.1	22.2
24	24.3	23.5	23.9	25.9	25.1	25.5	22.4	20.9	21.8	22.1	21.9	22.0
25	24.1	23.5	23.9	25.5	24.9	25.2	24.2	22.0	23.0	22.0	21.6	21.8
26	24.2	23.4	23.8	25.1	24.4	24.8	24.4	23.2	23.7	21.8	21.3	21.6
27	24.3	23.6	23.9	24.7	24.1	24.4	24.3	23.2	23.7	21.6	21.5	21.5
28	24.0	23.3	23.6	25.2	24.2	24.7	24.1	23.3	23.7	21.5	21.1	21.4
29	24.0	23.2	23.6	25.1	24.5	24.8	24.3	23.3	23.7	21.4	21.0	21.2
30	24.2	23.4	23.8	25.5	24.5	24.9	24.0	23.7	23.9	21.2	20.5	20.8
31	---	---	---	25.1	24.2	24.6	24.4	23.8	24.1	---	---	---
MONTH	24.4	14.2	19.0	25.9	20.4	23.4	24.7	19.1	22.0	24.6	20.5	22.8
YEAR	25.9	2.5	14.6									

03313700 WEST FORK DRAKES CREEK NEAR FRANKLIN, KY

LOCATION.--Lat 36°43'24", long 86°33'08", Simpson County, Hydrologic Unit 05110002, near left bank at upstream side of city of Franklin pumping plant intake, 20 ft upstream from dam, 0.8 mi downstream from bridge on State Highways 73 and 100, 1.5 mi east of Franklin, 3.3 mi downstream from Sharps Branch, and at mile 46.7.

DRAINAGE AREA.--110 mi², of which about 19 mi² does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder with telemetry and broad-crested weir. Datum of gage is 581.54 ft above NGVD of 1929. Prior to Oct. 1, 1981, at site 0.8 mi upstream at datum 8.05 ft lower.

REMARKS.--Records good except for those estimated, which are fair. Subsequent to Apr. 24, 1976, records of daily discharge less than about 300 ft³/s does not include approximately 3 ft³/s which is diverted by city of Franklin for municipal supply.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	31	172	331	146	69	111	155	743	60	e200	27
2	59	31	149	633	147	550	100	375	364	64	e170	26
3	53	28	129	516	893	262	92	343	259	57	141	26
4	50	27	125	350	527	197	86	265	257	52	101	26
5	46	38	125	358	e1,200	262	78	210	193	50	96	32
6	42	42	115	321	e1,690	1,390	73	173	152	49	95	34
7	41	46	103	251	981	641	70	146	129	65	77	31
8	37	43	96	218	544	359	69	125	109	65	65	26
9	32	40	93	200	379	271	65	111	109	50	55	19
10	32	36	190	166	317	210	59	105	102	40	52	17
11	31	34	305	141	255	174	56	96	88	37	60	15
12	29	37	225	131	221	149	139	89	e93	38	54	74
13	28	45	178	119	190	131	982	e110	117	48	47	108
14	31	54	e360	108	169	127	882	e310	90	58	42	53
15	30	54	e340	102	156	116	414	e1,200	76	50	38	37
16	29	70	e380	92	143	115	283	e1,500	86	37	34	40
17	27	75	e400	93	136	107	212	e880	82	30	32	58
18	25	622	e360	233	125	142	169	e630	113	27	30	60
19	25	1,090	294	336	116	171	142	e460	122	25	27	44
20	23	484	229	230	112	166	123	e360	107	21	71	34
21	21	298	187	185	104	448	126	e300	88	e19	230	29
22	21	208	168	160	93	268	e1,900	e250	77	e20	113	26
23	19	170	184	138	86	203	e2,000	e210	99	e28	73	23
24	19	318	e450	127	81	173	1,260	e180	99	e22	57	21
25	18	311	e340	e400	77	155	826	e150	82	e18	55	20
26	29	225	243	837	73	137	472	e175	75	e17	48	17
27	65	186	205	431	74	125	337	750	63	e18	50	15
28	53	221	180	297	67	112	254	388	56	e16	39	14
29	46	255	187	235	62	111	203	287	53	e16	33	15
30	39	211	762	205	---	142	174	198	54	e37	31	21
31	35	---	446	169	---	125	---	1,630	---	e95	30	---
TOTAL	1,102	5,330	7,720	8,113	9,164	7,608	11,757	12,161	4,137	1,229	2,246	988
MEAN	35.5	178	249	262	316	245	392	392	138	39.6	72.5	32.9
MAX	67	1,090	762	837	1,690	1,390	2,000	1,630	743	95	230	108
MIN	18	27	93	92	62	69	56	89	53	16	27	14
CFSM	0.39	1.95	2.74	2.88	3.47	2.70	4.31	4.31	1.52	0.44	0.80	0.36
IN.	0.45	2.18	3.16	3.32	3.75	3.11	4.81	4.97	1.69	0.50	0.92	0.40

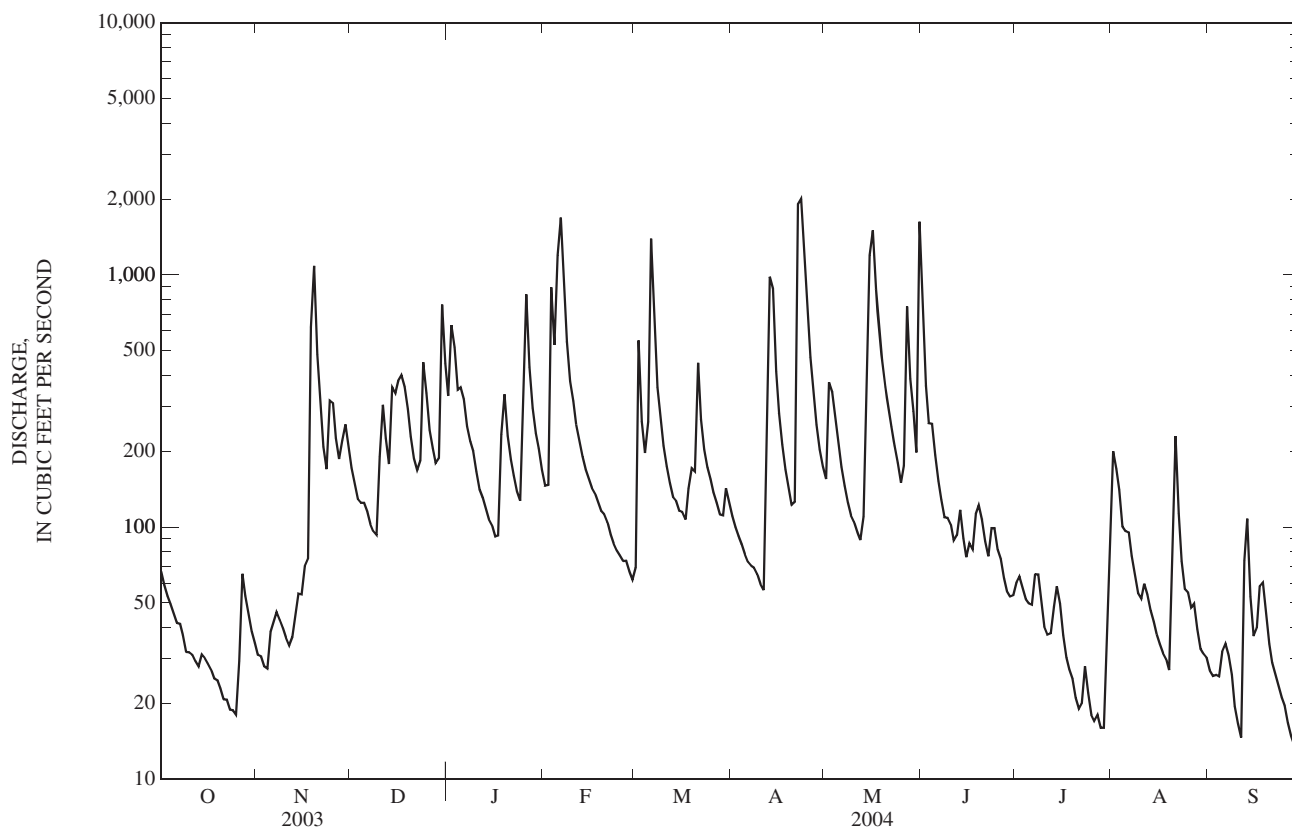
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

	MEAN	45.4	130	280	287	362	370	251	222	158	64.2	35.8	60.7
MAX	219	474	971	867	1,356	1,412	568	982	795	251	142	677	
(WY)	(1976)	(1980)	(1979)	(1974)	(1989)	(1975)	(1979)	(1983)	(1998)	(1989)	(1971)	(1979)	
MIN	1.87	6.95	11.8	10.4	138	113	38.3	22.8	18.8	5.47	2.80	2.01	
(WY)	(1988)	(2000)	(1981)	(1981)	(1980)	(1998)	(1986)	(1988)	(1985)	(1985)	(1986)	(2000)	

03313700 WEST FORK DRAKES CREEK NEAR FRANKLIN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	80,147		71,555		188	
ANNUAL MEAN	220		196		351	
HIGHEST ANNUAL MEAN					63.5	
LOWEST ANNUAL MEAN					12,800	
HIGHEST DAILY MEAN	3,140	Feb 16	2,000	Apr 23	12,800	Mar 12, 1975
LOWEST DAILY MEAN	18	Aug 30	14	Sep 28	0.00	Sep 19, 1985
ANNUAL SEVEN-DAY MINIMUM	21	Oct 19	18	Sep 24	0.00	Aug 13, 1988
MAXIMUM PEAK FLOW			2,460	Apr 22	27,300	Mar 12, 1975
MAXIMUM PEAK STAGE			9.37	Apr 22	23.20	Mar 12, 1975
ANNUAL RUNOFF (CFSM)	2.41		2.15		2.07	
ANNUAL RUNOFF (INCHES)	32.76		29.25		28.09	
10 PERCENT EXCEEDS	464		404		424	
50 PERCENT EXCEEDS	112		108		72	
90 PERCENT EXCEEDS	32		27		8.3	

e Estimated



03314500 BARREN RIVER AT BOWLING GREEN, KY

LOCATION.--Lat 37°00'04", long 86°25'51", Warren County, Hydrologic Unit 05110002, near center of downstream side of abandoned College Street bridge, 700 ft upstream from bridge on U.S. Highways 31W and 68 at Bowling Green, 6.0 mi downstream from Drakes Creek, 8.9 mi upstream from Jennings Creek, and at mile 37.6.

DRAINAGE AREA.--1,849 mi², of which about 490 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1938 to September 1994, March 2002 to current year. Gage-height records collected in vicinity since 1901 are published in reports of National Weather Service (prior to 1940 records are for site about 7 mi downstream and are fragmentary prior to July 1924).

REVISED RECORDS.--WSP 1385; 1943, 1945, 1946(M). WRD KY-80-1; Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 409.83 ft above NGVD of 1929. Prior to June 21, 1944, nonrecording gage at same site and datum.

REMARKS.--Records fair except those estimated, which are fair. Flow regulated by Barren River Lake beginning March 1964.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and National Streamflow Information Program.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 8, 1913 reached a stage of 52.2 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,820	2,510	4,230	5,120	3,410	4,200	766	4,330	5,860	e850	5,430	414
2	3,740	2,480	3,990	5,430	2,780	4,810	756	4,840	3,940	e940	3,100	403
3	3,660	2,470	4,330	6,910	4,450	5,260	747	5,550	4,500	e900	3,130	392
4	2,950	2,470	4,660	5,890	5,430	5,020	737	4,960	4,420	e880	2,980	391
5	2,050	2,530	4,720	5,090	6,510	4,960	730	4,600	4,260	e860	2,920	1,360
6	1,850	2,640	4,680	4,880	16,100	8,860	723	4,370	4,100	1,340	2,840	2,040
7	1,810	2,580	4,620	3,080	12,300	8,360	718	4,180	3,970	1,230	2,780	2,100
8	1,780	2,520	4,550	2,210	4,950	5,090	714	4,040	3,860	1,090	2,710	1,430
9	1,750	2,490	4,480	1,980	3,530	5,340	709	3,920	3,780	1,340	2,670	721
10	1,320	2,460	4,490	1,730	5,370	5,320	706	3,820	3,740	1,360	2,580	409
11	1,190	2,440	4,440	2,570	5,640	5,030	703	3,880	2,990	1,480	1,860	366
12	1,170	2,450	4,130	2,810	5,340	4,830	699	3,830	2,500	1,470	2,050	375
13	945	2,500	3,840	4,350	5,110	4,670	2,670	3,790	2,540	1,450	e1,000	375
14	702	2,470	4,240	4,560	4,920	4,560	5,620	3,750	2,080	1,560	e750	465
15	598	2,480	5,140	4,510	4,790	4,460	3,520	5,700	1,730	1,610	e630	428
16	1,420	2,570	4,650	4,430	4,660	3,930	2,310	9,970	1,330	1,480	e610	534
17	2,440	2,650	4,710	4,360	4,550	3,210	1,680	4,260	1,170	1,390	e590	685
18	2,600	2,880	4,680	4,160	4,470	2,000	1,270	3,600	1,120	1,330	e580	1,100
19	2,590	7,250	4,850	5,210	4,690	1,270	1,020	4,260	e1,050	1,310	e565	2,170
20	2,580	4,960	4,650	4,880	4,710	1,030	884	4,220	e1,000	e1,050	e540	3,180
21	2,570	4,150	4,400	4,950	4,650	1,960	834	4,230	e900	e940	e900	1,110
22	2,560	4,320	3,560	4,810	4,570	2,100	3,530	4,110	e800	e890	2,660	2,520
23	2,540	4,080	3,350	4,610	4,510	1,470	14,200	3,990	e700	e835	2,580	3,380
24	2,530	4,030	2,690	4,010	4,460	1,160	12,900	3,810	1,140	e810	2,470	3,390
25	2,520	4,510	2,710	3,410	4,410	989	6,240	2,380	e1,050	e755	1,610	3,370
26	2,580	4,240	2,360	5,420	4,360	867	4,070	e1,580	e1,000	e745	e850	3,360
27	2,610	4,080	2,130	5,160	4,300	793	4,860	e1,800	e950	e735	e680	3,340
28	2,640	4,230	3,230	4,820	4,260	773	4,760	e2,600	e930	e725	e590	3,320
29	2,600	4,730	4,180	4,520	4,210	765	4,440	2,530	e890	e710	e540	3,300
30	2,560	4,510	4,730	4,340	---	775	4,420	2,310	e860	e700	e463	2,390
31	2,530	---	5,130	4,120	---	826	---	4,160	---	e1,800	e425	---
TOTAL	69,205	100,680	128,550	134,330	153,440	104,688	87,936	125,370	69,160	34,565	54,083	48,818
MEAN	2,232	3,356	4,147	4,333	5,291	3,377	2,931	4,044	2,305	1,115	1,745	1,627
MAX	3,820	7,250	5,140	6,910	16,100	8,860	14,200	9,970	5,860	1,800	5,430	3,390
MIN	598	2,440	2,130	1,730	2,780	765	699	1,580	700	700	425	366

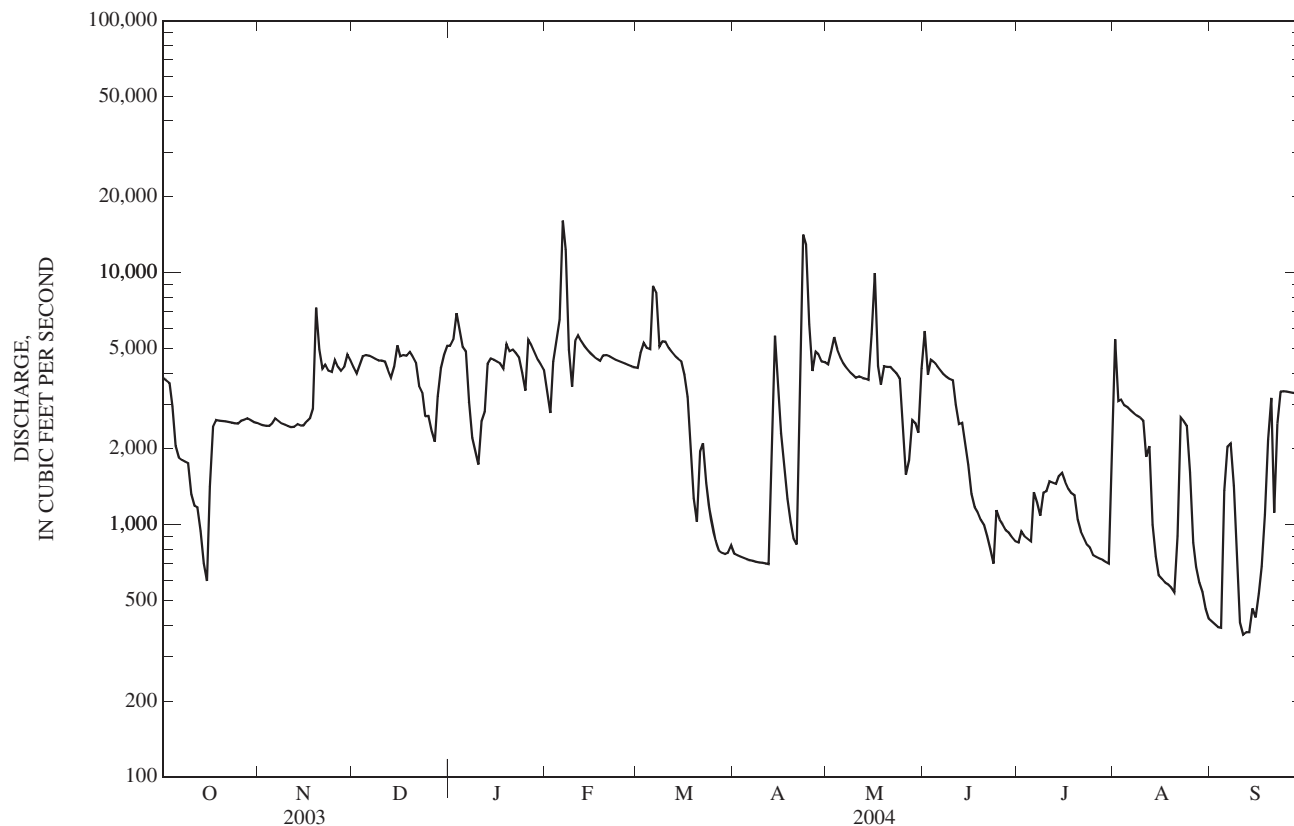
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

	MEAN	1,862	3,146	3,945	4,300	4,835	4,075	3,042	2,844	2,130	1,520	886	1,242
MAX		4,027	6,097	9,210	9,141	9,830	10,450	8,368	9,408	5,825	5,059	3,468	5,358
(WY)		(1975)	(1980)	(1979)	(1979)	(1989)	(1975)	(1979)	(1983)	(1981)	(1989)	(1971)	(1979)
MIN		381	286	573	228	1,624	1,128	379	247	102	118	110	251
(WY)		(1977)	(1977)	(1981)	(1981)	(1992)	(1981)	(1986)	(1988)	(1988)	(1988)	(1991)	(1993)

03314500 BARREN RIVER AT BOWLING GREEN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	1,192,453		1,110,825		2,813	
ANNUAL MEAN	3,267		3,035		1,292	
HIGHEST ANNUAL MEAN					5,001	
LOWEST ANNUAL MEAN					1,292	
HIGHEST DAILY MEAN	21,100	Feb 17	16,100	Feb 6	57,500	Mar 13, 1975
LOWEST DAILY MEAN	518	Aug 28	366	Sep 11	75	Jul 9, 1988
ANNUAL SEVEN-DAY MINIMUM	621	Aug 25	422	Sep 10	76	Jul 6, 1988
MAXIMUM PEAK FLOW			18,300	Feb 6	85,000	Feb 28, 1962
MAXIMUM PEAK STAGE			25.47	Feb 6	49.55	Feb 28, 1962
INSTANTANEOUS LOW FLOW			355	Sep 11	44	Sep 19, 1954
10 PERCENT EXCEEDS	5,140		4,980		5,930	
50 PERCENT EXCEEDS	2,910		2,670		2,130	
90 PERCENT EXCEEDS	887		724		303	

e Estimated



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 with telemetry. Datum of gage is 363.19 ft above NGVD of 1929 (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.--Records fair except for those below 2000 ft³/s, which are poor. Flow regulated by Nolin River Lake beginning March 1963, Barren River Lake beginning March 1964 and Green River Lake beginning February 1969, .

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,180	5,070	18,600	19,100	e12,300	6,750	5,220	18,300	30,700	3,660	3,550	1,940
2	6,890	5,020	15,800	22,900	e13,000	6,830	5,170	24,100	30,200	4,050	8,030	1,780
3	6,090	4,980	13,300	31,000	e14,500	7,460	4,680	27,200	28,900	3,780	9,050	1,830
4	5,600	4,860	13,100	33,500	e17,100	9,450	4,240	25,000	27,000	3,600	7,800	2,080
5	4,900	4,820	14,700	35,400	e21,000	10,500	3,780	21,500	24,600	3,880	7,540	2,020
6	4,100	4,940	15,100	35,300	e29,000	14,400	3,420	18,900	22,800	4,700	7,020	2,180
7	3,570	5,110	14,100	30,300	36,300	22,800	3,170	17,200	20,200	5,910	6,370	2,860
8	3,360	5,230	13,100	21,900	38,600	28,300	3,050	14,400	18,100	5,970	7,070	3,110
9	3,310	5,120	12,100	16,800	39,300	24,400	2,880	11,200	17,400	5,250	6,500	2,820
10	3,230	5,000	11,300	13,400	32,600	19,600	2,740	9,110	17,700	4,800	5,910	2,270
11	3,010	4,880	12,100	11,300	25,500	e16,400	2,710	8,360	17,700	4,680	5,500	1,800
12	2,780	4,970	13,700	11,900	e22,200	e14,000	2,750	8,050	17,000	4,620	4,750	1,560
13	2,640	6,230	15,500	13,300	e19,500	e12,100	4,600	7,570	19,600	4,610	4,050	1,490
14	2,560	7,270	16,800	16,300	e17,500	e10,200	15,300	7,290	18,700	4,750	3,590	1,590
15	2,290	7,860	18,200	19,400	e16,200	e8,900	23,400	11,200	17,000	4,660	3,270	1,740
16	2,100	7,740	19,600	21,300	e14,900	e7,900	21,100	18,800	16,100	3,990	2,710	1,720
17	2,860	7,360	19,800	21,200	e13,800	e6,900	16,300	22,700	14,100	3,360	2,200	1,660
18	4,130	7,090	19,500	21,100	e12,900	e6,400	13,700	20,000	11,100	3,070	1,890	e1,900
19	4,780	11,400	19,600	21,300	12,100	e5,800	11,100	17,300	8,650	3,350	1,770	e4,600
20	4,950	17,500	17,800	21,700	11,100	5,380	8,690	14,100	7,980	2,900	1,650	7,560
21	4,950	19,400	16,500	19,500	10,200	5,840	9,010	12,100	7,040	2,250	1,830	6,850
22	4,940	16,700	15,900	16,700	9,260	7,760	10,400	10,800	6,550	1,950	3,340	5,590
23	4,900	14,000	15,000	14,300	8,490	9,080	18,800	9,160	6,070	2,340	4,040	7,120
24	4,880	13,800	17,200	12,800	7,980	7,690	31,700	7,660	5,080	2,390	4,340	8,510
25	4,740	14,500	16,400	11,900	7,600	6,120	34,600	6,860	4,670	2,730	4,060	8,760
26	5,370	13,700	15,300	e12,700	7,230	5,120	33,200	6,740	4,620	3,090	3,400	7,730
27	5,590	13,200	14,100	e14,700	7,000	4,490	27,000	11,400	4,390	2,920	2,760	5,210
28	5,580	15,600	12,500	e15,500	6,910	4,050	22,100	17,100	3,960	2,740	2,450	4,280
29	5,490	16,900	11,800	e14,500	6,840	3,860	19,600	21,200	3,540	2,470	2,300	4,370
30	5,280	18,900	14,800	e13,500	---	4,170	18,400	21,200	3,460	2,140	2,130	4,360
31	5,150	---	18,000	e12,700	---	4,960	---	27,200	---	2,320	2,020	---
TOTAL	138,200	289,150	481,300	597,200	490,910	307,610	382,810	473,700	434,910	112,930	132,890	111,290
MEAN	4,458	9,638	15,530	19,260	16,930	9,923	12,760	15,280	14,500	3,643	4,287	3,710
MAX	8,180	19,400	19,800	35,400	39,300	28,300	34,600	27,200	30,700	5,970	9,050	8,760
MIN	2,100	4,820	11,300	11,300	6,840	3,860	2,710	6,740	3,460	1,950	1,650	1,490

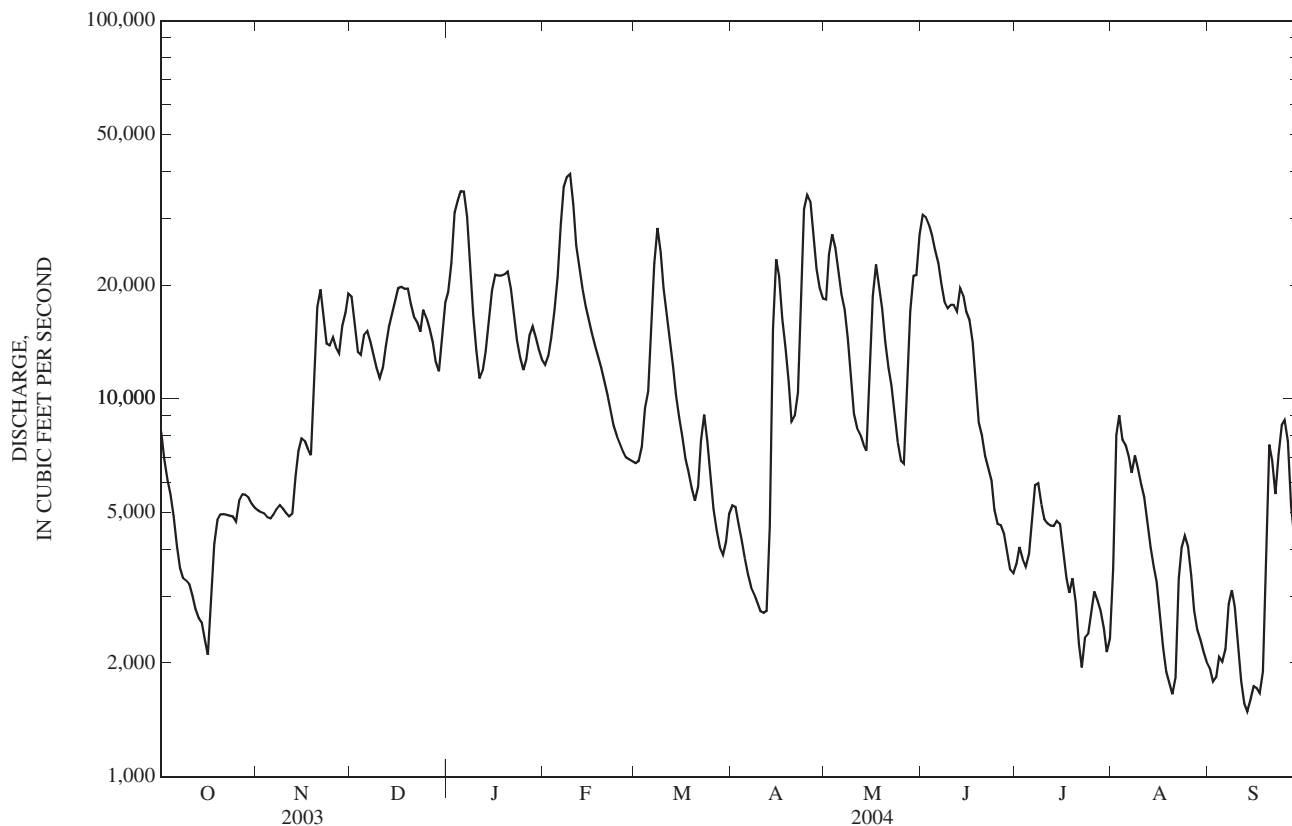
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

	MEAN	5,073	8,131	13,210	15,480	15,900	16,880	13,270	10,560	7,998	3,806	2,718	3,750
MAX		16,950	19,310	42,250	36,020	26,410	41,520	34,210	25,950	20,190	8,811	8,743	22,540
(WY)		(1980)	(1980)	(1979)	(1974)	(1994)	(1997)	(1979)	(1995)	(1981)	(1973)	(1971)	(1979)
MIN		1,750	2,548	2,103	954	6,083	6,150	4,345	1,881	1,523	1,270	524	512
(WY)		(2001)	(2000)	(1981)	(1981)	(1977)	(1981)	(2001)	(2001)	(1999)	(2000)	(1999)	(1999)

03316500 GREEN RIVER AT PARADISE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	4,096,680		3,952,900		9,745	
ANNUAL MEAN	11,220		10,800		18,460	
HIGHEST ANNUAL MEAN					4,432	
LOWEST ANNUAL MEAN					83,800	
HIGHEST DAILY MEAN	42,700	Feb 21	39,300	Feb 9	83,800	Mar 7, 1997
LOWEST DAILY MEAN	1,590	Aug 22	1,490	Sep 13	228	Oct 4, 2001
ANNUAL SEVEN-DAY MINIMUM	2,010	Aug 17	1,650	Sep 11	320	Sep 8, 1995
MAXIMUM PEAK FLOW			41,400	Feb 9	107,000	Mar 5, 1962
MAXIMUM PEAK STAGE			22.25	Feb 9	40.46	Mar 5, 1962
INSTANTANEOUS LOW FLOW			1,430	Sep 13	228	Oct 4, 2001
10 PERCENT EXCEEDS	21,600		21,400		22,700	
50 PERCENT EXCEEDS	8,290		7,750		6,000	
90 PERCENT EXCEEDS	3,290		2,710		1,350	

e Estimated



03318010 ROUGH RIVER AT ROUGH RIVER DAM, NEAR FALLS OF ROUGH, KY

LOCATION.--Lat 37°37'19", long 86°30'15", Grayson County, Hydrologic Unit 05110004, on right bank 800 ft downstream from Rough River Dam 1.5 mi upstream from Cane Run, 3.1 mi upstream from Rock Lick Creek, 3.5 mi northeast of Falls of Rough, and at mile 89.2.

DRAINAGE AREA.--454 mi², of which about 107 mi² does not contribute directly to surface runoff.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--July 1962 to current water year.

INSTRUMENTATION.--Water-temperature recorder with telemetry.

COOPERATION.--U. S. Army Corps of Engineers, Louisville District and The Nature Conservancy.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum 29.0°C, July 7, 2002, minimum 2.0°C, Jan. 3, 4, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum 22.2°C, Oct. 1; minimum 2.5°C, Feb. 8, 9.

REMARKS.--Water-temperature records rated good.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.2	21.5	21.8	17.6	17.5	17.5	10.8	10.3	10.6	5.5	5.1	5.3
2	21.8	20.7	21.4	17.8	17.5	17.6	10.3	10.0	10.1	6.3	5.5	5.9
3	21.5	20.4	21.0	17.8	17.4	17.6	10.0	9.7	9.8	6.8	6.3	6.6
4	21.4	21.0	21.2	18.3	17.4	17.7	9.7	9.3	9.5	7.6	6.8	7.2
5	21.1	20.8	21.0	17.7	17.4	17.5	9.3	9.0	9.2	7.3	6.8	7.0
6	21.1	20.7	20.9	17.4	17.1	17.3	9.0	8.7	8.8	6.8	6.4	6.6
7	21.0	20.5	20.8	17.1	16.7	17.0	8.7	8.4	8.6	6.4	6.0	6.2
8	20.8	20.0	20.4	16.7	16.3	16.5	8.4	8.3	8.3	6.0	5.9	5.9
9	20.6	20.5	20.5	16.3	15.9	16.1	8.3	8.2	8.3	5.9	5.7	5.8
10	20.5	20.3	20.4	16.0	15.8	15.9	8.3	8.0	8.2	5.7	5.5	5.6
11	20.7	20.0	20.3	15.9	15.7	15.8	8.0	7.6	7.8	5.7	5.4	5.5
12	20.5	19.7	20.1	15.9	15.6	15.8	7.6	7.2	7.4	5.8	5.6	5.7
13	20.4	19.6	19.9	15.6	14.9	15.2	7.2	6.8	7.0	5.9	5.8	5.9
14	19.7	19.2	19.5	14.9	14.6	14.7	6.9	6.5	6.7	6.0	5.7	5.9
15	20.2	19.1	19.6	14.6	14.2	14.4	6.5	6.2	6.4	5.9	5.8	5.9
16	20.0	19.7	19.8	14.2	14.1	14.2	6.3	6.1	6.2	5.9	5.7	5.8
17	19.7	19.5	19.6	14.2	14.0	14.1	6.1	5.9	6.0	6.1	5.9	6.0
18	19.5	19.3	19.4	14.3	14.2	14.2	5.9	5.6	5.8	6.0	5.9	6.0
19	19.4	19.2	19.3	14.2	13.9	14.0	5.6	5.1	5.4	5.9	5.6	5.7
20	19.3	19.1	19.2	14.2	13.7	13.9	5.1	4.9	5.0	5.6	5.3	5.5
21	19.3	19.1	19.2	14.0	13.7	13.8	4.9	4.7	4.8	5.4	5.1	5.3
22	19.1	18.9	19.0	13.9	13.6	13.7	4.9	4.7	4.8	5.1	4.6	4.9
23	19.0	18.8	18.9	13.9	13.6	13.8	5.0	4.8	4.9	4.6	4.3	4.5
24	19.0	18.7	18.9	13.8	13.0	13.4	4.8	4.6	4.7	4.3	4.2	4.2
25	19.0	18.8	18.9	13.0	12.7	12.9	4.6	4.4	4.5	4.2	4.0	4.0
26	18.9	18.5	18.7	12.7	12.4	12.6	4.6	4.3	4.4	4.4	3.9	4.1
27	18.5	18.2	18.3	12.4	12.2	12.3	4.6	4.2	4.4	4.2	3.7	4.0
28	18.2	17.8	18.0	12.2	11.5	11.9	4.6	4.3	4.4	3.7	3.4	3.5
29	17.8	17.6	17.7	11.5	11.0	11.2	4.7	4.6	4.7	3.6	3.5	3.5
30	17.8	17.5	17.6	11.1	10.8	11.0	4.9	4.6	4.8	3.5	3.0	3.2
31	17.9	17.5	17.6	---	---	---	5.1	4.9	5.0	3.2	3.0	3.1
MONTH	22.2	17.5	19.6	18.3	10.8	14.8	10.8	4.2	6.7	7.6	3.0	5.3

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.4	3.1	3.2	7.3	7.1	7.2	11.9	10.2	11.0	12.9	11.6	12.1
2	3.4	3.3	3.4	9.2	6.9	7.4	12.6	10.1	11.3	11.9	11.4	11.7
3	3.3	3.1	3.2	7.1	6.8	6.9	13.1	10.2	11.7	12.2	11.4	11.8
4	3.1	3.0	3.1	9.2	6.8	7.9	12.8	10.3	11.5	13.7	11.8	12.9
5	3.0	2.8	2.9	9.4	8.6	9.1	12.1	10.2	11.2	14.6	13.7	14.1
6	2.9	2.8	2.9	8.6	8.0	8.2	12.8	10.5	11.4	15.1	14.6	14.8
7	2.9	2.7	2.8	8.7	8.2	8.4	12.4	11.0	11.7	15.4	14.9	15.2
8	2.7	2.5	2.6	9.2	8.3	8.6	14.2	11.5	12.7	15.5	15.2	15.3
9	2.8	2.5	2.6	9.5	9.0	9.2	13.0	10.9	11.9	16.0	14.8	15.3
10	2.9	2.6	2.8	10.1	9.4	9.7	12.3	11.4	11.8	15.6	14.7	15.0
11	3.1	2.8	3.0	10.1	9.8	10.0	12.0	11.1	11.5	15.2	14.5	14.8
12	3.4	3.1	3.3	9.9	9.6	9.7	11.3	11.0	11.0	14.9	13.8	14.4
13	3.5	3.3	3.4	10.4	9.7	9.9	11.2	9.8	10.5	14.3	13.8	14.1
14	3.7	3.4	3.6	10.2	9.6	9.9	12.1	9.9	11.0	14.3	13.7	14.0
15	3.8	3.6	3.7	10.2	9.6	9.9	12.4	11.0	11.6	13.9	13.7	13.8
16	3.9	3.6	3.8	9.8	9.5	9.6	13.2	11.2	11.9	13.9	13.5	13.7
17	4.0	3.7	3.8	11.0	9.5	10.0	12.9	11.3	11.9	15.0	13.5	14.3
18	5.3	4.0	4.6	11.3	9.6	10.3	13.7	11.3	12.1	15.3	14.6	15.0
19	6.4	4.7	5.4	10.8	9.4	9.9	11.8	10.9	11.4	15.4	15.0	15.2
20	6.2	5.5	5.8	10.8	9.6	10.1	12.5	11.0	11.7	15.6	15.1	15.3
21	6.0	5.6	5.8	10.8	9.3	9.8	11.7	10.9	11.3	15.6	15.2	15.4
22	6.7	5.3	5.9	11.0	9.5	10.1	11.8	10.7	11.2	15.8	15.3	15.4
23	6.4	5.5	6.0	11.1	9.5	10.3	11.4	10.9	11.2	15.8	15.4	15.5
24	7.1	6.1	6.5	11.6	10.3	11.0	12.0	11.1	11.4	16.0	15.3	15.5
25	6.5	5.0	5.7	11.8	10.4	11.2	11.8	11.0	11.3	15.9	15.2	15.5
26	5.5	5.0	5.3	11.9	10.5	11.1	12.4	11.1	11.4	15.9	14.9	15.4
27	5.7	5.3	5.5	11.5	10.3	10.8	11.6	11.0	11.4	15.2	14.9	14.9
28	6.5	5.4	5.9	11.8	10.5	11.1	12.9	11.4	11.9	15.2	14.9	15.0
29	7.4	6.1	6.8	11.1	10.5	10.7	12.7	12.1	12.4	15.2	14.9	15.0
30	---	---	---	11.2	10.4	10.8	13.0	12.3	12.5	15.4	14.9	15.1
31	---	---	---	11.7	10.3	11.0	---	---	---	15.5	15.0	15.2
MONTH	7.4	2.5	4.3	11.9	6.8	9.7	14.2	9.8	11.6	16.0	11.4	14.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.4	15.1	15.2	19.2	19.0	19.1	19.5	18.7	19.1	19.9	19.1	19.5
2	15.6	15.1	15.3	19.2	19.1	19.1	19.3	18.6	19.0	19.8	19.2	19.5
3	15.4	15.1	15.3	19.4	19.2	19.3	19.4	18.7	19.1	19.7	19.4	19.5
4	15.5	15.2	15.3	19.6	19.2	19.4	19.5	19.1	19.3	19.8	19.4	19.6
5	16.0	15.2	15.6	19.7	19.4	19.5	19.4	19.1	19.2	19.9	19.5	19.6
6	16.7	15.8	16.4	20.0	19.5	19.7	19.7	19.1	19.4	19.9	19.5	19.7
7	17.3	16.6	17.0	20.1	19.7	19.9	19.8	19.0	19.4	19.7	19.5	19.6
8	17.6	17.1	17.4	20.2	20.0	20.1	19.7	19.3	19.5	19.8	19.4	19.6
9	17.6	17.5	17.6	20.4	20.1	20.2	19.7	19.4	19.5	20.5	19.4	19.8
10	17.9	17.6	17.7	20.7	20.3	20.4	19.7	19.3	19.5	20.1	19.2	19.6
11	18.1	17.8	17.9	20.9	20.5	20.7	19.6	19.2	19.3	20.1	19.3	19.7
12	18.2	17.9	18.0	20.9	20.1	20.5	19.7	19.1	19.4	19.8	19.4	19.5
13	18.2	18.0	18.1	20.4	19.9	20.2	19.6	18.9	19.2	20.2	19.3	19.6
14	18.2	18.1	18.1	20.8	19.8	20.2	20.0	18.7	19.1	20.3	19.3	19.6
15	18.3	18.1	18.2	20.3	19.1	19.8	19.7	18.5	19.1	20.4	19.4	19.7
16	18.4	18.2	18.2	19.8	19.1	19.3	19.9	18.6	19.1	20.2	19.8	20.0
17	18.4	18.2	18.3	19.8	19.1	19.3	19.6	18.7	19.1	20.2	19.8	20.0
18	18.4	18.3	18.3	19.7	18.9	19.2	19.9	18.9	19.3	20.4	19.9	20.2
19	18.4	18.3	18.4	19.9	18.8	19.2	19.8	19.2	19.4	20.6	19.8	20.2
20	18.5	18.3	18.4	19.8	18.8	19.2	19.6	19.1	19.3	20.5	20.0	20.2
21	18.5	18.3	18.4	20.2	18.9	19.2	19.8	19.1	19.4	20.5	20.1	20.3
22	18.5	18.4	18.5	19.8	18.9	19.2	20.3	18.9	19.3	20.5	20.0	20.2
23	18.6	18.4	18.5	19.7	19.1	19.2	19.5	18.8	19.2	20.5	19.9	20.2
24	18.8	18.5	18.6	19.5	18.9	19.2	20.4	19.0	19.4	20.4	20.0	20.2
25	18.8	18.3	18.5	19.5	18.7	19.0	20.3	19.0	19.4	20.8	20.1	20.4
26	18.7	18.4	18.5	19.1	18.7	18.9	19.6	19.1	19.3	20.6	19.8	20.3
27	18.9	18.4	18.7	19.8	18.7	19.1	19.7	19.1	19.3	20.7	20.0	20.4
28	19.0	18.7	18.9	19.5	18.5	19.0	19.6	19.2	19.4	20.6	20.0	20.3
29	19.1	18.9	19.0	19.4	18.6	19.0	19.6	19.2	19.4	20.6	20.1	20.4
30	19.2	19.0	19.1	19.7	18.7	19.1	19.5	19.3	19.4	20.7	20.3	20.5
31	---	---	---	19.6	18.6	19.0	19.6	19.2	19.4	---	---	---
MONTH	19.2	15.1	17.7	20.9	18.5	19.5	20.4	18.5	19.3	20.8	19.1	19.9
YEAR	22.2	2.5	13.6									

03319000 ROUGH RIVER NEAR DUNDEE, KY

LOCATION.--Lat 37°32'51", long 86°43'18", Ohio County, Hydrologic Unit 05110004, on right bank, 150 ft downstream from bridge on State Highway 919, 1.5 mi downstream from Caney Creek, 3 mi southeast of Dundee, and at mi 62.5.

DRAINAGE AREA.--757 mi², of which about 120 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1992 and March 2002 to current year. October 1939 to January 1940 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 393.18 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Aug. 14, 1979.

REMARKS.--Records fair except for those estimated, which are poor. Flow regulated by Rough River Lake (Station 03318005) beginning October 1959.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and National Streamflow Information Program.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1937 reached a stage of 31.8 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	1,120	e1,650	2,760	927	430	425	3,220	4,790	2,370	162	115
2	170	1,110	e1,490	5,410	1,040	400	318	4,630	6,470	2,130	108	116
3	84	1,110	e1,450	7,240	3,320	463	262	4,170	5,650	2,020	97	116
4	97	1,100	e1,440	4,870	2,560	808	218	2,620	3,150	2,000	214	115
5	140	1,100	e1,480	4,440	3,140	1,220	186	2,300	1,660	2,000	260	116
6	134	1,090	e1,540	3,130	4,610	3,670	169	2,570	1,210	2,010	257	114
7	129	893	e1,490	1,730	2,950	2,360	160	2,980	1,460	1,660	244	114
8	100	802	e1,430	1,080	e1,720	1,510	152	3,080	1,780	2,180	241	113
9	164	784	e1,570	835	e1,520	2,300	136	e2,880	1,960	2,240	238	113
10	291	775	e1,810	724	e1,470	2,620	123	e2,200	2,040	2,230	236	83
11	289	773	2,070	690	e1,390	2,570	112	e1,590	2,140	2,230	170	44
12	157	880	1,650	1,330	e1,310	2,060	137	e1,170	2,270	2,170	117	41
13	48	1,940	1,130	1,780	e1,260	1,030	1,120	e860	2,610	1,590	82	46
14	47	1,250	989	2,310	e1,200	677	4,360	875	2,440	1,200	37	64
15	73	e1,100	1,010	2,510	e1,150	659	3,660	3,810	2,310	985	32	51
16	656	e1,080	1,280	2,500	e1,080	456	1,710	4,430	2,310	556	31	129
17	973	e1,200	1,790	2,460	e1,040	384	812	2,050	2,410	144	31	230
18	970	e1,650	1,420	2,640	e820	318	505	1,610	2,470	77	30	229
19	963	3,110	1,830	2,960	329	272	378	1,700	2,350	71	30	227
20	958	2,250	1,670	2,730	149	313	313	2,490	2,240	69	32	226
21	959	1,650	1,290	2,550	130	1,340	409	2,010	2,180	66	35	226
22	959	e1,470	1,060	e2,300	108	814	1,520	1,550	2,150	67	34	163
23	956	1,710	1,940	e2,050	95	500	3,420	1,430	2,200	72	31	112
24	1,050	2,660	4,110	e1,720	91	390	4,210	1,400	2,260	51	33	111
25	1,100	2,900	2,520	e1,570	84	327	3,290	2,230	2,280	42	33	111
26	1,230	2,200	1,520	2,000	350	279	3,040	3,690	2,000	41	99	112
27	1,410	2,700	1,490	2,020	884	249	1,610	6,880	1,870	40	377	112
28	1,240	4,530	1,730	1,740	990	224	1,150	7,710	2,110	39	151	111
29	1,180	3,200	1,920	1,790	702	235	1,310	5,330	2,390	38	127	111
30	1,150	e1,980	3,480	1,800	---	389	2,100	2,650	2,480	37	119	111
31	1,140	---	2,960	1,230	---	485	---	5,000	---	42	116	---
TOTAL	19,134	50,117	54,209	74,899	36,419	29,752	37,315	91,115	75,640	30,467	3,804	3,682
MEAN	617	1,671	1,749	2,416	1,256	960	1,244	2,939	2,521	983	123	123
MAX	1,410	4,530	4,110	7,240	4,610	3,670	4,360	7,710	6,470	2,370	377	230
MIN	47	773	989	690	84	224	112	860	1,210	37	30	41

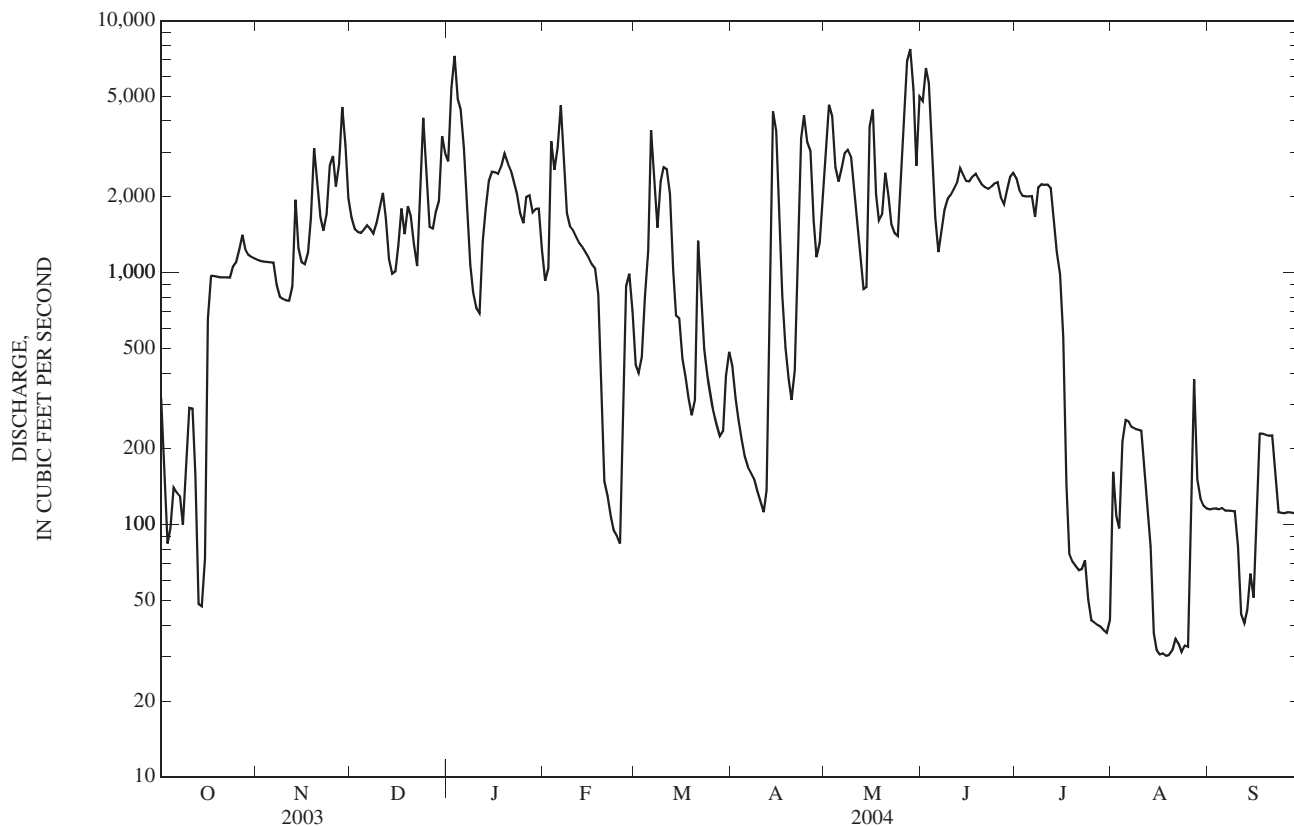
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	766	1,212	1,650	1,789	2,242	1,839	1,418	1,344	794	404	241	457
MAX	1,871	3,187	4,041	3,488	5,717	4,420	4,602	4,658	2,521	1,670	1,050	3,832
(WY)	(2003)	(1980)	(1979)	(1978)	(1989)	(1979)	(1983)	(1983)	(2004)	(1967)	(1979)	(1979)
MIN	26.1	223	60.4	167	331	520	134	111	50.2	46.8	53.5	55.9
(WY)	(1961)	(1981)	(1964)	(1977)	(1964)	(1981)	(1986)	(1988)	(1988)	(2002)	(1960)	(1983)

03319000 ROUGH RIVER NEAR DUNDEE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	580,138		506,553		1,169	
ANNUAL MEAN	1,589		1,384		2,274	
HIGHEST ANNUAL MEAN					593	
LOWEST ANNUAL MEAN					19,100	
HIGHEST DAILY MEAN	10,200	Feb 16	7,710	May 28	19,100	Feb 15, 1989
LOWEST DAILY MEAN	47	Jul 28	30	Aug 18	14	Sep 30, 1960
ANNUAL SEVEN-DAY MINIMUM	67	Jul 25	32	Aug 15	18	Sep 27, 1960
MAXIMUM PEAK FLOW			7,860	May 28	22,200	Sep 22, 1979
MAXIMUM PEAK STAGE			25.87	May 28	29.05	Sep 22, 1979
INSTANTANEOUS LOW FLOW			30	Aug 18	30	Aug 18, 2004
10 PERCENT EXCEEDS	2,840		2,970		2,700	
50 PERCENT EXCEEDS	1,420		1,140		673	
90 PERCENT EXCEEDS	154		84		74	

e Estimated



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 with telemetry. Datum of gage is 353.95 ft above NGVD of 1929. Auxiliary water-stage recorder at Livermore, 8.0 mi upstream at datum 360.11 ft above NGVD of 1929. See WDR KY-88-1 for history of changes prior to Sept. 30, 1958.

REMARKS.--Records good except for those estimated and discharges below 2,000 ft³/s, which are fair. Flow regulated by Rough River Lake, October 1959, Nolin Lake beginning March 1963, Barren River Lake beginning March 1964, and Green River Lake beginning February 1969.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,960	6,410	22,300	21,500	13,600	8,080	6,130	22,600	36,700	4,910	3,570	2,120
2	8,200	6,350	18,700	25,800	12,500	7,940	6,090	26,700	38,000	5,540	8,640	1,940
3	7,200	6,270	16,000	33,400	16,100	8,430	5,450	31,800	36,300	5,220	10,700	2,000
4	6,470	6,100	15,600	36,000	19,700	10,700	4,780	31,400	34,300	e5,000	9,370	2,290
5	5,620	5,930	17,000	38,500	23,400	12,200	4,340	28,000	31,800	e5,400	8,760	2,230
6	4,620	6,010	17,400	38,900	32,800	16,300	3,940	23,400	29,500	e6,450	8,480	2,370
7	3,960	6,300	16,700	36,100	37,300	23,600	3,650	20,700	27,300	e7,600	7,490	2,960
8	3,740	6,430	15,800	29,400	39,500	29,600	3,420	17,900	25,400	7,940	8,280	3,320
9	3,670	6,260	14,700	e21,000	40,400	28,000	3,280	14,900	23,100	7,240	7,860	3,150
10	3,640	6,140	13,700	e15,800	38,500	22,500	3,090	12,300	20,400	6,660	7,100	2,500
11	3,420	5,980	14,300	e12,500	31,800	e19,200	2,930	11,300	19,800	6,510	6,520	1,950
12	3,070	6,000	16,100	e12,700	28,400	e16,800	2,920	10,600	19,000	6,410	5,470	1,670
13	2,930	7,700	17,300	14,700	e25,000	e14,500	5,430	9,690	21,300	6,360	4,580	1,590
14	2,740	9,340	18,200	18,300	e22,200	e12,800	e16,400	9,060	20,900	6,440	3,990	1,740
15	2,520	10,200	19,200	22,300	e20,000	e11,000	e23,000	14,700	19,100	6,100	3,710	1,920
16	2,290	9,950	20,400	24,900	e18,500	e9,600	e22,000	21,000	18,500	5,050	3,020	1,840
17	3,000	9,620	20,800	24,000	e17,000	e8,700	e18,700	26,400	16,900	4,110	2,460	1,640
18	4,760	9,290	20,800	23,500	e15,200	e7,800	e16,100	24,300	14,300	3,530	2,140	1,670
19	5,790	13,400	21,000	23,400	14,000	e7,000	e13,700	21,600	11,400	3,800	2,010	4,360
20	6,110	18,700	19,500	23,300	12,500	6,430	e11,800	17,400	10,500	3,390	1,860	8,880
21	6,040	21,000	18,400	22,100	11,400	6,750	e12,000	15,300	9,370	2,600	1,940	8,360
22	6,010	18,600	17,800	19,300	10,400	9,200	e15,800	13,800	8,690	2,270	3,520	8,170
23	5,970	16,300	17,400	17,100	9,590	11,000	e23,000	11,800	8,230	2,650	4,420	8,270
24	6,000	15,400	19,500	15,600	8,930	9,470	e33,000	9,760	7,080	2,620	4,900	6,120
25	5,870	15,900	19,200	14,600	8,540	7,520	e35,000	8,780	6,330	2,920	4,630	6,230
26	7,170	16,300	18,100	16,100	8,140	6,160	e34,000	9,120	6,250	3,310	3,910	8,740
27	7,350	16,600	16,900	18,200	7,880	5,240	e29,500	14,400	5,930	3,240	3,150	6,780
28	7,310	20,100	15,200	18,800	8,010	4,690	e26,000	19,300	5,270	3,040	2,710	4,720
29	7,150	21,400	14,100	17,700	8,160	4,350	e22,500	24,700	4,750	2,720	2,510	4,800
30	6,870	22,300	17,000	16,500	---	4,610	22,400	25,300	4,640	2,360	2,290	4,880
31	6,620	---	20,000	15,200	---	5,650	---	32,000	---	2,520	2,180	---
TOTAL	166,070	346,280	549,100	687,200	559,450	355,820	430,350	580,010	541,040	143,910	152,170	119,210
MEAN	5,357	11,540	17,710	22,170	19,290	11,480	14,340	18,710	18,030	4,642	4,909	3,974
MAX	9,960	22,300	22,300	38,900	40,400	29,600	35,000	32,000	38,000	7,940	10,700	8,880
MIN	2,290	5,930	13,700	12,500	7,880	4,350	2,920	8,780	4,640	2,270	1,860	1,590

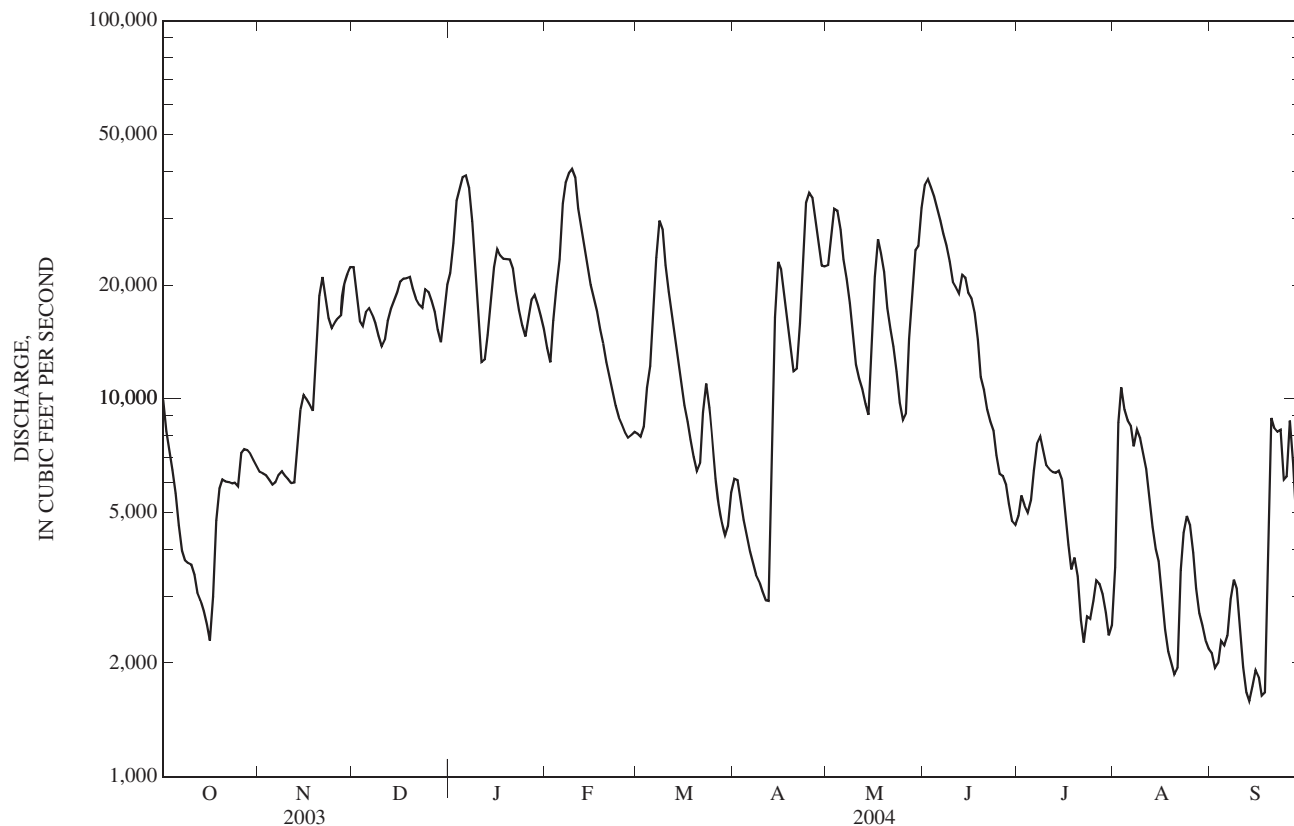
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	5,613	10,330	16,460	18,360	21,750	19,720	15,470	13,500	9,065	4,548	2,888	4,234
MAX	19,100	22,770	46,530	41,100	52,100	53,330	42,430	50,460	23,850	12,260	8,763	27,360
(WY)	(1980)	(1980)	(1979)	(1974)	(1989)	(1997)	(1979)	(1983)	(1981)	(1989)	(1971)	(1979)
MIN	1,875	2,737	2,496	1,223	7,116	7,479	2,260	1,706	541	1,235	362	354
(WY)	(2000)	(2000)	(1981)	(1981)	(1977)	(1981)	(1986)	(1988)	(1988)	(2000)	(1999)	(1999)

03320000 GREEN RIVER AT LOCK 2, AT CALHOUN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	5,041,390		4,630,610		11,780	
ANNUAL MEAN	13,810		12,650		22,070	
HIGHEST ANNUAL MEAN					5,345	
LOWEST ANNUAL MEAN					85,200	
HIGHEST DAILY MEAN	47,900	Feb 24	40,400	Feb 9	208,000	Mar 7, 1997
LOWEST DAILY MEAN	1,800	Aug 22	1,590	Sep 13	186	Sep 6, 1999
ANNUAL SEVEN-DAY MINIMUM	2,280	Aug 17	1,720	Sep 12	208,000	Sep 5, 1999
MAXIMUM PEAK FLOW			40,700	Feb 9	208,000	Jan 27, 1937
MAXIMUM PEAK STAGE			23.98	Jun 4	42.40	Jan 30, 1937
INSTANTANEOUS LOW FLOW			1,530	Sep 13	107	Sep 14, 1999
10 PERCENT EXCEEDS	28,100		25,100		29,600	
50 PERCENT EXCEEDS	10,800		9,370		7,190	
90 PERCENT EXCEEDS	3,670		2,930		1,420	

e Estimated



03320500 POND RIVER NEAR APEX, KY

LOCATION.--Lat 37°07'20", long 87°19'10", Muhlenberg County, Hydrologic Unit 05110006, on downstream side of bridge near right bank 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-97: 1989-96(P).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 384.53 ft above NGVD of 1929. Prior to Aug. 21, 1942, nonrecording gage at same site. Prior to Oct. 1, 1974, at datum 6.11 ft higher.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	40	238	304	136	68	107	1,260	e1,400	100	143	10
2	8.9	35	160	853	183	113	100	1,730	e920	135	75	8.8
3	7.1	32	128	e1,080	735	181	90	e1,470	e605	108	44	8.2
4	6.9	31	120	e850	744	626	82	e1,060	e370	91	83	7.4
5	6.7	30	128	1,060	1,150	599	75	e770	198	141	653	7.3
6	6.7	29	128	e786	2,110	718	70	e570	129	321	621	6.9
7	6.8	30	118	e575	e1,470	580	66	e420	97	604	246	6.4
8	7.0	31	106	e420	e1,040	357	63	e286	77	463	111	5.7
9	7.4	30	96	277	e748	259	60	189	67	228	64	5.2
10	8.7	29	106	219	e576	201	55	144	84	133	43	4.9
11	9.4	28	144	180	360	166	54	116	65	95	33	4.6
12	9.9	35	143	158	264	139	63	100	63	119	29	4.5
13	9.6	69	120	141	223	123	475	109	147	95	24	4.4
14	10	68	127	127	196	114	e1,500	143	139	106	20	4.0
15	12	67	185	120	174	107	e1,260	1,850	111	99	16	3.7
16	12	127	230	108	149	119	e834	1,980	219	60	17	3.6
17	14	129	311	100	136	137	e590	1,320	235	42	13	3.6
18	15	181	270	163	140	173	356	e900	177	34	11	3.3
19	16	586	222	301	129	197	223	e655	128	29	12	3.2
20	16	450	194	231	116	173	171	e460	94	25	12	3.0
21	16	231	159	168	101	252	175	e295	70	21	12	2.7
22	16	148	135	141	89	254	597	158	58	27	26	2.4
23	15	114	436	123	83	194	1,680	107	96	71	23	2.1
24	15	338	1,060	113	80	158	2,160	80	83	56	20	1.9
25	16	471	e770	175	77	136	e1,740	66	70	40	30	1.8
26	53	262	e495	671	73	136	e1,300	134	112	30	24	1.7
27	171	423	267	671	68	112	e910	e755	83	24	21	1.4
28	124	e868	190	484	65	103	e690	e454	53	20	18	1.3
29	86	e690	191	290	63	98	454	207	40	17	15	1.1
30	62	443	588	213	---	103	1,050	368	34	27	13	0.85
31	47	---	509	165	---	105	---	1,800	---	112	12	---
TOTAL	822.1	6,045	8,074	11,267	11,478	6,801	17,050	19,956	6,024	3,473	2,484	125.95
MEAN	26.5	202	260	363	396	219	568	644	201	112	80.1	4.20
MAX	171	868	1,060	1,080	2,110	718	2,160	1,980	1,400	604	653	10
MIN	6.7	28	96	100	63	68	54	66	34	17	11	0.85
CFSM	0.14	1.04	1.34	1.87	2.04	1.13	2.93	3.32	1.04	0.58	0.41	0.02
IN.	0.16	1.16	1.55	2.16	2.20	1.30	3.27	3.83	1.16	0.67	0.48	0.02

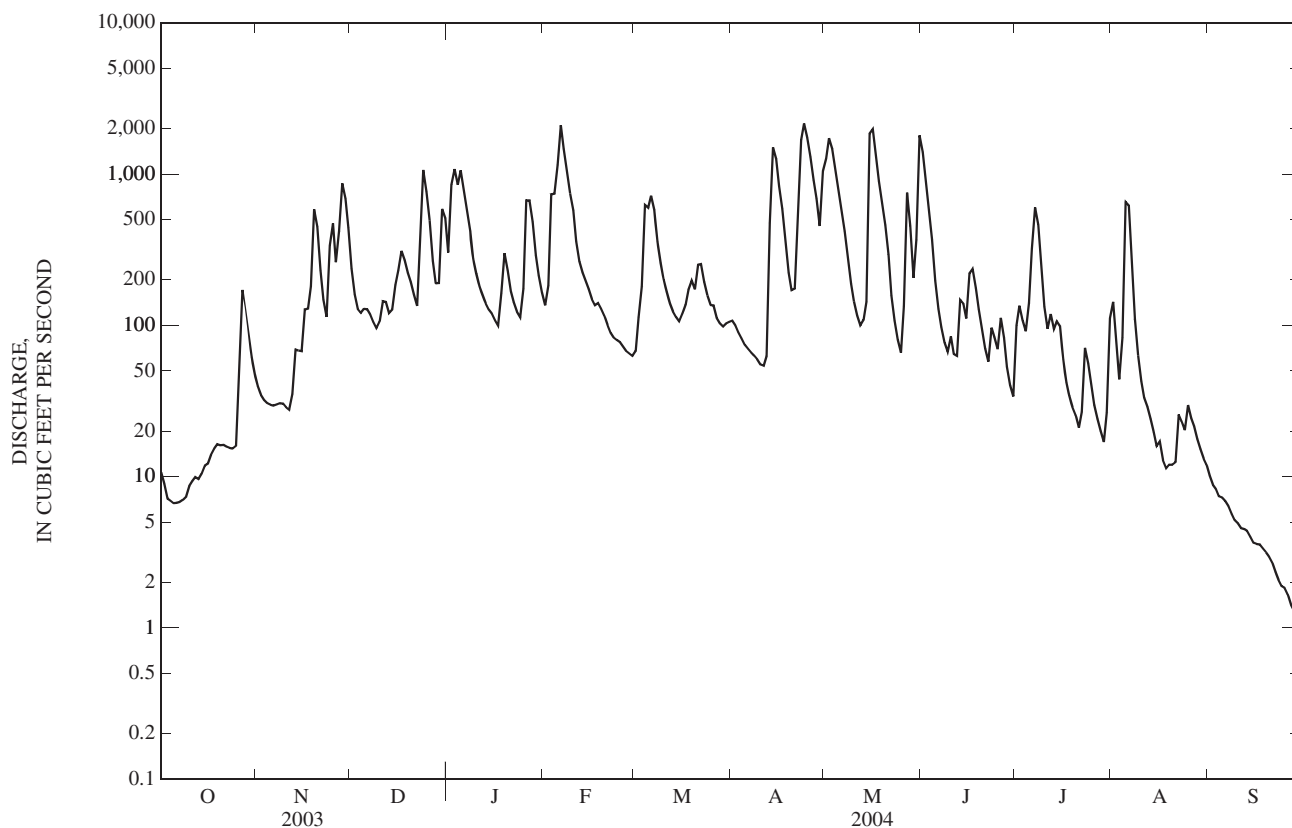
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

MEAN	30.4	173	403	448	612	596	438	334	121	58.9	31.7	61.7
MAX	485	1,430	2,167	2,024	3,988	2,519	1,822	2,607	900	440	239	988
(WY)	(2003)	(1958)	(1979)	(1950)	(1989)	(1997)	(1979)	(1984)	(1969)	(1989)	(1984)	(1979)
MIN	0.00	0.00	0.00	3.56	42.6	35.2	39.2	6.46	1.37	0.44	0.19	0.00
(WY)	(1954)	(1954)	(1964)	(1981)	(1941)	(1941)	(1986)	(1941)	(1964)	(1964)	(1993)	(1953)

03320500 POND RIVER NEAR APEX, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941 - 2004	
ANNUAL TOTAL	119,891.60		93,600.05		274	
ANNUAL MEAN	328		256		643	
HIGHEST ANNUAL MEAN					59.8	
LOWEST ANNUAL MEAN					28,400	
HIGHEST DAILY MEAN	3,260	May 7	2,160	Apr 24	35,700	Feb 15, 1989
LOWEST DAILY MEAN	0.38	Jul 20	0.85	Sep 30	0.00	Oct 21, 1940
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 14	1.4	Sep 24	0.00	Oct 21, 1940
MAXIMUM PEAK FLOW			2,420	May 15	26.81	May 7, 1984
MAXIMUM PEAK STAGE			16.21	May 15	1.41	Nov 19, 1957
ANNUAL RUNOFF (CFSM)	1.69		1.32		19.19	
ANNUAL RUNOFF (INCHES)	22.99		17.95		733	
10 PERCENT EXCEEDS	928		738		49	
50 PERCENT EXCEEDS	129		114		8.8	
90 PERCENT EXCEEDS	9.6		8.8		0.80	

e Estimated



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 current year, gage height only.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 361.80 ft above NGVD of 1929.

REMARKS.--Records good.

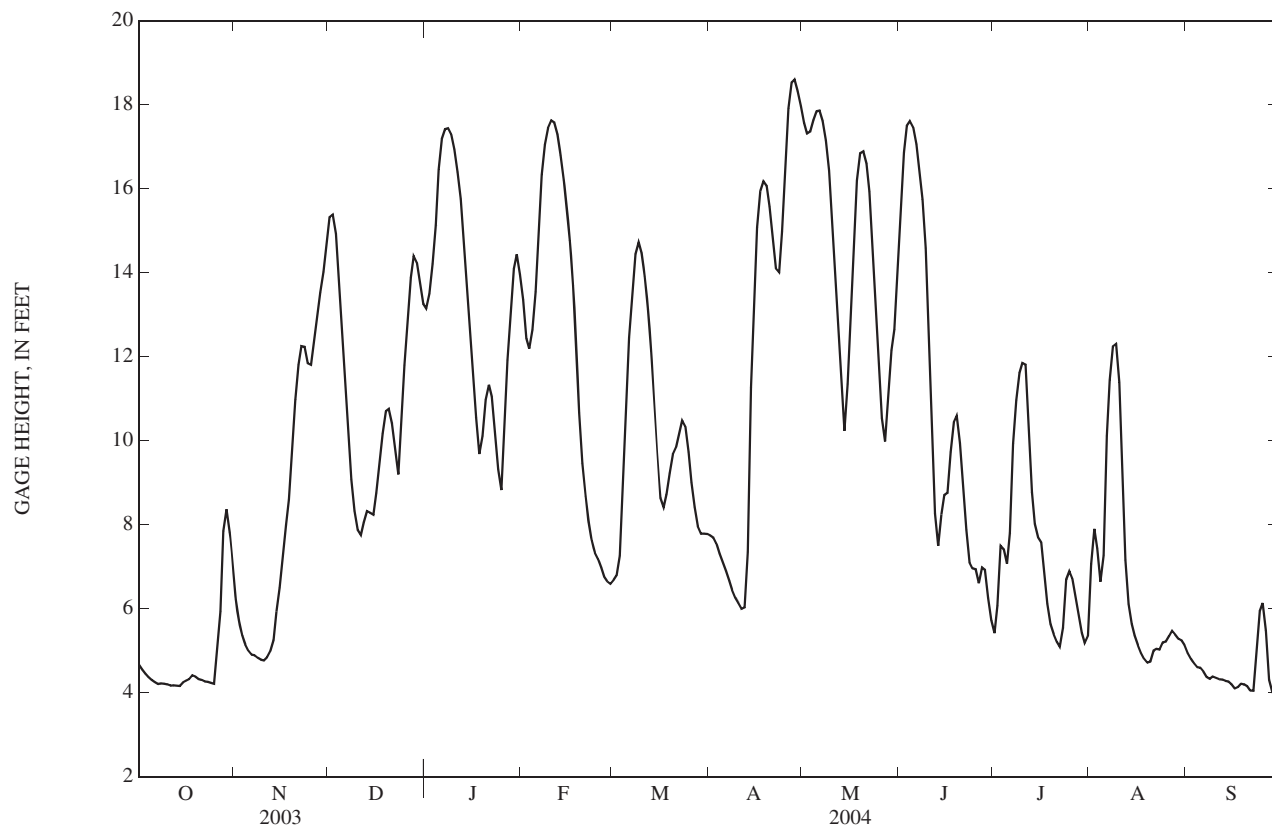
COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.67	6.22	15.32	13.15	13.35	6.68	7.74	17.56	15.23	5.42	7.06	4.95
2	4.55	5.72	15.38	13.50	12.44	6.79	7.69	17.31	16.86	6.08	7.90	4.81
3	4.45	5.36	14.92	14.21	12.19	e7.26	7.55	17.36	17.49	7.50	7.44	4.70
4	4.37	5.14	14.14	15.13	12.64	e9.36	7.31	17.63	17.61	7.41	6.65	4.61
5	4.31	4.99	13.09	16.45	13.55	e11.00	7.10	17.84	17.46	7.07	7.27	4.59
6	4.26	4.91	11.75	17.18	15.12	12.45	6.90	17.86	17.05	7.80	10.11	4.50
7	4.21	4.89	10.29	17.42	16.32	13.54	6.67	17.61	16.48	9.93	11.45	4.38
8	4.23	4.83	9.08	17.44	17.05	14.43	6.45	17.15	15.75	10.97	12.25	4.33
9	4.22	4.78	8.33	17.30	17.45	14.72	6.26	16.43	14.58	11.61	12.30	4.39
10	4.20	4.77	7.88	16.94	17.62	14.47	6.13	15.46	12.86	11.85	11.39	4.36
11	4.17	4.85	7.76	16.40	17.57	13.91	6.00	14.38	10.59	11.81	9.30	4.33
12	4.18	4.99	8.05	15.76	17.29	13.13	6.03	13.05	8.27	10.33	7.16	4.32
13	4.17	5.25	8.32	15.00	16.79	12.13	7.35	11.65	7.50	8.78	6.11	4.28
14	4.16	5.93	8.28	14.11	16.20	10.96	11.26	10.23	8.24	8.02	5.63	4.27
15	4.25	6.50	8.24	13.11	15.55	9.66	13.20	11.35	8.70	7.71	5.36	4.20
16	4.28	7.19	8.75	11.94	14.76	8.63	15.08	12.90	8.76	7.58	5.14	4.10
17	4.32	7.99	9.47	10.55	13.69	8.41	15.94	14.55	9.73	6.85	4.94	4.13
18	4.41	8.61	10.17	9.68	12.28	8.72	16.17	16.19	10.44	6.12	4.80	4.21
19	4.39	9.63	10.70	10.11	10.66	9.23	16.07	16.84	10.59	5.63	4.72	4.20
20	4.33	10.97	10.75	10.98	9.46	9.68	15.57	16.89	9.95	5.39	4.74	4.15
21	4.31	11.81	10.41	11.33	8.68	9.84	14.83	16.59	8.88	5.22	5.00	4.05
22	4.27	12.25	9.79	11.05	8.06	10.16	14.10	15.93	7.88	5.10	5.05	4.05
23	4.26	12.24	9.20	10.26	7.62	10.49	14.00	14.98	7.11	5.55	5.03	4.94
24	4.24	11.84	10.29	9.32	7.34	10.34	14.97	13.83	6.97	6.70	5.20	5.95
25	4.22	11.80	11.79	8.82	7.19	9.73	16.63	12.39	6.95	6.90	5.22	6.13
26	5.01	12.35	12.88	10.17	6.98	9.01	17.91	10.53	6.61	6.73	5.35	5.48
27	5.94	12.91	13.88	11.92	6.77	8.42	18.52	9.98	6.98	6.31	5.47	4.31
28	7.85	13.53	14.40	13.10	6.65	7.96	18.59	11.18	6.93	5.84	5.38	4.02
29	8.37	14.02	14.24	14.10	6.59	7.79	18.31	12.15	6.26	5.42	5.28	3.94
30	7.82	14.67	13.76	14.43	---	7.79	17.96	12.65	5.72	5.18	5.24	3.92
31	6.96	---	13.26	13.96	---	7.78	---	13.99	---	5.35	5.14	---
MEAN	4.82	8.36	11.12	13.38	12.34	10.14	11.94	14.66	10.81	7.36	6.74	4.49
MAX	8.37	14.67	15.38	17.44	17.62	14.72	18.59	17.86	17.61	11.85	12.30	6.13
MIN	4.16	4.77	7.76	8.82	6.59	6.68	6.00	9.98	5.72	5.10	4.72	3.92

e Estimated

03321060 POND RIVER NEAR MADISONVILLE, KY—Continued



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 TEMPERATURES.--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 daily recorded, 805 microsiemens, Feb. 15, 1977; minimum daily recorded, 200 microsiemens, Mar. 3, 1979.

WATER TEMPERATURES.--Maximum daily recorded, 32.0°C, June 28, 1978, July 14-18, 1980; minimum daily recorded, freezing point on many days during the winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)
NOV												
04...	1230	Environmental	14,400	22	0.097	0.073	--	--	8.4	623	16.5	290
04...	1240	Replicate	--	22	.101	.076	--	--	--	--	--	290
DEC												
02...	1220	Environmental	53,700	29	.136	.103	11.2	89	7.9	467	7.0	240
02...	1228	Field Blank	--	--	--	--	--	--	--	--	--	--
02...	1230	Replicate	--	--	--	--	--	--	--	--	--	--
JAN												
09...	1100	Environmental	120,000	200	.159	.124	--	--	7.5	290	2.0	130
20...	1340	Environmental	62,200	82	.121	.092	12.1	88	7.8	464	2.5	210
FEB												
03...	1320	Environmental	22,700	12	.059	.043	13.8	96	8.0	599	1.5	290
MAR												
09...	1240	Environmental	58,200	140	.131	.099	11.6	102	7.8	448	10.0	190
23...	1340	Environmental	22,900	22	.073	.054	13.7	118	8.4	607	9.5	300
23...	1348	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
APR												
19...	1230	Environmental	20,900	28	.061	.045	12.4	129	8.2	539	18.0	240
26...	1220	Environmental	17,200	20	.073	.054	11.6	123	8.3	597	18.5	280
MAY												
18...	1200	Environmental	18,100	65	.097	.073	9.7	110	8.2	563	22.0	260
18...	1210	Replicate	--	59	.097	.073	--	--	--	--	--	260
25...	1210	Environmental	25,000	100	.096	.071	7.3	88	8.0	562	25.0	270
25...	1218	Field Blank	--	--	--	--	--	--	--	--	--	--
JUN												
02...	1420	Environmental	71,100	180	.180	.137	5.8	69	7.5	366	22.5	150
22...	1330	Environmental	73,800	51	.171	.129	6.2	75	7.7	366	25.5	170
22...	1340	Replicate	--	48	.171	.128	--	--	--	--	--	160
JUL												
20...	1200	Environmental	25,400	83	.115	.085	8.1	101	8.0	477	27.0	230
AUG												
24...	1210	Environmental	10,500	19	.084	.063	11.8	145	8.3	556	26.5	230
31...	1300	Environmental	18,200	65	.171	.130	6.2	74	7.7	510	25.5	230
31...	1308	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

03378500 WABASH RIVER AT NEW HARMONY, IN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitro- gen, susp, water, mg/L (49570)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)
NOV													
04...	<0.04	2.00	E0.004	0.47	0.047	0.063	0.16	3.4	<0.1	3.4	3.5	35.2	36.0
04...	<.04	2.01	E.005	.49	.048	.064	.16	3.4	<.1	3.3	3.5	34.7	45.0
DEC													
02...	<.04	3.52	.011	.29	.079	.099	.24	2.8	<.1	2.7	4.3	5.0	3.1
02...	<.010	<.016	<.002	--	<.006	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	<.04	1.97	.024	.45	.080	.097	.38	4.0	<.1	3.9	6.6	3.4	1.6
20...	.07	2.98	.011	.42	.108	.123	.30	3.8	<.1	3.8	4.4	2.0	2.6
FEB													
03...	E.03	3.02	.010	.12	.058	.066	.12	1.3	<.1	1.3	2.3	1.2	2.2
MAR													
09...	<.04	3.50	.017	.22	.081	.101	.36	2.1	<.1	2.1	4.6	3.4	3.6
23...	<.04	3.18	E.006	.27	.025	.036	.14	1.7	<.1	1.7	3.0	11.7	19.6
23...	--	--	--	<.02	--	--	--	<.1	<.1	<.01	0.3	--	--
APR													
19...	<.04	1.88	.009	1.05	<.006	.013	.16	11.4	1.2	10.2	2.8	53.7	92.7
26...	<.04	1.70	.009	.77	<.006	.012	.11	5.9	<.1	5.8	3.1	48.0	55.2
MAY													
18...	E.02	2.30	.027	.89	.010	.025	.20	6.6	.2	6.4	3.6	58.8	60.0
18...	E.02	2.29	.022	.80	.011	.024	.19	6.2	.9	5.3	5.2	53.7	53.3
25...	<.04	4.72	.043	.74	.058	.080	.30	8.0	1.9	6.1	3.3	32.8	27.0
25...	<.010	<.016	E.001	--	<.006	--	--	--	--	--	--	--	--
JUN													
02...	<.04	3.58	.077	.68	.084	.105	.39	6.0	<.1	5.9	6.1	6.6	7.6
22...	<.04	3.78	.071	.41	.100	.117	.22	3.3	<.1	3.3	5.2	13.8	19.1
22...	<.04	3.78	.069	.44	.099	.117	.24	3.6	<.1	3.5	5.2	13.9	19.1
JUL													
20...	<.04	1.69	E.007	.68	.060	.075	.24	5.6	.3	5.3	3.4	36.4	36.6
AUG													
24...	--	--	--	1.35	--	--	.17	9.5	.6	8.8	3.2	75.3	123
31...	--	--	--	.76	--	--	.26	6.7	.2	6.5	4.9	30.1	42.1
31...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	.9	--	--

[illegible]

03378500 WABASH RIVER AT NEW HARMONY, IN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

03378500 WABASH RIVER AT NEW HARMONY, IN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
NOV						
04...	<0.010	<0.002	<0.009	--	97	45
04...	<.010	<.002	<.009	--	96	44
DEC						
02...	<.010	<.002	<.009	--	83	115
02...	--	--	--	<0.04	--	--
02...	--	--	--	--	83	120
JAN						
09...	<.010	<.002	<.009	--	74	222
20...	<.010	<.002	<.009	.89	85	141
FEB						
03...	<.010	<.002	<.009	1.05	91	30
MAR						
09...	<.010	<.002	<.009	.92	93	260
23...	<.010	<.002	<.009	1.34	97	51
23...	--	--	--	--	--	--
APR						
19...	<.010	<.002	<.009	1.12	98	96
26...	<.010	<.002	<.009	--	98	74
MAY						
18...	<.010	<.002	<.009	.91	96	106
18...	<.010	<.002	<.009	.91	97	105
25...	<.010	<.002	<.009	.91	98	204
25...	--	--	--	<.04	--	--
JUN						
02...	<.010	<.002	<.009	--	66	402
22...	<.010	<.002	<.009	.56	82	117
22...	<.010	<.002	<.009	.55	84	112
JUL						
20...	<.010	<.002	<.009	.87	98	154
AUG						
24...	<.010	<.002	<.009	.98	97	52
31...	<.010	<.002	<.009	.90	99	140
31...	--	--	--	--	--	--

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

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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 with telemetry. Datum of gage is 362.80 ft above NGVD of 1929. Prior to July 31, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	42	361	305	222	82	187	1,370	1,940	36	85	22
2	6.8	35	202	656	216	109	180	1,440	e1,550	30	97	16
3	6.0	27	159	1,440	584	130	160	e1,320	e1,300	25	57	13
4	5.6	21	141	e1,300	962	365	138	e1,000	e640	23	37	12
5	5.2	20	145	1,570	999	721	120	817	228	e30	38	10
6	4.4	19	150	e1,380	1,660	1,200	108	472	149	e95	114	8.9
7	4.2	19	148	e1,000	1,840	1,150	100	276	120	e200	66	7.2
8	4.3	16	135	647	e1,580	720	93	198	100	405	40	5.6
9	3.8	20	122	375	e1,200	414	87	162	89	211	27	4.6
10	3.8	19	119	293	e800	280	79	132	94	121	19	4.1
11	6.1	15	132	232	446	217	73	111	118	82	14	4.2
12	19	20	134	201	302	183	84	97	132	63	11	3.8
13	18	38	126	179	263	158	308	89	579	75	8.4	3.9
14	15	86	118	159	236	145	1,080	93	450	62	6.8	4.8
15	12	91	123	144	213	133	1,340	278	238	45	5.4	7.4
16	12	101	134	132	189	137	1,300	1,060	387	34	4.4	17
17	16	121	159	123	169	160	669	1,120	850	30	3.8	20
18	16	130	182	188	153	176	318	591	626	29	3.1	10
19	14	210	175	378	141	193	213	254	340	26	3.4	4.3
20	15	391	155	359	143	194	175	177	216	27	7.4	3.1
21	21	230	140	252	133	638	149	139	153	27	8.8	3.0
22	19	142	126	204	120	e600	147	114	118	26	10	3.1
23	15	108	153	176	111	e460	823	102	95	37	9.7	3.2
24	12	221	571	156	104	299	1,470	81	80	23	79	3.2
25	16	469	895	194	99	229	1,690	65	69	16	137	3.1
26	37	414	542	963	93	192	1,920	58	62	13	200	2.7
27	99	333	275	1,300	88	168	e1,700	517	62	11	178	2.5
28	104	917	200	1,130	82	150	e1,400	412	48	10	113	2.4
29	98	1,160	177	702	77	141	1,200	231	39	11	65	2.2
30	71	818	245	443	---	153	970	169	31	14	43	2.1
31	52	---	364	299	---	174	---	1,230	---	52	31	---
TOTAL	739.4	6,253	6,808	16,880	13,225	10,071	18,281	14,175	10,903	1,889	1,522.2	209.4
MEAN	23.9	208	220	545	456	325	609	457	363	60.9	49.1	6.98
MAX	104	1,160	895	1,570	1,840	1,200	1,920	1,440	1,940	405	200	22
MIN	3.8	15	118	123	77	82	73	58	31	10	3.1	2.1
CFSM	0.10	0.85	0.89	2.21	1.85	1.32	2.48	1.86	1.48	0.25	0.20	0.03
IN.	0.11	0.95	1.03	2.55	2.00	1.52	2.76	2.14	1.65	0.29	0.23	0.03

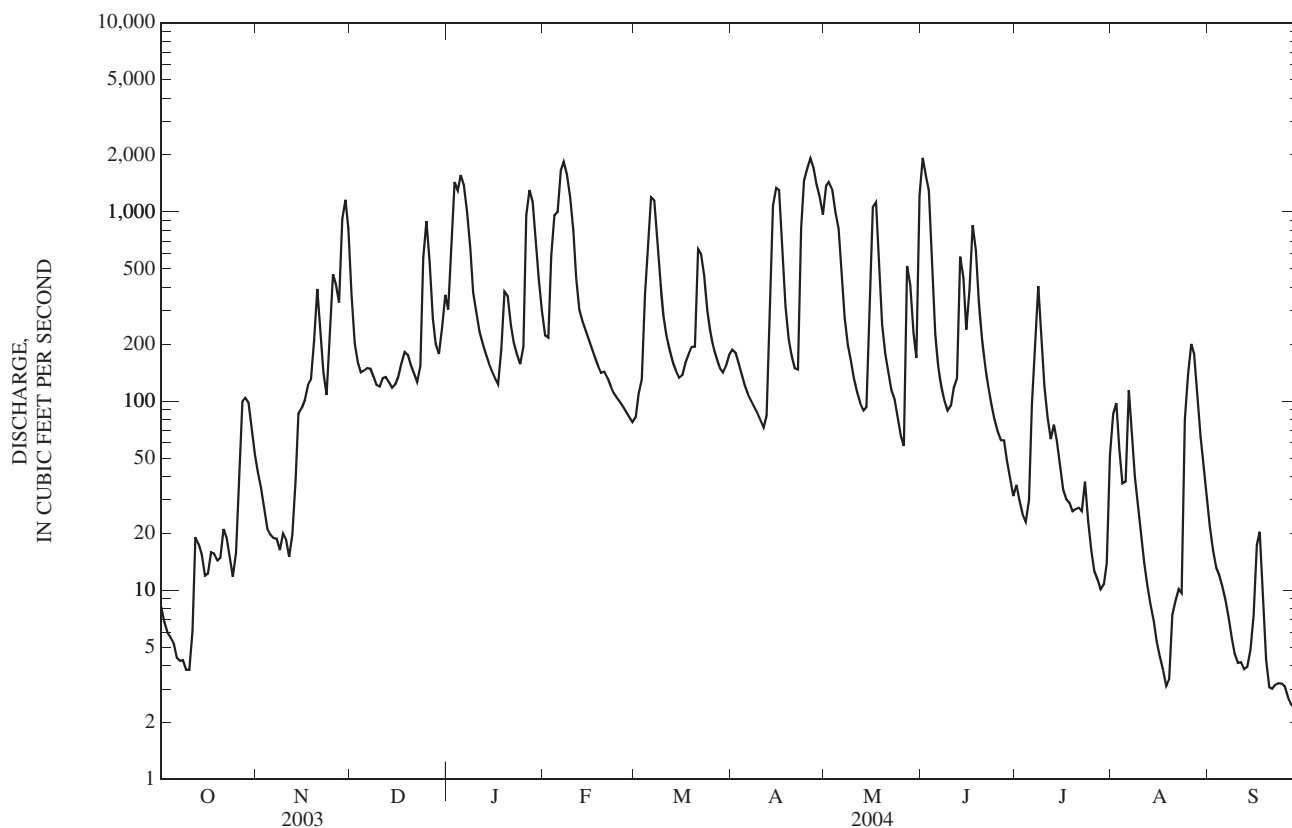
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

MEAN	36.5	203	458	556	727	754	591	402	155	86.7	35.1	48.2
MAX	324	2,178	1,963	2,268	3,529	2,360	1,851	1,878	949	946	275	798
(WY)	(1997)	(1958)	(1979)	(1950)	(1989)	(1997)	(1979)	(1983)	(1969)	(1989)	(1985)	(1950)
MIN	0.00	0.00	0.96	4.85	19.2	61.9	53.7	7.09	1.18	0.00	0.00	0.00
(WY)	(1941)	(1954)	(1964)	(1964)	(1964)	(1941)	(1986)	(1941)	(1944)	(1952)	(1952)	(1953)

03383000 TRADEWATER RIVER AT OLNEY, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941 - 2004	
ANNUAL TOTAL	129,819.3		100,956.0		332	
ANNUAL MEAN	356		276		701	
HIGHEST ANNUAL MEAN					61.6	
LOWEST ANNUAL MEAN					14,000	
HIGHEST DAILY MEAN	2,510	Feb 23	1,940	Jun 1	14,000	Feb 16, 1989
LOWEST DAILY MEAN	3.8	Oct 9	2.1	Sep 30	0.00	Oct 1, 1940
ANNUAL SEVEN-DAY MINIMUM	4.5	Oct 4	2.6	Sep 24	0.00	Oct 1, 1940
MAXIMUM PEAK FLOW			1,970	Jun 1	14,600	Feb 16, 1989
MAXIMUM PEAK STAGE			12.53	Jun 1	18.85	Feb 16, 1989
ANNUAL RUNOFF (CFSM)	1.45		1.12		1.35	
ANNUAL RUNOFF (INCHES)	19.63		15.27		18.34	
10 PERCENT EXCEEDS	1,300		962		1,120	
50 PERCENT EXCEEDS	118		128		61	
90 PERCENT EXCEEDS	9.5		7.3		1.1	

e Estimated



03399800 OHIO RIVER AT SMITHLAND DAM, SMITHLAND, KY

LOCATION.--Lat 37°09'30", long 88°25'34", Livingston County, Hydrologic Unit 05140203, at 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, and water-stage recorders with telemetry. Datum of headwater gage is 311.22 ft above NGVD of 1929. Datum of tailwater gage 0.8 mi downstream is 289.28 ft above NGVD of 1929.

