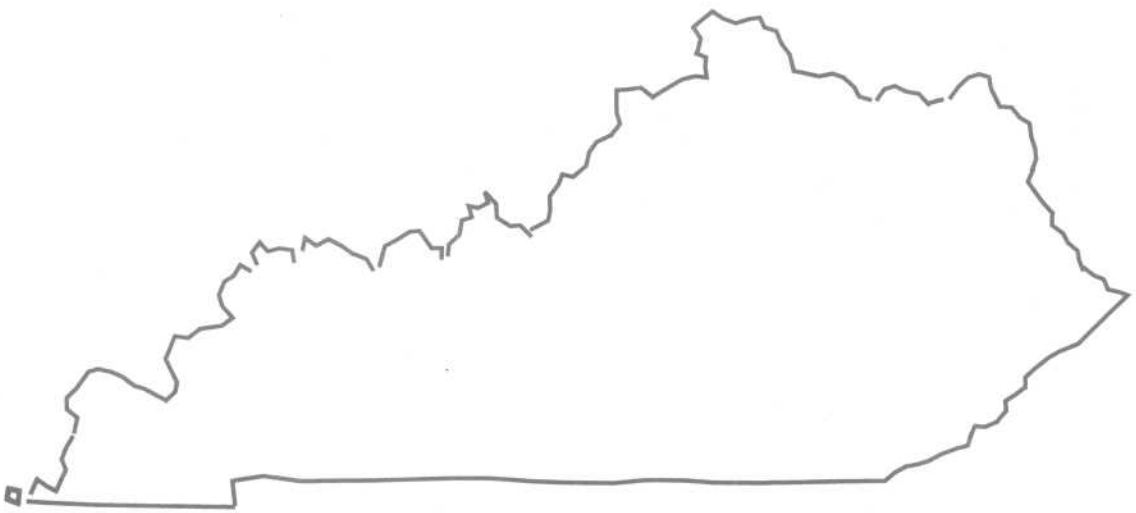
Water Resources Data
Kentucky
Water Year 1994



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT KY-94-1

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

Click here to return to USGS publications

CALENDAR FOR WATER YEAR 1994

1993

OCTOBER

S	M	T	W	T	F	S
					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						

NOVEMBER

S	M	T	W	T	F	S
	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				

DECEMBER

S	M	T	W	T	F	S
			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	

1994

JANUARY

S	M	T	W	T	F	S
						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					

FEBRUARY

S	M	T	W	T	F	S
		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					

MARCH

S	M	T	W	T	F	S
		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		

APRIL

S	M	T	W	T	F	S
					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

MAY

S	M	T	W	T	F	S
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				

JUNE

S	M	T	W	T	F	S
			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		

JULY

S	M	T	W	T	F	S
					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						

AUGUST

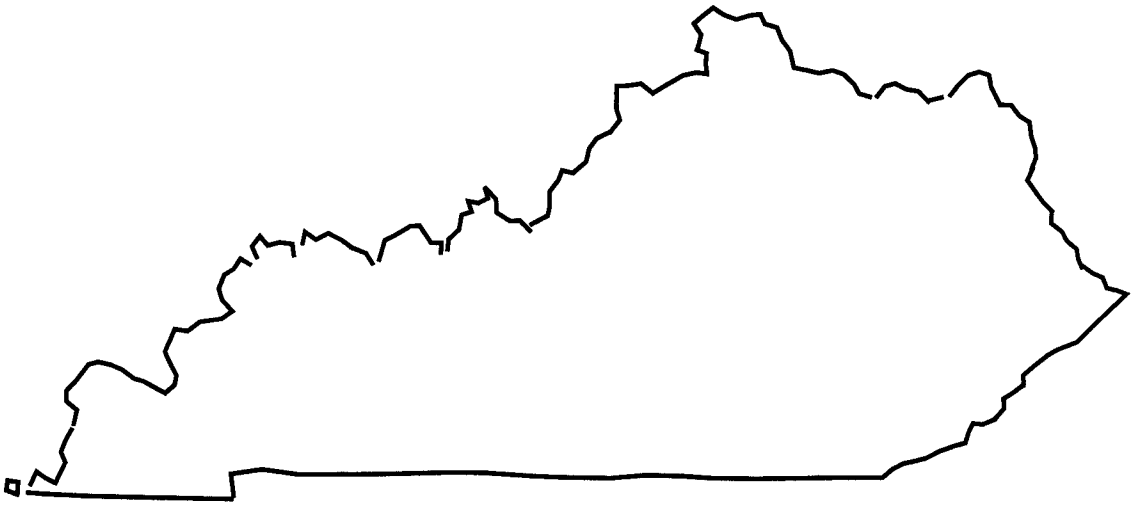
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER

S	M	T	W	T	F	S
				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	

Water Resources Data Kentucky Water Year 1994

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT KY-94-1
Prepared in cooperation with the Commonwealth of Kentucky and with other agencies

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

U.S. Geological Survey
Gordon P. Eaton, Director

For additional information write to:

District Chief, Water Resources Division
U.S. Geological Survey
2301 Bradley Avenue
Louisville, Kentucky 40217-1807

1995

PREFACE

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

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

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

H.C. Allen	Rene Garcia	S.B. Pickard
P.J. Bruenderman	M.S. Griffin	R.E. Puckett
S.J. Couts	A.C. Haliday	M.F. Rose
R.S. Darnell	Zeke Hensley	K.J. Ruhl
A.K. Dirrim	H.A. Hitchcock	E.A. Shreve
D.W. Eichert	G.L. Hubbard	C.J. SHolar
R.D. Evaldi	G.K. McCombs	B.J. Stich
P.L. Faith	B.L. Moore	M.D. Unthank
J.D. Filbeck	C.R. Moses	D.D. Zettwoch

This report was prepared in cooperation with the Commonwealth of Kentucky and with other agencies under the general supervision of Harry C. Rollins, Assistant District Chief, Kentucky.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0186

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	April 26, 1995	Annual—October 1, 1993 to September 30, 1994

4. TITLE AND SUBTITLE
Water Resources Data—Kentucky, Water Year 1994

5. FUNDING NUMBERS

6. AUTHOR(S)
D.L. McClain, F.D. Byrd, and A.C. Brown

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Kentucky District
2301 Bradley Avenue
Louisville, KY 40217-1807

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-KY-94-1

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Kentucky District
2301 Bradley Avenue
Louisville, KY 40217-1807

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
USGS/WRD/HD-95/284

11. SUPPLEMENTARY NOTES
Prepared in cooperation with the Commonwealth of Kentucky and other agencies.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

Water resources data for the 1994 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 98 stream-gaging stations and stage at 3 stations. It also includes water-quality data for 36 stations sampled at regular intervals. Also published are 8 daily temperature and 104 miscellaneous temperature and specific conductance determinations for the gaging stations. Suspended-sediment data for 3 stations are also published. Ground-water levels are published for 13 recording and 84 partial sites. Precipitation data at a regular interval is published for 1 site. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurement and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kentucky.

14. SUBJECT TERMS
*Kentucky, *Hydrologic data, *Surface waters, *Water quality, *Ground waters, Gaging stations, Streamflow, Flow rates, Lakes, Wells, Chemical analyses, Suspended sediments, Water temperature, Water levels

15. NUMBER OF PAGES
324

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	

CONTENTS

Page

Preface . . . iii
List of gaging stations, in downstream order, for which records are published . . . vii
List of ground-water wells, by county, for which records are published . . . x
List of precipitation-quality stations, by county, for which records are published . . . xi
Introduction . . . 1
Cooperation . . . 1
Summary of hydrologic conditions . . . 2
  Surface water . . . 2
  Quality of water . . . 2
  Ground-water levels . . . 2
Special networks and programs . . . 6
Explanation of records . . . 8
  Station identification numbers . . . 8
    Downstream order system . . . 8
    Latitude-longitude system . . . 9
  Records of stage and water discharge . . . 9
    Data collection and computation . . . 9
    Data presentation . . . 11
  Station manuscript . . . 11
  Data table of daily mean values . . . 12
  Statistics of monthly mean data . . . 12
  Summary statistics . . . 13
    Identifying estimated daily discharge . . . 14
    Accuracy of the records . . . 14
    Other records available . . . 15
  Record of surface-water quality records . . . 15
    Classification of records . . . 15
    Arrangement of records . . . 15
    On-site measurements and sample collection . . . 16
    Water temperature . . . 16
    Sediment . . . 16
    Laboratory measurements . . . 17
    Data presentation . . . 17
    Remarks codes . . . 18
    Dissolved trace-element concentrations . . . 18
    Change in National Trends Network procedures . . . 18
  Records of ground-water level . . . 19
    Data collection and computation . . . 19
    Data presentation . . . 19
  Records of precipitation-quality . . . 20
    On-site measurements and sample collection . . . 20
    Data presentation . . . 21
Access to WATSTORE data . . . 21
Definition of terms . . . 22
Publications on techniques of water-resources investigations . . . 32
Station records, surface water . . . 39
  Discharge at partial-record stations . . . 227
    Crest-stage partial-record stations . . . 227
    Special study and miscellaneous sites . . . 229
  Miscellaneous temperature measurement and field determinations . . . 231
Station records, ground water . . . 249
  Ground-water levels listed by county . . . 249
Station records, precipitation records . . . 288
  Chemical analyses listed by county . . . 288
Discontinued gaging-station records . . . 292
Discontinued water-quality records . . . 300
Discontinued ground-water records . . . 308
Index . . . 309