REMARKS.--Records good. 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.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

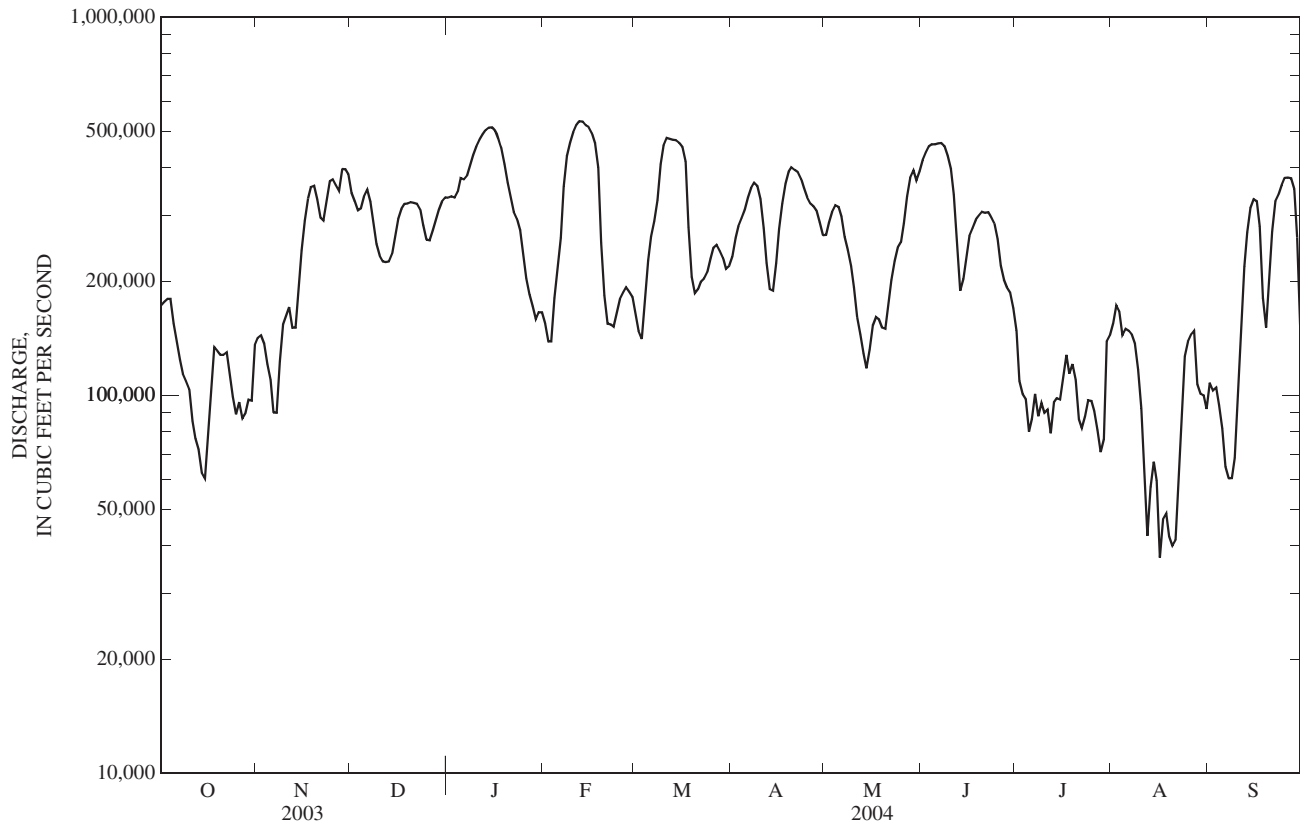
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173,000	142,000	343,000	333,000	155,000	164,000	233,000	266,000	419,000	148,000	155,000	108,000
2	177,000	144,000	326,000	336,000	139,000	148,000	260,000	286,000	439,000	109,000	173,000	103,000
3	180,000	137,000	308,000	333,000	139,000	141,000	280,000	306,000	455,000	101,000	167,000	105,000
4	180,000	121,000	312,000	346,000	181,000	175,000	294,000	318,000	461,000	97,900	144,000	94,200
5	155,000	110,000	336,000	375,000	216,000	228,000	310,000	315,000	461,000	80,200	150,000	81,700
6	139,000	90,100	350,000	372,000	261,000	263,000	334,000	297,000	464,000	86,500	148,000	64,700
7	124,000	89,900	325,000	381,000	357,000	289,000	354,000	262,000	465,000	101,000	145,000	60,300
8	114,000	123,000	286,000	407,000	429,000	328,000	365,000	242,000	456,000	88,000	137,000	60,400
9	109,000	154,000	251,000	432,000	466,000	409,000	358,000	220,000	430,000	95,400	117,000	68,300
10	104,000	162,000	234,000	455,000	497,000	458,000	330,000	193,000	397,000	89,900	92,400	110,000
11	85,500	171,000	226,000	474,000	518,000	480,000	277,000	161,000	340,000	91,800	66,800	157,000
12	76,900	151,000	225,000	490,000	531,000	477,000	224,000	145,000	262,000	79,400	42,500	219,000
13	71,900	151,000	226,000	503,000	530,000	474,000	191,000	129,000	189,000	95,800	57,200	270,000
14	62,500	192,000	237,000	510,000	518,000	473,000	189,000	118,000	203,000	98,200	66,700	313,000
15	60,300	242,000	264,000	511,000	512,000	466,000	224,000	132,000	232,000	97,500	59,500	330,000
16	77,400	290,000	293,000	501,000	494,000	454,000	275,000	153,000	264,000	112,000	37,200	326,000
17	104,000	331,000	311,000	479,000	464,000	415,000	322,000	161,000	277,000	128,000	47,000	280,000
18	134,000	355,000	321,000	451,000	400,000	278,000	362,000	159,000	291,000	114,000	48,700	181,000
19	131,000	358,000	322,000	409,000	253,000	206,000	390,000	151,000	299,000	121,000	42,300	151,000
20	128,000	329,000	324,000	365,000	184,000	186,000	401,000	150,000	306,000	110,000	40,000	203,000
21	128,000	295,000	323,000	332,000	155,000	191,000	395,000	177,000	304,000	86,400	41,400	272,000
22	130,000	290,000	321,000	306,000	154,000	200,000	389,000	202,000	305,000	81,900	62,000	326,000
23	113,000	326,000	310,000	293,000	152,000	204,000	374,000	226,000	295,000	87,800	92,200	340,000
24	99,100	368,000	282,000	273,000	166,000	212,000	353,000	246,000	285,000	97,000	127,000	360,000
25	89,100	372,000	258,000	236,000	180,000	230,000	334,000	254,000	259,000	96,700	139,000	376,000
26	95,900	360,000	257,000	204,000	187,000	246,000	322,000	285,000	220,000	90,900	145,000	377,000
27	86,800	348,000	273,000	185,000	193,000	250,000	316,000	336,000	202,000	80,900	148,000	375,000
28	89,500	397,000	290,000	172,000	188,000	241,000	308,000	377,000	193,000	70,800	107,000	351,000
29	97,500	396,000	310,000	159,000	182,000	231,000	287,000	393,000	187,000	76,500	101,000	261,000
30	96,900	385,000	326,000	166,000	---	216,000	265,000	370,000	170,000	139,000	100,000	146,000
31	136,000	---	334,000	166,000	---	220,000	---	391,000	---	144,000	92,100	---
TOTAL	3,548,300	7,380,000	9,104,000	10,955,000	8,801,000	8,953,000	9,316,000	7,421,000	9,530,000	3,096,500	3,091,000	6,469,600
MEAN	114,500	246,000	293,700	353,400	303,500	288,800	310,500	239,400	317,700	99,890	99,710	215,700
MAX	180,000	397,000	350,000	511,000	531,000	480,000	401,000	393,000	465,000	148,000	173,000	377,000
MIN	60,300	89,900	225,000	159,000	139,000	141,000	189,000	118,000	170,000	70,800	37,200	60,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	64,780	116,400	188,300	218,900	311,900	348,500	289,600	306,600	216,800	98,540	75,560	67,750
MAX	114,500	246,000	379,200	353,400	536,200	700,900	594,100	562,200	376,000	203,600	132,400	215,700
(WY)	(2004)	(2004)	(1997)	(2004)	(1994)	(1997)	(1994)	(1996)	(1997)	(1998)	(2003)	(2004)
MIN	24,530	34,800	59,450	89,880	213,000	216,300	150,000	112,600	60,070	43,110	19,190	12,490
(WY)	(2000)	(1999)	(1999)	(2001)	(1995)	(2000)	(1995)	(2000)	(1999)	(1999)	(1999)	(1999)

03399800 OHIO RIVER AT SMITHLAND DAM, SMITHLAND, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	87,456,100		87,665,400		191,300	
ANNUAL MEAN	239,600		239,500		120,900	
HIGHEST ANNUAL MEAN					247,000	
LOWEST ANNUAL MEAN					120,900	
HIGHEST DAILY MEAN	627,000	Feb 28	531,000	Feb 12	831,000	Mar 12, 1997
LOWEST DAILY MEAN	46,100	Jan 30	37,200	Aug 16	3,090	Aug 5, 1999
ANNUAL SEVEN-DAY MINIMUM	58,300	Jan 25	45,200	Aug 15	10,200	Sep 1, 1999
MAXIMUM PEAK FLOW			533,000		832,000	
MAXIMUM PEAK STAGE			39.61		51.44	
10 PERCENT EXCEEDS	476,000		416,000		443,000	
50 PERCENT EXCEEDS	199,000		226,000		141,000	
90 PERCENT EXCEEDS	88,500		89,800		31,700	



03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current water year.

pH: October 1979 to current year.

WATER TEMPERATURE: October 1979 to currentwater year.

DISSOLVED OXYGEN: October 1979 to current water 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 and a maximum, minimum, and mean value for temperature, specific conductance, and dissolved oxygen are determined for each level. The monitor was shut down Nov. 10 to Mar. 30.

SPECIFIC CONDUCTANCE: records rated good

ph: records rated good.

WATER TEMPERATURE: records rated excellent.

DISSOLVED OXYGEN: records rated good.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	167	165	166	143	137	140	---	---	---	---	---	---
2	---	---	---	142	138	140	---	---	---	---	---	---
3	---	---	---	142	139	140	---	---	---	---	---	---
4	---	---	---	142	138	140	---	---	---	---	---	---
5	---	---	---	142	138	140	---	---	---	---	---	---
6	---	---	---	144	141	142	---	---	---	---	---	---
7	---	---	---	144	143	143	---	---	---	---	---	---
8	---	---	---	145	143	144	---	---	---	---	---	---
9	---	---	---	155	146	150	---	---	---	---	---	---
10	---	---	---	153	149	151	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	148	145	146	---	---	---	---	---	---	---	---	---
26	147	146	147	---	---	---	---	---	---	---	---	---
27	146	145	145	---	---	---	---	---	---	---	---	---
28	145	144	144	---	---	---	---	---	---	---	---	---
29	152	142	150	---	---	---	---	---	---	---	---	---
30	147	137	140	---	---	---	---	---	---	---	---	---
31	143	136	137	---	---	---	---	---	---	---	---	---
MONTH	167	136	147	155	137	143	---	---	---	---	---	---

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	105	104	105	116	115	115
2	---	---	---	---	---	---	112	105	108	117	115	116
3	---	---	---	---	---	---	117	108	112	116	111	114
4	---	---	---	---	---	---	116	107	111	113	109	111
5	---	---	---	---	---	---	111	107	109	113	109	111
6	---	---	---	---	---	---	114	108	111	112	108	111
7	---	---	---	---	---	---	129	115	121	110	108	109
8	---	---	---	---	---	---	127	122	124	111	105	107
9	---	---	---	---	---	---	126	124	123	106	104	105
10	---	---	---	---	---	---	122	119	120	106	102	103
11	---	---	---	---	---	---	119	117	118	106	103	104
12	---	---	---	---	---	---	117	115	116	103	102	103
13	---	---	---	---	---	---	116	115	115	104	103	103
14	---	---	---	---	---	---	115	114	115	107	105	106
15	---	---	---	---	---	---	124	106	114	109	107	108
16	---	---	---	---	---	---	116	104	109	112	109	110
17	---	---	---	---	---	---	111	106	108	114	112	113
18	---	---	---	---	---	---	109	106	108	115	114	114
19	---	---	---	---	---	---	111	112	112	116	115	116
20	---	---	---	---	---	---	112	111	112	117	116	117
21	---	---	---	---	---	---	111	110	111	119	117	118
22	---	---	---	---	---	---	112	110	111	119	118	119
23	---	---	---	---	---	---	112	110	111	120	119	120
24	---	---	---	---	---	---	112	111	111	121	120	121
25	---	---	---	---	---	---	112	111	112	123	120	122
26	---	---	---	---	---	---	113	113	113	126	124	124
27	---	---	---	---	---	---	114	113	114	126	125	125
28	---	---	---	---	---	---	114	113	114	126	125	126
29	---	---	---	---	---	---	114	114	114	126	125	126
30	---	---	---	104	102	103	115	114	114	127	126	126
31	---	---	---	105	103	104	---	---	---	127	124	126
MONTH	---	---	---	105	102	104	129	104	113	127	102	114
JUNE			JULY			AUGUST			SEPTEMBER			
1	119	102	109	138	137	138	168	166	167	183	178	180
2	114	109	112	138	136	137	169	167	168	183	177	179
3	110	106	107	139	136	137	171	166	168	182	177	179
4	112	106	108	140	139	140	170	168	169	184	177	180
5	113	108	111	142	139	140	170	168	169	180	176	179
6	114	112	113	143	141	142	170	168	168	181	174	177
7	112	108	109	145	143	144	170	168	169	185	176	178
8	109	107	108	147	145	146	169	168	168	181	177	179
9	111	109	110	149	147	148	171	168	169	181	176	178
10	114	111	112	151	149	150	171	167	168	183	177	180
11	115	114	114	152	149	150	174	168	171	186	179	183
12	116	114	115	153	150	152	170	168	169	187	180	183
13	118	116	117	154	152	153	169	168	169	188	183	186
14	120	118	119	154	152	153	171	166	168	189	186	187
15	121	120	121	157	153	154	171	168	168	191	186	189
16	123	121	122	156	154	155	172	169	171	191	184	188
17	126	125	125	159	156	157	175	172	174	193	186	189
18	126	126	126	158	156	157	177	170	174	188	184	187
19	128	127	127	159	156	158	175	172	174	179	101	125
20	129	128	129	161	158	159	175	172	173	---	---	---
21	130	129	130	161	158	159	177	172	174	---	---	---
22	131	130	131	162	158	160	174	172	173	---	---	---
23	133	131	132	162	160	161	179	173	175	---	---	---
24	133	132	132	163	161	162	179	173	176	99	98	99
25	133	133	133	165	162	163	178	173	176	100	99	99
26	135	133	134	166	163	164	178	173	176	102	100	101
27	136	135	136	165	163	164	179	174	176	103	102	102
28	137	136	137	166	165	165	181	174	177	103	103	103
29	138	135	136	169	165	167	183	172	176	103	102	102
30	137	136	137	168	165	166	178	174	177	103	102	102
31	---	---	---	168	166	167	178	176	177	---	---	---
MONTH	138	102	122	169	136	154	183	166	172	193	98	158
YEAR	193	98	139									

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.2	22.8	23.1	16.3	16.2	16.2	---	---	---	---	---	---
2	---	---	---	16.4	16.2	16.2	---	---	---	---	---	---
3	---	---	---	16.3	16.1	16.2	---	---	---	---	---	---
4	---	---	---	16.3	16.1	16.2	---	---	---	---	---	---
5	---	---	---	16.5	16.2	16.3	---	---	---	---	---	---
6	---	---	---	16.4	16.2	16.3	---	---	---	---	---	---
7	---	---	---	16.6	16.2	16.4	---	---	---	---	---	---
8	---	---	---	16.5	16.3	16.4	---	---	---	---	---	---
9	---	---	---	16.3	16.0	16.1	---	---	---	---	---	---
10	---	---	---	16.0	15.9	16.0	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	17.2	17.0	17.1	---	---	---	---	---	---	---	---	---
26	16.9	16.8	16.9	---	---	---	---	---	---	---	---	---
27	17.3	16.8	17.1	---	---	---	---	---	---	---	---	---
28	17.1	16.9	17.0	---	---	---	---	---	---	---	---	---
29	17.1	16.7	16.9	---	---	---	---	---	---	---	---	---
30	16.9	16.3	16.6	---	---	---	---	---	---	---	---	---
31	17.1	16.2	16.4	---	---	---	---	---	---	---	---	---
MONTH	23.2	16.2	17.6	16.6	15.9	16.2	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	11.9	9.9	10.9	14.2	12.5	13.0
2	---	---	---	---	---	---	12.2	10.8	11.4	14.6	12.8	13.4
3	---	---	---	---	---	---	11.9	10.9	11.5	15.2	13.7	14.4
4	---	---	---	---	---	---	11.3	10.5	11.0	15.0	14.0	14.5
5	---	---	---	---	---	---	11.4	10.7	11.0	15.4	13.8	14.6
6	---	---	---	---	---	---	10.8	10.8	10.8	14.7	14.0	14.3
7	---	---	---	---	---	---	10.7	10.5	10.6	14.7	14.2	14.5
8	---	---	---	---	---	---	10.6	10.3	10.4	14.7	14.3	14.5
9	---	---	---	---	---	---	10.8	10.3	10.4	14.9	14.4	14.7
10	---	---	---	---	---	---	10.6	10.3	10.4	16.2	14.6	15.0
11	---	---	---	---	---	---	10.8	10.3	10.5	15.3	14.5	15.0
12	---	---	---	---	---	---	10.4	10.3	10.4	15.7	15.1	15.3
13	---	---	---	---	---	---	11.3	10.3	10.6	16.2	15.5	15.9
14	---	---	---	---	---	---	11.0	10.4	10.6	16.5	15.5	16.0
15	---	---	---	---	---	---	10.9	10.5	10.8	17.8	16.3	16.6
16	---	---	---	---	---	---	11.1	10.7	10.9	17.5	16.4	16.9
17	---	---	---	---	---	---	11.3	10.6	10.9	17.4	16.3	16.8
18	---	---	---	---	---	---	11.3	10.8	11.0	17.1	16.3	16.4
19	---	---	---	---	---	---	11.5	10.9	11.2	16.9	16.4	16.5
20	---	---	---	---	---	---	11.8	11.1	11.3	17.1	16.3	16.6
21	---	---	---	---	---	---	11.6	11.0	11.3	17.3	16.3	16.8
22	---	---	---	---	---	---	11.9	11.2	11.4	17.2	16.8	17.0
23	---	---	---	---	---	---	11.5	11.2	11.3	17.8	17.0	17.3
24	---	---	---	---	---	---	11.4	11.2	11.4	17.8	17.0	17.4
25	---	---	---	---	---	---	11.4	11.2	11.3	17.7	17.2	17.4
26	---	---	---	---	---	---	11.6	11.2	11.4	18.1	16.9	17.4
27	---	---	---	---	---	---	12.6	11.3	11.7	18.3	16.8	17.5
28	---	---	---	---	---	---	11.7	11.4	11.6	18.4	17.3	17.8
29	---	---	---	---	---	---	12.3	11.5	11.9	18.5	17.8	18.1
30	---	---	---	11.5	10.2	10.4	13.7	12.2	12.6	19.2	18.0	18.5
31	---	---	---	11.1	9.8	10.6	---	---	---	20.4	17.7	19.2
MONTH	---	---	---	11.5	9.8	10.5	13.7	9.9	11.1	20.4	12.5	16.1

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.4	22.0	23.0	16.9	16.5	16.8	---	---	---	---	---	---
2	---	---	---	17.6	16.6	17.2	---	---	---	---	---	---
3	---	---	---	17.6	16.8	17.3	---	---	---	---	---	---
4	---	---	---	18.8	17.0	17.6	---	---	---	---	---	---
5	---	---	---	18.5	16.9	17.6	---	---	---	---	---	---
6	---	---	---	17.9	16.9	17.4	---	---	---	---	---	---
7	---	---	---	17.8	17.0	17.4	---	---	---	---	---	---
8	---	---	---	17.1	16.6	16.8	---	---	---	---	---	---
9	---	---	---	17.1	16.2	16.5	---	---	---	---	---	---
10	---	---	---	16.2	16.0	16.1	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	18.2	17.2	17.6	---	---	---	---	---	---	---	---	---
26	17.2	17.0	17.0	---	---	---	---	---	---	---	---	---
27	17.3	16.8	17.1	---	---	---	---	---	---	---	---	---
28	17.4	17.0	17.2	---	---	---	---	---	---	---	---	---
29	17.5	16.9	17.2	---	---	---	---	---	---	---	---	---
30	18.2	16.6	17.1	---	---	---	---	---	---	---	---	---
31	17.6	16.4	16.9	---	---	---	---	---	---	---	---	---
MONTH	23.4	16.4	17.9	18.8	16.0	17.1	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	14.5	13.9	14.2	16.9	16.1	16.3
2	---	---	---	---	---	---	13.7	13.0	13.3	19.6	15.2	16.8
3	---	---	---	---	---	---	13.7	12.4	13.0	17.6	16.3	17.2
4	---	---	---	---	---	---	13.2	12.7	12.9	18.6	16.8	17.3
5	---	---	---	---	---	---	13.2	11.2	12.0	18.1	16.8	17.2
6	---	---	---	---	---	---	14.9	10.8	12.2	18.7	16.8	17.4
7	---	---	---	---	---	---	16.1	11.9	13.8	17.7	16.3	17.2
8	---	---	---	---	---	---	16.3	13.5	14.6	18.3	17.1	17.6
9	---	---	---	---	---	---	16.0	11.6	13.9	18.3	17.3	17.8
10	---	---	---	---	---	---	16.2	13.9	14.8	19.2	17.6	18.2
11	---	---	---	---	---	---	15.2	14.2	14.9	20.8	18.0	18.9
12	---	---	---	---	---	---	13.9	13.4	13.6	19.6	18.4	18.8
13	---	---	---	---	---	---	14.3	12.8	13.9	19.8	18.4	19.2
14	---	---	---	---	---	---	14.1	11.2	12.0	20.1	19.3	19.8
15	---	---	---	---	---	---	12.2	11.1	11.8	23.5	18.9	20.8
16	---	---	---	---	---	---	12.1	11.4	11.6	21.7	20.9	21.1
17	---	---	---	---	---	---	12.1	11.2	11.7	23.1	20.7	21.9
18	---	---	---	---	---	---	13.7	11.1	12.1	22.3	20.9	21.4
19	---	---	---	---	---	---	13.2	11.5	12.4	22.3	21.1	21.7
20	---	---	---	---	---	---	15.0	11.6	13.2	24.6	20.2	21.9
21	---	---	---	---	---	---	18.0	12.0	15.1	22.9	21.7	22.2
22	---	---	---	---	---	---	18.5	12.0	15.1	23.3	21.4	22.5
23	---	---	---	---	---	---	18.0	13.0	15.0	25.9	22.6	24.0
24	---	---	---	---	---	---	15.8	14.3	15.1	25.1	22.1	23.5
25	---	---	---	---	---	---	18.0	13.3	16.2	26.3	22.6	24.2
26	---	---	---	---	---	---	16.7	13.6	15.2	25.9	21.9	23.8
27	---	---	---	---	---	---	18.9	13.7	15.9	25.6	23.0	24.1
28	---	---	---	---	---	---	16.4	14.4	15.7	24.7	23.3	23.8
29	---	---	---	---	---	---	16.4	14.7	15.4	24.1	23.1	23.5
30	---	---	---	17.9	17.0	17.3	16.7	15.1	15.9	24.7	23.5	23.8
31	---	---	---	16.2	14.8	15.2	---	---	---	24.0	21.5	22.8
MONTH	---	---	---	17.9	14.8	16.2	18.9	10.8	13.9	26.3	15.2	20.5

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.6	22.5	23.3	17.3	16.6	16.9	---	---	---	---	---	---
2	---	---	---	17.6	16.8	17.2	---	---	---	---	---	---
3	---	---	---	17.6	16.9	17.4	---	---	---	---	---	---
4	---	---	---	18.6	17.3	17.6	---	---	---	---	---	---
5	---	---	---	18.4	17.0	17.6	---	---	---	---	---	---
6	---	---	---	17.9	17.1	17.5	---	---	---	---	---	---
7	---	---	---	17.9	17.0	17.4	---	---	---	---	---	---
8	---	---	---	17.3	16.7	17.0	---	---	---	---	---	---
9	---	---	---	17.1	16.3	16.6	---	---	---	---	---	---
10	---	---	---	16.3	16.1	16.2	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	18.0	15.8	17.0	---	---	---	---	---	---	---	---	---
26	17.2	15.2	16.7	---	---	---	---	---	---	---	---	---
27	17.3	16.6	16.9	---	---	---	---	---	---	---	---	---
28	17.4	17.0	17.2	---	---	---	---	---	---	---	---	---
29	17.5	17.0	17.2	---	---	---	---	---	---	---	---	---
30	18.1	16.7	17.2	---	---	---	---	---	---	---	---	---
31	17.6	16.5	16.9	---	---	---	---	---	---	---	---	---
MONTH	23.6	15.2	17.8	18.6	16.1	17.1	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	20.0	18.9	19.4	
2	---	---	---	---	---	---	---	---	19.8	19.1	19.6	
3	---	---	---	---	---	---	---	---	18.2	17.5	17.8	
4	---	---	---	---	---	---	---	---	19.0	17.0	17.8	
5	---	---	---	---	---	---	---	---	19.8	17.6	18.6	
6	---	---	---	---	---	---	---	---	21.2	18.3	19.4	
7	---	---	---	---	---	---	---	---	22.7	19.7	20.9	
8	---	---	---	---	---	---	---	---	23.7	20.2	21.7	
9	---	---	---	---	---	---	---	---	24.8	21.5	22.8	
10	---	---	---	---	---	---	---	---	24.6	21.8	23.3	
11	---	---	---	---	---	---	---	---	25.0	22.8	23.6	
12	---	---	---	---	---	---	---	---	25.1	22.9	24.3	
13	---	---	---	---	---	---	---	---	24.5	23.4	24.0	
14	---	---	---	---	---	---	---	---	24.2	23.5	23.9	
15	---	---	---	---	---	---	---	---	24.0	23.1	23.7	
16	---	---	---	---	---	---	---	---	24.4	23.1	23.6	
17	---	---	---	---	---	---	---	---	25.2	22.9	23.7	
18	---	---	---	---	---	---	---	---	24.7	23.6	24.2	
19	---	---	---	---	---	---	---	---	24.8	23.7	24.2	
20	---	---	---	---	---	---	---	---	25.5	23.5	24.5	
21	---	---	---	---	---	---	---	---	26.3	24.8	25.4	
22	---	---	---	---	---	---	---	---	26.6	25.2	25.9	
23	---	---	---	---	---	---	---	---	26.9	25.0	26.0	
24	---	---	---	---	---	---	---	---	26.5	25.2	25.9	
25	---	---	---	---	---	---	---	---	26.8	25.7	26.2	
26	---	---	---	---	---	---	---	---	26.4	25.8	26.0	
27	---	---	---	---	---	---	---	---	26.0	25.1	25.5	
28	---	---	---	---	---	---	---	---	25.5	25.1	25.3	
29	---	---	---	---	---	---	---	---	25.5	24.7	25.0	
30	---	---	---	---	---	---	19.6	18.0	19.0	25.7	24.8	25.2
31	---	---	---	---	---	---	---	---	---	25.0	24.5	24.7
MONTH	---	---	---	---	---	---	19.6	18.0	19.0	26.9	17.0	23.3

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1.2	0.9	1.0	7.1	6.7	6.8	---	---	---	---	---	---
2	---	---	---	7.0	6.7	6.9	---	---	---	---	---	---
3	---	---	---	6.7	6.3	6.4	---	---	---	---	---	---
4	---	---	---	6.3	5.8	6.0	---	---	---	---	---	---
5	---	---	---	6.1	5.4	5.8	---	---	---	---	---	---
6	---	---	---	5.6	5.1	5.4	---	---	---	---	---	---
7	---	---	---	5.4	4.9	5.2	---	---	---	---	---	---
8	---	---	---	5.9	5.0	5.4	---	---	---	---	---	---
9	---	---	---	7.5	5.1	6.5	---	---	---	---	---	---
10	---	---	---	8.0	7.6	7.8	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.2	6.6	7.0	---	---	---	---	---	---	---	---	---
26	7.0	6.2	6.6	---	---	---	---	---	---	---	---	---
27	6.7	6.0	6.2	---	---	---	---	---	---	---	---	---
28	7.4	6.2	7.1	---	---	---	---	---	---	---	---	---
29	6.9	6.6	6.8	---	---	---	---	---	---	---	---	---
30	7.2	5.8	6.7	---	---	---	---	---	---	---	---	---
31	6.9	6.5	6.7	---	---	---	---	---	---	---	---	---
MONTH	7.4	0.9	6.0	8.0	4.9	6.2	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	9.7	9.3	9.6	8.3	8.0	8.2
2	---	---	---	---	---	---	9.4	9.1	9.2	8.4	7.7	8.2
3	---	---	---	---	---	---	9.3	9.1	9.2	7.8	7.4	7.6
4	---	---	---	---	---	---	9.8	9.3	9.5	7.9	7.0	7.5
5	---	---	---	---	---	---	9.9	9.4	9.6	7.8	6.5	7.2
6	---	---	---	---	---	---	10.1	8.9	9.6	7.5	6.3	6.8
7	---	---	---	---	---	---	9.7	9.0	9.3	7.0	6.7	6.9
8	---	---	---	---	---	---	9.2	8.8	9.0	7.0	6.2	6.6
9	---	---	---	---	---	---	9.0	8.7	8.8	6.9	6.5	6.7
10	---	---	---	---	---	---	8.9	8.7	8.8	7.1	6.4	6.8
11	---	---	---	---	---	---	8.8	8.6	8.7	6.9	6.2	6.6
12	---	---	---	---	---	---	8.7	8.5	8.6	7.3	6.2	6.7
13	---	---	---	---	---	---	8.6	8.3	8.4	7.3	6.6	6.9
14	---	---	---	---	---	---	8.6	8.4	8.4	7.2	6.6	7.0
15	---	---	---	---	---	---	9.2	8.2	8.5	7.9	6.8	7.2
16	---	---	---	---	---	---	9.1	8.3	8.7	7.6	6.6	7.1
17	---	---	---	---	---	---	9.2	8.8	8.9	7.3	5.8	6.6
18	---	---	---	---	---	---	9.1	8.8	9.0	6.0	5.7	5.9
19	---	---	---	---	---	---	9.3	9.1	9.2	5.7	5.3	5.5
20	---	---	---	---	---	---	9.3	9.1	9.2	5.4	5.2	5.4
21	---	---	---	---	---	---	9.3	9.2	9.2	5.6	5.1	5.3
22	---	---	---	---	---	---	9.3	8.9	9.1	5.8	5.3	5.5
23	---	---	---	---	---	---	9.4	8.8	9.1	6.2	5.2	5.5
24	---	---	---	---	---	---	9.2	8.9	9.0	5.7	5.1	5.4
25	---	---	---	---	---	---	9.0	8.2	8.6	5.6	4.6	5.1
26	---	---	---	---	---	---	8.2	8.0	8.1	4.2	3.3	3.9
27	---	---	---	---	---	---	8.0	7.9	8.0	3.4	3.4	3.4
28	---	---	---	---	---	---	8.2	8.0	8.1	3.4	3.3	3.4
29	---	---	---	---	---	---	8.4	7.7	8.0	3.4	3.2	3.3
30	---	---	---	9.7	9.6	9.7	8.7	8.1	8.4	3.2	3.0	3.1
31	---	---	---	9.8	9.5	9.6	---	---	---	5.9	3.1	4.3
MONTH	---	---	---	9.8	9.5	9.7	10.1	7.7	8.9	8.4	3.0	6.0

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

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DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	0.8	0.6	0.7	7.2	7.1	7.2	---	---	---	---	---	---
2	---	---	---	7.5	7.3	7.4	---	---	---	---	---	---
3	---	---	---	7.2	6.9	7.0	---	---	---	---	---	---
4	---	---	---	7.1	6.7	7.0	---	---	---	---	---	---
5	---	---	---	7.2	6.3	6.9	---	---	---	---	---	---
6	---	---	---	6.6	6.3	6.5	---	---	---	---	---	---
7	---	---	---	7.2	5.7	6.4	---	---	---	---	---	---
8	---	---	---	8.6	6.2	7.4	---	---	---	---	---	---
9	---	---	---	7.6	5.6	6.9	---	---	---	---	---	---
10	---	---	---	7.9	7.4	7.6	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.3	6.9	7.1	---	---	---	---	---	---	---	---	---
26	7.1	6.9	7.0	---	---	---	---	---	---	---	---	---
27	7.7	7.3	7.4	---	---	---	---	---	---	---	---	---
28	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
29	7.6	6.8	7.2	---	---	---	---	---	---	---	---	---
30	7.3	6.5	6.9	---	---	---	---	---	---	---	---	---
31	8.5	6.7	7.3	---	---	---	---	---	---	---	---	---
MONTH	8.5	0.6	6.4	8.6	5.6	7.0	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	9.8	9.4	9.7	9.2	8.7	8.9
2	---	---	---	---	---	---	9.6	9.4	9.5	9.4	8.6	8.8
3	---	---	---	---	---	---	9.6	9.4	9.4	9.2	8.7	9.0
4	---	---	---	---	---	---	10.0	9.5	9.7	9.1	8.5	8.8
5	---	---	---	---	---	---	10.0	9.9	10.0	9.1	7.8	8.5
6	---	---	---	---	---	---	10.2	9.6	10.1	8.6	7.9	8.3
7	---	---	---	---	---	---	9.8	9.4	9.7	8.8	8.3	8.5
8	---	---	---	---	---	---	9.4	9.1	9.3	8.7	8.3	8.5
9	---	---	---	---	---	---	9.7	9.0	9.2	8.8	8.2	8.6
10	---	---	---	---	---	---	9.2	9.0	9.0	9.8	7.6	8.6
11	---	---	---	---	---	---	9.3	8.7	9.0	8.7	7.8	8.4
12	---	---	---	---	---	---	9.0	8.8	8.9	8.7	8.3	8.4
13	---	---	---	---	---	---	9.3	8.6	9.0	9.2	8.8	9.0
14	---	---	---	---	---	---	9.0	8.5	8.7	9.2	8.3	8.9
15	---	---	---	---	---	---	8.9	8.3	8.7	9.5	9.2	9.3
16	---	---	---	---	---	---	9.2	8.6	9.0	9.8	8.9	9.4
17	---	---	---	---	---	---	9.3	8.9	9.1	9.6	8.3	8.9
18	---	---	---	---	---	---	9.4	9.2	9.3	9.1	8.0	8.3
19	---	---	---	---	---	---	9.3	9.2	9.3	8.7	8.0	8.2
20	---	---	---	---	---	---	9.4	9.2	9.3	8.9	7.8	8.1
21	---	---	---	---	---	---	9.5	9.3	9.4	8.9	7.5	8.2
22	---	---	---	---	---	---	9.6	9.3	9.4	8.6	8.2	8.4
23	---	---	---	---	---	---	9.5	9.1	9.3	9.0	8.2	8.6
24	---	---	---	---	---	---	9.3	9.2	9.3	8.8	7.7	8.4
25	---	---	---	---	---	---	9.2	8.8	9.1	8.5	7.4	7.9
26	---	---	---	---	---	---	9.1	8.4	8.8	8.6	6.8	7.7
27	---	---	---	---	---	---	9.1	8.4	8.7	8.4	6.3	7.2
28	---	---	---	---	---	---	8.6	8.3	8.4	8.2	6.7	7.5
29	---	---	---	---	---	---	9.0	8.2	8.7	8.2	6.9	7.6
30	---	---	---	9.8	9.7	9.8	9.3	8.9	9.1	8.2	6.9	7.5
31	---	---	---	10.0	9.8	9.9	---	---	---	7.7	5.5	6.9
MONTH	---	---	---	10.0	9.7	9.8	10.2	8.2	9.2	9.8	5.5	8.4

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DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	2.5	2.2	2.4	8.7	7.4	8.2	---	---	---	---	---	---
2	---	---	---	9.3	7.7	8.6	---	---	---	---	---	---
3	---	---	---	9.7	8.1	9.2	---	---	---	---	---	---
4	---	---	---	9.5	8.1	9.0	---	---	---	---	---	---
5	---	---	---	9.7	8.4	9.1	---	---	---	---	---	---
6	---	---	---	9.5	7.7	8.4	---	---	---	---	---	---
7	---	---	---	9.7	8.3	9.1	---	---	---	---	---	---
8	---	---	---	9.0	7.8	8.6	---	---	---	---	---	---
9	---	---	---	8.0	6.8	7.3	---	---	---	---	---	---
10	---	---	---	7.6	7.5	7.6	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	8.2	7.0	7.4	---	---	---	---	---	---	---	---	---
26	7.3	7.0	7.2	---	---	---	---	---	---	---	---	---
27	7.7	7.4	7.5	---	---	---	---	---	---	---	---	---
28	8.1	7.4	7.7	---	---	---	---	---	---	---	---	---
29	8.4	7.3	7.8	---	---	---	---	---	---	---	---	---
30	8.4	6.8	7.4	---	---	---	---	---	---	---	---	---
31	8.9	6.8	8.0	---	---	---	---	---	---	---	---	---
MONTH	8.9	2.2	6.9	9.7	6.8	8.5	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	9.9	9.6	9.7	9.3	9.1	9.2
2	---	---	---	---	---	---	9.8	9.6	9.7	9.4	8.8	9.1
3	---	---	---	---	---	---	10.0	9.5	9.8	9.3	9.1	9.2
4	---	---	---	---	---	---	10.2	9.2	9.9	9.3	9.1	9.2
5	---	---	---	---	---	---	10.1	9.8	10.0	9.3	9.1	9.2
6	---	---	---	---	---	---	10.2	10.0	10.1	10.3	8.9	9.3
7	---	---	---	---	---	---	10.3	9.7	10.0	10.0	9.5	9.7
8	---	---	---	---	---	---	10.2	9.9	10.0	10.1	9.7	9.9
9	---	---	---	---	---	---	10.1	9.9	10.0	10.3	9.9	10.0
10	---	---	---	---	---	---	10.3	10.0	10.1	10.5	9.4	10.0
11	---	---	---	---	---	---	10.2	9.9	10.0	10.3	9.8	10.0
12	---	---	---	---	---	---	10.2	10.0	10.1	10.3	10.0	10.2
13	---	---	---	---	---	---	10.1	10.0	10.0	9.9	9.6	9.8
14	---	---	---	---	---	---	9.9	8.9	9.4	9.9	9.5	9.7
15	---	---	---	---	---	---	9.9	8.8	9.4	9.7	8.5	9.4
16	---	---	---	---	---	---	9.4	8.9	9.1	9.8	9.5	9.6
17	---	---	---	---	---	---	9.5	9.0	9.2	9.6	8.5	9.0
18	---	---	---	---	---	---	9.6	9.2	9.3	9.6	8.8	9.3
19	---	---	---	---	---	---	9.7	9.2	9.4	9.7	9.0	9.4
20	---	---	---	---	---	---	9.3	9.2	9.2	9.7	8.4	9.2
21	---	---	---	---	---	---	9.4	9.2	9.3	9.5	8.7	9.1
22	---	---	---	---	---	---	9.6	9.1	9.3	9.5	8.6	8.9
23	---	---	---	---	---	---	9.5	8.9	9.3	8.9	7.8	8.4
24	---	---	---	---	---	---	9.3	9.2	9.3	9.1	7.6	8.6
25	---	---	---	---	---	---	9.3	9.0	9.2	8.9	7.6	8.4
26	---	---	---	---	---	---	9.4	9.0	9.2	8.9	7.6	8.5
27	---	---	---	---	---	---	9.2	8.8	9.0	8.5	7.5	8.1
28	---	---	---	---	---	---	9.4	9.0	9.2	8.6	7.8	8.2
29	---	---	---	---	---	---	9.6	9.1	9.2	8.3	8.1	8.2
30	---	---	---	9.6	9.6	9.6	9.4	9.1	9.2	8.2	7.4	7.9
31	---	---	---	9.9	9.5	9.8	---	---	---	8.0	7.2	7.5
MONTH	---	---	---	9.9	9.5	9.7	10.3	8.8	9.6	10.5	7.2	9.1

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3.8	2.1	2.8	8.7	7.4	8.3	---	---	---	---	---	---
2	---	---	---	9.0	7.8	8.4	---	---	---	---	---	---
3	---	---	---	9.6	8.1	9.1	---	---	---	---	---	---
4	---	---	---	9.6	8.5	9.2	---	---	---	---	---	---
5	---	---	---	9.5	7.7	8.8	---	---	---	---	---	---
6	---	---	---	9.4	7.8	8.4	---	---	---	---	---	---
7	---	---	---	9.6	7.9	8.8	---	---	---	---	---	---
8	---	---	---	9.3	7.7	8.7	---	---	---	---	---	---
9	---	---	---	8.4	6.9	7.6	---	---	---	---	---	---
10	---	---	---	7.6	7.1	7.4	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	8.2	7.1	7.4	---	---	---	---	---	---	---	---	---
26	8.0	6.9	7.3	---	---	---	---	---	---	---	---	---
27	7.6	7.3	7.4	---	---	---	---	---	---	---	---	---
28	8.1	7.5	7.7	---	---	---	---	---	---	---	---	---
29	8.3	7.4	7.7	---	---	---	---	---	---	---	---	---
30	8.4	6.8	7.6	---	---	---	---	---	---	---	---	---
31	8.8	6.9	7.7	---	---	---	---	---	---	---	---	---
MONTH	8.8	2.1	7.0	9.6	6.9	8.5	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	9.2	8.9	9.0	
2	---	---	---	---	---	---	---	---	9.2	9.0	9.1	
3	---	---	---	---	---	---	---	---	9.4	9.1	9.2	
4	---	---	---	---	---	---	---	---	9.2	9.1	9.2	
5	---	---	---	---	---	---	---	---	9.2	9.1	9.1	
6	---	---	---	---	---	---	---	---	9.6	9.0	9.2	
7	---	---	---	---	---	---	---	---	9.6	9.3	9.5	
8	---	---	---	---	---	---	---	---	9.4	9.3	9.3	
9	---	---	---	---	---	---	---	---	9.3	9.0	9.2	
10	---	---	---	---	---	---	---	---	9.2	9.0	9.1	
11	---	---	---	---	---	---	---	---	9.0	8.7	8.8	
12	---	---	---	---	---	---	---	---	9.2	8.6	8.8	
13	---	---	---	---	---	---	---	---	8.5	8.4	8.4	
14	---	---	---	---	---	---	---	---	8.6	8.2	8.4	
15	---	---	---	---	---	---	---	---	8.6	8.3	8.4	
16	---	---	---	---	---	---	---	---	9.1	8.4	8.6	
17	---	---	---	---	---	---	---	---	8.7	8.5	8.6	
18	---	---	---	---	---	---	---	---	8.5	8.4	8.4	
19	---	---	---	---	---	---	---	---	8.3	8.2	8.3	
20	---	---	---	---	---	---	---	---	8.4	8.2	8.3	
21	---	---	---	---	---	---	---	---	8.2	8.0	8.1	
22	---	---	---	---	---	---	---	---	8.0	7.8	7.9	
23	---	---	---	---	---	---	---	---	7.8	7.6	7.7	
24	---	---	---	---	---	---	---	---	7.7	7.5	7.6	
25	---	---	---	---	---	---	---	---	7.7	7.5	7.6	
26	---	---	---	---	---	---	---	---	7.6	7.5	7.5	
27	---	---	---	---	---	---	---	---	7.6	6.3	7.2	
28	---	---	---	---	---	---	---	---	7.6	7.4	7.5	
29	---	---	---	---	---	---	---	---	7.8	7.3	7.5	
30	---	---	---	---	---	---	9.1	8.9	9.0	7.5	7.3	7.4
31	---	---	---	---	---	---	---	---	---	7.5	7.2	7.4
MONTH	---	---	---	---	---	---	9.1	8.9	9.0	9.6	6.3	8.4

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	146	144	145	144	143	144	---	---	---	---	---	---
2	---	---	---	145	143	144	---	---	---	---	---	---
3	---	---	---	144	142	144	---	---	---	---	---	---
4	---	---	---	144	143	144	---	---	---	---	---	---
5	---	---	---	145	143	144	---	---	---	---	---	---
6	---	---	---	145	144	144	---	---	---	---	---	---
7	---	---	---	145	143	145	---	---	---	---	---	---
8	---	---	---	146	145	145	---	---	---	---	---	---
9	---	---	---	155	147	150	---	---	---	---	---	---
10	---	---	---	147	146	147	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	147	145	146	---	---	---	---	---	---	---	---	---
26	146	145	145	---	---	---	---	---	---	---	---	---
27	145	144	144	---	---	---	---	---	---	---	---	---
28	145	144	144	---	---	---	---	---	---	---	---	---
29	151	145	147	---	---	---	---	---	---	---	---	---
30	146	140	144	---	---	---	---	---	---	---	---	---
31	145	139	142	---	---	---	---	---	---	---	---	---
MONTH	151	139	145	155	142	145	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	109	106	107	117	114	116
2	---	---	---	---	---	---	125	107	112	116	110	114
3	---	---	---	---	---	---	118	109	114	109	103	107
4	---	---	---	---	---	---	112	107	109	107	104	106
5	---	---	---	---	---	---	108	107	108	107	104	105
6	---	---	---	---	---	---	113	107	108	106	104	104
7	---	---	---	---	---	---	119	110	113	105	103	104
8	---	---	---	---	---	---	120	114	116	104	103	104
9	---	---	---	---	---	---	118	111	116	104	103	104
10	---	---	---	---	---	---	118	115	118	109	103	104
11	---	---	---	---	---	---	119	114	116	105	103	104
12	---	---	---	---	---	---	117	116	117	108	104	106
13	---	---	---	---	---	---	116	112	115	110	107	108
14	---	---	---	---	---	---	115	114	114	111	107	109
15	---	---	---	---	---	---	117	111	114	117	112	113
16	---	---	---	---	---	---	112	100	106	116	112	114
17	---	---	---	---	---	---	110	103	107	116	114	115
18	---	---	---	---	---	---	110	107	108	116	114	115
19	---	---	---	---	---	---	114	109	111	116	115	116
20	---	---	---	---	---	---	112	110	111	117	115	116
21	---	---	---	---	---	---	112	109	110	117	116	116
22	---	---	---	---	---	---	111	109	110	117	116	116
23	---	---	---	---	---	---	110	109	110	117	116	117
24	---	---	---	---	---	---	111	110	110	118	117	118
25	---	---	---	---	---	---	112	110	110	118	117	118
26	---	---	---	---	---	---	113	111	112	119	118	119
27	---	---	---	---	---	---	115	111	113	120	119	119
28	---	---	---	---	---	---	114	113	113	120	119	119
29	---	---	---	---	---	---	115	113	114	120	118	119
30	---	---	---	104	104	104	118	115	116	120	118	119
31	---	---	---	110	104	107	---	---	---	129	110	121
MONTH	---	---	---	110	104	106	125	100	112	129	103	112

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	141	141	141	145	143	145	---	---	---	---	---	---
2	---	---	---	146	145	145	---	---	---	---	---	---
3	---	---	---	146	145	146	---	---	---	---	---	---
4	---	---	---	147	146	146	---	---	---	---	---	---
5	---	---	---	147	145	146	---	---	---	---	---	---
6	---	---	---	147	145	146	---	---	---	---	---	---
7	---	---	---	146	143	145	---	---	---	---	---	---
8	---	---	---	146	145	145	---	---	---	---	---	---
9	---	---	---	149	147	148	---	---	---	---	---	---
10	---	---	---	147	147	147	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	146	145	146	---	---	---	---	---	---	---	---	---
26	145	144	145	---	---	---	---	---	---	---	---	---
27	145	144	145	---	---	---	---	---	---	---	---	---
28	145	144	145	---	---	---	---	---	---	---	---	---
29	146	145	146	---	---	---	---	---	---	---	---	---
30	150	146	147	---	---	---	---	---	---	---	---	---
31	146	144	145	---	---	---	---	---	---	---	---	---
MONTH	150	141	145	149	143	146	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	105	105	105	112	110	111
2	---	---	---	---	---	---	106	105	105	113	109	111
3	---	---	---	---	---	---	108	106	107	116	110	114
4	---	---	---	---	---	---	107	107	107	117	112	115
5	---	---	---	---	---	---	108	108	108	116	114	115
6	---	---	---	---	---	---	108	107	108	116	115	115
7	---	---	---	---	---	---	109	108	108	116	110	114
8	---	---	---	---	---	---	110	108	109	116	115	116
9	---	---	---	---	---	---	110	108	109	116	115	116
10	---	---	---	---	---	---	110	109	110	117	116	116
11	---	---	---	---	---	---	110	110	110	117	116	117
12	---	---	---	---	---	---	110	109	110	117	116	117
13	---	---	---	---	---	---	110	107	108	117	117	117
14	---	---	---	---	---	---	113	107	113	117	116	117
15	---	---	---	---	---	---	110	102	106	121	116	118
16	---	---	---	---	---	---	108	105	106	124	117	120
17	---	---	---	---	---	---	108	106	107	122	118	120
18	---	---	---	---	---	---	109	108	109	122	117	119
19	---	---	---	---	---	---	112	108	110	124	118	122
20	---	---	---	---	---	---	115	110	111	125	118	122
21	---	---	---	---	---	---	115	107	110	129	122	126
22	---	---	---	---	---	---	124	108	114	130	120	128
23	---	---	---	---	---	---	120	109	115	131	126	129
24	---	---	---	---	---	---	115	113	114	140	126	130
25	---	---	---	---	---	---	116	110	112	134	128	132
26	---	---	---	---	---	---	120	114	117	135	124	130
27	---	---	---	---	---	---	118	111	116	136	127	132
28	---	---	---	---	---	---	118	107	112	135	130	133
29	---	---	---	---	---	---	116	111	114	137	134	136
30	---	---	---	105	104	105	115	109	112	137	132	136
31	---	---	---	106	105	105	---	---	---	143	134	138
MONTH	---	---	---	106	104	105	124	102	110	143	109	122

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	144	141	142	145	143	145	---	---	---	---	---	---
2	---	---	---	146	144	145	---	---	---	---	---	---
3	---	---	---	146	145	145	---	---	---	---	---	---
4	---	---	---	147	145	146	---	---	---	---	---	---
5	---	---	---	146	145	146	---	---	---	---	---	---
6	---	---	---	147	145	146	---	---	---	---	---	---
7	---	---	---	146	143	145	---	---	---	---	---	---
8	---	---	---	146	145	145	---	---	---	---	---	---
9	---	---	---	149	145	147	---	---	---	---	---	---
10	---	---	---	149	147	148	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	147	145	146	---	---	---	---	---	---	---	---	---
26	146	145	145	---	---	---	---	---	---	---	---	---
27	146	144	145	---	---	---	---	---	---	---	---	---
28	145	144	145	---	---	---	---	---	---	---	---	---
29	146	145	146	---	---	---	---	---	---	---	---	---
30	150	146	147	---	---	---	---	---	---	---	---	---
31	147	144	145	---	---	---	---	---	---	---	---	---
MONTH	150	141	145	149	143	146	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	113	113	113
2	---	---	---	---	---	---	---	---	---	114	113	114
3	---	---	---	---	---	---	---	---	---	117	113	116
4	---	---	---	---	---	---	---	---	---	117	115	116
5	---	---	---	---	---	---	---	---	---	117	116	117
6	---	---	---	---	---	---	---	---	---	117	117	117
7	---	---	---	---	---	---	---	---	---	118	117	117
8	---	---	---	---	---	---	---	---	---	119	117	118
9	---	---	---	---	---	---	---	---	---	119	118	119
10	---	---	---	---	---	---	---	---	---	120	119	119
11	---	---	---	---	---	---	---	---	---	121	119	120
12	---	---	---	---	---	---	---	---	---	121	119	120
13	---	---	---	---	---	---	---	---	---	121	120	121
14	---	---	---	---	---	---	---	---	---	121	120	121
15	---	---	---	---	---	---	---	---	---	122	121	121
16	---	---	---	---	---	---	---	---	---	123	122	122
17	---	---	---	---	---	---	---	---	---	123	122	122
18	---	---	---	---	---	---	---	---	---	124	123	123
19	---	---	---	---	---	---	---	---	---	125	124	124
20	---	---	---	---	---	---	---	---	---	125	124	125
21	---	---	---	---	---	---	---	---	---	126	125	125
22	---	---	---	---	---	---	---	---	---	126	126	126
23	---	---	---	---	---	---	---	---	---	127	126	127
24	---	---	---	---	---	---	---	---	---	128	127	128
25	---	---	---	---	---	---	---	---	---	128	128	128
26	---	---	---	---	---	---	---	---	---	128	127	128
27	---	---	---	---	---	---	---	---	---	129	127	128
28	---	---	---	---	---	---	---	---	---	130	128	129
29	---	---	---	---	---	---	---	---	---	131	129	130
30	---	---	---	---	---	---	113	110	112	132	131	131
31	---	---	---	---	---	---	---	---	---	130	129	129
MONTH	---	---	---	---	---	---	113	110	112	132	113	122

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.6	7.5	7.2	---	---	---	---	---	---	---	---
2	---	---	7.5	7.2	---	---	---	---	---	---	---	---
3	---	---	7.4	7.1	---	---	---	---	---	---	---	---
4	---	---	7.3	7.0	---	---	---	---	---	---	---	---
5	---	---	7.2	7.0	---	---	---	---	---	---	---	---
6	---	---	7.2	7.0	---	---	---	---	---	---	---	---
7	---	---	7.0	7.0	---	---	---	---	---	---	---	---
8	---	---	7.1	7.0	---	---	---	---	---	---	---	---
9	---	---	7.2	7.0	---	---	---	---	---	---	---	---
10	---	---	7.2	7.2	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.2	7.1	---	---	---	---	---	---	---	---	---	---
26	7.3	7.1	---	---	---	---	---	---	---	---	---	---
27	7.2	7.2	---	---	---	---	---	---	---	---	---	---
28	7.6	7.3	---	---	---	---	---	---	---	---	---	---
29	7.5	7.3	---	---	---	---	---	---	---	---	---	---
30	7.3	7.2	---	---	---	---	---	---	---	---	6.8	6.8
31	7.4	7.2	---	---	---	---	---	---	---	---	6.8	6.7
MONTH	7.6	6.6	7.5	7.0	---	---	---	---	---	---	6.8	6.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.7	6.6	6.6	6.5	7.0	6.9	7.3	7.2	7.4	7.3	7.2	7.2
2	6.8	6.6	6.7	6.5	7.0	6.8	7.3	6.6	7.4	7.3	7.3	7.2
3	6.9	6.7	6.7	6.4	6.9	6.9	6.7	6.6	7.4	6.8	7.3	7.3
4	6.8	6.7	6.5	6.4	7.0	6.8	6.8	6.7	6.8	6.8	7.3	7.3
5	6.9	6.8	6.5	6.4	6.9	6.8	6.8	6.8	6.9	6.8	7.3	7.2
6	7.0	6.7	6.4	6.2	6.9	6.8	6.8	6.8	6.9	6.8	7.4	7.4
7	6.9	6.8	6.4	6.2	6.9	6.8	6.9	6.8	6.9	6.8	7.5	7.4
8	6.8	6.7	6.3	6.2	6.9	6.8	6.9	6.9	6.9	6.8	7.5	7.4
9	6.8	6.7	6.3	6.2	7.0	6.8	7.0	6.9	6.9	6.9	7.5	7.4
10	6.7	6.7	6.3	6.2	7.0	6.9	7.1	6.9	6.9	6.9	7.5	7.4
11	6.8	6.7	6.4	6.3	6.9	6.8	7.1	7.0	7.1	6.9	7.5	7.4
12	6.8	6.8	6.3	6.2	6.9	6.8	7.1	7.0	7.1	7.0	7.5	7.4
13	6.8	6.7	6.5	6.4	6.9	6.8	7.1	7.1	7.0	7.0	7.6	7.5
14	6.8	6.7	6.5	6.4	6.9	6.8	7.2	7.1	7.1	7.0	7.6	7.5
15	6.7	6.6	6.7	6.5	6.9	6.8	7.2	7.2	7.1	7.0	7.6	7.4
16	6.7	6.6	6.7	6.5	6.9	6.7	7.2	7.2	7.1	6.8	7.5	7.4
17	6.7	6.6	6.6	6.4	6.8	6.7	7.3	7.2	6.8	6.8	7.4	7.4
18	6.7	6.6	6.5	6.4	6.8	6.7	7.3	7.3	6.9	6.8	7.3	7.2
19	6.7	6.6	6.6	6.5	6.8	6.8	7.3	7.1	6.9	6.8	7.2	7.1
20	6.8	6.6	6.5	6.4	6.8	6.8	7.2	7.1	6.8	6.8	---	---
21	6.7	6.6	6.6	6.5	6.9	6.8	7.1	7.1	6.9	6.8	---	---
22	6.7	6.5	6.6	6.5	7.0	6.9	7.2	7.1	7.0	6.9	---	---
23	6.8	6.6	6.6	6.5	6.9	6.9	7.2	7.1	7.0	6.9	---	---
24	6.9	6.5	6.7	6.6	7.0	6.9	7.2	7.2	7.0	6.9	6.9	6.9
25	6.8	6.5	6.7	6.5	7.1	7.0	7.3	7.2	7.1	7.0	7.0	6.8
26	6.7	6.4	6.7	6.5	7.1	7.0	7.3	7.2	7.1	7.0	6.9	6.8
27	6.6	6.3	6.7	6.6	7.1	7.0	7.3	7.2	7.1	7.0	6.9	6.8
28	6.4	6.4	6.7	6.6	7.2	7.1	7.3	7.2	7.2	7.0	6.8	6.8
29	6.4	6.4	6.7	6.6	7.2	7.1	7.3	7.2	7.2	7.1	6.8	6.8
30	6.6	6.5	6.7	6.6	7.2	7.1	7.3	7.2	7.3	7.2	6.8	6.6
31	---	---	6.8	6.7	---	---	7.4	7.3	7.2	7.2	---	---
MONTH	7.0	6.3	6.8	6.2	7.2	6.7	7.4	6.6	7.4	6.8	7.6	6.6
YEAR	7.6	6.2										

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.6	7.5	7.3	---	---	---	---	---	---	---	---
2	---	---	7.5	7.3	---	---	---	---	---	---	---	---
3	---	---	7.5	7.2	---	---	---	---	---	---	---	---
4	---	---	7.2	7.1	---	---	---	---	---	---	---	---
5	---	---	7.4	7.2	---	---	---	---	---	---	---	---
6	---	---	7.3	7.1	---	---	---	---	---	---	---	---
7	---	---	7.2	7.1	---	---	---	---	---	---	---	---
8	---	---	7.4	7.1	---	---	---	---	---	---	---	---
9	---	---	7.2	7.1	---	---	---	---	---	---	---	---
10	---	---	7.2	7.2	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.2	7.1	---	---	---	---	---	---	---	---	---	---
26	7.3	7.1	---	---	---	---	---	---	---	---	---	---
27	7.5	7.1	---	---	---	---	---	---	---	---	---	---
28	7.6	7.4	---	---	---	---	---	---	---	---	---	---
29	7.5	7.4	---	---	---	---	---	---	---	---	---	---
30	7.3	7.2	---	---	---	---	---	---	---	---	6.9	6.9
31	7.5	7.3	---	---	---	---	---	---	---	---	7.0	6.9
MONTH	7.6	6.6	7.5	7.1	---	---	---	---	---	---	7.0	6.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.7	6.9	6.7	7.1	7.0	7.4	7.3	7.3	7.3	7.2	7.1
2	7.0	6.8	6.9	6.8	7.0	7.0	7.4	6.7	7.3	7.3	7.3	7.1
3	7.0	6.8	7.0	6.8	7.0	7.0	6.7	6.7	7.4	6.7	7.3	7.2
4	7.0	6.8	6.8	6.7	7.1	7.0	6.8	6.7	6.7	6.6	7.3	7.3
5	7.1	7.0	6.9	6.6	7.0	7.0	6.8	6.8	6.8	6.7	7.4	7.2
6	7.1	6.9	6.8	6.5	7.0	7.0	6.8	6.7	6.8	6.8	7.4	7.3
7	7.0	6.9	6.7	6.5	7.0	6.9	6.9	6.8	6.8	6.7	7.5	7.4
8	6.9	6.8	6.6	6.5	7.0	7.0	6.9	6.8	6.9	6.8	7.5	7.4
9	7.0	6.8	6.6	6.5	7.1	7.0	6.9	6.8	7.0	6.9	7.5	7.4
10	6.9	6.8	7.0	6.4	7.1	7.1	6.9	6.8	7.0	6.9	7.5	7.4
11	6.9	6.8	6.6	6.5	7.1	7.0	7.0	6.9	7.0	6.9	7.5	7.4
12	6.9	6.9	6.6	6.6	7.1	7.0	7.0	7.0	7.1	7.0	7.4	7.4
13	6.9	6.8	7.0	6.8	7.0	7.0	7.0	7.0	7.1	7.0	7.5	7.4
14	6.9	6.7	6.9	6.8	7.1	7.0	7.1	7.0	7.1	7.0	7.5	7.4
15	6.8	6.6	7.2	7.0	7.1	7.0	7.1	7.1	7.2	7.1	7.5	7.2
16	6.8	6.7	7.3	7.0	7.0	6.8	7.1	7.1	7.2	6.7	7.3	7.1
17	6.8	6.6	7.3	6.8	6.9	6.8	7.2	7.1	6.8	6.7	7.2	7.1
18	6.8	6.7	7.2	6.8	7.0	6.8	7.2	7.2	6.9	6.8	7.3	7.1
19	6.8	6.7	7.0	6.8	7.0	6.9	7.2	6.9	6.9	6.8	7.2	7.2
20	6.8	6.7	7.0	6.8	7.0	6.9	7.0	7.0	6.9	6.8	---	---
21	6.9	6.7	7.0	6.8	7.0	6.9	7.0	6.9	6.8	6.8	---	---
22	6.9	6.7	7.0	6.9	7.0	7.0	7.0	7.0	7.0	6.9	---	---
23	7.0	6.8	7.2	7.0	7.0	6.9	7.1	7.0	7.0	6.9	---	---
24	7.0	6.7	7.1	6.9	7.1	7.0	7.1	7.1	7.0	6.9	7.0	7.0
25	6.9	6.6	7.0	6.8	7.1	7.1	7.1	7.1	7.1	7.0	7.0	6.8
26	6.9	6.6	7.2	6.8	7.1	7.0	7.2	7.1	7.1	7.0	6.9	6.8
27	6.8	6.5	7.1	6.9	7.2	7.0	7.2	7.1	7.1	7.0	6.9	6.8
28	6.6	6.5	7.1	6.9	7.2	7.2	7.2	7.1	7.1	7.0	6.8	6.7
29	6.7	6.5	7.1	6.9	7.2	7.2	7.2	7.2	7.2	7.0	6.8	6.7
30	6.9	6.7	7.0	7.2	7.3	7.2	7.3	7.2	7.2	7.1	6.8	6.7
31	---	---	7.1	6.9	---	---	7.3	7.3	7.2	7.2	---	---
MONTH	7.1	6.5	7.3	6.4	7.3	6.8	7.4	6.7	7.4	6.6	7.5	6.7
YEAR	7.6	6.4										

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.6	7.7	7.4	---	---	---	---	---	---	---	---
2	---	---	7.8	7.5	---	---	---	---	---	---	---	---
3	---	---	8.0	7.6	---	---	---	---	---	---	---	---
4	---	---	7.8	7.4	---	---	---	---	---	---	---	---
5	---	---	8.0	7.6	---	---	---	---	---	---	---	---
6	---	---	7.9	7.4	---	---	---	---	---	---	---	---
7	---	---	7.7	7.4	---	---	---	---	---	---	---	---
8	---	---	7.5	7.3	---	---	---	---	---	---	---	---
9	---	---	7.3	7.2	---	---	---	---	---	---	---	---
10	---	---	7.2	7.2	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.3	7.1	---	---	---	---	---	---	---	---	---	---
26	7.3	7.2	---	---	---	---	---	---	---	---	---	---
27	7.6	7.4	---	---	---	---	---	---	---	---	---	---
28	7.7	7.4	---	---	---	---	---	---	---	---	---	---
29	7.6	7.4	---	---	---	---	---	---	---	---	---	---
30	7.6	7.3	---	---	---	---	---	---	---	---	7.4	7.4
31	7.6	7.3	---	---	---	---	---	---	---	---	7.4	7.2
MONTH	7.7	6.6	8.0	7.2	---	---	---	---	---	---	7.4	7.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	7.1	7.3	7.0	7.1	7.0	7.8	7.5	7.7	7.6	8.1	7.6
2	7.3	7.2	7.6	7.0	7.1	7.0	7.7	7.4	7.7	7.6	8.2	7.6
3	7.3	7.1	7.3	7.1	7.1	7.1	7.7	7.3	7.7	7.1	8.1	7.7
4	7.3	7.2	7.3	7.1	7.2	7.1	7.6	7.4	7.4	7.3	8.1	7.7
5	7.2	7.0	7.4	7.1	7.1	7.0	7.5	7.2	7.4	7.0	8.0	7.4
6	7.2	7.0	7.5	7.1	7.1	7.0	7.6	7.2	7.3	7.2	8.0	7.7
7	7.4	7.0	7.3	6.8	7.0	7.0	7.6	7.4	7.3	7.2	8.0	7.7
8	7.6	7.2	7.4	7.1	7.1	7.0	7.6	7.4	7.4	7.2	8.0	7.8
9	7.6	7.1	7.4	7.1	7.1	7.0	7.6	7.4	7.3	7.2	7.7	7.3
10	7.7	7.5	7.5	6.9	7.2	7.1	7.6	7.4	7.2	7.1	7.4	7.4
11	7.6	7.5	7.6	7.3	7.2	7.1	7.6	7.5	7.4	7.0	7.5	7.4
12	7.4	7.3	7.7	7.4	7.4	7.1	7.6	7.6	7.3	7.1	7.5	7.4
13	7.6	7.3	7.6	7.5	7.5	7.1	7.6	7.6	7.2	7.1	7.6	7.5
14	7.4	6.9	7.6	7.4	7.5	7.2	7.7	7.5	7.0	6.9	7.8	7.5
15	7.1	6.7	7.7	7.4	7.7	7.2	7.8	7.6	7.1	7.1	7.7	7.5
16	6.9	6.8	7.8	7.4	7.7	7.4	7.7	7.6	7.1	7.0	7.6	7.4
17	7.2	6.8	7.7	7.5	7.7	7.4	7.7	7.6	7.1	7.0	7.7	7.3
18	7.1	6.7	7.6	7.5	7.8	7.5	7.8	7.7	7.4	7.0	7.3	7.2
19	7.2	6.8	7.7	7.5	7.8	7.5	7.8	7.7	7.3	6.9	7.4	7.1
20	7.0	6.8	7.5	7.4	7.8	7.6	7.8	7.7	7.4	7.2	---	---
21	7.3	6.8	7.6	7.5	7.8	7.7	7.8	7.7	7.4	7.0	---	---
22	7.4	6.8	7.6	7.4	7.8	7.5	7.8	7.6	7.5	7.4	---	---
23	7.4	7.0	7.6	7.4	7.7	7.7	7.8	7.6	7.5	7.3	---	---
24	7.2	7.1	7.6	7.4	7.7	7.6	7.8	7.7	7.5	7.3	7.2	7.2
25	7.3	6.9	7.6	7.4	7.8	7.7	7.8	7.8	7.6	7.4	7.2	7.1
26	7.1	6.8	7.5	7.4	7.6	7.5	7.8	7.7	7.7	7.6	7.2	7.0
27	7.3	6.8	7.5	7.4	7.6	7.4	7.7	7.7	7.7	7.4	7.3	7.0
28	7.0	6.8	7.5	7.4	7.6	7.5	7.7	7.6	8.0	7.4	7.0	6.9
29	7.1	6.9	7.4	7.4	7.6	7.4	7.7	7.6	8.2	7.5	7.1	6.9
30	7.1	7.0	7.4	7.3	7.6	7.5	7.7	7.6	8.2	7.5	7.0	6.8
31	---	---	7.3	7.1	---	---	7.7	7.7	8.1	7.5	---	---
MONTH	7.7	6.7	7.8	6.8	7.8	7.0	7.8	7.2	8.2	6.9	8.2	6.8
YEAR	8.2	6.6										

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.6	7.7	7.4	---	---	---	---	---	---	---	---
2	---	---	7.8	7.4	---	---	---	---	---	---	---	---
3	---	---	7.9	7.5	---	---	---	---	---	---	---	---
4	---	---	7.9	7.4	---	---	---	---	---	---	---	---
5	---	---	8.0	7.3	---	---	---	---	---	---	---	---
6	---	---	7.7	7.4	---	---	---	---	---	---	---	---
7	---	---	7.7	7.3	---	---	---	---	---	---	---	---
8	---	---	7.6	7.3	---	---	---	---	---	---	---	---
9	---	---	7.4	7.1	---	---	---	---	---	---	---	---
10	---	---	7.2	7.2	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	7.3	7.1	---	---	---	---	---	---	---	---	---	---
26	7.3	7.1	---	---	---	---	---	---	---	---	---	---
27	7.4	7.2	---	---	---	---	---	---	---	---	---	---
28	7.6	7.4	---	---	---	---	---	---	---	---	---	---
29	7.6	7.4	---	---	---	---	---	---	---	---	---	---
30	7.6	7.3	---	---	---	---	---	---	---	---	---	---
31	7.6	7.3	---	---	---	---	---	---	---	---	---	---
MONTH	7.6	6.6	8.0	7.1	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.7	7.5	7.3	7.2	7.9	7.8	7.9	7.8	8.4	8.3
2	---	---	7.6	7.5	7.6	7.1	7.9	7.8	7.8	7.8	8.5	8.3
3	---	---	7.4	7.3	7.5	7.2	7.7	7.6	7.8	7.5	8.5	8.3
4	---	---	7.4	7.3	7.5	7.3	7.8	7.7	7.6	7.5	8.4	8.3
5	---	---	7.4	7.2	7.3	7.1	7.7	7.7	7.6	7.5	8.3	8.1
6	---	---	7.4	7.3	7.3	7.2	7.7	7.6	7.6	7.4	8.4	8.2
7	---	---	7.5	7.4	7.5	7.3	7.8	7.6	7.4	7.3	8.3	8.2
8	---	---	7.6	7.3	7.8	7.3	7.7	7.7	7.5	7.4	8.3	8.1
9	---	---	7.5	7.3	8.0	7.5	7.7	7.6	7.5	7.4	8.0	7.7
10	---	---	7.6	7.3	7.9	7.7	7.7	7.6	7.3	7.3	7.7	7.6
11	---	---	7.5	7.3	7.8	7.7	7.8	7.6	7.5	7.3	7.9	7.7
12	---	---	7.5	7.4	7.8	7.7	7.7	7.7	7.4	7.4	8.0	7.8
13	---	---	7.6	7.4	7.8	7.7	7.7	7.6	7.4	7.2	8.1	7.9
14	---	---	7.6	7.4	7.8	7.7	7.8	7.6	7.3	7.1	8.1	8.1
15	---	---	7.7	7.4	7.8	7.6	7.8	7.7	7.3	7.2	8.6	8.1
16	---	---	8.1	7.5	7.8	7.6	7.8	7.7	7.3	7.1	8.2	8.1
17	---	---	7.7	7.5	7.8	7.7	7.8	7.7	7.4	7.1	8.2	7.9
18	---	---	7.7	7.5	7.9	7.7	7.9	7.8	7.6	7.3	7.7	7.3
19	---	---	7.6	7.5	7.9	7.8	8.0	7.8	7.6	7.4	7.5	7.4
20	---	---	7.6	7.5	8.0	7.8	7.9	7.8	7.7	7.5	---	---
21	---	---	7.7	7.5	8.0	7.9	7.9	7.8	7.6	7.5	---	---
22	---	---	7.6	7.5	8.0	7.9	7.9	7.8	7.7	7.5	---	---
23	---	---	7.6	7.5	7.9	7.9	8.0	7.8	7.7	7.6	---	---
24	---	---	7.6	7.5	8.0	7.8	8.0	7.9	7.8	7.7	7.5	7.4
25	---	---	7.6	7.5	8.0	8.0	8.0	7.9	7.9	7.7	7.6	7.5
26	---	---	7.6	7.5	7.9	7.8	8.0	7.9	8.0	7.8	7.5	7.4
27	---	---	7.6	7.4	8.0	7.7	7.9	7.8	8.4	7.8	7.6	7.4
28	---	---	7.6	7.5	7.9	7.8	8.0	7.8	8.2	8.1	7.4	7.3
29	---	---	7.6	7.5	7.8	7.8	7.9	7.7	8.4	8.1	7.4	7.3
30	7.6	7.2	7.6	7.5	8.0	7.8	7.9	7.7	8.4	8.3	7.3	7.1
31	---	---	7.5	7.4	---	---	7.9	7.8	8.5	8.4	---	---
MONTH	7.6	7.2	8.1	7.2	8.0	7.1	8.0	7.6	8.5	7.1	8.6	7.1
YEAR	8.6	6.6										

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.0	21.7	22.6	16.1	15.8	15.9	---	---	---	---	---	---
2	---	---	---	16.0	15.8	15.9	---	---	---	---	---	---
3	---	---	---	16.0	15.8	15.9	---	---	---	---	---	---
4	---	---	---	16.0	15.8	15.9	---	---	---	---	---	---
5	---	---	---	16.0	15.8	15.9	---	---	---	---	---	---
6	---	---	---	16.1	15.9	16.0	---	---	---	---	---	---
7	---	---	---	16.1	16.0	16.0	---	---	---	---	---	---
8	---	---	---	16.2	16.1	16.1	---	---	---	---	---	---
9	---	---	---	16.2	16.0	16.1	---	---	---	---	---	---
10	---	---	---	15.9	15.8	15.8	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	17.2	16.9	17.0	---	---	---	---	---	---	---	---	---
26	17.1	16.7	16.8	---	---	---	---	---	---	---	---	---
27	17.0	16.5	16.7	---	---	---	---	---	---	---	---	---
28	17.1	16.9	17.0	---	---	---	---	---	---	---	---	---
29	16.7	16.4	16.6	---	---	---	---	---	---	---	---	---
30	16.8	16.0	16.3	---	---	---	---	---	---	---	---	---
31	16.2	15.9	16.0	---	---	---	---	---	---	---	---	---
MONTH	23.0	15.9	17.4	16.2	15.8	15.9	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	9.7	9.4	9.6	12.1	11.8	11.9
2	---	---	---	---	---	---	10.2	9.5	9.9	12.6	12.0	12.3
3	---	---	---	---	---	---	10.4	9.9	10.2	12.9	12.4	12.6
4	---	---	---	---	---	---	10.7	10.1	10.4	13.3	12.7	13.0
5	---	---	---	---	---	---	10.7	10.4	10.5	13.6	12.8	13.2
6	---	---	---	---	---	---	10.7	10.2	10.4	13.3	12.8	13.0
7	---	---	---	---	---	---	10.5	10.2	10.3	13.2	13.1	13.1
8	---	---	---	---	---	---	10.2	10.1	10.2	13.4	12.9	13.2
9	---	---	---	---	---	---	10.2	10.1	10.2	13.5	13.3	13.4
10	---	---	---	---	---	---	10.2	10.1	10.1	13.8	13.4	13.6
11	---	---	---	---	---	---	10.2	10.1	10.1	13.9	13.6	13.8
12	---	---	---	---	---	---	10.1	10.1	10.1	14.4	13.7	14.0
13	---	---	---	---	---	---	10.1	10.1	10.1	14.6	14.1	14.4
14	---	---	---	---	---	---	10.3	10.2	10.2	14.7	14.6	14.6
15	---	---	---	---	---	---	10.8	10.3	10.5	15.4	14.8	15.0
16	---	---	---	---	---	---	11.0	10.6	10.7	15.5	14.9	15.2
17	---	---	---	---	---	---	10.9	10.6	10.7	15.6	14.9	15.3
18	---	---	---	---	---	---	10.7	10.5	10.6	15.2	15.0	15.0
19	---	---	---	---	---	---	10.9	10.7	10.8	15.2	14.9	15.1
20	---	---	---	---	---	---	11.1	10.8	10.9	15.2	15.0	15.1
21	---	---	---	---	---	---	10.9	10.8	10.9	15.5	15.1	15.3
22	---	---	---	---	---	---	11.0	10.8	10.9	15.7	15.4	15.6
23	---	---	---	---	---	---	11.1	10.9	11.0	16.1	15.6	15.8
24	---	---	---	---	---	---	11.0	11.0	11.0	16.1	15.8	16.0
25	---	---	---	---	---	---	11.0	11.0	11.0	16.2	15.8	16.0
26	---	---	---	---	---	---	11.1	11.0	11.1	15.7	15.4	15.6
27	---	---	---	---	---	---	11.2	11.1	11.1	15.4	15.4	15.4
28	---	---	---	---	---	---	11.3	11.2	11.2	15.5	15.5	15.5
29	---	---	---	---	---	---	11.6	11.2	11.4	15.8	15.5	15.7
30	---	---	---	9.2	8.9	9.1	11.9	11.6	11.8	16.0	15.8	15.8
31	---	---	---	9.6	9.1	9.3	---	---	---	18.1	15.9	16.9
MONTH	---	---	---	9.6	8.9	9.2	11.9	9.4	10.6	18.1	11.8	14.5

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 Sept. 30, 2004 (discontinued).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 1,259.00 ft above NGVD of 1929. 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.--Records good. Flow regulated by Martins Fork Dam (station 03400798) beginning January 1979.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

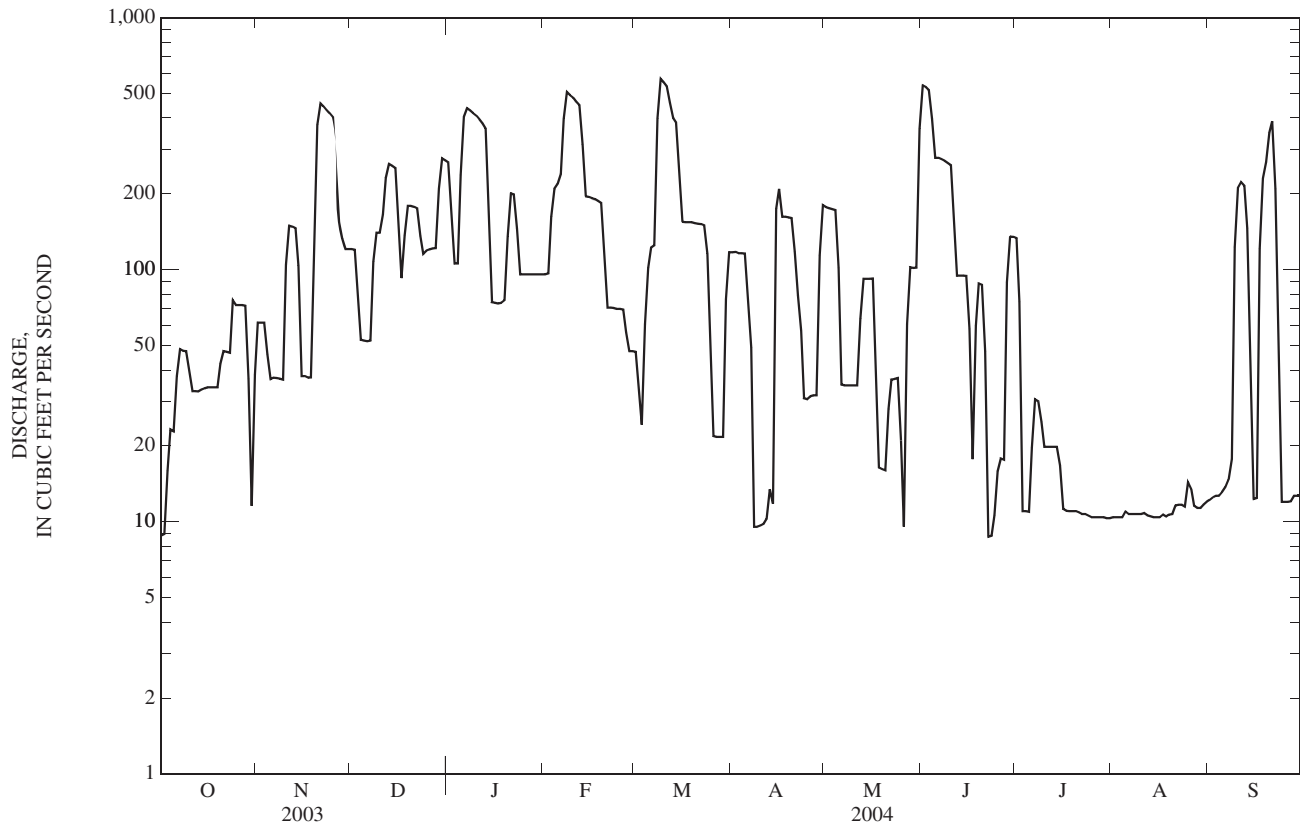
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	62	121	266	96	47	117	177	538	133	10	12
2	8.9	62	120	177	97	34	117	176	529	74	10	12
3	16	62	77	106	162	24	116	174	516	11	10	13
4	23	46	53	106	209	61	116	172	396	11	10	13
5	23	37	52	237	218	102	116	102	277	11	11	13
6	38	37	52	404	239	122	77	35	277	20	11	14
7	48	37	52	436	397	125	49	35	274	31	11	15
8	48	37	107	428	507	399	9.6	35	271	30	11	18
9	48	37	140	418	493	572	9.6	35	265	25	11	123
10	39	104	140	408	481	555	9.7	35	260	20	11	211
11	33	150	165	394	465	535	9.8	35	164	20	11	222
12	33	148	231	380	450	459	10	64	95	20	11	215
13	33	146	263	363	314	400	13	92	95	20	11	146
14	33	104	258	181	196	384	12	92	95	20	10	54
15	34	38	253	74	195	257	174	92	95	17	10	12
16	34	38	161	74	192	155	209	92	58	11	10	12
17	34	37	93	73	190	154	162	46	18	11	11	121
18	34	37	137	74	187	154	162	16	60	11	10	230
19	34	166	179	76	184	154	161	16	88	11	11	267
20	42	375	179	136	120	153	160	16	87	11	11	348
21	48	456	178	201	71	152	118	28	47	11	12	388
22	47	445	175	199	71	151	79	37	8.7	11	12	209
23	47	430	136	145	70	150	57	37	8.8	11	12	46
24	76	416	115	96	70	116	31	37	11	11	11	12
25	72	403	119	96	70	46	31	21	16	10	14	12
26	72	261	120	96	69	22	31	9.5	18	10	14	12
27	72	154	121	96	56	22	32	61	18	10	12	12
28	72	133	122	96	48	22	32	102	89	10	11	13
29	37	121	210	96	48	22	114	102	135	10	11	13
30	12	121	276	96	---	76	180	102	135	10	12	13
31	38	---	271	96	---	117	---	363	---	10	12	---
TOTAL	1,237.7	4,700	4,676	6,124	5,965	5,742	2,514.7	2,436.5	4,944.5	632	345	2,801
MEAN	39.9	157	151	198	206	185	83.8	78.6	165	20.4	11.1	93.4
MAX	76	456	276	436	507	572	209	363	538	133	14	388
MIN	8.8	37	52	73	48	22	9.6	9.5	8.7	10	10	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	48.8	104	144	173	208	200	131	120	74.1	25.8	29.7	27.1
MAX	181	226	452	357	481	413	428	322	267	75.3	117	117
(WY)	(1990)	(1997)	(1992)	(1982)	(1994)	(2002)	(1998)	(1983)	(1989)	(1990)	(1996)	(1989)
MIN	11.0	28.9	16.4	10.1	66.9	33.5	12.4	36.7	12.5	9.34	9.43	9.49
(WY)	(1998)	(1981)	(1981)	(1981)	(1999)	(1988)	(1986)	(1987)	(1988)	(1988)	(1988)	(1984)

03400800 MARTINS FORK NEAR SMITH, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	53,722.5		42,118.4		107	
ANNUAL MEAN	147		115		173	
HIGHEST ANNUAL MEAN					58.0	
LOWEST ANNUAL MEAN					1,880	
HIGHEST DAILY MEAN	1,360	Feb 18	572	Mar 9	4.3	Mar 19, 2002
LOWEST DAILY MEAN	6.7	Jul 1	8.7	Jun 22	4.3	Mar 9, 2002
ANNUAL SEVEN-DAY MINIMUM	10	Aug 28	10	Jul 25	4.4	Mar 8, 2002
MAXIMUM PEAK FLOW			597	Mar 8	9,000	Apr 4, 1977
MAXIMUM PEAK STAGE			11.33	Mar 8	24.24	Apr 4, 1977
INSTANTANEOUS LOW FLOW					0.10	Oct 30, 1978
10 PERCENT EXCEEDS	447		277		292	
50 PERCENT EXCEEDS	67		72		46	
90 PERCENT EXCEEDS	11		11		11	



03400800 MARTINS FORK NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--October 1971 to current water year.

pH.--December 1979 to current water year.

WATER TEMPERATURES.--October 1971 to current water year.

DISSOLVED OXYGEN.--October 1971 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry.

REMARKS.--

SPECIFIC CONDUCTANCE.--Records rated good.

pH.--Records rated good.

WATER TEMPERATURE.--Records rated good.

DISSOLVED OXYGEN.--Records rated good.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE.--(water years 1972-77, 1980 to current water year) Maximum recorded, 561 microsiemens, Feb. 12, 1972; minimum recorded 49 microsiemens, Feb 26, 1985.

pH.--Maximum recorded, 8.2 units, July 2, 1980; minimum recorded, 5.9 units, Jan. 6, 7, 1996, Sept. 20, 1998.

WATER TEMPERATURE.--Maximum recorded, 32.5°C, Aug. 6, 1982; minimum recorded, 0.0°C, on many days during the winter months.

DISSOLVED OXYGEN.--Maximum recorded, 15.6 mg/L, Jan. 20, 21, 1985; minimum recorded, 4.6 mg/L, Aug. 10, 1994.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 162 microsiemens, Sep. 8; minimum recorded 94 microsiemens, Feb. 10.

pH.--Maximum recorded, 7.5 units, Dec. 15; minimum recorded, 6.3 units, Jan. 25, Mar. 28-31.

WATER TEMPERATURE.--Maximum recorded, 27.6°C, July 21; minimum recorded, 3.6°C, Jan. 23

DISSOLVED OXYGEN.--Maximum recorded, 15.5 mg/L, Apr. 8; minimum recorded, 3.5 mg/L Sep. 9.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	150	147	148	146	141	145	129	128	129	114	111	113
2	151	149	150	147	144	145	129	126	128	113	111	112
3	151	147	149	147	144	145	130	127	129	113	109	110
4	150	147	148	147	143	145	130	127	129	113	109	111
5	148	146	147	147	143	146	130	127	128	118	113	116
6	147	146	146	150	144	148	127	126	127	120	117	118
7	147	145	146	148	146	147	127	125	126	121	118	119
8	148	146	147	153	147	148	127	125	126	120	116	118
9	148	147	148	156	151	153	126	123	124	119	117	118
10	149	148	149	153	142	148	125	122	123	121	114	118
11	150	149	149	147	141	145	122	119	121	114	109	111
12	150	149	150	147	142	146	122	119	120	110	104	107
13	150	149	150	145	144	145	124	117	121	106	104	105
14	150	141	149	144	139	142	124	115	120	109	106	108
15	155	149	150	147	138	142	115	111	113	109	108	108
16	155	150	152	141	138	140	113	111	112	111	109	110
17	150	144	149	141	137	139	115	113	114	112	111	111
18	146	142	144	139	135	138	116	114	115	113	111	112
19	145	141	143	149	135	142	117	115	116	114	111	112
20	146	142	144	149	134	140	115	113	115	115	113	114
21	148	145	147	141	118	125	116	113	114	115	111	114
22	148	147	147	126	113	116	116	114	115	111	106	109
23	148	146	147	122	107	115	117	114	115	114	106	108
24	149	148	148	117	108	114	116	115	115	114	108	113
25	150	148	149	121	114	116	116	115	115	115	113	114
26	149	148	149	122	116	120	116	112	114	115	113	114
27	149	148	149	123	119	120	112	106	107	116	114	115
28	151	149	150	126	123	125	108	102	105	115	114	114
29	155	151	153	128	124	126	112	106	109	117	115	116
30	154	150	152	129	127	128	107	103	104	117	116	117
31	150	141	146	---	---	---	111	106	109	116	114	115
MONTH	155	141	148	156	107	136	130	102	118	121	104	113

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	116	115	116	122	117	120	106	104	105	117	116	116
2	117	115	116	125	117	122	114	105	110	116	112	115
3	117	114	115	123	121	122	114	108	111	114	107	111
4	124	113	117	122	118	120	113	106	108	111	107	109
5	125	117	121	119	113	115	108	107	107	112	104	109
6	121	112	115	117	112	115	120	107	110	111	107	110
7	119	98	108	118	103	110	122	113	118	109	106	108
8	102	98	100	118	106	112	125	122	124	109	105	107
9	104	97	99	113	102	106	126	123	124	106	104	104
10	99	94	96	117	99	104	123	120	122	105	103	104
11	107	95	100	109	96	102	121	118	119	106	104	105
12	116	98	104	106	96	101	120	117	119	105	103	104
13	117	97	107	103	99	100	121	115	118	107	105	106
14	109	97	104	105	101	103	124	118	121	109	106	107
15	115	108	113	102	98	100	119	112	116	112	108	109
16	121	105	110	106	98	101	112	107	110	114	109	112
17	107	105	106	105	100	102	113	105	110	116	113	115
18	107	106	107	108	101	104	113	106	111	116	115	116
19	109	107	108	107	100	104	115	112	114	117	116	116
20	113	109	111	106	101	101	115	113	114	117	116	116
21	113	112	113	108	101	104	114	113	113	118	116	117
22	114	113	113	103	101	102	114	112	113	118	116	117
23	116	114	114	104	100	101	115	111	113	119	117	118
24	118	115	116	109	104	106	115	114	114	120	118	119
25	118	116	117	109	105	108	115	114	115	121	119	120
26	117	116	116	106	104	105	114	113	114	123	117	120
27	119	117	117	105	103	104	115	114	114	---	---	---
28	119	117	118	105	104	104	115	114	115	123	120	121
29	120	117	118	105	104	105	116	114	115	123	121	122
30	---	---	---	107	102	104	117	115	116	127	123	124
31	---	---	---	106	103	105	---	---	---	129	116	126
MONTH	125	94	111	125	96	107	126	104	114	129	103	113
	JUNE			JULY			AUGUST			SEPTEMBER		
1	118	112	115	130	128	129	140	137	139	155	151	154
2	124	117	119	130	120	126	140	136	138	155	154	155
3	124	115	118	127	125	126	141	138	139	156	154	155
4	120	117	119	127	124	126	141	138	140	156	153	155
5	119	116	118	129	123	126	141	135	140	157	155	156
6	122	114	118	138	124	131	142	139	141	157	154	156
7	116	113	115	138	135	137	142	139	141	156	150	154
8	119	115	117	141	136	138	142	139	141	162	151	158
9	119	116	117	141	137	138	142	139	141	161	143	153
10	119	117	118	141	138	140	141	138	140	143	132	137
11	121	117	119	141	139	140	141	139	140	133	124	128
12	121	120	120	143	139	140	143	140	142	130	124	126
13	125	120	122	143	133	138	145	143	143	131	124	127
14	125	122	124	134	132	133	144	142	143	131	126	129
15	126	123	124	134	131	132	145	142	144	130	127	128
16	127	125	125	133	130	132	146	143	145	130	127	129
17	---	---	---	132	130	132	147	144	145	134	125	130
18	127	125	126	133	130	132	147	144	146	127	109	119
19	128	125	127	133	129	131	149	146	147	115	108	111
20	128	126	127	133	130	131	150	147	148	119	110	113
21	129	127	128	136	132	133	150	144	148	120	115	117
22	130	128	129	137	134	136	151	147	149	120	117	119
23	130	126	128	137	134	136	150	147	149	122	117	118
24	129	128	129	138	135	136	150	148	149	119	116	117
25	131	123	129	138	134	137	150	147	149	120	116	118
26	131	129	130	138	136	137	151	148	149	121	116	118
27	130	128	129	139	137	138	152	149	150	122	118	119
28	131	129	130	140	137	139	152	150	151	122	117	120
29	130	127	129	141	137	139	153	150	151	123	120	122
30	130	127	128	140	138	139	153	150	152	122	120	121
31	---	---	---	141	135	139	154	152	153	---	---	---
MONTH	---	---	---	143	120	134	154	135	145	162	108	132
YEAR	---	---	---									

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.2	7.0	7.1	7.0	7.4	7.1	7.0	6.5	7.0	6.7	6.7	6.5
2	7.2	7.1	7.1	7.0	7.3	7.1	6.9	6.6	7.0	6.5	6.8	6.6
3	7.3	7.1	7.1	7.0	7.1	7.0	7.1	6.8	7.1	6.5	6.8	6.6
4	7.2	7.0	7.1	7.0	7.1	6.8	7.0	6.9	7.1	6.8	6.8	6.6
5	7.2	7.0	7.1	6.9	6.9	6.8	7.2	6.9	7.1	6.5	7.1	6.7
6	7.2	7.0	7.1	6.9	7.3	6.8	7.2	7.1	6.9	6.6	7.0	6.7
7	7.2	6.9	7.2	7.0	7.2	7.0	7.1	6.9	7.0	6.6	6.9	6.6
8	7.1	6.9	7.2	7.0	7.3	6.8	6.9	6.8	7.1	6.8	6.9	6.8
9	7.1	6.9	7.2	7.1	7.2	6.9	6.8	6.6	7.1	6.8	6.9	6.5
10	7.2	6.9	7.2	7.1	7.0	6.7	6.8	6.7	6.9	6.5	6.8	6.7
11	7.2	6.8	7.3	7.0	7.0	6.8	6.8	6.6	7.0	6.7	6.8	6.6
12	7.1	6.8	7.3	7.2	7.1	6.8	6.8	6.6	7.0	6.5	6.8	6.7
13	7.1	6.8	7.5	7.3	7.0	6.6	6.8	6.4	7.0	6.8	6.8	6.6
14	7.2	6.8	7.4	7.1	7.1	6.6	6.8	6.4	6.9	6.7	6.7	6.5
15	7.1	6.7	7.1	6.9	7.5	6.5	6.9	6.5	6.9	6.4	6.5	6.4
16	7.0	6.8	7.1	6.9	7.3	6.8	6.8	6.7	6.8	6.6	6.8	6.4
17	7.0	6.9	7.0	6.8	7.1	6.8	6.8	6.5	6.7	6.4	7.0	6.6
18	7.1	6.9	7.5	6.8	7.1	6.7	7.0	6.5	6.9	6.5	6.9	6.6
19	7.1	6.9	7.2	6.9	7.0	6.7	6.9	6.7	6.9	6.6	6.9	6.6
20	7.1	6.9	7.4	7.1	7.0	6.9	6.7	6.7	6.9	6.6	6.9	6.5
21	7.3	6.9	7.2	6.9	7.1	6.8	6.7	6.6	6.9	6.8	6.9	6.8
22	7.2	7.1	7.2	6.8	7.2	6.6	6.8	6.6	6.9	6.7	6.9	6.7
23	7.3	7.1	7.4	6.8	6.9	6.6	6.6	6.5	6.8	6.6	6.8	6.6
24	7.3	7.1	7.4	7.0	7.1	6.7	6.8	6.6	6.8	6.6	6.7	6.4
25	7.3	7.1	7.2	7.1	7.1	6.8	6.8	6.3	6.8	6.7	6.7	6.5
26	7.3	7.2	7.3	7.1	7.2	6.8	6.8	6.6	6.7	6.4	6.7	6.5
27	7.3	7.2	7.2	6.9	7.1	6.6	6.9	6.5	6.8	6.4	6.6	6.5
28	7.4	7.1	7.3	7.0	7.0	6.5	7.0	6.7	6.8	6.6	6.6	6.3
29	7.4	7.2	7.3	7.2	6.9	6.6	7.1	6.8	6.8	6.6	6.6	6.3
30	7.3	7.1	7.3	7.1	6.9	6.6	7.1	6.6	---	---	6.7	6.3
31	7.2	7.0	---	---	7.1	6.5	6.9	6.8	---	---	6.8	6.5
MONTH	7.4	6.7	7.5	6.8	7.5	6.5	7.2	6.3	7.1	6.4	7.1	6.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.9	6.5	6.9	6.9	7.1	7.0	6.7	6.6	7.0	6.9	7.1	7.0
2	6.8	6.6	7.0	6.8	7.1	7.1	6.9	6.7	6.9	6.9	7.1	7.0
3	6.9	6.6	6.9	6.8	7.2	7.1	6.9	6.8	7.0	6.9	7.1	7.0
4	7.0	6.8	7.0	6.8	7.2	7.1	6.9	6.8	6.9	6.8	7.0	7.0
5	6.9	6.8	7.0	6.9	7.							

03400800 MARTINS FORK NEAR SMITH, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	22.4	20.9	21.7	19.0	17.8	18.3	10.5	9.9	10.3	5.7	5.1	5.4
2	23.0	20.3	21.4	18.9	18.0	18.4	9.9	8.9	9.4	6.1	5.5	5.8
3	22.5	19.9	21.2	18.9	17.9	18.2	9.0	8.6	8.8	7.4	6.1	6.7
4	22.4	21.2	21.7	19.4	17.8	18.5	8.7	8.6	8.6	8.6	7.4	8.1
5	22.6	21.0	21.6	19.1	18.2	18.7	8.7	8.3	8.5	8.8	8.3	8.5
6	22.2	21.0	21.4	19.2	18.6	18.8	8.3	8.0	8.2	8.3	7.6	7.9
7	22.2	21.1	21.4	18.9	18.2	18.6	8.2	7.8	7.9	7.8	7.4	7.6
8	22.2	21.1	21.5	19.0	17.8	18.3	8.0	7.7	7.8	7.5	7.2	7.4
9	22.1	21.2	21.5	18.8	17.5	18.0	7.8	7.4	7.6	7.3	6.8	7.0
10	22.2	21.2	21.7	18.1	15.6	16.8	7.9	7.6	7.7	6.9	6.2	6.6
11	22.6	21.2	21.7	16.4	15.6	16.1	7.6	7.1	7.3	6.2	5.8	6.0
12	22.6	21.4	21.8	16.4	16.1	16.3	7.3	6.8	7.1	5.9	5.6	5.8
13	23.1	21.6	22.3	16.2	15.0	15.6	7.2	6.9	7.0	5.9	5.3	5.6
14	22.5	21.6	22.1	15.0	14.2	14.6	6.9	6.6	6.8	6.1	5.4	5.8
15	22.4	20.6	21.4	14.2	13.6	13.9	7.3	6.5	6.8	6.3	5.9	6.0
16	22.0	20.6	21.2	13.7	13.5	13.6	7.2	6.8	7.0	6.1	5.7	5.9
17	21.0	20.5	20.7	13.7	13.1	13.4	7.2	6.7	6.9	6.4	6.0	6.2
18	21.2	19.8	20.5	16.0	13.0	13.5	6.7	6.4	6.6	6.3	5.9	6.1
19	21.1	19.7	20.3	14.0	13.1	13.5	6.4	5.8	6.1	5.9	5.2	5.5
20	21.2	19.9	20.4	14.2	13.8	14.0	5.8	5.4	5.7	5.3	5.0	5.1
21	21.4	19.7	20.5	14.0	13.6	13.8	5.5	5.1	5.3	5.0	4.4	4.9
22	20.9	19.8	20.3	14.0	13.4	13.7	5.3	4.9	5.1	4.6	3.9	4.3
23	20.3	19.4	19.8	14.5	13.2	13.7	5.4	4.7	5.1	4.5	3.6	4.1
24	20.2	18.8	19.6	13.9	13.2	13.6	5.4	5.0	5.2	4.6	4.1	4.4
25	20.1	19.1	19.6	13.3	12.7	13.0	5.1	4.9	5.0	4.6	4.4	4.5
26	19.5	19.0	19.3	12.7	12.1	12.5	5.3	4.9	5.1	5.2	4.6	5.0
27	19.3	18.7	19.0	12.1	11.6	11.8	5.7	5.2	5.4	5.2	4.7	5.0
28	19.2	18.6	18.8	11.8	11.4	11.6	5.7	5.3	5.4	4.7	4.1	4.3
29	20.3	18.3	19.0	11.4	10.7	11.0	5.4	5.2	5.3	4.7	4.1	4.4
30	20.7	17.6	18.9	10.8	10.4	10.6	5.5	4.9	5.3	4.5	3.9	4.3
31	19.7	17.8	18.4	---	---	---	5.6	5.2	5.4	4.6	3.8	4.2
MONTH	23.1	17.6	20.7	19.4	10.4	15.1	10.5	4.7	6.8	8.8	3.6	5.8
FEBRUARY			MARCH			APRIL			MAY			
1	4.8	4.1	4.4	8.0	6.9	7.4	11.3	10.3	10.7	15.0	14.1	14.6
2	4.8	4.4	4.6	8.3	7.5	7.9	11.6	10.4	11.2	15.6	14.6	14.9
3	4.6	4.3	4.5	8.8	7.5	7.8	12.0	11.1	11.6	16.1	14.9	15.5
4	4.6	4.1	4.4	8.8	7.4	8.0	11.6	11.2	11.4	16.8	15.4	16.1
5	4.8	4.5	4.6	12.6	8.1	10.8	12.1	11.2	11.6	18.0	15.9	16.8
6	5.1	4.7	4.9	11.6	9.4	10.2	20.6	11.2	13.3	16.3	14.5	15.7
7	5.2	4.6	4.9	10.7	9.2	10.0	17.6	11.4	13.9	16.4	14.5	15.2
8	5.7	5.1	5.4	10.5	9.2	9.9	19.2	15.0	17.5	16.6	14.3	15.2
9	5.9	5.6	5.7	10.2	9.6	10	20.9	16.0	18.4	16.8	14.6	15.4
10	5.8	5.6	5.7	9.9	9.2	9.5	19.6	16.2	18.1	17.0	14.8	15.6
11	5.9	5.5	5.7	10.0	9.3	9.7	18.5	17.7	18.1	16.7	15.1	15.7
12	5.8	5.6	5.7	9.9	9.3	9.6	18.1	17.3	17.7	16.6	15.2	15.8
13	6.3	5.4	5.9	9.9	9.1	9.4	18.8	16.6	17.4	16.8	15.7	16.2
14	6.1	5.9	6.0	10.3	9.3	9.6	17.1	12.2	15.0	16.9	16.1	16.5
15	6.0	5.7	5.9	9.6	9.2	9.3	13.0	11.3	11.8	17.4	16.4	16.9
16	6.1	5.5	5.8	11.6	9.2	10.0	11.8	11.2	11.5	17.9	16.8	17.4
17	6.0	5.8	6.0	10.1	9.2	9.7	12.0	11.1	11.5	20.0	16.9	18.1
18	6.9	5.8	6.3	10.0	9.6	9.8	12.1	11.1	11.6	20.1	16.9	17.9
19	6.8	6.1	6.5	10.0	9.4	9.7	12.2	11.3	11.7	19.2	16.9	17.7
20	6.8	6.2	6.6	12.2	9.4	10.6	12.1	11.5	11.8	20.2	17.0	18.1
21	6.9	6.5	6.7	11.3	9.7	10.2	12.6	11.5	11.9	18.5	17.1	17.7
22	7.4	6.5	6.9	10.3	9.4	9.9	12.4	11.7	12.0	19.4	17.3	18.1
23	7.2	6.6	6.9	10.9	9.2	10.0	13.0	11.7	12.1	19.7	17.5	18.3
24	7.4	6.7	7.1	11.1	9.8	10.3	14.0	11.9	12.6	19.0	17.6	18.2
25	7.2	6.6	6.8	11.9	9.5	10.4	13.3	11.9	12.4	21.9	17.9	18.9
26	7.0	6.8	6.8	12.0	9.3	10.4	12.8	11.6	12.1	21.9	19.2	20.0
27	7.6	6.6	6.9	10.9	9.6	10.0	14.0	11.6	12.5	---	---	---
28	7.9	6.6	7.1	11.5	9.4	10.1	15.0	12.7	13.7	20.4	20.1	20.2
29	7.9	6.7	7.1	11.9	9.5	10.4	14.0	12.9	13.5	21.3	20.1	20.6
30	---	---	---	11.0	9.8	10.2	14.6	13.7	14.0	21.4	20.6	20.9
31	---	---	---	10.9	10.1	10.5	---	---	---	21.5	19.9	20.7
MONTH	7.9	4.1	5.9	12.6	6.9	9.7	20.9	10.3	13.4	---	---	---

03400800 MARTINS FORK NEAR SMITH, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.2	7.0	7.1	---	---	---	---	---	---	12.7	12.4	12.6
2	7.3	7.0	7.1	---	---	---	11.3	11.0	11.2	12.6	12.3	12.4
3	7.6	7.3	7.5	---	---	---	11.3	11.0	11.2	12.4	12.0	12.2
4	7.4	6.8	7.0	---	---	---	11.3	11.0	11.2	12.0	11.6	11.8
5	6.9	6.6	6.8	---	---	---	11.1	11.0	11.1	11.8	11.5	11.7
6	---	---	---	---	---	---	11.3	11.0	11.2	12.2	11.7	12.0
7	---	---	---	---	---	---	11.3	11.2	11.2	12.6	12.2	12.4
8	---	---	---	---	---	---	11.4	11.1	11.3	12.6	12.4	12.5
9	---	---	---	---	---	---	11.3	11.2	11.3	12.7	12.4	12.6
10	---	---	---	9.5	8.7	9.1	11.3	11.0	11.2	12.9	12.5	12.7
11	---	---	---	9.0	8.5	8.7	11.5	11.2	11.4	13.0	12.7	12.9
12	---	---	---	8.7	8.4	8.5	11.8	11.4	11.6	13.0	12.7	12.9
13	---	---	---	8.7	8.4	8.6	11.8	11.7	11.8	13.0	12.7	12.9
14	---	---	---	8.9	8.6	8.7	11.8	11.6	11.7	12.9	12.3	12.6
15	8.6	8.1	8.3	---	---	---	12.0	9.4	11.7	12.6	12.4	12.5
16	8.5	8.3	8.4	---	---	---	12.1	11.8	11.9	12.6	12.4	12.5
17	8.9	8.4	8.7	---	---	---	12.2	11.8	12.1	12.6	12.3	12.4
18	9.1	8.8	9.0	---	---	---	12.2	11.9	12.1	12.3	12.2	12.2
19	9.4	9.0	9.2	---	---	---	12.3	11.9	12.1	12.6	12.2	12.4
20	9.4	9.2	9.3	---	---	---	12.3	12.2	12.3	12.8	12.6	12.7
21	9.4	8.9	9.2	11.2	10.2	10.5	12.5	12.2	12.3	12.8	12.5	12.7
22	---	---	---	11.1	10.4	10.7	12.6	12.4	12.5	13.0	12.6	12.8
23	---	---	---	11.3	10.1	10.8	12.5	12.2	12.4	13.1	12.6	12.9
24	---	---	---	---	---	---	12.5	12.2	12.4	12.9	12.8	12.9
25	---	---	---	---	---	---	12.7	12.4	12.6	12.8	12.6	12.8
26	---	---	---	---	---	---	12.8	12.5	12.6	12.7	12.4	12.6
27	9.6	8.3	9.1	---	---	---	12.7	12.4	12.5	12.7	12.4	12.6
28	8.5	7.1	7.7	---	---	---	12.6	12.4	12.5	13.1	12.7	13.0
29	7.1	6.6	6.9	---	---	---	12.6	12.3	12.5	13.1	12.7	12.9
30	7.0	6.6	6.8	---	---	---	12.7	12.4	12.6	13.0	12.7	12.9
31	7.6	7.0	7.1	---	---	---	12.7	12.5	12.6	13.2	12.8	13.0
MONTH	---	---	---	---	---	---	---	---	---	13.2	11.5	12.6
FEBRUARY			MARCH			APRIL			MAY			
1	13.3	12.8	13.0	12.4	11.9	12.2	11.0	10.7	10.8	9.6	9.2	9.4
2	13.1	12.8	13.0	12.2	11.8	12.0	10.9	10.6	10.7	9.4	9.2	9.3
3	13.0	12.7	12.9	12.2	11.8	12.0	10.7	10.4	10.5	9.3	8.9	9.1
4	13.2	12.9	13.0	12.2	11.8	12.0	14.6	10.4	12.4	9.1	8.8	9.0
5	13.0	12.7	12.9	11.9	10.8	11.3	12.3	11.7	12.0	9.0	8.7	8.9
6	12.8	12.6	12.7	11.6	10.9	11.4	12.3	8.3	11.0	10.4	8.8	9.6
7	13.0	12.7	12.9	11.6	11.2	11.4	11.5	10.1	10.8	10.6	10.1	10.3
8	13.0	12.8	12.9	11.7	11.4	11.6	15.5	9.2	11.1	10.6	9.8	10.3
9	13.0	12.7	12.9	11.8	11.5	11.6	11.3	9.3	10.1	10.6	10.0	10.3
10	13.0	12.5	12.8	12.0	11.6	11.8	12.0	9.5	10.3	10.7	9.6	10.3
11	12.9	12.6	12.8	11.8	11.5	11.7	11.0	9.4	10.1	10.3	9.8	10.1
12	12.9	12.6	12.8	11.8	11.5	11.6	13.1	9.2	10.6	9.9	9.4	9.7
13	13.0	12.5	12.7	11.9	11.6	11.7	13.4	9.1	10.3	10.0	9.4	9.7
14	12.6	12.4	12.4	11.7	11.4	11.6	14.0	6.5	10.5	9.7	9.3	9.6
15	12.7	12.4	12.5	11.6	11.3	11.5	10.9	10.1	10.5	9.7	9.2	9.5
16	12.8	12.6	12.7	11.3	10.8	11.1	11.0	10.5	10.8	9.8	8.4	9.6
17	12.8	12.6	12.7	11.3	11.0	11.2	11.1	10.6	10.9	9.6	8.8	9.3
18	12.7	12.3	12.5	11.3	11.2	11.2	11.1	10.7	10.9	9.0	8.6	8.8
19	12.6	12.4	12.5	11.4	11.1	11.3	11.1	10.7	11.0	8.9	8.3	8.6
20	12.7	12.3	12.5	11.4	10.7	11.1	11.1	10.6	10.9	8.7	8.3	8.5
21	12.6	12.2	12.5	11.2	10.7	11.1	11.0	10.6	10.8	9.1	8.2	8.7
22	12.6	12.3	12.5	11.4	11.2	11.3	11.1	10.6	10.8	9.0	8.7	8.9
23	12.6	12.3	12.4	11.5	11.0	11.3	11.1	10.6	10.8	9.0	8.6	8.8
24	12.5	12.3	12.4	11.4	11.0	11.2	11.1	10.6	10.8	8.9	8.6	8.8
25	12.5	12.3	12.4	11.4	11.1	11.2	10.9	10.5	10.7	8.9	7.9	8.5
26	12.5	12.3	12.4	11.5	11.0	11.2	10.9	10.5	10.7	8.4	7.8	8.0
27	12.6	12.3	12.4	11.4	11.1	11.2	10.8	9.8	10.4	---	---	---
28	12.5	12.3	12.4	11.3	11.0	11.2	10.2	9.8	10	8.8	8.5	8.6
29	12.6	12.2	12.4	11.2	10.8	11.0	10.1	9.6	9.8	8.7	8.5	8.6
30	---	---	---	11.2	10.8	11.0	9.7	9.5	9.6	8.7	8.4	8.6
31	---	---	---	11.1	10.8	11.0	---	---	---	8.5	4.0	6.1
MONTH	13.3	12.2	12.7	12.4	10.7	11.4	15.5	6.5	10.7	---	---	---

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03401000 CUMBERLAND RIVER NEAR HARLAN, KY

LOCATION.--Lat 36°50'48", long 83°21'21", Harlan County, Hydrologic Unit 05130101, on right downstream side of 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 with telemetry. Datum of gage is 1,139.10 ft above NGVD of 1929. Prior to Aug. 28, 1984, datum of gage 1.00 ft higher. Prior to Nov. 4, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft³/s, Mar. 6, May 31, gage height, 15.04 ft; minimum discharge, 76 ft³/s, Sept. 6, 7, gage height, 1.34 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	167	748	981	628	362	728	708	3,280	503	183	103
2	106	173	632	3,230	658	432	776	786	1,800	643	147	94
3	101	168	550	3,140	2,090	439	999	868	1,870	764	134	91
4	102	162	536	1,810	1,800	424	1,080	725	4,010	475	125	94
5	108	201	677	2,930	1,460	507	951	671	4,170	387	278	92
6	103	671	774	3,420	5,570	9,380	808	518	2,020	371	278	80
7	120	807	734	1,930	4,040	2,920	712	470	1,410	351	173	98
8	120	496	681	1,590	2,280	1,760	597	431	1,270	317	142	3,300
9	116	363	683	1,390	1,730	1,580	534	403	1,140	285	125	3,320
10	114	312	1,020	1,210	1,480	1,350	482	387	1,070	254	116	1,470
11	99	367	1,760	1,070	1,310	1,200	454	408	922	247	118	942
12	94	358	1,390	1,000	1,190	1,090	521	372	710	315	189	688
13	93	556	1,150	946	1,060	948	3,260	397	716	300	197	551
14	175	521	1,110	846	850	881	2,820	390	682	303	141	397
15	369	441	1,040	661	797	811	1,700	373	676	258	121	268
16	197	592	946	605	735	873	1,420	378	719	211	108	229
17	151	592	1,170	577	699	920	1,120	587	595	249	101	5,600
18	139	537	e1,140	1,080	666	853	957	357	567	317	101	5,510
19	129	6,350	e1,090	1,680	635	787	853	333	550	216	100	1,890
20	121	3,710	e958	1,260	607	734	785	399	534	187	96	1,240
21	127	1,770	e866	1,100	524	770	728	321	470	169	191	1,040
22	126	1,290	e750	969	481	701	610	303	370	170	237	824
23	122	1,070	945	849	456	666	603	285	341	255	138	507
24	134	1,130	2,330	722	447	637	596	268	356	192	127	372
25	147	1,180	1,820	740	431	549	528	261	444	174	130	321
26	155	1,040	1,260	784	424	474	859	408	996	247	117	290
27	208	765	1,050	806	422	455	1,080	3,100	652	303	106	268
28	274	807	889	796	387	440	878	2,080	511	230	97	295
29	231	947	808	760	371	416	746	1,570	554	183	102	307
30	160	867	1,120	745	---	585	762	1,320	508	162	152	248
31	131	---	1,030	668	---	708	---	8,510	---	162	112	---
TOTAL	4,476	28,410	31,657	40,295	34,228	34,652	28,947	28,387	33,913	9,200	4,482	30,529
MEAN	144	947	1,021	1,300	1,180	1,118	965	916	1,130	297	145	1,018
MAX	369	6,350	2,330	3,420	5,570	9,380	3,260	8,510	4,170	764	278	5,600
MIN	93	162	536	577	371	362	454	261	341	162	96	80
CFSM	0.39	2.53	2.73	3.48	3.16	2.99	2.58	2.45	3.02	0.79	0.39	2.72
IN.	0.45	2.83	3.15	4.01	3.40	3.45	2.88	2.82	3.37	0.92	0.45	3.04

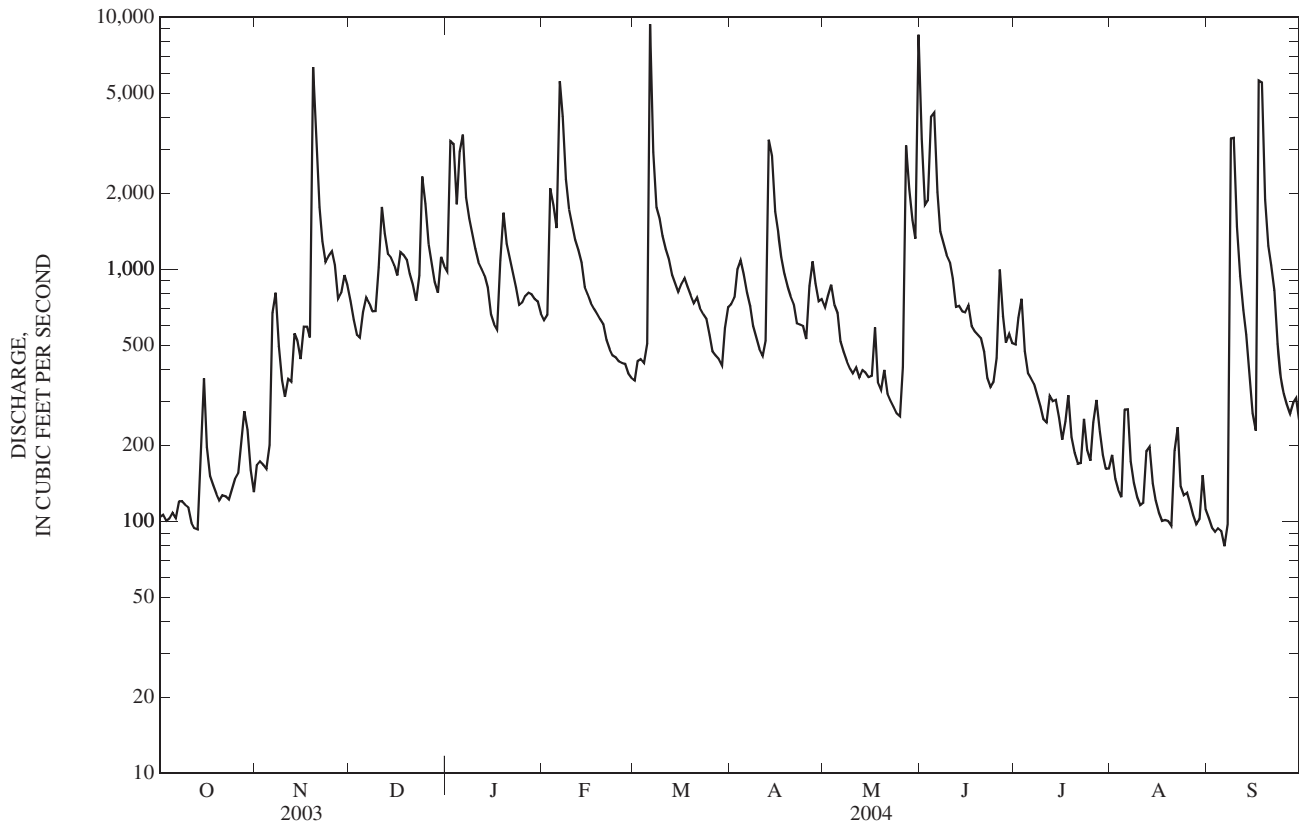
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	184	483	829	1,000	1,298	1,286	1,057	840	503	244	215	195
MAX	1,129	1,532	2,704	1,783	3,259	2,684	2,986	2,003	1,789	453	534	1,018
(WY)	(1990)	(1997)	(1992)	(1994)	(1994)	(1994)	(1998)	(1984)	(1989)	(1991)	(1996)	(2004)
MIN	30.0	51.1	88.9	63.5	554	334	211	330	96.1	57.3	52.7	38.3
(WY)	(1998)	(1999)	(1981)	(1981)	(1988)	(1988)	(1986)	(1982)	(1988)	(1988)	(1988)	(1999)

03401000 CUMBERLAND RIVER NEAR HARLAN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	326,762		309,176		674	
ANNUAL MEAN	895		845		1,130	
HIGHEST ANNUAL MEAN					333	
LOWEST ANNUAL MEAN					21,300	
HIGHEST DAILY MEAN	16,000	Feb 16	9,380	Mar 6	16	Oct 9, 1997
LOWEST DAILY MEAN	93	Oct 13	80	Sep 6	17	Oct 4, 1997
ANNUAL SEVEN-DAY MINIMUM	104	Sep 30	93	Sep 1	64,500	Apr 5, 1977
MAXIMUM PEAK FLOW			15,500	Mar 6	30.20	Apr 5, 1977
MAXIMUM PEAK STAGE			15.04	Mar 6	3.0	Oct 9, 1953
INSTANTANEOUS LOW FLOW					1.80	
ANNUAL RUNOFF (CFSM)	2.39		2.26		24.50	
ANNUAL RUNOFF (INCHES)	32.50		30.75		1,500	
10 PERCENT EXCEEDS	1,760		1,740		370	
50 PERCENT EXCEEDS	536		586		69	
90 PERCENT EXCEEDS	137		125			

e Estimated



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. See WRD-KY-98-1 for history of changes.

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 with telemetry and crest-stage gages. Datum of gage is 1,097.99 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--Records good. Occasional regulation from Fern Lake.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District and Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	1100	*5,490	*17.17	Sep 8	0830	5,120	16.50
Mar 6	0600	5,100	16.48	Sep 17	1600	4,670	15.70

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

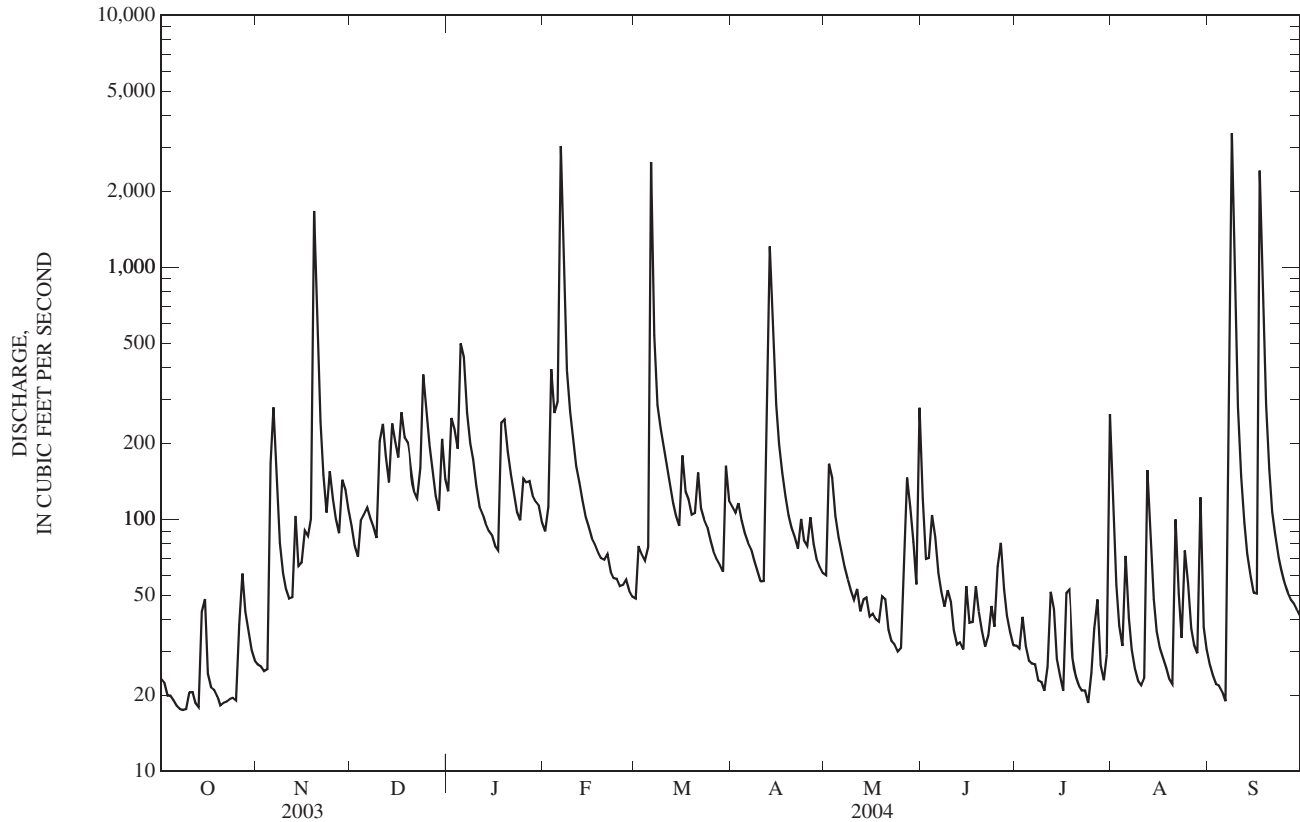
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	27	95	129	90	49	113	60	121	32	106	27
2	23	26	78	252	112	78	107	166	70	31	55	24
3	20	25	71	227	395	73	116	146	70	41	38	22
4	20	25	99	191	264	69	99	103	104	31	32	22
5	19	167	105	498	293	78	88	85	85	28	72	21
6	18	278	111	440	3,020	2,610	81	75	61	27	41	19
7	18	146	101	265	937	536	76	65	52	27	30	75
8	18	81	94	200	391	284	69	58	45	23	26	3,400
9	18	61	84	173	268	230	63	52	52	23	23	955
10	21	53	205	136	206	196	57	48	47	21	22	278
11	21	49	239	113	163	167	57	53	36	26	23	148
12	19	49	178	105	140	140	174	43	32	52	157	97
13	18	103	140	97	118	116	1,210	48	32	44	83	73
14	43	65	240	90	102	103	577	49	30	28	48	60
15	48	68	202	87	94	94	286	41	54	24	36	51
16	24	90	176	78	84	179	199	42	39	21	31	51
17	22	86	266	75	79	129	153	40	39	51	28	2,410
18	21	101	212	242	74	121	124	39	54	53	26	931
19	20	1,670	202	249	70	104	103	49	43	28	23	285
20	18	588	159	187	69	106	92	48	36	24	22	157
21	19	244	129	151	73	153	85	36	31	22	100	107
22	19	150	122	127	62	111	77	33	35	21	51	86
23	19	106	160	107	58	100	101	32	45	21	34	71
24	20	155	375	99	58	93	82	30	37	19	75	62
25	19	120	269	145	54	82	79	31	65	25	56	56
26	38	101	195	140	55	75	102	71	81	37	37	51
27	61	88	152	142	58	70	80	146	53	48	32	48
28	43	144	124	124	52	66	70	112	42	26	29	46
29	36	131	109	117	49	62	65	81	36	23	122	44
30	30	110	208	114	---	163	61	55	32	29	37	41
31	28	---	144	97	---	119	---	277	---	261	31	---
TOTAL	784	5,107	5,044	5,197	7,488	6,556	4,646	2,214	1,559	1,167	1,526	9,718
MEAN	25.3	170	163	168	258	211	155	71.4	52.0	37.6	49.2	324
MAX	61	1,670	375	498	3,020	2,610	1,210	277	121	261	157	3,400
MIN	18	25	71	75	49	49	57	30	30	19	22	19
CFSM	0.42	2.81	2.68	2.77	4.26	3.49	2.56	1.18	0.86	0.62	0.81	5.35
IN.	0.48	3.13	3.10	3.19	4.60	4.02	2.85	1.36	0.96	0.72	0.94	5.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

	MEAN	24.1	77.3	159	206	233	250	182	116	66.4	51.3	36.1	24.6
MAX	155	416	609	551	677	610	569	539	298	345	197	324	
(WY)	(1978)	(1974)	(1991)	(1974)	(1991)	(1975)	(1998)	(1984)	(1989)	(1967)	(1942)	(2004)	
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)	

03402000 YELLOW CREEK NEAR MIDDLESBORO, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941 - 2004	
ANNUAL TOTAL	58,969		51,006		118	
ANNUAL MEAN	162		139		219	
HIGHEST ANNUAL MEAN					49.5	
LOWEST ANNUAL MEAN					7,000	
HIGHEST DAILY MEAN	4,200	Feb 16	3,400	Sep 8	11,700	Apr 4, 1977
LOWEST DAILY MEAN	16	Sep 21	18	Oct 6	1.2	Oct 7, 1952
ANNUAL SEVEN-DAY MINIMUM	18	Sep 15	19	Oct 3	1.6	Sep 17, 1955
MAXIMUM PEAK FLOW			5,490	Feb 6	11,700	Apr 4, 1977
MAXIMUM PEAK STAGE			17.17	Feb 6	23.35	Apr 4, 1977
INSTANTANEOUS LOW FLOW			17	Jul 25	0.00	Sep 26, 1952
ANNUAL RUNOFF (CFSM)	2.67		2.30		1.95	
ANNUAL RUNOFF (INCHES)	36.20		31.31		26.51	
10 PERCENT EXCEEDS	267		233		250	
50 PERCENT EXCEEDS	77		72		45	
90 PERCENT EXCEEDS	23		23		7.8	



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 with telemetry. Datum of gage is 970.00 ft above sea level, Sandy Hook datum.

REMARKS.--Records good except those estimated, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,900 ft³/s, Mar. 6, gage height, 33.13 ft; minimum discharge, 155 ft³/s, Sept. 7, gage height, 6.45 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

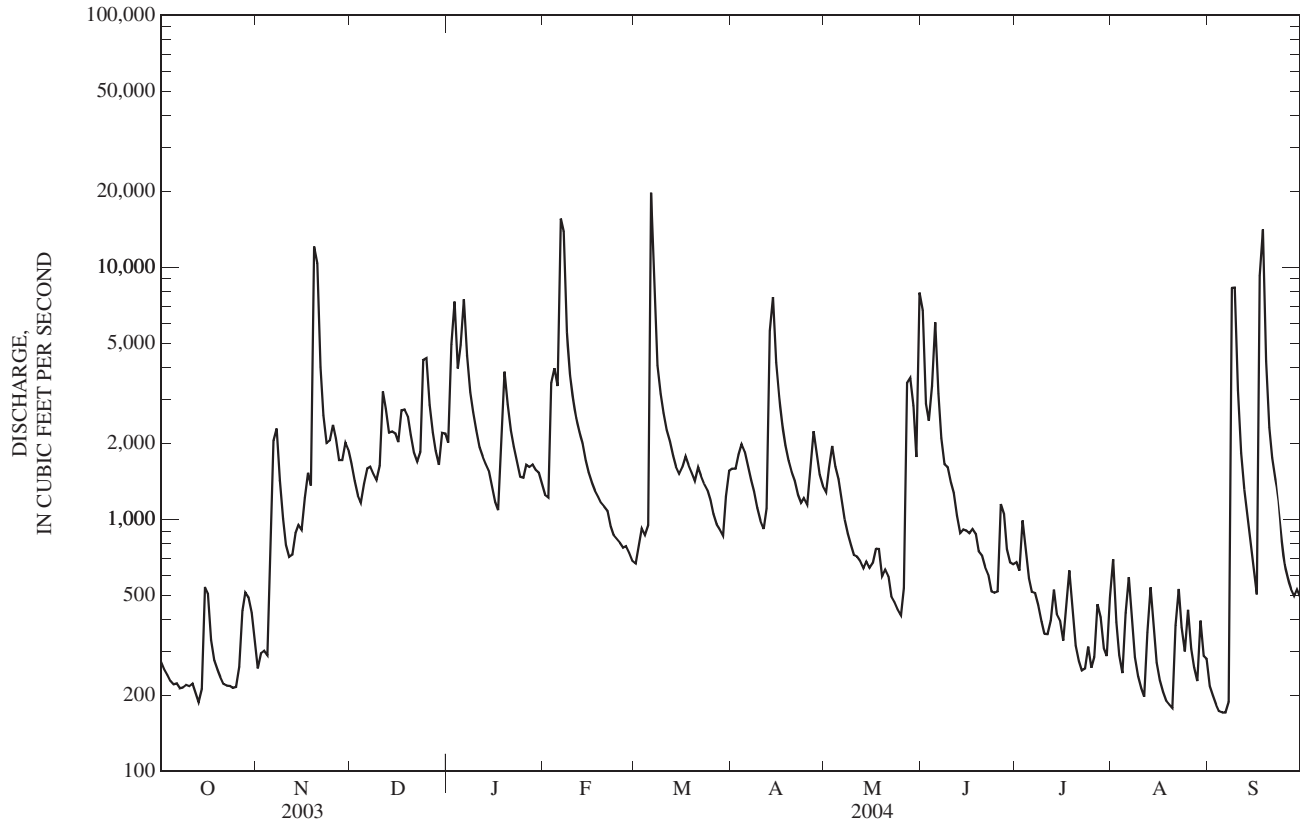
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	257	1,660	2,010	1,250	669	1,590	1,280	6,750	674	695	218
2	254	295	1,420	4,960	1,220	774	1,590	1,600	2,880	625	392	199
3	241	301	1,240	7,300	3,480	924	1,800	1,960	2,460	990	289	184
4	229	289	1,160	3,970	3,980	868	1,990	1,620	3,390	755	246	173
5	222	682	1,390	4,930	3,380	948	1,850	1,440	6,040	584	425	172
6	224	2,050	1,590	7,450	15,600	19,700	1,620	1,220	3,150	516	590	172
7	214	2,290	1,620	4,470	13,900	10,300	1,430	1,000	2,110	510	410	189
8	215	1,430	1,520	3,200	5,540	4,090	1,290	875	1,660	456	285	8,300
9	220	1,010	1,430	2,660	3,710	3,150	1,110	789	1,610	394	238	8,320
10	218	790	1,630	2,250	2,970	2,640	986	721	1,400	352	213	3,250
11	223	709	3,210	1,930	2,520	2,260	916	712	1,270	351	198	1,840
12	206	724	2,750	1,770	2,230	2,040	1,100	683	1,040	397	356	1,310
13	188	884	2,210	1,670	2,000	1,790	5,590	640	882	527	537	1,040
14	212	949	2,230	1,560	1,710	1,620	7,620	680	911	422	367	816
15	539	909	2,190	1,350	1,540	1,520	4,190	643	904	397	271	638
16	510	1,220	2,030	1,170	1,400	1,610	3,090	670	880	331	229	504
17	333	1,530	2,710	1,090	1,300	1,780	2,390	765	916	478	206	9,270
18	276	1,360	2,730	2,100	1,230	1,650	1,970	762	875	628	190	14,100
19	254	12,100	2,570	3,860	1,160	1,530	1,710	594	748	431	184	4,240
20	237	10,400	2,170	2,860	1,120	1,420	1,540	633	719	316	178	2,320
21	222	4,020	1,840	2,250	1,080	1,610	1,420	596	649	273	380	1,760
22	219	2,590	1,700	1,940	937	1,490	1,260	495	604	251	530	1,440
23	218	2,010	1,850	1,690	864	1,390	1,160	469	517	256	372	1,090
24	215	2,060	4,290	1,480	836	1,310	1,210	439	512	313	299	822
25	217	2,370	4,350	1,470	807	1,190	1,140	417	518	258	438	662
26	260	2,100	2,860	1,650	773	1,050	1,610	534	1,150	285	306	584
27	434	1,720	2,210	1,610	784	957	2,240	3,470	1,050	461	259	529
28	513	1,720	1,870	1,650	737	913	1,830	3,630	761	409	228	497
29	491	2,020	1,640	1,570	686	864	1,500	2,820	674	308	396	528
30	427	1,890	2,200	1,540	---	1,240	1,360	1,770	663	287	288	492
31	323	---	2,190	1,380	---	1,560	---	7,930	---	493	280	---
TOTAL	8,826	62,679	66,460	80,790	78,744	74,857	60,102	41,857	47,693	13,728	10,275	65,659
MEAN	285	2,089	2,144	2,606	2,715	2,415	2,003	1,350	1,590	443	331	2,189
MAX	539	12,100	4,350	7,450	15,600	19,700	7,620	7,930	6,750	990	695	14,100
MIN	188	257	1,160	1,090	686	669	916	417	512	251	178	172
CFSM	0.37	2.71	2.78	3.38	3.53	3.14	2.60	1.75	2.06	0.58	0.43	2.84
IN.	0.43	3.03	3.21	3.90	3.80	3.62	2.90	2.02	2.30	0.66	0.50	3.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	218	803	1,773	2,197	2,592	2,982	2,427	1,519	960	413	439	383
MAX	670	3,009	5,204	4,201	6,720	5,367	5,977	3,091	2,369	726	923	2,189
(WY)	(1997)	(1997)	(1992)	(1994)	(1994)	(1994)	(1998)	(1995)	(2003)	(2003)	(1996)	(2004)
MIN	87.4	104	342	640	964	1,285	817	796	245	176	107	59.7
(WY)	(1999)	(1999)	(2000)	(2000)	(2002)	(2003)	(1995)	(1993)	(2002)	(1993)	(1995)	(1999)

03402900 CUMBERLAND RIVER AT PINE STREET BRIDGE AT PINEVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	690,801		611,670		1,386	
ANNUAL MEAN	1,893		1,671		2,241	
HIGHEST ANNUAL MEAN					792	
LOWEST ANNUAL MEAN					41,500	
HIGHEST DAILY MEAN	34,600	Feb 16	19,700	Mar 6	41,500	Mar 18, 2002
LOWEST DAILY MEAN	188	Oct 13	172	Sep 5	48	Sep 20, 1999
ANNUAL SEVEN-DAY MINIMUM	212	Oct 8	187	Sep 1	49	Sep 16, 1999
MAXIMUM PEAK FLOW			24,900	Mar 6	46,700	Mar 18, 2002
MAXIMUM PEAK STAGE			33.13	Mar 6	47.32	Mar 18, 2002
INSTANTANEOUS LOW FLOW			155	Sep 7	47	Sep 20, 1999
ANNUAL RUNOFF (CFSM)	2.46		2.17		1.80	
ANNUAL RUNOFF (INCHES)	33.37		29.55		24.46	
10 PERCENT EXCEEDS	3,390		3,290		2,970	
50 PERCENT EXCEEDS	1,030		1,100		680	
90 PERCENT EXCEEDS	270		253		123	



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 with telemetry. Datum of gage is 942.97 ft above NGVD of 1929. See WRD KY-90-1 for history of changes prior to Oct. 17, 1975.

REMARKS.--Records good except for those estimated, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Diversions by City of Barbourville for municipal water supply.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381	322	2,290	2,600	1,660	779	2,140	1,740	11,200	764	1,200	319
2	352	307	1,950	4,510	1,570	873	2,120	1,930	5,000	749	659	269
3	333	338	1,670	11,700	2,980	1,120	2,280	2,700	2,960	950	446	245
4	311	331	1,510	7,760	4,530	1,090	2,480	2,290	3,210	999	346	227
5	301	417	1,700	5,100	4,300	1,090	2,430	2,020	6,790	721	525	221
6	290	2,660	2,030	9,270	14,400	13,800	2,180	1,750	4,780	641	1,000	215
7	284	3,650	2,130	6,850	23,400	21,300	1,950	1,400	2,800	602	736	213
8	266	2,300	2,040	4,250	15,400	11,600	1,760	1,180	2,170	570	464	5,290
9	267	1,480	1,890	3,390	7,980	5,110	1,530	1,030	1,980	486	351	11,900
10	270	1,080	1,950	2,900	4,180	3,420	1,340	1,050	1,730	426	317	6,130
11	266	869	3,510	2,480	3,250	2,880	1,210	1,030	1,580	402	279	2,530
12	265	846	3,620	2,260	2,860	2,600	1,320	914	1,320	455	301	1,720
13	237	1,010	2,920	2,130	2,580	2,340	4,550	796	1,070	653	687	1,300
14	250	1,210	2,780	1,990	2,270	2,110	10,700	818	1,030	560	535	1,030
15	442	1,170	2,880	1,810	2,010	1,980	7,170	811	1,080	484	376	790
16	683	1,560	2,670	1,530	1,830	2,000	4,300	906	1,120	421	321	618
17	450	2,240	3,400	1,390	1,650	2,280	3,270	867	1,100	345	285	6,320
18	354	2,020	3,820	2,400	1,560	2,130	2,660	1,050	1,030	806	252	19,300
19	320	8,310	3,620	5,540	1,450	2,010	2,320	792	902	592	234	12,800
20	301	15,800	e2,950	4,440	1,400	1,840	2,090	752	820	412	225	4,710
21	288	8,930	2,460	3,090	1,390	2,140	1,930	740	779	339	317	2,240
22	271	3,910	e2,380	2,600	1,190	2,070	1,730	623	836	321	667	1,810
23	264	2,640	2,350	2,270	1,050	1,910	1,550	563	651	308	532	1,440
24	261	2,500	3,660	2,000	995	1,790	1,650	543	606	330	462	1,030
25	258	3,090	5,540	1,880	975	1,670	1,520	498	704	333	628	813
26	273	2,810	3,900	2,140	924	1,470	2,030	552	1,160	335	450	694
27	404	2,370	2,930	2,080	937	1,300	2,980	3,070	1,480	613	355	620
28	609	2,200	2,450	2,180	894	1,220	2,600	5,470	995	638	318	573
29	585	2,720	2,150	2,080	816	1,160	2,140	4,290	787	437	392	557
30	516	2,570	2,550	2,050	---	1,480	1,840	2,610	772	355	461	586
31	436	---	2,850	1,880	---	2,070	---	5,020	---	481	374	---
TOTAL	10,788	81,660	84,550	108,550	110,431	100,632	79,770	49,805	62,442	16,528	14,495	86,510
MEAN	348	2,722	2,727	3,502	3,808	3,246	2,659	1,607	2,081	533	468	2,884
MAX	683	15,800	5,540	11,700	23,400	21,300	10,700	5,470	11,200	999	1,200	19,300
MIN	237	307	1,510	1,390	816	779	1,210	498	606	308	225	213
CFSM	0.36	2.84	2.84	3.65	3.97	3.38	2.77	1.67	2.17	0.56	0.49	3.00
IN.	0.42	3.16	3.28	4.21	4.28	3.90	3.09	1.93	2.42	0.64	0.56	3.35

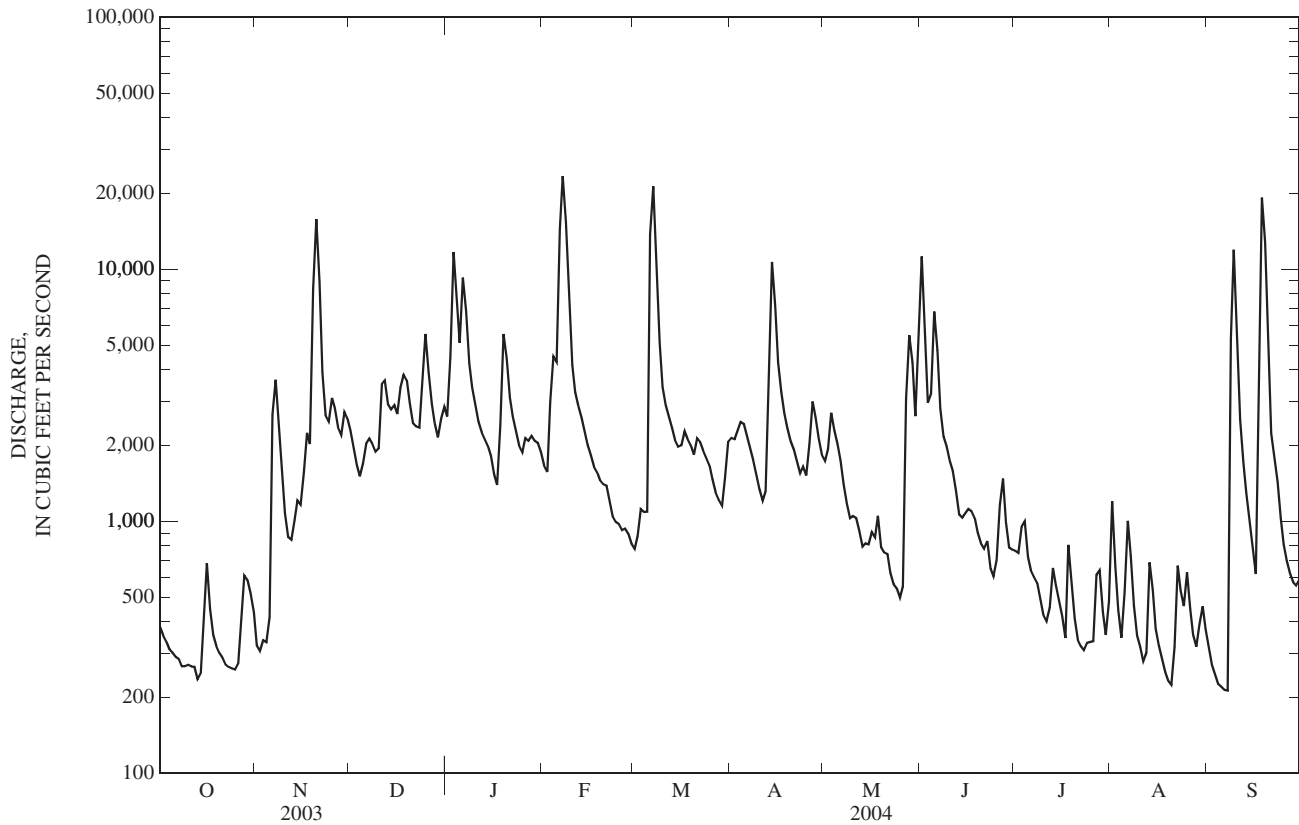
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

	MEAN	426	1,224	2,108	2,554	3,211	3,277	2,771	2,010	1,286	547	470	518
MAX	3,058	3,816	5,837	5,582	7,612	6,208	8,578	6,782	5,524	1,071	1,089	2,884	
(WY)	(1990)	(1997)	(1992)	(1982)	(2003)	(1997)	(1998)	(1984)	(1989)	(1989)	(2003)	(2004)	
MIN	87.9	117	193	135	1,220	791	549	635	201	141	124	60.5	
(WY)	(1981)	(1999)	(1981)	(1981)	(1999)	(1988)	(1986)	(1986)	(1988)	(1988)	(1999)	(1999)	

03403500 CUMBERLAND RIVER AT BARBOURVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	917,038		806,161		1,692	
ANNUAL MEAN	2,512		2,203		824	
HIGHEST ANNUAL MEAN					2,417	
LOWEST ANNUAL MEAN					824	
HIGHEST DAILY MEAN	33,900	Feb 17	23,400	Feb 7	41,600	May 8, 1984
LOWEST DAILY MEAN	233	Sep 21	213	Sep 7	50	Sep 19, 1999
ANNUAL SEVEN-DAY MINIMUM	260	Oct 8	244	Sep 1	53	Sep 16, 1999
MAXIMUM PEAK FLOW			24,600	Feb 7	56,100	Apr 6, 1977
MAXIMUM PEAK STAGE			29.78	Feb 7	45.91	Apr 6, 1977
INSTANTANEOUS LOW FLOW			202	Sep 7	0.20	Oct 5, 1930
ANNUAL RUNOFF (CFSM)	2.62		2.29		1.76	
ANNUAL RUNOFF (INCHES)	35.54		31.24		23.94	
10 PERCENT EXCEEDS	4,330		4,460		3,680	
50 PERCENT EXCEEDS	1,330		1,440		844	
90 PERCENT EXCEEDS	324		320		128	

e Estimated



03403910 CLEAR FORK AT SAXTON, KY

LOCATION.--Lat 36°38'02", long 84°06'42", Whitley County, Hydrologic Unit 05130101, on State Highway 1804 bridge, at Saxton, 100 ft upstream from CSX 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 September 30, 2004 (discontinued).

GAGE.--Water-stage recorder with telemetry and crest-stage gage. Datum of gage is 921.83 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 19	1800	6,270	20.12	Sep 8	1930	6,140	19.90
Feb 6	1600	5,800	19.27	Sep 18	0300	*12,400	*30.05
Mar 6	1600	9,810	25.86				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	102	647	587	452	225	642	365	791	e350	747	81
2	210	97	528	773	418	275	589	721	457	288	360	78
3	178	95	457	840	656	369	568	1,140	468	277	224	86
4	158	93	441	768	683	345	512	791	1,480	285	161	98
5	147	193	520	1,220	1,060	359	452	617	1,330	220	141	85
6	134	1,060	519	1,790	4,720	7,540	403	496	665	245	157	75
7	123	998	493	1,170	3,020	3,250	373	399	434	227	123	83
8	115	605	471	896	1,980	1,470	353	325	329	189	102	4,120
9	107	422	435	771	1,290	1,060	325	275	280	155	91	3,400
10	102	328	611	634	1,010	910	290	246	244	134	85	1,080
11	103	275	1,160	524	834	745	275	236	203	124	81	595
12	101	254	897	481	718	653	429	244	199	157	101	392
13	97	623	722	450	627	558	2,970	193	750	261	261	290
14	111	482	833	411	551	498	2,810	174	376	181	144	223
15	214	401	846	390	506	462	1,660	161	2,720	134	109	182
16	149	433	767	351	453	561	1,140	183	1,010	114	93	166
17	117	552	1,090	326	414	573	869	198	632	107	83	6,740
18	106	533	1,000	732	387	527	696	176	1,020	289	77	10,800
19	99	4,720	972	1,260	358	516	579	182	583	162	74	2,390
20	94	e3,600	814	917	351	477	505	176	409	122	68	861
21	90	1,410	677	727	373	720	458	147	295	108	127	583
22	86	921	618	613	338	694	e408	125	290	97	197	435
23	84	691	616	519	308	624	e450	116	304	96	117	345
24	84	706	1,040	462	296	556	546	106	500	93	120	287
25	81	748	1,020	563	284	491	442	99	742	89	195	243
26	84	650	826	845	270	436	617	154	1,780	119	128	215
27	131	568	684	797	279	395	677	547	827	335	99	193
28	182	673	588	735	252	366	567	445	524	177	87	179
29	140	871	516	650	234	339	472	471	385	121	91	169
30	123	766	715	611	---	604	402	278	293	108	92	155
31	109	---	654	515	---	678	---	826	---	320	85	---
TOTAL	3,900	23,870	22,177	22,328	23,122	27,276	21,479	10,612	20,320	5,684	4,620	34,629
MEAN	126	796	715	720	797	880	716	342	677	183	149	1,154
MAX	241	4,720	1,160	1,790	4,720	7,540	2,970	1,140	2,720	350	747	10,800
MIN	81	93	435	326	234	225	275	99	199	89	68	75
CFSM	0.38	2.40	2.16	2.18	2.41	2.66	2.16	1.03	2.05	0.55	0.45	3.49
IN.	0.44	2.68	2.49	2.51	2.60	3.07	2.41	1.19	2.28	0.64	0.52	3.89

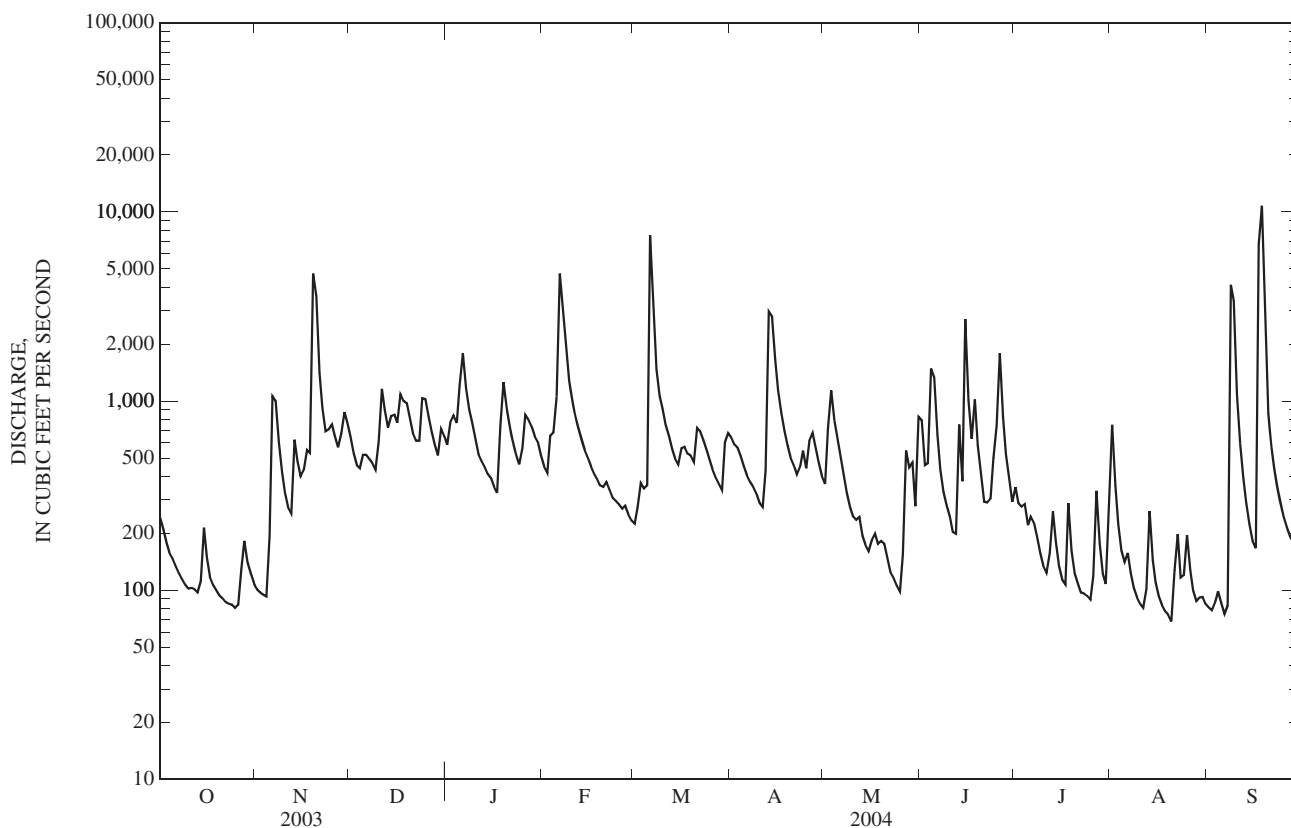
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

MEAN	160	432	627	879	929	999	846	643	406	202	183	169
MAX	1,472	1,624	1,824	2,534	2,078	3,356	2,193	2,087	1,923	659	557	1,154
(WY)	(1990)	(1974)	(1973)	(1974)	(2003)	(1975)	(1998)	(1984)	(1989)	(1971)	(1985)	(2004)
MIN	6.07	15.0	53.7	41.0	327	300	147	122	31.1	44.0	34.3	16.0
(WY)	(2001)	(2001)	(1981)	(1981)	(2002)	(1988)	(1986)	(1985)	(1988)	(1970)	(1997)	(2000)

03403910 CLEAR FORK AT SAXTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	275,991		220,017		538	
ANNUAL MEAN	756		601		894	
HIGHEST ANNUAL MEAN					233	
LOWEST ANNUAL MEAN					19,400	
HIGHEST DAILY MEAN	11,600	Feb 16	10,800	Sep 18	19,400	May 28, 1973
LOWEST DAILY MEAN	78	Aug 28	68	Aug 20	3.3	Aug 19, 1988
ANNUAL SEVEN-DAY MINIMUM	86	Oct 20	84	Sep 1	4.5	Oct 11, 2000
MAXIMUM PEAK FLOW			12,400	Sep 18	22,800	Apr 5, 1977
MAXIMUM PEAK STAGE			30.05	Sep 18	41.51	Apr 5, 1977
ANNUAL RUNOFF (CFSM)	2.28		1.82		1.63	
ANNUAL RUNOFF (INCHES)	31.02		24.73		22.09	
10 PERCENT EXCEEDS	1,350		1,020		1,140	
50 PERCENT EXCEEDS	433		402		252	
90 PERCENT EXCEEDS	117		99		34	

e Estimated



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 with telemetry and crest-stage gages. Datum of gage is 891.52 ft above NGVD of 1929. See WDR KY-90-1 for history of changes prior to June 26, 1990.

REMARKS.--Records good except for those estimated, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District and Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

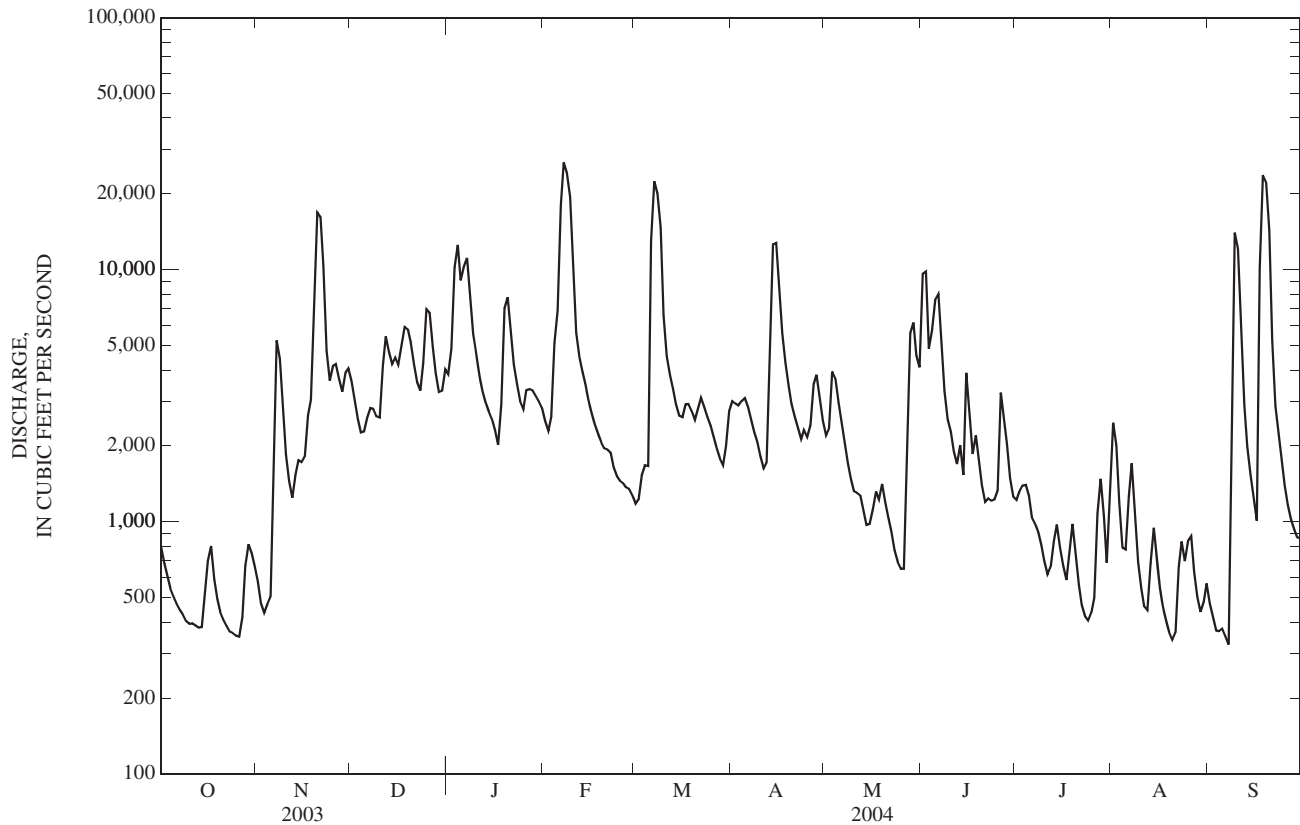
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	794	582	3,610	3,850	2,510	1,180	3,010	2,200	9,600	1,220	2,470	474
2	684	473	3,050	4,870	2,300	1,230	2,940	2,330	9,820	1,320	2,010	421
3	604	435	2,550	10,200	2,600	1,530	2,890	3,950	4,870	1,390	1,190	371
4	543	471	2,260	12,500	5,110	1,670	3,020	3,700	5,750	1,400	791	368
5	504	505	2,280	9,050	6,890	1,660	3,090	2,970	7,590	1,260	776	377
6	472	2,110	2,580	10,300	17,900	13,000	2,850	2,520	8,000	1,040	1,260	351
7	447	5,230	2,820	11,100	26,600	22,300	2,540	2,090	4,940	984	1,700	326
8	428	4,430	2,800	7,810	24,100	20,000	2,270	1,710	3,290	909	1,100	4,380
9	404	2,690	2,620	5,570	19,400	14,700	2,070	1,470	2,540	804	693	14,000
10	394	1,850	2,580	4,580	11,100	6,580	1,810	1,320	2,270	696	543	12,100
11	395	1,450	4,170	3,790	5,630	4,540	1,620	1,300	1,900	618	461	5,760
12	388	1,240	5,440	3,250	4,510	3,820	1,720	1,270	1,690	665	445	2,890
13	381	1,540	4,710	2,970	3,920	3,340	5,450	1,110	2,010	842	685	1,990
14	383	1,750	4,210	2,740	3,460	2,920	12,600	971	1,530	974	948	1,550
15	516	1,720	4,480	2,550	3,010	2,630	12,800	981	3,900	790	728	1,250
16	701	1,820	4,200	2,290	2,670	2,590	8,340	1,120	2,670	668	550	1,010
17	802	2,650	4,970	2,020	2,410	2,930	5,600	1,320	1,860	587	456	10,100
18	591	3,050	5,940	2,930	2,230	2,940	4,260	1,230	2,200	735	403	23,700
19	491	7,570	5,790	7,030	2,070	2,750	3,450	1,410	1,760	981	365	22,200
20	438	16,800	5,150	7,770	1,950	2,530	2,920	1,190	1,390	750	340	14,300
21	408	16,200	4,230	5,570	1,930	2,820	2,610	1,030	1,200	561	364	5,270
22	386	10,300	3,580	4,210	1,880	3,100	2,360	913	1,240	467	662	2,880
23	366	4,760	3,320	3,520	1,650	2,850	2,130	768	1,210	423	835	2,250
24	362	3,630	4,260	3,010	1,520	2,600	2,320	693	1,220	406	698	1,770
25	354	4,140	6,960	2,800	1,460	2,410	2,170	650	1,330	436	838	1,400
26	350	4,220	6,740	3,330	1,420	2,190	2,410	651	3,250	499	874	1,160
27	420	3,680	4,920	3,360	1,370	1,960	3,500	1,940	2,560	1,080	634	1,020
28	669	3,280	3,890	3,320	1,350	1,780	3,830	5,600	2,040	1,480	504	929
29	814	3,890	3,270	3,160	1,270	1,680	3,110	6,170	1,480	1,060	439	867
30	749	4,040	3,310	3,010	---	1,990	2,510	4,560	1,260	686	480	861
31	660	---	4,020	2,830	---	2,750	---	4,090	---	1,310	570	---
TOTAL	15,898	116,506	124,710	155,290	164,220	140,970	112,200	63,227	96,370	27,041	24,812	136,325
MEAN	513	3,884	4,023	5,009	5,663	4,547	3,740	2,040	3,212	872	800	4,544
MAX	814	16,800	6,960	12,500	26,600	22,300	12,800	6,170	9,820	1,480	2,470	23,700
MIN	350	435	2,260	2,020	1,270	1,180	1,620	650	1,200	406	340	326

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	594	1,676	3,221	4,024	5,112	5,151	4,124	3,028	1,922	800	744	780
MAX	4,413	4,923	9,751	8,015	12,920	10,400	11,520	9,572	8,305	1,684	1,882	4,544
(WY)	(1990)	(1997)	(1992)	(1994)	(1994)	(1994)	(1998)	(1984)	(1989)	(1989)	(2003)	(2004)
MIN	107	141	300	203	1,803	1,193	730	943	277	211	191	86.2
(WY)	(1981)	(1999)	(1981)	(1981)	(1988)	(1988)	(1986)	(1986)	(1988)	(1988)	(2002)	(1999)

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	1,359,470		1,177,569		2,585	
ANNUAL MEAN	3,725		3,217		4,390	
HIGHEST ANNUAL MEAN					1,159	
LOWEST ANNUAL MEAN					38,500	
HIGHEST DAILY MEAN	32,700	Feb 18	26,600	Feb 7	1,159	1988
LOWEST DAILY MEAN	350	Oct 26	326	Sep 7	62	Oct 18, 1980
ANNUAL SEVEN-DAY MINIMUM	378	Oct 21	378	Oct 21	63	Oct 17, 1980
MAXIMUM PEAK FLOW			27,700	Feb 7	49,700	Jan 31, 1957
MAXIMUM PEAK STAGE			25.27	Feb 7	35.03	Apr 7, 1977
INSTANTANEOUS LOW FLOW					6.1	Oct 23, 1953
10 PERCENT EXCEEDS	7,100		6,780		5,840	
50 PERCENT EXCEEDS	2,000		2,100		1,250	
90 PERCENT EXCEEDS	505		472		198	



03404500 CUMBERLAND RIVER AT CUMBERLAND FALLS, KY

LOCATION.--Lat 36°50'14", long 84°26'36", McCreary County, Hydrologic Unit 05130101, on left bank 0.1 mi downstream from bridge on State Highway 90, 0.2 upstream from Cumberland Falls, and at mile 562.4.

DRAINAGE AREA.--1,977 mi².

PERIOD OF RECORD.--August 1907 to December 1911, October 1914 to September 1994, October 2002 to current year. Monthly discharges only for October 1914 to March 1915 and October 1931 to July 1932, published in WSP 1306.

REVISED RECORDS.--WSP 1436: 1919. WSP 1436: Drainage area.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 825.28 ft above NGVD of 1929. Aug. 15, 1907 to Dec. 10, 1911, nonrecording gage at site 300 ft downstream at different datum. Apr. 3, 1915 to Sept. 1, 1933, nonrecording gage at site 500 ft downstream at same datum.