ILLUSTRATIONS

Page

Figure 1. Mean runoff during 1993 water year and period of record for three representative gaging stations 3
2. Hydrograph of a well in downtown Louisville (381447085454001) 7
3. Hydrograph of a well in south west Jefferson County (38124085470601) 7
4. Diagram showing system for numbering wells and miscellaneous sites (latitude and longitude) 10
5. Map showing location of gaging stations in Kentucky 36
6. Map showing location of surface water quality stations in Kentucky 37
7. Map showing location of surface-water quality stations in Jefferson County for the MSD Sampling Network 38
8. Map showing location of observation wells in Kentucky 246
9. Map showing location of observation wells in Jefferson County 247
10. Map showing location of observation wells in downtown Louisville 248

TABLES

Table 1. Mean, maximum, and minimum streamflow for water year 1994 and recurrence intervals at selected stations 4
2. Summary of nitrite plus nitrate results at National Stream Quality Accounting Network stations, October 1983 to September 1994 5

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]

	STATION NUMBER	Page
OHIO RIVER BASIN		
Ohio River:		
BIG SANDY RIVER BASIN		
Levisa Fork (head of Big Sandy River):		
Russell Fork at Haysi, VA (d)	03208500	.39
Levisa Fork at Pikeville (d)	03209500	.40
Levisa Fork at Paintsville (d)	03212500	.41
LITTLE SANDY RIVER BASIN		
Little Sandy River at Grayson (d)	03216500	.42
Ohio River at Greenup Dam (d)	03216600	.43
TYGARTS CREEK BASIN		
Tygarts Creek at Olive Hill (d)	03216800	.44
Tygarts Creek near Greenup (d)	03217000	.45
KINNICONICK CREEK BASIN		
Kinniconick Creek at Tannery (d)	03237250	.46
LICKING RIVER BASIN		
Licking River at Farmers (d,t)	03249500	.49
North Fork Triplett Creek near Morehead (d)	03250100	.52
North Fork Licking River near Mt. Olivet (d)	03251200	.53
Licking River at McKinneysburg (d)	03251500	.54
South Fork Licking River:		
Hinkston Creek near Carlisle (d)	03252300	.55
South Fork Licking River at Cynthiana (d)	03252500	.56
Licking River at Catawba (d)	03253500	.57
Licking River at Butler (c,b,s)	03254000	.58
Ohio River at Markland Dam (d)	03277200	.60
KENTUCKY RIVER BASIN		
North Fork Kentucky River (head of Kentucky River):		
Leatherwood Creek at Daisy (d)	03277400	.61
Carr Fork near Sassafras (d)	03277450	.62
North Fork Kentucky River at Jackson (d)	03280000	.63
Cutshin Creek at Wooton (d)	03280700	.64
Middle Fork Kentucky River at Tallega (d)	03281000	.65
Kentucky River:		
Red Bird River (head of South Fork Kentucky River) near Big Creek (d)	03281040	.66
Goose Creek at Manchester (d)	03281100	.67
South Fork Kentucky River at Booneville (d)	03281500	.68
Kentucky River at lock 14, at Heidelberg (d)	03282000	.69
Sturgeon Creek at Cressmont (d)	03282040	.70
Red River near Hazel Green (d)	03282500	.71
Red River at Clay City (d)	03283500	.72
Kentucky River at lock 10, near Winchester (d)	03284000	.73
Dix River near Danville (d)	03285000	.74
Clarks Run near Danvile (d)	03285200	.75
Kentucky River at lock 6, near Salvisa (d)	03287000	.77
Kentucky River at lock 4, at Frankfort (d)	03287500	.78
Elkhorn Creek:		
North Elkhorn Creek near Georgetown (d)	03288000	.79
North Elkhorn Creek at Georgetown (d)	03288100	.80
Royal Spring at Georgetown (d)	03288110	.82
South Elkhorn Creek near Midway (d)	03289300	.83
Elkhorn Creek near Frankfort (d)	03289500	.84
Kentucky River at lock 2, at Lockport (d,c,b,s)	03290500	.85
Eagle Creek at Glencoe (d)	03291500	.88
HARRODS CREEK BASIN		
Harrods Creek near La Grange (d)	03292460	.89
Harrods Creek near Prospect (c)	03292473	.90
GOOSE CREEK BASIN		
Goose Creek at Old Westport Road near St. Matthews (c)	03292474	.91
Goose Creek at U.S. Hwy 42 near Glenview Acres (c)	03292475	.92
Little Goose Creek near Harrods Creek (c)	03292480	.93