REMARKS.--Records good except for those estimated, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	1200	*35,100	11.14	Mar 7	1400	25,600	9.38
Feb 9	1000	21,900	8.64				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,170	798	4,440	4,610	3,070	1,560	4,130	2,810	9,150	1,610	6,270	650
2	1,010	694	3,710	6,240	2,820	1,660	3,920	2,940	11,400	1,580	3,230	573
3	866	580	3,100	10,700	2,890	1,900	3,690	4,620	6,600	1,790	2,100	490
4	762	568	2,790	13,700	4,780	2,160	3,640	4,700	7,760	1,670	1,400	455
5	698	665	2,730	11,700	9,600	2,180	3,660	3,810	9,170	1,730	1,450	462
6	640	1,640	2,970	11,700	31,700	19,000	3,490	3,220	9,320	1,450	1,590	447
7	594	5,550	3,210	12,600	30,000	24,800	3,140	2,730	6,490	1,480	2,000	406
8	561	5,540	3,250	9,590	26,700	21,400	2,870	2,280	4,050	1,340	1,710	5,840
9	530	3,550	3,110	6,810	21,500	17,100	2,630	1,980	3,280	1,200	1,130	15,300
10	498	2,490	3,000	5,510	14,100	9,330	2,350	1,760	2,790	1,050	785	13,900
11	503	1,890	4,150	4,520	7,330	5,780	2,130	1,700	2,470	933	619	7,650
12	495	1,660	5,820	3,840	5,530	4,680	2,200	1,710	2,210	955	580	3,980
13	485	1,900	5,630	3,510	4,750	4,090	7,500	1,510	3,560	1,150	681	2,690
14	512	2,280	4,830	3,240	4,120	3,590	14,600	1,380	2,790	1,270	1,140	e2,130
15	628	2,220	5,110	3,050	3,670	3,220	15,400	1,320	4,320	1,230	1,130	e1,710
16	819	2,310	4,930	2,790	3,220	3,130	11,000	1,440	4,450	982	828	e1,360
17	984	3,140	5,450	2,480	2,900	3,420	7,360	1,680	2,740	826	613	e9,730
18	903	3,730	6,770	3,700	2,720	3,490	5,550	1,640	2,660	763	518	e31,200
19	700	7,230	6,850	8,470	2,540	3,330	4,340	1,630	2,510	1,190	462	e27,500
20	596	17,200	6,190	9,410	2,410	3,110	3,650	1,690	1,960	1,120	413	e16,900
21	533	17,300	5,180	6,880	2,380	3,260	3,290	1,400	1,630	853	408	8,910
22	497	13,000	4,330	5,270	2,340	3,680	2,970	1,270	1,530	617	720	3,820
23	465	6,320	3,920	4,310	2,110	3,480	2,820	1,160	1,600	523	1,050	2,810
24	441	4,360	5,670	3,660	1,940	3,220	2,900	1,000	1,560	484	1,100	2,290
25	435	4,550	7,700	3,350	1,840	3,010	2,770	933	3,130	465	1,120	1,880
26	427	4,860	8,140	3,860	1,780	2,770	2,910	931	3,820	559	1,310	1,450
27	503	4,320	6,160	4,090	1,750	2,550	4,240	2,420	3,410	1,660	1,070	1,210
28	756	4,120	4,650	3,980	1,720	2,340	4,720	5,770	2,880	2,140	768	1,080
29	1,040	4,860	3,890	3,800	1,650	2,200	3,930	7,440	2,030	1,720	637	1,000
30	1,020	5,020	3,890	3,620	---	3,010	3,310	5,730	1,640	1,100	579	939
31	903	---	4,560	3,410	---	3,920	---	6,020	---	1,610	716	---
TOTAL	20,974	134,345	146,130	184,400	203,860	172,370	141,110	80,624	122,910	37,050	38,127	168,762
MEAN	677	4,478	4,714	5,948	7,030	5,560	4,704	2,601	4,097	1,195	1,230	5,625
MAX	1,170	17,300	8,140	13,700	31,700	24,800	15,400	7,440	11,400	2,140	6,270	31,200
MIN	427	568	2,730	2,480	1,650	1,560	2,130	931	1,530	465	408	406

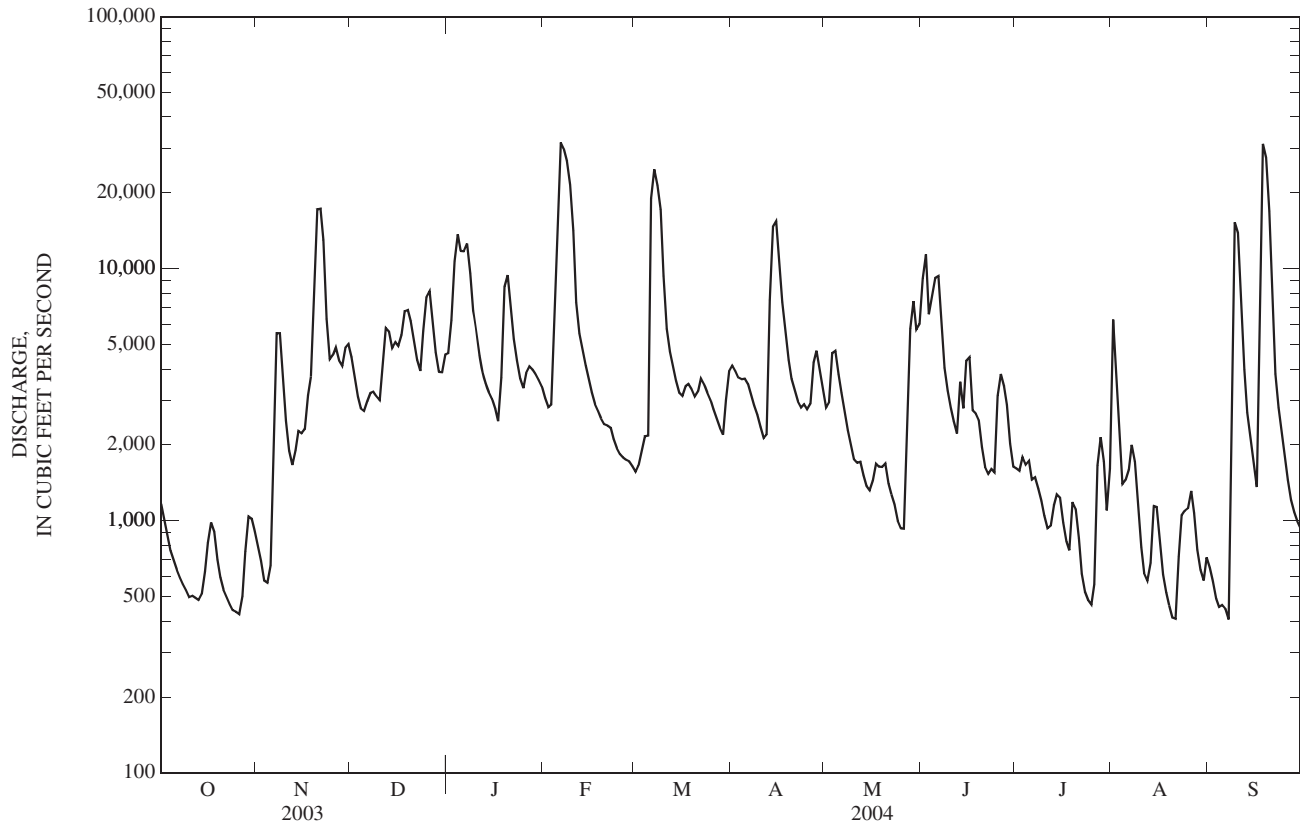
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2004, BY WATER YEAR (WY)

MEAN	684	1,877	3,884	5,773	6,411	7,008	5,092	3,274	1,809	1,344	946	631
MAX	5,330	7,963	17,620	17,570	15,740	18,510	11,390	11,230	8,954	6,379	4,171	5,625
(WY)	(1990)	(1978)	(1927)	(1937)	(1939)	(1917)	(1977)	(1984)	(1989)	(1941)	(1942)	(2004)
MIN	10.5	44.2	141	227	462	1,572	987	417	103	47.5	37.3	23.0
(WY)	(1954)	(1940)	(1940)	(1981)	(1941)	(1988)	(1963)	(1936)	(1936)	(1944)	(1925)	(1925)

03404500 CUMBERLAND RIVER AT CUMBERLAND FALLS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1908 - 2004	
ANNUAL TOTAL	1,620,568		1,450,662		3,213	
ANNUAL MEAN	4,440		3,964		5,196	
HIGHEST ANNUAL MEAN					1,324	
LOWEST ANNUAL MEAN					57,500	
HIGHEST DAILY MEAN	37,100	Feb 16	31,700	Feb 6	57,500	Jan 28, 1918
LOWEST DAILY MEAN	425	Sep 21	406	Sep 7	4.0	Sep 19, 1954
ANNUAL SEVEN-DAY MINIMUM	472	Oct 21	472	Oct 21	7.1	Oct 23, 1953
MAXIMUM PEAK FLOW			35,100	Feb 6	59,600	Jan 28, 1918
MAXIMUM PEAK STAGE			11.14	Feb 6	15.50	Jan 28, 1918
INSTANTANEOUS LOW FLOW					4.0	Sep 19, 1954
10 PERCENT EXCEEDS	8,420		8,240		7,950	
50 PERCENT EXCEEDS	2,490		2,780		1,440	
90 PERCENT EXCEEDS	681		618		160	

e Estimated



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 with telemetry. Datum of gage is 1,049.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except for discharges below 2.0 ft³/s, which are fair and for those estimated, which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	0700	3,180	10.08	Sep 17	1630	*3,940	*11.08
Mar 6	1330	2,060	8.36				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	9.7	72	e100	51	28	84	32	119	59	390	6.4
2	18	8.5	58	e500	57	101	71	133	76	23	113	5.6
3	14	9.1	49	374	152	67	62	88	82	15	65	13
4	12	8.5	58	201	97	55	50	52	519	13	47	36
5	11	49	86	e327	928	100	43	40	282	11	421	11
6	11	131	101	e225	2,550	1,700	38	33	108	24	166	7.9
7	9.8	90	73	145	681	354	35	27	72	52	65	11
8	8.9	47	64	117	244	160	34	22	55	20	42	594
9	8.5	32	56	105	169	113	31	19	46	13	31	230
10	8.0	26	133	84	138	87	27	19	39	20	25	79
11	8.7	23	159	70	109	72	26	19	33	82	21	47
12	9.2	30	97	71	93	62	156	16	28	31	64	33
13	8.2	62	76	66	80	52	557	13	32	26	68	25
14	28	32	136	58	70	49	289	12	33	16	37	19
15	42	44	110	54	64	46	158	14	43	12	27	15
16	17	95	104	46	56	114	108	16	36	9.2	23	16
17	11	89	310	44	53	74	83	16	28	8.2	20	2,620
18	10	71	171	515	49	59	65	13	32	16	20	1,210
19	9.4	507	152	388	45	51	55	22	24	13	19	170
20	8.5	243	113	155	46	55	50	18	18	9.7	13	92
21	7.7	111	90	108	58	118	45	12	19	8.3	14	65
22	7.2	76	89	87	47	70	40	9.7	22	8.7	17	52
23	6.9	60	189	70	43	59	97	8.5	31	14	11	43
24	6.6	107	416	66	40	52	74	6.7	27	13	37	35
25	6.3	87	185	86	36	46	44	e6.0	220	14	38	31
26	8.2	65	121	92	33	41	150	e30	111	113	18	27
27	47	59	e95	104	37	40	82	e215	61	377	13	23
28	27	198	e80	85	32	40	54	e160	50	85	10	22
29	16	144	e72	70	29	39	42	81	48	48	8.9	19
30	12	94	e205	68	---	191	35	46	48	37	9.6	17
31	11	---	e122	56	---	111	---	366	---	406	8.2	---
TOTAL	429.1	2,607.8	3,842	4,537	6,087	4,206	2,685	1,564.9	2,342	1,597.1	1,861.7	5,574.9
MEAN	13.8	86.9	124	146	210	136	89.5	50.5	78.1	51.5	60.1	186
MAX	47	507	416	515	2,550	1,700	557	366	519	406	421	2,620
MIN	6.3	8.5	49	44	29	28	26	6.0	18	8.2	8.2	5.6
CFSM	0.26	1.62	2.30	2.72	3.90	2.52	1.66	0.94	1.45	0.96	1.12	3.45
IN.	0.30	1.80	2.66	3.14	4.21	2.91	1.86	1.08	1.62	1.10	1.29	3.85

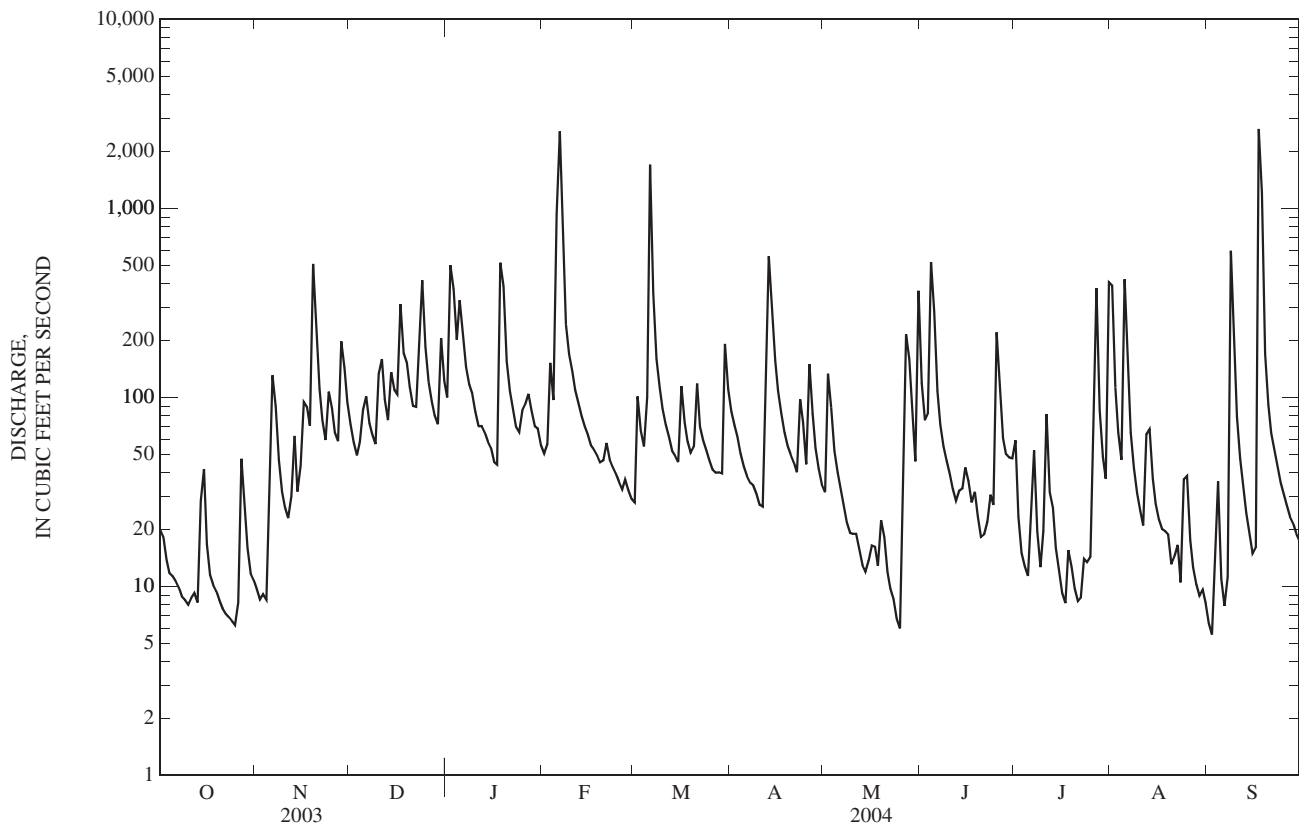
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	28.0	78.6	115	149	159	156	114	87.3	57.5	39.2	29.5	33.5
MAX	133	267	378	372	365	458	413	387	203	110	90.9	186
(WY)	(1990)	(1974)	(1991)	(1974)	(2003)	(1975)	(1998)	(1983)	(1997)	(1978)	(2003)	(2004)
MIN	1.35	5.15	10.4	5.13	56.9	41.9	16.5	9.47	2.39	2.11	2.50	0.32
(WY)	(1981)	(1999)	(1981)	(1981)	(1977)	(1988)	(1986)	(1986)	(1988)	(1975)	(1976)	(1999)

03404900 LYNN CAMP CREEK AT CORBIN, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	40,667.1		37,334.5		86.9	
ANNUAL MEAN	111		102		141	
HIGHEST ANNUAL MEAN					36.5	
LOWEST ANNUAL MEAN					4,530	
HIGHEST DAILY MEAN	2,570	Feb 16	2,620	Sep 17		Apr 17, 1998
LOWEST DAILY MEAN	3.9	Aug 29	5.6	Sep 2	0.02	Jun 24, 1988
ANNUAL SEVEN-DAY MINIMUM	5.3	Aug 23	7.3	Oct 20	0.02	Jun 24, 1988
MAXIMUM PEAK FLOW			3,940	Sep 17	9,000	Jan 29, 1957
MAXIMUM PEAK STAGE			11.08	Sep 17	22.50	Jan 29, 1957
INSTANTANEOUS LOW FLOW					0.02	Jun 24, 1988
ANNUAL RUNOFF (CFSM)	2.07		1.90		1.61	
ANNUAL RUNOFF (INCHES)	28.12		25.81		21.94	
10 PERCENT EXCEEDS	228		186		192	
50 PERCENT EXCEEDS	52		48		36	
90 PERCENT EXCEEDS	9.7		11		3.3	

e Estimated



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 with telemetry. Datum of gage is 802.90 ft above NGVD of 1929. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--U.S. Army Corps of Engineers, Nashville District and Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 3	0600	21,900	29.19	May 27	unknown	unknown	unknown
Feb 6	2230	*31,700	*36.10	Sep 19	unknown	unknown	unknown
Mar 6	2000	12,300	20.88				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	229	1,920	1,420	636	318	1,900	873	5,710	238	1,860	86
2	285	207	1,380	8,140	630	485	1,440	1,060	2,640	229	1,190	152
3	251	192	1,100	19,200	1,210	771	1,200	2,330	1,860	904	811	240
4	214	181	960	5,540	2,280	615	990	1,650	4,190	584	586	147
5	194	1,080	1,060	4,190	3,240	611	815	1,270	7,200	830	1,710	117
6	180	5,160	1,120	4,680	26,100	7,920	697	1,010	3,110	1,080	2,780	106
7	166	2,250	1,080	2,980	22,500	6,390	622	792	1,810	1,270	1,260	91
8	149	1,360	993	2,140	4,340	2,750	572	628	1,200	1,030	795	1,280
9	130	956	916	1,690	2,600	1,800	522	508	864	627	553	3,890
10	120	737	884	1,380	1,980	1,360	457	418	746	436	423	1,450
11	122	614	1,430	1,100	1,590	1,070	415	577	608	2,380	351	831
12	121	556	1,310	943	1,310	906	456	390	494	1,890	345	569
13	110	1,710	1,150	849	1,130	763	3,210	318	448	2,190	508	480
14	116	1,460	1,150	758	977	662	5,940	276	444	1,290	434	381
15	223	1,170	1,590	687	880	610	3,740	252	587	844	312	304
16	322	1,680	1,500	624	781	603	2,320	598	816	572	254	257
17	220	1,640	1,910	561	696	740	1,660	2,060	632	427	215	e9,600
18	180	1,410	2,220	1,240	648	617	1,280	798	505	581	191	e21,000
19	159	4,560	1,970	4,170	594	549	1,020	516	407	420	170	5,330
20	145	5,560	1,660	2,400	559	502	860	1,040	342	324	151	1,850
21	132	2,750	1,360	1,680	540	735	758	661	284	269	143	1,180
22	123	1,780	1,210	1,330	510	872	1,180	437	241	247	149	830
23	113	1,320	1,190	1,070	459	745	3,210	341	262	655	144	620
24	104	1,130	2,770	900	423	696	2,340	328	314	468	133	486
25	98	1,340	3,030	826	404	647	1,650	258	288	346	140	401
26	103	1,130	2,080	994	381	586	2,970	503	1,370	991	190	347
27	160	1,000	1,580	1,040	364	547	2,790	e10,000	821	5,550	165	303
28	366	2,730	1,290	921	348	514	1,810	e13,000	488	2,630	136	273
29	368	6,230	1,080	824	328	483	1,330	5,590	355	1,250	119	249
30	298	2,970	1,400	807	---	2,140	1,040	2,420	280	821	103	229
31	262	---	1,680	720	---	3,010	---	5,310	---	738	96	---
TOTAL	5,853	55,092	45,973	75,804	78,438	41,017	49,194	56,212	39,316	32,111	16,417	53,079
MEAN	189	1,836	1,483	2,445	2,705	1,323	1,640	1,813	1,311	1,036	530	1,769
MAX	368	6,230	3,030	19,200	26,100	7,920	5,940	13,000	7,200	5,550	2,780	21,000
MIN	98	181	884	561	328	318	415	252	241	229	96	86
CFSM	0.31	3.04	2.46	4.05	4.48	2.19	2.71	3.00	2.17	1.71	0.88	2.93
IN.	0.36	3.39	2.83	4.67	4.83	2.53	3.03	3.46	2.42	1.98	1.01	3.27

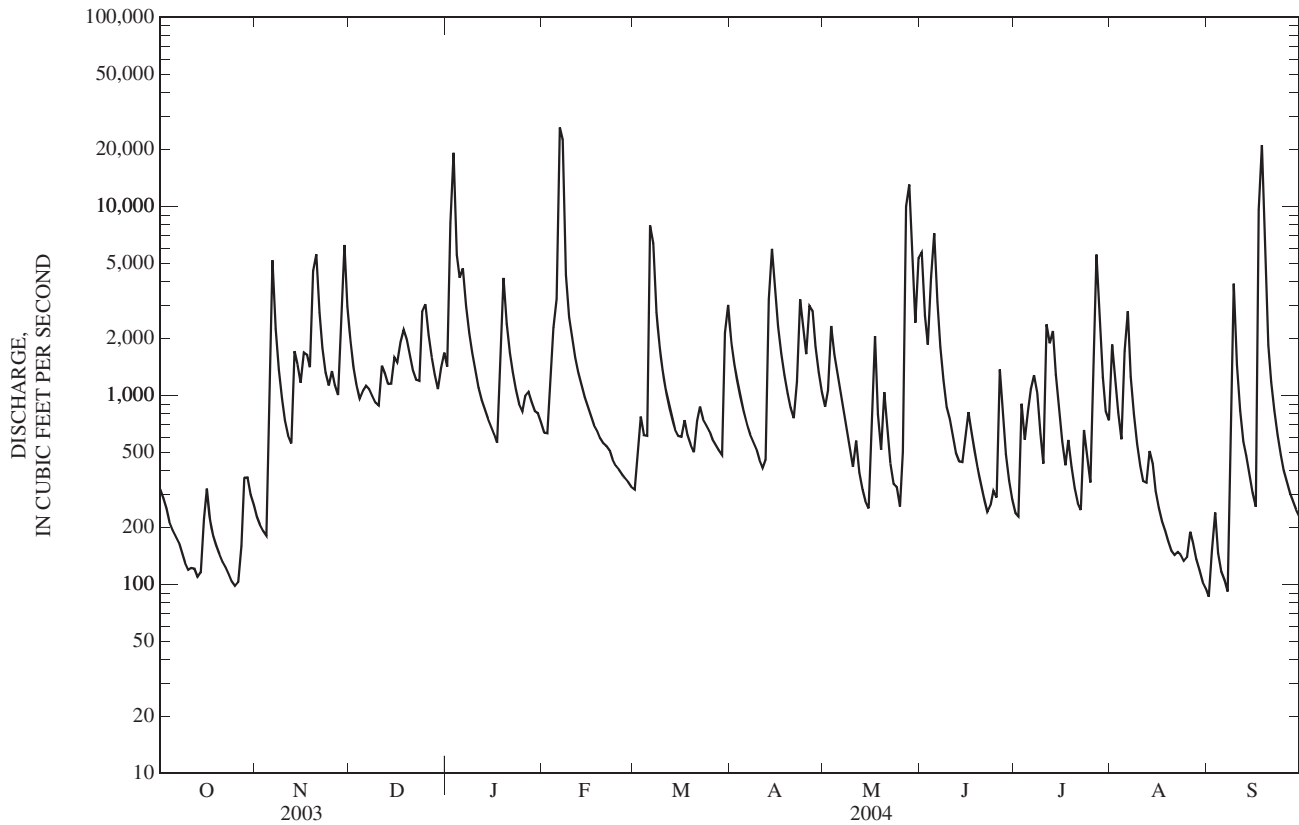
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

MEAN	198	577	1,243	1,665	1,924	1,963	1,476	990	593	361	211	180
MAX	2,887	2,374	5,279	5,990	5,236	5,860	4,051	4,207	2,862	1,830	1,263	1,769
(WY)	(1990)	(1987)	(1991)	(1937)	(1956)	(1975)	(1972)	(1983)	(1947)	(1941)	(1977)	(2004)
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)

03406500 ROCKCASTLE RIVER AT BILLOWS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	457,659		548,506		944	
ANNUAL MEAN	1,254		1,499		345	
HIGHEST ANNUAL MEAN					1,575	
LOWEST ANNUAL MEAN					1979	
HIGHEST DAILY MEAN	26,200	Feb 17	26,100	Feb 6	46,200	Dec 9, 1978
LOWEST DAILY MEAN	47	Aug 29	86	Sep 1	0.90	Sep 9, 1957
ANNUAL SEVEN-DAY MINIMUM	64	Aug 23	117	Oct 20	1.4	Sep 11, 1964
MAXIMUM PEAK FLOW			31,700	Feb 6	50,000	Dec 9, 1978
MAXIMUM PEAK STAGE			36.10	Feb 6	47.17	Dec 9, 1978
INSTANTANEOUS LOW FLOW					0.80	Sep 9, 1957
ANNUAL RUNOFF (CFSM)	2.08		2.48		1.56	
ANNUAL RUNOFF (INCHES)	28.19		33.78		21.24	
10 PERCENT EXCEEDS	2,710		2,970		2,150	
50 PERCENT EXCEEDS	610		794		336	
90 PERCENT EXCEEDS	156		180		25	

e Estimated



03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY

LOCATION.--Lat 36°37'47", long 84°31'55", McCreary County, Hydrologic Unit 05130104, on right bank, 400 ft upstream from Salt Branch, 1,000 ft downstream from Bear Creek, 5.3 mi southwest of Stearns, and at mile 49.4.

DRAINAGE AREA.--954 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1113: 1946(M). WSP 1436: Drainage area, WDR KY-96-1 latitude and longitude.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 763.83 ft above NGVD of 1929; prior to Oct. 1, 1980 at site 1,000 ft upstream at datum 0.98 ft higher.

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet, National Park Service, and U.S. Army Corps of Engineers, Nashville District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached a stage of 52.9 ft from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 22,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	2000	49,900	32.36	Sep 17	2300	*63,600	*36.88
Mar 6	2000	39,900	28.69				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821	337	2,500	2,390	1,540	894	3,780	1,200	4,100	1,280	4,710	578
2	688	312	1,890	2,570	1,400	1,040	2,840	1,400	2,030	980	2,090	371
3	582	297	1,620	3,630	1,430	2,270	2,330	3,760	1,640	937	1,180	371
4	502	288	1,540	e3,100	1,650	2,410	1,940	2,930	4,920	1,090	792	458
5	443	314	1,840	e3,500	4,330	2,030	1,630	2,150	4,190	815	581	364
6	406	971	1,940	7,920	38,200	23,900	1,390	1,670	2,320	890	491	279
7	372	2,570	1,860	4,590	e29,600	14,300	1,240	1,320	1,540	2,370	411	234
8	339	1,890	1,720	3,180	e7,400	5,640	1,160	1,060	1,140	1,580	350	4,400
9	310	1,340	1,580	2,630	e4,000	3,610	1,070	868	937	1,020	298	6,310
10	289	1,040	1,580	2,210	e3,200	2,860	958	1,070	763	686	259	2,740
11	273	883	3,410	1,790	2,710	2,290	868	1,000	623	498	227	1,560
12	266	799	3,150	1,570	2,290	1,930	1,080	938	736	406	228	1,050
13	260	999	2,470	1,480	2,030	1,660	7,690	716	1,280	379	248	797
14	270	1,140	2,300	1,400	1,770	1,450	10,700	571	826	359	353	586
15	348	1,000	2,900	1,310	1,590	1,320	6,310	515	e2,600	318	320	447
16	568	1,040	2,660	1,220	1,460	1,350	4,240	1,180	e1,900	277	249	378
17	447	2,530	2,790	1,110	1,400	1,940	3,040	1,120	e1,200	264	208	33,300
18	356	2,560	3,070	1,510	1,330	1,960	2,390	1,140	e1,500	451	182	33,000
19	314	7,180	2,930	3,750	1,280	2,910	1,930	3,850	e1,100	516	161	6,050
20	289	11,100	2,670	3,120	1,460	2,560	1,630	1,820	e900	387	148	3,060
21	269	5,130	2,250	2,470	1,930	4,100	1,440	1,110	e680	288	199	1,970
22	256	e3,290	1,990	2,070	2,150	4,660	1,290	779	e710	239	219	1,400
23	243	e2,860	1,990	1,760	1,690	3,200	1,270	606	e670	222	224	1,070
24	229	e2,380	4,690	1,530	1,440	2,500	1,350	604	e650	193	262	852
25	221	e2,860	4,920	1,590	1,290	2,040	1,350	451	1,050	254	674	698
26	223	e2,700	3,440	3,900	1,160	1,710	2,260	388	4,210	481	503	572
27	289	2,060	2,650	3,450	1,100	1,500	2,770	772	2,330	3,450	354	481
28	404	2,180	2,190	2,860	1,030	1,350	2,100	1,050	1,350	1,860	268	429
29	539	4,140	1,860	2,340	946	1,230	1,660	1,160	935	965	228	396
30	445	3,370	2,160	2,080	---	3,800	1,380	928	853	616	194	369
31	380	---	2,730	1,810	---	5,710	---	2,840	---	1,790	269	---
TOTAL	11,641	69,560	77,290	79,840	122,806	110,124	75,086	40,966	49,683	25,861	16,880	104,570
MEAN	376	2,319	2,493	2,575	4,235	3,552	2,503	1,321	1,656	834	545	3,486
MAX	821	11,100	4,920	7,920	38,200	23,900	10,700	3,850	4,920	3,450	4,710	33,300
MIN	221	288	1,540	1,110	946	894	868	388	623	193	148	234
CFSM	0.39	2.43	2.61	2.70	4.44	3.72	2.62	1.39	1.74	0.87	0.57	3.65
IN.	0.45	2.71	3.01	3.11	4.79	4.29	2.93	1.60	1.94	1.01	0.66	4.08

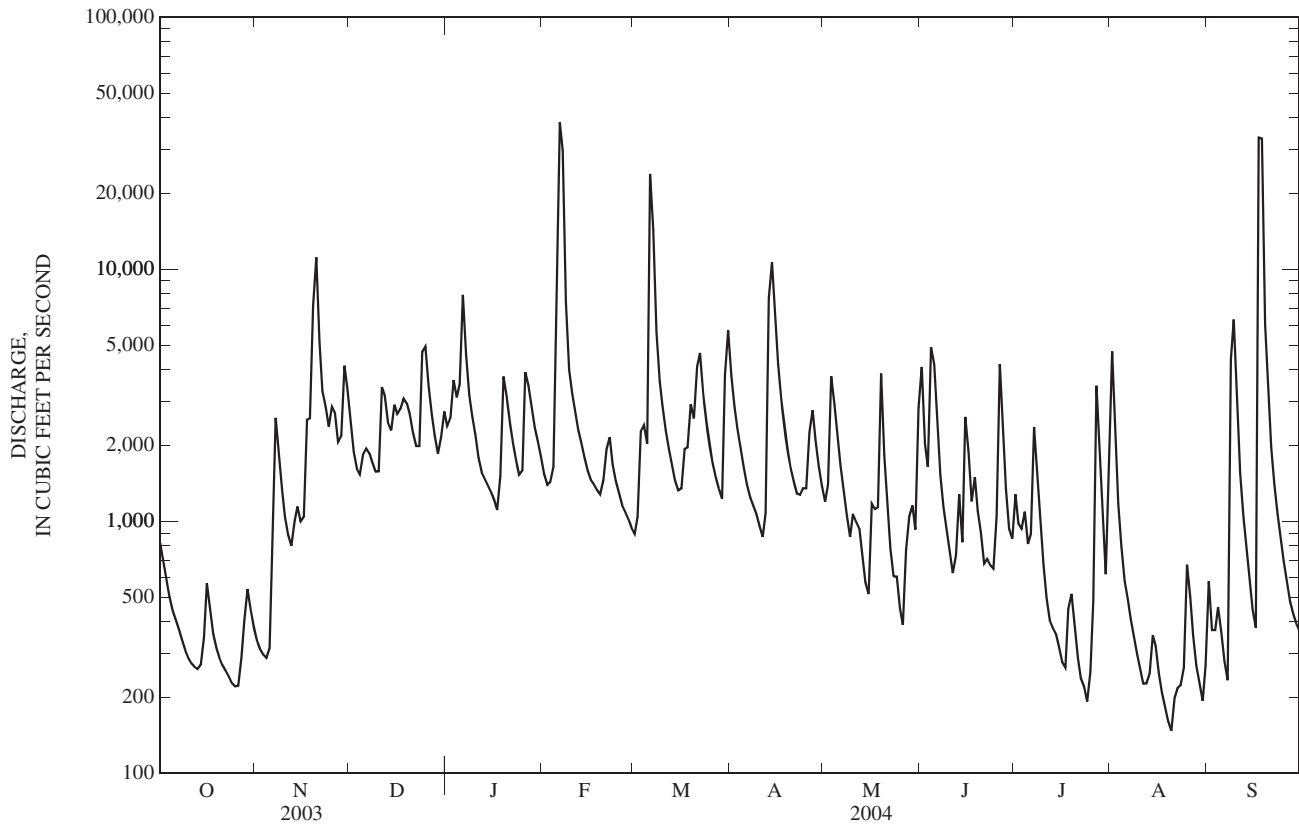
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	373	1,225	2,577	3,275	3,545	3,608	2,586	1,738	1,002	606	409	429
MAX	2,553	4,556	7,388	9,615	8,747	10,580	6,038	6,555	5,152	3,772	2,997	3,486
(WY)	(1990)	(1958)	(1991)	(1950)	(1956)	(1975)	(1977)	(1984)	(1989)	(1967)	(1971)	(2004)
MIN	20.8	30.6	150	145	725	1,200	568	224	72.8	34.5	65.4	29.6
(WY)	(1954)	(1954)	(1964)	(1981)	(1968)	(2003)	(1986)	(1948)	(1988)	(1944)	(1951)	(1953)

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	864,440		784,307		1,773	
ANNUAL MEAN	2,368		2,143		810	
HIGHEST ANNUAL MEAN					3,023	
LOWEST ANNUAL MEAN					810	
HIGHEST DAILY MEAN	48,300	Feb 16	38,200	Feb 6	80,200	Mar 13, 1975
LOWEST DAILY MEAN	116	Aug 29	148	Aug 20	11	Sep 18, 1954
ANNUAL SEVEN-DAY MINIMUM	147	Aug 24	192	Aug 17	12	Sep 13, 1954
MAXIMUM PEAK FLOW			63,600	Sep 17	93,200	May 28, 1973
MAXIMUM PEAK STAGE			36.88	Sep 17	46.29	May 28, 1973
INSTANTANEOUS LOW FLOW					11	Oct 4, 1948
ANNUAL RUNOFF (CFSM)	2.48		2.25		1.86	
ANNUAL RUNOFF (INCHES)	33.71		30.58		25.25	
10 PERCENT EXCEEDS	4,740		3,790		4,020	
50 PERCENT EXCEEDS	1,090		1,350		720	
90 PERCENT EXCEEDS	289		288		82	

e Estimated



03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-72, 1979 to 1990; July 1999 to Aug. 2000. Oct. 10, 2001 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--May 1980 to Sept. 1990, July 1999 to Aug. 22, 2000, Oct. 10, 2001 to current water year.

pH.--May 1980 to Sept. 1990, July 1999 to Aug. 22, 2000, Oct. 10, 2001 to current water year.

WATER TEMPERATURES.--May 1980 to Sept. 1990, July 1999 to Aug. 22, 2000. Oct. 10, 2001 to current water year.

DISSOLVED OXYGEN.--May 1980 to Sept. 1990, Oct. 10, 2001 to current water year.

TURBIDITY.--May 1980 to Sept. 1987 (discontinued).

SUSPENDED SEDIMENT DISCHARGE.--May 1980 to Sept. 1990 (discontinued).

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler May 1980 to Sept. 1990. Three parameter water-quality monitor from July 1999 to Aug. 22, 2000. Four parameter water-quality monitor with telemetry since Oct. 10, 2001.

REMARKS.--Miscellaneous samples prior to 1979. Miscellaneous measurements values may fall outside the range observed for that day by the water-quality monitor due to minor differences in sampling location.

SPECIFIC CONDUCTANCE.--Records rated good..

pH.--Records rated good except the following periods: Apr. 14-May 14, June 24-Jul. 5 rated fair; Jul. 7-Sep. 30 rated poor.

WATER TEMPERATURES.--Records rated good expect the following periods: Mar. 15-May 14 rated fair; Mar. 2-14 rated poor.

DISSOLVED OXYGEN.--Records rated good except the following period: Oct. 17-Dec. 1 rated fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 434 microsiemens, July 17, 1985; minimum recorded, 37 microsiemens, Sep. 17, 2004.

pH.--Maximum recorded, 8.6 units, Aug. 10, 1989; minimum recorded, 5.2 units, May 19, 1980 and Nov. 24, 1980.

WATER TEMPERATURES.--Maximum recorded, 34.6°C, Aug. 31, Sept. 1, 1989; minimum recorded, 0.0 mg/L, Jan. 29, 2002 and Jan. 24-27, 2003.

SEDIMENT CONCENTRATIONS.--Maximum daily mean, 1980 mg/L, Aug. 9, 1981; minimum daily mean, 0.0 mg/L, on several days in 1983-84, 1987-88.

SEDIMENT LOADS.--Maximum daily, 200,000 tons, Sept. 2, 1982; minimum daily, 0.04 tons, Nov. 25, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 225 microsiemens, Aug. 30; minimum recorded 34 microsiemens, Sept. 17.

pH.--Maximum 8.0 units, Aug. 10, 16-19, 27, Sep. 15; minimum recorded, 6.3 units, Feb. 6.

WATER TEMPERATURES.--Maximum recorded, 27.6°C, July 24; minimum recorded, 1.8°C, Jan. 23-24.

DISSOLVED OXYGEN.--Maximum recorded, 14.9 mg/L, Jan. 23; minimum recorded, 5.4 mg/L, July 13-14.

COOPERATION.--Environmental and Public Protection Cabinet.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[illegible]

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	120	120	120	80	80	80	100	100	100
2	---	---	---	120	120	120	80	80	80	100	90	95
3	---	---	---	140	120	123	80	80	80	110	90	99
4	---	---	---	150	140	149	90	80	83	110	100	108
5	---	---	---	150	110	127	90	80	87	100	90	92
6	---	---	---	110	50	68	90	90	90	90	90	90
7	---	---	---	70	70	70	90	90	90	90	90	90
8	---	---	---	80	70	74	90	90	90	90	90	90
9	---	---	---	80	80	80	90	90	90	100	90	96
10	---	---	---	90	80	81	100	90	90	100	100	100
11	---	---	---	90	90	90	100	90	100	110	100	102
12	---	---	---	90	90	90	100	90	98	110	80	97
13	---	---	---	90	90	90	100	80	92	80	80	80
14	---	---	---	100	90	95	100	70	79	84	79	81
15	---	---	---	100	100	100	80	70	74	91	84	89
16	---	---	---	100	100	100	80	80	80	101	91	95
17	---	---	---	100	100	100	80	80	80	114	101	109
18	---	---	---	130	100	120	80	80	80	112	70	90
19	---	---	---	130	110	126	90	80	80	72	45	59
20	---	---	---	110	100	109	90	80	89	45	42	43
21	---	---	---	100	90	98	90	90	90	53	44	49
22	---	---	---	90	90	90	90	90	90	59	53	56
23	---	---	---	90	80	88	90	90	90	64	59	62
24	---	---	---	90	80	84	90	90	90	71	64	67
25	---	---	---	90	80	89	100	90	91	77	71	74
26	---	---	---	90	90	90	100	80	95	80	77	78
27	---	---	---	90	90	90	90	80	82	85	78	83
28	---	---	---	90	90	90	90	90	90	---	---	---
29	---	---	---	100	90	94	100	90	93	---	---	---
30	---	---	---	100	80	88	100	100	100	---	---	---
31	---	---	---	80	80	80	---	---	---	---	---	---
MONTH	---	---	---	150	50	97	100	70	87	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	112	92	97	---	---	---	197	137	159
2	---	---	---	97	87	92	---	---	---	137	127	131
3	---	---	---	109	87	96	---	---	---	133	127	128
4	---	---	---	114	103	109	77	76	77	163	133	148
5	---	---	---	---	---	---	76	73	75	170	163	168
6	---	---	---	---	---	---	73	72	72	176	170	173
7	---	---	---	86	73	78	76	72	74	178	171	176
8	---	---	---	75	71	72	81	76	79	172	101	154
9	---	---	---	87	75	82	86	81	84	111	96	100
10	---	---	---	87	84	85	89	86	88	109	74	100
11	82	79	80	86	84	84	90	89	89	125	80	98
12	97	82	84	90	86	88	90	89	90	111	59	88
13	92	62	79	95	90	92	91	90	90	62	57	59
14	---	---	---	99	95	97	92	90	91	91	60	76
15	---	---	---	102	99	101	96	92	94	111	91	100
16	---	---	---	105	102	104	101	96	98	114	111	113
17	---	---	---	107	105	106	104	101	102	114	34	71
18	---	---	---	111	107	109	105	104	105	66	55	61
19	---	---	---	121	111	116	106	105	105	76	66	71
20	---	---	---	130	121	126	110	106	108	84	76	80
21	---	---	---	132	130	132	132	110	120	89	84	87
22	---	---	---	134	132	133	142	122	135	95	89	92
23	---	---	---	137	134	136	147	142	145	99	95	96
24	---	---	---	136	128	132	153	144	146	103	99	101
25	133	124	129	128	119	123	154	141	146	106	103	104
26	150	103	130	121	119	120	156	143	146	109	106	108
27	104	96	100	120	62	86	195	156	176	113	109	111
28	108	104	107	67	62	64	212	195	204	115	113	114
29	106	104	104	70	63	67	223	212	218	118	115	117
30	116	104	106	78	70	74	225	223	224	120	118	119
31	---	---	---	92	61	77	223	197	216	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	197	34	110
YEAR	---	---	---									

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.7	7.5	7.7	7.7	---	---	---	---	---	---	6.7	6.6
2	7.9	7.5	7.8	7.7	---	---	---	---	---	---	6.7	6.6
3	7.8	7.4	7.8	7.7	---	---	---	---	---	---	6.8	6.7
4	7.7	7.5	7.8	7.7	---	---	---	---	---	---	6.9	6.8
5	7.8	7.5	7.8	7.7	---	---	---	---	---	---	6.9	6.8
6	7.8	7.5	7.7	7.7	---	---	---	---	---	---	6.8	6.3
7	7.8	7.5	7.9	7.7	---	---	---	---	---	---	6.6	6.5
8	7.8	7.5	---	---	---	---	---	---	---	---	6.6	6.5
9	7.7	7.5	---	---	---	---	---	---	---	---	6.6	6.5
10	7.7	7.5	---	---	---	---	---	---	---	---	6.7	6.6
11	7.7	7.5	---	---	---	---	---	---	---	---	6.7	6.7
12	7.7	7.5	---	---	---	---	---	---	---	---	6.8	6.7
13	7.7	7.5	---	---	---	---	---	---	---	---	6.8	6.8
14	7.6	7.4	---	---	---	---	---	---	---	---	6.9	6.8
15	7.5	7.3	---	---	---	---	---	---	---	---	6.9	6.8
16	7.5	7.4	---	---	---	---	---	---	---	---	6.9	6.9
17	7.5	7.4	---	---	---	---	---	---	---	---	7.0	6.9
18	7.5	7.4	---	---	---	---	---	---	---	---	7.1	7.0
19	7.5	7.4	---	---	---	---	---	---	---	---	7.1	7.1
20	7.5	7.3	---	---	---	---	---	---	---	---	7.1	6.9
21	7.5	7.3	---	---	---	---	---	---	---	---	6.9	6.9
22	7.5	7.4	---	---	---	---	---	---	---	---	6.9	6.9
23	7.6	7.4	---	---	---	---	---	---	---	---	6.9	6.8
24	7.6	7.5	---	---	---	---	---	---	---	---	6.9	6.8
25	7.6	7.5	---	---	---	---	---	---	---	---	6.9	6.9
26	7.5	7.5	---	---	---	---	---	---	---	---	7.0	6.9
27	7.6	7.5	---	---	---	---	---	---	---	---	7.0	6.9
28	7.6	7.5	---	---	---	---	---	---	---	---	7.1	6.9
29	7.7	7.6	---	---	---	---	---	---	---	---	7.1	7.0
30	7.7	7.6	---	---	---	---	---	---	---	---	7.0	6.9
31	7.7	7.6	---	---	---	---	---	---	---	---	6.9	6.9
MONTH	7.9	7.3	---	---	---	---	---	---	---	---	7.1	6.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.9	6.8	7.1	7.0	---	---	7.1	7.0	6.9	6.7	7.7	7.4
2	6.9	6.8	7.0	6.9	---	---	7.1	7.0	---	---	7.5	7.3
3	6.9	6.8	7.1	6.9	---	---	7.2	7.0	7.2	7.1	7.7	7.4
4	7.0	6.8	7.1	7.0	---	---	7.2	7.1	7.4	7.1	7.7	7.4
5	7.0	6.9	7.0	7.0	---	---	7.1	7.1	7.1	7.1	7.9	7.5
6	7.0	6.9	7.1	7.0	---	---	---	---	7.4	7.1	7.9	7.5
7	7.0	6.9	7.1	7.0	---	---	6.9	6.8	7.6	7.1	7.6	7.5
8	7.1	6.9	7.1	6.9	---	---	6.9	6.8	7.8	7.1	7.6	7.1
9	7.1	7.0	7.1	6.9	---	---	7.1	6.9	7.9	7.2	7.2	7.1
10	7.1	7.0	7.1	6.9	6.9	6.7	7.3	6.9	8.0	7.2	7.3	7.2
11	7.1	7.0	7.1	6.9	7.1	6.7	7.3	6.9	7.9	7.1	7.3	7.3
12	7.1	6.9	7.0	6.8	7.1	6.7	7.3	7.0	7.3	7.1	7.4	7.3
13	7.0	6.8	6.8	6.7	6.8	6.7	7.4	7.0	7.4	7.1	7.7	7.3
14	7.0	6.7	7.2	6.7	---	---	7.4	7.1	7.5	7.2	7.9	7.3
15	6.8	6.7	7.3	7.2	---	---	7.4	7.1	7.8	7.2	8.0	7.3
16	6.8	6.7	7.2	7.1	---	---	7.4	7.1	8.0	7.2	7.5	7.4
17	6.9	6.8	7.3	7.2	---	---	7.3	7.1	8.0	7.2	7.4	6.7
18	6.9	6.8	7.2	7.0	---	---	7.3	7.1	8.0	7.2	6.9	6.7
19	7.0	6.9	7.0	6.8	---	---	7.4	7.2	8.0	7.2	7.0	6.9
20	7.0	6.9	6.9	6.7	---	---	7.5	7.2	7.6	7.2	7.1	7.0
21	7.0	6.9	6.9	6.7	---	---	7.6	7.3	7.4	7.2	7.2	7.1
22	7.1	7.0	7.0	6.8	---	---	7.5	7.3	7.7	7.3	7.2	7.2
23	7.0	7.0	7.1	6.9	---	---	7.6	7.2	7.7	7.3	7.2	7.1
24	7.0	6.9	7.1	6.9	7.3	7.2	7.6	7.2	7.6	7.3	7.2	7.1
25	7.1	7.0	7.3	6.9	7.2	7.1	7.4	7.3	7.4	7.2	7.3	7.2
26	7.0	6.8	7.1	6.9	7.2	7.0	7.4	7.2	7.6	7.2	7.4	7.2
27	6.9	6.8	7.2	6.9	7.2	7.1	7.3	6.9	8.0	7.4	7.4	7.3
28	7.0	6.9	6.9	6.8	7.2	7.1	7.0	6.9	7.9	7.5	7.4	7.3
29	7.1	6.9	---	---	7.3	7.2	7.1	7.0	7.8	7.5	7.4	7.3
30	7.1	7.0	---	---	7.3	7.0	7.3	7.0	7.7	7.5	7.5	7.0
31	---	---	---	---	---	---	7.1	6.7	7.8	7.5	---	---
MONTH	7.1	6.7	---	---	---	---	---	---	---	---	8.0	6.7
YEAR	---	---										

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.7	15.6	16.2	14.4	13.4	13.8	7.1	6.6	6.8	5.3	4.9	5.1
2	15.8	14.9	15.3	14.6	13.6	14.1	6.6	6.2	6.2	6.2	5.2	5.5
3	15.2	14.0	14.6	14.7	13.7	14.2	6.0	5.8	5.8	8.1	6.2	7.0
4	15.1	14.4	14.7	14.8	13.8	14.3	6.0	5.8	5.9	---	---	---
5	15.1	14.4	14.7	15.0	14.5	14.8	6.3	6.0	6.2	10.7	10.5	10.6
6	15.8	14.6	15.0	15.0	14.9	14.9	6.4	6.3	6.4	10.6	7.8	9.6
7	16.1	14.8	15.4	15.0	14.6	14.9	6.3	6.0	6.2	7.8	5.0	6.3
8	16.4	15.2	15.7	15.0	13.6	14.3	6.0	5.6	5.8	5.0	3.8	4.2
9	16.6	15.6	16.1	13.6	12.5	13.0	5.8	5.5	5.6	3.8	3.2	3.4
10	16.6	16.2	16.4	12.5	12.0	12.2	6.2	5.6	5.9	3.2	2.8	3.0
11	17.4	16.4	16.8	12.2	11.9	12.0	6.3	6.0	6.1	2.8	2.3	2.6
12	17.6	16.8	17.2	12.3	12.0	12.1	6.6	6.3	6.4	2.6	2.4	2.5
13	17.9	17.1	17.5	12.3	11.0	11.6	6.3	5.3	5.6	2.7	2.3	2.5
14	17.7	17.1	17.6	11.0	10.3	10.5	5.3	5.0	5.1	3.1	2.5	2.7
15	17.3	16.3	16.8	10.4	10.1	10.3	5.3	4.8	5.0	3.5	3.1	3.3
16	16.7	15.9	16.3	10.2	10.0	10.1	6.1	5.1	5.5	3.4	3.0	3.2
17	16.3	15.8	16.0	10.9	10.1	10.4	6.3	5.9	6.1	3.8	3.2	3.5
18	16.3	15.6	15.8	12.1	10.9	11.3	6.2	5.8	6.0	4.5	3.8	4.1
19	15.9	14.9	15.4	13.8	12.1	12.9	5.8	5.1	5.5	4.6	4.3	4.5
20	15.9	14.8	15.3	13.8	12.1	12.9	5.1	4.2	4.7	4.4	3.7	4.0
21	15.9	14.9	15.4	11.9	11.2	11.6	4.2	3.5	3.7	3.7	2.9	3.1
22	15.9	15.1	15.4	---	---	---	3.5	3.1	3.3	2.9	2.2	2.5
23	15.3	14.5	14.9	---	---	---	4.2	3.3	3.6	2.3	1.8	2.0
24	15.0	13.9	14.4	---	---	---	5.2	4.2	4.8	2.3	1.8	2.0
25	15.0	13.8	14.4	---	---	---	5.5	5.2	5.4	2.8	2.1	2.3
26	14.7	14.3	14.5	8.6	8.5	8.6	5.3	4.5	4.8	5.0	2.8	4.1
27	14.4	13.6	14.1	8.5	8.2	8.3	4.5	3.8	4.0	5.9	5.0	5.6
28	14.1	13.3	13.7	8.6	8.4	8.5	4.0	3.4	3.6	5.7	4.9	5.3
29	14.1	13.5	13.7	8.2	8.3	8.3	4.4	3.7	4.0	4.9	4.1	4.3
30	14.0	13.1	13.5	7.8	7.3	7.6	5.0	4.4	4.7	4.2	3.2	3.7
31	14.2	13.3	13.7	---	---	---	5.4	5.0	5.2	3.2	2.3	2.6
MONTH	17.9	13.1	15.4	---	---	---	7.1	3.1	5.3	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	2.3	2.0	2.2	6.9	6.6	6.8	12.2	11.1	11.6	17.0	15.9	16.4
2	2.5	2.0	2.2	8.0	6.9	7.4	11.1	10.1	10.5	16.9	15.7	16.4
3	2.8	2.5	2.6	8.8	7.7	8.1	10.6	9.5	10.1	15.7	14.1	15.1
4	3.3	2.7	3.0	10.3	8.8	9.5	10.8	9.8	10.3	14.1	13.2	13.6
5	4.7	3.1	3.6	11.3	10.2	10.6	11.0	10.0	10.5	14.3	12.9	13.6
6	7.6	4.7	6.4	12.0	11.0	11.5	11.5	10.1	10.8	15.5	14.0	14.8
7	---	---	---	11.4	10.4	10.9	12.1	10.8	11.4	17.1	15.4	16.2
8	---	---	---	10.4	9.0	9.7	13.2	11.8	12.4	18.3	16.4	17.3
9	---	---	---	9.0	7.9	8.4	14.0	12.6	13.2	19.4	17.7	18.5
10	---	---	---	8.0	7.3	7.7	13.6	13.2	13.4	19.8	18.6	19.2
11	---	---	---	7.5	6.8	7.0	13.5	13.1	13.3	20.7	19.6	20.0
12	---	---	---	7.1	6.4	6.8	13.1	12.1	12.7	21.1	20.0	20.4
13	---	---	---	7.4	6.6	7.0	12.1	9.8	11.0	20.5	19.4	19.9
14	---	---	---	7.5	7.1	7.3	9.9	9.2	9.5	21.0	19.7	20.3
15	---	---	---	8.0	7.2	7.6	10.3	9.4	9.8	20.7	20.2	20.5
16	---	---	---	9.0	8.0	8.5	11.8	10.1	10.9	20.9	20.3	20.6
17	---	---	---	9.4	8.9	9.1	13.4	11.5	12.3	21.1	20.5	20.7
18	---	---	---	10.4	9.3	9.9	15.1	13.0	13.9	20.7	19.5	20.2
19	---	---	---	11.0	9.9	10.4	15.8	14.7	15.3	19.5	17.8	18.6
20	---	---	---	10.7	9.8	10.3	16.4	15.8	16.1	19.1	17.8	18.4
21	---	---	---	10.7	10.0	10.3	16.9	16.0	16.4	20.6	19.0	19.7
22	---	---	---	10.0	8.7	9.5	17.5	16.3	16.9	21.2	20.1	20.6
23	---	---	---	8.7	7.7	8.1	17.4	16.8	17.1	22.3	20.5	21.4
24	---	---	---	8.7	7.5	8.1	18.1	16.9	17.4	22.6	21.2	21.9
25	---	---	---	10.1	8.4	9.2	18.4	17.8	18.1	23.5	21.8	22.6
26	---	---	---	11.5	10.1	10.7	18.1	16.7	17.5	23.3	22.5	22.9
27	---	---	---	13.0	11.4	12.3	16.7	15.8	16.1	23.1	22.0	22.5
28	---	---	---	14.4	12.6	13.4	15.9	14.9	15.4	22.6	21.8	22.2
29	---	---	---	14.8	13.9	14.4	15.9	15.0	15.5	---	---	---
30	---	---	---	14.8	13.7	14.2	16.5	15.5	15.9	---	---	---
31	---	---	---	13.7	12.2	12.9	---	---	---	---	---	---
MONTH	---	---	---	14.8	6.4	9.6	18.4	9.2	13.5	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.5	9.1	9.3	9.6	8.6	9.0	11.6	11.2	11.5	13.8	13.2	13.6
2	9.8	8.9	9.3	9.5	8.6	9.0	---	---	---	13.8	13.2	13.6
3	9.7	9.1	9.4	9.8	8.4	9.0	11.9	11.5	11.8	13.2	12.5	13.0
4	9.7	9.0	9.3	9.8	8.8	9.2	11.8	11.5	11.8	---	---	---
5	9.8	8.9	9.4	9.6	8.7	9.1	12.1	11.4	11.6	---	---	---
6	9.8	9.3	9.5	10.1	8.8	9.6	12.2	11.8	12.1	12.5	11.2	11.7
7	9.8	9.2	9.5	10.1	9.8	9.9	12.7	12.2	12.5	13.6	12.5	13.0
8	9.8	9.1	9.4	12.2	10.1	11.7	13.1	12.6	12.9	14.2	13.5	13.9
9	9.7	8.8	9.3	12.4	12.1	12.3	13.2	12.8	13.0	14.3	13.8	14.2
10	9.5	8.8	9.1	12.6	12.2	12.4	13.0	12.5	12.7	14.4	13.8	14.2
11	9.4	8.7	9.0	12.4	11.7	12.2	12.7	12.4	12.5	14.5	14.0	14.3
12	9.1	8.5	8.8	12.1	11.2	11.5	12.5	12.2	12.3	14.4	14.0	14.2
13	8.9	8.3	8.7	11.6	11.1	11.3	12.8	12.2	12.5	14.5	14.1	14.3
14	8.7	8.2	8.5	12.8	11.4	12.2	12.9	12.6	12.7	14.3	13.8	14.1
15	9.2	8.2	8.6	12.6	11.9	12.3	13.6	12.7	13.3	13.9	13.5	13.7
16	9.2	8.4	8.8	12.4	12.1	12.2	13.6	13.0	13.4	13.9	13.5	13.7
17	8.9	8.5	8.8	12.4	12.1	12.3	13.2	12.9	13.1	13.7	13.4	13.6
18	9.1	8.5	8.8	12.8	11.8	12.3	13.2	12.8	13.1	13.4	12.8	13.2
19	9.2	8.6	8.9	11.9	10.8	11.3	13.4	13.1	13.2	13.4	12.9	13.1
20	9.5	8.7	9.0	11.8	10.5	11.2	13.9	13.2	13.6	13.8	13.4	13.6
21	9.8	8.8	9.2	12.0	11.2	11.6	14.4	13.8	14.1	14.4	13.8	14.1
22	9.4	8.5	8.9	---	---	---	14.5	14.1	14.3	14.7	14.1	14.4
23	9.2	8.2	8.8	---	---	---	14.4	13.8	14.1	14.9	14.1	14.6
24	9.1	8.4	8.7	---	---	---	14.0	13.5	13.8	14.9	14.3	14.6
25	8.9	8.1	8.5	---	---	---	14.2	13.4	13.8	14.6	13.8	14.3
26	8.7	7.8	8.3	11.4	11.2	11.3	14.2	13.6	14.0	14.2	13.2	13.6
27	9.3	8.2	8.8	11.3	11.0	11.2	14.4	14.1	14.3	13.3	12.5	12.8
28	9.1	8.5	8.9	11.2	10.8	11.0	14.6	14.3	14.5	13.1	12.6	12.9
29	9.2	8.5	8.9	11.4	10.8	11.2	14.4	14.0	14.2	13.4	12.8	13.2
30	9.2	8.5	8.9	11.3	11.1	11.2	14.3	13.7	13.9	13.8	13.1	13.4
31	9.3	8.6	9.0	---	---	---	13.8	13.4	13.6	14.2	13.1	13.8
MONTH	9.8	7.8	9.0	---	---	---	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	14.5	13.8	14.1	---	---	---	10.4	9.9	10.1	8.9	8.6	8.8
2	14.4	13.7	14.2	11.6	11.5	11.6	10.6	10.1	10.3	8.7	8.4	8.6
3	14.3	13.8	14.1	11.6	11.2	11.4	10.8	10.3	10.5	9.2	8.6	8.9
4	14.2	13.7	14.0	11.2	10.7	11.0	10.7	10.2	10.4	9.4	9.2	9.3
5	14.2	13.4	13.8	10.7	10.2	10.5	10.5	10.1	10.3	9.4	9.0	9.3
6	14.0	12.8	13.7	11.1	9.1	10.6	10.4	10.1	10.3	9.2	8.8	9.0
7	---	---	---	11.2	10.7	10.9	10.2	9.8	10.0	8.8	8.4	8.6
8	---	---	---	11.2	10.8	11.0	9.9	9.6	9.8	8.5	8.1	8.3
9	---	---	---	11.4	11.1	11.3	9.7	9.3	9.5	8.1	7.6	7.9
10	---	---	---	11.8	11.4	11.6	9.4	9.2	9.3	8.2	7.6	7.9
11	---	---	---	11.9	11.6	11.8	9.4	9.1	9.3	8.5	8.1	8.3
12	---	---	---	12.0	11.6	11.8	9.5	9.1	9.3	8.2	7.9	8.0
13	---	---	---	11.9	11.6	11.8	10.9	9.4	10	7.9	7.7	7.8
14	---	---	---	11.8	11.6	11.7	11.2	10.8	11.1	8.4	7.7	8.0
15	---	---	---	11.6	11.3	11.5	11.2	10.9	11.1	8.3	7.9	8.1
16	---	---	---	11.3	10.9	11.2	10.9	10.3	10.7	8.3	8.0	8.1
17	---	---	---	11.0	10.8	10.9	10.6	10.0	10.3	8.3	7.9	8.1
18	---	---	---	10.9	10.6	10.8	10.1	9.6	10.0	8.3	8.0	8.1
19	---	---	---	10.8	10.4	10.6	9.7	9.3	9.6	8.6	8.3	8.5
20	---	---	---	10.8	10.4	10.7	9.4	9.1	9.2	8.7	8.3	8.5
21	---	---	---	11.0	10.4	10.7	9.2	8.9	9.0	8.3	7.8	8.1
22	---	---	---	11.3	11.0	11.1	9.1	8.8	8.9	8.0	7.6	7.8
23	---	---	---	11.6	11.2	11.5	8.9	8.6	8.7	7.9	7.4	7.7
24	---	---	---	11.7	11.2	11.5	8.7	8.5	8.6	8.0	7.4	7.7
25	---	---	---	11.4	10.8	11.2	8.6	8.4	8.5	7.8	7.2	7.5
26	---	---	---	10.9	10.4	10.6	8.7	8.3	8.5	7.7	7.2	7.4
27	---	---	---	10.4	9.9	10.2	9.0	8.7	8.8	8.0	7.4	7.7
28	---	---	---	10.0	9.4	9.8	9.3	8.8	9.1	7.6	7.4	7.5
29	---	---	---	9.5	9.2	9.4	9.3	9.0	9.1	---	---	---
30	---	---	---	9.7	9.1	9.4	9.1	8.8	8.9	---	---	---
31	---	---	---	10.1	9.7	9.9	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	11.2	8.3	9.6	---	---	---

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03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY

LOCATION.--Lat 36°43'32", long 84°32'38", McCreary County, Hydrologic Unit 05130104, on left bank 200 ft upstream of bridge on State Highway 92 at Yamacraw, 700 feet upstream from Wolf Creek, 0.6 mile downstream from Rock Creek, and at mile 40.3.

DRAINAGE AREA.--1,083 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to September 30, 2000, October 1, 2002 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 711.166 ft above NGVD of 1929.

REMARKS.--Records poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	992	429	3,050	2,690	e1,850	e1,050	e4,710	e1,500	e5,500	e1,600	8,500	634
2	837	395	2,290	3,450	e1,650	e1,820	e3,750	e1,900	e3,190	e1,150	3,210	461
3	732	375	1,830	4,750	e1,720	e3,150	e3,100	e5,100	e2,280	e1,100	1,770	425
4	652	362	1,660	3,840	1,790	e3,150	e2,600	e3,740	e6,200	e1,300	1,160	515
5	586	398	1,890	4,010	6,420	e2,670	e2,260	e3,000	e4,950	e960	957	446
6	539	937	2,120	9,750	43,800	26,400	e1,970	e2,310	e3,190	e1,000	885	358
7	500	2,800	2,030	5,810	32,100	e17,900	e1,740	e1,850	e2,130	e3,480	726	308
8	461	2,120	1,870	3,890	e8,000	e11,000	e1,500	e1,400	e1,400	e2,310	586	4,050
9	424	1,490	1,710	3,070	e4,600	e5,990	e1,400	e1,100	e1,100	e1,620	451	8,070
10	396	1,160	1,730	2,510	e3,600	e4,040	e1,200	e1,300	e900	e1,000	368	3,280
11	380	967	3,720	1,990	e3,000	e3,060	e1,100	e1,200	e760	e700	326	1,800
12	371	877	3,740	1,720	e2,600	e2,600	e1,300	e1,100	e1,000	e460	322	1,200
13	364	1,150	2,800	1,610	e2,300	e2,100	14,500	e900	e1,600	e440	364	903
14	373	1,290	2,520	1,510	e2,000	e1,800	e12,900	e680	e1,100	e420	419	695
15	472	1,140	3,230	1,420	e1,800	e1,600	e8,340	e620	e3,640	e400	427	563
16	657	1,130	2,990	1,310	e1,700	e1,700	e5,220	e1,400	e2,850	e320	341	482
17	e580	2,640	3,110	1,190	e1,600	e2,660	e3,860	e1,300	e1,500	e300	295	34,400
18	e473	2,890	3,580	2,060	e1,500	e2,490	e3,030	e1,350	e1,900	e520	262	39,200
19	e421	7,100	3,430	4,850	e1,600	e3,460	e2,400	e5,150	e1,500	e640	241	8,400
20	385	13,800	3,090	3,990	e1,800	e3,120	e2,000	e2,780	e1,100	e500	222	4,050
21	369	6,380	2,530	2,950	e2,300	e4,550	e1,800	e1,730	e810	e360	271	2,460
22	350	3,800	2,210	2,390	e2,760	e5,240	e1,650	e1,100	e840	e270	374	1,680
23	337	2,670	2,180	1,990	e2,220	e3,870	e1,550	e740	e820	e250	311	1,250
24	317	2,220	5,600	1,700	e1,910	e3,240	e1,600	e700	e800	e230	350	947
25	307	2,810	6,230	1,690	e1,700	e2,660	e1,550	e560	e1,200	e300	679	761
26	305	2,660	4,220	4,450	e1,450	e2,200	e2,910	e480	e5,780	602	648	634
27	364	2,230	3,110	4,090	e1,300	e1,900	e3,320	e800	e3,310	4,050	464	544
28	498	2,430	2,480	3,310	e1,200	e1,700	e2,910	e1,200	e2,230	2,370	358	488
29	635	4,880	2,070	e2,820	e1,100	e1,500	e2,310	e1,400	e1,300	1,210	308	449
30	561	4,130	2,370	e2,400	---	e4,780	e1,850	e1,150	e1,050	783	272	420
31	479	---	3,140	e2,100	---	e7,310	---	e3,790	---	2,740	268	---
TOTAL	15,117	77,660	88,530	95,310	141,370	140,710	100,330	53,330	65,930	33,385	26,135	119,873
MEAN	488	2,589	2,856	3,075	4,875	4,539	3,344	1,720	2,198	1,077	843	3,996
MAX	992	13,800	6,230	9,750	43,800	26,400	14,500	5,150	6,200	4,050	8,500	39,200
MIN	305	362	1,660	1,190	1,100	1,050	1,100	480	760	230	222	308
CFSM	0.45	2.39	2.64	2.84	4.50	4.19	3.09	1.59	2.03	0.99	0.78	3.69
IN.	0.52	2.67	3.04	3.27	4.86	4.83	3.45	1.83	2.26	1.15	0.90	4.12

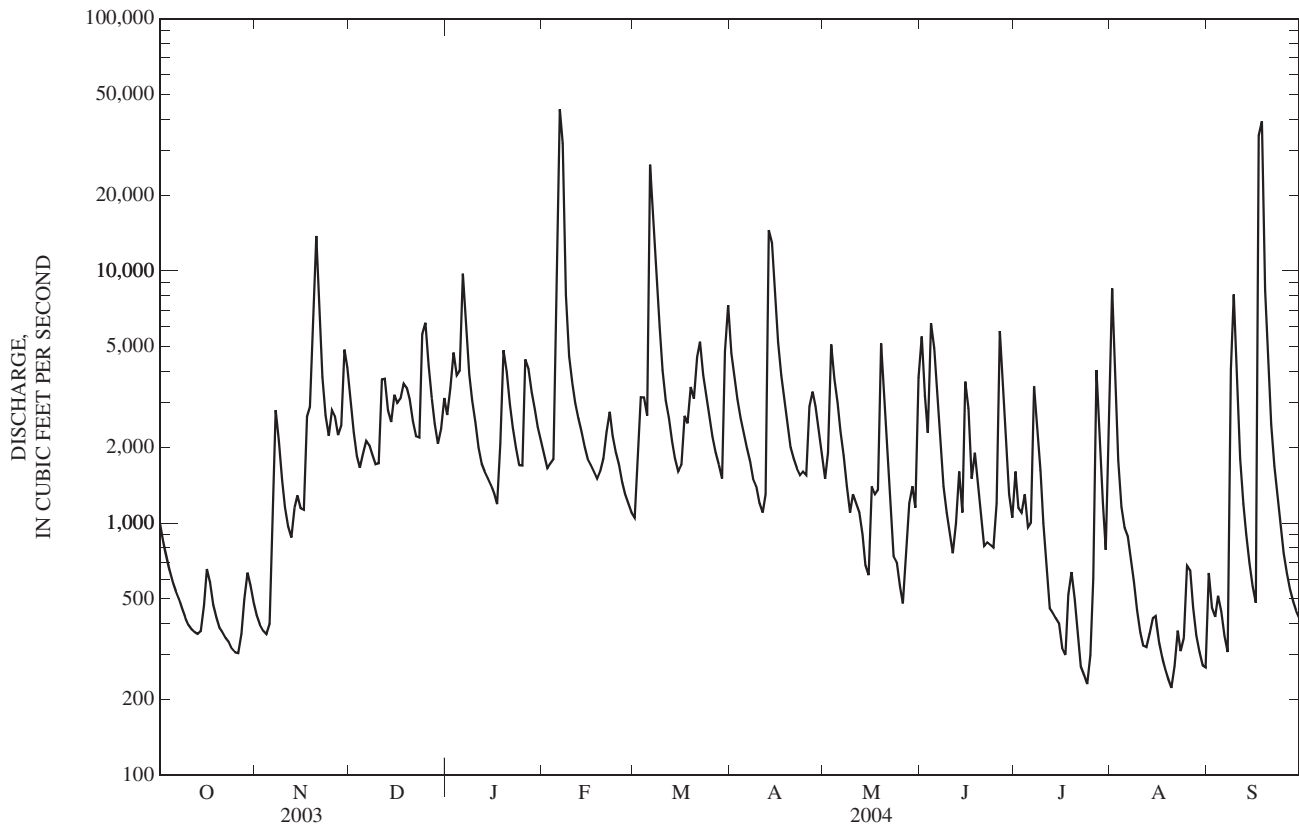
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	311	1,520	2,679	1,671	4,927	2,812	4,790	2,681	1,872	1,023	510	1,857
MAX	488	2,589	4,877	3,075	7,876	4,539	6,502	4,448	2,696	2,092	843	3,996
(WY)	(2004)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2003)	(2003)	(1999)	(2004)	(2004)
MIN	75.6	137	305	959	2,131	1,394	3,344	1,720	718	255	180	40.3
(WY)	(2000)	(2000)	(2000)	(2003)	(2000)	(2003)	(2004)	(2004)	(2000)	(2000)	(1999)	(1999)

03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	1,033,199		957,680		2,229	
ANNUAL MEAN	2,831		2,617		2,930	
HIGHEST ANNUAL MEAN					1,143	
LOWEST ANNUAL MEAN					43,800	
HIGHEST DAILY MEAN	35,300	Feb 16	43,800	Feb 6	43,800	Feb 6, 2004
LOWEST DAILY MEAN	154	Aug 29	222	Aug 20	25	Sep 27, 1999
ANNUAL SEVEN-DAY MINIMUM	187	Aug 24	282	Aug 17	25	Sep 26, 1999
MAXIMUM PEAK FLOW			74,800	Sep 17	74,800	Sep 17, 2004
MAXIMUM PEAK STAGE			33.46	Sep 17	33.46	Sep 17, 2004
ANNUAL RUNOFF (CFSM)	2.61		2.42		2.06	
ANNUAL RUNOFF (INCHES)	35.49		32.90		27.97	
10 PERCENT EXCEEDS	6,000		4,720		4,560	
50 PERCENT EXCEEDS	1,300		1,670		1,050	
90 PERCENT EXCEEDS	380		374		150	

e Estimated



03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Oct. 1, 2002 to current water year.

INSTRUMENTATION.--Four parameter water-quality monitor with telemetry since Oct. 1, 2002.

REMARKS.--

SPECIFIC CONDUCTANCE.--Records rated good except the following periods: Nov. 21-25, Aug.15-22 rated fair; Aug. 23-Sep.22 rated poor.

pH.--Records rated good.

WATER TEMPERATURE.--Records rated good

DISSOLVED OXYGEN.--Records rated good expect the following periods: Oct. 20-30, Nov. 13-Dec. 26, Jan. 14-26, and Mar. 17-Apr. 12 rated poor.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 421 microsiemens, Mar 16; minimum recorded 27 microsiemens, Sep. 18.

pH.--Maximum 7.7 units, Jul. 27; minimum recorded, 6.7 units, June 10-19.

WATER TEMPERATURE.--Maximum recorded, 28.8°C, Aug. 27; minimum recorded, 1.2°C, Jan. 23-24.

DISSOLVED OXYGEN.--Maximum recorded, 15.0 mg/L, Nov. 26; minimum recorded, 4.7 mg/L, Aug. 30-31.

COOPERATION.--Environmental and Public Protection Cabinet.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	117	113	116	146	142	144	93	87	90	95	92	93
2	118	114	116	143	141	142	89	86	87	95	86	90
3	120	116	117	143	142	142	88	87	87	90	86	88
4	120	118	118	146	143	144	89	88	88	89	86	87
5	120	116	118	147	145	146	90	89	89	88	84	86
6	121	118	119	145	133	142	94	90	92	112	78	95
7	121	118	119	155	127	134	95	94	95	90	80	82
8	123	119	120	159	139	151	99	94	97	82	80	81
9	123	119	121	139	134	136	101	99	100	83	82	83
10	126	121	122	134	115	125	102	96	100	86	83	85
11	128	121	124	115	106	109	98	92	94	91	86	88
12	130	123	126	106	101	103	113	98	110	95	91	93
13	130	124	126	101	96	99	106	92	97	95	93	94
14	130	126	128	96	92	94	92	88	90	97	94	96
15	129	125	127	92	90	91	93	88	89	98	97	97
16	126	121	124	96	92	94	94	92	93	100	98	98
17	121	120	121	104	96	99	94	92	93	101	99	100
18	---	---	---	106	90	100	94	91	92	106	88	99
19	---	---	---	93	78	85	94	89	91	94	84	88
20	137	133	135	105	92	99	91	89	90	98	89	94
21	142	136	139	98	90	92	94	91	93	93	89	91
22	153	142	147	97	91	95	92	89	90	93	89	92
23	156	150	154	102	95	98	89	88	89	89	87	88
24	156	154	156	108	102	105	88	80	84	89	87	88
25	157	154	156	112	99	107	90	86	88	90	88	89
26	155	148	150	100	94	97	89	87	88	---	---	---
27	148	144	146	99	94	97	88	85	86	---	---	---
28	146	140	142	99	87	95	86	85	85	---	---	---
29	141	139	140	96	84	87	87	85	86	---	---	---
30	141	140	140	98	93	96	89	87	88	---	---	---
31	146	141	144	---	---	---	95	88	91	---	---	---
MONTH	---	---	---	159	78	112	113	80	91	---	---	---

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	124	122	123	82	79	80	104	101	102
2	---	---	---	128	124	127	82	81	81	103	96	102
3	---	---	---	127	122	125	82	80	81	119	88	96
4	---	---	---	152	126	142	84	81	83	122	111	115
5	---	---	---	152	129	140	87	84	86	112	96	103
6	---	---	---	130	66	84	90	87	89	98	94	95
7	---	---	---	164	86	112	93	90	92	97	95	96
8	---	---	---	246	136	208	95	93	94	99	97	98
9	---	---	---	326	246	286	98	94	96	102	99	100
10	---	---	---	339	315	330	101	98	99	103	102	102
11	---	---	---	329	301	315	103	101	102	109	102	106
12	---	---	---	321	303	311	106	102	104	113	109	111
13	---	---	---	348	321	335	102	82	92	113	92	103
14	---	---	---	381	348	365	100	74	84	92	73	84
15	---	---	---	411	381	396	75	73	74	89	83	78
16	---	---	---	421	100	239	78	73	75	95	81	93
17	---	---	---	102	100	100	82	78	79	104	95	98
18	---	---	---	118	101	107	84	82	83	116	103	110
19	126	121	123	140	118	131	87	84	85	104	61	72
20	120	116	118	132	108	116	89	87	88	62	52	55
21	125	117	120	108	95	102	92	88	91	56	52	53
22	140	125	134	95	92	94	94	91	93	61	55	57
23	140	136	139	92	87	89	99	94	97	69	66	68
24	136	129	133	87	86	86	101	97	99	---	---	---
25	130	122	126	88	86	87	101	97	98	---	---	---
26	122	120	121	91	88	90	104	99	101	---	---	---
27	122	120	120	94	91	92	104	85	92	97	83	87
28	123	119	121	98	94	96	94	85	90	92	84	88
29	123	120	122	100	77	96	98	94	96	90	83	86
30	---	---	---	100	77	89	102	97	99	97	90	92
31	---	---	---	84	77	80	---	---	---	115	93	103
MONTH	---	---	---	421	66	164	106	73	90	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	110	91	103	116	103	108	156	70	118	192	181	188
2	104	99	101	---	---	---	179	70	121	181	133	150
3	99	95	97	---	---	---	84	82	82	133	112	118
4	95	69	84	---	---	---	84	80	82	113	103	106
5	75	66	71	---	---	---	88	82	85	118	104	111
6	84	73	80	---	---	---	87	82	85	137	116	128
7	87	83	85	96	85	89	84	80	82	140	134	138
8	92	87	90	83	74	77	84	81	83	145	98	133
9	90	86	88	81	74	77	88	83	85	147	114	124
10	91	87	88	90	81	86	93	87	89	116	109	112
11	93	90	91	91	90	90	98	91	93	116	105	111
12	99	92	94	91	85	89	100	96	97	125	116	120
13	99	80	84	97	91	95	100	96	98	125	122	123
14	88	79	83	101	97	99	97	92	94	126	122	124
15	87	80	83	103	101	102	92	89	90	138	123	130
16	96	87	92	108	103	105	94	90	92	146	138	143
17	115	96	105	110	108	109	98	94	95	146	31	131
18	134	115	122	113	110	112	103	97	99	48	27	36
19	134	115	121	113	110	111	105	101	102	61	46	53
20	133	116	124	115	113	114	107	104	105	78	61	70
21	158	133	148	---	---	---	109	106	107	89	78	83
22	171	158	167	---	---	---	108	102	105	97	88	93
23	179	171	177	---	---	---	118	104	109	105	96	100
24	177	145	165	---	---	---	125	115	120	108	101	103
25	145	131	134	---	---	---	129	124	126	111	105	108
26	151	133	141	---	---	---	128	122	124	113	108	110
27	133	109	116	125	74	104	126	122	124	116	111	113
28	119	109	114	77	73	75	141	124	133	118	114	116
29	121	118	120	77	72	74	161	139	151	122	118	120
30	120	117	118	81	76	79	174	158	168	124	121	122
31	---	---	---	110	70	81	185	173	180	---	---	---
MONTH	179	66	110	---	---	---	185	70	107	192	27	114
YEAR	---	---	---									

03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.2	7.2	7.2	7.0	7.0	7.0	6.9	6.9	---	---	7.3	7.2
2	7.3	7.2	7.2	7.0	7.0	6.9	6.9	6.8	---	---	7.2	7.2
3	7.3	7.2	7.2	7.0	6.9	6.9	6.8	6.8	---	---	7.3	7.2
4	7.3	7.2	7.2	7.0	6.9	6.9	6.8	6.7	---	---	7.3	7.3
5	7.3	7.2	7.2	7.0	6.9	6.9	6.8	6.7	---	---	7.4	7.3
6	7.3	7.2	7.1	7.0	7.0	6.9	6.9	6.8	---	---	7.3	6.8
7	7.3	7.2	7.2	7.1	7.0	7.0	6.9	6.8	---	---	6.8	6.7
8	7.3	7.2	7.2	7.2	7.0	7.0	6.8	6.6	---	---	6.9	6.7
9	7.3	7.2	7.2	7.1	7.0	7.0	6.7	6.6	---	---	7.0	6.9
10	7.2	7.2	7.2	7.1	7.0	7.0	6.8	6.7	---	---	7.1	7.0
11	7.3	7.2	7.2	7.1	7.0	6.9	6.8	6.6	---	---	7.1	7.1
12	7.3	7.2	7.1	7.1	7.0	6.9	6.7	6.6	---	---	7.1	7.1
13	7.3	7.2	7.1	7.0	7.0	6.9	6.7	6.6	---	---	7.1	7.1
14	7.2	7.2	7.1	7.1	6.9	6.8	6.7	6.6	---	---	7.1	7.1
15	7.2	7.1	7.1	7.1	6.9	6.8	6.7	6.7	---	---	7.1	7.1
16	7.2	7.1	7.1	7.1	6.9	6.9	6.7	6.7	---	---	7.4	7.1
17	7.2	7.1	7.2	7.1	6.9	6.9	6.7	6.7	---	---	7.2	7.1
18	---	---	7.2	7.1	6.9	6.9	6.7	6.6	---	---	7.2	7.2
19	---	---	7.1	7.1	6.9	6.9	6.8	6.6	7.2	7.1	7.4	7.2
20	7.4	7.2	7.1	6.9	6.9	6.8	6.8	6.7	7.2	7.2	7.4	7.3
21	7.4	7.2	7.0	7.0	6.9	6.8	6.7	6.7	7.3	7.2	7.3	7.3
22	7.5	7.2	7.0	6.9	6.9	6.8	6.7	6.7	7.4	7.3	7.3	7.2
23	7.4	7.1	7.0	6.7	6.9	6.8	6.7	6.6	7.4	7.3	7.2	7.2
24	7.4	7.1	6.8	6.7	6.8	6.8	6.7	6.6	7.3	7.3	7.2	7.2
25	7.3	7.0	7.0	6.8	6.8	6.8	6.7	6.6	7.3	7.2	7.2	7.2
26	7.2	7.0	7.0	6.9	6.8	6.8	7.0	6.6	7.3	7.2	7.2	7.2
27	7.1	6.9	7.0	7.0	6.8	6.7	---	---	7.3	7.2	7.2	7.1
28	7.1	6.9	7.0	7.0	6.8	6.7	---	---	7.3	7.2	7.2	7.1
29	7.2	6.9	7.0	7.0	6.8	6.7	---	---	7.2	7.2	7.2	7.0
30	7.1	6.9	7.1	7.0	6.8	6.8	---	---	---	---	7.2	7.0
31	7.2	6.9	---	---	6.9	6.8	---	---	---	---	7.2	7.1
MONTH	---	---	7.2	6.7	7.0	6.7	---	---	---	---	7.4	6.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.1	7.1	6.8	6.7	6.8	6.7	7.1	6.4	7.1	6.6	7.5	7.3
2	7.1	7.1	6.9	6.6	6.7	6.4	7.1	6.1	7.2	6.9	7.4	7.3
3	7.1	7.1	7.0	6.7	6.4	6.3	6.6	6.1	7.2	7.0	7.4	7.3
4	7.1	7.1	7.0	6.9	6.6	6.4	6.1	6.1	7.2	7.1	7.4	7.3
5	7.1	7.1	7.0	6.8	6.5	6.3	6.2	6.1	7.1	7.1	7.4	7.2
6	7.2	7.1	6.9	6.8	6.4	6.3	6.2	6.1	7.2	7.0	7.4	7.2

03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.0	15.9	16.4	14.9	13.6	14.2	7.3	6.3	6.8	4.8	4.5	4.7
2	15.9	15.0	15.5	15.4	14.1	14.6	6.3	5.7	6.0	6.4	4.8	5.6
3	15.2	14.2	14.8	15.5	14.1	14.7	6.0	5.6	5.8	7.9	6.4	7.0
4	15.4	14.5	15.0	15.3	14.0	14.6	6.0	5.7	5.8	9.8	7.9	8.7
5	15.4	14.7	15.1	15.3	14.7	15.0	6.1	6.0	6.0	10.0	9.6	9.9
6	16.0	14.8	15.4	15.2	15.0	15.2	6.1	6.0	6.0	9.7	7.5	9.1
7	16.4	15.3	15.8	15.0	14.4	14.6	6.1	5.7	5.9	7.5	4.7	5.9
8	16.7	15.6	16.2	14.5	13.6	14.2	5.8	5.3	5.6	4.7	3.5	3.9
9	16.9	16.1	16.5	13.6	12.6	12.9	5.8	5.1	5.5	3.5	2.9	3.1
10	17.0	16.8	16.9	12.6	12.0	12.3	6.1	5.6	5.8	2.9	2.3	2.7
11	17.5	16.9	17.1	12.4	12.1	12.3	6.1	5.7	5.9	2.3	1.8	2.1
12	17.9	17.2	17.5	12.7	12.4	12.5	6.2	5.8	5.9	2.6	1.8	2.2
13	18.4	17.5	17.9	12.6	11.0	11.8	5.9	5.1	5.5	2.5	1.9	2.2
14	18.2	17.1	17.9	11.0	10.1	10.4	5.1	4.7	4.9	2.8	2.0	2.3
15	17.4	16.2	16.8	10.1	9.8	10.0	5.0	4.7	4.8	3.2	2.7	2.9
16	16.5	15.5	16.1	10.3	10.0	10.1	5.7	4.8	5.2	3.0	2.5	2.8
17	16.3	15.6	16.0	10.6	10.2	10.4	5.8	5.5	5.7	3.4	2.6	2.9
18	---	---	---	11.6	10.5	11.0	5.6	5.5	5.5	4.3	3.4	3.9
19	---	---	---	13.5	11.6	12.4	5.5	4.7	5.1	4.3	3.8	4.0
20	16.3	15.3	16.0	13.5	12.1	12.9	4.7	3.9	4.3	3.8	3.0	3.4
21	16.3	15.2	15.7	12.1	11.1	11.5	3.9	3.0	3.4	3.0	2.3	2.6
22	16.6	15.4	15.9	11.1	10.6	10.8	3.4	2.9	3.2	2.3	1.8	2.0
23	15.4	14.7	15.0	11.1	10.6	10.8	4.0	3.1	3.5	1.8	1.2	1.5
24	15.3	14.0	14.7	11.0	10.2	10.8	4.9	4.0	4.4	2.1	1.2	1.6
25	15.2	13.9	14.6	10.2	9.3	9.7	5.3	4.9	5.1	2.4	1.8	2.0
26	14.9	14.4	14.7	9.3	8.4	8.8	5.0	4.2	4.6	---	---	---
27	14.6	13.7	14.2	8.4	8.2	8.3	4.2	3.5	3.8	---	---	---
28	14.0	13.1	13.6	8.6	8.1	8.5	3.6	3.3	3.5	---	---	---
29	14.2	13.3	13.7	8.2	7.8	8.0	4.3	3.3	3.8	---	---	---
30	14.1	13.0	13.6	7.8	7.3	7.5	4.8	4.2	4.4	---	---	---
31	14.7	13.5	14.0	---	---	---	5.0	4.3	4.6	---	---	---
MONTH	---	---	---	15.5	7.3	11.7	7.3	2.9	5.0	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	7.0	6.3	6.6	12.0	11.2	11.5	16.6	15.9	16.2
2	---	---	---	7.8	7.0	7.3	11.2	10.0	10.4	16.8	15.8	16.4
3	---	---	---	8.1	7.7	7.9	10.8	9.7	10.2	15.8	14.7	15.1
4	---	---	---	9.8	8.1	9.0	10.6	9.8	10.2	14.7	13.4	13.9
5	---	---	---	11.0	9.8	10.5	10.8	9.6	10.2	14.4	13.4	13.8
6	---	---	---	11.6	10.7	11.1	11.3	9.8	10.5	15.7	14.2	14.8
7	---	---	---	11.2	10.2	10.6	12.0	10.8	11.3	17.0	15.3	15.9
8	---	---	---	10.2	9.0	9.6	13.2	11.9	12.5	17.7	16.8	17.1
9	---	---	---	9.0	7.9	8.3	13.7	12.6	13.2	18.8	17.7	18.1
10	---	---	---	7.9	7.3	7.6	13.6	13.0	13.2	19.7	18.8	19.2
11	---	---	---	7.7	6.8	7.1	13.2	13.0	13.1	20.1	19.5	19.7
12	---	---	---	7.0	6.3	6.7	13.1	11.9	12.7	20.9	19.9	20.4
13	---	---	---	7.2	6.3	6.7	11.9	10.0	10.9	20.9	20.4	20.8
14	---	---	---	7.3	7.0	7.1	10.0	9.2	9.6	20.5	19.9	20.2
15	---	---	---	7.7	7.3	7.4	10.4	9.3	9.8	20.8	19.5	20.2
16	---	---	---	8.9	7.7	8.3	11.8	9.9	10.6	20.9	19.2	20.2
17	---	---	---	9.1	8.6	8.8	13.2	11.5	12.1	21.0	20.3	20.6
18	---	---	---	10.1	8.9	9.4	14.6	13.0	13.6	21.2	20.1	20.8
19	5.0	4.5	4.8	10.7	9.8	10.2	15.8	14.5	15.0	20.6	18.3	19.3
20	5.2	4.8	4.9	10.6	10.0	10.4	16.2	15.4	15.7	19.4	18.4	18.9
21	5.3	5.0	5.2	10.5	9.8	10.1	16.4	15.8	16.0	20.7	19.1	19.7
22	5.8	4.9	5.3	9.8	9.0	9.5	17.2	16.4	16.7	22.5	20.1	21.0
23	6.0	5.4	5.7	9.0	7.9	8.3	17.2	17.0	17.1	23.9	19.8	21.5
24	6.7	5.9	6.1	8.6	7.8	8.2	17.7	17.0	17.2	24.1	19.7	21.7
25	6.7	6.1	6.3	9.9	8.4	9.1	18.0	17.7	17.8	25.6	19.6	22.5
26	6.3	5.9	6.1	11.6	9.7	10.6	18.0	17.4	17.7	24.1	19.8	21.6
27	6.3	5.6	6.0	12.7	11.2	11.8	17.4	15.8	16.3	22.6	20.1	22.0
28	6.5	5.6	6.1	13.8	12.4	13.1	15.8	14.9	15.4	22.6	21.8	22.3
29	6.6	5.9	6.3	14.5	13.7	14.1	16.1	14.9	15.4	22.4	21.4	21.8
30	---	---	---	14.3	13.6	13.9	16.1	15.4	15.7	22.4	22.0	22.3
31	---	---	---	13.6	12.0	12.8	---	---	---	22.4	20.5	21.7
MONTH	---	---	---	14.5	6.3	9.4	18.0	9.2	13.4	25.6	13.4	19.3

03410600 SOUTH FORK CUMBERLAND RIVER AT YAMACRAW, KY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.2	8.8	8.9	10.5	9.4	10.0	14.9	14.0	14.4	11.6	11.3	11.5
2	9.4	8.7	9.1	10.5	9.3	10.0	15.4	14.2	14.6	11.4	8.8	10.3
3	9.7	8.7	9.3	10.5	9.2	9.8	15.1	14.0	14.6	9.0	7.7	8.4
4	9.6	9.0	9.3	10.6	9.1	9.6	14.7	13.8	14.2	7.7	6.0	6.9
5	9.6	8.6	9.2	10.4	8.9	9.9	14.5	13.6	14.0	6.9	5.7	6.1
6	9.7	8.5	9.1	10.4	9.3	9.9	14.9	13.7	14.2	8.8	6.5	7.6
7	9.6	8.3	9.1	10.7	10.1	10.4	14.8	13.7	14.2	6.5	4.9	5.5
8	9.5	8.1	8.9	10.8	10.4	10.6	14.9	13.8	14.3	14.5	5.0	14.2
9	9.3	8.1	8.8	11.3	10.6	10.9	15.0	13.7	14.2	14.6	14.4	14.5
10	8.8	7.8	8.4	11.8	11.1	11.5	14.4	13.1	13.7	14.8	12.3	14.1
11	9.0	7.6	8.3	12.0	11.4	11.7	15.3	13.5	14.3	14.9	12.2	14.1
12	8.9	7.2	8.1	11.9	11.4	11.6	15.0	13.6	14.5	14.8	14.4	14.6
13	8.8	7.2	8.0	12.0	11.1	11.6	14.7	13.6	14.0	14.7	14.4	14.5
14	8.4	7.1	7.7	12.8	11.9	12.4	14.7	13.4	14.0	14.5	14.0	14.3
15	8.8	7.2	8.2	13.0	12.5	12.7	14.8	13.6	14.1	14.0	13.7	13.9
16	9.1	8.1	8.7	12.9	12.6	12.8	14.5	13.4	13.8	13.9	13.6	13.8
17	8.9	8.8	8.8	13.1	12.5	12.8	13.8	12.7	13.2	13.8	13.2	13.5
18	---	---	---	13.0	12.5	12.7	13.5	12.8	13.1	13.4	12.8	13.0
19	---	---	---	12.7	12.2	12.5	13.7	12.7	13.1	13.1	12.8	13.0
20	11.1	9.7	10.5	13.1	12.5	12.9	13.8	12.9	13.2	13.4	13.0	13.2
21	10.6	7.6	8.6	13.4	13.0	13.3	14.2	13.2	13.4	13.6	13.2	13.4
22	8.5	6.8	7.7	13.4	13.0	13.2	13.6	13.1	13.3	13.7	13.4	13.5
23	11.8	7.5	9.3	13.1	10.0	11.9	13.3	12.4	12.9	13.8	13.5	13.7
24	12.9	9.6	11.8	11.9	8.9	11.2	13.7	12.5	13.0	13.6	13.2	13.5
25	13.5	11.4	12.5	13.8	8.6	12.4	13.3	12.4	12.9	13.3	12.8	13.2
26	13.6	11.9	12.8	15.8	12.8	14.0	12.8	12.3	12.5	---	---	---
27	14.1	12.6	13.2	14.9	13.8	14.3	13.0	12.4	12.5	---	---	---
28	14.7	13.1	13.9	14.7	13.0	13.8	12.9	12.4	12.5	---	---	---
29	15.0	11.4	12.9	15.4	13.8	14.8	12.4	11.7	12.2	---	---	---
30	12.7	11.4	11.9	15.1	13.9	14.7	12.0	11.6	11.8	---	---	---
31	14.7	9.4	11.1	---	---	---	12.0	11.5	11.6	---	---	---
MONTH	---	---	---	15.8	8.6	12.0	15.4	11.5	13.5	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	8.4	6.9	7.3	11.2	10.1	10.7	8.9	8.6	8.8
2	---	---	---	7.0	6.6	6.8	11.2	10.3	10.7	8.8	8.3	8.6
3	---	---	---	7.2	6.6	6.8	11.8	10.4	11.0	9.2	8.8	9.0
4	---	---	---	6.7	6.0	6.4	11.3	10.1	11.0	9.5	9.2	9.4
5	---	---	---	7.3	5.9	6.4	11.6	10.6	11.1	9.4	9.2	9.4
6	---	---	---	---	---	---	11.5	10.5	11.1	9.3	9.1	9.2
7	---	---	---	---	---	---	11.6	10.3	10.8	9.1	8.8	8.9
8	---	---	---	---	---	---	10.5	9.6	10.1	8.9	8.4	8.6
9	---	---	---	---	---	---	10.8	10.0	10.5	8.6	8.1	8.3
10	---	---	---	---	---	---	11.9	9.5	10.2	8.4	7.9	8.2
11	---	---	---	---	---	---	10.2	9.7	10.0	8.2	7.7	7.9
12	---	---	---	---	---	---	10.6	9.3	10.0	8.1	7.5	7.8
13	---	---	---	---	---	---	---	---	---	8.0	6.7	7.5
14	---	---	---	---	---	---	---	---	---	7.6	6.6	7.3
15	---	---	---	---	---	---	---	---	---	8.6	7.0	7.8
16	---	---	---	11.1	10.9	11.0	---	---	---	8.7	6.7	7.8
17	---	---	---	11.1	10.8	10.9	---	---	---	8.0	7.3	7.8
18	---	---	---	11.1	10.7	10.9	---	---	---	8.2	6.8	7.8
19	9.5	7.5	7.9	11.0	10.6	10.8	---	---	---	8.4	7.7	8.1
20	8.3	7.6	7.9	12.0	10.7	11.0	---	---	---	8.2	8.1	8.2
21	8.8	7.6	8.0	11.5	10.8	11.1	---	---	---	8.2	7.8	8.0
22	8.7	7.6	8.1	12.0	11.2	11.6	---	---	---	8.1	6.3	7.6
23	8.6	7.4	8.0	12.3	11.8	12.0	---	---	---	8.5	6.5	7.6
24	8.0	7.2	7.5	12.5	11.8	12.0	---	---	---	8.5	6.5	7.8
25	7.7	7.0	7.3	12.0	11.3	11.7	---	---	---	8.5	6.5	7.9
26	8.0	7.1	7.4	12.1	10.9	11.3	---	---	---	8.3	7.6	8.0
27	7.9	7.2	7.5	11.4	10.2	10.8	---	---	---	8.3	6.9	7.3
28	7.9	7.1	7.4	10.7	9.9	10.3	9.3	9.1	9.3	7.4	7.0	7.2
29	7.7	7.0	7.2	10.8	9.2	9.8	9.2	9.0	9.1	7.5	7.3	7.4
30	---	---	---	11.0	9.4	10.3	9.1	8.8	9.0	7.5	7.2	7.3
31	---	---	---	11.1	10.4	10.7	---	---	---	7.8	7.2	7.5
MONTH	---	---	---	---	---	---	---	---	---	9.5	6.3	8.1

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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.

REVISED RECORDS.--WDR-98-1: Peak discharges and annual maximum.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 804.72 ft above NGVD of 1929.

REMARKS.--Records good except for those estimated, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1946 reached a stage of 10.8 ft from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	0600	3,290	8.98	Jul 31	1930	1,680	6.11
Mar 6	0430	1,660	6.07	Sep 17	1030	*3,880	*10.05

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

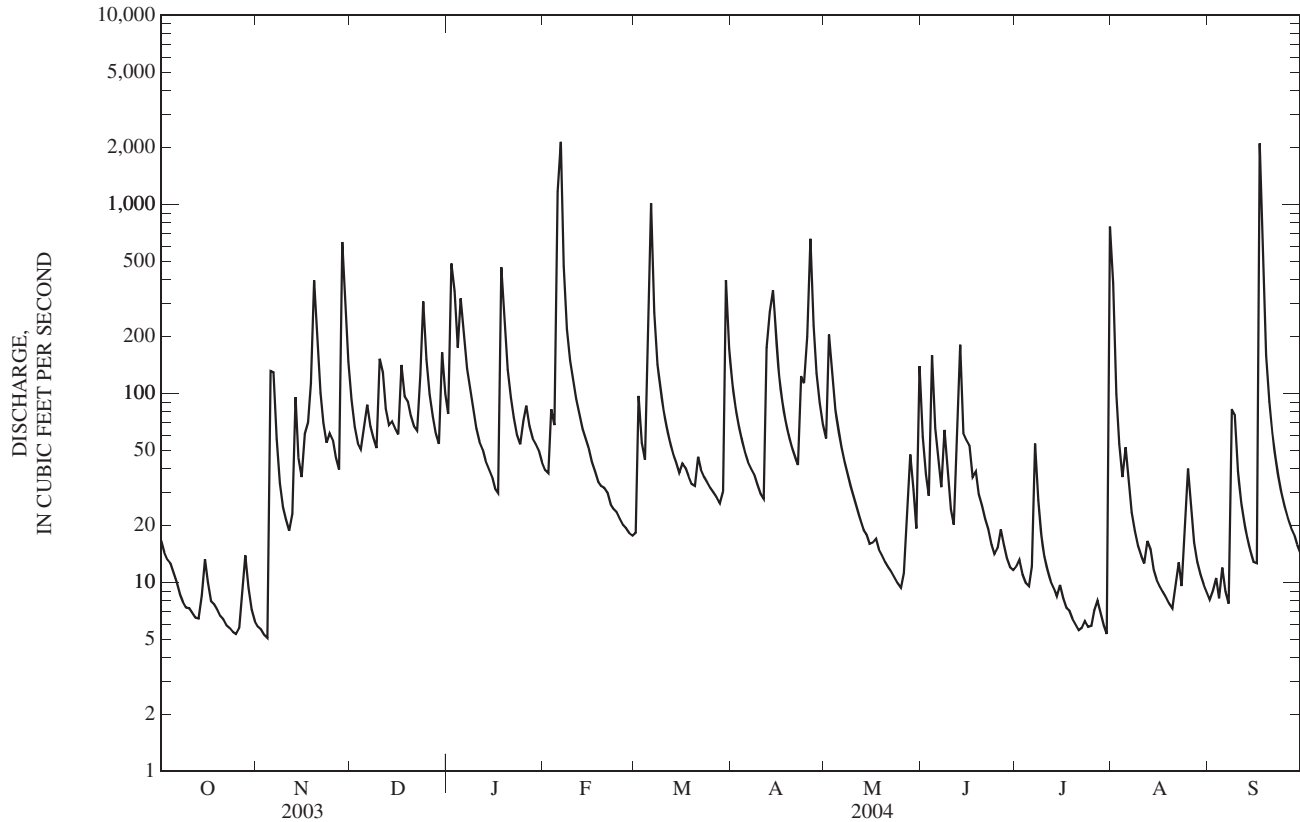
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	5.9	93	78	39	18	113	58	59	12	384	8.1
2	14	5.6	67	486	38	97	84	205	37	13	99	9.1
3	13	5.3	54	348	82	55	69	125	29	11	54	11
4	13	5.1	51	175	68	45	58	82	159	10	36	8.2
5	11	131	67	318	1,160	153	49	65	65	9.6	52	12
6	10	129	87	214	2,140	1,010	43	52	44	12	34	9.0
7	8.6	58	67	135	471	267	40	43	32	54	23	7.7
8	7.9	34	58	104	219	142	37	37	64	27	19	82
9	7.4	25	51	84	149	104	33	32	40	18	16	77
10	7.3	22	152	65	116	81	30	28	24	14	14	39
11	6.9	19	129	56	93	66	28	25	20	12	13	27
12	6.5	23	83	50	77	55	175	21	63	10	17	21
13	6.5	95	68	44	65	48	269	19	181	9.3	15	17
14	8.5	46	71	40	57	43	350	18	62	8.5	12	15
15	13	36	65	36	51	38	200	16	57	9.7	10	13
16	10	61	61	31	43	43	124	16	53	8.3	9.5	13
17	8.0	70	141	30	39	40	91	17	36	7.3	8.9	2,090
18	7.7	113	97	464	34	37	72	15	39	7.1	8.3	499
19	7.2	395	90	267	32	33	60	14	29	6.4	7.8	159
20	6.6	188	76	134	32	32	53	13	26	6.0	7.3	91
21	6.4	101	67	95	30	46	47	12	22	5.6	9.7	62
22	5.9	70	64	75	26	40	42	11	19	5.7	13	46
23	5.7	55	125	60	24	36	123	11	16	6.3	9.6	36
24	5.5	62	305	54	24	34	113	9.9	14	5.8	22	29
25	5.3	57	151	72	22	32	200	9.4	15	5.9	40	25
26	5.7	46	99	86	20	30	656	11	19	7.1	26	22
27	8.8	40	75	67	19	28	227	23	16	8.0	16	20
28	14	630	62	58	18	26	128	47	13	6.9	13	18
29	9.4	304	54	54	18	30	89	31	12	5.9	11	16
30	7.2	147	164	50	---	396	68	19	12	5.3	9.7	14
31	6.2	---	99	43	---	173	---	139	---	760	8.9	---
TOTAL	270.2	2,978.9	2,893	3,873	5,206	3,278	3,671	1,224.3	1,277	1,087.7	1,018.7	3,496.1
MEAN	8.72	99.3	93.3	125	180	106	122	39.5	42.6	35.1	32.9	117
MAX	17	630	305	486	2,140	1,010	656	205	181	760	384	2,090
MIN	5.3	5.1	51	30	18	18	28	9.4	12	5.3	7.3	7.7
CFSM	0.20	2.29	2.15	2.88	4.14	2.44	2.82	0.91	0.98	0.81	0.76	2.69
IN.	0.23	2.55	2.48	3.32	4.46	2.81	3.15	1.05	1.09	0.93	0.87	3.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	16.6	28.7	77.6	92.7	122	121	85.3	44.8	38.2	13.9	14.3	19.2
MAX	164	99.3	306	155	281	299	242	114	151	37.5	82.2	117
(WY)	(1990)	(2004)	(1991)	(1994)	(2003)	(1997)	(1998)	(1995)	(1998)	(2001)	(2003)	(2004)
MIN	1.49	2.08	8.31	26.7	42.4	35.0	21.4	11.0	7.98	3.89	1.91	1.77
(WY)	(2000)	(2001)	(1998)	(2000)	(2002)	(2003)	(1995)	(2001)	(1991)	(1990)	(1990)	(2000)

03413200 BEAVER CREEK NEAR MONTICELLO, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	29,567.6		30,273.9		55.9	
ANNUAL MEAN	81.0		82.7		82.7	
HIGHEST ANNUAL MEAN					24.7	
LOWEST ANNUAL MEAN					2,200	
HIGHEST DAILY MEAN	2,200	Feb 16	2,140	Feb 6	2,200	Feb 16, 2003
LOWEST DAILY MEAN	4.6	Jul 27	5.1	Nov 4	1.2	Sep 6, 1995
ANNUAL SEVEN-DAY MINIMUM	5.8	Jul 22	5.9	Oct 20	1.2	Oct 23, 1999
MAXIMUM PEAK FLOW			3,880	Sep 17	3,880	Sep 17, 2004
MAXIMUM PEAK STAGE			10.05	Sep 17	10.05	Sep 17, 2004
INSTANTANEOUS LOW FLOW					0.50	Oct 2, 1968
ANNUAL RUNOFF (CFSM)	1.87		1.91		1.29	
ANNUAL RUNOFF (INCHES)	25.34		25.95		17.49	
10 PERCENT EXCEEDS	156		155		121	
50 PERCENT EXCEEDS	29		36		18	
90 PERCENT EXCEEDS	7.2		7.9		2.4	



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.

WATER DISCHARGE RECORDS

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 with telemetry. Datum of gage is 391.45 ft above NGVD of 1929. Prior to July 31, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except for those estimated, which are fair.

COOPERATION.--U.S. Army Corps of Engineer, Nashville District and Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 24	0030	*4,000	*11.54				

No other peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	39	395	407	279	152	185	905	1,080	109	315	71
2	84	36	336	508	262	157	173	999	638	107	151	67
3	82	34	299	687	347	170	161	1,040	490	104	116	67
4	77	32	281	507	467	326	150	1,010	404	105	103	68
5	e73	30	272	680	1,100	382	140	773	345	116	592	63
6	e63	29	252	663	2,510	419	133	637	301	212	596	69
7	e57	27	230	531	1,330	449	128	543	267	464	347	62
8	e60	28	213	475	951	357	125	471	239	388	256	55
9	59	34	201	438	776	307	120	422	216	231	210	49
10	62	31	197	394	675	271	116	383	207	188	183	41
11	60	30	216	352	591	244	111	375	215	201	161	37
12	59	30	205	324	526	222	114	341	192	259	141	95
13	52	28	183	299	477	204	177	318	182	203	127	193
14	50	40	185	276	434	189	751	340	182	200	113	139
15	49	36	240	242	409	180	636	1,190	172	194	103	109
16	71	54	248	219	372	182	475	1,630	365	150	95	99
17	61	83	258	205	335	196	374	962	455	139	87	91
18	55	202	264	229	e295	196	308	767	338	170	81	91
19	e52	741	245	338	e265	196	264	605	288	136	75	87
20	e49	475	231	292	268	357	235	509	237	118	88	79
21	e47	331	212	248	252	708	225	442	207	107	93	69
22	44	270	200	227	233	500	391	394	187	97	92	65
23	41	231	305	209	217	413	2,310	354	178	94	87	62
24	38	432	747	198	207	360	2,670	320	180	108	231	58
25	40	519	516	236	194	317	1,550	294	155	88	213	54
26	84	360	424	547	181	283	1,240	276	157	84	134	48
27	225	522	370	521	171	256	890	554	138	85	111	45
28	116	946	333	448	160	236	712	371	123	80	97	44
29	81	582	320	385	154	221	601	316	116	78	89	56
30	62	467	579	350	---	206	651	297	116	74	82	55
31	48	---	482	313	---	195	---	1,360	---	184	76	---
TOTAL	2,089	6,699	9,439	11,748	14,438	8,851	16,116	19,198	8,370	4,873	5,245	2,188
MEAN	67.4	223	304	379	498	286	537	619	279	157	169	72.9
MAX	225	946	747	687	2,510	708	2,670	1,630	1,080	464	596	193
MIN	38	27	183	198	154	152	111	276	116	74	75	37
CFSM	0.28	0.92	1.25	1.55	2.04	1.17	2.20	2.54	1.14	0.64	0.69	0.30
IN.	0.32	1.02	1.44	1.79	2.20	1.35	2.46	2.93	1.28	0.74	0.80	0.33

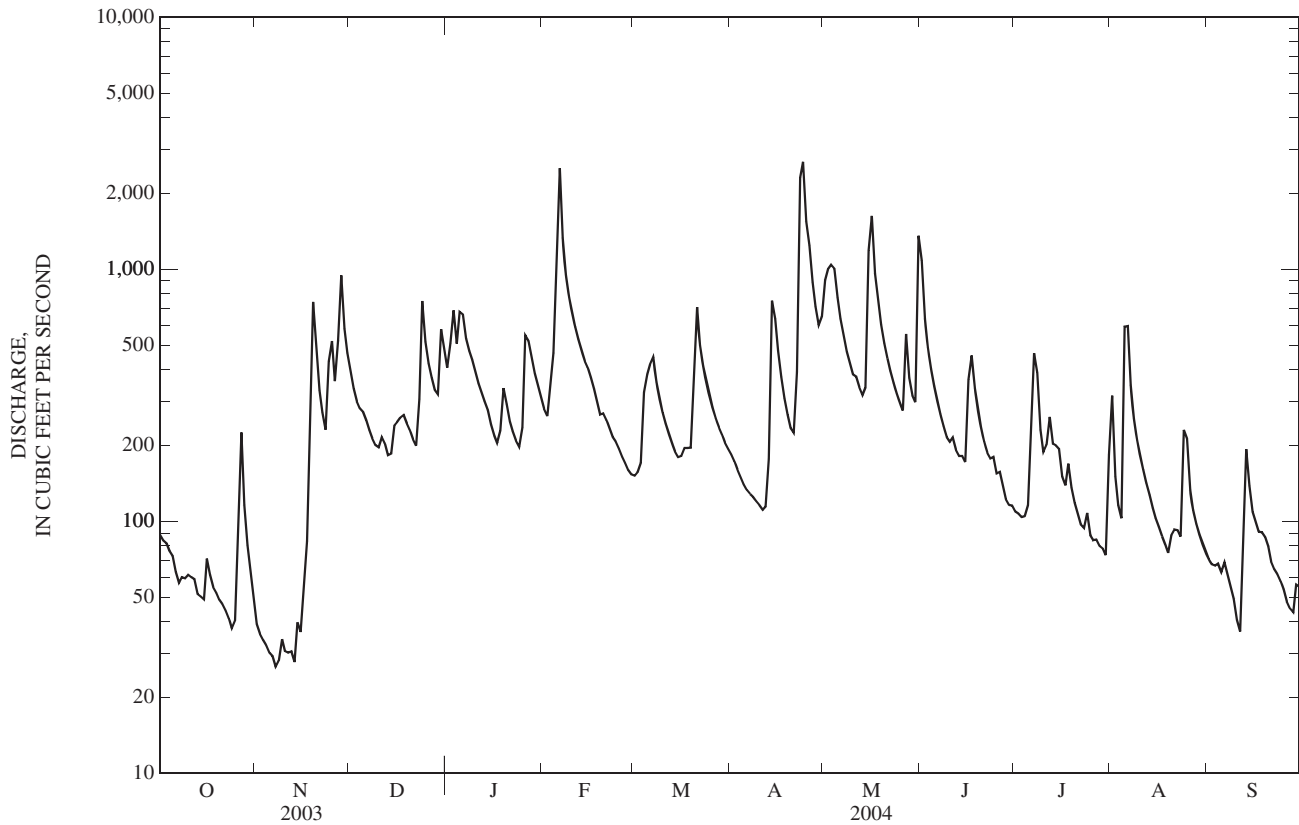
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	75.8	214	467	550	687	752	550	443	228	146	96.8	102
MAX	609	1,677	1,985	2,168	2,130	3,653	1,924	1,875	1,498	790	381	925
(WY)	(2003)	(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)

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	174,832		109,254		358	
ANNUAL MEAN	479		299		757	
HIGHEST ANNUAL MEAN					58.9	
LOWEST ANNUAL MEAN					24,300	
HIGHEST DAILY MEAN	5,170	May 7	2,670	Apr 24	24,300	Mar 2, 1997
LOWEST DAILY MEAN	27	Nov 7	27	Nov 7	3.6	Oct 3, 1941
ANNUAL SEVEN-DAY MINIMUM	30	Nov 7	30	Nov 7	7.0	Oct 24, 1940
MAXIMUM PEAK FLOW			4,000	Apr 24	37,600	Mar 1, 1997
MAXIMUM PEAK STAGE			11.54	Apr 24	26.44	Mar 1, 1997
INSTANTANEOUS LOW FLOW			25	Nov 7	1.0	Oct 3, 1941
ANNUAL RUNOFF (CFSM)	1.96		1.22		1.47	
ANNUAL RUNOFF (INCHES)	26.65		16.66		19.93	
10 PERCENT EXCEEDS	1,150		602		833	
50 PERCENT EXCEEDS	265		211		143	
90 PERCENT EXCEEDS	59		55		28	

e Estimated



03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2003 to current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2003 to current water year.

pH: April 2003 to current water year.

WATER TEMPERATURES: April 2003 to current water year.

DISSOLVED OXYGEN: April 2003 to current year.

TURBIDITY: April 2003 to current water year.

INSTRUMENTATION.--Water-quality monitor with telemetry.

REMARKS.--

SPECIFIC CONDUCTANCE.-- Records rated good.

pH.-- Records rated good except for the following period: Feb. 18-Mar. 7 rated fair.

WATER TEMPERATURE.--Records rated good.

DISSOLVED OXYGEN.-- Records rated poor.

TURBIDITY.-- Records rated poor.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE.-- Maximum recorded, 535 microsiemens, Oct. 28 ; minimum recorded, 211 microsiemens, Apr. 24.

pH.--Maximum recorded, 9.0 units, Mar. 18-20; minimum recorded, 7.0 units, Aug. 6.

WATER TEMPERATURE.-- Maximum recorded, 24.5°C, July 22-23; minimum recorded, 5.2°C, Feb. 6.

DISSOLVED OXYGEN.-- Maximum recorded, 18.7 mg/L, Mar. 11; minimum recorded, 4.6 mg/L, Sep. 14.

TURBIDITY.-- Maximum recorded, 330 NTU, Apr. 23; minimum recorded, 0.0 NTU, on several days.

COOPERATION.--Kentucky Department of Agriculture

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	420	417	417	---	---	---	396	375	386	368	358	361
2	---	---	---	---	---	---	409	396	403	409	368	393
3	---	---	---	442	437	440	417	409	413	410	354	378
4	---	---	---	456	442	451	422	417	419	355	337	344
5	---	---	---	465	456	460	428	422	425	383	355	370
6	---	---	---	476	465	470	431	428	429	386	364	376
7	---	---	---	481	476	479	434	431	432	381	360	368
8	---	---	---	492	481	488	438	425	434	403	381	393
9	---	---	---	502	491	496	448	438	443	415	405	410
10	---	---	---	514	502	511	448	446	447	422	418	419
11	---	---	---	524	514	517	449	446	447	427	422	426
12	---	---	---	529	521	526	451	444	449	430	426	428
13	---	---	---	528	523	525	444	437	441	431	427	429
14	---	---	---	525	515	520	440	438	439	434	430	432
15	---	---	---	515	505	509	447	440	444	434	424	430
16	---	---	---	508	492	503	448	439	444	432	428	430
17	---	---	---	492	485	488	439	430	434	437	431	434
18	---	---	---	492	372	459	426	421	426	437	432	435
19	---	---	---	405	305	364	421	417	419	446	428	436
20	---	---	---	339	301	326	423	420	422	446	421	435
21	491	489	490	344	330	335	428	421	424	424	412	415
22	490	481	485	378	344	361	433	428	430	412	404	408
23	491	480	486	399	378	390	435	415	426	416	408	413
24	495	490	492	401	396	399	416	353	388	427	416	425
25	495	477	492	407	380	392	359	328	340	429	425	427
26	477	424	454	381	365	372	369	334	350	428	397	415
27	529	424	487	367	361	364	392	369	382	425	343	384
28	535	435	499	369	345	357	404	392	399	346	331	336
29	436	412	422	346	339	342	409	404	407	364	346	357
30	440	429	437	375	346	360	408	396	405	381	364	373
31	429	418	423	---	---	---	396	366	380	390	381	388
MONTH	---	---	---	---	---	---	451	328	417	446	331	402

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	397	389	394	425	419	422	432	420	427	383	322	359
2	403	397	399	429	419	424	435	429	432	343	318	328
3	406	401	403	437	426	430	438	431	435	341	315	323
4	424	375	407	440	427	429	440	434	436	340	322	335
5	375	291	331	448	347	399	444	433	437	353	335	341
6	300	226	249	350	336	343	441	433	439	372	353	364
7	301	249	280	353	342	348	450	436	442	384	370	378
8	324	301	313	353	342	347	444	438	440	399	378	382
9	333	324	328	364	349	356	445	440	443	404	388	396
10	340	333	335	384	364	375	450	443	445	407	403	405
11	346	340	343	402	384	394	458	449	452	412	403	407
12	353	346	349	415	402	408	470	451	462	415	404	412
13	358	353	355	422	415	420	470	426	457	416	412	415
14	368	358	363	430	420	426	443	384	426	417	413	415
15	374	368	372	434	429	432	384	341	354	417	317	396
16	378	373	374	439	432	435	366	346	353	317	287	299
17	387	378	382	440	434	437	389	366	378	344	307	324
18	417	387	393	441	434	437	398	370	384	362	340	351
19	417	412	415	442	437	439	398	377	386	369	352	361
20	425	414	419	438	259	411	401	391	397	384	355	364
21	423	418	420	372	344	364	405	400	403	407	384	398
22	420	415	417	371	341	351	405	399	402	412	381	396
23	419	416	418	368	344	354	406	233	335	415	364	402
24	422	416	418	394	368	380	284	211	241	418	401	416
25	422	399	416	421	394	408	326	284	306	420	417	418
26	422	412	418	436	421	429	328	321	324	424	419	422
27	427	418	423	459	436	446	347	321	333	429	326	408
28	424	414	419	480	459	471	365	347	356	348	323	335
29	427	418	421	485	434	465	378	365	372	358	337	346
30	---	---	---	434	423	428	390	377	379	397	358	379
31	---	---	---	423	415	418	---	---	---	394	273	355
MONTH	427	226	378	485	259	407	470	211	396	429	273	375
JUNE			JULY			AUGUST			SEPTEMBER			
1	317	259	284	451	444	448	460	343	417	449	438	445
2	358	317	340	451	436	442	351	335	340	455	447	451
3	378	358	369	464	440	452	371	351	365	457	453	454
4	388	377	383	468	462	464	399	369	385	458	453	455
5	399	388	395	472	463	468	431	282	388	462	455	458
6	403	397	401	465	453	459	304	252	278	464	458	461
7	410	403	406	458	320	428	332	304	315	466	461	464
8	414	410	411	320	250	270	382	332	360	462	451	455
9	423	414	418	297	251	268	409	382	396	464	456	462
10	423	418	419	337	297	318	426	409	420	466	459	464
11	424	419	421	383	334	360	433	426	430	464	456	458
12	427	422	425	412	383	397	446	433	439	466	460	464
13	425	421	423	417	367	401	452	446	448	460	256	370
14	433	425	430	390	355	374	461	452	457	294	252	266
15	436	431	434	412	390	401	467	460	462	355	294	330
16	435	333	387	434	382	408	479	467	472	406	355	382
17	370	328	353	382	356	365	479	475	477	421	406	415
18	368	351	358	423	368	394	482	476	480	430	421	426
19	395	368	380	448	423	438	486	480	483	435	430	434
20	382	361	367	448	419	438	485	481	484	443	435	440
21	406	368	385	419	411	414	486	480	483	452	443	448
22	418	395	407	417	409	412	491	484	487	470	452	461
23	418	398	411	440	417	431	492	465	484	481	470	476
24	424	416	418	453	440	446	468	377	420	481	478	479
25	461	424	444	457	453	455	388	347	373	485	479	482
26	458	451	454	465	456	458	347	325	332	490	485	488
27	468	457	463	465	448	457	373	333	352	490	484	487
28	471	468	470	450	439	446	388	371	378	484	483	483
29	469	438	453	467	441	459	417	388	402	483	480	481
30	447	395	434	473	462	470	426	416	419	483	478	480
31	---	---	---	463	456	461	438	426	434	---	---	---
MONTH	471	259	405	473	250	416	492	252	415	490	252	444
YEAR	---	---	---									

CUMBERLAND RIVER BASIN

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	8.1	---	---	7.8	7.7	7.6	7.4	7.9	7.6	8.6	8.2
2	---	---	---	---	7.9	7.8	7.6	7.4	7.8	7.6	8.2	8.0
3	---	---	7.9	7.9	7.9	7.9	7.4	7.3	7.8	7.6	8.2	7.9
4	---	---	7.8	7.7	7.9	7.9	7.4	7.3	7.7	7.6	8.1	7.9
5	---	---	7.8	7.7	7.9	7.9	7.5	7.4	---	---	7.9	7.6
6	---	---	7.8	7.8	8.0	7.9	7.6	7.5	---	---	7.7	7.6
7	---	---	7.8	7.8	8.0	8.0	7.7	7.6	---	---	7.7	7.6
8	---	---	8.0	7.8	8.0	8.0	7.8	7.7	---	---	7.9	7.2
9	---	---	8.0	7.9	---	---	7.8	7.7	---	---	7.9	7.8
10	---	---	8.1	8.0	8.6	8.4	7.9	7.7	---	---	8.1	7.8
11	---	---	8.0	8.0	8.5	8.3	7.9	7.9	---	---	8.2	7.9
12	---	---	8.0	7.9	8.4	8.3	7.9	7.8	---	---	8.3	8.1
13	---	---	8.0	8.0	8.4	8.1	7.9	7.8	---	---	8.4	8.2
14	---	---	8.1	8.0	8.2	8.1	7.9	7.9	---	---	8.4	8.2
15	---	---	8.1	8.0	8.2	8.1	8.0	7.8	---	---	8.4	8.3
16	---	---	8.0	7.9	8.2	7.9	8.0	7.9	---	---	8.5	8.2
17	---	---	8.0	7.9	8.0	7.8	8.0	7.9	---	---	8.6	8.1
18	---	---	7.9	7.4	8.2	7.6	8.0	7.8	---	---	9.0	8.4
19	---	---	7.6	7.4	7.7	7.6	7.9	7.8	8.2	8.1	9.0	8.9
20	---	---	7.6	7.5	7.8	7.6	8.0	7.8	8.2	8.1	9.0	7.8
21	8.2	8.1	7.6	7.5	7.7	7.7	8.0	7.8	8.3	8.1	7.9	7.7
22	8.2	8.1	7.7	7.6	7.7	7.5	8.0	7.8	8.4	8.1	7.8	7.8
23	8.2	8.1	7.8	7.7	7.6	7.2	8.0	7.8	8.4	8.2	8.0	7.8
24	8.2	8.1	7.8	7.7	7.2	7.1	8.1	7.9	8.3	8.1	8.0	7.9
25	8.2	7.8	7.8	7.7	7.2	7.1	8.1	7.7	8.5	8.1	8.0	8.0
26	7.9	7.7	7.7	7.7	7.3	7.1	7.7	7.6	8.5	8.2	8.0	7.9
27	7.8	7.7	7.7	7.6	7.6	7.3	7.6	7.5	8.6	8.2	7.9	7.9
28	7.8	7.8	7.6	7.6	7.6	7.5	7.6	7.5	8.6	8.4	8.2	7.9
29	7.8	7.8	7.6	7.6	7.6	7.5	7.7	7.6	8.6	8.3	8.4	8.2
30	7.8	7.8	7.7	7.6	7.5	7.5	7.8	7.6	---	---	8.4	8.0
31	7.8	7.8	---	---	7.5	7.4	7.9	7.7	---	---	8.5	8.2
MONTH	---	---	---	---	---	---	8.1	7.3	---	---	9.0	7.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.7	8.5	7.6	7.5	7.6	7.3	7.9	7.8	7.6	7.3	7.8	7.7
2	8.8	8.6	7.6	7.5	7.7	7.5	7.9	7.8	7.3	7.2	7.8	7.7
3	8.8	8.7	7.6	7.5	7.8	7.7	7.9	7.8	7.3	7.2	7.8	7.7
4	8.8	8.8	7.6	7.5	7.7	7.6	7.9	7.9	7.4	7.2	7.8	7.7
5	8.9	8.8	7.6	7.6	7.7	7.6	7.9	7.9	7.4	7.1	7.8	7.7
6	8.8	8.8	7.7	7.6	7.7	7.7	7.9	7.9	7.2	7.0	7.8	7.7
7	8.8	8.7	7.7	7.7	7.7	7.7	7.9	7.6	7.2	7.2	7.8	7.7
8	8.8	8.6	7.7	7.7	7.7	7.6	7.6	7.6	7.4	7.2	7.8	7.7
9	8.8	8.6	7.8	7.7	7.6	7.6	8.0	7.5	7.4	7.3	7.8	7.7
10	8.8	8.7	7.8	7.7	7.7	7.6	7.7	7.6	7.4	7.3	7.8	7.7
11	8.7	8.6	7.8	7.8	7.7	7.6	7.8	7.7	7.4	7.4	7.8	7.7
12	8.7	8.4	7.8	7.8	7.7	7.6	7.8	7.8	7.5	7.4	7.8	7.7
13	8.5	8.3	7.8	7.7	7.6	7.5	7.8	7.7	7.5	7.5	7.8	7.1
14	8.4	8.2	7.8	7.8	7.5	7.4	7.9	7.7	7.6	7.5	7.4	7.1
15	8.3	8.2	7.8	7.5	7.5	7.5	7.9	7.9	7.6	7.5	7.4	7.3
16	8.4	8.3	7.5	7.4	7.5	7.4	7.9	7.6	7.5	7.4	7.5	7.4
17	8.4	8.2	7.6	7.5	7.6	7.4	7.6	7.6	7.5	7.4	7.6	7.5
18	8.4	7.8	7.6	7.6	7.6	7.5	7.7	7.6	7.5	7.4	7.7	7.6
19	7.8	7.7	7.7	7.5	7.7	7.6	7.8	7.6	8.0	7.4	7.8	7.6
20	7.9	7.7	7.7	7.6	7.7	7.6	7.7	7.6	7.9	7.9	7.8	7.7
21	7.8	7.7	7.9	7.5	7.8	7.7	7.6	7.6	7.9	7.8	7.8	7.7
22	7.7	7.6	7.9	7.8	7.8	7.7	7.6	7.5	7.9	7.9	7.8	7.7
23	7.6	7.3	7.9	7.9	7.8	7.8	7.5	7.5	7.9	7.9	7.8	7.7
24	7.3	7.2	7.9	7.9	7.8	7.8	7.6	7.5	7.9	7.7	7.8	7.7
25	7.4	7.3	8.0	7.9	7.8	7.8	7.5	7.5	7.7	7.6	7.8	7.7
26	7.4	7.4	8.0	7.9	7.9	7.8	7.5	7.4	7.6	7.6	7.8	7.7
27	7.5	7.4	7.9	7.6	8.0	7.9	7.5	7.4	7.7	7.6	7.8	7.7
28	7.6	7.5	7.7	7.6	7.9	7.9	7.6	7.4	7.7	7.6	7.8	7.8
29	7.6	7.6	7.7	7.6	7.9	7.8	7.6	7.6	7.8	7.7	7.9	7.8
30	7.6	7.6	7.8	7.7	7.9	7.8	7.6	7.6	7.8	7.7	7.9	7.8
31	---	---	7.8	7.4	---	---	7.6	7.5	7.8	7.7	---	---
MONTH	8.9	7.2	8.0	7.4	8.0	7.3	8.0	7.4	8.0	7.0	7.9	7.1
YEAR	---	---										

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.1	14.5	14.8	---	---	---	10.4	9.9	10.2	10.0	9.0	9.4
2	---	---	---	---	---	---	9.9	9.3	9.6	12.0	10.0	11.1
3	---	---	---	16.8	15.6	16.0	10.0	9.5	9.7	13.0	12.0	12.4
4	---	---	---	16.7	14.8	15.7	10.4	9.9	10.1	14.1	13.0	13.6
5	---	---	---	16.7	15.7	16.1	10.4	9.8	10.2	14.0	11.8	12.9
6	---	---	---	15.7	14.2	15.0	9.9	9.5	9.7	11.8	8.9	10.3
7	---	---	---	14.2	12.5	13.5	9.5	8.9	9.2	8.9	7.8	8.0
8	---	---	---	12.6	11.2	11.9	9.6	8.6	9.0	8.1	7.7	7.9
9	---	---	---	11.6	10.3	11.0	11.1	9.6	10.4	8.5	8.1	8.3
10	---	---	---	11.8	10.4	11.1	11.3	10.3	11.0	8.3	8.0	8.1
11	---	---	---	13.0	11.6	12.3	10.3	9.1	9.7	8.1	7.7	7.7
12	---	---	---	14.4	13.0	13.7	9.1	7.9	8.4	8.9	8.0	8.5
13	---	---	---	13.6	11.6	12.8	7.9	7.2	7.6	9.1	8.4	8.8
14	---	---	---	11.6	10.5	10.9	7.4	7.2	7.3	9.0	8.2	8.7
15	---	---	---	10.5	10.2	10.2	8.1	7.3	7.7	9.0	8.5	8.8
16	---	---	---	11.0	10.2	10.6	8.6	8.1	8.4	8.7	7.9	8.3
17	---	---	---	12.3	11.0	11.6	8.5	7.8	8.1	9.7	8.7	9.3
18	---	---	---	13.9	12.3	13.1	8.2	8.0	8.2	9.9	9.1	9.7
19	---	---	---	14.4	13.7	14.1	8.2	7.4	7.8	9.1	7.3	8.2
20	---	---	---	14.0	13.1	13.5	7.4	6.7	6.9	7.3	6.3	6.6
21	16.5	15.7	16.2	13.5	12.9	13.2	6.9	6.2	6.6	7.1	6.5	6.8
22	16.6	15.0	15.6	14.0	12.8	13.4	8.5	6.9	7.7	7.2	6.7	6.9
23	16.1	14.6	15.2	14.4	13.8	14.1	9.6	8.5	9.2	6.7	5.9	6.3
24	15.6	14.0	14.8	14.2	11.8	13.0	9.6	8.7	9.2	7.5	6.4	7.0
25	15.8	14.5	15.2	11.8	10.7	11.0	8.7	8.1	8.3	8.2	7.4	7.6
26	15.4	14.4	15.0	10.8	10.4	10.6	8.2	7.5	7.9	9.7	8.2	9.2
27	14.4	13.4	13.9	11.9	10.8	11.3	8.6	7.7	8.2	9.3	7.8	8.5
28	13.4	12.8	13.2	11.9	10.7	11.3	9.7	8.3	8.8	7.8	6.9	7.2
29	13.3	12.4	12.8	10.7	10.0	10.2	10.4	9.7	10.1	7.5	6.6	7.0
30	14.1	12.5	13.3	10.4	9.7	10.1	10.3	9.6	9.9	7.4	6.3	6.8
31	15.2	13.5	13.9	---	---	---	9.6	8.9	9.2	6.3	5.3	5.7
MONTH	---	---	---	---	---	---	11.3	6.2	8.8	14.1	5.3	8.6
FEBRUARY			MARCH			APRIL			MAY			
1	6.8	5.3	6.0	12.1	11.2	11.5	12.7	12.0	12.4	17.1	16.4	16.7
2	7.9	6.8	7.2	13.1	11.7	12.4	13.3	11.4	12.3	16.7	15.8	16.1
3	8.0	7.7	7.9	12.7	12.2	12.4	13.9	12.1	13.0	15.8	14.6	15.1
4	7.7	6.8	7.2	13.5	12.1	12.8	14.1	12.7	13.3	15.0	13.9	14.5
5	8.6	6.5	7.3	13.6	13.3	13.5	13.6	12.3	13.0	16.3	14.6	15.3
6	7.9	5.2	6.4	13.5	13.0	13.3	14.4	12.4	13.2	17.3	15.6	16.3
7	7.8	7.0	7.5	13.0	12.0	12.4	15.0	13.5	14.1	17.7	16.4	17.1
8	8.3	7.5	7.9	12.3	11.2	11.7	16.4	14.3	15.1	18.1	16.9	17.6
9	8.5	8.0	8.2	11.7	10.5	11.1	16.6	14.6	15.5	18.5	17.3	18.0
10	9.6	8.5	9.0	10.7	9.5	10.2	15.5	14.6	15.1	18.5	17.8	18.2
11	9.8	8.9	9.3	11.1	10.0	10.5	15.5	14.2	14.7	18.9	17.8	18.4
12	10.1	9.6	9.9	10.9	9.9	10.4	14.6	13.3	14.0	19.0	18.3	18.8
13	9.6	8.8	9.1	10.6	9.6	10.2	13.3	10.7	11.6	19.1	18.6	18.8
14	9.4	8.7	9.1	11.8	10.5	11.1	11.1	10.1	10.6	18.8	18.2	18.4
15	9.4	9.0	9.3	11.9	10.5	11.3	12.8	9.6	11.0	18.2	16.9	17.4
16	9.0	8.2	8.7	12.0	11.7	11.8	14.9	12.4	13.5	17.6	17.1	17.3
17	9.5	8.4	9.0	12.5	11.1	11.9	16.6	14.6	15.5	18.0	17.1	17.6
18	9.4	8.5	8.8	13.6	12.0	12.8	17.8	16.1	17.0	19.0	17.5	17.9
19	10.2	8.6	9.6	14.0	12.5	13.2	18.1	17.3	17.7	19.2	18.3	18.7
20	10.9	10.1	10.5	14.0	13.2	13.6	18.6	17.4	17.9	19.7	18.3	19.0
21	10.9	10.2	10.6	13.7	12.3	12.9	18.2	16.9	17.8	19.7	18.7	19.3
22	10.3	9.5	10.0	12.4	11.4	11.9	16.9	16.3	16.5	19.8	18.9	19.4
23	10.2	9.5	9.9	11.8	10.8	11.3	16.4	15.5	15.8	19.8	19.1	19.5
24	10.7	10.1	10.4	13.2	11.4	12.3	16.4	15.5	15.9	19.8	19.3	19.5
25	10.1	9.6	9.8	14.4	12.7	13.6	16.5	15.8	16.1	19.5	18.9	19.2
26	9.8	9.1	9.5	15.8	14.3	15.1	16.5	15.7	16.1	19.7	19.1	19.4
27	9.8	8.4	9.1	16.9	15.6	16.2	16.1	15.1	15.6	20.4	18.6	19.5
28	10.1	8.7	9.5	17.5	16.0	16.8	15.9	14.3	15.1	20.4	19.5	19.8
29	11.2	9.8	10.4	17.1	15.2	16.3	16.3	15.0	15.6	19.6	18.9	19.3
30	---	---	---	15.2	14.1	14.7	16.6	16.0	16.3	20.2	19.2	19.7
31	---	---	---	14.1	12.7	13.3	---	---	---	20.3	18.8	19.6
MONTH	11.2	5.2	8.9	17.5	9.5	12.7	18.6	9.6	14.7	20.4	13.9	18.1

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.9	9.7	9.8	---	---	---	---	---	---	13.6	12.8	13.3
2	---	---	---	---	---	---	---	---	---	13.8	12.4	13.0
3	---	---	---	10.4	8.0	8.7	---	---	---	12.9	11.8	12.2
4	---	---	---	8.9	7.7	8.2	---	---	---	12.1	11.4	11.7
5	---	---	---	8.4	7.2	7.7	---	---	---	12.6	11.4	11.9
6	---	---	---	7.5	7.0	7.3	---	---	---	13.5	11.0	12.9
7	---	---	---	8.1	7.1	7.6	---	---	---	14.6	12.8	13.3
8	---	---	---	9.4	7.8	8.6	12.5	10.8	11.5	13.5	11.4	12.5
9	---	---	---	10.4	8.9	9.6	11.5	10.6	11.0	11.2	9.0	10.3
10	---	---	---	10.9	9.4	10.1	10.7	10.0	10.2	---	---	---
11	---	---	---	10.2	9.3	9.7	10.0	9.5	9.7	---	---	---
12	---	---	---	9.4	8.6	9.0	---	---	---	---	---	---
13	---	---	---	10.0	8.4	9.2	---	---	---	---	---	---
14	---	---	---	10.8	9.0	9.9	---	---	---	---	---	---
15	---	---	---	10.6	9.9	10.2	---	---	---	---	---	---
16	---	---	---	10.7	9.6	10.1	---	---	---	11.4	8.5	9.2
17	---	---	---	10.4	8.4	10.2	---	---	---	9.3	7.7	8.3
18	---	---	---	8.5	7.5	8.1	11.9	11.5	11.7	8.4	7.8	8.1
19	---	---	---	7.6	7.1	7.3	12.8	11.6	12.1	10.4	7.3	8.3
20	---	---	---	7.8	7.3	7.7	13.9	12.3	12.9	10.0	7.0	8.8
21	11.3	10.2	10.8	7.9	7.5	7.7	13.8	11.8	12.8	9.0	7.2	8.4
22	11.2	9.8	10.4	7.8	7.0	7.5	13.5	11.6	12.6	8.3	6.6	7.6
23	11.3	9.9	10.4	---	---	---	13.4	11.9	12.2	8.5	6.5	7.3
24	11.4	10.0	10.5	---	---	---	12.7	12.1	12.3	8.1	7.1	7.6
25	11.1	9.9	10.4	---	---	---	13.4	12.2	12.6	8.1	6.8	7.3
26	10.7	9.5	10.2	---	---	---	13.6	12.0	13.0	---	---	---
27	11.4	9.5	10.9	---	---	---	14.1	12.6	13.4	---	---	---
28	11.1	10.8	10.9	---	---	---	14.4	13.0	13.6	---	---	---
29	12.0	10.9	11.4	---	---	---	14.2	12.2	12.9	---	---	---
30	12.4	11.4	11.8	---	---	---	13.4	12.3	12.9	---	---	---
31	12.1	11.2	11.5	---	---	---	13.9	12.4	13.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	15.4	12.5	13.4	13.7	11.6	12.8	---	---	---
2	---	---	---	15.8	11.1	13.3	14.7	12.0	13.5	---	---	---
3	---	---	---	14.0	10.9	11.9	14.8	12.5	13.7	---	---	---
4	---	---	---	12.7	10.3	11.4	15.3	12.3	13.9	---	---	---
5	---	---	---	11.1	10.0	10.5	15.9	12.8	14.4	---	---	---
6	---	---	---	11.4	9.8	10.6	16.7	13.3	14.7	---	---	---
7	---	---	---	11.8	10.3	11.1	---	---	---	---	---	---
8	---	---	---	13.0	10.6	11.8	16.6	12.2	14.5	---	---	---
9	---	---	---	12.1	11.2	11.7	16.6	12.3	14.2	---	---	---
10	---	---	---	14.0	11.8	12.9	---	---	---	---	---	---
11	---	---	---	18.7	---	15.3	---	---	---	---	---	---
12	---	---	---	18.5	---	17.7	---	---	---	---	---	---
13	---	---	---	17.1	13.6	14.9	10.6	8.9	9.7	---	---	---
14	---	---	---	14.7	12.6	13.6	11.2	10.6	10.8	---	---	---
15	---	---	---	14.6	12.6	13.7	11.4	10.9	11.2	---	---	---
16	---	---	---	14.1	11.9	12.6	11.5	10.6	11.0	---	---	---
17	---	---	---	14.3	11.2	13.0	14.3	10.6	12.2	---	---	---
18	---	---	---	14.6	11.9	13.2	14.5	12.0	13.2	---	---	---
19	13.1	11.7	12.6	13.8	11.1	12.7	12.8	10.3	11.7	---	---	---
20	13.1	11.1	12.2	13.2	9.8	11.5	12.7	10.1	11.2	---	---	---
21	14.1	11.6	12.9	10.1	6.8	9.1	10.1	8.8	9.3	10.0	8.4	8.7
22	14.8	12.0	13.5	6.8	5.1	5.8	9.3	8.7	9.0	9.5	8.6	9.1
23	14.9	12.1	13.6	9.1	5.6	6.6	9.7	8.6	9.2	9.7	9.0	9.4
24	14.1	12.0	13.1	10.2	7.3	9.3	9.9	8.8	9.5	9.9	9.1	9.5
25	15.7	12.1	14.1	10.2	8.6	9.5	10.2	9.9	10.0	10.3	9.4	9.8
26	15.4	12.6	14.0	10.2	8.0	9.1	10.2	9.8	10.0	10.4	9.4	9.9
27	16.7	12.7	14.8	9.7	8.2	8.9	---	---	---	10.0	8.0	9.2
28	17.0	12.6	15.2	11.2	8.0	9.9	---	---	---	8.7	8.0	8.5
29	17.0	13.0	15.1	11.1	9.5	10.4	---	---	---	9.1	7.6	8.6
30	---	---	---	11.8	10.4	11.1	---	---	---	9.9	8.4	9.7
31	---	---	---	12.7	11.0	11.9	---	---	---	9.8	7.8	9.1
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[illegible]

03438500 CUMBERLAND RIVER AT SMITHLAND, KY

(National stream-quality accounting network station)

LOCATION.--Lat 37°08' 55", long 88°23' 57", Livingston County, Hydrologic Unit 05130205, 1.0 mi (1.6 km) downstream from McCormick Creek, 27.8 mi (44.7 km) downstream from gaging station near Grand Rivers, and at mile 2.8 (4.5 km).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-65, 1968-1980, 2002 to current water year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES.--October 1949 to July 1966, July 1967 to August 1980.

REMARKS.--Records of daily discharge are published for gaging station near Grand Rivers (station 03438220). Flow is completely regulated. Barkley-Kentucky Canal (station 03438190) diverts waters from or to Kentucky Lake in the Tennessee River Basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unfl lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfl uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
DEC 04...	1240	Environmental	43,100	18	0.060	0.045	9.9	88	8.0	244	10.0	120
DEC 04...	1250	Replicate	--	--	--	--	--	--	--	--	--	--
FEB 05...	1340	Environmental	54,800	7.3	.051	.037	14.2	111	8.2	233	5.0	110
FEB 05...	1348	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
MAR 25...	1300	Environmental	34,400	14	.054	.041	12.7	118	8.6	205	12.0	97
MAR 25...	1310	Replicate	--	12	.054	.041	--	--	--	--	--	52
MAY 27...	1320	Environmental	60,000	11	.057	.043	9.2	113	8.2	227	25.5	110
MAY 27...	1328	Field Blank	--	--	--	--	--	--	--	--	--	--
JUN 24...	1230	Environmental	12,300	12	.061	.046	7.8	97	8.1	203	27.5	91
JUN 24...	1238	Field Blank	--	--	--	--	--	--	--	--	--	--
SEP 02...	1230	Environmental	42,600	15	.058	.043	8.3	101	8.0	198	26.0	87

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
DEC 04...	39.2	6.15	1.82	4.36	90	110	4.95	<0.2	4.28	21.9	139	0.16	0.30
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05...	35.3	5.42	1.70	4.83	88	108	5.58	<.2	3.50	18.8	135	.18	.36
FEB 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 25...	30.7	4.87	1.51	3.71	80	89	4.83	<.2	2.35	17.1	128	.13	.44
MAR 25...	16.9	2.41	.77	2.02	80	90	4.60	<.2	1.32	15.8	124	.13	.43
MAY 27...	35.9	5.35	1.48	3.99	88	108	5.06	<.2	2.26	18.8	135	.24	.43
MAY 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 24...	28.5	4.76	1.71	5.09	75	91	6.09	<.2	2.46	18.3	128	.23	.54
JUN 24...	0.03	<0.008	--	E0.08	--	--	--	--	0.07	--	--	--	--
SEP 02...	25.9	5.43	1.74	6.40	63	76	6.78	<.2	4.69	18.6	103	.21	.48

03438500 CUMBERLAND RIVER AT SMITHLAND, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Phaeo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)
DEC 04... 04...	<0.04 --	0.62 --	E0.005 --	0.14 --	0.038 --	0.049 --	0.10 --	0.8 --	<0.1 --	0.8 --	2.2 --	11.3 --	10.4 --
FEB 05... 05...	<.04 --	.58 --	E.004 --	.14 <.02	.018 --	.023 --	.08 --	.9 <.1	<.1 <.1	.9 <.1	1.9 0.4	6.2 --	6.9 --
MAR 25... 25...	<.04 <.04	.46 .46	E.006 E.006	.25 .27	E.005 <.006	.012 .012	.08 .08	1.5 1.6	<.1 <.1	1.5 1.6	2.1 2.2	15.1 15.3	17.0 17.9
MAY 27... 27...	E.02 --	.42 --	.012 --	.24 --	<.006 --	.023 --	.05 --	1.5 --	<.1 --	1.4 --	2.6 --	13.4 --	16.1 --
JUN 24... 24...	.06 --	.14 --	E.007 --	.30 --	.011 --	.022 --	.09 --	1.6 --	<.1 --	1.6 --	2.5 --	16.6 --	20.9 --
SEP 02...	<.04	.11	.028	.32	.017	.026	.11	1.9	<.1	1.9	2.4	15.9	31.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alum- inum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)
DEC 04... 04...	2 --	<0.20 --	0.4 --	22 --	<0.06 --	26 --	<0.04 --	<0.8 --	0.142 --	0.7 --	E5 --	<0.08 --	1.3 --
FEB 05... 05...	3 --	<.20 --	.4 --	22 --	<.06 --	20 --	<.04 --	<.8 --	.143 --	.7 --	9 --	<.08 --	1.0 --
MAR 25... 25...	4 3	<.20 <.20	.3 E.2	20 11	<.06 <.06	17 9	<.04 <.04	<.8 <.8	.125 .071	.7 .6	9 E4	<.08 .08	0.8 E.5
MAY 27... 27...	5 --	<.20 --	.5 --	21 --	<.06 --	23 --	<.04 --	1.0 --	.152 --	.8 --	E4 --	<.08 --	.9 --
JUN 24... 24...	5 <2	<.20 <.20	.7 <.2	24 <0.2	<.06 <.06	26 <8	<.04 <.04	<.8 <.8	.149 <.014	.9 <.4	<6 <6	<.08 <.08	1.1 <.6
SEP 02...	4	<.20	.9	20	<.06	33	<.04	<.8	.134	.9	<6	<.08	1.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)
DEC 04... 04...	0.3 --	0.5 --	0.97 --	<0.4 --	<0.2 --	125 --	0.8 --	E0.5 --	<0.006 --	E0.007 --	<0.006 --	<0.005 --	<0.005 --
FEB 05... 05...	1.6 --	.5 --	.93 --	<.4 --	<.2 --	107 --	.7 --	E.3 --	<.006 --	E.024 --	<.006 --	<.005 --	<.005 --
MAR 25... 25...	.5 1.5	.5 E.3	1.01 .57	E.2 <.4	<.2 <.2	96.7 52.0	1.5 .8	<.6 1.8	<.006 <.006	E.020 E.020	<.006 <.006	<.005 <.005	<.005 <.005
MAY 27... 27...	.3 --	.6 --	1.09 --	<.4 --	<.2 --	116 --	.8 --	<.6 --	<.006 <.006	E.022 <.006	.008 <.006	<.005 <.005	<.005 <.005
JUN 24... 24...	.3 <.2	.9 <.4	.94 <.06	E.3 <.4	<.2 <.2	92.9 <0.40	.9 <.1	E.4 <.6	<.006 --	E.053 --	<.006 --	<.005 --	<.005 --
SEP 02...	.2	1.1	.66	E.3	<.2	90.7	1.0	<.6	<.006	E.018	<.006	<.005	<.005

03438500 CUMBERLAND RIVER AT SMITHLAND, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd, 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd, 0.7u GF ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd, 0.7u GF ug/L (82677)
DEC 04... 04...	0.115 --	<0.050 --	<0.010 --	<0.004 --	<0.041 --	<0.020 --	<0.005 --	<0.006 --	<0.018 --	<0.003 --	<0.005 --	<0.009 --	<0.02 --
FEB 05... 05...	.054 --	<.050 --	<.010 --	<.004 --	<.041 --	<.020 --	<.005 --	<.006 --	<.018 --	<.003 --	<.005 --	<.009 --	<.02 --
MAR 25... 25...	.101 .101	<.050 <.050	<.010 <.010	<.004 <.004	<.041 <.041	<.020 <.020	<.005 <.005	<.006 <.006	<.018 <.018	<.003 <.003	<.005 <.005	<.009 <.009	<.02 <.02
MAY 27... 27...	.455 <.007	<.050 <.050	<.010 <.010	<.006 <.004	<.041 <.041	<.020 <.020	<.005 <.005	<.006 <.006	<.018 <.018	<.003 <.003	<.005 <.005	<.009 <.009	<.02 <.02
JUN 24... 24...	.332 --	<.050 --	<.010 --	<.004 --	<.041 --	<.020 --	<.005 --	<.006 --	<.018 --	<.003 --	<.005 --	<.009 --	<.02 --
SEP 02...	.068	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd, 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd, 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd, 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd, 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)
DEC 04... 04...	<0.004 --	<0.009 --	<0.005 --	<0.003 --	<0.004 --	<0.035 --	<0.027 --	<0.015 --	E0.010 --	<0.006 --	<0.003 --	<0.007 --	<0.003 --
FEB 05... 05...	<.004 --	<.009 --	<.005 --	<.003 --	<.004 --	<.035 --	<.027 --	<.015 --	E.009 --	<.006 --	<.003 --	<.007 --	<.003 --
MAR 25... 25...	<.004 <.004	<.009 <.009	<.005 <.005	<.003 <.003	<.004 <.004	<.035 <.035	<.027 <.027	<.015 <.015	E.008 E.008	<.006 <.006	<.003 <.003	<.007 <.007	<.003 <.003
MAY 27... 27...	<.004 <.004	<.009 <.009	<.005 <.005	<.003 <.003	<.004 <.004	<.035 <.035	<.027 <.027	<.015 <.015	.031 <.013	<.006 <.006	<.003 <.003	<.007 <.016	<.003 <.003
JUN 24... 24...	<.004 --	<.009 --	<.005 --	<.003 --	<.004 --	<.035 --	<.027 --	<.015 --	.020 --	<.006 --	<.003 --	<.007 --	<.003 --
SEP 02...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.006	<.006	<.003	<.007	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF ug/L (82683)	Phorate water fltrd, 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd, 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd, 0.7u GF ug/L (82679)	Propar-gite, water, fltrd, 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd, 0.7u GF ug/L (82675)
DEC 04... 04...	<0.010 --	<0.004 --	<0.022 --	<0.011 --	0.01 --	<0.004 --	<0.025 --	<0.011 --	<0.02 --	0.030 --	E0.01 --	<0.034 --	<0.02 --
FEB 05... 05...	<0.010 --	<0.004 --	<0.022 --	<0.011 --	.01 --	<0.004 --	<0.025 --	<0.011 --	<.02 --	.025 --	<.02 --	<.034 --	<.02 --
MAR 25... 25...	<0.010 <0.010	<0.004 <0.004	<0.022 <0.022	<0.011 <0.011	.01 .01	<0.004 <0.004	<0.025 <0.025	<0.011 <0.011	<.02 <.02	.033 .033	E.01 E.01	<.034 <.034	<.02 <.02
MAY 27... 27...	<0.010 <0.010	<0.004 <0.004	<0.022 <0.022	<0.011 <0.011	.02 <.01	<0.004 <0.004	<0.025 <0.025	<0.011 <0.011	<.02 <.02	.080 <.005	E.01 <.02	<.034 <.034	<.02 <.02
JUN 24... 24...	<0.010 --	<0.004 --	<0.022 --	<0.011 --	.03 --	<0.004 --	<0.025 --	<0.011 --	<.02 --	.036 --	<.02 --	<.034 --	<.02 --
SEP 02...	<0.010	<0.004	<0.022	<0.011	<.02	<0.004	<0.025	<0.011	<.02	.012	<.02	<.034	<.02

CUMBERLAND RIVER BASIN

03438500 CUMBERLAND RIVER AT SMITHLAND, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
DEC						
04...	<0.010	<0.002	<0.009	0.23	97	10
04...	--	--	--	--	97	12
FEB						
05...	<.010	<.002	<.009	.23	86	13
05...	--	--	--	--	--	--
MAR						
25...	<.010	<.002	<.009	.23	99	15
25...	<.010	<.002	<.009	.14	99	15
MAY						
27...	<.010	<.002	<.009	.23	98	14
27...	<.010	<.002	<.009	--	--	--
JUN						
24...	<.010	<.002	<.009	.21	98	52
24...	--	--	--	<.04	--	--
SEP						
02...	<.010	<.002	<.009	.19	78	32

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

[illegible]

03609750 TENNESSEE RIVER AT HIGHWAY 60 NEAR PADUCAH, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp. water, mg/L (49570)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sediment total, mg/L (00694)	Inorganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Phytoplankton, ug/L (62360)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)
NOV 06...	<0.04	0.39	0.032	0.04	0.043	0.055	0.07	0.3	<0.1	0.3	2.1	3.0	1.8
NOV 06...	<0.10	<0.16	<0.02	--	<0.06	--	--	--	--	--	--	--	--
NOV 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	<.04	.47	E.004	.10	.024	.029	.05	.8	<.1	.8	1.9	3.6	8.6
MAR 11...	.04	.58	E.007	.10	.037	.046	.11	.7	<.1	.7	2.1	3.6	2.2
APR 21...	<.04	.23	E.006	.20	<.006	.011	.05	1.1	<.1	1.1	2.2	9.4	14.6
APR 21...	<.04	.23	E.006	.21	<.006	.011	.05	1.1	<.1	1.1	2.3	9.8	11.6
MAY 20...	E.03	.10	.008	.43	E.003	.012	.05	1.9	<.1	1.9	2.7	11.5	16.5
JUL 22...	<.04	E.05	.008	.13	.011	.022	.05	.9	<.1	.9	2.1	10.9	9.5
JUL 22...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	0.6	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

[illegible]

[illegible]

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60 NEAR PADUCAH, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concent- ration mg/L (80154)
NOV						
06...	<0.010	<0.002	<0.009	0.15	98	8
06...	--	--	--	<.04	--	--
06...	--	--	--	--	98	7
JAN						
22...	<.010	<.002	<.009	.18	98	5
MAR						
11...	<.010	<.002	<.009	.15	99	23
APR						
21...	<.010	<.002	<.009	.18	97	7
21...	<.010	<.002	<.009	.18	96	8
MAY						
20...	<.010	<.002	<.009	.08	96	13
JUL						
22...	<.010	<.002	<.009	.05	95	11
22...	--	--	--	--	--	--

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

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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 with telemetry and crest-stage gage. Datum of gage is 413.46 ft above NGVD of 1929.

REMARKS.--Records fair except those estimated record, which are poor.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 6	0000	*5,300	*14.30	May 15	1030	4,020	13.53
Mar 20	2300	4,150	13.62	Jun 16	0830	4,770	14.01
Apr 25	1230	4,700	13.97				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	25	66	65	52	65	51	112	106	50	15	13
2	9.8	23	50	455	67	75	46	104	55	78	14	13
3	9.5	22	46	191	288	94	43	116	53	40	13	13
4	11	22	52	119	132	179	40	98	53	34	14	12
5	9.2	30	49	369	2,670	244	38	67	49	25	275	11
6	9.0	28	45	144	1,800	480	36	53	46	27	15	11
7	9.5	24	37	90	298	137	35	45	43	68	9.9	11
8	9.9	21	34	75	159	89	34	40	40	25	8.2	10
9	10	18	33	75	123	70	31	35	61	21	7.8	10
10	11	20	94	63	107	54	29	33	84	25	7.2	10
11	11	25	88	55	94	50	28	60	39	256	7.1	9.5
12	11	28	47	52	90	46	53	41	e90	62	7.0	9.0
13	10	35	36	49	80	41	172	77	293	29	6.7	10
14	19	21	48	46	71	40	121	125	e50	23	6.3	33
15	15	51	45	44	64	e39	77	1,590	e220	20	6.2	14
16	12	65	39	41	56	65	53	300	3,280	18	6.0	11
17	18	37	33	40	52	57	44	128	197	19	5.9	9.8
18	18	297	31	128	e47	60	37	88	101	17	6.0	8.5
19	13	350	30	112	e46	51	34	67	104	17	7.6	7.8
20	13	94	26	60	e56	1,170	32	54	57	16	13	7.6
21	14	48	24	47	e50	e460	38	46	45	16	21	7.9
22	16	36	25	44	e45	e238	239	41	41	15	8.1	8.0
23	21	33	640	40	e42	e150	1,190	36	37	16	176	8.1
24	20	838	328	39	40	93	434	33	33	15	162	8.2
25	126	153	114	603	37	76	2,810	31	59	17	69	7.8
26	865	76	78	484	35	64	358	29	42	17	45	7.4
27	133	921	61	261	33	56	149	28	28	15	50	7.2
28	49	702	54	134	31	50	101	37	e23	15	28	7.2
29	35	180	86	93	30	77	77	28	23	14	18	7.0
30	29	96	158	78	---	73	127	35	146	18	15	6.9
31	27	---	90	60	---	61	---	907	---	28	14	---
TOTAL	1,573.9	4,319	2,587	4,156	6,695	4,504	6,557	4,484	5,498	1,056	1,057.0	309.9
MEAN	50.8	144	83.5	134	231	145	219	145	183	34.1	34.1	10.3
MAX	865	921	640	603	2,670	1,170	2,810	1,590	3,280	256	275	33
MIN	9.0	18	24	39	30	39	28	28	23	14	5.9	6.9
CFSM	0.38	1.07	0.62	1.00	1.72	1.08	1.63	1.08	1.37	0.25	0.25	0.08
IN.	0.44	1.20	0.72	1.15	1.86	1.25	1.82	1.24	1.53	0.29	0.29	0.09

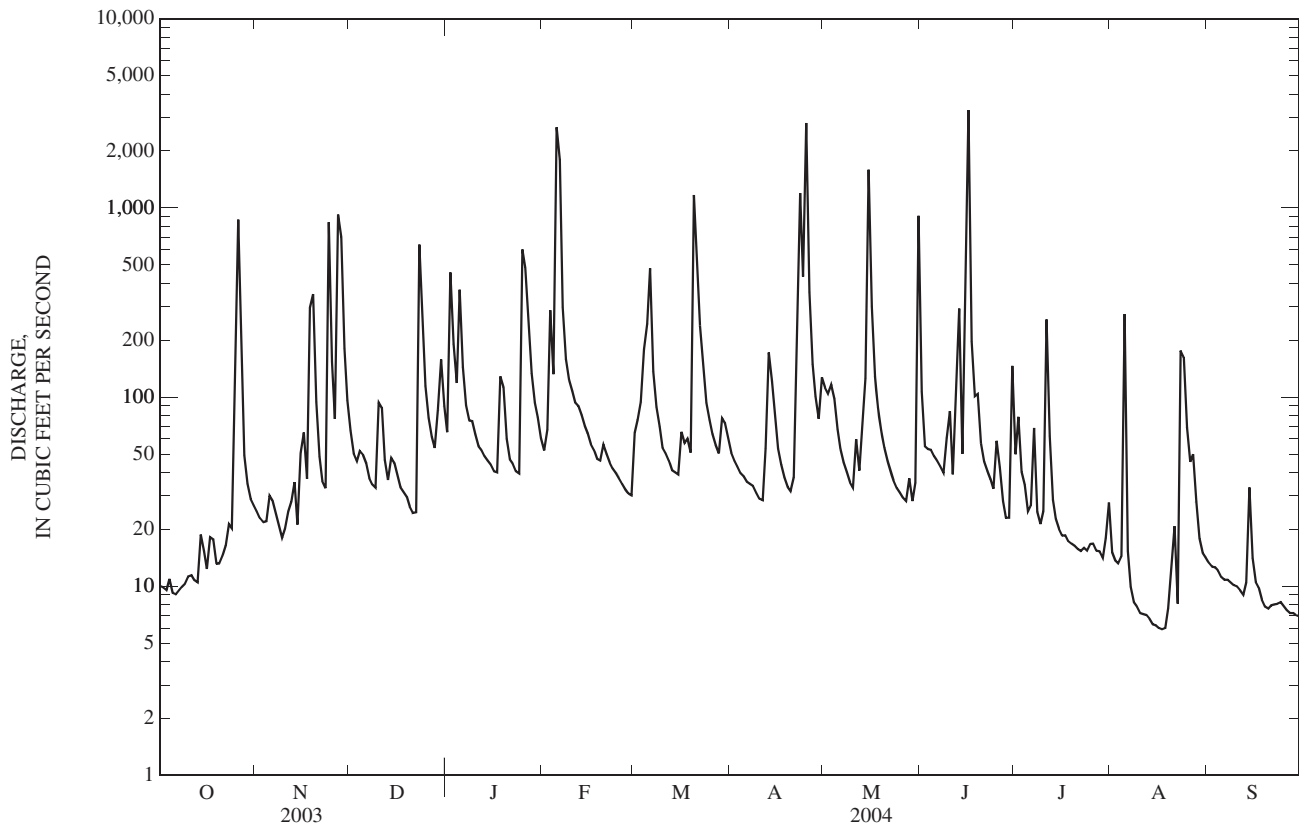
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

	MEAN	58.0	182	336	216	404	270	234	253	128	66.0	42.7	41.4
MAX	258	1,039	1,097	583	1,693	1,336	623	925	667	264	377	357	
(WY)	(2003)	(2002)	(2002)	(1999)	(1989)	(1997)	(1983)	(1983)	(1998)	(1989)	(1995)	(2002)	
MIN	2.96	7.43	24.4	27.1	65.5	61.7	21.6	12.4	3.88	4.95	2.40	2.36	
(WY)	(1988)	(2000)	(1996)	(2001)	(1996)	(1995)	(1986)	(1988)	(1988)	(1986)	(1983)	(1983)	

03610200 CLARKS RIVER AT ALMO, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1983 - 2004	
ANNUAL TOTAL	65,750.8			42,796.8			185	
ANNUAL MEAN	180			117			405	2002
HIGHEST ANNUAL MEAN							69.8	1987
LOWEST ANNUAL MEAN							14,000	Mar 2, 1997
HIGHEST DAILY MEAN	5,020	May	5	3,280	Jun	16	1.6	Aug 29, 1983
LOWEST DAILY MEAN	9.0	Oct	6	5.9	Aug	17	1.7	Aug 31, 1983
ANNUAL SEVEN-DAY MINIMUM	9.7	Oct	2	6.3	Aug	12	23,300	Mar 2, 1997
MAXIMUM PEAK FLOW				5,300	Feb	6	18.35	Mar 2, 1997
MAXIMUM PEAK STAGE				14.30	Feb	6	1.38	
ANNUAL RUNOFF (CFSM)	1.34			0.873			18.73	
ANNUAL RUNOFF (INCHES)	18.25			11.88			307	
10 PERCENT EXCEEDS	337			193			33	
50 PERCENT EXCEEDS	43			42			5.9	
90 PERCENT EXCEEDS	13			10				

e Estimated



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 on 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 with telemetry. Datum of gage is 345.53 ft above NGVD of 1929.