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

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

	STATION NUMBER	Page
OHIO RIVER BASIN--Continued		
Ohio River--Continued		
BEARGRASS CREEK BASIN		
South Fork Beargrass Creek at Louisville (d,c)	03292500	.94
South Fork Beargrass Creek at Winter Avenue at Louisville (c)	03292550	.96
Middle Fork Beargrass Creek at Louisville (d,c)	03293000	.97
Middle Fork Beargrass Creek at Beals Branch Road at Louisville (c)	03293200	.99
Muddy Fork at Mockingbird Valley Road at Louisville (c)	03293530	100
Ohio River at Louisville (d)	03294500	101
MILL CREEK BASIN		
Mill Creek Cutoff near Louisville (d,c)	03294550	102
Mill Creek at Orell Road near Louisville (c)	03294570	104
SALT RIVER BASIN		
Salt River at Glensboro (d)	03295400	105
Brashears Creek at Taylorsville (d)	03295890	106
Floyds Fork:		
Floyds Fork near Pee Wee Valley (d)	03297900	107
Long Run near Fisherville (c)	03297980	108
Floyds Fork at Fisherville (d,c)	03298000	109
Pope Lick at Pope Lick Road near Middletown (c)	03298100	111
Chenoweth Run at Gelhaus Lane near Fern Creek (c)	03298150	112
Floyds Fork near Mount Washington (c)	03298200	113
Cedar Creek at Fairmount Road near Mt. Washington, Ky. (c)	03298242	114
Cedar Creek at Thixton Road near Louisville (c)	03298250	115
Pennsylvania Run at Mt. Washington Road near Louisville (c)	03298300	116
Salt River at Shepherdsville (d)	03298500	117
Long Lick near Clermont (d)	03298550	118
Rolling Fork:		
Beech Fork at Maud (d)	03300400	119
Rolling Fork near Boston (d)	03301500	120
Wilson Creek at Harrison Fork Road near Deatsville (c)	03301575	121
Wilson Creek near Deatsville (d,c,t)	03301580	122
Rolling Fork near Lebanon Junction (c,b,s)	03301630	132
Pond Creek:		
Southern Ditch:		
Southern Ditch at Minors Lane near Okolona (c)	03301880	134
Slop Ditch near Okolona (c)	03301885	135
Northern Ditch:		
Fern Creek at Old Bardstown Road at Louisville (c)	03301900	136
Northern Ditch at Okolona (c)	03301940	137
Spring Ditch at Private Drive near Okolona (c)	03301950	138
Pond Creek near Louisville (d,c)	03302000	139
Pond Creek at Pendleton Road near Louisville (c)	03302030	141
OTTER CREEK BASIN		
Otter Creek at Otter Creek Park near Rock Haven, Ky. (c)	03302110	142
Ohio River at Cannelton Dam (d)	03303280	143
GREEN RIVER BASIN		
Green River near Campbellsville (d,t)	03306000	144
Russell Creek near Columbia (d)	03307000	147
Little Pitman Creek near Campbellsville (d)	03307260	148
Green River at Munfordville (d,c,b,s,t)	03308500	149
Nolin River at White Mills (d)	03310300	154
Bacon Creek near Priceville (d)	03310400	155
Nolin River at Kyrock (d,t)	03311000	156
Beaverdam Creek at Rhoda (d)	03311600	159
Beaver Creek at Hwy 31 E near Glasgow (d)	03312765	160
Barren River near Finney (d,t)	03313000	161
West Fork Drakes Creek near Franklin (d)	03313700	164
Barren River at Bowling Green (d)	03314500	165
Mud River near Huntsville (d)	03316275	166
Green River at Paradise (d)	03316500	167

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

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

	STATION NUMBER	Page
OHIO RIVER BASIN--Continued		
Ohio River--Continued		
GREEN RIVER BASIN--Continued		
Rough River at Falls of Rough (d)	03318500	168
Rough River at Hartford (d)	03319600	169
Green River at lock 2, at Calhoun (d)	03320000	171
Pond River near Apex (d)	03320500	172
Pond River near Madisonville (d)	03321060	173
Cypress Creek near Calhoun (d)	03321210	174
Ohio River at Evansville, IN (d)	03322000	175
HIGHLAND CREEK BASIN		
Highland Creek:		
Beaverdam Creek near Corydon (d)	03322360	176
TRADEWATER RIVER BASIN		
Tradewater River at Olney (d)	03383000	177
Clear Creek near Richland (g)	03383755	178
Tradewater River near Sullivan (g)	03384180	179
CUMBERLAND RIVER BASIN		
Martins Fork Lake at Martins Fork Dam near Smith (c,t)	03400798	180
Martins Fork near Smith (d,c,t)	03400800	195
Cumberland River near Harlan (d)	03401000	202
Yellow Creek near Middlesboro (d)	03402000	203
Cumberland River at Pine St. Bridge at Pineville, KY (d)	03402900	204
Cumberland River at Williamsburg (d)	03404000	205
Cumberland River at Cumberland Falls (d)	03404500	206
Laurel River:		
Lynn Camp Creek at Corbin (d)	03404900	207
Rockcastle River at Billows (d)	03406500	208
South Fork Cumberland River near Stearns (d,c,s,b)	03410500	209
Beaver Creek near Monticello (d)	03413200	212
Little River near Cadiz (d)	03438000	213
Barkley-Kentucky Canal near Grand Rivers (d)	03438190	214
Cumberland River near Grand Rivers (d)	03438220	215
TENNESSEE RIVER BASIN		
Clarks River at Almo (d)	03610200	216
West Fork Clarks River near Brewers (d)	03610545	217
MASSAC CREEK BASIN		
Massac Creek near Paducah (d)	03611260	218
Ohio River at Metropolis, IL (d)	03611500	219
BAYOU CREEK BASIN		
Bayou Creek:		
Bayou Creek near Heath (d)	03611800	220
Bayou Creek near Grahamville (d)	03611850	221
Little Bayou Creek near Grahamville (d)	03611900	222
Ohio River at lock and dam 53, near Grand Chain, IL (c,b,s)	03612500	223
LOWER MISSISSIPPI RIVER BASIN		
MAYFIELD CREEK BASIN		
Mayfield Creek near Blandville (g)	07023100	225
BAYOU DE CHIEN BASIN		
Bayou De Chien near Clinton (d)	07024000	226