REMARKS.--Records good.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 16	0230	*1,340	*10.21	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

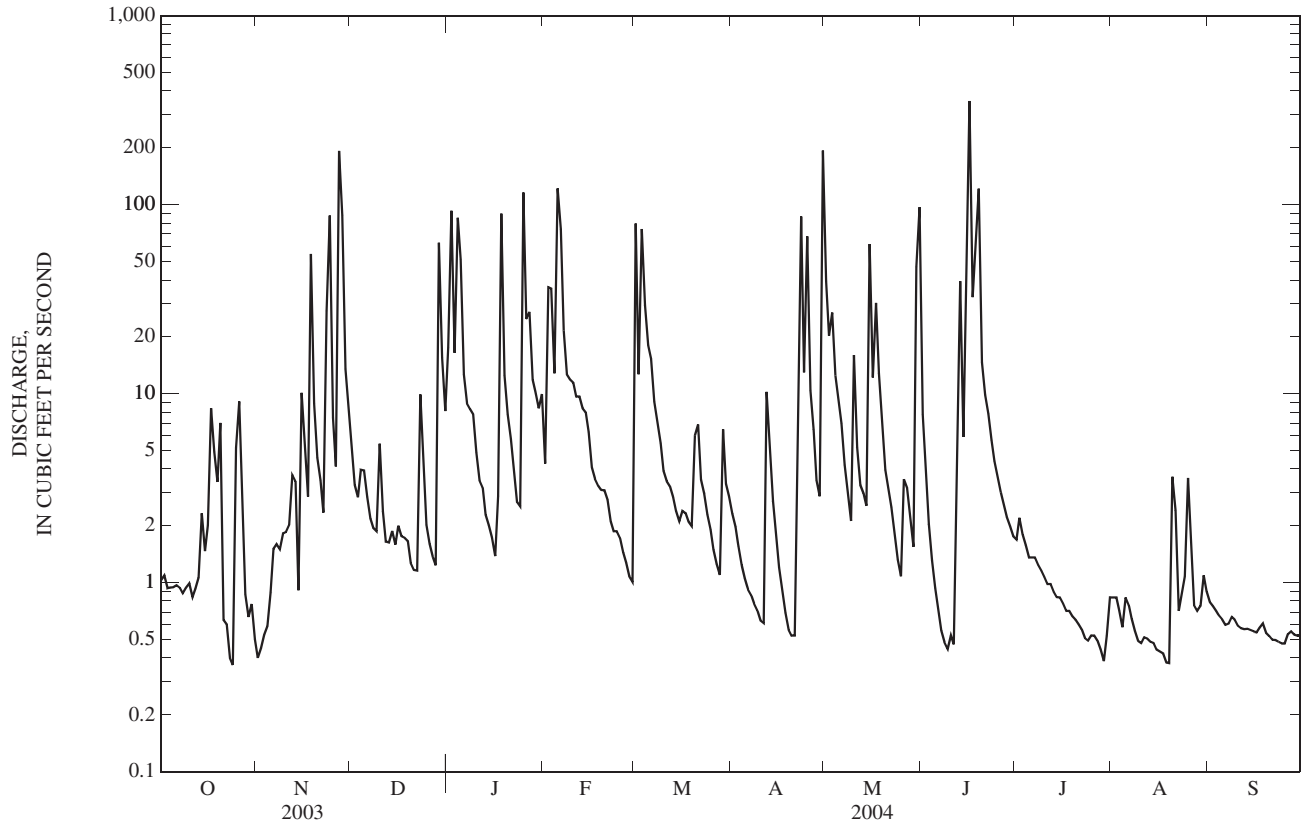
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	0.40	5.1	17	4.3	79	2.3	39	7.7	1.7	0.84	0.79
2	1.1	0.45	3.3	93	37	13	2.0	20	4.0	2.2	0.84	0.75
3	0.94	0.53	2.8	16	36	74	1.6	27	2.1	1.8	0.71	0.71
4	0.94	0.59	4.0	85	13	30	1.2	12	1.3	1.6	0.58	0.67
5	0.95	0.89	3.9	51	122	18	1.1	9.1	0.94	1.4	0.84	0.64
6	0.97	1.5	2.8	13	74	15	0.92	7.0	0.71	1.4	0.76	0.60
7	0.94	1.6	2.2	8.9	22	9.1	0.86	4.2	0.56	1.4	0.64	0.61
8	0.88	1.5	1.9	8.3	13	7.0	0.78	3.0	0.49	1.2	0.56	0.66
9	0.94	1.8	1.9	7.8	12	5.5	0.72	2.1	0.45	1.2	0.49	0.64
10	0.99	1.9	5.4	4.9	11	3.9	0.63	16	0.53	1.1	0.48	0.59
11	0.84	2.0	2.4	3.5	9.7	3.4	0.61	5.2	0.47	0.99	0.51	0.58
12	0.93	3.7	1.7	3.2	9.7	3.2	10	3.3	2.8	0.99	0.51	0.57
13	1.1	3.4	1.6	2.3	8.4	2.8	4.8	3.0	39	0.89	0.49	0.57
14	2.3	0.91	1.9	2.0	7.9	2.4	2.7	2.5	5.9	0.84	0.48	0.56
15	1.5	10	1.6	1.7	6.3	2.1	1.8	62	41	0.84	0.44	0.55
16	2.0	5.2	2.0	1.4	4.1	2.4	1.2	12	352	0.78	0.43	0.55
17	8.4	2.9	1.8	2.9	3.5	2.3	0.90	30	32	0.71	0.42	0.58
18	4.9	55	1.7	89	3.3	2.1	0.69	13	61	0.71	0.38	0.61
19	3.4	8.9	1.7	13	3.1	2.0	0.56	7.5	121	0.66	0.38	0.54
20	7.0	4.6	1.3	7.8	3.1	6.0	0.53	4.0	15	0.64	3.6	0.52
21	0.64	3.5	1.2	5.8	2.7	6.9	0.53	3.1	9.9	0.60	2.4	0.50
22	0.60	2.3	1.2	4.1	2.1	3.5	18	2.5	7.8	0.57	0.71	0.50
23	0.40	27	9.9	2.7	1.9	3.0	86	1.8	5.7	0.51	0.87	0.49
24	0.37	87	4.5	2.5	1.9	2.3	13	1.3	4.4	0.49	1.1	0.48
25	5.2	7.4	2.0	116	1.7	1.9	68	1.1	3.6	0.53	3.6	0.48
26	9.1	4.1	1.6	25	1.4	1.5	10	3.5	3.0	0.53	1.4	0.53
27	2.3	192	1.4	27	1.3	1.3	6.5	3.2	2.6	0.49	0.76	0.55
28	0.87	88	1.2	12	1.1	1.1	3.5	2.2	2.2	0.44	0.71	0.53
29	0.66	13	63	10	1.0	6.5	2.9	1.6	2.0	0.38	0.75	0.53
30	0.77	8.8	16	8.4	---	3.3	193	47	1.8	0.52	1.1	0.53
31	0.50	---	8.1	9.9	---	2.8	---	97	---	0.84	0.90	---
TOTAL	63.43	540.87	161.1	655.1	418.5	317.3	437.33	446.2	731.95	28.95	28.68	17.41
MEAN	2.05	18.0	5.20	21.1	14.4	10.2	14.6	14.4	24.4	0.93	0.93	0.58
MAX	9.1	192	63	116	122	79	193	97	352	2.2	3.6	0.79
MIN	0.37	0.40	1.2	1.4	1.0	1.1	0.53	1.1	0.45	0.38	0.38	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	3.50	15.1	28.1	23.2	35.5	30.3	29.8	20.5	10.5	8.07	2.78	4.13
MAX	19.4	70.8	105	65.8	160	109	121	102	53.8	37.3	13.9	50.1
(WY)	(1986)	(1997)	(1983)	(2000)	(1989)	(1997)	(1973)	(2002)	(1998)	(1983)	(1982)	(1985)
MIN	0.25	0.37	0.71	0.58	4.19	8.37	2.14	1.17	0.32	0.37	0.30	0.23
(WY)	(1982)	(1972)	(1977)	(1977)	(1996)	(1987)	(1986)	(1992)	(1972)	(1974)	(1980)	(1976)

03611260 MASSAC CREEK NEAR PADUCAH, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1972 - 2004	
ANNUAL TOTAL	7,227.40		3,846.82		17.5	
ANNUAL MEAN	19.8		10.5		37.9	
HIGHEST ANNUAL MEAN					6.54	
LOWEST ANNUAL MEAN					1,910	
HIGHEST DAILY MEAN	711	Jun 11	352	Jun 16	1,910	Jan 3, 2000
LOWEST DAILY MEAN	0.37	Oct 24	0.37	Oct 24	0.09	Nov 13, 1971
ANNUAL SEVEN-DAY MINIMUM	0.48	Aug 20	0.43	Aug 13	0.10	Nov 10, 1971
MAXIMUM PEAK FLOW			1,340	Jun 16	5,990	Sep 5, 1985
MAXIMUM PEAK STAGE			10.21	Jun 16	15.86	Sep 5, 1985
INSTANTANEOUS LOW FLOW					0.06	Nov 14, 1971
10 PERCENT EXCEEDS	39		21		28	
50 PERCENT EXCEEDS	2.9		2.0		2.2	
90 PERCENT EXCEEDS	0.59		0.53		0.45	



03611500 OHIO RIVER AT METROPOLIS, IL

LOCATION.--Lat 37°08'51", long 88°44'27", Massac County IL., 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 with telemetry. Datum of gage is 276.27 ft above NGVD of 1929. 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.--Records fair except those below 100,000 ft³/s and those estimated, which are poor. Flow regulated by many dams and reservoirs. Maximum daily discharge includes overflow through Bay Creek and Cache River Valleys.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet and U.S. Army Corps of Engineers, Louisville District and National Stream Quality Accounting Network.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282,000	226,000	593,000	474,000	286,000	270,000	303,000	339,000	575,000	319,000	227,000	211,000
2	254,000	212,000	627,000	483,000	269,000	231,000	315,000	370,000	606,000	234,000	269,000	225,000
3	249,000	208,000	e633,000	480,000	262,000	244,000	331,000	404,000	630,000	e203,000	289,000	204,000
4	232,000	201,000	e625,000	487,000	298,000	294,000	338,000	424,000	635,000	176,000	255,000	e173,000
5	210,000	195,000	e540,000	528,000	336,000	357,000	347,000	416,000	627,000	152,000	223,000	e139,000
6	214,000	149,000	e462,000	555,000	e460,000	410,000	375,000	391,000	629,000	156,000	199,000	e105,000
7	217,000	e143,000	e430,000	590,000	e675,000	450,000	398,000	331,000	632,000	176,000	200,000	e108,000
8	205,000	e212,000	e415,000	623,000	725,000	474,000	416,000	255,000	620,000	159,000	209,000	117,000
9	197,000	e219,000	362,000	661,000	774,000	631,000	411,000	221,000	587,000	157,000	208,000	144,000
10	e182,000	244,000	354,000	694,000	823,000	696,000	371,000	228,000	550,000	175,000	165,000	191,000
11	e159,000	242,000	360,000	723,000	855,000	724,000	295,000	200,000	486,000	165,000	e120,000	211,000
12	e139,000	237,000	374,000	750,000	875,000	710,000	197,000	166,000	389,000	146,000	e90,000	263,000
13	e137,000	229,000	365,000	772,000	869,000	709,000	167,000	151,000	294,000	169,000	e98,000	342,000
14	e158,000	258,000	377,000	786,000	838,000	714,000	198,000	131,000	287,000	190,000	e115,000	414,000
15	e162,000	283,000	409,000	788,000	823,000	708,000	275,000	160,000	356,000	191,000	e110,000	465,000
16	e174,000	317,000	434,000	773,000	786,000	693,000	339,000	238,000	397,000	203,000	e92,000	489,000
17	e207,000	381,000	437,000	739,000	739,000	646,000	384,000	276,000	411,000	212,000	e99,000	453,000
18	e200,000	452,000	455,000	697,000	646,000	532,000	423,000	290,000	414,000	190,000	e96,000	385,000
19	194,000	503,000	450,000	639,000	502,000	360,000	475,000	249,000	389,000	190,000	e88,000	326,000
20	198,000	497,000	460,000	566,000	337,000	208,000	503,000	225,000	373,000	191,000	e82,000	382,000
21	210,000	433,000	463,000	495,000	269,000	213,000	518,000	255,000	384,000	e150,000	e90,000	488,000
22	218,000	410,000	460,000	445,000	283,000	270,000	525,000	278,000	388,000	e127,000	e122,000	543,000
23	202,000	444,000	449,000	423,000	292,000	294,000	549,000	278,000	382,000	e129,000	e160,000	554,000
24	155,000	508,000	417,000	400,000	290,000	296,000	565,000	298,000	370,000	140,000	226,000	538,000
25	116,000	527,000	382,000	357,000	303,000	311,000	531,000	301,000	368,000	138,000	233,000	510,000
26	146,000	559,000	376,000	322,000	313,000	316,000	497,000	303,000	332,000	128,000	242,000	515,000
27	176,000	594,000	398,000	298,000	318,000	298,000	459,000	377,000	311,000	115,000	249,000	518,000
28	185,000	615,000	425,000	289,000	316,000	290,000	418,000	423,000	355,000	92,800	219,000	486,000
29	182,000	612,000	451,000	271,000	306,000	285,000	375,000	432,000	365,000	118,000	195,000	383,000
30	186,000	598,000	472,000	282,000	---	281,000	337,000	482,000	347,000	212,000	207,000	138,000
31	217,000	---	470,000	291,000	---	284,000	---	532,000	---	222,000	207,000	---
TOTAL	5,963,000	10,708,000	13,925,000	16,681,000	14,868,000	13,199,000	11,635,000	9,424,000	13,489,000	5,325,800	5,384,000	10,020,000
MEAN	192,400	356,900	449,200	538,100	512,700	425,800	387,800	304,000	449,600	171,800	173,700	334,000
MAX	282,000	615,000	633,000	788,000	875,000	724,000	565,000	532,000	635,000	319,000	289,000	554,000
MIN	116,000	143,000	354,000	271,000	262,000	208,000	167,000	131,000	287,000	92,800	82,000	105,000

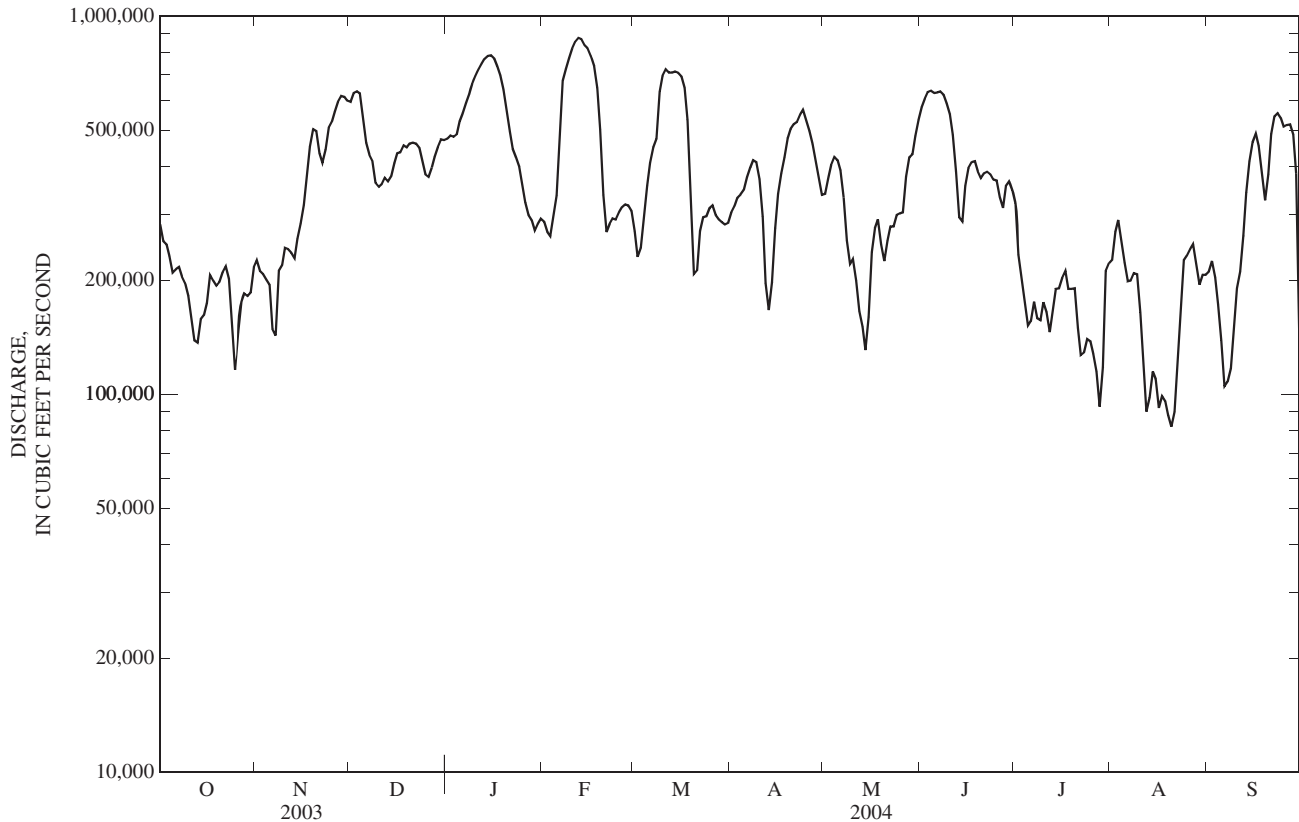
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

	MEAN	105,500	167,300	293,200	394,200	469,100	521,300	453,400	343,600	224,700	154,900	123,900	105,000
MAX	335,600	450,300	717,500	1,022,000	1,217,000	1,039,000	896,400	917,800	596,400	441,200	331,100	383,500	
(WY)	(1980)	(1986)	(1973)	(1937)	(1937)	(1997)	(1994)	(1983)	(1997)	(1928)	(1958)	(1979)	
MIN	22,710	33,400	48,610	71,650	77,380	154,700	129,900	75,180	53,840	23,350	25,390	29,330	
(WY)	(1931)	(1931)	(1931)	(1940)	(1934)	(1941)	(1986)	(1941)	(1936)	(1930)	(1930)	(1930)	

03611500 OHIO RIVER AT METROPOLIS, IL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	140,255,000		130,621,800		278,000	
ANNUAL MEAN	384,300		356,900		436,600	
HIGHEST ANNUAL MEAN					120,300	
LOWEST ANNUAL MEAN					1,850,000	
HIGHEST DAILY MEAN	1,010,000	Feb 27	875,000	Feb 12	1,850,000	Feb 1, 1937
LOWEST DAILY MEAN	100,000	Jun 29	82,000	Aug 20	15,000	Jul 20, 1930
ANNUAL SEVEN-DAY MINIMUM	135,000	Jan 26	93,900	Aug 15	16,600	Jul 20, 1930
MAXIMUM PEAK FLOW			881,000	Feb 13	1,850,000	Feb 1, 1937
MAXIMUM PEAK STAGE			47.71	Feb 13	66.60	Feb 2, 1937
10 PERCENT EXCEEDS	748,000		629,000		637,000	
50 PERCENT EXCEEDS	317,000		318,000		193,000	
90 PERCENT EXCEEDS	169,000		152,000		69,100	

e Estimated



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 with telemetry. Datum of gage is 366.06 ft above NGVD of 1929 (levels by U.S. Department of Energy).

REMARKS.--Records fair except those estimated, which are poor.

COOPERATION.--Kentucky Cabinet for Health Services.

EXTREMES FOR CURRENT YEAR.--No peak discharges greater than base discharge of 900 ft³/s and maximum (*):

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 30	2230	*1,100	*6.83				
							No other peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.21	0.61	e0.98	e3.9	e0.94	18	1.4	4.2	2.3	0.31	0.35	0.22
2	0.19	0.52	e0.85	e18	6.0	3.1	1.2	6.0	1.4	0.32	0.39	0.24
3	0.21	0.57	e0.47	e3.4	e6.1	21	1.0	4.7	0.97	0.48	0.41	0.24
4	0.23	0.64	e0.85	e1.8	e2.0	13	0.94	2.4	0.78	0.73	0.36	0.23
5	0.25	0.73	e0.98	e10	e10	5.8	0.90	1.7	0.71	0.31	0.38	0.23
6	0.27	0.83	e0.55	e5.1	21	3.5	0.86	1.3	0.65	0.33	0.35	0.22
7	0.26	0.85	e0.41	e2.2	e5.4	2.2	0.83	0.99	0.91	0.36	0.34	0.22
8	0.26	0.85	e0.35	e1.8	e2.1	1.7	e0.86	0.71	0.68	0.30	0.34	0.20
9	0.27	0.85	e0.41	0.88	e1.8	1.6	0.80	0.60	0.58	0.30	0.33	0.17
10	0.29	0.80	e1.3	0.60	e1.7	1.3	0.87	2.7	0.63	0.33	0.32	0.16
11	0.26	0.85	e0.55	0.48	e1.5	1.2	0.88	e1.2	0.75	0.35	0.34	0.16
12	0.25	0.90	e0.35	0.47	e1.3	1.0	1.6	0.74	3.4	0.38	0.38	0.16
13	0.31	0.66	e0.35	0.43	e0.98	0.93	1.5	0.75	10	0.37	0.31	0.16
14	0.39	0.77	e0.47	0.41	1.2	0.94	1.2	1.1	1.9	0.36	0.30	0.17
15	0.30	1.3	e0.26	0.39	0.95	e0.92	1.1	2.6	e2.8	0.38	0.29	0.15
16	0.30	0.99	e0.47	0.35	0.67	e1.4	1.1	e1.7	37	0.41	0.28	e0.16
17	1.6	0.88	e0.35	0.79	0.62	1.2	1.1	1.5	1.3	0.36	0.28	0.17
18	0.38	7.4	e0.35	22	0.57	1.0	1.1	1.2	16	0.34	0.26	0.14
19	0.29	2.6	e0.41	e2.6	0.61	0.89	1.2	0.76	6.6	0.33	0.25	0.15
20	0.25	0.63	e0.26	e1.9	0.59	3.5	1.2	0.57	0.95	0.32	0.32	0.14
21	e0.31	0.37	e0.22	e1.6	0.50	3.2	1.2	0.51	0.45	0.32	0.33	0.14
22	0.35	0.35	e0.24	0.86	0.45	1.7	3.2	0.52	0.35	0.31	0.27	0.14
23	0.38	9.8	e2.8	0.65	e0.45	1.4	19	0.57	0.28	0.35	0.32	0.15
24	0.38	13	e1.1	0.63	0.42	1.3	e4.7	0.62	0.20	0.36	0.36	e0.17
25	0.48	e1.8	e0.49	13	0.44	1.2	12	0.63	0.19	0.43	0.35	0.17
26	0.52	e0.98	e0.26	e5.4	0.43	1.1	3.3	1.1	0.17	0.35	0.29	0.15
27	0.51	e39	e0.30	e1.9	0.38	1.0	2.0	0.94	0.17	0.32	0.24	0.15
28	0.59	e17	e0.22	e1.6	0.38	1.00	1.5	0.76	0.21	0.33	0.33	0.14
29	0.56	e5.7	e19	e1.3	0.39	3.2	1.2	0.76	0.24	0.35	0.37	0.16
30	0.54	e2.6	e3.9	e1.1	---	2.0	2.2	109	0.25	0.52	0.31	0.17
31	0.55	---	e1.3	e1.0	---	1.6	---	26	---	0.39	0.23	---
TOTAL	11.94	114.83	40.80	106.54	69.87	102.88	71.94	178.83	92.82	11.40	9.98	5.23
MEAN	0.39	3.83	1.32	3.44	2.41	3.32	2.40	5.77	3.09	0.37	0.32	0.17
MAX	1.6	39	19	22	21	21	19	109	37	0.73	0.41	0.24
MIN	0.19	0.35	0.22	0.35	0.38	0.89	0.80	0.51	0.17	0.30	0.23	0.14
CFSM	0.06	0.58	0.20	0.52	0.37	0.51	0.37	0.88	0.47	0.06	0.05	0.03
IN.	0.07	0.65	0.23	0.61	0.40	0.58	0.41	1.02	0.53	0.06	0.06	0.03

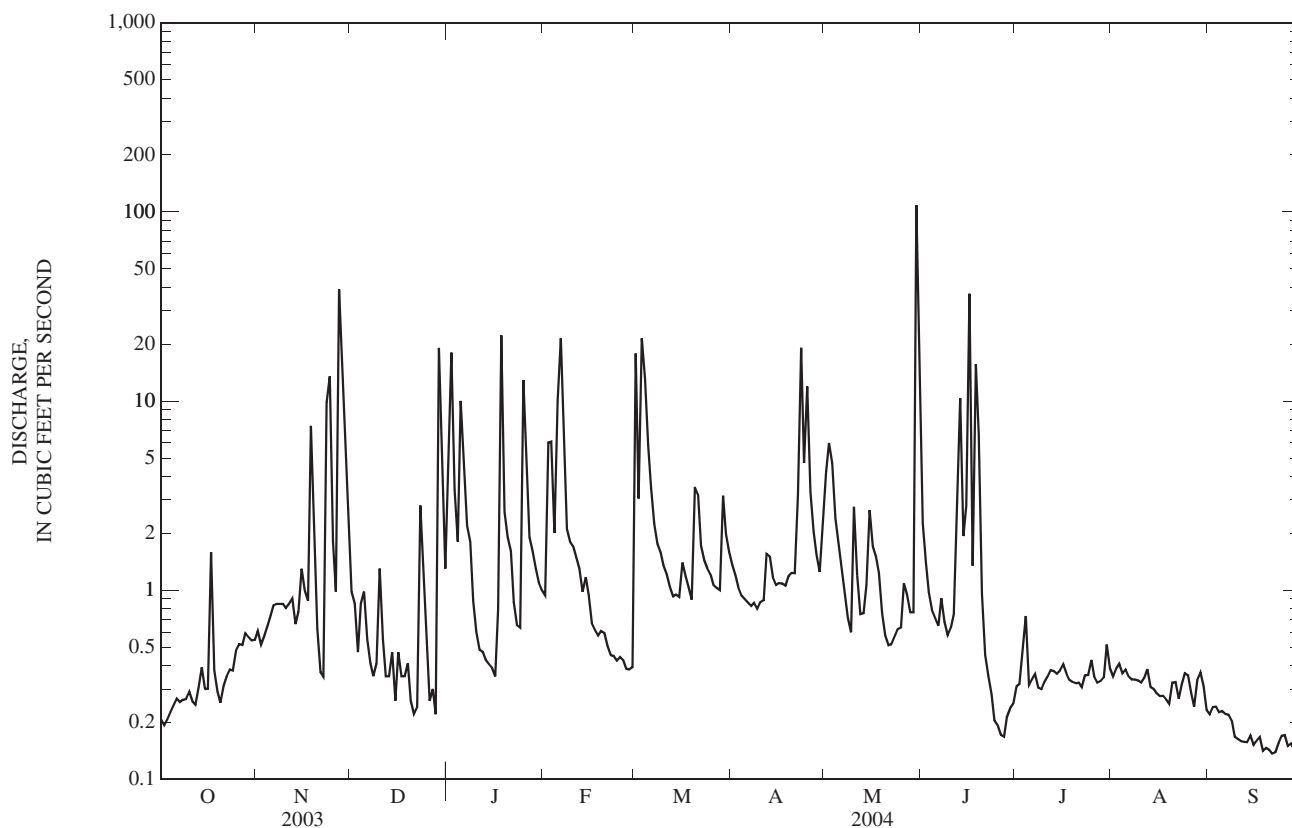
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1.71	5.30	10.9	9.57	11.3	10.0	8.27	9.26	4.23	2.45	1.35	0.85
MAX	9.97	22.8	37.2	24.4	29.2	34.9	16.6	31.2	16.6	7.59	8.31	2.73
(WY)	(2002)	(1997)	(1991)	(1999)	(2003)	(1997)	(1994)	(2002)	(1998)	(1998)	(1998)	(2002)
MIN	0.21	0.21	0.50	0.89	0.60	3.26	2.40	0.56	0.17	0.09	0.12	0.15
(WY)	(1998)	(2000)	(1998)	(2001)	(1996)	(1995)	(2004)	(1994)	(1994)	(1993)	(1993)	(1998)

03611800 BAYOU CREEK NEAR HEATH, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	2,199.86		817.06		6.30	
ANNUAL MEAN	6.03		2.23		13.2	
HIGHEST ANNUAL MEAN					2.23	
LOWEST ANNUAL MEAN					710	
HIGHEST DAILY MEAN	178	Jun 11	109	May 30	1,870	Mar 1, 1997
LOWEST DAILY MEAN	0.15	Sep 28	0.14	Sep 18	0.02	Oct 13, 2002
ANNUAL SEVEN-DAY MINIMUM	0.19	Sep 28	0.15	Sep 17	0.03	Oct 12, 2002
MAXIMUM PEAK FLOW					9.90	
MAXIMUM PEAK STAGE					0.962	
ANNUAL RUNOFF (CFSM)	0.920		0.341		13.06	
ANNUAL RUNOFF (INCHES)	12.49		4.64		6.4	
10 PERCENT EXCEEDS	11		3.6		0.50	
50 PERCENT EXCEEDS	0.71		0.62		0.16	
90 PERCENT EXCEEDS	0.26		0.23			

e Estimated



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 with telemetry. Datum of gage is 330 ft above NGVD of 1929 (from topographic map).

REMARKS.--Records fair except for those estimated, which are poor.

COOPERATION.--Kentucky Cabinet for Health Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	0015	*1,340	*10.75				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	7.3	e15	e57	5.6	140	5.3	16	e12	e7.0	5.6	6.2
2	8.0	7.0	e12	e148	74	24	5.2	28	e8.0	7.4	5.4	6.4
3	7.7	7.0	e9.6	e43	e105	137	5.0	14	e6.4	7.7	5.3	6.3
4	7.6	7.0	e12	e31	e10	156	4.9	5.8	e5.5	20	5.3	6.4
5	7.6	6.9	e14	e68	146	63	4.9	5.3	e5.1	7.8	5.3	6.3
6	7.6	7.1	e15	e94	228	30	4.8	5.2	e4.8	10	4.6	6.2
7	7.4	6.9	e14	e22	e61	15	4.7	5.1	e6.0	13	4.4	6.3
8	7.4	6.8	e11	e11	e25	11	4.6	5.0	e4.9	7.3	4.2	6.4
9	7.3	6.8	e11	11	e22	12	4.6	4.9	e4.3	7.2	4.2	6.4
10	8.3	6.7	e17	9.8	15	9.8	4.6	17	e4.6	6.2	4.3	6.4
11	7.0	7.4	e14	9.4	11	9.0	4.6	5.2	e4.9	6.4	4.5	6.3
12	6.9	7.6	e12	9.5	11	7.5	6.2	5.0	e15	6.6	4.6	6.3
13	6.9	7.0	e13	9.4	9.2	7.1	5.0	5.3	50	6.4	4.6	6.3
14	9.0	7.2	e13	9.5	8.0	7.1	5.1	5.3	e13	6.2	4.6	6.5
15	7.2	11	e13	9.3	7.5	6.9	4.8	6.9	e18	5.7	4.6	6.3
16	7.0	7.8	e11	9.3	8.8	9.1	4.7	5.3	151	5.4	4.7	6.4
17	13	7.4	e10	14	7.6	6.8	4.5	5.4	e10	6.1	4.9	6.4
18	7.3	45	e9.8	191	6.6	6.5	4.5	5.1	e68	6.2	5.1	6.3
19	7.0	21	e9.5	19	6.7	6.0	4.5	4.9	100	6.0	5.1	6.2
20	6.9	9.5	e9.5	e12	6.5	47	4.4	4.7	e12	5.7	6.2	6.3
21	6.9	8.5	e9.5	7.2	6.2	24	4.6	4.6	e8.0	5.2	6.4	6.1
22	6.7	8.5	e12	7.0	5.5	7.5	22	4.5	e6.5	5.6	6.4	6.2
23	6.9	37	e30	6.0	5.3	6.2	107	4.5	e5.8	6.3	8.2	6.1
24	7.0	144	e13	5.8	5.4	6.4	19	4.5	e5.3	5.1	8.8	6.1
25	8.4	e14	e12	119	5.3	5.8	68	4.5	e5.0	5.4	8.0	6.0
26	8.2	e8.2	e11	68	5.2	5.3	11	15	e4.6	5.7	7.1	5.7
27	7.4	e213	e11	20	5.1	5.2	6.6	5.1	e4.4	6.2	7.0	5.7
28	7.5	e129	e9.5	e12	5.0	5.0	5.8	4.7	e5.0	5.8	6.7	6.2
29	7.4	e36	e118	7.1	4.8	12	5.1	4.7	e5.4	6.0	6.7	6.5
30	7.0	e22	e47	6.1	---	6.0	11	106	e5.6	14	6.0	6.6
31	7.1	---	e19	6.1	---	5.6	---	187	---	6.4	6.1	---
TOTAL	236.3	820.6	537.4	1,051.5	822.3	799.8	357.0	504.5	559.1	226.0	174.9	187.8
MEAN	7.62	27.4	17.3	33.9	28.4	25.8	11.9	16.3	18.6	7.29	5.64	6.26
MAX	13	213	118	191	228	156	107	187	151	20	8.8	6.6
MIN	6.7	6.7	9.5	5.8	4.8	5.0	4.4	4.5	4.3	5.1	4.2	5.7
CFSM	0.51	1.84	1.16	2.28	1.90	1.73	0.80	1.09	1.25	0.49	0.38	0.42
IN.	0.59	2.05	1.34	2.63	2.05	2.00	0.89	1.26	1.40	0.56	0.44	0.47

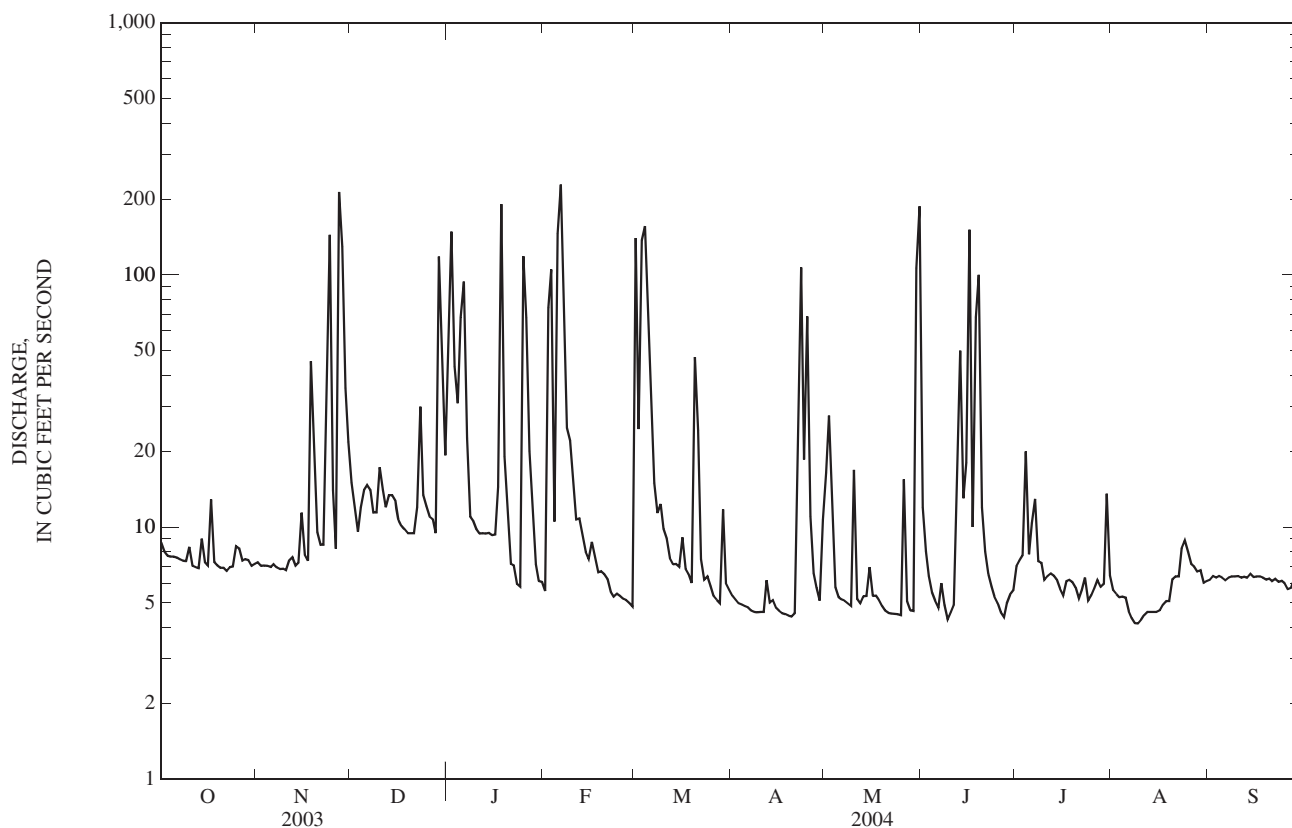
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	10.5	19.7	30.7	28.4	33.6	29.8	28.2	28.2	17.8	13.0	11.5	9.45		
MAX	29.0	56.7	85.9	55.8	79.4	77.5	50.7	69.6	32.4	27.4	21.4	16.4		
(WY)	(2002)	(1997)	(2002)	(1999)	(2003)	(1997)	(2003)	(2002)	(1998)	(2001)	(1998)	(2002)		
MIN	4.87	4.32	6.66	7.02	6.13	15.0	11.9	8.86	7.56	6.37	5.64	5.11		
(WY)	(2001)	(2000)	(1996)	(2001)	(1996)	(1995)	(2004)	(2001)	(1991)	(1994)	(2004)	(1997)		

03611850 BAYOU CREEK NEAR GRAHAMVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	10,530.2		6,277.2		21.8	
ANNUAL MEAN	28.8		17.2		36.8	
HIGHEST ANNUAL MEAN					14.7	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	496	Feb 22	228	Feb 6	923	Mar 1, 1997
LOWEST DAILY MEAN	6.0	Jun 5	4.2	Aug 8	1.9	Oct 9, 1996
ANNUAL SEVEN-DAY MINIMUM	6.3	Jun 4	4.4	Aug 6	2.7	Oct 2, 1997
MAXIMUM PEAK FLOW			1,340	May 31	1,750	Mar 1, 1997
MAXIMUM PEAK STAGE			10.75	May 31	12.60	Mar 1, 1997
ANNUAL RUNOFF (CFSM)	1.94		1.15		1.47	
ANNUAL RUNOFF (INCHES)	26.29		15.67		19.92	
10 PERCENT EXCEEDS	46		30		30	
50 PERCENT EXCEEDS	9.5		6.9		8.7	
90 PERCENT EXCEEDS	7.0		4.8		5.0	

e Estimated



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 with telemetry. Datum of gage is 324.80 ft above NGVD of 1929 (levels by U.S. Department of Energy).

REMARKS.--Records fair except for those estimated, which are poor. Some regulation from Paducah Gaseous Diffusion Plant, 0.4 mi upstream.

COOPERATION.--Kentucky Cabinet for Health Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 30	2300	*423	*6.41				
						No other peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	6.4	e1.9	e4.6	e0.75	27	5.5	10	2.3	0.89	1.1	0.97
2	0.83	5.9	e1.7	e34	8.4	8.6	5.0	15	1.1	0.93	1.1	0.73
3	0.83	5.2	e1.4	e6.3	15	26	4.5	10	0.94	1.0	1.2	0.68
4	0.83	5.2	e1.7	e19	e4.1	28	3.6	5.9	0.86	3.5	1.2	0.71
5	0.80	4.5	e1.9	e17	22	11	3.6	3.3	0.84	0.81	1.4	0.74
6	0.79	3.4	e1.5	e4.7	33	7.0	4.0	1.8	0.87	1.1	0.88	1.2
7	0.79	2.8	e1.3	e2.8	12	5.5	3.6	0.90	0.84	1.7	0.61	0.96
8	0.89	2.9	e1.2	e1.6	e4.7	6.7	3.2	0.73	0.81	0.80	0.61	0.86
9	1.2	3.0	e1.2	1.6	5.1	6.8	2.4	0.62	0.82	0.77	0.61	1.0
10	2.0	4.5	e2.1	1.3	5.0	6.6	2.4	2.0	0.81	0.74	0.66	1.1
11	1.4	4.4	e1.5	1.2	4.2	5.7	2.5	0.78	0.82	0.89	0.62	1.1
12	1.6	4.8	e1.2	1.2	4.1	5.3	4.3	0.74	3.1	1.2	0.68	1.2
13	2.8	7.9	e1.2	1.2	3.4	5.5	2.8	0.81	3.8	1.1	0.67	1.3
14	4.7	9.0	e1.3	1.2	3.2	5.9	1.5	0.95	1.3	1.1	0.68	1.1
15	2.3	14	e1.1	1.2	2.8	5.9	1.1	3.1	3.3	1.1	0.67	1.2
16	2.4	13	e1.4	1.1	2.0	7.4	2.0	1.1	29	1.1	0.67	1.4
17	4.7	13	e1.2	2.3	1.9	5.9	2.0	0.88	2.1	1.1	0.68	1.4
18	1.5	18	e1.2	32	1.9	6.5	1.8	0.85	11	1.2	0.67	1.5
19	1.4	7.5	e1.2	e5.8	1.7	5.8	1.8	0.64	14	1.1	0.66	1.4
20	1.8	4.1	e1.1	e2.2	e2.2	12	1.9	0.55	1.6	1.2	0.87	1.5
21	2.5	3.3	e0.95	e2.0	e2.7	9.7	2.0	0.52	1.0	1.2	0.77	1.5
22	2.9	3.8	e0.95	2.1	e2.4	6.8	6.9	0.50	1.1	1.2	0.64	1.5
23	3.1	9.1	e3.4	2.0	e2.8	6.0	20	0.49	0.97	1.6	1.2	1.5
24	4.8	19	e2.0	2.0	3.3	5.6	8.7	0.49	0.86	1.3	1.4	1.5
25	4.9	e2.6	e1.4	15	3.3	5.9	17	0.46	0.90	1.6	1.8	1.6
26	3.7	e1.9	e1.1	e12	3.4	4.9	6.2	3.0	0.86	1.5	0.77	1.6
27	2.2	e71	e1.1	e4.4	3.3	4.3	3.3	1.3	0.86	1.3	0.49	1.8
28	2.3	e30	e0.95	e2.2	3.5	3.8	2.4	0.64	0.87	1.3	0.83	1.7
29	2.3	e4.9	e18	e1.6	3.5	8.9	2.6	0.51	0.94	1.2	1.3	1.8
30	4.2	e3.2	e6.0	e1.2	---	7.3	7.8	37	0.96	2.9	0.86	1.8
31	6.8	---	e2.6	e1.1	---	6.2	---	50	---	1.5	0.92	---
TOTAL	74.66	288.3	66.75	187.9	165.65	268.5	136.4	155.56	89.53	39.93	27.22	38.35
MEAN	2.41	9.61	2.15	6.06	5.71	8.66	4.55	5.02	2.98	1.29	0.88	1.28
MAX	6.8	71	18	34	33	28	20	50	29	3.5	1.8	1.8
MIN	0.79	1.9	0.95	1.1	0.75	3.8	1.1	0.46	0.81	0.74	0.49	0.68
CFSM	0.42	1.66	0.37	1.05	0.99	1.50	0.79	0.87	0.52	0.22	0.15	0.22
IN.	0.48	1.86	0.43	1.21	1.07	1.73	0.88	1.00	0.58	0.26	0.18	0.25

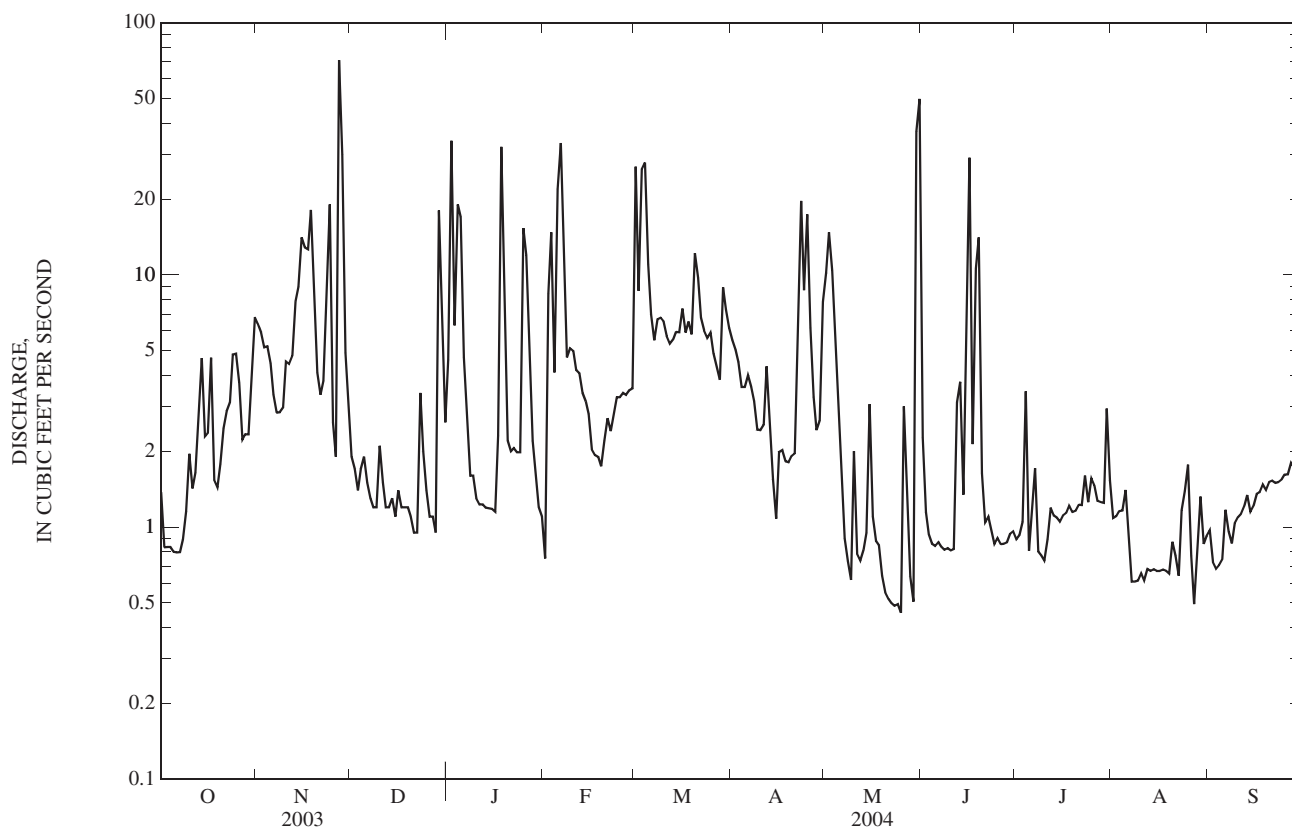
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

	2.54	5.87	9.90	9.52	10.2	10.5	9.06	9.69	4.09	2.80	1.94	1.61
MEAN	2.54	5.87	9.90	9.52	10.2	10.5	9.06	9.69	4.09	2.80	1.94	1.61
MAX	7.45	18.3	33.5	20.4	20.2	32.5	19.2	31.3	12.4	8.74	8.11	3.13
(WY)	(2002)	(1997)	(1991)	(1999)	(2003)	(1997)	(1994)	(2002)	(1998)	(2001)	(1998)	(2003)
MIN	1.16	0.71	1.26	1.17	1.02	3.79	2.25	1.48	0.91	0.82	0.72	0.78
(WY)	(2001)	(2000)	(1996)	(2001)	(1996)	(1995)	(2001)	(1994)	(2002)	(1991)	(1996)	(1998)

03611900 LITTLE BAYOU CREEK NEAR GRAHAMVILLE, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	2,483.04		1,538.75		6.52	
ANNUAL MEAN	6.80		4.20		12.4	
HIGHEST ANNUAL MEAN					3.75	
LOWEST ANNUAL MEAN					506	
HIGHEST DAILY MEAN	133	Jun 11	71	Nov 27	506	Mar 1, 1997
LOWEST DAILY MEAN	0.63	Sep 28	0.46	May 25	0.02	May 25, 1995
ANNUAL SEVEN-DAY MINIMUM	0.82	Oct 2	0.52	May 19	0.35	Aug 2, 2001
MAXIMUM PEAK FLOW					1,300	Mar 1, 1997
MAXIMUM PEAK STAGE					11.26	Mar 1, 1997
ANNUAL RUNOFF (CFSM)	1.18		0.727		1.13	
ANNUAL RUNOFF (INCHES)	15.98		9.90		15.32	
10 PERCENT EXCEEDS	13		8.9		9.3	
50 PERCENT EXCEEDS	1.7		1.8		1.3	
90 PERCENT EXCEEDS	1.1		0.78		0.70	

e Estimated



03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

LOCATION.--Lat 37°12'11, long 89°02'30, Pulaski County, Hydrologic Unit 05140206, at auxilliary gaging station, 0.5 mi upstream from Gar Creek, 3.0 mi southwest of Grand Chain, IL, 18.1 mi downstream from gaging station at Metropolis, and at mile 962.2.

DRAINAGE AREA.--203,100 mi², approximately

WATER-QUALITY RECORDS

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 gaging station at Metropolis, IL (station 03611500). Flow regulated by many dams and reservoirs.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum daily recorded, 693 microsiemens, Nov. 25, 1968; minimum daily recorded, 170 microsiemens, Feb. 9, 1957.

WATER TEMPERATURES.--Maximum daily recorded, 30.0°C, July 15, 1964, July 17-21, 25, 1977; minimum daily recorded, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unflab. Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)
NOV												
05...	1350	Environmental	187,000	17	0.075	0.055	9.8	102	8.0	328	18.0	130
05...	1400	Replicate	--	--	--	--	--	--	--	--	--	--
DEC												
03...	1400	Environmental	608,000	100	.099	.075	11.2	97	7.7	271	9.0	130
03...	1408	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
03...	1410	Replicate	--	--	--	--	--	--	--	--	--	--
JAN												
21...	1330	Environmental	487,000	74	.085	.064	12.6	94	7.6	324	3.5	140
FEB												
04...	1330	Environmental	290,000	24	.056	.041	14.5	104	7.7	344	2.5	140
MAR												
10...	1430	Environmental	662,000	68	.063	.047	13.2	112	7.8	351	9.0	130
10...	1440	Replicate	--	72	.064	.048	--	--	--	--	--	130
24...	1310	Environmental	294,000	44	.062	.046	11.7	102	7.9	272	10.5	120
24...	1318	Field Blank	--	--	--	--	--	--	--	--	--	--
APR												
20...	1340	Environmental	474,000	100	.069	.051	10.4	100	7.8	343	14.0	130
27...	1430	Environmental	459,000	69	.077	.057	9.3	94	7.6	285	16.0	120
27...	1438	Field Blank	--	--	--	--	--	--	--	--	--	--
MAY												
19...	1410	Environmental	237,000	20	.068	.050	9.4	106	7.9	305	22.0	130
26...	1250	Environmental	296,000	47	.072	.054	8.4	100	7.8	407	24.0	160
26...	1300	Replicate	--	51	.069	.051	--	--	--	--	--	160
JUN												
08...	1120	Environmental	620,000	74	.137	.103	6.1	70	7.4	250	23.0	110
08...	1128	Field Blank	--	--	<.004	<.004	--	--	--	--	--	--
23...	1410	Environmental	373,000	98	.098	.073	7.0	84	7.7	308	26.0	130
23...	1418	Field Blank	--	--	--	--	--	--	--	--	--	--
JUL												
21...	1350	Environmental	166,000	17	.085	.063	7.9	101	7.9	283	28.5	120
AUG												
25...	1310	Environmental	222,000	20	.087	.065	7.9	97	7.8	338	26.5	140
SEP												
01...	1300	Environmental	189,000	19	.096	.073	6.6	80	7.5	267	26.5	110

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
NOV 05...	34.3	9.56	2.62	13.4	87	106	16.6	<0.2	5.57	42.4	196	0.24	0.41
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	36.2	8.94	2.68	7.92	82	100	11.6	<.2	6.89	31.9	158	.26	.70
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 21...	37.3	10.2	2.61	9.23	90	110	13.2	<.2	6.43	36.3	185	.27	.60
FEB 04...	39.4	9.68	2.15	10.5	94	115	12.9	<.2	5.81	37.8	186	.22	.41
MAR 10...	36.5	9.51	2.08	13.8	86	105	20.4	<.2	5.16	43.9	201	.19	.58
10...	37.2	9.64	2.15	14.0	84	102	20.1	<.2	5.26	42.7	200	.23	.55
24...	34.4	8.74	1.97	10.5	78	95	14.2	<.2	4.72	38.0	174	.19	.47
24...	0.03	<0.008	--	E0.08	--	--	--	--	E0.03	--	--	--	--
APR 20...	36.2	9.27	2.00	14.3	80	98	19.8	<.2	4.62	48.8	202	.18	.72
27...	35.3	8.84	2.17	11.4	84	103	13.4	<.2	4.90	40.9	178	.23	.56
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 19...	38.2	9.32	2.22	11.2	87	107	14.6	<.2	3.91	37.3	185	.20	.47
26...	43.2	13.2	2.39	15.5	99	121	22.6	<.2	3.48	60.8	233	.25	.64
26...	42.6	12.6	2.22	17.2	100	122	22.0	<.2	3.56	58.2	238	.27	.63
JUN 08...	30.7	7.01	3.02	7.16	77	94	9.23	<.2	6.46	28.7	161	.24	.70
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	36.1	8.86	2.78	9.74	91	111	12.5	<.2	5.99	34.6	186	.18	.64
23...	.02	<.008	--	E.09	--	--	--	--	.06	--	--	--	--
JUL 21...	35.0	8.67	2.76	11.3	84	102	13.9	<.2	4.83	35.5	169	.25	.45
AUG 25...	37.1	10.7	2.83	15.9	88	107	19.3	<.2	3.17	47.6	198	.28	.55
SEP 01...	30.8	7.99	3.11	12.1	73	90	13.7	<.2	4.94	33.6	157	.25	.49

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)
NOV 05...	<0.04	0.89	0.008	0.18	0.033	0.046	0.10	1.3	<0.1	1.2	2.8	12.2	9.8
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	<.04	1.25	.009	.42	.037	.047	.29	5.7	.2	5.4	3.2	6.4	3.1
03...	--	--	--	<.02	--	--	--	<0.1	<.1	<0.1	0.3	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 21...	E.02	1.48	.009	.36	.041	.047	.22	4.6	<.1	4.6	3.2	3.7	4.0
FEB 04...	E.03	1.15	.008	.14	.025	.033	.11	1.3	<.1	1.3	2.1	2.7	2.6
MAR 10...	E.04	1.23	.018	.39	.033	.040	.21	4.9	<.1	4.8	2.4	4.1	3.6
10...	.04	1.22	.019	.35	.032	.042	.21	3.8	<.1	3.8	2.4	4.5	3.6
24...	<.04	1.13	.014	.28	.017	.027	.13	2.5	<.1	2.5	2.4	6.7	8.6
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 20...	<.04	1.00	.024	.47	.018	.056	.27	6.1	.2	5.9	2.6	5.1	4.5
27...	<.04	.92	.024	.28	.019	.030	.17	3.1	<.1	3.1	2.7	7.9	6.5
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 19...	<.04	1.03	.015	.24	.015	.026	.09	1.6	<.1	1.6	3.7	14.0	16.2
26...	<.04	1.28	E.006	.37	.021	.037	.16	3.1	<.1	3.1	2.6	19.8	14.4
26...	<.04	1.26	E.006	.39	.021	.037	.16	3.4	<.1	3.4	2.5	20.2	14.5
JUN 08...	<.04	1.38	.011	.34	.039	.051	.23	3.6	.1	3.4	4.3	4.8	4.2
08...	--	--	--	<.02	--	--	--	<.1	<.1	<.1	E.3	--	--
23...	<.04	1.89	<.008	.38	.044	.056	.22	4.2	<.1	4.2	3.2	7.5	8.6
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.04	.86	.014	.25	.029	.041	.08	1.5	<.1	1.4	2.7	12.2	15.9
AUG 25...	<.04	.50	.009	.40	.018	.032	.13	2.7	<.1	2.7	3.2	20.3	23.6
SEP 01...	<.04	.52	.030	.20	.043	.052	.11	1.3	<.1	1.3	3.4	11.3	15.0

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alum- inum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)
NOV													
05...	3	E0.16	0.8	33	<0.06	50	<0.04	<0.8	0.141	1.4	<6	<0.08	3.3
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
03...	--	--	.6	--	--	30	--	--	--	--	16	--	2.0
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
21...	5	E.10	.6	32	<.06	30	<.04	<.8	.171	1.4	12	<.08	2.0
FEB													
04...	6	E.10	.5	30	<.06	29	<.04	<.8	.176	1.0	11	<.08	2.2
MAR													
10...	6	E.10	.4	35	<.06	33	<.04	<.8	.150	1.2	8	<.08	3.2
10...	6	E.12	.4	34	<.06	31	<.04	<.8	.151	1.2	10	<.08	3.1
24...	11	<.20	.4	30	<.06	25	<.04	<.8	.132	1.1	9	<.08	2.2
24...	<2	<.20	<.2	<0.2	<.06	<8	<.04	<.8	<.014	<0.4	<6	<.08	<0.6
APR													
20...	11	E.11	.4	34	<.06	31	<.04	<.8	.129	1.3	E4	<.08	3.3
27...	--	--	.4	--	--	30	--	--	--	--	8	--	2.6
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	6	E.10	.6	30	<.06	36	<.04	<.8	.156	1.4	<6	E.07	2.8
26...	8	E.13	.7	39	<.06	43	E.02	<.8	.197	1.8	<6	<.08	4.5
26...	8	E.13	.6	39	<.06	43	E.03	<.8	.199	1.7	<6	<.08	4.4
JUN													
08...	8	E.12	.7	31	<.06	27	<.04	E.4	.137	2.1	7	<.08	2.2
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	9	E.14	.7	35	<.06	34	<.04	<.8	.167	1.8	<6	<.08	2.7
23...	<2	<.20	<.2	<.2	<.06	<8	<.04	<.8	<.014	<.4	<6	<.08	<.6
JUL													
21...	6	E.18	1.0	32	<.06	46	<.04	<.8	.169	1.6	<6	<.08	2.4
AUG													
25...	5	E.16	.9	34	<.06	54	<.04	<.8	.189	1.7	<6	<.08	3.4
SEP													
01...	5	E.15	1.1	30	<.06	45	<.04	<.8	.144	1.6	<6	<.08	2.5

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)
NOV													
05...	0.3	2.0	1.41	E0.3	<0.2	174	1.2	<0.6	<0.006	E0.021	0.008	<0.005	<0.005
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
03...	--	--	--	E.2	--	142	0.8	--	<.006	E.006	E.005	<.005	<.005
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
21...	2.8	1.4	1.92	.5	<.2	142	.7	.7	<.006	E.022	.012	.005	<.005
FEB													
04...	10.9	1.1	1.49	E.3	<.2	147	.7	E.5	<.006	E.017	.009	<.005	<.005
MAR													
10...	.9	1.2	1.74	E.2	<.2	172	1.0	E.5	<.006	E.013	.012	<.005	<.005
10...	.8	1.4	1.58	E.3	<.2	168	.8	.7	<.006	E.015	.011	<.005	<.005
24...	1.5	1.0	1.40	E.3	<.2	136	1.5	1.9	<.006	E.016	.007	<.005	<.005
24...	<.2	<0.4	<0.06	<.4	<.2	<0.40	<.1	<.6	--	--	--	--	--
APR													
20...	.6	1.2	1.24	E.2	<.2	187	.5	E.5	<.006	E.013	.023	<.005	<.005
27...	--	--	--	E.3	--	158	1.2	--	<.006	E.056	.110	.007	<.005
27...	--	--	--	--	--	--	--	--	<.006	<.006	<.006	<.005	<.005
MAY													
19...	.3	1.5	1.22	E.2	<.2	138	.7	.6	<.006	E.074	.100	.007	<.005
26...	.2	2.4	1.83	.5	<.2	239	.8	.7	<.006	E.022	.126	<.006	<.005
26...	E.2	2.3	1.90	E.4	<.2	236	.8	.8	<.006	E.018	.122	.006	<.005
JUN													
08...	1.1	1.2	1.73	<.4	<.2	125	1.3	E.4	<.006	E.150	.167	.013	<.005
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	.3	1.8	1.50	E.3	<.2	156	.8	.6	<.006	E.111	.175	.013	<.005
23...	<.2	<.4	<.06	<.4	<.2	<.40	<.1	E.5	--	--	--	--	--
JUL													
21...	.3	2.3	1.34	E.3	<.2	147	1.2	E.4	<.006	E.056	.043	<.005	<.005
AUG													
25...	.3	2.7	1.87	.4	<.2	178	1.1	.7	<.006	E.030	.011	<.005	<.005
SEP													
01...	.4	2.2	1.22	E.4	<.2	118	1.2	E.4	<.006	E.075	.038	<.005	<.005

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)
NOV 05... 05...	0.105 --	<0.050 --	<0.010 --	<0.004 --	<0.041 --	<0.020 --	<0.005 --	<0.006 --	<0.018 --	<0.003 --	<0.005 --	<0.009 --	<0.02 --
DEC 03... 03... 03...	.084 -- --	<.050 -- --	<.010 -- --	<.004 -- --	E.003 -- --	<.020 -- --	<.005 -- --	<.006 -- --	<.018 -- --	<.003 -- --	E.001 -- --	<.009 -- --	<.02 -- --
JAN 21...	.085	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
FEB 04...	.046	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
MAR 10... 10... 24... 24...	.106 .107 .245 --	<.050 <.050 <.050 --	<.010 <.010 <.010 --	<.004 <.004 <.004 --	<.041 <.041 E.005 --	<.020 <.020 <.020 --	<.005 <.005 <.005 --	<.006 <.006 <.006 --	<.018 <.018 <.018 --	<.003 <.003 <.003 --	<.005 <.005 <.005 --	<.009 <.009 <.009 --	<.02 <.02 <.02 --
APR 20... 27... 27...	.218 1.75 <.007	<.050 <.050 <.050	<.010 <.010 <.010	<.004 <.004 <.004	<.041 <.041 <.041	<.020 E.020 <.020	<.005 <.005 <.005	<.006 <.006 <.006	<.018 <.018 <.018	<.003 <.003 <.003	<.005 <.005 <.005	<.009 <.009 <.009	<.02 <.02 <.02
MAY 19... 26... 26...	1.37 1.27 1.26	<.050 <.050 <.050	<.010 <.010 <.010	<.004 <.004 <.004	<.041 <.041 <.041	<.020 <.020 <.020	<.005 <.005 <.005	<.006 <.006 <.006	<.018 <.018 <.018	<.003 <.003 <.003	<.005 <.005 <.005	<.009 <.009 <.009	<.02 <.02 <.02
JUN 08... 08... 23... 23...	2.05 -- 1.51 --	<.050 -- <.050 --	<.010 -- <.010 --	<.004 -- <.004 --	E.006 -- <.041 --	E.006 -- <.020 --	<.005 -- <.005 --	<.006 -- <.006 --	<.018 -- <.018 --	<.003 -- <.003 --	<.005 -- <.005 --	<.009 -- <.009 --	<.02 -- <.02 --
JUL 21...	.445	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
AUG 25...	.195	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
SEP 01...	.316	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)
NOV 05... 05...	<0.004 --	<0.009 --	<0.005 --	<0.003 --	<0.004 --	<0.035 --	<0.027 --	<0.015 --	0.020 --	<0.006 --	<0.003 --	<0.007 --	<0.003 --
DEC 03... 03... 03...	<.004 -- --	<.009 -- --	<.005 -- --	<.003 -- --	<.004 -- --	<.035 -- --	<.027 -- --	<.015 -- --	.017 -- --	<.006 -- --	<.003 -- --	<.007 -- --	<.003 -- --
JAN 21...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.024	E.006	<.003	<.007	<.003
FEB 04...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.014	<.006	<.003	<.007	<.003
MAR 10... 10... 24... 24...	<.004 <.004 <.004 --	<.009 <.009 <.009 --	<.005 <.005 <.005 --	<.003 .003 <.003 --	<.004 <.004 <.004 --	<.035 <.035 <.035 --	<.027 <.027 <.027 --	<.015 <.015 <.015 --	.018 .017 .030 --	<.006 <.006 <.006 --	<.003 <.003 <.003 --	<.007 <.007 <.007 --	<.003 <.003 <.003 --
APR 20... 27... 27...	<.004 <.004 <.004	<.009 <.009 <.009	<.005 <.005 <.005	<.003 <.003 <.003	<.004 <.004 <.004	<.035 <.035 <.035	<.027 <.027 <.027	<.015 <.015 <.015	.034 .209 <.013	<.006 <.010 <.006	<.003 <.003 <.003	<.007 <.007 <.007	<.003 <.003 <.003
MAY 19... 26... 26...	<.004 <.004 <.004	<.009 <.009 <.009	<.005 <.005 <.005	<.003 <.003 <.003	<.004 <.004 <.004	<.035 <.035 <.035	<.027 <.027 <.027	<.015 <.015 <.015	.164 .176 .174	<.006 <.006 <.006	<.003 <.003 <.003	<.007 <.007 <.007	<.003 <.003 <.003
JUN 08... 08... 23... 23...	<.004 -- <.004 --	<.009 -- <.009 --	<.005 -- <.005 --	<.003 -- <.003 --	<.004 -- <.004 --	<.035 -- <.035 --	<.027 -- <.027 --	<.015 -- <.015 --	.402 -- .400 --	.010 -- <.006 --	<.003 -- <.003 --	<.007 -- <.007 --	<.003 -- <.003 --
JUL 21...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.119	<.006	<.003	<.007	<.003
AUG 25...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.034	<.006	<.003	<.007	<.003
SEP 01...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.118	<.006	<.003	<.007	<.003

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)
NOV 05...	<0.010	<0.004	<0.022	<0.011	.01	<0.004	<0.025	<0.011	<0.02	.034	E0.01	<0.034	<0.02
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.240	<.02	<.034	<.02
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 21...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.234	M	<.034	<.02
FEB 04...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.055	<.02	<.034	<.02
MAR 10...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.096	<.02	<.034	<.02
10...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.093	<.02	<.034	<.02
24...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.173	E.01	<.034	<.02
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 20...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.031	<.02	<.034	<.02
27...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.286	<.02	<.034	<.02
27...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02
MAY 19...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.166	<.02	<.034	<.02
26...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.145	<.02	<.034	<.02
26...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.134	<.02	<.034	<.02
JUN 08...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.260	<.02	<.034	<.02
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.131	<.02	<.034	<.02
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.054	<.02	<.034	<.02
AUG 25...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.030	<.02	<.034	<.02
SEP 01...	<.010	<.004	<.022	<.011	<.09	<.006	<.025	<.011	<.02	.043	<.02	<.034	<.02

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
NOV						
05...	<0.010	<0.002	<0.009	0.36	97	25
05...	--	--	--	--	97	27
DEC						
03...	<.010	<.002	<.009	--	84	192
03...	--	--	--	--	--	--
03...	--	--	--	--	85	182
JAN						
21...	<.010	<.002	<.009	.45	90	115
FEB						
04...	<.010	<.002	<.009	.37	89	39
MAR						
10...	<.010	<.002	<.009	.43	90	136
10...	<.010	<.002	<.009	.43	--	--
24...	<.010	<.002	<.009	.34	97	68
24...	--	--	--	<.04	--	--
APR						
20...	<.010	<.002	<.009	.34	88	209
27...	<.010	<.002	<.009	--	94	104
27...	<.010	<.002	<.009	--	--	--
MAY						
19...	<.010	<.002	<.009	.37	96	33
26...	<.010	<.002	<.009	.47	98	106
26...	<.010	<.002	<.009	.48	98	108
JUN						
08...	<.010	<.002	<.009	.23	91	131
08...	--	--	--	--	--	--
23...	<.010	<.002	<.009	.37	98	101
23...	--	--	--	<.04	--	--
JUL						
21...	<.010	<.002	<.009	.35	97	24
AUG						
25...	<.010	<.002	<.009	.34	88	42
SEP						
01...	<.010	<.002	<.009	.29	97	24

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

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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 with telemetry. Datum of gage is 307.71 ft above NGVD of 1929. Prior to Aug. 2, 1951, nonrecording gage at same site and datum.

REMARKS.-- Records fair except for those estimated, which are poor. Minium flow affected by backwater from the Mississippi River.

COOPERATION.--Kentucky Natural Resources and Environmental Protection Cabinet.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 17	0300	*1,240	*13.67				
						No peaks greater than base discharge	

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	29	51	24	123	30	74	103	32	23	26
2	21	27	25	141	65	47	27	85	41	72	23	25
3	21	27	26	57	140	209	25	68	36	30	23	24
4	21	28	30	125	45	123	24	48	34	30	23	24
5	21	28	28	389	683	282	23	42	31	27	25	24
6	21	28	25	45	879	242	24	37	31	39	24	24
7	21	27	23	26	136	67	23	35	31	75	23	22
8	21	27	23	30	51	44	22	33	29	28	24	22
9	22	26	23	26	44	43	21	31	114	27	24	22
10	24	27	36	21	38	34	21	31	83	26	23	22
11	23	28	26	20	34	31	21	36	34	25	24	22
12	22	30	22	21	34	29	46	31	185	25	24	21
13	22	37	22	19	30	28	86	32	292	25	23	22
14	31	28	24	18	30	28	43	37	58	24	23	22
15	25	51	23	17	29	28	27	115	96	24	23	21
16	24	49	24	17	27	39	24	51	1,140	24	24	20
17	34	37	23	19	26	33	23	38	829	25	24	20
18	29	203	22	251	25	31	21	34	121	24	24	19
19	26	118	21	48	26	28	20	31	33	24	24	19
20	25	43	20	27	27	70	20	36	27	23	27	19
21	24	32	20	24	24	89	24	28	25	23	26	19
22	24	29	20	23	23	34	61	26	25	23	24	19
23	24	56	143	21	23	29	924	25	26	23	89	19
24	24	443	53	20	23	28	685	25	25	23	237	19
25	36	46	26	e42	24	26	512	24	175	26	50	19
26	76	32	23	e175	24	25	122	23	37	26	37	19
27	40	837	21	e160	24	24	69	23	27	24	24	19
28	35	606	21	e100	23	24	51	28	26	24	275	19
29	34	75	133	e72	25	37	45	55	25	24	148	19
30	30	39	78	e28	---	61	89	354	27	27	33	19
31	29	---	34	25	---	41	---	863	---	26	28	---
TOTAL	852	3,091	1,067	2,058	2,606	1,977	3,153	2,399	3,766	898	1,446	630
MEAN	27.5	103	34.4	66.4	89.9	63.8	105	77.4	126	29.0	46.6	21.0
MAX	76	837	143	389	879	282	924	863	1,140	75	275	26
MIN	21	26	20	17	23	24	20	23	25	23	23	19
CFSM	0.40	1.50	0.50	0.97	1.31	0.93	1.53	1.13	1.83	0.42	0.68	0.31
IN.	0.46	1.67	0.58	1.11	1.41	1.07	1.71	1.30	2.04	0.49	0.78	0.34

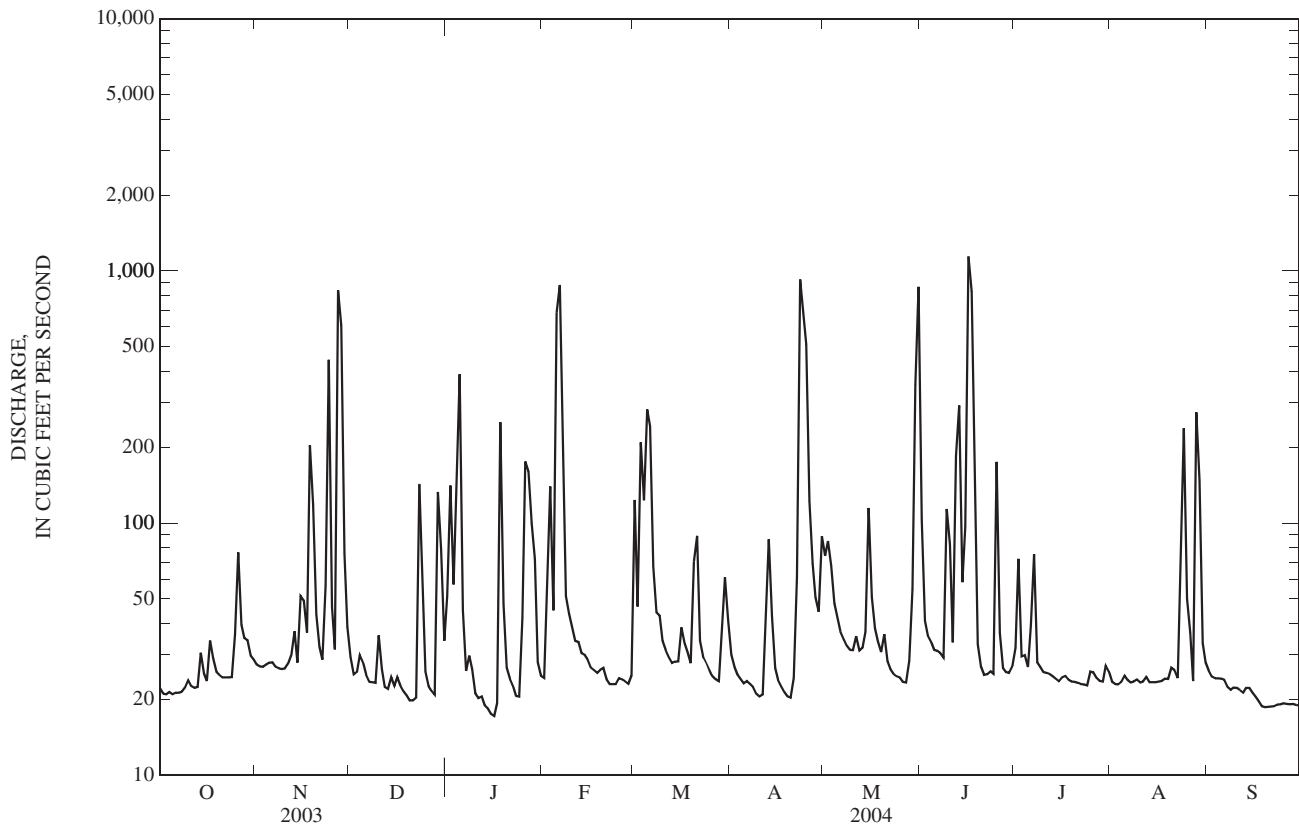
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	33.8	81.7	131	149	186	204	134	109	76.8	56.5	39.4	34.9
MAX	165	520	557	586	672	1,138	335	470	419	397	206	268
(WY)	(1985)	(1958)	(1991)	(1950)	(1989)	(1975)	(1970)	(1978)	(1976)	(1976)	(1977)	(1977)
MIN	7.27	9.41	12.1	12.7	16.2	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)

07024000 BAYOU DE CHIEN NEAR CLINTON, KY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	40,303		23,943		103	
ANNUAL MEAN	110		65.4		268	
HIGHEST ANNUAL MEAN					18.7	
LOWEST ANNUAL MEAN					1941	
HIGHEST DAILY MEAN	3,660	May 18	1,140	Jun 16	7,150	Jan 2, 1966
LOWEST DAILY MEAN	18	Jul 12	17	Jan 15	4.0	May 29, 1943
ANNUAL SEVEN-DAY MINIMUM	19	Jul 22	19	Jan 11	4.7	Jun 20, 1942
MAXIMUM PEAK FLOW			1,240	Jun 17	9,460	Jan 2, 1966
MAXIMUM PEAK STAGE			13.67	Jun 17	16.79	May 17, 2003
ANNUAL RUNOFF (CFSM)	1.61		0.952		1.49	
ANNUAL RUNOFF (INCHES)	21.82		12.96		20.30	
10 PERCENT EXCEEDS	132		119		185	
50 PERCENT EXCEEDS	34		27		25	
90 PERCENT EXCEEDS	21		21		11	

e Estimated



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 2004.

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
<u>BEARGRASS CREEK BASIN</u>							
03293200	Middle Fork Beargrass Creek at Beals Branch Road at Louisville, Ky.	Lat 38°14'32", long 85°41'57", Jefferson County, Hydrologic Unit 05140101, at bridge on Beals Branch Road at Louisville, Ky., and at mile 1.5	22.7	†2004	07-10-04	10.12	2400
<u>SALT RIVER BASIN</u>							
03297980	Long Run near Fisherville, Ky.	Lat 38°13'10", long 85°26'56", Jefferson County, Hydrologic Unit 05140101, at bridge on State Highway 1531 near Fisherville, Ky., 0.7 mi below South Long Run and at mile 2.4.	22.5	†2004	05-28-04	8.73	3570
03298100	Pope Lick at Pope Lick Road near Middletown, Ky.	Lat 38°13'09", long 85°31'07", Jefferson County, Hydrologic Unit 05140102, at culvert on Pope Lick Road near Middletown, Ky. and at mile 3.2.	2.9	†2004	05-28-04	7.82	343

Annual maximum discharge at crest-stage partial-record stations during water year 2004.--*Continued*

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
03301880	Southern Ditch at Minors Lane near Okolona, Ky.	Lat 38°08'04", long 85°42'34", Jefferson County, Hydrologic Unit 05140102, at bridge on Minors Lane nr Okolona, Ky., 0.2 mi below Mud Creek, and at mile 4.2.	12.8	†2004	05-28-04	6.73	2,800
03301950	Spring Ditch at Private Drive near Okolona, Ky.	Lat 38°09'27", long 85°40'57", Jefferson County, Hydrologic Unit 05140102, at at culvert on Private Drive nr Okolona, Ky., and at mile 4.2	1.6	†2004	05-28-04	6.17	368

Discharge measurements made at miscellaneous sites during water year 2004.

Station no.	Station name	Location	Period of record	Date	Discharge (ft ³ /s)
<u>GREEN RIVER BASIN</u>					
03316000	Mud River near Lewisburg, Ky.	Lat 37°00'15", Long 86°54'26", Logan County, Hydrologic Unit 05110003, at upstream side of bridge on State Highway 106, 2.5 mi northeast of Lewisburg, 7.5 mi downstream from Motts Lick Creek, and 14.0 mi upstream from Wolf Lick Creek.	2001-04	10-06-03	54.6

WATER-QUALITY RECORDS

LOCATION.--Lat 37°47'47", long 86°16'25", Breckinridge County, Hydrologic Unit 05140104.

DRAINAGE AREA.--36 mi².

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1205	Environmental	125	16.0	743	9.5	7.3	308	12.3	115	139	13.1
MAY 27...	1230	Environmental	2,080	432	738	8.3	7.0	142	16.1	58	71	1.74
JUL 08...	1400	Environmental	7.4	4.30	749	9.4	7.6	546	19.9	136	166	5.67
JUL 08...	1408	Field Blank	--	--	--	--	--	--	--	--	--	0.24
AUG 02...	1145	Environmental	7.0	9.61	758	9.6	7.3	597	20.2	154	186	5.96
SEP 07...	1120	Environmental	17	5.90	750	6.1	7.6	641	20.9	161	195	6.20

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
APR 22...	<0.04	0.81	0.015	0.066	<0.006	E0.025	0.027	<0.005	<0.005	0.139	<0.050	<0.010	<0.004
MAY 27...	<.04	.21	.010	.25	<.006	E.099	.092	<.005	<.005	.905	<.050	<.010	<.004
JUL 08...	<.04	1.06	E.003	.037	<.006	E.063	.008	<.005	<.005	.436	<.050	<.010	<.004
JUL 08...	<.04	<.06	<.006	<.004	--	--	--	--	--	--	--	--	--
AUG 02...	<.04	1.02	.008	.023	<.006	E.064	.006	<.005	<.005	.132	<.050	<.010	<.004
SEP 07...	<.04	.70	.011	.031	<.006	E.022	E.003	<.005	<.005	.044	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos, water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 27...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
JUL 08...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
SEP 07...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003

03303195 SINKING CREEK AT ROSETTA, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	E0.010	<0.006	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 27...	<.004	<.035	<.027	<.015	.112	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
JUL 08...	<.004	<.035	<.027	<.015	.025	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<.004	<.035	<.027	<.015	.014	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
SEP 07...	<.004	<.035	<.027	<.015	E.004	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Promet- on, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.013	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	26
MAY 27...	<.01	<.004	<.025	<.011	<.02	.010	<.02	<.034	<.02	<.010	<.002	<.009	306
JUL 08...	.02	<.004	<.025	<.011	<.02	.009	<.02	<.034	<.02	<.010	<.002	<.009	73
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	.01	<.004	<.025	<.011	<.02	<.010	<.02	<.034	<.02	<.010	<.002	<.009	4
SEP 07...	.01	<.004	<.025	<.011	<.02	E.005	<.02	<.034	<.02	<.010	<.002	<.009	5

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

03303205 SINKING CREEK NEAR LODIBURG, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°52'06", long 86°23'16", Breckinridge County, Hydrologic Unit 05140104.

DRAINAGE AREA.--125 mi².

PERIOD OF RECORD.--April 2004 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1445	Environmental	333	46.0	743	9.9	7.4	432	13.4	181	218	4.95
MAY 25...	1445	Environmental	1,160	227	743	8.5	7.0	360	15.8	126	153	3.63
27...	1500	Environmental	5,260	445	738	8.6	7.1	175	16.2	82	100	1.89
JUL 08...	1550	Environmental	44	14.1	749	9.4	7.1	533	17.8	120	147	5.31
12...	1229	Environmental	--	--	--	--	--	--	--	--	--	--
12...	1416	Environmental	--	--	--	--	--	--	--	--	--	--
AUG 02...	1445	Environmental	38	9.96	758	11.1	7.1	588	18.4	222	269	6.43
SEP 07...	1520	Environmental	20	11.6	750	8.3	7.3	511	17.8	187	227	5.11

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)
APR 22...	<0.04	1.29	0.014	0.096	<0.006	E0.047	0.010	<0.020	<0.005	0.409	<0.050	<0.010	<0.004
MAY 25...	<.04	1.34	.072	.42	<.006	E.126	.227	<.010	<.005	.753	<.050	<.010	<.004
27...	<.04	0.35	.037	.40	<.006	E.116	.091	.011	<.005	.942	<.050	<.010	<.004
JUL 08...	<.04	2.04	.042	.070	<.006	E.118	E.006	<.005	<.005	.200	<.050	<.010	<.004
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<.04	2.17	.071	.101	<.006	E.075	.008	<.005	<.005	.119	<.050	<.010	<.004
SEP 07...	<.04	1.33	.054	.086	<.006	E.046	E.004	<.005	<.005	.069	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water, fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 25...	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
27...	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
JUL 08...	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<.041	<.075	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.150	<.009	<.005	<.003
SEP 07...	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003

03303205 SINKING CREEK NEAR LODIBURG, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	E0.008	<0.006	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 25...	<.004	<.035	<.027	<.015	.047	<.006	<.003	.013	<.003	<.010	<.004	<.022	<.011
MAY 27...	<.004	<.035	<.027	<.015	.102	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
JUL 08...	<.004	<.035	<.027	<.015	E.011	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
SEP 07...	<.004	<.035	<.027	<.015	E.007	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Promet- on, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concent- ration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.017	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	106
MAY 25...	.02	<.004	<.025	<.011	<.02	.035	<.02	<.034	<.02	<.010	<.002	<.009	414
MAY 27...	<.01	<.004	<.025	<.011	<.02	.056	<.02	<.034	<.02	<.010	<.002	<.009	563
JUL 08...	.01	<.004	<.025	<.011	<.02	.014	<.02	<.034	<.02	<.010	<.002	<.009	67
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	.01	<.004	<.025	<.011	<.02	.012	<.02	<.034	<.02	<.010	<.002	E.005	19
SEP 07...	.01	<.004	<.025	<.011	<.02	.009	<.02	<.034	<.02	<.010	<.002	<.009	8

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

3747550860904 F15CS004--BIG SPRING AT BIG SPRING, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°47'55", long 86°09'04", Breckinridge County, Hydrologic Unit 05140104.

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1500	Environmental	46	39.5	743	13.4	7.7	318	12.3	132	161	6.52
MAY 25...	1545	Environmental	--	134	751	8.8	7.3	306	13.6	117	142	7.08
27...	1030	Environmental	--	114	738	7.5	7.0	201	15.3	65	79	2.40
AUG 02...	1130	Environmental	2.4	5.30	745	--	7.4	375	13.9	182	209	5.99
SEP 07...	1120	Environmental	1.6	--	750	10.2	7.0	383	13.7	174	211	4.31

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
APR 22...	0.14	2.01	0.052	0.119	<0.006	E0.172	<0.010	<0.005	<0.005	4.92	<0.050	<0.010	<0.004
MAY 25...	<.04	3.09	.136	.30	<.006	E.300	.014	<.005	<.005	2.08	<.050	<.010	<.004
27...	<.04	1.24	.152	.34	<.006	E.330	.009	.186	<.005	2.99	<.050	<.010	<.004
AUG 02...	<.04	2.32	.037	.052	<.006	E.133	.018	<.005	<.005	0.097	<.100	<.010	<.004
SEP 07...	<.04	1.68	.030	--	<.006	E.093	.007	<.005	<.005	.065	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 25...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
27...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
AUG 02...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
SEP 07...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003

3747550860904 F15CS004--BIG SPRING AT BIG SPRING, KY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	0.309	0.029	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 25...	<.004	<.035	<.027	<.015	.447	.023	<.003	<.007	<.003	<.010	<.004	<.022	<.011
MAY 27...	<.004	<.035	<.027	<.015	.736	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
AUG 02...	<.004	<.035	<.027	<.015	.017	.089	<.003	<.007	<.003	<.010	<.004	<.022	<.011
SEP 07...	<.004	<.035	<.027	<.015	E.006	.026	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--CONTINUED

Date	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sediment concentration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.152	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	62
MAY 25...	<.01	<.004	<.025	<.011	<.02	.043	<.02	<.034	<.02	<.010	<.002	<.009	82
MAY 27...	<.01	<.004	<.025	<.011	<.02	.548	<.02	<.034	<.02	<.010	<.002	<.009	153
AUG 02...	<.01	<.004	<.025	<.011	<.02	.018	<.02	<.034	<.02	<.010	<.002	<.009	6
SEP 07...	.01	<.004	<.025	<.011	<.02	.010	<.02	<.034	<.02	<.010	<.002	<.009	2

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

374813086171501 F14DS005--FLAT ROCK SPRING NEAR ROSETTA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°48'13", long 86°17'15", Breckinridge County, Hydrologic Unit 05140104.

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1215	Environmental	50	--	743	--	7.2	325	12.5	--	--	5.85
MAY 25...	1440	Environmental	--	164	751	9.2	7.3	293	14.2	126	154	3.90
JUL 08...	1330	Environmental	12	7.40	749	10.3	7.3	417	14.1	312	381	4.82
AUG 02...	1300	Environmental	8.6	20.3	750	--	7.3	390	14.3	188	229	5.22
SEP 07...	1255	Environmental	4.8	--	750	9.8	7.0	423	14.1	193	235	4.95

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF (82686)	Benfluralin, water, fltrd 0.7u GF (82673)	Butylate, water, fltrd, ug/L (04028)
APR 22...	<0.04	1.61	0.030	0.077	<0.006	E0.062	0.011	0.011	<0.005	0.588	<0.050	<0.010	<0.004
MAY 25...	<.04	0.76	.115	.30	<.006	E.342	.033	<.005	<.005	2.91	<.050	<.010	<.004
JUL 08...	<.04	2.03	.043	.079	<.006	E.138	E.004	<.005	<.005	.195	<.050	<.010	<.004
AUG 02...	<.04	1.90	.092	.148	<.006	E.066	.007	<.005	<.005	.103	<.050	<.010	<.004
SEP 07...	<.04	1.57	.066	.094	<.006	E.075	<.006	<.005	<.005	.063	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF (82680)	Carbofuran, water, fltrd 0.7u GF (82674)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd 0.7u GF (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)	Ethalfuralin, water, fltrd 0.7u GF (82663)	Ethoprop, water, fltrd 0.7u GF (82672)	Fonofos, water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 25...	E.009	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
JUL 08...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
AUG 02...	<0.041	<0.030	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.015	<0.009	<0.005	<0.003
SEP 07...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003

374813086171501 F14DS005--FLAT ROCK SPRING NEAR ROSETTA, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	E0.009	<0.006	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 25...	<.004	<.035	<.027	<.015	.058	<.010	<.003	<.007	<.003	<.010	<.004	.028	<.011
JUL 08...	<.004	<.035	<.027	<.015	E.010	E.004	<.003	<.007	<.003	<.010	<.004	.023	<.011
AUG 02...	<.004	<.035	.181	<.015	E.007	.006	<.003	<.007	<.003	<.010	<.004	E.010	<.011
SEP 07...	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propan- chlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propan- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.027	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	25
MAY 25...	<.01	<.004	<.025	E.010	<.02	2.28	<.02	<.034	<.02	<.010	<.002	<.009	138
JUL 08...	<.01	<.004	<.025	<.011	<.02	.020	<.02	<.034	<.02	<.010	<.002	<.009	28
AUG 02...	M	<.004	<.025	<.011	<.02	.014	<.02	<.034	<.02	<.010	<.002	<.009	20
SEP 07...	<.01	<.004	<.025	<.011	<.02	.019	<.02	<.034	<.02	<.010	<.002	<.009	5

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

374846086154101 F14DS003--ROSS KARST WINDOW NEAR BIG SPRING, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°48'46", long 86°15'41", Breckinridge County, Hydrologic Unit 05140104.

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Chlor- ide, water, fltrd, mg/L (00940)	Ammonia water, fltrd, mg/L as N (00608)
MAY 25...	1510	Environmental	152	751	9.2	7.3	280	14.0	88	108	4.32	<0.04
27...	1120	Environmental	264	738	7.7	7.1	125	15.7	66	80	1.61	<.04
AUG 02...	1230	Environmental	21.8	748	--	7.2	389	14.3	186	227	5.11	<.04
SEP 07...	1200	Environmental	--	750	8.9	6.9	445	14.1	208	254	5.08	<.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)
MAY 25...	0.82	0.092	0.24	<0.006	E0.252	0.080	<0.005	<0.005	2.10	<0.050	<0.010	<0.004	E0.018
27...	.42	.043	.41	<.006	E.133	.016	.113	<.005	1.45	<.050	<.010	<.004	<.041
AUG 02...	1.95	.081	.140	<.006	E.083	.008	<.005	<.005	0.109	<.100	<.010	<.004	<.041
SEP 07...	1.59	.060	.089	<.006	E.070	E.003	<.005	<.005	.080	<.050	<.010	<.004	<.041

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)
MAY 25...	E0.015	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.015	<0.009	<0.005	<0.003	<0.004
27...	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003	<.004
AUG 02...	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003	<.004
SEP 07...	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.020	<.009	<.005	<.003	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)
MAY 25...	<0.035	<0.027	<0.015	0.048	<0.010	<0.003	<0.007	<0.003	<0.010	<0.004	E0.015	<0.011	0.01
27...	<.035	<.027	<.015	.345	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01
AUG 02...	<.035	.211	<.015	E.009	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01
SEP 07...	<.035	<.027	<.015	E.005	.007	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01

374846086154101 F14DS003--ROSS KARST WINDOW NEAR BIG SPRING, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propy- zamide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
MAY												
25...	<0.004	<0.025	0.011	<0.02	1.31	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	106
27...	<.004	<.025	<.011	<.02	0.507	<.02	<.034	<.02	<.010	<.002	<.009	581
AUG												
02...	<.004	<.025	<.011	<.02	.019	<.02	<.034	<.02	<.010	<.002	<.009	25
SEP												
07...	<.004	<.025	<.011	<.02	.012	M	<.034	<.02	<.010	<.002	<.009	6

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

374847086172901 F14DS007--FIDDLE SPRING NEAR ROSETTA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°48'47", long 86°17'29", Breckinridge County, Hydrologic Unit 05140104.

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1320	Environmental	23	9.90	743	12.8	7.2	545	13.1	188	229	5.38
MAY 25...	1340	Environmental	--	211	751	7.2	7.0	280	14.7	111	135	3.35
25...	1350	Replicate	--	--	--	--	--	--	--	112	136	3.67
AUG 02...	1400	Environmental	4.4	28.2	749	--	7.0	531	14.5	210	256	5.87
SEP 07...	1345	Environmental	2.7	--	750	9.2	6.9	1,000	14.3	244	297	6.92

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
APR 22...	<0.04	1.12	0.025	0.065	<0.006	E0.031	<0.008	<0.005	<0.005	0.345	<0.050	<0.010	<0.004
MAY 25...	<.04	0.40	.090	.31	<.006	E.141	.091	<.005	<.005	.850	<.050	<.010	<.004
25...	<.04	.37	.092	.38	<.006	E.157	.088	<.005	<.005	.828	<.050	<.010	<.004
AUG 02...	<.04	2.08	.192	.25	<.006	E.026	.011	<.005	<.005	.075	<.100	<.010	<.004
SEP 07...	<.04	1.44	.042	.070	<.006	E.020	<.006	<.005	<.005	.047	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 25...	E.012	<.020	<.005	<.006	<.018	E.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
25...	E.012	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
AUG 02...	E.018	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003
SEP 07...	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009	<.005	<.003

374847086172901 F14DS007--FIDDLE SPRING NEAR ROSETTA, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	<0.013	<0.006	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 25...	<.004	<.035	<.027	<.015	.036	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
MAY 25...	<.004	<.035	<.027	<.015	.035	<.006	<.003	<.007	<.005	<.010	<.004	<.022	<.011
AUG 02...	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
SEP 07...	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sediment concentration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.013	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	11
MAY 25...	.01	<.004	<.025	<.011	<.02	.481	<.02	<.034	<.02	<.010	<.002	<.009	253
MAY 25...	<.01	<.004	<.025	<.011	<.02	.461	<.02	<.034	<.02	<.010	<.002	<.009	--
AUG 02...	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	28
SEP 07...	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	6

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

375209086224001 F14CS002--BOILING SPRING NEAR LODIBURG, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°52'09", long 86°22'40", Breckinridge County, Hydrologic Unit 05140104.