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

Page

CALLOWAY COUNTY
Well 363634088191601 . . . 249
CHRISTIAN COUNTY
Well 365142087270401 . . . 249
DAVIESS COUNTY
Well 374638087054101 . . . 249
ELLIOTT COUNTY
Well 380425083091901 . . . 250
FAYETTE COUNTY
Well 375928084362001 . . . 250
FRANKLIN COUNTY
Well 382031084553901 . . . 250
GRAVES COUNTY
Well 365210088391301 . . . 251
GRAYSON COUNTY
Well 372822086165801 . . . 252
HARDIN COUNTY
Well 373925085540301 Local number OW-6 . . . 253
Well 374035085525401 Local number OW-1-82 . . . 254
Well 374037085524801 Local number TW-2-82 . . . 255
Well 374046085523501 Local number OW-1-81 . . . 256
HENDERSON COUNTY
Well 374441087421001 . . . 257
JEFFERSON COUNTY
Well 380122085545001 Local number 80-1 . . . 257
Well 380252085530601 Local number 79-3 . . . 257
Well 380341085534501 Local number 83-1 . . . 258
Well 380423085541501 Local number 2 . . . 258
Well 380458085523201 Local number 86-4 . . . 258
Well 380517085535201 Local number 77-1 . . . 259
Well 380532085515301 Local number 51-5-2, (76-1) . . . 259
Well 380606085531301 Local number 53-6-1, (RR-46) . . . 260
Well 380619085512301 Local number 86-3 . . . 261
Well 380709085531101 Local number C-5-m . . . 261
Well 380716085521801 Local number 52-7-2, (RR-47) . . . 261
Well 380816085520701 Local number 52-8-1 . . . 262
Well 380827085503001 Local number 86-5 . . . 262
Well 380843085530701 Local number B-3-d . . . 262
Well 380850085534701 Local number 78-2 . . . 263
Well 380940085514001 Local number 81-1 . . . 263
Well 380955085531801 Local number 83-2 . . . 263
Well 381034085502601 Local number 50-10-2, (RR-30) . . . 264
Well 381050085511001 Local number 51-10-1, (RR-29) . . . 265
Well 381102085485601 Local number 86-2 . . . 265
Well 381123085491401 Local number 49-11-1, (RR-32) . . . 265
Well 381130085515001 Local number 51-11-1 . . . 266
Well 381139085502301 Local number 81-2 . . . 266
Well 381142085475702 Local number 47-11-4, (RR-42) . . . 266
Well 381143085465801 Local number 46-11-2, (RR-25) . . . 267
Well 381204085455301 Local number CP-16 . . . 267
Well 381207085484601 Local number 48-12-15, (RR-41) . . . 267
Well 381209085472101 Local number 47-12-3, (C-7) . . . 268
Well 381213085521701 Local number 52-12-2, (RR-22) . . . 268
Well 381222085505201 Local number 50-12-16 (RR-27) . . . 268
Well 381246085470601 Local number 47-12-4, (Seagrams TW #2) . . . 269
Well 381246085463201 Local number CP-18A . . . 270
Well 381251085483501 Local number 48-12-2, (C-3) . . . 270
Well 381251085500501 Local number 50-12-18, (RR-35) . . . 270
Well 381257085471801 Local number 47-12-15, (TW-4) . . . 271
Well 381259085511002 Local number 51-13-1, (RR-21) . . . 271
Well 381315085502602 Local number 50-13-79, (NC-TW-D) . . . 272
Well 381320085464101 Local number CP-15 . . . 273
Well 381331085491601 Local number 49-13-40, (RR-26) . . . 273