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

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
APR 22...	1340	Environmental	--	45.0	743	9.2	7.4	430	13.4	181	220	5.73
MAY 25...	1235	Environmental	--	--	743	--	7.2	300	--	132	161	4.00
27...	1610	Environmental	--	677	738	6.5	7.0	188	16.4	80	97	1.75
AUG 02...	1415	Environmental	37	15.2	758	10.2	6.9	581	17.2	220	268	6.29
SEP 07...	1320	Environmental	3.5	10.5	750	7.2	7.3	520	17.0	196	239	5.15

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
APR 22...	<0.04	1.31	0.019	0.106	<0.006	E0.047	0.010	<0.005	<0.005	0.424	<0.050	<0.010	<0.004
MAY 25...	<.04	0.83	.075	.45	<.006	E.104	.137	<.005	<.005	.658	<.050	<.010	<.004
27...	<.04	.47	.038	.31	<.006	E.109	.082	<.005	<.005	.866	<.050	<.010	<.004
AUG 02...	<.04	2.23	.078	.106	<.006	E.075	.007	<.005	<.005	.129	<.050	<.010	<.004
SEP 07...	<.04	1.52	.057	.087	<.006	E.046	E.004	<.005	<.005	.073	<.050	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)
APR 22...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<0.02	<0.004	<0.009	<0.005	<0.003
MAY 25...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
27...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003
AUG 02...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.075	<0.009	<0.005	<0.003
SEP 07...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.009	<.02	<0.004	<0.009	<0.005	<0.003

375209086224001 F14CS002--BOILING SPRING NEAR LODIBURG, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
APR 22...	<0.004	<0.035	<0.027	<0.015	E0.008	<0.006	<0.003	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAY 25...	<.004	<.035	<.027	<.015	.042	<.006	<.003	.011	<.003	<.010	<.004	<.022	<.011
MAY 27...	<.004	<.035	<.027	<.015	.106	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
AUG 02...	<.004	<.035	<.027	<.015	E.011	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011
SEP 07...	<.004	<.035	<.027	<.015	E.007	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sediment concentration mg/L (80154)
APR 22...	<0.01	<0.004	<0.025	<0.011	<0.02	0.018	<0.02	<0.034	<0.02	<0.010	<0.002	<0.009	135
MAY 25...	.01	<.004	<.025	<.011	<.02	.039	<.02	<.034	<.02	<.010	<.002	<.009	409
MAY 27...	<.01	<.004	<.025	<.011	<.02	.050	<.02	<.034	<.02	<.010	<.002	<.009	408
AUG 02...	.01	<.004	<.025	<.011	<.02	.013	<.02	<.034	<.02	<.010	<.002	<.009	11
SEP 07...	.01	<.004	<.025	<.011	<.02	.010	<.02	<.034	<.02	<.010	<.002	<.009	7

E--Laboratory estimated value.

<--Numeric result is less than the value shown.

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°48'07", long 87°30'49", Christian County, Hydrologic Unit 05130205.

DRAINAGE AREA.--67 mi².

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 15...	1500	Environmental	19	762	8.4	7.4	620	18.8	149	182	<0.04	3.43
NOV 12...	1410	Environmental	22	762	6.3	7.5	500	16.0	146	178	.08	1.95
FEB 17...	1410	Environmental	49	770	13.6	7.7	479	8.2	162	198	<.04	3.31
MAR 16...	1410	Environmental	44	759	12.9	7.8	497	11.9	164	201	.06	2.90
16...	1418	Field Blank	--	--	--	--	--	--	--	--	<.010	<0.016
APR 14...	0930	Environmental	372	748	12.7	6.1	226	7.8	68	83	.48	1.34
30...	1210	Environmental	E75	764	8.2	7.3	363	17.1	132	161	E.02	2.73
MAY 06...	1240	Environmental	E125	765	8.2	7.4	366	17.3	132	161	.06	2.95
JUN 15...	1410	Environmental	E32	764	4.7	7.6	501	22.3	155	189	E.04	3.86
JUL 14...	1020	Environmental	110	745	6.7	7.3	344	23.1	120	146	<.04	2.09
27...	1230	Environmental	E50	766	8.5	7.6	521	20.9	155	190	E.03	3.95
27...	1240	Replicate	--	--	--	--	--	--	155	189	E.02	3.95
AUG 10...	1230	Environmental	E80	764	7.2	7.7	576	21.6	198	242	E.03	4.86
SEP 14...	1210	Environmental	E100	767	6.5	7.4	626	21.9	149	182	E.04	5.33

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water fltrd, ug/L (82660)	2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)	2-Amino-N-isopropylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl)aniline, water, fltrd, ug/L (61630)	3,4-Dichloroaniline, water fltrd, ug/L (61625)
OCT 15...	1.55	1.62	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	E0.117	<0.004	<0.01	0.093
NOV 12...	0.397	0.51	<.05	<0.09	E.01	<.03	<.006	<.1	<.005	E.138	<.004	<.01	.044
FEB 17...	.461	.60	<.05	<.09	<.01	M	<.006	--	<.005	E.089	<.004	<.01	.016
MAR 16...	.497	.62	<.05	<.09	<.01	E.01	<.006	--	<.005	E.084	<.004	<.01	.021
16...	<.006	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	.262	.57	<.05	<.09	<.01	<.03	<.006	--	<.005	E.227	<.004	<.01	<.004
30...	.228	.35	<.05	<.09	<.01	E.01	<.006	--	<.005	E.176	<.004	<.01	.013
MAY 06...	.258	.31	<.05	<.09	<.01	<.03	<.006	--	<.005	E.236	<.004	<.01	.016
JUN 15...	.842	.89	<.05	<.09	--	E.01	<.006	--	<.005	E.244	<.004	<.01	.094
JUL 14...	.413	.55	<.04	<.09	<.01	<.01	<.006	--	<.005	E.174	<.004	<.01	.033
27...	1.52	1.58	<.04	--	<.01	E.01	<.006	--	<.005	E.206	<.004	<.01	E.054
27...	1.47	1.66	<.04	--	<.01	<.01	<.006	--	<.005	E.159	<.004	<.01	<.004
AUG 10...	1.03	1.07	<.04	--	<.01	.01	<.006	--	<.005	E.095	<.004	<.01	.068
SEP 14...	2.00	2.12	<.04	<.09	<.01	.01	<.006	--	<.005	E.095	<.004	<.01	.064

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	4,4-Di- chloro- benzo- phen- one, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl- methyl sulfone water, fltrd, ug/L (61634)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH, water, fltrd, ug/L (34253)	alpha- HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)
OCT 15...	<0.005	<0.003	<0.006	<0.03	<0.006	0.006	<0.005	<0.005	88.9	110	0.874	<0.02	<0.200
NOV 12...	<.005	<.003	<.006	<.03	<.010	<.010	<.005	<.005	93.8	107	.602	<.02	<.050
FEB 17...	<.005	<.003	<.006	<.03	<.006	<.005	<.005	<.005	172	E106	.222	<.02	<.050
MAR 16...	<.005	<.003	<.006	<.03	<.006	<.005	<.005	<.005	85.3	98.1	.637	<.02	<.050
MAR 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.005	<.003	<.006	<.03	.199	<.005	<.005	<.005	81.2	94.7	E21.9	<.02	<.050
APR 30...	<.005	<.003	<.006	<.03	.035	<.005	<.005	<.005	79.6	91.1	1.84	<.02	<.050
MAY 06...	<.005	<.003	<.006	<.03	.035	<.005	<.005	<.005	84.0	96.6	2.83	<.02	<.050
JUN 15...	<.005	<.003	--	<.01	.009	<.005	<.005	<.005	90.1	108	1.95	<.02	<.050
JUL 14...	<.004	<.007	<.006	<.01	.010	<.005	<.005	<.005	81.6	92.2	1.47	<.07	<.050
JUL 27...	<.004	<.007	<.006	<.01	<.015	<.005	<.005	<.005	74.7	89.0	2.14	<.07	<.050
JUL 27...	<.004	<.007	<.006	<.01	.011	<.005	<.005	<.005	89.1	98.8	.352	<.07	<.050
AUG 10...	<.004	<.007	<.006	<.01	.012	<.005	<.005	<.005	76.6	85.9	.245	<.07	<.050
SEP 14...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	75.3	90.9	.534	<.07	<.100

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	beta- Endo- sulfan, water, fltrd, ug/L (34357)	Bifen- thrin, water, fltrd, ug/L (61580)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	lambda- Cyhalo- thrin, water, fltrd, ug/L (61595)
OCT 15...	<0.010	<0.01	<0.005	0.005	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009
NOV 12...	<0.010	<.01	<.005	<.010	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
FEB 17...	<0.010	<.01	<.005	E.018	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAR 16...	<0.010	<.01	<.005	.013	<.041	E.025	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAR 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<0.010	<.01	<.005	<.010	E.054	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 30...	<0.010	<.01	<.005	.011	E.021	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAY 06...	<0.010	<.01	<.005	.008	E.036	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUN 15...	<0.010	<.01	<.005	<.018	<.073	<.047	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 14...	<0.010	<.01	<.005	<.004	E.160	<.035	<.06	E.004	<.006	<.008	<.018	<.005	<.009
JUL 27...	<0.010	<.01	<.005	.009	E.013	<.050	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 27...	<0.010	<.01	<.005	<.004	E.033	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
AUG 10...	<0.010	<.01	<.005	.008	E.009	<.030	<.06	<.005	<.006	<.008	<.018	<.005	<.009
SEP 14...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicrotophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton sulf- oxide, water, fltrd, ug/L (61641)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	(E)-Dimethomorph, water, fltrd, ug/L (79844)	Endosulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)
OCT 15...	<0.009	<0.003	0.017	<0.08	<0.005	<0.006	<0.02	<0.050	<0.02	<0.02	<0.004	0.003	<0.009
NOV 12...	<.009	<.003	.006	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	E.003	<.009
FEB 17...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	.006	<.009
MAR 16...	<.009	<.003	<.005	<.08	<.010	<.006	.02	<.002	<.02	<.02	<.004	.007	<.009
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.009	<.003	.006	<.08	E.007	<.006	<.02	<.002	<.02	<.02	<.004	<.010	<.009
30...	<.009	<.003	.007	<.08	E.007	<.006	E.01	<.002	<.02	<.02	<.004	.004	<.009
MAY 06...	<.009	<.003	.010	<.08	<.009	<.006	.02	<.002	<.02	<.02	<.004	.004	<.009
JUN 15...	<.009	<.003	<.006	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	.006	<.009
JUL 14...	<.009	<.003	.180	<.08	.012	<.006	<.01	<.036	<.02	<.02	<.007	<.035	<.009
27...	<.009	<.003	.027	<.08	.021	<.006	<.01	<.036	<.02	<.02	<.007	.004	<.009
27...	<.009	<.003	.006	<.08	.015	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
AUG 10...	<.009	<.003	<.010	<.08	.012	<.006	<.01	<.036	<.02	<.02	<.007	E.004	<.009
SEP 14...	<.009	<.003	<.010	<.08	<.010	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenithion sulf- oxide, water, fltrd, ug/L (61647)	Flumetralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)
OCT 15...	<0.03	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003
NOV 12...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
FEB 17...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAR 16...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
30...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAY 06...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUN 15...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUL 14...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
27...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
27...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
AUG 10...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
SEP 14...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)
OCT 15...	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.006	<0.03	0.017	<0.006	<0.002
NOV 12...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.014	<.006	<.003
FEB 17...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	E.012	<.006	<.003
MAR 16...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.015	<.006	<.003
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.028	<.006	<.003
30...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.027	<.006	<.003
MAY 06...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.022	<.006	<.003
JUN 15...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.027	<.006	<.003
JUL 14...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.027	<.006	<.003
27...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.043	<.006	<.003
27...	<.004	<.035	<.030	<.027	.018	<.006	<.02	<.03	<.015	<.01	.019	.008	<.003
AUG 10...	<.004	<.035	<.030	<.027	<.200	<.006	<.02	<.03	<.015	<.01	.062	<.006	<.003
SEP 14...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.030	<.006	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Myclo- butanil water, fltrd, ug/L (61599)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phorothioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
OCT 15...	<0.008	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008
NOV 12...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
FEB 17...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
MAR 16...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
30...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	.076	<.10	<.011	<.06	<.008
MAY 06...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
JUN 15...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
JUL 14...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008
27...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
27...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
AUG 10...	<.008	<.007	<.005	<.007	<.003	<.070	<.010	<.004	<.022	<.10	<.011	--	<.008
SEP 14...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	--

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phoste- bupirim water, fltrd, ug/L (61602)	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)
OCT 15...	<0.005	<0.006	0.04	<0.005	<0.004	<0.010	<0.011	<0.02	<0.004	0.084	<0.003	<0.02	<0.006
NOV 12...	<.005	<.006	.02	<.005	<.010	<.025	<.011	<.02	<.004	.061	<.003	<.02	<.006
FEB 17...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.156	<.003	<.02	<.006
MAR 16...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.143	<.003	<.02	<.006
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.005	<.006	.08	<.005	.011	<.025	<.011	<.02	<.004	4.90	<.003	<.02	<.006
30...	<.005	<.006	.06	<.005	<.004	<.025	<.011	<.02	<.004	.415	<.003	<.02	<.006
MAY 06...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.502	<.003	<.02	<.006
JUN 15...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.208	<.003	<.02	<.006
JUL 14...	<.005	<.006	.03	<.005	<.007	<.025	<.011	<.02	<.004	.128	<.003	<.02	<.006
27...	<.005	<.006	.03	<.005	<.015	<.025	<.030	<.02	<.004	.157	<.003	<.02	<.006
27...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.032	<.003	<.02	<.006
AUG 10...	<.005	<.006	.03	<.005	<.010	<.025	<.015	<.02	<.004	.038	<.003	<.02	<.006
SEP 14...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.047	<.003	<.02	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Teflu- thrin, water, fltrd, ug/L (61606)	Tem- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)
OCT 15...	<0.02	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05
NOV 12...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
FEB 17...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAR 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 14...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
30...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAY 06...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUN 15...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUL 14...	.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
27...	.03	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
27...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
AUG 10...	.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
SEP 14...	.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05

03437400 NORTH FORK LITTLE RIVER AT GARY LANE BRIDGE NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di- chlor- vos, water fltrd, ug/L (38775)	Sus- pended sediment concentration mg/L (80154)
OCT		
15...	<0.01	3
NOV		
12...	<.01	2
FEB		
17...	<.01	4
MAR		
16...	<.01	4
16...	--	--
APR		
14...	<.01	201
30...	<.01	56
MAY		
06...	<.01	20
JUN		
15...	<.01	6
JUL		
14...	<.01	81
27...	<.01	6
27...	<.01	7
AUG		
10...	<.01	6
SEP		
14...	<.01	5

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°47'52", long 87°30'52", Christian County, Hydrologic Unit 05130205. "

DRAINAGE AREA.--68 mi².

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 15...	1210	Environmental	9.8	761	9.0	7.6	523	18.9	216	263	<0.04	2.28
NOV 12...	1210	Environmental	19	762	9.0	7.7	520	16.1	220	268	<.04	1.40
FEB 17...	1210	Environmental	83	772	14.5	--	467	8.0	187	228	<.04	4.75
MAR 16...	1210	Environmental	56	769	15.9	8.1	451	11.3	181	216	<.04	3.97
APR 14...	1530	Environmental	242	748	12.4	6.8	296	9.5	102	124	.66	4.41
30...	1310	Environmental	200	764	9.3	7.6	372	16.2	154	187	E.03	4.51
30...	1318	Field Blank	--	--	--	--	--	--	--	--	--	--
MAY 06...	1420	Environmental	226	765	10.1	7.6	426	16.2	174	213	<.04	5.73
JUN 15...	1230	Environmental	50	762	5.4	7.7	464	20.7	188	230	<.04	4.89
15...	1238	Field Blank	--	--	--	--	--	--	--	--	<.010	<0.016
JUL 14...	0840	Environmental	85	745	7.1	7.3	375	22.1	145	176	<.04	2.93
27...	1130	Environmental	80	766	8.5	7.6	479	19.8	188	230	<.04	3.56
AUG 10...	1110	Environmental	90	764	8.1	7.6	485	19.9	214	261	<.04	4.25
SEP 14...	1100	Environmental	80	767	6.9	7.5	466	19.9	189	227	<.04	2.33

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, ug/L (49295)	2-(4-t-Butylphenyl)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water fltrd, ug/L (82660)	2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)	2-Amino-N-isopropylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl)aniline, water, fltrd, ug/L (61630)	3,4-Dichloroaniline, water fltrd, ug/L (61625)
OCT 15...	0.049	0.073	M	--	<0.01	<0.03	<0.006	<0.1	<0.005	E0.186	<0.004	<0.01	<0.004
NOV 12...	.031	.059	<0.05	<0.09	<.01	<.03	<.006	<.1	<.005	E.216	<.004	<.01	<.004
FEB 17...	.007	.021	<.05	<.09	<.01	<.03	<.006	--	<.005	E.196	<.004	<.01	<.004
MAR 16...	<.006	.019	<.05	<.09	<.01	<.03	<.006	--	<.005	E.156	<.004	<.01	<.004
APR 14...	.111	.23	<.05	<.09	<.01	<.03	<.006	--	<.005	E.997	<.004	<.01	<.004
30...	.042	.20	<.05	<.09	<.01	<.03	<.006	--	<.005	E.336	<.004	<.01	<.004
30...	--	--	<.05	<.09	<.01	<.03	<.006	--	<.005	<.006	<.004	<.01	<.004
MAY 06...	.019	.043	<.05	<.09	<.01	<.03	<.006	--	<.005	E.346	<.004	<.01	<.004
JUN 15...	.028	.051	<.05	<.09	--	<.03	<.006	--	<.005	E.284	<.004	<.01	<.004
15...	E.003	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	.093	.165	<.04	<.09	<.01	<.01	<.006	--	<.005	E.178	<.004	<.01	<.004
27...	.030	.050	<.04	--	<.01	.01	<.006	--	<.005	E.218	<.004	<.01	.092
AUG 10...	.039	.058	<.04	--	<.01	<.01	<.006	--	<.005	E.187	<.004	<.01	E.003
SEP 14...	.048	.073	<.04	<.09	<.01	<.01	<.006	--	<.005	E.158	<.004	<.01	<.004

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	4,4-Di- chloro- benzo- phen- one, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl- methyl sulfone water, fltrd, ug/L (61634)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH, water, fltrd, ug/L (34253)	alpha- HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)
OCT 15...	<0.005	<0.003	<0.006	<0.03	0.008	0.005	<0.005	<0.005	91.3	96.5	0.187	<0.02	<0.050
NOV 12...	<.005	<.003	<.006	<.03	.010	<.005	<.005	<.005	87.7	97.4	.125	<.02	<.050
FEB 17...	<.005	<.003	<.006	<.03	.008	<.005	<.005	<.005	167	E102	.109	<.02	<.050
MAR 16...	<.005	<.003	<.006	<.03	.007	<.005	<.005	<.005	88.3	87.2	.679	<.02	<.050
APR 14...	<.005	<.003	<.006	<.03	2.21	<.005	<.005	<.005	86.2	103	E22.4	<.02	<.050
30...	<.005	<.003	<.006	<.03	.254	.006	<.005	<.005	89.3	96.7	2.90	<.02	<.050
30...	<.005	<.003	<.006	<.03	<.006	<.005	<.005	<.005	83.5	89.9	<.007	<.02	<.050
MAY 06...	<.005	<.003	<.006	<.03	.075	<.005	<.005	<.005	85.3	98.1	1.34	<.02	<.050
JUN 15...	<.005	<.003	--	<.01	.016	<.005	<.005	<.005	88.4	107	.726	<.02	<.050
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	88.0	98.1	.233	<.07	<.050
27...	<.004	<.007	<.006	<.01	.014	<.005	<.005	<.005	88.2	97.9	2.22	<.07	<.050
AUG 10...	<.004	<.007	<.006	<.01	E.005	E.004	<.005	<.005	76.1	79.1	.175	<.07	<.050
SEP 14...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	86.4	92.6	.161	<.07	<.050

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	beta- Endo- sulfan, water, fltrd, ug/L (34357)	Bifen- thrin, water, fltrd, ug/L (61580)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	lambda- Cyhalo- thrin, water, fltrd, ug/L (61595)
OCT 15...	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009
NOV 12...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
FEB 17...	<0.010	<.01	<.005	<.005	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAR 16...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 14...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
30...	<0.010	<.01	<.005	<.004	E.012	<.020	<.06	<.005	<.006	.012	<.018	<.005	<.009
30...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAY 06...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUN 15...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<0.010	<.01	<.005	<.004	E.049	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
27...	<0.010	<.01	<.005	<.010	E.013	<.050	<.06	<.005	<.006	<.008	<.018	<.005	<.009
AUG 10...	<0.010	<.01	<.005	E.004	E.011	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
SEP 14...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicrotophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton sulf- oxide, water, fltrd, ug/L (61641)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	(E)-Dimethomorph, water, fltrd, ug/L (79844)	Endosulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)
OCT 15...	<0.009	<0.003	0.007	<0.08	<0.005	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.002	<0.009
NOV 12...	<.009	<.003	<.005	<.08	E.005	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
FEB 17...	<.009	<.003	<.005	<.08	<.009	<.006	E.01	E.009	E.01	<.02	<.004	E.003	<.009
MAR 16...	<.009	<.003	<.005	<.08	<.010	<.006	E.01	<.002	<.02	<.02	<.004	<.004	<.009
APR 14...	<.009	<.003	.006	<.08	<.009	<.006	.02	E.019	<.02	<.02	<.004	<.004	<.009
30...	<.009	.003	<.005	<.08	E.006	<.006	E.01	<.002	<.02	<.02	<.004	<.010	<.009
30...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
MAY 06...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
JUN 15...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.009	<.003	.086	<.08	E.007	<.006	<.01	<.036	<.02	<.02	<.007	.026	<.009
27...	<.009	<.003	.022	<.08	.021	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
AUG 10...	<.009	<.003	<.005	<.08	.009	<.006	<.01	<.036	<.02	<.02	<.007	E.003	<.009
SEP 14...	<.009	<.003	<.005	<.08	<.010	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenithion sulf- oxide, water, fltrd, ug/L (61647)	Flumetralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)
OCT 15...	<0.03	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003
NOV 12...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
FEB 17...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAR 16...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
APR 14...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
30...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
30...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAY 06...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUN 15...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
27...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003
AUG 10...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003
SEP 14...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)
OCT 15...	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.006	<0.03	0.025	<0.006	<0.002
NOV 12...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.024	<.006	<.003
FEB 17...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	E.010	<.006	<.003
MAR 16...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	E.011	<.006	<.003
APR 14...	<.004	<.035	<.008	.038	<.005	<.006	<.04	<.03	<.015	<.03	.098	<.006	<.003
30...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.047	<.006	<.003
30...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	<.013	<.006	<.003
MAY 06...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.032	<.006	<.003
JUN 15...	<.004	<.035	<.008	<.027	.022	<.006	<.04	<.03	<.015	<.03	.016	<.006	<.003
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.004	<.035	<.030	<.027	.016	<.006	<.02	<.03	<.015	<.01	.015	<.006	<.003
27...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.045	<.006	<.003
AUG 10...	<.004	<.035	<.030	<.027	.011	<.006	<.02	<.03	<.015	<.01	.013	.006	<.003
SEP 14...	<.004	<.035	<.030	E.010	<.005	<.006	<.02	<.03	<.015	<.01	E.012	<.006	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Myclo- butanil water, fltrd, ug/L (61599)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phorothioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
OCT 15...	<0.008	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008
NOV 12...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
FEB 17...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
MAR 16...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
APR 14...	<.008	.022	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
30...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	E.010	<.10	<.011	<.06	<.008
30...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
MAY 06...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
JUN 15...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008
27...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
AUG 10...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
SEP 14...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	--

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phoste- bupirim water, fltrd, ug/L (61602)	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)
OCT 15...	<0.005	<0.006	E0.01	<0.005	<0.004	<0.010	<0.011	<0.02	<0.004	0.023	<0.003	<0.02	<0.006
NOV 12...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.024	<.003	<.02	<.006
FEB 17...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.082	<.003	<.02	<.006
MAR 16...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.073	<.003	<.02	<.006
APR 14...	<.005	<.006	.05	<.005	.012	<.025	<.011	<.02	<.004	.771	<.003	<.02	<.006
30...	<.005	<.006	.05	<.005	.008	<.025	<.011	<.02	<.004	.296	<.003	<.02	<.006
30...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	<.005	<.003	<.02	<.006
MAY 06...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.139	<.003	<.02	<.006
JUN 15...	<.005	<.006	.04	<.005	<.004	<.025	<.011	<.03	<.004	.094	<.003	<.02	<.006
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.024	<.003	<.02	<.006
27...	<.005	<.006	.03	<.005	<.015	<.025	<.025	<.02	<.004	.168	<.003	<.02	<.006
AUG 10...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.018	<.003	<.02	<.006
SEP 14...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.021	<.003	<.02	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Teflu- thrin, water, fltrd, ug/L (61606)	Tem- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)
OCT 15...	<0.02	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05
NOV 12...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
FEB 17...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAR 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
APR 14...	<.02	<.008	<.3	<.034	<.07	<.02	E.01	<.010	<.01	<.002	<.004	<.009	<.05
30...	E.02	<.008	<.3	<.034	<.07	<.02	E.01	<.010	.02	<.002	<.004	<.009	<.05
30...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAY 06...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUN 15...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
27...	.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
AUG 10...	.04	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
SEP 14...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05

03437600 SOUTH FORK LITTLE RIVER AT KY 107 NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di- chlor- vos, water fltrd, ug/L (38775)	Sus- pended sediment concentration mg/L (80154)
OCT		
15...	<0.01	2
NOV		
12...	<.01	1
FEB		
17...	<.01	6
MAR		
16...	<.01	2
APR		
14...	<.01	63
30...	<.01	182
30...	<.01	--
MAY		
06...	<.01	17
JUN		
15...	<.01	3
15...	--	--
JUL		
14...	<.01	59
27...	<.01	3
AUG		
10...	<.01	5
SEP		
14...	<.01	4

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03437680 LITTLE RIVER AT KY 345 NEAR CADIZ, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°47'02", long 87°32'50", Christian County, Hydrologic Unit 05130205.

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
APR 14...	1140	Environmental	688	748	12.9	6.1	302	8.1	108	131	00.22	2.03
JUL 14...	1410	Environmental	187	745	7.9	7.3	388	23.5	144	175	<.04	2.87
14...	1418	Field Blank	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water, fltrd, 0.7u GF ug/L (82660)	2-Amino-N-iso-propylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl) aniline, water, fltrd, ug/L (61630)	3,4-Dichloro-aniline, water, fltrd, ug/L (61625)	3,5-Dichloro-aniline, water, fltrd, ug/L (61627)
APR 14...	0.116	0.36	<0.05	<0.09	<0.01	<0.03	<0.006	<0.005	E0.209	<0.004	<0.01	<0.004	<0.005
JUL 14...	.191	.33	<.04	<.09	<.01	<.01	<.006	<.005	E.194	<.004	<.01	.017	<.004
14...	--	--	--	--	--	--	<.006	--	<.006	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4,4-Di'chloro-benzophenone, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl-methyl sulfone, water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unfltrd percent recovery (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)
APR 14...	<0.003	<0.006	<0.03	0.718	<0.005	<0.005	<0.005	80.0	97.3	12.4	<0.02	<0.050	<0.010
JUL 14...	<.007	<.006	<.01	<.007	<.005	<.005	<.005	80.8	90.5	0.716	<.07	<.050	<.010
14...	--	--	--	<.006	<.005	--	<.005	--	94.8	<.007	--	<.050	<.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF ug/L (82687)	cis-Propi-conazole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin, water, fltrd, ug/L (61586)
APR 14...	<0.01	<0.005	<0.004	E0.044	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009	<0.009
JUL 14...	<.01	<.005	<.004	E.016	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009	<.009
14...	--	--	<.004	<.041	<.020	--	<.005	<.006	--	<.018	--	--	--

03437680 LITTLE RIVER AT KY 345 NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Dicro- tophos, water, fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd, ug/L (61641)	Disulf- oton, water, fltrd 0.7u GF ug/L (82677)	(E)-Di- metho- morph, water, fltrd, ug/L (79844)	Endo- sulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)
APR 14...	<0.003	0.006	<0.08	<0.009	<0.006	E0.01	<0.002	<0.02	<0.02	<0.004	<0.004	<0.009	<0.03
JUL 14...	<.003	.048	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009	<.0020
14...	<.003	<.005	--	<.009	--	--	--	<.02	--	--	<.004	<.009	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami- phos, water, fltrd, ug/L (61591)	Fen- thion sulf- oxide, water, fltrd, ug/L (61647)	Flume- tralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Lindane water, fltrd, ug/L (39341)
APR 14...	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003	<0.004
JUL 14...	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<0.387	<.003	<.004
14...	--	<.005	--	--	--	--	--	--	<.003	--	--	--	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)
APR 14...	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.015	<0.03	0.030	<0.006	<0.003	<0.008
JUL 14...	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.018	<.006	<.003	<.008
14...	<.035	--	<.027	--	--	--	--	<.015	--	<.013	<.006	<.003	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phor- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Phoste- bupirim water, fltrd, ug/L (61602)
APR 14...	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005
JUL 14...	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008	<.005
14...	<.007	--	--	<.003	--	<.010	<.004	<.022	--	<.011	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
APR 14...	<0.006	0.06	<0.005	0.012	<0.025	<0.011	<0.02	<0.004	2.40	<0.003	<0.02	<0.006	<0.02
JUL 14...	<.006	.01	<.005	<.007	<.025	<.011	<.03	<.004	0.066	<.003	<.02	<.006	E.01
14...	--	<.01	--	<.004	<.025	<.011	<.02	--	<.005	--	--	--	<.02

03437680 LITTLE RIVER AT KY 345 NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)	Di- chlor- vos, water fltrd, ug/L (38775)
APR 14...	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.010	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01
JUL 14...	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05	<.01
14...	--	--	<0.034	--	<.02	--	<.010	--	<.002	--	<.009	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus- pended sedi- ment concen- tration mg/L (80154)
APR 14...	173
JUL 14...	67
14...	--

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03437990 CASEY CREEK AT KY 525 NEAR CADIZ, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°45'21", long 87°43'31", Trigg County, Hydrologic Unit 05130205.

DRAINAGE AREA.--306 mi².

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
APR 14...	1130	Environmental	84	769	11.8	7.3	209	11.8	85	104	<0.04	0.36
JUL 14...	1500	Environmental	13	762	11.3	7.6	313	19.4	140	171	<.04	2.34

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water, fltrd, 0.7u GF ug/L (82660)	2-Amino-N-isopropylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl)aniline, water, fltrd, ug/L (61630)	3,4-Dichloroaniline, water, fltrd, ug/L (61625)	3,5-Dichloroaniline, water, fltrd, ug/L (61627)
APR 14...	<0.006	0.051	<0.05	<0.09	<0.01	<0.03	<0.006	<0.005	E0.406	<0.004	<0.01	<0.004	<0.005
JUL 14...	.021	.035	<.04	<.09	<.01	<.01	<.006	<.005	E.169	<.004	<.01	<.004	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4,4-Di'chloro-benzo-phenone, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl-methyl sulfone, water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)
APR 14...	<0.003	<0.006	<0.03	0.016	<0.005	<0.005	<0.005	80.8	93.4	8.19	<0.02	<0.050	<0.010
JUL 14...	<.007	<.006	<.01	<.006	<.005	<.005	<.005	82.6	97.9	0.126	<.07	<.050	<.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water, fltrd, 0.7u GF ug/L (82687)	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin, water, fltrd, ug/L (61586)
APR 14...	<0.01	<0.005	<0.004	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009	<0.009
JUL 14...	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009	<.009

03437990 CASEY CREEK AT KY 525 NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd ug/L (39572)	Dicro- tophos, water, fltrd ug/L (38454)	Diel- drin, water, fltrd ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd ug/L (61641)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	(E)-Di- metho- morph, water, fltrd ug/L (79844)	Endo- sulfan ether, water, fltrd ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd ug/L (61644)
APR 14...	<0.003	E0.004	<0.08	<0.009	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.004	<0.009	<0.03
JUL 14...	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009	<.0020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion, water, fltrd ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd ug/L (61646)	Fenami- phos, water, fltrd ug/L (61591)	Fen- thion sulf- oxide, water, fltrd ug/L (61647)	Flume- tralin, water, fltrd ug/L (61592)	Fonofos oxon, water, fltrd ug/L (61649)	Fonofos water, fltrd ug/L (04095)	Hexa- zinone, water, fltrd ug/L (04025)	Ipro- dione, water, fltrd ug/L (61593)	Isofen- phos, water, fltrd ug/L (61594)	Lindane water, fltrd ug/L (39341)
APR 14...	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003	<0.004
JUL 14...	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<0.387	<.003	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd ug/L (61652)	Mala- thion, water, fltrd ug/L (39532)	Meta- laxyl, water, fltrd ug/L (61596)	Methi- althion water, fltrd ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd ug/L (39415)	Metri- buzin, water, fltrd ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd ug/L (61599)
APR 14...	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.015	<0.03	E0.011	<0.006	<0.003	<0.008
JUL 14...	<.035	<.030	<.027	.006	<.006	<.02	<.03	<.015	<.01	<.013	<.006	<.003	<.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phoro- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd ug/L (61600)	p,p'- DDE, water, fltrd ug/L (34653)	Para- oxon, water, fltrd ug/L (61663)	Para- thion, water, fltrd ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd ug/L (61668)	Phosmet water, fltrd ug/L (61601)	Phoste- bupirim water, fltrd ug/L (61602)
APR 14...	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005
JUL 14...	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- fenofos water, fltrd ug/L (61603)	Prome- ton, water, fltrd ug/L (04037)	Prome- tryn, water, fltrd ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd ug/L (61604)	Sima- zine, water, fltrd ug/L (04035)	Sulfo- tepp, water, fltrd ug/L (61605)	Sulpro- fos, water, fltrd ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd ug/L (61669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
APR 14...	<0.006	<0.01	<0.005	<0.004	<0.025	<0.011	<0.02	<0.004	0.845	<0.003	<0.02	<0.006	<0.02
JUL 14...	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.024	<.003	<.02	<.006	<.02

03437990 CASEY CREEK AT KY 525 NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)	Di- chlor- vos, water fltrd, ug/L (38775)
APR 14...	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.010	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01
JUL 14...	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus- pended sediment concentration mg/L (80154)
APR 14...	53
JUL 14...	2

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 2003 to current water year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 16...	1420	Environmental	E76	763	9.4	7.7	475	18.4	196	239	<0.04	3.50
NOV 13...	1250	Environmental	E47	777	9.7	7.8	504	13.5	--	243	<.04	2.54
13...	1258	Field Blank	--	--	--	--	--	--	--	--	--	--
FEB 18...	1400	Environmental	296	771	14.2	8.0	385	9.1	166	202	<.04	4.48
MAR 17...	1300	Environmental	195	768	13.5	8.5	431	12.2	174	203	<.04	3.67
17...	1310	Replicate	--	--	--	--	--	--	173	208	<.04	3.66
APR 14...	1330	Environmental	E986	768	10.9	7.7	439	11.1	165	201	.04	3.83
28...	1150	Environmental	704	769	9.8	7.3	370	14.6	139	170	<.04	4.23
MAY 05...	1440	Environmental	773	765	10.6	7.5	328	15.8	134	163	<.04	4.16
05...	1448	Field Blank	--	--	--	--	--	--	--	--	<.010	E0.009
JUN 16...	1400	Environmental	E441	766	9.0	7.7	403	20.9	161	196	<.04	4.71
JUL 14...	1240	Environmental	E165	765	8.3	7.7	372	23.5	152	185	<.04	3.45
28...	1050	Environmental	76	770	8.3	7.8	431	20.4	175	214	<.04	3.81
AUG 11...	1250	Environmental	E160	766	8.4	7.8	416	20.2	178	218	<.04	3.81
SEP 16...	1230	Environmental	65	763	7.2	7.4	390	20.3	154	188	<.04	3.29

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3,5-Dichloro-aniline water, fltrd, ug/L (61627)	4,4-Di'chloro-benzo-phen-one, wat flt ug/L (61631)	4Chloro-2methyl-phenol, water, fltrd, ug/L (61633)	4Chloro-phenyl-methyl-sulfone water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)
OCT 16...	<0.005	<0.003	<0.006	<0.03	<0.006	E0.003	<0.005	<0.005	85.3	103	0.249	<0.02	<0.200
NOV 13...	<.005	<.003	<.006	<.03	<.006	<.005	<.005	<.005	90.4	88.7	.210	<.02	<.050
13...	<.005	<.003	<.006	<.03	<.006	<.005	<.005	<.005	94.6	94.6	<.007	<.02	<.050
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.005	<.003	<.006	<.03	.011	<.005	<.005	<.005	93.7	90.3	.465	<.02	<.050
17...	<.005	<.003	<.006	<.03	.011	<.005	<.005	<.005	90.5	86.9	.503	<.02	<.050
APR 14...	<.005	<.003	<.006	<.03	.026	<.005	<.005	<.005	84.0	97.8	7.25	<.02	<.050
28...	<.005	<.003	<.006	<.03	.117	<.005	<.005	<.005	84.1	92.9	3.39	<.02	<.050
MAY 05...	<.005	<.003	<.006	<.03	.054	<.005	<.005	<.005	85.6	99.4	2.87	<.02	<.050
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.005	<.003	--	<.01	.022	<.005	<.005	<.005	88.1	110	.602	<.02	<.050
JUL 14...	<.004	<.007	<.006	<.01	.008	<.005	<.005	<.005	83.5	92.3	1.06	<.07	<.050
28...	<.004	<.007	<.006	<.01	.011	<.005	<.005	<.005	80.6	91.0	.817	<.07	<.050
AUG 11...	<.004	<.007	<.006	<.01	E.005	<.005	<.005	<.005	79.3	88.8	.164	<.07	<.050
SEP 16...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	85.7	98.3	.174	<.07	<.050

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben- flur- alin, water, fltrd 0.7u GF (82673)	beta- Endo- sulfan, water, fltrd, ug/L (34357)	Bifen- thrin, water, fltrd, ug/L (61580)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF (82680)	Carbo- furan, water, fltrd 0.7u GF (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	lambda- Cyhalo- thrin, water, fltrd, ug/L (61595)
OCT 16...	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009
NOV 13...	<.010	<.01	<.005	<.004	E.013	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
NOV 13...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAR 17...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 14...	<.010	<.01	<.005	<.007	E.005	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 28...	<.010	<.01	<.005	<.004	E.007	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAY 05...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 14...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 28...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
AUG 11...	<.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
SEP 16...	<.010	<.01	<.041	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cyper- methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF (82682)	Diazi- non, water, fltrd, ug/L (39572)	Dicro- tophos, water fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd, ug/L (61641)	Disul- foton, water, fltrd 0.7u GF (82677)	(E)-Di- metho- morph, water, fltrd, ug/L (79844)	Endo- sulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF (82668)	Ethal- flur- alin, water, fltrd 0.7u GF (82663)
OCT 16...	<0.009	<0.003	E0.004	<0.08	<0.005	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.002	<0.009
NOV 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
NOV 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
MAR 17...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
APR 14...	<.009	<.003	E.004	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	E.002	<.009
APR 28...	<.009	<.003	<.005	<.08	<.009	<.006	E.01	<.002	<.02	<.02	<.004	E.002	<.009
MAY 05...	<.009	<.003	<.005	<.08	<.009	<.006	E.01	<.002	<.02	<.02	<.004	<.004	<.009
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
JUL 14...	<.009	<.003	.010	<.08	E.003	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
JUL 28...	<.009	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
AUG 11...	<.009	<.003	<.005	<.08	E.004	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
SEP 16...	<.009	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009

CUMBERLAND RIVER BASIN

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami- phos, water, fltrd, ug/L (61591)	Fen- thion sulf- oxide, water, fltrd, ug/L (61647)	Flume- tralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)
OCT 16...	<0.03	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003
NOV 13...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
NOV 13...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAR 17...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
APR 14...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
APR 28...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAY 05...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUL 14...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003
JUL 28...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003
AUG 11...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003
SEP 16...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.387	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF (82671)
OCT 16...	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.006	<0.03	E0.013	<0.006	<0.002
NOV 13...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.014	<.006	<.003
NOV 13...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	<.013	<.006	<.003
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	E.010	<.006	<.003
MAR 17...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	E.010	<.006	<.003
APR 14...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.025	<.006	<.003
APR 28...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.031	<.006	<.003
MAY 05...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.052	<.006	<.003
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.004	<.035	<.008	<.027	.052	<.006	<.04	<.03	<.015	<.03	.053	.029	<.003
JUL 14...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.014	<.006	<.003
JUL 28...	<.004	<.035	<.030	<.027	.013	<.006	<.02	<.03	<.015	<.01	.156	<.006	<.003
AUG 11...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.018	<.006	<.003
SEP 16...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.013	<.006	<.003

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Myclo- butanil water, fltrd, ug/L (61599)	Naprop- amide, water, fltrd 0.7u GF (82684)	O-Et-O- Me-S-Pr -phos- phoro- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF (82669)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
OCT 16...	<0.008	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008
NOV 13...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
NOV 13...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
MAR 17...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
APR 14...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
APR 28...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
MAY 05...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.008	E.005	<.008	<.007	<.003	<.008	<.010	E.002	<.022	<.10	<.011	<.06	<.008
JUL 14...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008
JUL 28...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008
AUG 11...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
SEP 16...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phoste- bupirim water, fltrd, ug/L (61602)	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)
OCT 16...	<0.005	<0.006	E0.01	<0.005	<0.004	<0.010	<0.011	<0.02	<0.004	0.026	<0.003	<0.02	<0.006
NOV 13...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.030	<.003	<.02	<.006
NOV 13...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	<.005	<.003	<.02	<.006
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.074	<.003	<.02	<.006
MAR 17...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.076	<.003	<.02	<.006
APR 14...	<.005	<.006	.01	<.005	.007	<.025	<.011	<.02	<.004	1.75	<.003	<.02	<.006
APR 28...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.429	<.003	<.02	<.006
MAY 05...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.494	<.003	<.02	<.006
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.005	<.006	.06	<.005	<.004	<.025	<.011	<.02	<.004	.069	<.003	<.02	<.006
JUL 14...	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	.091	<.003	<.02	<.006
JUL 28...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.048	<.003	<.02	--
AUG 11...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.028	<.003	<.02	<.006
SEP 16...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.029	<.003	<.02	<.006

03438000 LITTLE RIVER NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tebu- thiuron water fltrd 0.7u GF (82670)	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)
OCT 16...	<0.02	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05
NOV 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
NOV 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAR 17...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
APR 14...	M	<.008	<.3	<.034	<.07	<.02	M	<.010	<.01	<.002	<.004	<.009	<.05
APR 28...	<.02	<.008	<.3	<.034	<.07	<.02	E.01	<.010	<.01	<.002	<.004	<.009	<.05
MAY 05...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUL 14...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUL 28...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
AUG 11...	.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
SEP 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di- chlor- vos, water fltrd, ug/L (38775)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 16...	<0.01	2
NOV 13...	<.01	2
NOV 13...	<.01	--
FEB 18...	--	3
MAR 17...	<.01	3
MAR 17...	<.01	3
APR 14...	<.01	152
APR 28...	<.01	30
MAY 05...	<.01	39
MAY 05...	--	--
JUN 16...	<.01	27
JUL 14...	<.01	16
JUL 28...	<.01	11
AUG 11...	<.01	27
SEP 16...	<.01	14

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03438024 MUDDY FORK NEAR HOPKINSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°53'12", long 87°35'02", Christian County, Hydrologic Unit 05130205.

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
APR 13...	1540	Environmental	24	741	10.7	7.2	442	10.3	154	188	0.05	2.31
13...	1548	Field Blank	--	--	--	--	--	--	--	--	<.04	<0.06
JUL 13...	1200	Environmental	3.1	750	5.8	6.9	470	17.6	207	252	<.04	4.97

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water, fltrd, 0.7u GF ug/L (82660)	2-Amino-N-iso-propyl-benzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl) aniline, water, fltrd, ug/L (61630)	3,4-Dichloro-aniline, water, fltrd, ug/L (61625)	3,5-Dichloro-aniline, water, fltrd, ug/L (61627)
APR 13...	0.043	0.111	<0.05	<0.09	<0.01	<0.03	<0.006	<0.005	E0.230	<0.004	<0.01	<0.004	<0.005
13...	<.006	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	.027	.050	<.04	<.09	<.01	<.01	<.006	<.005	E.254	<.004	<.01	<.004	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4,4-Di'chloro-benzophenone, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl sulfone, water, fltrd, ug/L (61634)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-Endosulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unfltrd percent recovery (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovery (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Benfluralin, water, fltrd, 0.7u GF ug/L (82673)
APR 13...	<0.003	<0.006	<0.03	0.073	0.010	<0.005	<0.005	82.0	94.1	0.806	<0.02	<0.050	<0.010
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	<.007	<.006	<.01	.009	<.005	<.005	<.005	80.3	91.3	.188	<.07	<.050	<.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Endosulfan, water, fltrd, ug/L (34357)	Bifenthrin, water, fltrd, ug/L (61580)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd, 0.7u GF ug/L (82680)	Carbofuran, water, fltrd, 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd, 0.7u GF ug/L (82687)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin, water, fltrd, ug/L (61586)
APR 13...	<0.01	<0.005	<0.004	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009	<0.009
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	E.004	<.018	<.005	<.009	<.009

03438024 MUDDY FORK NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Dicro- tophos, water, fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd, ug/L (61641)	Disulf- oton, water, fltrd 0.7u GF ug/L (82677)	(E)-Di- metho- morph, water, fltrd, ug/L (79844)	Endo- sulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)
APR 13... 13...	<0.003 --	<0.005 --	<0.08 --	<0.009 --	<0.006 --	<0.02 --	<0.002 --	<0.02 --	<0.02 --	<0.004 --	<0.004 --	<0.009 --	<0.03 --
JUL 13...	<.003	.019	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.020	<.009	<.0020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami- phos, water, fltrd, ug/L (61591)	Fen- thion sulf- oxide, water, fltrd, ug/L (61647)	Flume- tralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Lindane water, fltrd, ug/L (39341)
APR 13... 13...	<0.004 --	<0.005 --	<0.008 --	<0.03 --	<0.03 --	<0.008 --	<0.004 --	<0.002 --	<0.003 --	<0.013 --	<1 --	<0.003 --	0.016 --
JUL 13...	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)
APR 13... 13...	<0.035 --	<0.008 --	<0.027 --	<0.005 --	<0.006 --	<0.04 --	<0.03 --	<0.015 --	<0.03 --	0.019 --	<0.006 --	<0.003 --	<0.008 --
JUL 13...	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	E.009	<.006	<.003	<.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phorothioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Phoste- bupirim water, fltrd, ug/L (61602)
APR 13... 13...	<0.007 --	<0.008 --	<0.007 --	<0.003 --	<0.008 --	<0.010 --	<0.004 --	<0.022 --	<0.10 --	<0.011 --	<0.06 --	<0.008 --	<0.005 --
JUL 13...	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
APR 13... 13...	<0.006 --	0.03 --	<0.005 --	<0.004 --	<0.025 --	<0.011 --	<0.02 --	<0.004 --	0.676 --	<0.003 --	<0.02 --	<0.006 --	<0.02 --
JUL 13...	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.051	<.003	<.02	<.006	<.02

03438024 MUDDY FORK NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)	Di- chlor- vos, water fltrd, ug/L (38775)
APR 13...	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.010	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	<.008	<.3	<.034	<.07	<.02	<.01	<.010	E.01	<.002	<.004	<.009	<.05	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus- pended sediment concentration mg/L (80154)
APR 13...	42
13...	--
JUL 13...	50

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03438028 SINKING FORK NEAR HOPKINSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°52'01", long 87°36'28", Christian County, Hydrologic Unit 05130205.

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
APR 13...	1720	Environmental	593	740	12.4	7.2	207	7.0	71	86	<0.04	1.30
JUL 13...	1320	Environmental	6.5	750	5.9	7.2	338	22.7	141	172	<.04	2.79

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water fltrd 0.7u GF (82660)	2-Amino-N-iso-propylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl)-aniline, water, fltrd, ug/L (61630)	3,4-Dichloro-aniline, water, fltrd, ug/L (61625)	3,5-Dichloro-aniline, water, fltrd, ug/L (61627)
APR 13...	0.029	0.27	<0.05	<0.09	<0.01	<0.03	<0.006	<0.005	E0.456	<0.004	<0.01	<0.004	<0.005
JUL 13...	.044	.119	<.04	E.01	<.01	<.01	<.006	<.005	E.170	<.004	<.01	<.004	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4,4-Di'chloro-benzo-phenone, wat flt ug/L (61631)	4Chloro-2methyl-phenol, water, fltrd, ug/L (61633)	4Chloro-phenyl-methyl-sulfone, water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)
APR 13...	<0.003	<0.006	<0.03	0.832	<0.005	<0.005	<0.005	85.9	98.1	18.1	<0.02	<0.050	<0.010
JUL 13...	<.007	<.006	<.01	<.006	<.005	<.005	<.005	84.1	96.4	0.136	<.07	<.050	<.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin, water fltrd 0.7u GF ug/L (82687)	cis-Propi-conazole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin, water, fltrd, ug/L (61586)
APR 13...	<0.01	<0.005	<0.004	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009	<0.009
JUL 13...	<.01	<.005	<.004	E.052	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009	<.009

03438028 SINKING FORK NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Dicro- tophos, water, fltrd, ug/L (38454)	Diel- drin, water, fltrd, ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd, ug/L (61641)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	(E)-Di- metho- morph, water, fltrd, ug/L (79844)	Endo- sulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)

APR 13...	<0.003	<0.005	<0.08	<0.009	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.004	<0.009	<0.03
JUL 13...	<.003	E.004	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.000	<.009	<.0020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami- phos, water, fltrd, ug/L (61591)	Fen- thion sulf- oxide, water, fltrd, ug/L (61647)	Flume- tralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Lindane water, fltrd, ug/L (39341)

APR 13...	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003	<0.004
JUL 13...	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<0.387	<.003	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)

APR 13...	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.015	<0.03	0.031	<0.010	<0.003	<0.008
JUL 13...	<.035	<.030	<.027	.025	<.006	<.02	<.03	<.015	<.01	E.008	<.006	<.003	<.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phoro- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Phoste- bupirim water, fltrd, ug/L (61602)

APR 13...	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	0.121	<0.10	<0.011	<0.06	<0.008	<0.005
JUL 13...	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)

APR 13...	<0.006	0.03	<0.005	<0.004	<0.025	<0.011	<0.02	<0.004	2.44	<0.003	<0.02	<0.006	<0.02
JUL 13...	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	0.031	<.003	<.02	<.006	<.02

CUMBERLAND RIVER BASIN

03438028 SINKING FORK NEAR HOPKINSVILLE, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)	Di- chlor- vos, water fltrd, ug/L (38775)
APR 13...	.008	.3	.034	.07	.02	<0.01	<0.010	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01
JUL 13...	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	.010	<.05	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus- pended sediment concentration mg/L (80154)
APR 13...	271
JUL 13...	40

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°50'26", long 87°44'27", Christian County, Hydrologic Unit 05130205.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 16...	1620	Environmental	7.7	763	8.3	7.6	467	19.0	208	254	<0.04	4.21
NOV 13...	1440	Environmental	E8.7	777	8.4	7.6	458	13.0	210	256	<.04	3.58
NOV 13...	1450	Replicate	--	--	--	--	--	--	207	253	<.04	3.64
FEB 18...	1600	Environmental	E125	769	12.9	7.8	403	10.3	164	201	<.04	5.62
MAR 17...	1440	Environmental	90	768	13.2	8.4	411	12.5	174	212	<.04	4.91
APR 13...	1300	Environmental	E90	761	10.3	7.7	408	12.1	171	209	<.04	4.77
APR 28...	1330	Environmental	125	769	10.1	7.3	360	14.4	149	182	<.04	5.51
MAY 05...	1210	Environmental	E358	768	9.9	7.3	355	14.5	146	179	<.04	5.16
JUN 16...	1220	Environmental	E795	767	7.9	7.4	368	19.3	150	183	<.04	4.63
JUL 13...	1220	Environmental	E175	767	8.0	7.5	383	21.6	136	166	<.04	4.26
JUL 28...	1210	Environmental	50	769	--	7.7	423	18.1	176	215	<.04	5.24
AUG 11...	1130	Environmental	E100	767	8.2	7.5	410	18.5	--	--	<.04	4.23
SEP 16...	1400	Environmental	E50	764	7.6	7.5	469	19.9	200	244	<.04	3.74

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd 0.7u GF (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water fltrd 0.7u GF (82660)	2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)	2-Amino-N-iso-propylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Tri-fluoro-methyl)aniline, water, fltrd, ug/L (61630)	3,4-Di-chloro-aniline, water, fltrd, ug/L (61625)
OCT 16...	0.047	0.066	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	E0.246	<0.004	<0.01	<0.004
NOV 13...	.040	.062	<.05	<0.09	<.01	<.03	<.006	<.1	<.005	E.110	<.004	<.01	<.004
NOV 13...	.040	.066	<.05	<.09	<.01	<.03	<.006	<.1	<.005	E.309	<.004	<.01	<.004
FEB 18...	.019	.036	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	.008	.027	<.05	<.09	<.01	<.03	<.006	--	<.005	E.200	<.004	<.01	<.004
APR 13...	.014	.040	<.05	<.09	<.01	<.03	<.006	--	<.005	E.158	<.004	<.01	<.004
APR 28...	.031	.079	<.05	<.09	<.01	<.03	<.006	--	<.005	E.431	<.004	<.01	<.004
MAY 05...	.027	.062	<.05	<.09	<.01	<.03	<.006	--	<.005	E.458	<.004	<.01	<.004
JUN 16...	.054	.58	<.05	<.09	--	<.03	<.006	--	<.005	E.290	<.004	<.01	<.004
JUL 13...	.060	.108	<.04	<.09	<.01	<.01	<.006	--	<.005	E.211	<.004	<.01	<.004
JUL 28...	.035	.057	<.04	--	<.01	<.01	<.006	--	<.005	E.188	<.004	<.01	.010
AUG 11...	.054	.085	<.04	--	<.01	<.01	<.006	--	<.005	E.199	<.004	<.01	<.004
SEP 16...	.036	.053	<.04	<.09	<.01	<.01	<.006	--	<.005	E.182	<.004	<.01	<.004

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3,5-Di-chloro-aniline water, fltrd, ug/L (61627)	4,4-Di'chloro-benzo-phen-one, wat flt ug/L (61631)	4Chloro-2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl-methyl sulfone water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)
OCT 16...	<0.005	<0.003	<0.006	<0.03	<0.006	<0.004	<0.005	<0.005	90.5	98.2	0.089	<0.02	<0.050
NOV 13...	<.005	<.003	<.006	<.03	E.005	<.005	<.005	<.005	85.8	91.2	.092	<.02	<.050
NOV 13...	<.005	<.003	<.006	<.03	<.007	<.005	<.005	<.005	92.9	103	.093	<.02	<.050
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.005	<.003	<.006	<.03	E.005	<.005	<.005	<.005	85.2	75.7	.885	<.02	<.050
APR 13...	<.005	<.003	<.006	<.03	.018	<.005	<.005	<.005	80.0	94.2	.424	<.02	<.050
APR 28...	<.005	<.003	<.006	<.03	.177	.006	<.005	<.005	82.4	93.1	3.98	<.02	<.050
MAY 05...	<.005	<.003	<.006	<.03	.067	<.006	<.005	<.005	86.0	99.1	1.52	<.02	<.050
JUN 16...	<.005	<.003	--	<.01	<.009	<.005	<.005	<.005	93.3	114	.887	<.02	<.050
JUL 13...	<.004	<.007	<.006	<.01	.008	<.005	<.005	<.005	71.5	85.2	.218	<.07	<.050
JUL 28...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	88.4	99.1	.516	<.07	<.050
AUG 11...	<.004	<.007	<.006	<.01	E.006	<.005	<.005	<.005	79.9	88.0	.156	<.07	<.050
SEP 16...	<.004	<.007	<.006	<.01	<.006	<.005	<.005	<.005	81.5	92.2	.088	<.07	<.050

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben-flu-alin, water, fltrd 0.7u GF (82673)	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)
OCT 16...	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009
NOV 13...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
NOV 13...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 13...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
APR 28...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
MAY 05...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	E.002	<.018	<.005	<.009
JUN 16...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 13...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
JUL 28...	<0.010	<.01	<.005	<.004	E.030	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
AUG 11...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009
SEP 16...	<0.010	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton sulf- oxide, water, fltrd, ug/L (61641)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	(E)-Dimethomorph, water, fltrd, ug/L (79844)	Endosulfan ether, water, fltrd, ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd 0.7u GF ug/L (82663)
OCT 16...	<0.009	<0.003	<0.005	<0.08	<0.005	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.002	<0.009
NOV 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
NOV 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
APR 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
APR 28...	<.009	<.003	<.005	<.08	<.009	<.006	E.01	<.002	<.02	<.02	<.004	<.004	<.009
MAY 05...	<.009	<.003	<.005	<.08	<.009	<.006	E.01	<.002	<.02	<.02	<.004	<.004	<.009
JUN 16...	<.009	<.003	<.005	<.08	<.009	<.006	<.02	<.002	<.02	<.02	<.004	<.004	<.009
JUL 13...	<.009	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
JUL 28...	<.009	<.003	.056	<.08	E.007	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
AUG 11...	<.009	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009
SEP 16...	<.009	<.003	<.005	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenthion sulf- oxide, water, fltrd, ug/L (61647)	Flumetralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)
OCT 16...	<0.03	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003
NOV 13...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
NOV 13...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
APR 13...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
APR 28...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
MAY 05...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUN 16...	<.03	<.004	<.005	<.008	<.03	<.03	<.008	<.004	<.002	<.003	<.013	<1	<.003
JUL 13...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
JUL 28...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
AUG 11...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003
SEP 16...	<.0020	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<.0387	<.003

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)
OCT 16...	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.006	<0.03	0.074	<0.006	<0.002
NOV 13...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.062	<.006	<.003
NOV 13...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.068	<.006	<.003
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.018	<.006	<.003
APR 13...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.032	<.006	<.003
APR 28...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.062	<.006	<.003
MAY 05...	<.004	<.035	<.008	<.027	<.005	<.006	<.04	<.03	<.015	<.03	.057	<.006	<.003
JUN 16...	<.004	<.035	<.008	<.027	.010	<.006	<.04	<.03	<.015	<.03	.019	<.006	<.003
JUL 13...	<.004	<.035	<.030	<.027	.009	<.006	<.02	<.03	<.015	<.01	.255	<.006	<.003
JUL 28...	<.004	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.019	<.006	<.003
AUG 11...	<.004	<.035	<.030	<.027	.010	<.006	<.02	<.03	<.015	<.01	.097	<.006	<.003
SEP 16...	<.004	<.035	<.030	<.027	.025	<.006	<.02	<.03	<.015	<.01	.094	<.006	<.003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Myclo- butanil water, fltrd, ug/L (61599)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phoro- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- oxon, water, fltrd, ug/L (61663)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
OCT 16...	<0.008	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008
NOV 13...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
NOV 13...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	--	--
APR 13...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
APR 28...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	E.008	<.10	<.011	<.06	<.008
MAY 05...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	E.008	<.10	<.011	<.06	<.008
JUN 16...	<.008	<.007	<.008	<.007	<.003	<.008	<.010	<.004	<.022	<.10	<.011	<.06	<.008
JUL 13...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008
JUL 28...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
AUG 11...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	<.008
SEP 16...	<.008	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	--	--

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phoste- bupirim water, fltrd, ug/L (61602)	Pro- fenofos water, fltrd, ug/L (61603)	Prome- ton, water, fltrd, ug/L (04037)	Prome- tryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd, 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd, 0.7u GF ug/L (82679)	Propar- gite, water, fltrd, 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd, ug/L (61604)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- tepp, water, fltrd, ug/L (61605)	Sulpro- fos, water, fltrd, ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd, ug/L (61669)
OCT 16...	<0.005	<0.006	<0.01	<0.005	<0.004	<0.010	<0.011	<0.02	<0.004	0.034	<0.003	<0.02	<0.006
NOV 13...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.041	<.003	<.02	<.006
NOV 13...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.046	<.003	<.02	<.006
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.323	<.003	<.02	<.006
APR 13...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.104	<.003	<.02	<.006
APR 28...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	1.26	<.003	<.02	<.006
MAY 05...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.477	<.003	<.02	<.006
JUN 16...	<.005	<.006	M	<.005	<.004	<.025	<.011	<.02	<.004	.085	<.003	<.02	<.006
JUL 13...	<.005	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.047	<.003	<.02	<.006
JUL 28...	<.005	<.006	.02	<.005	<.010	<.025	<.011	<.02	<.004	.057	<.003	<.02	<.006
AUG 11...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.035	<.003	<.02	<.006
SEP 16...	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	.028	<.003	<.02	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)
OCT 16...	<0.02	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05
NOV 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
NOV 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 17...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
APR 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
APR 28...	<.02	<.008	<.3	<.034	<.07	<.02	E.01	<.010	<.01	<.002	<.004	<.009	<.05
MAY 05...	<.02	<.008	<.3	<.034	<.07	<.02	E.01	<.010	M	<.002	<.004	<.009	<.05
JUN 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUL 13...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
JUL 28...	E.01	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
AUG 11...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05
SEP 16...	<.02	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05

CUMBERLAND RIVER BASIN

03438040 SINKING CREEK AT KINGS CHAPEL ROAD NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di- chlor- vos, water fltrd, ug/L (38775)	Sus- pended sediment concentration mg/L (80154)
OCT		
16...	<0.01	2
NOV		
13...	<.01	1
13...	<.01	1
FEB		
18...	--	7
MAR		
17...	<.01	5
APR		
13...	<.01	11
28...	<.01	50
MAY		
05...	<.01	29
JUN		
16...	<.01	673
JUL		
13...	<.01	18
28...	<.01	10
AUG		
11...	<.01	14
SEP		
16...	<.01	2

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

03438080 LITTLE RIVER AT CRUTE ROAD BRIDGE NEAR CADIZ, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 36°50'35", long 87°47'07", Trigg County, Hydrologic Unit 05130205.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--March 2003 to current water year.

COOPERATION.--Kentucky Department of Agriculture.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Ammonia water, fltrd, as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
APR 13...	1150	Environmental	E99	761	9.8	7.6	408	11.3	164	200	0.06	3.26
JUL 13...	1050	Environmental	E125	767	8.6	7.3	350	19.9	154	188	E.02	3.73

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol, wat flt ug/L (61637)	2,5-Dichloroaniline, water, fltrd, ug/L (61614)	2,6-Diethyl-aniline, water, fltrd, 0.7u GF ug/L (82660)	2-Amino-N-isopropylbenzamide, wat flt ug/L (61617)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, ug/L (61620)	3-(Trifluoromethyl)aniline, water, fltrd, ug/L (61630)	3,4-Dichloroaniline, water, fltrd, ug/L (61625)	3,5-Dichloroaniline, water, fltrd, ug/L (61627)
APR 13...	0.047	0.083	<0.05	<0.09	<0.01	<0.03	<0.006	<0.005	E0.205	<0.004	<0.01	<0.004	<0.005
JUL 13...	.106	.165	<.04	<.09	<.01	<.01	<.006	<.005	E.231	<.004	<.01	.005	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4,4-Di'chloro-benzophenone, wat flt ug/L (61631)	4Chloro-2methylphenol, water, fltrd, ug/L (61633)	4Chlorophenyl-methyl sulfone, water, fltrd, ug/L (61634)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002 /9002, wat unf percent recovry (99224)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)
APR 13...	<0.003	<0.006	<0.03	0.019	<0.005	<0.005	<0.005	82.3	98.5	0.485	<0.02	<0.050	<0.010
JUL 13...	<.007	<.006	<.01	<.006	<.005	<.005	<.005	84.0	91.6	.480	<.07	<.050	<.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF ug/L (82687)	cis-Propi-conazole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin, water, fltrd, ug/L (61586)
APR 13...	<0.01	<0.005	<0.004	<0.041	<0.020	<0.06	<0.005	<0.006	<0.008	<0.018	<0.005	<0.009	<0.009
JUL 13...	<.01	<.005	<.004	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.005	<.009	<.009

03438080 LITTLE RIVER AT CRUTE ROAD BRIDGE NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd ug/L (39572)	Dicro- tophos, water, fltrd ug/L (38454)	Diel- drin, water, fltrd ug/L (39381)	Dimeth- oate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd ug/L (61640)	Disulf- oton sulf- oxide, water, fltrd ug/L (61641)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	(E)-Di- metho- morph, water, fltrd ug/L (79844)	Endo- sulfan ether, water, fltrd ug/L (61642)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd ug/L (61644)
APR 13...	<0.003	E0.004	<0.08	<0.009	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.004	<0.009	<0.03
JUL 13...	<.003	E.004	<.08	<.009	<.006	<.01	<.036	<.02	<.02	<.007	<.004	<.009	<.0020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethion, water, fltrd ug/L (82346)	Etho- prop, water, 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd ug/L (61646)	Fenami- phos, water, fltrd ug/L (61591)	Fen- thion sulf- oxide, water, fltrd ug/L (61647)	Flume- tralin, water, fltrd ug/L (61592)	Fonofos oxon, water, fltrd ug/L (61649)	Fonofos water, fltrd ug/L (04095)	Hexa- zinone, water, fltrd ug/L (04025)	Ipro- dione, water, fltrd ug/L (61593)	Isofen- phos, water, fltrd ug/L (61594)	Lindane water, fltrd ug/L (39341)
APR 13...	<0.004	<0.005	<0.008	<0.03	<0.03	<0.008	<0.004	<0.002	<0.003	<0.013	<1	<0.003	<0.004
JUL 13...	<.004	<.005	<.049	<.04	<.03	<.008	<.004	<.003	<.003	<.013	<0.387	<.003	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- oxon, water, fltrd ug/L (61652)	Mala- thion, water, fltrd ug/L (39532)	Meta- laxyl, water, fltrd ug/L (61596)	Methi- althion water, fltrd ug/L (61598)	c-Per- methric acid methyl ester, wat flt ug/L (79842)	Methyl para- oxon, water, fltrd ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	t-Per- methric acid methyl ester, wat flt ug/L (79843)	Metola- chlor, water, fltrd ug/L (39415)	Metri- buzin, water, fltrd ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd ug/L (61599)
APR 13...	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04	<0.03	<0.015	<0.03	0.015	<0.006	<0.003	<0.008
JUL 13...	<.035	<.030	<.027	<.005	<.006	<.02	<.03	<.015	<.01	.014	<.006	<.003	<.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O- Me-S-Pr -phos- phoro- thioate wat flt ug/L (61660)	Oxy- fluor- fen, water, fltrd ug/L (61600)	p,p'- DDE, water, fltrd ug/L (34653)	Para- oxon, water, fltrd ug/L (61663)	Para- thion, water, fltrd ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd ug/L (61668)	Phosmet water, fltrd ug/L (61601)	Phoste- bupirim water, fltrd ug/L (61602)
APR 13...	<0.007	<0.008	<0.007	<0.003	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005
JUL 13...	<.007	<.005	<.007	<.003	<.016	<.010	<.004	<.022	<.10	<.011	<.05	<.008	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- fenofos water, fltrd ug/L (61603)	Prome- ton, water, fltrd ug/L (04037)	Prome- tryn, water, fltrd ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propet- amphos, water, fltrd ug/L (61604)	Sima- zine, water, fltrd ug/L (04035)	Sulfo- tepp, water, fltrd ug/L (61605)	Sulpro- fos, water, fltrd ug/L (38716)	Tebu- pirim- phos oxon, water, fltrd ug/L (61669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
APR 13...	<0.006	0.01	<0.005	<0.004	<0.025	<0.011	<0.02	<0.004	0.279	<0.003	<0.02	<0.006	<0.02
JUL 13...	<.006	.01	<.005	<.004	<.025	<.011	<.02	<.004	.056	<.003	<.02	<.006	<.02

03438080 LITTLE RIVER AT CRUTE ROAD BRIDGE NEAR CADIZ, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Teflu- thrin, water, fltrd, ug/L (61606)	Teme- phos, water, fltrd, ug/L (61607)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	(Z)-Di- metho- morph, water, fltrd, ug/L (79845)	Di- chlor- vos, water fltrd, ug/L (38775)
APR 13...	<0.008	<0.3	<0.034	<0.07	<0.02	<0.01	<0.010	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01
JUL 13...	<.008	<.3	<.034	<.07	<.02	<.01	<.010	<.01	<.002	<.004	<.009	<.05	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus- pended sediment concentration mg/L (80154)
APR 13...	5
JUL 13...	33

E--Laboratory estimated value.

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

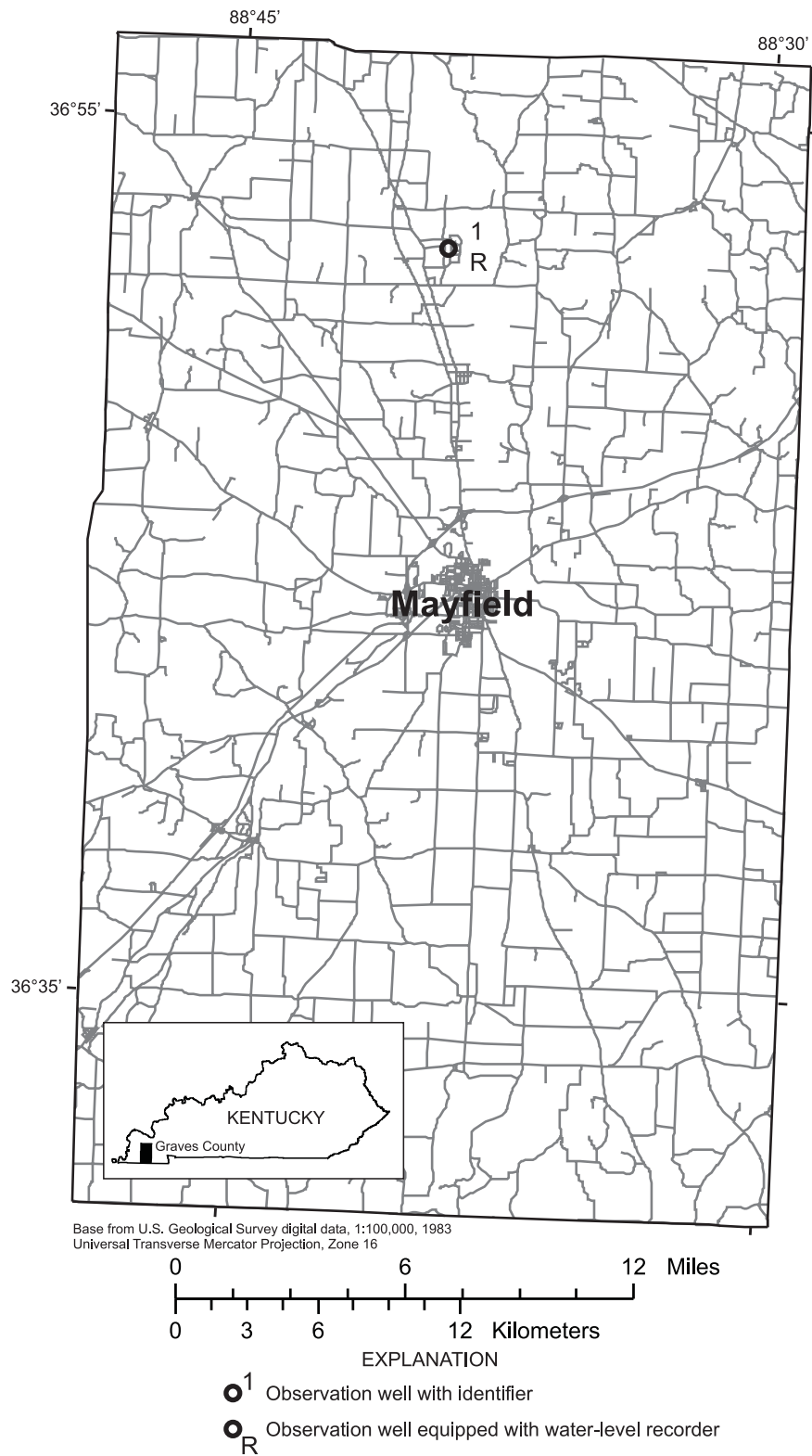
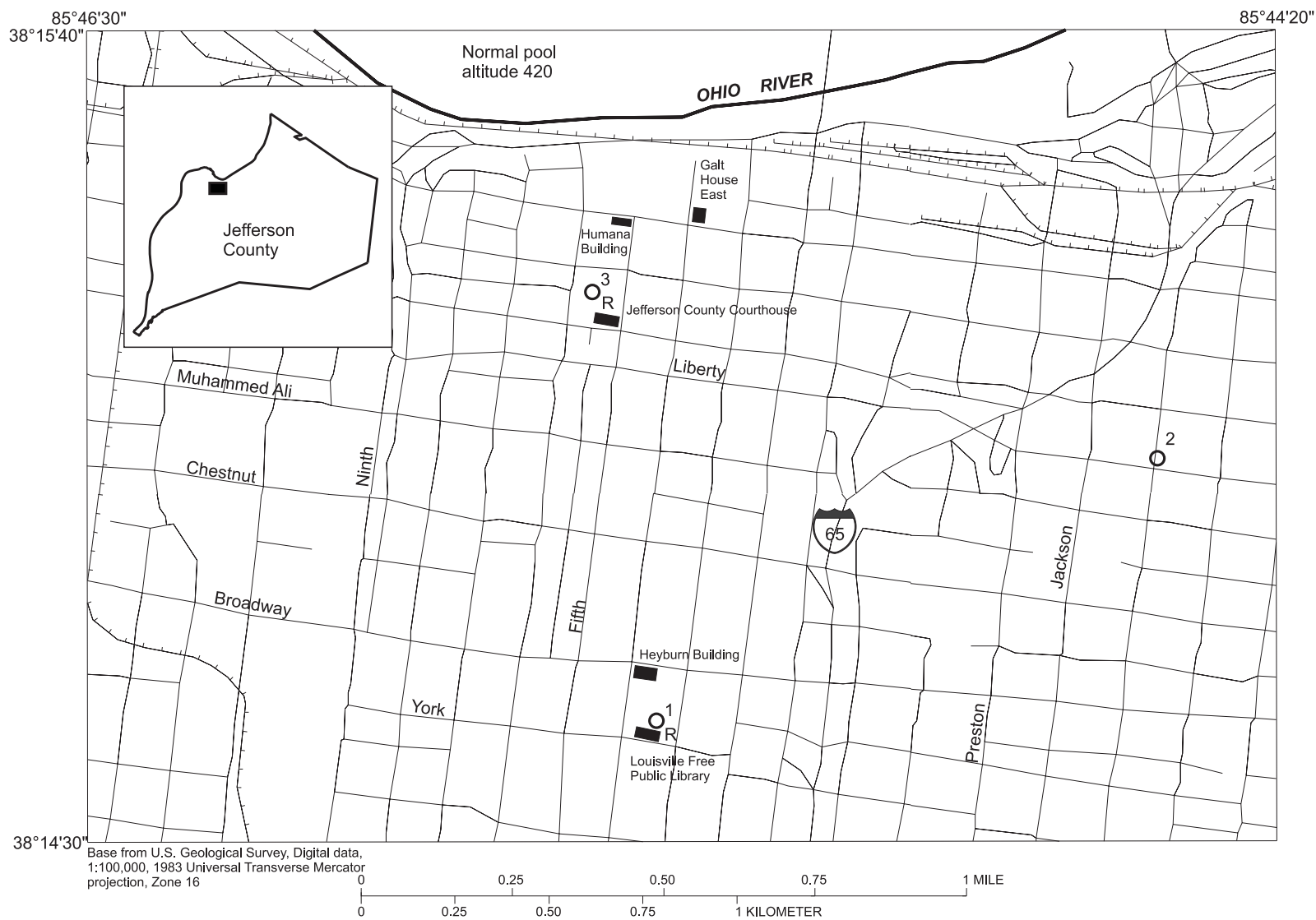


Figure 10. Location of observation wells in Graves County, Kentucky.



EXPLANATION

- ¹ Observation well with identifier
- _R Observation well equipped with water-level recorder

Figure 11. Location of observation wells in downtown Louisville, Kentucky.

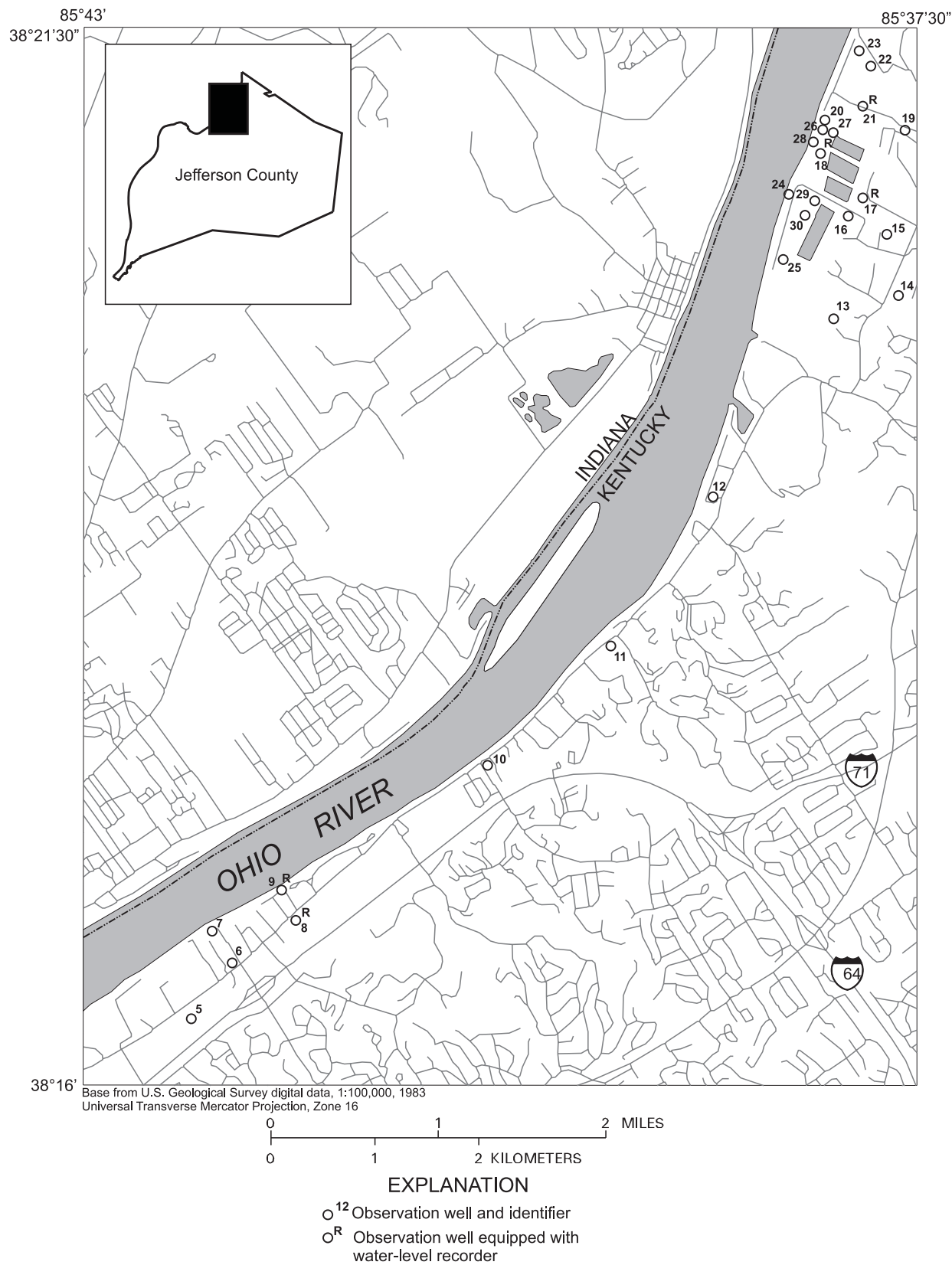


Figure 12. Location of observation wells in northeastern Jefferson County, Kentucky.

GRAVES COUNTY

365210088391301. (Viola well), map number 1.

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: 124 CLBR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 105 ft, cased to 85 ft, screened 85-105 ft.

INSTRUMENTATION.--Continuous water level recorder with telemetry, 60 minute interval.

DATUM.--Elevation of land-surface datum is 405.65 ft above NGVD of 1929. Measuring point: Floor of shelter, 4.03 ft above land-surface datum.

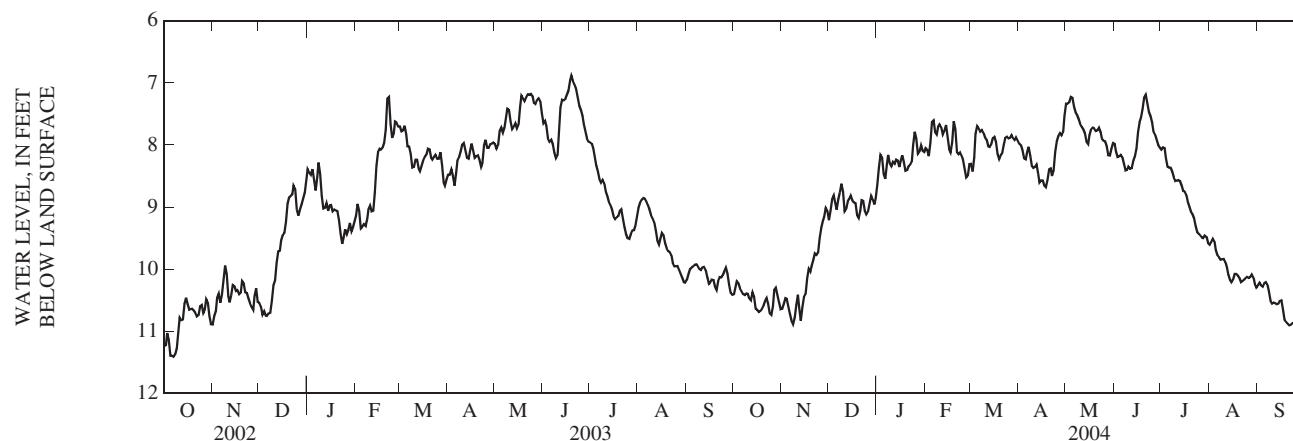
PERIOD OF RECORD.--February 1951 to September 1984 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.79 ft below land-surface datum, June 19, 2003: lowest measured, 19.24 ft below land-surface datum, Jan. 10, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.43	10.68	9.22	8.81	8.10	8.19	7.95	7.36	7.94	8.06	9.63	10.31
2	10.39	10.60	9.20	8.48	8.00	8.42	8.01	7.31	8.03	8.09	9.59	10.22
3	10.23	10.52	8.91	8.26	8.15	8.43	8.00	7.36	8.18	7.99	9.53	10.22
4	10.16	10.42	8.84	8.06	8.21	7.97	8.17	7.27	8.21	8.11	9.49	10.31
5	10.29	10.54	8.79	8.34	7.72	7.67	8.26	7.18	8.16	8.31	9.62	10.26
6	10.33	10.66	9.10	8.60	7.54	7.72	8.20	7.30	8.16	8.39	9.77	10.19
7	10.38	10.78	8.98	8.49	7.66	7.74	8.05	7.47	8.24	8.34	9.79	10.23
8	10.43	10.88	8.78	8.14	7.93	7.82	8.01	7.49	8.38	8.39	9.83	10.27
9	10.41	10.89	8.76	8.18	7.73	7.69	8.33	7.53	8.44	8.47	9.87	10.45
10	10.37	10.68	8.49	8.41	7.69	7.92	8.34	7.62	8.36	8.58	9.81	10.57
11	10.42	10.48	9.01	8.27	7.65	7.84	8.40	7.70	8.34	8.58	9.86	10.54
12	10.53	10.35	9.13	8.27	7.78	7.99	8.31	7.71	8.43	8.56	9.91	10.54
13	10.48	10.90	8.93	8.34	7.89	8.06	8.33	7.78	8.32	8.57	10.05	10.56
14	10.27	10.76	8.88	8.13	7.65	8.01	8.61	7.85	8.19	8.59	10.13	10.57
15	10.63	10.47	8.87	8.37	7.71	7.98	8.61	8.05	8.18	8.71	10.21	10.54
16	10.65	10.43	8.77	8.34	8.05	7.80	8.53	7.92	7.93	8.77	10.21	10.49
17	10.66	10.37	9.01	8.18	8.09	7.94	8.61	7.77	7.65	8.73	10.13	10.52
18	10.72	9.92	8.85	8.16	8.15	7.97	8.70	7.73	7.61	8.88	10.02	10.79
19	10.63	10.06	9.03	8.39	7.77	8.33	8.66	7.71	7.51	8.97	10.13	10.86
20	10.67	10.01	9.23	8.44	7.46	8.13	8.46	7.75	7.33	9.04	10.08	10.85
21	10.53	9.89	9.12	8.37	8.02	8.21	8.33	7.80	7.14	9.10	10.21	10.91
22	10.51	9.82	8.99	8.31	8.20	8.07	8.43	7.73	7.24	9.13	10.21	10.91
23	10.43	9.67	8.79	8.33	8.10	7.94	8.57	7.72	7.42	9.23	10.18	10.88
24	10.69	9.88	9.01	8.20	8.14	7.83	8.25	7.87	7.52	9.39	10.16	10.86
25	10.73	9.59	9.10	7.81	8.21	7.90	7.98	7.92	7.55	9.42	10.13	10.87
26	10.75	9.41	9.14	7.77	8.27	7.89	7.90	7.94	7.74	9.45	10.12	10.89
27	10.45	9.26	9.00	8.03	8.49	7.88	7.81	7.94	7.81	9.48	10.17	10.78
28	10.23	9.19	8.89	8.26	8.56	7.80	7.81	8.10	7.85	9.51	10.09	10.82
29	10.38	9.13	8.74	7.95	8.43	7.99	7.88	8.23	7.98	9.49	10.09	10.96
30	10.46	8.89	9.01	8.07	---	7.85	7.70	8.11	8.02	9.43	10.19	10.98
31	10.61	---	8.91	8.12	---	7.90	---	8.00	---	9.53	10.29	---
MAX	10.75	10.90	9.23	8.81	8.56	8.43	8.70	8.23	8.44	9.53	10.29	10.98
MIN	10.16	8.89	8.49	7.77	7.46	7.67	7.70	7.18	7.14	7.99	9.49	10.19

WTR YR 2004 HIGH 7.14 LOW 10.98



JEFFERSON COUNTY

381441085452701. (Lib 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 200 ft. west of 3rd st. in grass courtyard. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

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 NGVD of 1929. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water-quality sample collected May 8, 1956.