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

Page

JEFFERSON COUNTY--Continued
Well 381346085453801 Local number 45-13-2, (St. Patrick's well) . . . 273
Well 381346085454201 Local number CP-1 . . . 274
Well 381400085445001 Local number CP-6 . . . 274
Well 381417085500301 Local number 50-14-4, (RR-23) . . . 274
Well 381428085485701 Local number 78-6 . . . 275
Well 381430085472501 Local number CP-17 . . . 275
Well 381441085452701 Local number 45-14-71, (A-2) . . . 276
Well 381447085454001 Local number 45-14-66, (CJ&T #5) . . . 277
Well 381501085464601 Local number CP-10 . . . 278
Well 381503085453301 Local number 45-15-36, (Ky. Towers) . . . 278
Well 381504085443201 Local number CP-7A . . . 278
Well 381508085455701 Local number CP-4 . . . 279
Well 381518085454401 Local number 86-10 . . . 279
Well 381518085453402 Local number 86-11 . . . 280
Well 381518085451801 Local number 87-1 . . . 280
Well 381527085453001 Local number 86-7 . . . 281
Well 381539085465201 Local number CP-9 . . . 282
Well 381543085480101 Local number CP-14 . . . 282
Well 381553085431602 Local number M-2 . . . 282
Well 381604085430501 Local number 43-16-8, (WC-1) . . . 283
Well 381607085483601 Local number CP-3 . . . 283
Well 381638085415801 Local number 41-16-3, (WC-4) . . . 284
Well 381648085421201 Local number 42-16-15, (WC-5) . . . 285
Well 381653085413302 Local number WC-9A . . . 285
LARUE COUNTY
Well 374151085413201 . . . 285
LAUREL COUNTY
Well 370757084045001 . . . 286
LINCOLN COUNTY
Well 372739084402101 . . . 286
LOGAN COUNTY
Well 365046086444901 . . . 286
MCCRACKEN COUNTY
Well 370551088510401 . . . 287
METCALFE COUNTY
Well 370211085364301 . . . 287
WARREN COUNTY
Well 370342086080101 . . . 287

PRECIPITATION STATION, BY COUNTY, FOR WHICH RECORD IS PUBLISHED

ROWAN COUNTY, KENTUCKY
380706083324900 . . . 288

INTRODUCTION

Water resources data for the 1994 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 98 stream-gaging stations and stage at 3 stations. It also includes water-quality data for 36 stations sampled at regular intervals. Also published are 8 daily temperature and 104 miscellaneous temperature and specific conductance determinations for the gaging stations. Suspended-sediment data for 3 stations are also published. Ground-water levels are published for 13 recording and 84 partial sites. Precipitation data at a regular interval is published for 1 site. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurement and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kentucky.

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

Beginning with the 1961 water year and continuing through water year 1994, 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 94-1." These reports are for sale to the public for a nominal fee by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (502) 635-8000.

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

University of Kentucky, Charles T. Wethington, Jr., President, through Kentucky Geological Survey, Donald C. Haney, Director and State Geologist;
Kentucky Natural Resources and Environmental Protection Cabinet, Phillip J. Shepherd, Secretary, Gregory Higdon, Deputy Secretary, and Karen Armstrong-Cummings, Deputy Secretary;
City of Campbellsville, Robert Miller, Mayor;
City of Elizabethtown, Patricia Durbin, Mayor;
City of Glasgow, Charles B. Honeycutt, Mayor;
City of Louisville, Jerry E. Abramson, Mayor;
Jefferson County, David Armstrong, County Judge/Executive; and
Louisville and Jefferson County Metropolitan Sewer District, Gordon R. Garner, Executive Director.

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers.
The Kentucky Utilities Company and the Public Service Company of Indiana aided in collecting records.
Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Monthly and annual mean streamflow for the 1994 water year and the period of record are shown in figure 1 for three representative streamflow-gaging stations on streams in Kentucky. Annual mean streamflow for 1994 was above the long-term average in the eastern part of the State and above the long-term average in the central and western parts of the State except for two stations in each part.

Based on flow data collected at 26 surface-water gaging stations across Kentucky, annual peak flows during the 1994 water year had about a 2-year recurrence interval (table 1). Localized rains caused peak flow at one site in the central part of the State to exceed the 10-year recurrence interval, one site to exceed the 5-year recurrence interval, and one site in the western part of the State to exceed the 5-year recurrence interval. Base flows in the 1994 water year were less than a 2-year recurrence interval; however, two sites in the eastern part of the State exceeded the 5-year recurrence interval, five sites in the central to west-central part of the State exceeded the 5-year recurrence interval, and one site in the central part of the State exceeded the 10-year recurrence interval.

Quality of Water

Nitrogen is essential to ecosystems because it is used by organisms in making and maintaining protein, a major component of living substance. Although it is an abundant element in the atmosphere, only few organisms are able to make use of the inert gas phase. Other forms of nitrogen—ammonia and nitrate—become available for use by the majority of plants and bacteria through what is known as the nitrogen cycle. In the cycling of nitrogen, primary nitrogen users serve as a food source for other organisms or decay along with these organisms thereby releasing nitrogen.

Nitrite plus nitrate constitutes most of the dissolved nitrogen available in well-aerated streams. Concentrations of nitrite plus nitrate vary seasonally and differ from basin to basin across the State. They are also affected by contributions from point (urban runoff containing municipal and industrial waste) and nonpoint sources (agricultural runoff from fields and feedlots). Historical median values of nitrite plus nitrate at National Stream Quality Accounting Network stations ranged from 0.43 to 0.99 milligrams per liter (mg/L), as nitrogen (table 2). The lowest values for nitrite plus nitrate were recorded from samples collected at South Fork Cumberland River near Stearns, Kentucky (03410500). The drainage basin for this station lies predominantly within the Big South Fork National River and Recreational Area that is set aside and protected by legislation to serve as a natural and cultural resource; it is rarely affected by point or nonpoint sources of nitrogen. The highest nitrite plus nitrate concentration (1.30 mg/L) for water-year 1994 was measured from a sample collected in February at Licking River at Butler. Concentrations of sediment and associated nutrients such as phosphorus were also high in the sample. The high values were probably due to agricultural runoff as a result of seasonally high discharge from precipitation and snow melt.

Ground-Water Levels

Most currently monitored observation wells tap the alluvial aquifer underlying Louisville and western Jefferson County (figs. 9 and 10). A few of the observation wells are in or near the well field of Elizabethtown, in Hardin County, Kentucky, and are used to monitor water levels in the karst aquifer used for water supply by the city (fig. 8). A few observation wells are scattered throughout the State to monitor water-level trends in the various bedrock aquifers (fig. 8).

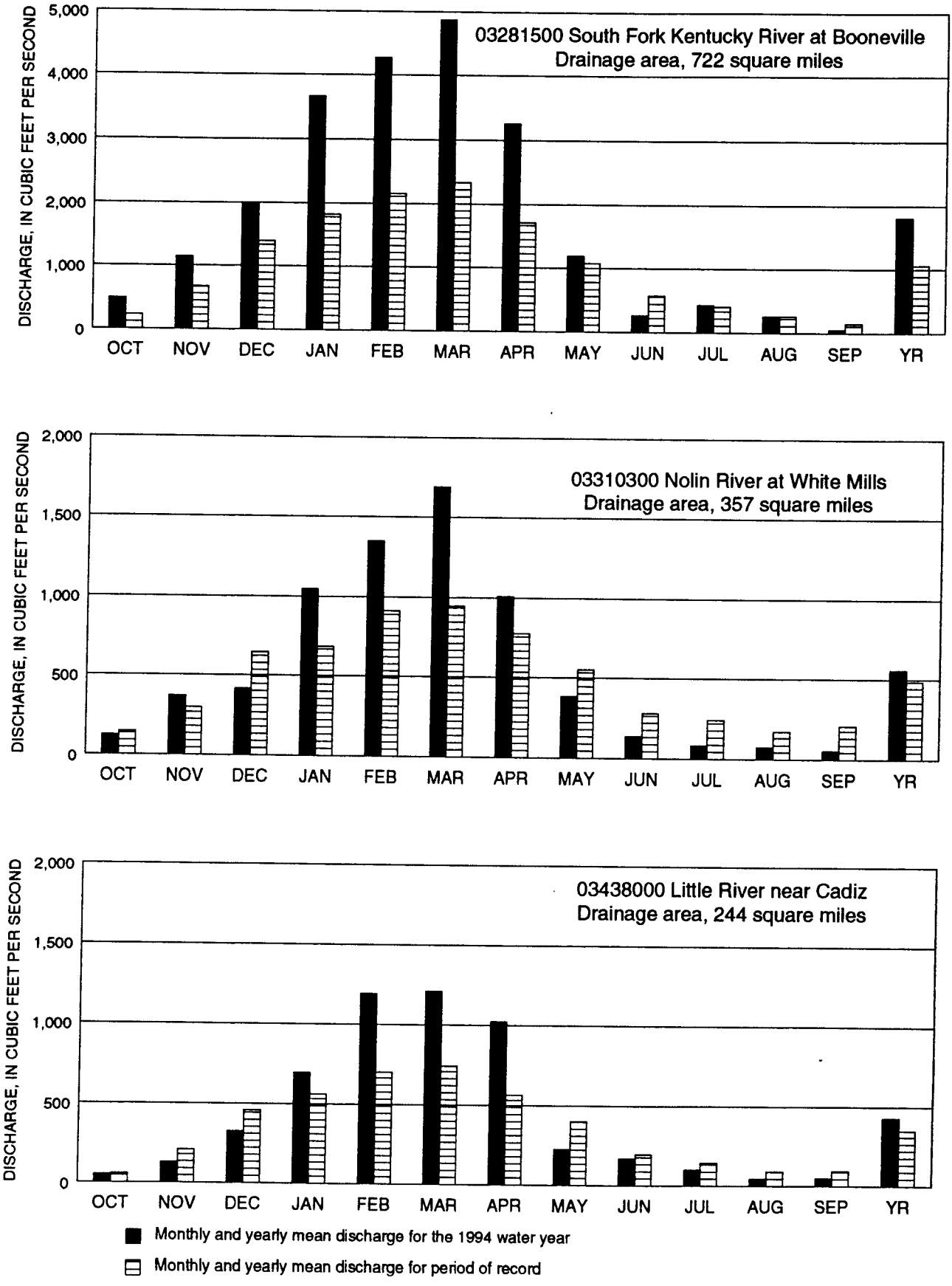


Figure 1. Mean discharge during 1994 water year and period of record for three representative gaging stations.