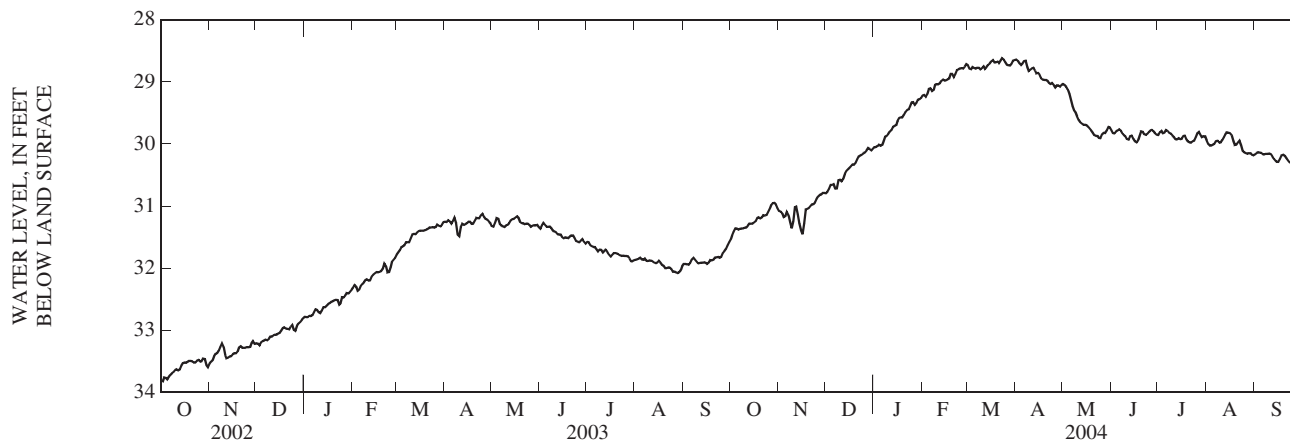
PERIOD OF RECORD.--February 1937 to current year. February 1937 to September 1976 published in hydrograph form and on file at district office.

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.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.56	31.07	30.82	30.07	29.24	28.70	28.64	29.03	29.76	29.86	29.90	30.18
2	31.51	31.09	30.77	30.03	29.20	28.76	28.64	29.04	29.80	29.85	29.98	30.16
3	31.44	31.10	30.76	30.07	29.22	28.81	28.68	29.06	29.85	29.77	30.02	30.14
4	31.38	31.15	30.68	30.00	29.26	28.78	28.72	29.09	29.81	29.81	30.03	30.13
5	31.34	31.21	30.64	30.02	29.13	28.74	28.73	29.15	29.79	29.85	30.02	30.15
6	31.38	31.12	30.68	30.04	29.09	28.81	28.67	29.24	29.77	29.79	30.01	30.14
7	31.38	31.07	30.62	29.99	29.11	28.76	28.66	29.34	29.75	29.76	29.99	30.19
8	31.35	31.22	30.81	29.90	29.19	28.78	28.66	29.45	29.81	29.83	29.92	30.15
9	31.37	31.30	30.62	29.87	29.07	28.76	28.85	29.46	29.86	29.82	29.98	30.17
10	31.35	31.42	30.55	29.87	29.03	28.83	28.80	29.52	29.87	29.85	29.98	30.15
11	31.35	31.07	30.60	29.81	29.04	28.72	28.81	29.59	29.88	29.88	29.97	30.16
12	31.34	30.97	30.60	29.79	29.04	28.77	28.75	29.63	29.96	29.90	29.90	30.17
13	31.30	31.05	30.53	29.76	29.01	28.80	28.79	29.67	29.90	29.94	29.88	30.22
14	31.27	31.22	30.45	29.69	28.96	28.72	28.85	29.67	29.85	29.91	29.82	30.26
15	31.30	31.35	30.44	29.73	28.96	28.73	28.87	29.71	29.88	29.90	29.81	30.28
16	31.27	31.42	30.38	29.66	29.00	28.68	28.84	29.67	29.95	29.94	29.83	30.30
17	31.26	31.49	30.39	29.60	28.95	28.66	28.93	29.72	29.97	29.89	29.83	30.28
18	31.22	31.07	30.33	29.56	28.97	28.64	28.95	29.72	29.98	29.85	29.89	30.20
19	31.16	31.04	30.33	29.58	28.92	28.73	28.97	29.78	29.92	29.88	30.01	30.17
20	31.20	31.05	30.34	29.56	28.82	28.64	28.97	29.78	29.83	29.97	30.02	30.18
21	31.20	31.02	30.27	29.50	28.92	28.71	28.97	29.86	29.77	29.95	30.00	30.20
22	31.17	30.99	30.22	29.47	28.92	28.69	29.00	29.86	29.84	30.00	29.95	30.25
23	31.13	30.96	30.19	29.44	28.82	28.63	29.03	29.88	29.85	29.96	29.95	30.28
24	31.18	30.98	30.19	29.44	28.80	28.60	29.04	29.86	29.86	29.96	30.08	30.31
25	31.11	30.91	30.16	29.35	28.80	28.67	29.00	29.94	29.81	29.93	30.13	30.29
26	31.07	30.86	30.15	29.31	28.76	28.70	29.10	29.87	29.80	29.85	30.14	30.21
27	31.01	30.83	30.13	29.34	28.79	28.75	29.08	29.82	29.77	29.80	30.16	30.13
28	30.96	30.81	30.08	29.40	28.78	28.71	29.03	29.82	29.77	29.81	30.16	30.19
29	30.95	30.82	30.05	29.28	28.73	28.76	29.08	29.83	29.82	29.88	30.14	30.14
30	30.95	30.76	30.11	29.28	---	28.66	29.07	29.74	29.84	29.90	30.16	30.09
31	31.00	---	30.09	29.27	---	28.66	---	29.71	---	29.85	30.19	---
MAX	31.56	31.49	30.82	30.07	29.26	28.83	29.10	29.94	29.98	30.00	30.19	30.31
MIN	30.95	30.76	30.05	29.27	28.73	28.60	28.64	29.03	29.75	29.76	29.81	30.09

WTR YR 2004 HIGH 28.60 LOW 31.56



JEFFERSON COUNTY

381504085443202. (CP7A), map number 2.

LOCATION.--Lat 38°15'04", long 85°44'32", Hydrologic Unit 05140101, 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.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 467.19 ft above NGVD of 1929. 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, 49.44 ft below land-surface datum, Oct. 21, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	45.80	Sept.30, 2004	Well Destroyed

JEFFERSON COUNTY

381518085453402. (Courthouse Annex), map number 3.

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: 112OTSH.

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 interval.

DATUM.--Elevation of land-surface datum is 461.63 ft above NGVD of 1929. 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.

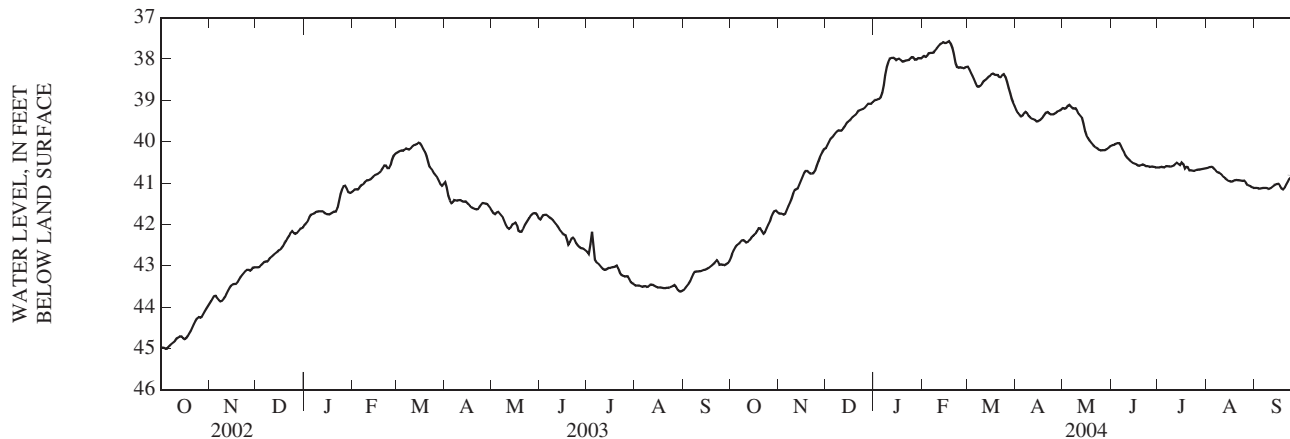
PERIOD OF RECORD.--November 1986 to current year.

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.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.86	41.74	40.18	39.03	37.97	38.17	39.18	39.20	40.10	40.62	40.65	41.12
2	42.76	41.73	40.13	38.99	37.93	38.20	39.28	39.19	40.09	40.63	40.63	41.11
3	42.66	41.74	40.04	38.99	37.93	38.31	39.33	39.22	40.08	40.61	40.63	41.13
4	42.59	41.76	39.97	38.98	37.97	38.37	39.38	39.17	40.06	40.60	40.60	41.13
5	42.53	41.78	39.89	38.96	37.87	38.44	39.40	39.11	40.04	40.63	40.61	41.14
6	42.48	41.71	39.89	38.90	37.85	38.53	39.34	39.12	40.03	40.61	40.64	41.11
7	42.46	41.60	39.83	38.74	37.85	38.63	39.29	39.18	40.04	40.58	40.69	41.13
8	42.40	41.51	39.78	38.52	37.86	38.70	39.26	39.21	40.15	40.60	40.72	41.11
9	42.37	41.44	39.74	38.27	37.83	38.65	39.36	39.19	40.21	40.60	40.75	41.13
10	42.38	41.31	39.71	38.14	37.77	38.65	39.40	39.19	40.30	40.60	40.75	41.14
11	42.43	41.19	39.75	38.01	37.73	38.56	39.43	39.30	40.36	40.58	40.80	41.14
12	42.45	41.14	39.72	37.97	37.66	38.53	39.46	39.36	40.40	40.57	40.84	41.11
13	42.40	41.18	39.66	37.99	37.65	38.51	39.46	39.39	40.45	40.51	40.87	41.08
14	42.36	41.08	39.60	37.95	37.60	38.45	39.50	39.45	40.47	40.51	40.91	41.05
15	42.32	41.00	39.55	38.03	37.59	38.44	39.51	39.69	40.51	40.57	40.93	41.03
16	42.25	40.90	39.50	38.03	37.63	38.39	39.50	39.81	40.54	40.57	40.96	41.02
17	42.24	40.81	39.48	37.99	37.60	38.36	39.47	39.87	40.54	40.45	40.96	41.01
18	42.19	40.71	39.43	37.99	37.59	38.35	39.43	39.95	40.57	40.64	40.97	41.11
19	42.12	40.70	39.39	38.05	37.56	38.41	39.38	40.00	40.58	40.67	40.94	41.16
20	42.07	40.71	39.37	38.08	37.70	38.37	39.33	40.05	40.59	40.54	40.92	41.15
21	42.11	40.76	39.32	38.05	37.76	38.41	39.27	40.09	40.55	40.69	40.93	41.07
22	42.22	40.78	39.28	38.03	38.03	38.45	39.30	40.13	40.55	40.69	40.93	41.00
23	42.23	40.76	39.23	38.03	38.17	38.43	39.33	40.15	40.59	40.69	40.93	40.93
24	42.14	40.76	39.24	38.02	38.23	38.36	39.35	40.18	40.59	40.71	40.95	40.88
25	42.04	40.66	39.21	37.96	38.21	38.39	39.32	40.21	40.60	40.70	40.94	40.85
26	41.98	40.53	39.20	37.94	38.20	38.48	39.35	40.21	40.61	40.68	40.94	40.83
27	41.88	40.43	39.15	37.98	38.22	38.64	39.28	40.20	40.60	40.68	41.03	40.81
28	41.78	40.34	39.11	38.05	38.23	38.77	39.27	40.21	40.60	40.67	41.06	40.81
29	41.71	40.29	39.06	37.98	38.21	38.90	39.26	40.20	40.62	40.67	41.07	40.83
30	41.66	40.19	39.10	37.97	---	39.00	39.23	40.17	40.62	40.66	41.09	40.84
31	41.67	---	39.06	38.00	---	39.10	---	40.13	---	40.64	41.11	---
MAX	42.86	41.78	40.18	39.03	38.23	39.10	39.51	40.21	40.62	40.71	41.11	41.16
MIN	41.66	40.19	39.06	37.94	37.56	38.17	39.18	39.11	40.03	40.45	40.60	40.81

WTR YR 2004 HIGH 37.56 LOW 42.86



JEFFERSON COUNTY

381613085422801. (Edith Lane Landfill), map number 5.

LOCATION.--Lat 38° 16' 13", long 85° 42' 28", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 50 feet east of landfill, 200 feet south of River Road. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 60.9, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 433.66 ft above NGVD of 1929. Measuring point: Top of pvc casing, 68 ft land-surface datum.

REMARKS.-- Unused landfill monitoring well.

PERIOD OF RECORD.--March 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.23 ft below land-surface datum, Mar. 29, 2002; lowest measured, 14.29 ft below land-surface datum, Sept. 25, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	13.36		

381638085415801. (WC-4), map number 6.

LOCATION.--Lat 38° 16' 38", long 85° 41' 58", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at the northwest corner of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 104 ft, screened 98-100 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.79 ft above NGVD of 1929. Measuring point: Floor of recorder shelter, 4.41 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River, which causes level to rise above land-surface and nearby pumpage. Water-quality sample collected July 10, 1979.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 3.71 ft above land-surface datum, Mar. 13, 1967; lowest, 19.61 ft below land-surface datum, Feb. 13, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	15.02		

381648085421201. (WC-5), map number 7.

LOCATION.--Lat 38° 16' 48", long 85° 42' 12", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 200 ft west of Louisville Water Company pump house, 200 ft south of the Ohio River, 0.2 mi northwest of junction of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 98 ft, screened 96-98 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.11 ft above NGVD of 1929. Measuring point: Top of pipe flange, 2.21 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River, which causes level to rise above land-surface. Water-quality collected Apr. 30, 1948.

PERIOD OF RECORD.--May 1946 to current year. May 1946 to April 1977 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft above land-surface datum, Jan. 17, 1950; lowest measured, 18.31 ft below land-surface datum, Nov. 6, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	13.82		

GROUND-WATER LEVELS

JEFFERSON COUNTY

381653085413302 (WC-9A), map number 8

LOCATION.--Lat 38°16'53", long 85°41'33". Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 45 ft east of River Road at Wagner Lane, opposite the southwest corner of Cox Park, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 90 ft, screened 76-78 ft, 88-90 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval. DATUM.--Elevation of land-surface datum is 437.65 ft NGVD of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

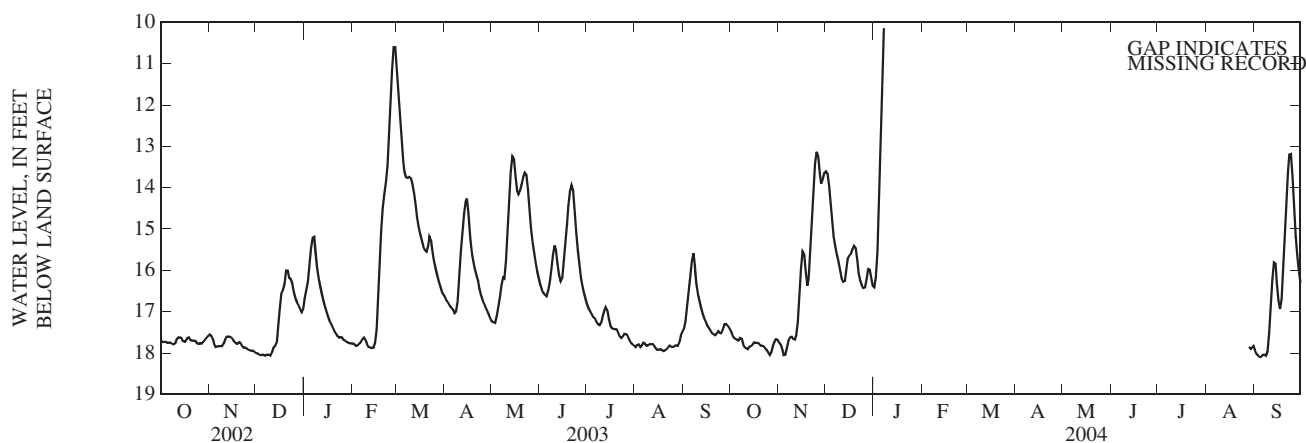
PERIOD OF RECORD.--December 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.40 ft below land-surface datum, May 20, 1996; lowest measured, 19.04 ft below land-surface datum, July 21, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.42	17.71	13.62	16.44	---	---	---	---	---	---	---	17.88
2	17.50	17.78	13.59	16.37	---	---	---	---	---	---	---	17.99
3	17.58	17.81	13.72	15.95	---	---	---	---	---	---	---	18.05
4	17.66	18.03	14.20	15.13	---	---	---	---	---	---	---	18.07
5	17.66	18.06	14.67	13.79	---	---	---	---	---	---	---	18.11
6	17.69	18.01	15.06	12.24	---	---	---	---	---	---	---	18.05
7	17.70	17.74	15.30	10.80	---	---	---	---	---	---	---	18.02
8	17.57	17.65	15.53	9.49	---	---	---	---	---	---	---	18.06
9	17.74	17.59	15.70	---	---	---	---	---	---	---	---	18.06
10	17.85	17.62	15.86	---	---	---	---	---	---	---	---	17.86
11	17.86	17.70	16.12	---	---	---	---	---	---	---	---	17.17
12	17.91	17.64	16.25	---	---	---	---	---	---	---	---	16.49
13	17.90	17.50	16.30	---	---	---	---	---	---	---	---	15.95
14	17.80	17.01	16.22	---	---	---	---	---	---	---	---	15.65
15	17.86	16.25	15.80	---	---	---	---	---	---	---	---	16.01
16	17.74	15.67	15.64	---	---	---	---	---	---	---	---	16.62
17	17.75	15.39	15.66	---	---	---	---	---	---	---	---	16.83
18	17.76	15.81	15.54	---	---	---	---	---	---	---	---	17.03
19	17.74	16.27	15.43	---	---	---	---	---	---	---	---	16.35
20	17.80	16.46	15.38	---	---	---	---	---	---	---	---	15.48
21	17.82	15.91	15.54	---	---	---	---	---	---	---	---	14.64
22	17.82	15.04	15.95	---	---	---	---	---	---	---	---	13.87
23	17.86	14.30	16.18	---	---	---	---	---	---	---	---	13.32
24	17.90	13.63	16.30	---	---	---	---	---	---	---	---	13.08
25	17.94	13.17	16.42	---	---	---	---	---	---	---	---	13.29
26	18.02	13.09	16.44	---	---	---	---	---	---	---	---	14.16
27	18.07	13.42	16.38	---	---	---	---	---	---	---	---	14.90
28	17.91	13.91	16.05	---	---	---	---	---	---	---	17.86	15.44
29	17.76	13.91	15.88	---	---	---	---	---	---	---	17.85	15.86
30	17.69	13.67	16.10	---	---	---	---	---	---	---	17.95	16.19
31	17.64	---	16.30	---	---	---	---	---	---	---	17.78	---
MAX	18.07	18.06	16.44	---	---	---	---	---	---	---	---	18.11
MIN	17.42	13.09	13.59	---	---	---	---	---	---	---	---	13.08

WTR YR 2004 HIGH 9.49 LOW 18.11



JEFFERSON COUNTY

381701085414002 (WC-8A), map number 9

LOCATION.--Lat 38°17'01", long 85°41'40", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, on the south bank of the Ohio River at the northwest corner of Cox Park, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 86.8 ft, screened 86.8-90.8 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 432.62 ft NGVD of 1929. Measuring point: Top of casing, 2.65 ft above land-surface datum.

REMARKS.--Replaces well 381702085414001 (WC-8) which was 100 ft north. Water levels affected by Ohio River.

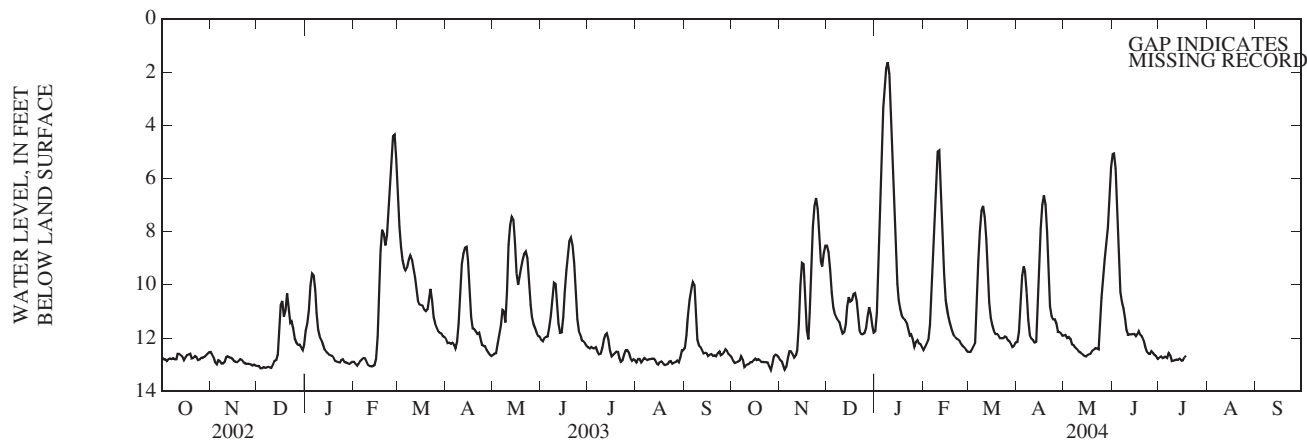
PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.63 ft below land-surface datum, Ja. 10, 2004; lowest measured, 14.35 ft below land-surface datum, Oct. 18, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.70	12.78	8.47	11.93	12.47	12.53	12.10	11.92	5.19	12.79	---	---
2	12.77	12.87	8.58	11.57	12.42	12.51	12.21	11.89	4.98	12.68	---	---
3	12.92	12.89	8.97	10.55	12.27	12.54	11.33	11.88	5.15	12.70	---	---
4	12.96	13.23	9.92	8.73	12.15	12.28	9.96	12.13	6.08	12.82	---	---
5	12.89	13.17	10.68	5.98	12.00	12.36	9.36	11.81	7.65	12.66	---	---
6	12.90	13.00	11.05	3.85	10.98	12.04	9.27	12.26	9.96	12.74	---	---
7	12.83	12.50	11.08	2.84	8.92	9.74	9.75	12.22	10.59	12.76	---	---
8	12.54	12.50	11.33	2.11	7.89	8.44	10.82	12.31	10.73	12.38	---	---
9	13.05	12.49	11.33	1.64	6.74	7.49	11.79	12.38	11.08	12.94	---	---
10	13.13	12.73	11.47	1.63	5.43	6.95	11.97	12.43	11.52	12.81	---	---
11	12.96	12.75	11.83	2.50	4.56	7.11	12.06	12.51	11.90	12.88	---	---
12	13.03	12.57	11.85	4.74	5.32	7.77	12.10	12.56	11.85	12.78	---	---
13	12.94	12.39	11.72	6.70	7.00	8.80	12.25	12.57	11.88	12.85	---	---
14	12.87	10.66	11.24	8.34	8.76	10.25	12.04	12.67	11.83	12.79	---	---
15	12.95	9.39	10.43	9.54	10.36	11.07	10.06	12.70	11.87	12.77	---	---
16	12.71	8.95	10.49	10.36	10.77	11.42	8.40	12.71	11.83	12.93	---	---
17	12.83	9.48	10.77	10.74	11.10	11.66	7.35	12.58	12.03	12.76	---	---
18	12.84	11.35	10.41	11.08	11.38	11.83	6.63	12.67	11.67	12.73	---	---
19	12.75	12.03	10.31	11.25	11.57	11.86	6.64	12.51	11.81	12.61	---	---
20	12.92	12.07	10.32	11.26	11.82	11.83	7.32	12.46	11.97	---	---	---
21	12.89	10.09	10.91	11.35	11.92	12.02	8.73	12.41	11.91	---	---	---
22	12.89	8.29	11.57	11.47	12.00	12.00	10.40	12.34	12.26	---	---	---
23	12.92	7.34	11.86	11.84	12.06	12.01	11.20	12.43	12.46	---	---	---
24	12.90	6.72	11.84	11.99	12.05	12.01	11.16	12.43	12.58	---	---	---
25	12.94	6.76	11.88	11.76	12.16	11.87	11.42	10.92	12.61	---	---	---
26	13.19	7.53	11.77	12.33	12.25	12.08	11.17	10.03	12.58	---	---	---
27	13.20	8.67	11.51	12.34	12.34	12.09	11.73	9.44	12.41	---	---	---
28	12.79	9.56	10.87	11.96	12.38	12.16	11.80	8.63	12.71	---	---	---
29	12.60	9.05	10.80	12.20	12.48	12.31	11.75	8.29	12.57	---	---	---
30	12.66	8.59	11.44	12.23	---	12.38	11.90	7.38	12.78	---	---	---
31	12.65	---	11.68	12.24	---	12.22	---	5.94	---	---	---	---
MAX	13.20	13.23	11.88	12.34	12.48	12.54	12.25	12.71	12.78	---	---	---
MIN	12.54	6.72	8.47	1.63	4.56	6.95	6.63	5.94	4.98	---	---	---

WTR YR 2004 HIGH 1.63 LOW 13.23



JEFFERSON COUNTY

381742085402001. WC-13), map number 10.

LOCATION.--Lat 38° 17' 42", long 85° 40' 20", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 30 ft east of River Road, 300 ft northeast of junction of River Road and Blankenbaker Lane, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 106 ft, screened 104-106 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.87 ft above NGVD of 1929. Measuring point: Top of plug, 3.07 ft above land-surface datum.

PERIOD OF RECORD.--June 1946 to current year. June 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.28 ft below land-surface datum, Jan. 18, 1950: lowest measured, 19.75 ft below land-surface datum, Jan. 29, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	17.13		

381827085392401. (WC-26), map number 11.

LOCATION.--Lat 38° 18' 27", long 85° 39' 24", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 20 ft east of River Road, opposite River Valley Club in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 130 ft, screened 128-130 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.94 ft above NGVD of 1929. Measuring point: Top of plug, 4.68 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year. July 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.93 ft below land-surface datum, Jan. 18, 1950: lowest measured, 38.53 ft below land-surface datum, Feb. 3, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	28.16		

381904085384801. (WC-27), map number 12.

LOCATION.--Lat 38° 19' 04", long 85° 38' 48", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 30 ft west of River Road, 250 ft north of north end of bridge over Goose Creek, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 96 ft, screened 94-96 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.46 ft above NGVD of 1929. Measuring point: Top of plug, 2.29 ft above land-surface datum.

PERIOD OF RECORD.--August 1946 to current year. August 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.84 ft above land-surface datum, Jan. 17, 1950: lowest measured, 20.97 ft below land-surface datum, Feb. 3, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	17.99		

JEFFERSON COUNTY

381958085380201. (Thompson well), map number 13.

LOCATION.--Lat 38°19'58", long 85°37'52", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6600 Upper River Road, in well house next to drive, near horse barn. Owner: Thompson.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled used water-table well, diameter 6 in., depth 53 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 461.44 above NGVD of 1929. Measuring point: Top of well seal, 7.00 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.58 ft below land-surface datum, Mar. 28, 2002; lowest measured, 42.05 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	41.31	Aug. 6, 2004	39.54
Nov. 5, 2003	41.63	Aug. 27, 2004	40.02
May 11, 2004	38.18		

382007085373801. (Bird Man), map number 14.

LOCATION.--Lat 38°20'07", long 85°37'38", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 7105 Upper River Road, in well house next to drive, near main house. Owner: Bird Man.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 61.5 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.83 ft above NGVD of 1929. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.02 ft below land-surface datum, May 5, 2002; lowest measured, 33.99 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	33.26	Jul. 29, 2004	30.52
Nov. 5, 2003	33.63	Aug. 6, 2004	30.65
May 11, 2004	29.50	Aug. 27, 2004	31.19

382016085382601. (LWC-P-4), map number 25.

LOCATION.--Lat 38°20'16", long 85°38'26", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, across from Transylvania Beach Road, 150 ft east of road, in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 90.6 ft., screen: unused water-table well, diameter 6 in., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel. Measuring point: Top of 2 in. PVC, 3.17 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--August 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.66 ft below land-surface datum, March 25, 2004; lowest measured, 12.41 ft below land-surface datum, Nov. 5, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	11.97	May 11, 2004	10.51
Nov. 5, 2003	12.41	Aug. 6, 2004	10.69
Mar. 25, 2004	9.66	Aug. 28, 2004	11.24

JEFFERSON COUNTY

382026085374301. (Little Dean), map number 15.

LOCATION.--Lat 38°20'26", long 85°37'43", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6203 Mason Road, well is next to drive, 50 ft. northwest of house. Owner: Little Dean.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 90 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.26 ft above NGVD of 1929. Measuring point: Top of well seal, 1.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.12 ft below land-surface datum, Jul. 28, 2004; lowest measured, 34.84 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	33.80	Jul. 28, 2004	31.12
Nov. 5, 2003	33.45	Aug. 6, 2004	31.29
May 11, 2004	31.55	Aug. 27, 2004	31.58

382032085375601. (Staples), map number 16.

LOCATION.--Lat 38°20'32", long 85°37'56", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6301 Mayfair Road, in concrete well pit next to drive, 15ft. north of garage. Owner: Staples.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 73 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.07 ft above NGVD of 1929. Measuring point: Top of concrete slab above hole in well seal at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.35 ft below land-surface datum, Mar. 25, 1999; lowest measured, 42.30 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	40.75	Jul. 28, 2004	33.07
Nov. 5, 2003	41.39	Aug. 6, 2004	34.24
May 11, 2004	32.41	Aug. 27, 2004	35.44

382034085381201. (LWC-P-1), map number 30.

LOCATION.--Lat 38°20'34", long 85°38'12", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 400 ft. south of Louisville Water Company gate on Mayfair Ave., in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 101.8 ft., screen unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.86 ft above NGVD of 1929. Measuring point: Top of 2 in. PVC, 3.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 12.85 ft. below land-surface datum, May 11, 2004; lowest measured, 19.94 ft below land-surface datum, Nov. 05, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Nov. 5, 2003	19.94	Aug. 6, 2004	14.09
May 11, 2004	12.85	Aug. 27, 2004	14.88

JEFFERSON COUNTY

382037085381101. (LWC-P-2), map number 29.

LOCATION.--Lat 38°20'37", long 85°38'11", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 200 ft. south of Louisville Water Company gate on Mayfair Ave., in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 102 ft., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.90 ft above NGVD of 1929. Measuring point: Top of 2 in. PVC, 3.01 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.61 ft below land-surface datum, May 11, 2004; lowest measured, 18.59 ft below land-surface datum, Nov. 5, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Nov. 5, 2003	18.59	Jul. 28, 2004	11.81
Mar.25, 2004	12.45	Aug. 3, 2004	12.83
May11, 2004	11.61	Aug.29, 2004	13.90

382038085382001. (Scott), map number 24.

LOCATION.--Lat 38°20'38", long 85°38'20", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6410 Transylvania Beach Road in side yard 20 ft south of house. Owner: Resident.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 50 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.23 ft above NGVD of 1929. Measuring point: Top of 6 in. steel casing, 1.17 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.52 ft below land-surface datum, Mar. 20, 2003; lowest measured, 18.79 ft below land-surface datum, Nov. 5, 2003.

Date	Water Level	Date	Water Level
Oct. 7, 2003	18.27	Aug. 6, 2004	16.71
Nov. 5, 2003	18.79	Aug.28, 2004	17.07
May11, 2004	16.15		

JEFFERSON COUNTY

382039085375201. (WP-7), map number 17

LOCATION.--Lat 38°20'39", long 85°37'52", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 83.5 ft, screen: unknown.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 462.66 ft NGVD of 1929. Measuring point: Top of casing, 3.80 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

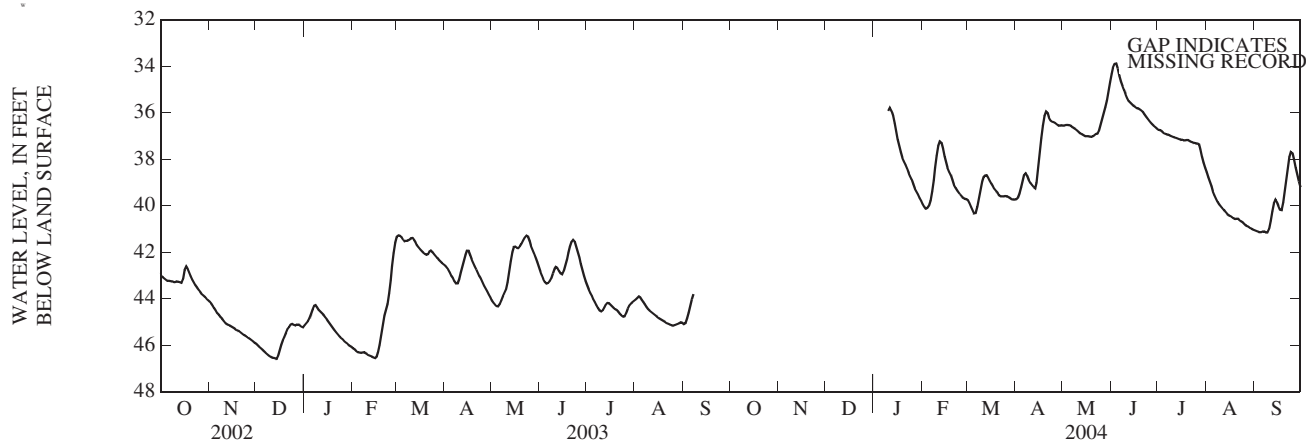
PERIOD OF RECORD.--December 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.84 ft below land-surface datum, June 4, 2004; lowest measured, 48.10 ft below land-surface datum, Jan. 15, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	39.86	39.73	39.71	36.54	34.50	36.72	38.47	41.06
2	---	---	---	---	39.96	39.79	39.72	36.58	34.17	36.74	38.67	41.08
3	---	---	---	---	40.11	39.98	39.58	36.54	33.96	36.76	38.89	41.12
4	---	---	---	---	40.16	40.11	39.37	36.51	33.84	36.82	39.06	41.12
5	---	---	---	---	40.05	40.24	39.06	36.55	33.95	36.88	39.27	41.16
6	---	---	---	---	39.98	40.41	38.77	36.53	34.26	36.91	39.47	41.11
7	---	---	---	---	39.60	40.20	38.60	36.62	34.58	36.95	39.61	41.11
8	---	---	---	---	39.18	39.89	38.60	36.65	34.77	36.93	39.77	41.11
9	---	---	---	---	38.64	39.50	38.84	36.68	34.95	37.00	39.89	41.18
10	---	---	---	36.09	38.10	39.13	38.96	36.74	35.11	37.02	39.99	41.13
11	---	---	---	35.76	37.59	38.81	39.07	36.78	35.28	37.06	40.09	40.86
12	---	---	---	35.81	37.25	38.70	39.15	36.89	35.45	37.07	40.14	40.45
13	---	---	---	36.03	37.21	38.69	39.23	36.92	35.54	37.09	40.22	40.04
14	---	---	---	36.24	37.37	38.68	39.28	36.94	35.60	37.11	40.30	39.75
15	---	---	---	36.69	37.73	38.88	38.75	36.99	35.68	37.16	40.37	39.72
16	---	---	---	37.01	38.04	38.97	38.05	37.02	35.72	37.16	40.44	39.95
17	---	---	---	37.28	38.27	39.11	37.39	37.01	35.78	37.16	40.46	40.07
18	---	---	---	37.56	38.46	39.21	36.79	37.01	35.81	37.21	40.49	40.27
19	---	---	---	37.84	38.61	39.38	36.31	37.04	35.83	37.18	40.56	40.10
20	---	---	---	38.04	38.74	39.38	35.99	37.04	35.88	37.16	40.58	39.61
21	---	---	---	38.16	39.02	39.52	35.92	37.00	35.90	37.19	40.53	39.08
22	---	---	---	38.31	39.18	39.58	36.12	36.93	36.00	37.25	40.59	38.55
23	---	---	---	38.49	39.28	39.60	36.30	36.91	36.11	37.27	40.64	38.10
24	---	---	---	38.71	39.39	39.59	36.36	36.89	36.21	37.30	40.69	37.73
25	---	---	---	38.76	39.49	39.60	36.41	36.68	36.30	37.31	40.73	37.63
26	---	---	---	38.97	39.55	39.57	36.42	36.41	36.40	37.33	40.82	37.86
27	---	---	---	39.18	39.63	39.62	36.47	36.14	36.45	37.33	40.88	38.20
28	---	---	---	39.35	39.69	39.65	36.54	35.89	36.52	37.40	40.89	38.53
29	---	---	---	39.43	39.71	39.72	36.56	35.65	36.59	37.75	40.94	38.83
30	---	---	---	39.61	---	39.72	36.55	35.31	36.64	38.04	41.00	39.10
31	---	---	---	39.73	---	39.75	---	34.88	---	38.27	41.01	---
MAX	---	---	---	---	40.16	40.41	39.72	37.04	36.64	38.27	41.01	41.18
MIN	---	---	---	---	37.21	38.68	35.92	34.88	33.84	36.72	38.47	37.63

WTR YR 2004 HIGH 33.84 LOW 41.18



JEFFERSON COUNTY

382051085380801. (LWC-1), map number 18

LOCATION.--Lat 38°20'51", long 85°37'08", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville. Water Company B.E. Payne treatment plant, 300 ft. west of lagoon #2, 1000 ft. north of Mayfair road, along treeline. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 76.5 ft, screened: 66-67 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 434.26 ft NGVD of 1929. Measuring point: Top of casing, 3.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

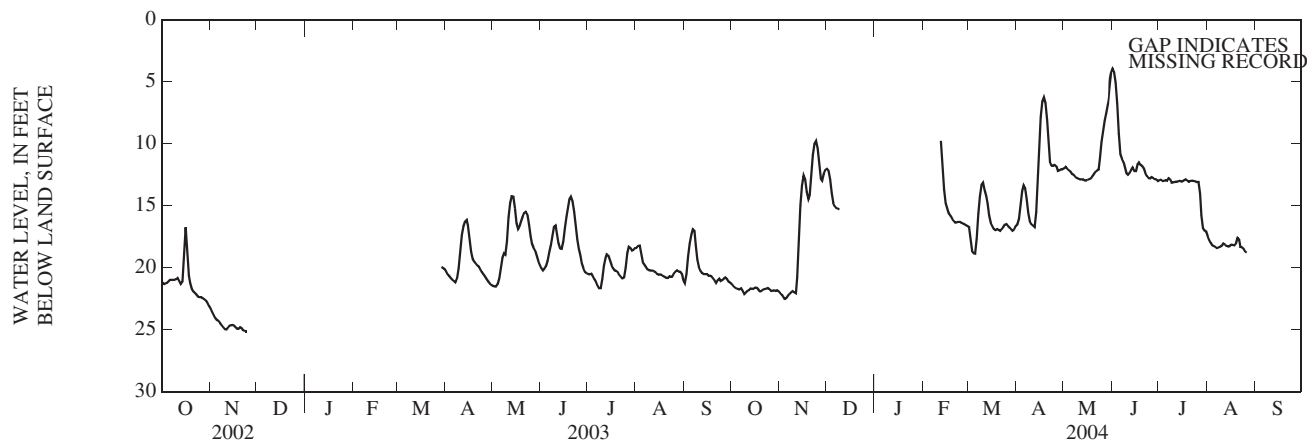
PERIOD OF RECORD.--March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.95 ft below land-surface datum, Jun. 2, 2004; lowest measured, 25.19 ft below land-surface datum, Nov. 26, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.27	21.99	12.10	---	---	16.66	16.48	12.08	3.96	13.04	17.22	---
2	21.41	22.12	11.97	---	---	16.76	16.53	11.93	3.95	12.87	17.69	---
3	21.49	22.19	12.39	---	---	18.63	15.64	11.82	4.43	12.92	17.85	---
4	21.64	22.50	13.38	---	---	18.76	14.23	12.24	5.67	13.09	18.16	---
5	21.69	22.52	14.57	---	---	18.90	13.41	12.03	7.78	12.91	18.26	---
6	21.74	22.42	15.02	---	---	18.79	13.26	12.41	10.53	13.00	18.26	---
7	21.73	22.14	15.08	---	---	16.52	13.84	12.46	11.22	13.00	18.37	---
8	21.63	22.07	15.31	---	---	14.82	15.01	12.58	11.24	12.54	18.46	---
9	22.08	21.88	15.21	---	---	13.65	16.09	12.69	11.72	13.20	18.26	---
10	22.15	21.87	15.33	---	---	13.03	16.41	12.79	12.21	13.06	18.38	---
11	21.88	22.08	---	---	---	13.28	16.57	12.87	12.58	13.14	18.10	---
12	21.87	22.01	---	---	8.76	14.25	16.62	12.90	12.43	13.01	18.00	---
13	21.76	19.54	---	---	10.81	14.21	16.79	12.85	12.27	13.10	18.25	---
14	21.58	16.11	---	---	12.79	15.41	14.21	12.92	11.98	13.03	18.23	---
15	21.82	13.83	---	---	14.54	16.23	11.13	12.97	11.86	12.97	18.35	---
16	21.55	12.91	---	---	15.07	16.54	8.62	12.99	12.57	13.13	18.18	---
17	21.62	12.20	---	---	15.42	16.76	7.07	12.84	11.86	12.95	18.07	---
18	21.63	13.58	---	---	15.72	16.96	6.17	12.93	11.41	12.96	18.24	---
19	21.84	14.21	---	---	15.83	16.99	6.36	12.74	11.60	12.80	18.17	---
20	21.95	14.76	---	---	16.07	16.83	7.12	12.59	11.82	13.17	17.93	---
21	21.80	13.57	---	---	16.34	17.07	9.04	12.39	11.74	13.00	17.24	---
22	21.72	11.47	---	---	16.35	16.97	11.03	12.19	12.19	13.00	18.20	---
23	21.74	10.31	---	---	16.34	16.83	11.86	12.17	12.52	12.98	18.43	---
24	21.67	9.72	---	---	16.26	16.64	11.68	12.01	12.74	13.03	18.27	---
25	21.61	9.83	---	---	16.33	16.44	11.90	10.39	12.79	13.08	18.60	---
26	21.82	10.91	---	---	16.39	16.55	11.51	9.32	12.79	13.06	18.74	---
27	21.92	12.34	---	---	16.48	16.71	12.15	8.60	12.58	13.09	18.81	---
28	21.78	13.29	---	---	16.51	16.85	12.24	7.66	12.92	14.94	---	---
29	21.88	12.69	---	---	16.62	17.01	12.05	7.34	12.76	16.57	---	---
30	21.86	12.17	---	---	---	17.04	12.07	6.29	13.01	17.04	---	---
31	21.79	---	---	---	---	16.80	---	4.56	---	16.96	---	---
MAX	22.15	22.52	---	---	---	18.90	16.79	12.99	13.01	17.04	---	---
MIN	21.27	9.72	---	---	---	13.03	6.17	4.56	3.95	12.54	---	---

WTR YR 2004 HIGH 3.95 LOW 22.52



382053085381301. (LWC-3B), map number 28.

LOCATION.--Lat 38°20'53", long 85°38'13", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 400 ft. south of Louisville Water Company B.E.gate on Mayfair Ave., in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 125 in., depth 85.8 ft., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 436.29 ft. above NGVD of 1929. Measuring point: Top of PVC casing 1.90 ft. above land-surface.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.67 ft below land-surface datum, Jul. 28, 2004; lowest measured, 22.22 ft below land-surface datum, Aug. 27, 2004.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Jul. 20, 2004	19.94	Jul. 30, 2004	20.57
Jul. 28, 2004	15.67	Aug. 27, 2004	22.22

382054085380602. (LWC-7A), map number 27.

LOCATION.--Lat 38°20'54", long 85°38'06", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, in field 1000 ft. southeast of collector well, inside 6 in. steel protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 82.7 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 431.99 ft above NGVD of 1929. Measuring point: Top of PVC casing 2.01 ft. above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.83 ft below land-surface datum, Jul. 28, 2004; lowest measured, 22.20 ft below land-surface datum, Aug. 27, 2004.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Jul. 20, 2004	10.97	Jul. 30, 2004	20.25
Jul. 28, 2004	10.83	Aug. 27, 2004	22.20

382057085380801. (LWC-2B), map number 26.

LOCATION.--Lat 38°20'57", long 85°38'08", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, in field 300 ft. southeast of collector well, inside 6 in. steel protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 82.1 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 432.59 ft above NGVD of 1929. Measuring point: Top of PVC casing 2.13 ft. above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft below land-surface datum, May 11, 2004; lowest measured, 29.04 ft below land-surface datum, Aug. 27, 2004.

Date	Water Level	Date	Water Level
Nov. 5, 2003	33.93	Jul. 28, 2004	24.02
May 11, 2004	11.92	Jul. 30, 2004	27.43
Jul. 20, 2004	12.25	Aug. 27, 2004	29.04

JEFFERSON COUNTY

382058085373501. (Shirley Avenue), map number 19.

LOCATION.--Lat $38^{\circ}20'58''$, long $85^{\circ}37'35''$, Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6401 Shirley Avenue, 50 ft. to rear of house. Owner: Resident.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 45 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 463.40 ft above NGVD of 1929. Measuring point: Under hand pump thru hole in side of casing, at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.36 ft below land-surface datum, Jul. 28, 2004; lowest measured, 44.03 ft below land-surface datum, Mar. 26, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	41.58	Jul. 28, 2004	37.36
Nov. 5, 2003	41.90	Aug. 6, 2004	37.74
May11, 2004	38.36	Aug.27, 2004	38.94

382102085380701. (WP-19), map number 20.

LOCATION.--Lat $38^{\circ}21'02''$, long $85^{\circ}38'07''$, Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, 200 ft. east of collector well. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 106 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 434.48 ft above NGVD of 1929. Measuring point: Top of casing, 2.28 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.25 ft below land-surface datum, Mar. 1, 1999; lowest measured, 49.70 ft below land-surface datum, Mar. 26, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	43.27	Jul. 28, 2004	14.00
Nov. 5, 2003	43.22	Aug. 6, 2004	37.73
May11, 2004	13.98	Aug.27, 2004	37.36

JEFFERSON COUNTY

382105085375101. (Hays-Kennedy), map number 21.

LOCATION.--Lat 38°21'05", long 85°37'51", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Hays Kennedy Park, 20 ft. south of Bass Road, along west edge of parking lot for picnic shelter. Owner: County Parks Dept.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 76.5 ft, screened: 66-76 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 439.68 ft above NGVD of 1929. Measuring point: Top of casing, 0.27 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

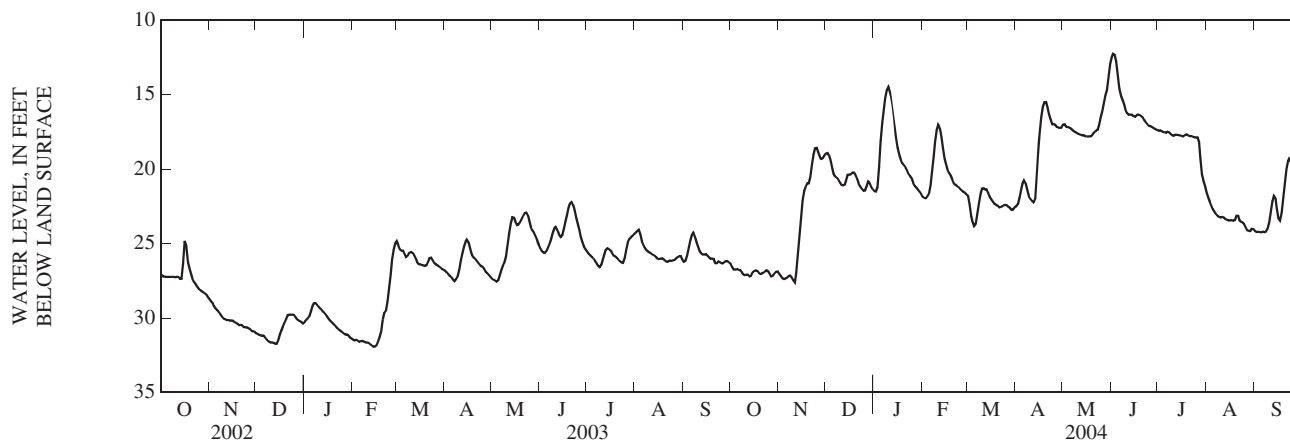
PERIOD OF RECORD.--March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.20 ft below land-surface datum, Jun. 6, 2004; lowest measured, 32.04 ft below land-surface datum, Feb. 14, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.33	26.92	19.03	21.43	21.76	21.75	22.50	17.18	12.69	17.42	21.41	24.10
2	26.42	27.13	18.90	21.52	21.90	21.82	22.52	16.82	12.31	17.39	21.78	24.21
3	26.70	27.21	18.92	21.49	21.96	22.92	22.20	17.13	12.20	17.41	22.08	24.23
4	26.77	27.41	19.24	20.95	21.97	23.42	21.65	17.16	12.42	17.49	22.34	24.18
5	26.71	27.37	19.66	18.78	21.69	23.66	21.10	17.21	13.17	17.50	22.60	24.26
6	26.73	27.37	20.27	17.37	21.62	24.00	20.75	17.21	14.30	17.54	22.75	24.23
7	26.77	27.23	20.42	16.40	20.50	23.38	20.75	17.36	14.94	17.57	22.94	24.19
8	26.80	27.15	20.56	15.58	19.58	22.66	21.11	17.42	15.19	17.43	23.12	24.32
9	27.02	27.15	20.60	14.89	18.59	21.96	21.67	17.48	15.52	17.66	23.16	24.10
10	27.14	27.34	20.78	14.50	17.73	21.42	21.92	17.57	15.84	17.63	23.29	23.90
11	27.10	27.57	20.99	14.46	17.05	21.18	22.09	17.62	16.14	17.83	23.23	23.32
12	27.08	27.64	21.13	15.22	16.97	21.40	22.17	17.67	16.31	17.67	23.21	22.45
13	27.09	26.32	21.04	16.11	17.51	21.32	22.28	17.73	16.35	17.70	23.31	21.90
14	27.35	24.96	21.05	16.83	18.19	21.37	21.74	17.74	16.33	17.69	23.37	21.69
15	26.97	23.80	20.44	17.75	19.07	21.80	19.65	17.70	16.36	17.72	23.44	22.26
16	26.88	22.61	20.32	18.35	19.57	21.94	18.11	17.84	16.55	17.74	23.45	23.06
17	26.80	21.64	20.41	18.81	19.91	22.14	16.94	17.78	16.44	17.82	23.41	23.54
18	26.79	21.29	20.32	19.23	20.18	22.23	16.04	17.80	16.33	17.76	23.46	23.37
19	26.92	21.04	20.15	19.51	20.34	22.44	15.57	17.79	16.34	17.67	23.50	22.50
20	26.98	20.87	20.30	19.70	20.51	22.37	15.41	17.75	16.44	17.67	23.34	21.46
21	27.12	21.03	20.48	19.79	20.87	22.55	15.61	17.61	16.40	17.79	22.92	20.41
22	26.92	20.09	20.83	19.97	21.03	22.57	16.22	17.45	16.61	17.78	23.34	19.62
23	26.99	19.39	21.09	20.21	21.09	22.54	16.41	17.40	16.79	17.78	23.53	19.27
24	26.76	18.71	21.20	20.50	21.16	22.46	16.90	17.36	16.95	17.86	23.54	19.28
25	26.84	18.49	21.44	20.45	21.28	22.40	17.05	16.82	17.04	17.86	23.64	19.71
26	26.89	18.64	21.47	20.80	21.36	22.38	16.93	16.33	17.13	17.87	23.73	20.68
27	27.19	19.11	21.38	21.06	21.48	22.52	17.13	16.00	17.11	17.86	24.08	21.67
28	27.24	19.25	20.92	21.19	21.56	22.56	17.23	15.22	17.23	18.51	24.15	22.35
29	27.08	19.39	20.73	21.27	21.61	22.67	17.20	14.91	17.25	20.02	24.17	22.61
30	26.95	19.18	21.14	21.49	---	22.81	17.24	14.48	17.34	20.69	24.09	22.97
31	26.83	---	21.26	21.59	---	22.65	---	13.24	---	20.94	23.95	---
MAX	27.35	27.64	21.47	21.59	21.97	24.00	22.52	17.84	17.34	20.94	24.17	24.32
MIN	26.33	18.49	18.90	14.46	16.97	21.18	15.41	13.24	12.20	17.39	21.41	19.27

WTR YR 2004 HIGH 12.20 LOW 27.64



JEFFERSON COUNTY

382120085374701. (River Fields), map number 22.

LOCATION.--Lat 38°21'20", long 85°37'47", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Garvin-Brown Preserve, 1000 ft. north of Bass Road, along tree line separating Garvin-Brown Preserve from Hays-Kennedy Park. Owner: River Fields.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 71.5 ft, screened: 61-71 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 440.05 ft above NGVD of 1929. Measuring point: Top of casing, 0.19 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.03 ft below land-surface datum, May 11, 2004; lowest measured, 23.76 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	21.86	Jul. 28, 2004	18.20
Nov. 5, 2003	22.34	Aug. 6, 2004	19.44
May11, 2004	18.03	Aug.27, 2004	20.39

382124085375401. (Abell), map number 23.

LOCATION.--Lat 38°21'24", long 85°37'54", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 7222 Beechland Road, in well pit 200 ft. east of road Owner: Abell.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled used water-table well, diameter 4 in., depth 45 ft, screen: unknown.

INSTRUMENTATION.--Preiodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.58 ft above NGVD of 1929. Measuring point: Top of well seal 3.66 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.04 ft below land-surface datum, Mar. 28, 2002; lowest measured, 20.81 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	19.64	Jul. 28, 2004	17.79
Nov. 5, 2003	20.15	Aug. 6, 2004	18.45
May11, 2004	17.76	Aug.27, 2004	19.14

CHEMICAL QUALITY OF PRECIPITATION

381353085401801 - SENECA PARK NEAR ST MATTHEWS, JEFFERSON COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°13'53", Long 85°40'18", Jefferson County, Hydrologic Unit 05140101 at Seneca Park Golf Course, 0.5 mi northwest of Bowman Field Airport.

PERIOD OF RECORD.--October 2003 to current water year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.

REMARKS.--Samples collected on weekly basis by observer. Samples compromised during shipping on January 6-13 and September 7-14. No samples collected on February 10-24; May 4-11; June 22-29; August 10-17; September 14-28; and September 28-October 05 due to dry conditions.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
OCT 07-14	0.209	M	4.67	16.5	0.30	0.04	0.06	0.01	0.09	1.76	0.380	1.64	<0.009
OCT 14-21	1.881	M	4.21	26.5	.12	.01	.02	.05	.10	1.46	.280	0.98	<.009
OCT 21-28	1.306	M	4.51	18.7	.12	.01	.01	.01	.06	1.54	.280	1.33	<.009
OCT 28-NOV 04	.098	M	4.64	18.0	.39	.05	.01	.02	.07	2.37	.600	1.72	<.009
NOV 04-12	1.615	M	4.63	12.9	.05	.01	.01	.04	.08	1.37	.170	.49	<.009
NOV 12-18	.432	2.30	4.55	15.3	.09	.01	.01	.04	.07	1.76	.280	.77	<.009
NOV 18-25	2.135	M	4.61	14.9	.05	.01	.01	.08	.15	1.69	.190	.56	<.009
NOV 25-DEC 02	2.098	M	4.49	19.0	.08	.01	.01	.03	.12	1.53	.160	1.11	<.009
DEC 02-09-16	1.111	.80	4.56	17.1	.12	.10	.14	.06	.15	1.59	.150	1.11	<.009
DEC 16-23	.704	.37	4.59	29.6	1.33	.12	.08	.69	1.11	4.41	.420	2.29	<.009
DEC 23-30	2.555	1.45	4.82	10.6	.08	.02	.12	.07	.12	0.96	.190	.70	<.009
DEC 30 2003-2004													
JAN 06 2004	4.200	M	4.52	19.2	.07	.03	.02	.20	.34	1.78	.190	.72	<.009
JAN 13-20	2.191	.85	4.40	21.3	.06	.01	M	.06	.14	1.72	.140	1.07	<.009
JAN 20-27	.060	1.10	M	M	.64	.05	.05	.35	.80	3.91	.920	4.39	<.009
JAN 27-FEB 03	1.569	.89	4.55	18.0	.07	.01	.01	.15	.27	1.60	.130	.93	<.009
FEB 03-10	1.361	.75	4.44	20.8	.08	.01	.01	.12	.21	1.94	.260	1.20	<.009
FEB 24-MAR 02	.549	.31	4.68	22.0	.30	.09	.04	.55	.90	1.88	.300	1.41	<.009
MAR 02-09	3.037	1.75	4.76	14.3	.34	.03	.03	.21	.34	.98	.140	.54	<.009
MAR 09-16	.752	.42	4.35	30.1	.13	.01	.01	.01	.11	2.28	.340	2.12	<.009
MAR 16-23	.562	.33	4.52	26.6	.23	.03	.03	.06	.12	2.71	.720	2.04	<.009
MAR 23-30	.878	.52	5.22	10.0	.32	.04	.02	.16	.24	1.25	.310	.95	<.009
MAR 30-APR 06	.414	.23	4.34	34.2	.29	.04	.01	.02	.09	2.65	.610	3.56	<.009
APR 06-13	1.476	.98	4.53	20.2	.08	.01	.01	.01	.08	1.99	.170	.97	<.009
APR 13-20	1.793	1.05	4.74	14.5	.04	.01	M	.01	.04	1.33	.420	1.37	<.009
APR 20-27	3.039	1.75	4.98	11.9	.12	.03	.03	.17	.27	1.15	.250	.91	<.009
APR 27-MAY 04	4.113	2.40	4.46	22.3	.13	.04	.07	.12	.17	2.19	.590	1.31	.115
MAY 11-18	2.467	M	4.90	10.2	.10	.03	.02	.11	.17	1.05	.240	.67	<.009

CHEMICAL QUALITY OF PRECIPITATION

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381353085401801 - SENECA PARK NEAR ST MATTHEWS, JEFFERSON COUNTY, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
MAY 18-25	0.297	0.20	4.41	27.7	0.41	0.06	0.03	0.13	0.21	3.48	0.290	1.49	<0.009
MAY 25- JUN 01	10.031	6.10	4.77	13.2	.14	.02	.03	.11	.15	1.41	.260	0.76	<.009
JUN 01-08	.324	.18	6.55	46.0	1.75	.34	1.56	.06	.21	6.22	7.19	2.72	1.97
JUN 08-15	2.862	1.66	4.24	40.1	.30	.06	.04	.11	.23	4.74	.610	1.91	<.009
JUN 15-22	.653	.37	6.94	56.9	.23	.13	.82	.10	.20	4.29	7.59	1.12	1.05
JUN 29- JUL 06	1.996	1.17	4.42	34.3	.87	.24	.06	.02	.09	5.25	.690	2.29	<.009
JUL 06-13	4.193	2.42	4.35	29.2	.19	.02	.02	.04	.08	3.15	.230	1.06	<.009
JUL 13-20	3.496	2.02	4.57	19.4	.48	.06	.03	.02	.06	2.70	.330	1.18	<.009
JUL 20-27	1.637	.95	4.27	33.7	.14	.01	.03	.01	.10	3.25	.290	1.36	<.009
JUL 27- AUG 03	1.956	1.15	5.75	17.8	.27	.09	1.40	.03	.14	3.13	1.04	1.18	.336
AUG 03-10	1.195	.70	4.36	34.7	.37	.04	.02	.02	.10	4.37	.650	1.57	<.009
AUG 17-24	.671	.38	4.41	32.0	.30	.03	.03	.03	.10	3.61	.600	1.65	<.009
AUG 24-31	1.431	.81	4.46	26.9	.10	.01	.14	.04	.11	2.85	.520	1.12	.152
AUG 31- SEP 07	.043	.03	M	M	.61	.10	.11	.03	.27	5.46	3.46	5.20	<.009

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

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 water 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
OCT 07-14	0.161	M	5.63	11.7	0.76	0.05	0.02	0.02	0.08	1.73	0.290	1.83	<0.009
OCT 14-21	.617	M	4.84	28.6	.21	.02	.02	.01	.11	3.05	.320	2.51	<.009
OCT 21-28	2.407	1.40	5.19	15.3	.10	.01	.01	.01	.10	1.69	.190	0.94	<.009
OCT 28- NOV 04	.120	0.07	5.05	18.9	.38	.03	.02	.02	.09	1.51	.440	2.33	<.009
NOV 04-11	3.610	2.10	5.19	11.2	.06	.03	.34	.07	.12	1.17	.100	.15	.108
NOV 11-18	4.276	2.50	5.35	11.0	.05	.01	.01	.05	.07	1.01	.180	.62	<.009
NOV 18-25	2.196	1.27	5.56	8.1	.03	.01	.01	.05	.09	.79	.100	.44	<.009
NOV 25- DEC 02	2.669	1.55	5.78	13.0	.04	.01	.01	.01	.04	1.17	.140	.80	<.009
DEC 02-09	.913	.55	4.98	15.6	.04	M	.01	.01	.05	1.42	.110	1.25	<.009
DEC 09-16	1.949	1.15	5.17	12.9	.05	.06	.04	.20	.41	1.85	.280	2.69	<.009
DEC 16-23	1.443	.85	5.19	16.1	.55	.06	.04	.20	.41	1.85	.280	2.69	<.009
DEC 23-30	1.717	1.02	4.94	9.2	.09	.03	.17	.06	.13	1.03	.030	1.09	<.009
DEC 30 2003- JAN 06 2004	4.332	2.54	5.65	6.9	.03	.01	.01	.06	.11	.64	.080	.40	<.009
JAN 06-13	.336	.20	5.03	22.8	.19	.01	.02	.05	.11	1.18	.250	3.20	<.009
JAN 13-20	1.331	.85	5.21	10.9	.03	M	.01	.02	.08	1.50	.130	1.06	<.009
JAN 20-27	.990	.59	5.12	14.2	.13	.01	.01	.02	.07	1.74	.170	1.05	<.009
JAN 27- FEB 03	.992	.47	5.20	14.0	.09	.01	.01	.04	.12	.85	.090	1.40	<.009
FEB 03-10	2.485	1.44	4.91	8.9	.07	.04	.34	.04	.06	.63	<.020	.21	<.009
FEB 10-17	.056	.02	M	M	.12	.01	.01	.03	.08	1.01	.270	2.14	<.009
FEB 17-24	.069	.05	M	M	1.01	.14	.09	.58	.78	5.04	1.20	3.51	<.009
FEB 24- MAR 02	1.085	.65	4.33	23.6	.28	.09	.04	.71	1.16	1.88	.180	1.64	<.009
MAR 02-09	4.551	2.70	4.97	5.3	.07	.01	.01	.06	.12	.63	.050	.35	<.009
MAR 09-16	.208	.12	3.95	39.0	.39	.04	.03	.03	.19	4.83	.560	3.33	<.009
MAR 16-23	1.352	.87	4.56	17.3	.17	.02	.02	.02	.06	2.06	.680	1.95	<.009
MAR 23-30	1.807	1.05	4.36	25.9	.22	.04	.02	.15	.24	2.59	.430	1.65	<.009
MAR 30- APR 06	.366	.25	4.27	31.0	.30	.07	.03	.08	.25	3.32	.780	3.79	<.009
APR 06-13	1.732	1.00	4.48	17.8	.07	.01	.01	.01	.05	2.06	.150	1.09	<.009

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
APR 13-20	1.346	0.75	4.40	18.0	0.11	0.01	0.01	0.01	0.07	1.99	0.140	1.41	<0.009
APR 20-27	3.613	2.12	4.85	12.3	.14	.03	.05	.15	.21	1.45	.270	1.06	<.009
APR 27- MAY 04	1.706	.97	4.68	10.2	.08	.02	.03	.13	.20	1.37	.170	0.69	<.009
MAY 04-11	0.936	.55	4.25	36.1	.28	.03	.02	.03	.10	3.66	.640	1.73	<.009
MAY 11-18	.485	.27	4.52	19.0	.29	.05	.03	.29	.47	2.13	.190	.93	<.009
MAY 18-25	2.318	1.35	4.90	15.0	.29	.05	.05	.17	.25	2.03	.400	1.18	<.009
MAY 25- JUN 01	10.814	6.47	5.01	9.0	.11	.02	.03	.10	.13	1.07	.270	.69	<.009
JUN 01-08	2.710	1.60	5.76	17.4	.37	.04	.28	.13	.25	2.87	1.69	1.35	.498
JUN 08-15	2.580	1.57	4.98	16.3	.45	.05	.22	.19	.38	2.53	.940	2.10	.152
JUN 15-22	1.529	.80	4.53	17.4	.23	.08	.29	.16	.19	2.28	1.50	1.22	.480
JUN 22-29	.853	.49	4.93	25.0	.24	.03	.02	.01	.12	3.31	.490	2.26	<.009
JUN 29- JUL 06	.028	.02	M	M	.97	.08	.12	.22	.30	1.77	.260	2.06	<.009
JUL 06-13	5.068	2.89	4.53	16.5	.14	.02	.04	.04	.09	1.77	.230	.98	<.009
JUL 13-20	1.061	M	4.89	15.2	.22	.03	.32	.07	.17	2.24	.900	1.27	.315
JUL 20-27	2.193	1.20	4.46	25.1	.20	.03	.17	.02	.10	2.88	.600	1.56	.098
JUL 27- AUG 03	3.077	1.77	4.72	9.0	.03	.01	.01	.02	.08	.97	.070	.48	<.009
AUG 03-10	3.391	1.95	4.64	12.2	.07	.01	.01	.01	.03	1.42	.230	.61	<.009
AUG 10-17	1.703	1.10	4.43	23.0	.32	.03	.02	.01	.14	2.89	.400	1.50	<.009
AUG 17-24	3.281	1.90	4.66	11.4	.03	M	.02	.02	.04	1.50	.240	.43	<.009
AUG 24-31	.043	.12	M	M	.28	.03	.07	.04	.13	0.90	.050	1.32	<.009
AUG 31- SEP 07	.195	.15	4.50	16.2	.25	.02	.01	.01	.08	1.68	.030	1.35	<.009
SEP 07-14	6.401	3.75	5.00	4.9	.02	<.003	<.003	M	.02	.37	<.020	.20	<.009
SEP 14-21	6.154	M	5.96	3.7	.02	<.003	.01	.01	<.02	.13	.014	.26	<.009
SEP 28- OCT 05	.306	M	4.48	18.8	.19	.02	.03	.01	.34	1.68	.145	2.47	<.009

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.

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
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 1989-92	E		E	E	
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 1972-81				E	
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 1972-81					E
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			E
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 1972-81					E
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	
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 1980-81				E	
OHIO R AT MAYSVILLE, KY	03238000	70130.00	1939-80		E	E		
LAWRENCE CR NR MAYSVILLE, KY	03238030	1.90	1975-86			E		
BRACKEN CR NR AUGUSTA, KY	03238620	28.80	1975-78				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
LOCUST CR NR AUGUSTA, KY	03238660	41.70	1980-81 1975-78 1980-81				E	
TWELVEMILE CR AT HWY 1997 NR ALEXANDRIA, KY	03238745	39.0	2001	E	E	E	E	
TWELVEMILE CR NR CALIFORNIA, KY	03238750	44.30	1975-81					E
FOURMILE CR AT HWY 547 NR ALEXANDRIA, KY	03238780	5.3	1999-2001	E	E	E	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					E
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			
TRIPLETT CR AT MOREHEAD, KY	03250000	47.5	1941-82 1989-92	E		E 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 JEFFERSVILLE, 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
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	
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		E
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				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	1972-81 1958-67				E	
LINE FK AT DEFEATED CR, KY	03277370	40.80	1958-76				E	
LEATHERWOOD CR AT DAISY, KY	03277400	40.9	1964-74, 1991-98	E	E	E	E	
N FK KENTUCKY R AT CORNETTSVILLE, 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	
RED BIRD RIVER NR BIG CREEK	03281040	155	1973-00	E	E	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 1967 1975-77 1979-81				E	
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				E	
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 1979-81				E	
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 BEREIA, 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 1979-81				E	
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	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

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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	
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	
N ELKHORN CR NR GEORGETOWN, KY	03288000	119	1950-84 1989-99	E	E	E	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 1957 1962 1972-81				E	
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				E	
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 1972-76				E	
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 BRADSFORDVILLE, KY	03298760	95.70	1972-77				E	
BIG S FK AT BRADSFORDVILLE, 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 1980-81				E	
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1953-72		E	E		
N PRONG NR WILLISBURG, KY	03300065	1.71	1975-89			E		

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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 1980-81				E	
TOWN CR TRIB AT BARDSTOWN, KY	03300990	.32	1975-86					
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1939-74	E	E	E		
WILSON CR AT HARRISON FK RD NR DEATSVILLE, KY	033015075	5.7	1999-2001	E	E	E	E	
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-96	E	E	E	E	
SLOP DITCH NR OKOLONA, KY	03301885	1.4	1994-96	E	E	E	E	
NORTHERN DITCH AT OKOLONA, KY	03301940	11.10	1974-79		E			
OTTER CR TRIB NR VINE GROVE, KY	03302085	.90	1975-86					
OTTER CR AT GRAHAMTON, KY	03302100	88.40	1953-72				E	
DOE RUN NR BRANDENBURG STATION, KY	03302150	52.70	1953-72				E	
SINKING CR AT ROSETTA, KY	03303195	36.00	1970-76				E	
SINKING CR DENTS BR NR IRVINGTON, KY	03303198	66.10	1970-76				E	
SINKING CR NR IRVINGTON, KY	03303200	86.70	1953-72				E	
SINKING CR NR LODIBURG, KY	03303205	125.00	1971-77				E	
SINKING CR AT SAMPLE, KY	03303210	222.00	1953-70				E	
BLACKFORD CR NR MACEO, KY	03303450	111.00	1953-74				E	
OHIO R AT OWENSBORO, KY	03303500	97200.00	1940-54*	E	E	E		
MCGILLS CR NR MCKINNEY, KY	03304500	2.14	1951-71*	E		E		
GREEN R NR MCKINNEY, KY	03305000	22.40	1951-73*	E	E	E		
GREEN R NR MOUNT SALEM, KY	03305500	36.30	1954-61*	E	E	E		
GREEN R AT MIDDLEBURG KY	03305520	66.50	1972-74				E	
CARPENTER CR TRIB NR HUSTONVILLE, KY	03305559	.88	1976-86					
GREEN R NR DUNNVILLE, KY	03305660	221.00	1972-77				E	
S FK NR DUNNVILLE, KY	03305720	71.00	1972-78				E	
IRVIN BRANCH NR SALEM, KY	03305725	1.37	1976-86			E		
GOOSE CR AT DUNNVILLE, KY	03305760	51.60	1972-77				E	
GREEN R AT NEATSVILLE, KY	03305800	399.00	1953-73				E	
GUM LICK TRIB NR CLEMENTSVILLE, KY	03305835	.71	1976-90			E		
CASEY CR AT CASEY CR, KY	03305865	74.70	1972-77				E	
ROBINSON CR AT ACTON, KY	03305945	48.40	1974-81				E	
GREEN R AT CAMPBELLSVILLE, KY	03306000	682	1930-32 1963-94	E	E		E	
GREEN R AT GREENSBURG, KY	03306500	736.00	1939-75*	E	E	E		
WHITE OAK CR TR NR MONTPELIER, KY	03306640	.50	1976-86	E		E		
RUSSELL CR NR JOPPA, KY	03306690	62.90	1974-81				E	
RUSSELL CR AT COLUMBIA, KY	03306850		1972-74				E	
RUSSELL CR NR GRESHAM, KY	03307100	265.00	1965-75*	E	E	E	E	
BIG PITMAN CR NR BENGAL, KY	03307215	47.70	1974-78 1980-81				E	
LITTLE PITTMAN CR NR CAMPBELLSVILLE, KY	03307260	19.3	1990-95	E	E	E	E	
BIG PITMAN CR NR SUMMERSVILLE, KY	03307295	126.00	1953-72				E	
BIG BRUSH CR NR SUMMERSVILLE, KY	03307400	45.70	1974-78 1980-81				E	
S FK LITTLE BARREN R AT EDMONTON, KY	03307500	18.30	1941-72*	E	E	E		
S FK LITTLE BARREN R AT SULPHUR WELL, KY	03307600	79.60	1975-81				E	
PRICES CR NR GRADYVILLE, KY	03307670	2.53	1976-86			E		
E FK LITTLE BARREN R NR SULPHUR WELL, KY	03307730	87.40	1975-81				E	
LITTLE BARREN R NR MONROE, KY	03307800	244.00	1960-76				E	
ECHO R OUTLET AT MAMMOTH CAVE, KY	03308950		1953-74				E	
GREEN R AT MAMMOTH CAVE, KY	03309000	1983.00	1938-50	E	E	E		
WET PRONG BUFFALO CR NR MAMMOTH CAVE, KY	03309100	2.26	1962-74				E	
MCDUGAL CR NR HODGENVILLE, KY	03309500	5.34	1953-71*	E	E	E	E	
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1941-73*	E	E	E		
S FK NOLIN R AT MATHERS MILL, KY	03310078	49.60	1974-78				E	
NOLIN R NR GLENDALE, KY	03310160	185.00	1972-73				E	
VALLEY CR NR GLENDALE, KY	03310270	90.10	1973-81				E	
BACON CR AT HIGHWAY 31W AT BONNIEVILLE, KY	03310380	53.50	1974-81				E	
BACON CR TRIB NR UPTON, KY	03310385	.56	1975-90			E		
BACON CR NR PRICEVILLE, KY	03310400	85.4	1959-94	E	E	E	E	
NOLIN R AT WAX, KY	03310500	600.00	1935-62*	E	E	E		
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74				E	
BRIER CR TRIB NR OLLIE, KY	03310880	.31	1976-86			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
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1961-74				E	
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762	1925-31	E		E	E	
			1936-92					
BEAVERDAM CR NR RHODA, KY	03311600	10.9	1961-72				E	
			1972-94	E	E	E	E	
BEAR CR NR LEITCHFIELD, KY	03312000	30.80	1950-71*	E	E	E		
BEAR CR NR ROUNDHILL, KY	03312100	137.00	1953-72				E	
BARREN R NR PAGEVILLE, KY	03312500	531.00	1939-63	E	E	E		
BEAVER CR AT HWY 31 NR GLASGOW, KY	03312765	49.6	1992-2002	E	E	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	1940-51		E			
ROCK LICK CR NR GLEN DEAN, KY	03318200	20.10	1957-71*	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	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

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
OHIO R AT DAM 51 AT GOLCONDA, IL	03384500	143900.00	1980-81	E	E			
POOR FK AT HARLAN, KY	03400000	51.70	1941-52		C			
POOR FK AT CUMBERLAND, KY	03400500	82.3	1940-43		E			
POOR FK AT ROSSPOINT, KY	03400585	142.00	1940-92	E		C	E	
CLOVER FK AT EVARTS, KY	03400700	82.40	1972-77				E	
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1959-87, 90			E		
CRANE CR NR SMITH, KY	03400796	1.63	1985-90*	E	E	E	E	
MARTINS FK AT HARLAN, KY	03400985	116.00	1976-77		E			
CLOVER FK AT HARLAN, KY	03400990	222	1960					E
PEARL BR AT WALLINS CR, KY	03401040	1.40	1977-92	E	E	E	E	
LITTLE YELLOW CR AT MIDDLESBORO, KY	03401400	10.80	1976-85			E		
BENNETTS FORK AT MIDDLESBORO, KY	03401428	60.6	1959-66					E
YELLOW CR BYPASS AT MIDDLESBORO, KY	03401500	35.30	1985-94	E	E	E	E	
SHILALAN CR NR PAGE, KY	03402020	2.96	1941-83			E		
YELLOW CR NR FERNDAL, KY	03402230	99.50	1976-86					
CLEAR CR AT CLEAR CR SPRINGS, KY	03402480	38.50	1972-81				E	
CUMBERLAND R AT PINEVILLE, KY	03402500	676.00	1975-81		E		E	
LEFT FK STRAIGHT CR AT CARY, KY	03402850	33.70	1928-31					
STRAIGHT CR AT STRAIGHT CR, KY	03402852	89.80	1958-76				E	
CUMBERLAND RIVER NR PINEVILLE, KY	03403000	809.00	1953-67				E	
STINKING CR AT DEWITT, KY	03403180	49.10	1938-92	E	E	E	E	
ROAD E CR AT DEWITT, KY	03403255	25.20	1961-75				E	
RICHLAND CR NR BARBOURVILLE, KY	03403530	27.70	1961-75				E	
LITTLE RICHLAND CR NR HINKLE, KY	03403538	11.60	1961-76				E	
CLEAR FK AT SAXTON, KY	03403910	331.00	1974-83			E		
JELICO CR NR WILLIAMSBURG, KY	03404200	103.00	1968-90*	E	E	E	E	
MARSH CR NR WHITELY CITY, KY	03404390	72.00	1953-72				E	
			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				E	
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	

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
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	3.52	1976-87, 90			E		
MARROWBONE CR AT GRIDER, KY	03414175	80.70	1975-81				E	
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	
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		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		
CHESTNUT CR NR BENTON, KY	03610503	.82	1975-86			E		
WEST FK CLARKS R NR BREWERS, KY	03610545	68.7	1968-83	E	E	E	E	
			1988-94	E	E	E	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					
			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.	PHY.	SED.	CHEM-
				AC- TIVE STA- TUS	AC- TIVE STA- TUS	AC- TIVE STA- TUS	ICAL AC- TIVE STA- TUS
BRUSHY FK AT THOMAS, KY	03201400		1980-82		N	N	N
CARD CR AT MOUTHCARD, 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	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
JONES FK AT BETTY, KY	03209603		1980-82		N	N	N
SALTICK 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 ZEBULON, 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	1973-76		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. AC- TIVE STA- TUS	PHY. AC- TIVE STA- TUS	SED. AC- TIVE STA- TUS	CHEM- 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
TWELVEMILE CR AT HWY 1997 NR ALEXANDRIA, KY	03238745	39.0	2001		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 CATAWBA, KY	03253500	3300.00	1962-79		N		N
LICKING R AT BUTLER, KY	03254000	3375.00	1950, 1975-94	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
OHIO R AT MARKLAND DAM, KY	03277200	83170.00	1960-70 1974-86	N N	N N	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
LOTTS 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 1979-81 1987-91	N	N	N	N
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 VANCELEAVE, 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 1988	N	N	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 1978-83 1987-90	N	N	N	N
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

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
S FK KENTUCKY R AT BOONEVILLE, KY	03281500	722.00	1950-75 1979-83 1987-90	N	N	N	N
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
SPEARS CR AT STREAMLAMD DR NR DANVILLE, KY	03285290		1998-2001		N		N
MOCKS BR AT HWY 1896 NR DANVILLE, KY	03285335		1998-99 2001		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 1987-90	N	N	N	N
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 BERE A 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
HARRODS CR NR PROSPECT, KY	03292473	92.1	1988-98		N		N
GOOSE CR AT OLD WESTPORT RD AT ST. MATTHEWS, KY	03292474		1988-98		N		N
GOOSE CR AT U.S. HWY 42 AT GLENVIEW ACRES, KY	03292475	10.1	1988-98		N		N
LITTLE GOOSE CR NR HARRODS CR, KY	03292480	5.8	1988-98		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, 95-98		N		N
S. FK. BEARGRASS CR NR EASTERN PKY AT LOUISVILLE, KY	03292530	21.6	1995-98		N		N
S. FK BEARGRASS CR NR WINTER AVE., KY.	03292550	22.6	1988-98		N		N
MIDDLE FK BEARGRASS CR AT LOUISVILLE, KY	03293000	18.9	1988-92, 96-98		N		N
M. FK. BEARGRASS CR NR SCENIC LOOP AT LOUISVILLE, KY	03293200	22.7	1988-98		N		N
M. FK. BEARGRASS CR NR LEXINGTON RD AT LOUISVILLE, KY	03293500	24.4	1996-98		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
MUDDY FK. MOCKINGBIRD VALLEY RD AT LOUISVILLE, KY	03293550	6.2	1988-98		N		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, 98		N		N
MILL CR AT ORELL RD NR LOUIVILLE, KY	03294570	13.5	1988-98		N		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
LONG RUN NR FISHERVILLE, KY	03297980	22.5	1988-98		N		N
FLOYDS FK AT FISHERVILLE, KY	03298000	138.	1988-98		N		N
POPE LICK AT POPE LICK RD AT MIDDLETOWN, KY	03298100	2.9	1988-98		N		N
CHENOWETH RUN NR RUCKRIEGEL PKY, AT LOUISVILLE, KY	03298135	5.47	1996-98		N		N
CHENOWETH RUN NR GELHAUS LANE, AT FERN CREEK, KY	03298150	11.6	1988-98		N		N
FLOYDS FK NR MOUNT WASHINGTON, KY	03298200	21.3	1988-98		N		N
CEDAR CR AT FAIRMOUNT RD NR MOUNT WASHINGTON, KY	03298242	7.8	1992-98		N		N
CEDAR CREEK AT THIXTON RD NR LOUISVILLE, KY	03298250	11.1	1988-98		N		N
PENNSYLVANIA R AT MT WASHINGTON RD AT LOUISVILLE, KY	03298300	6.4	1988-98		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 1979-92	N	N	N	N
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 HARRISON FK RD AT DEATSVILLE, KY	03301575	5.7	1990-98		N		N
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-92 1992-96		N		N
ROLLING FORK NR LEBANON JUNCTION, KY	03301630	1375.00	1975-94	N	N	N	N
SOUTHERN DITCH AT MINORS LN NR OKOLONA, KY	03301880	12.8	1988-98		N		N
FERN CR NR OLD BARDSTOWN RD AT LOUISVILLE, KY	03301900	3.5	1988-98		N		N
NORTHERN DITCH AT OKOLONA, KY	03301940	11.1	1988-98		N		N
SPRING DITCH AT PRIVATE DRIVE NR OKOLONA, KY	03301950	1.6	1988-98		N		N
POND CR NR LOUISVILLE, KY	03302000	64.0	1988-98		N		
POND CR AT PENDLETON RD NR LOUISVILLE, KY	03302030	80.3	1988-98		N		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
OTTER CR AT OTTER CR PARK NR ROCKHAVEN, KY	03302110	99.2	1993-98		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

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
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 RHODES 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
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

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
ROUGH R AT HARTFORD, KY	03319600		1966-72		N		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		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		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
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		N
PANTHER CR NR CURDSVILLE, KY	03321450	344.00	1973-80		N		N
LICK CR NR BLUFF CITY, KY	03321455		1980-82		N	N	N
KNOBLICK 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		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		N
OHIO R NR UNIONTOWN DAM, KY	03322420		1975		N		N
EAGLE CR NR MORGANFIELD, KY	03382570		1980-82		N	N	N
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

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
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
JELLICO 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
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	N
W FK CANE BR NR PARKERS LAKE, KY	03407200	.26	1957-73			N	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

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
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	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	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
373925085540301	Hardin	OW-6	1989-95
374020085530601	Hardin	OW-5	1989-90, 1994,95
374035085525401	Hardin	OW-1-82	1982-98
374046085523501	Hardin	OW-1-81	1982-98 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

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381142085475702	Jefferson	RR-42	1945-97
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
381442085444801	Jefferson	Metro United Way	1991-2002
381445085460201	Jefferson	QW Well 9th & Broadway	1996-2002
381447085454001	Jefferson	Courier Journal	1953-2002
381500085445501	Jefferson	89-2	1989-92
381500085454701	Jefferson	78-5	1978-92
381501085445601	Jefferson	U of L Medical School	1996-2002
381501085464601	Jefferson	CP-10	1977-97
381503085452601	Jefferson	Stewarts	1981-92
381503085453301	Jefferson	Kentucky Towers	1948-2002
381505085475701	Jefferson	CP-5	1977-92
381508085455701	Jefferson	CP-4	1977-97
381514085453502	Jefferson	CP11A	1984-92
381517085455501	Jefferson	Roy Wilkins Blvd.	1986-2002
381518085451801	Jefferson	87-1	1986-96

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381518085454401	Jefferson	86-10	1986-97
381522085445201	Jefferson	Louisville Scrap Metal	1991-2003
381524085452301	Jefferson	86-8	1986-92
381527085453001	Jefferson	Belevedre Well	1986-2002
381528085454201	Jefferson	86-9	1986-92
381536085492801	Jefferson	CP-2	1977-92
381538085434401*	Jefferson	78-7	1978-92
381539085465201	Jefferson	CP-9	1977-97
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
381722085405801	Jefferson	WC-11	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	Metcalf	Froedge	1979-83, 1988-97
370342086080101	Warren	Estes	1961-83, 1988-97

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Stearns, South Fork Cumberland River near	498-506	Woolper Creek Basin,	
Sturgeon Creek at Cressmont	212,213	gaging stations records in	160-170
Surface-water, Summary of Hydrologic Conditions	2	Woolper Creek at Woolper Road near Burlington	160-170
System, Downstream Order	6	Wooton, Cutshin Creek at	202,203
Tallega, Middle Fork Kentucky River at	204,205	Yamacraw, South Fork Cumberland River near	508-516
Tannery, Kinniconick Creek below Trace Creek at	76,77	Yarnallton, Town Branch at Yarnallton Road at	279-281
Taylorsville, Brashears Creek at	318,319	Yellow Creek near Middlesboro	482,483

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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter (mm)
	2.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^0	kilometer (km)
Area		
acre	4.047×10^3	square meter (m ²)
	4.047×10^{-1}	square hectometer (hm ²)
	4.047×10^{-3}	square kilometer (km ²)
square mile (mi ²)	2.590×10^0	square kilometer (km ²)
Volume		
gallon (gal)	3.785×10^0	liter (L)
	3.785×10^{-3}	cubic meter (m ³)
	3.785×10^0	cubic decimeter (dm ³)
million gallons (Mgal)	3.785×10^3	cubic meter (m ³)
	3.785×10^{-3}	cubic hectometer (hm ³)
cubic foot (ft ³)	2.832×10^{-2}	cubic meter (m ³)
	2.832×10^1	cubic decimeter (dm ³)
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter (m ³)
	2.447×10^{-3}	cubic hectometer (hm ³)
acre-foot (acre-ft)	1.233×10^3	cubic meter (m ³)
	1.233×10^{-3}	cubic hectometer (hm ³)
	1.233×10^{-6}	cubic kilometer (km ³)
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m ³ /s)
	2.832×10^1	cubic decimeter per second (dm ³ /s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m ³ /s)
	6.309×10^{-2}	cubic decimeter per second (dm ³ /s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m ³ /s)
	4.381×10^1	cubic decimeter per second (dm ³ /s)
Mass		
ton (short)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