Table 1. Mean, maximum, and minimum streamflow for water year 1994 and recurrence intervals at selected stations

Station number	Length of record (years)	Mean		Maximum		Minimum	
		Daily streamflow (ft^3/s)	Percent of average	Peak streamflow (ft^3/s)	Recurrence interval (years)	Daily streamflow (ft^3/s)	Recurrence interval (years)
				TYGARTS CREEK BASIN			
03216800	37	135	153	3,390	<2	.26	<10
				LICKING RIVER BASIN			
03250100	27	169	127	6,910	>2	.07	<10
03252500	56	1,171	153	14,900	<2	6.0	<2
				KENTUCKY RIVER BASIN			
03280700	37	138	145	5,860	>2	2.8	<2
03281040	22	513	179	12,600	>2	5.2	<2
03281100	30	456	169	8,690	<2	5.5	<2
03281500	61	1,808	170	27,200	>2	30	<2
03282500	39	153	174	2,230	<2	.57	<2
03283500	57	876	177	11,800	>2	15	<2
03285000	52	732	156	28,100	>10	2.0	<2
				HARRODS CREEK BASIN			
03292460	26	33.5	91	4,320	>2	0	<10
				BEARGRASS CREEK BASIN			
03293000	50	19.2	76	516	<2	.46	<10
				SALT RIVER BASIN			
03298000	50	194	108	3,900	<2	.42	<2
03300400	22	730	116	16,200	<2	.59	<20
03301500	56	2,569	143	31,000	>2	11	<2
				GREEN RIVER BASIN			
03307000	55	467	159	16,400	>5	6.9	<2
03310300	35	556	114	8,710	>2	46	<10
03310400	35	64.2	110	2,230	>2	6.9	<10
03311600	22	23.7	131	1,120	<2	.56	<10
03320500	54	298	109	4,460	<2	.04	<2
				CUMBERLAND RIVER BASIN			
03404900	21	141	160	2,140	<2	3.0	<2
03406500	58	1,527	162	21,200	<2	22	<2
03410500	52	2,631	147	66,700	>5	70	<2
03438000	54	429	122	5,750	<2	27	<2
				MASSAC CREEK BASIN			
03611260	23	16.8	95	1,840	<2	.52	<2
				BAYOU DE CHIEN BASIN			
07024000	49	91.8	88	1,790	<2	15	<2

Table 2. Summary of nitrite plus nitrate results at National Stream Quality Accounting Network stations, October 1983 to September 1994

[75P, 75 percent of the samples with result less than or equal to value shown; 25P, 25 percent of the samples with result less than or equal to value shown; N, number of samples; Max, maximum; Min, minimum]

Station number	Nitrite plus nitrate, dissolved as nitrogen, in milligrams per liter							
	Water-years 1984-93				Water-year 1994			
	Median	75P	25P	N	Median	Max	Min	N
03254000	*0.43	*1.05	*0.12	40	0.91	1.30	0.33	4
03290500	.85	1.20	.50	87	.85	1.20	.29	5
03301630	.46	1.10	.30	40	.61	.83	.54	4
03308500	.80	1.20	.50	42	.64	1.20	.37	6
[1]03410500	*.14	*.20	*.10	41	.20	.33	.10	6
03612500	.99	1.40	.60	123	.97	1.10	.67	5

*Value is estimated by using a log-probability regression

[1]Period of record, water-years 1985-93

In general, water levels in Jefferson County remained near the levels from 1993. Ground-water levels in the alluvial aquifer underlying Louisville and western Jefferson County respond to rainfall, pumpage, river stage, and natural flow to the Ohio River. Hydrographs in figures 2 and 3 show that in the downtown area (well 381447085454001) and in the southwestern part of Louisville (well 381034085502601) water-level fluctuates because of pumpage and seasonal variations in recharge. The water level in wells near the Ohio River fluctuate because of change in river stage; however, water levels in well 381638085415801 dropped because of nearby pumping.

Water-level measurements in most observation wells in bedrock aquifers throughout the State resumed in 1989 following a lapse of no measurements for several years. Water levels in the wells in the 1994 water year were very near the levels for the period of available record. Record highs occurred at observation wells in Graves, Grayson, McCracken, and Metcalf Counties; a record low was recorded at the observation well in Lincoln County.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Louisville and Jefferson County Metropolitan Sewer District (MSD) Sampling Network is a network of 28 surface-water-quality sites in Jefferson County, including a control site in Bernheim Forest in Bullitt County. The program is a cooperative effort between the U.S. Geological Survey and MSD to (1) determine the current status of water quality in the major streams in Jefferson County, (2) identify problem stream segments and whether they are impacted by point or nonpoint sources of pollution, and (3) obtain streamflow information on these streams. The 28 sites are sampled monthly. At six of the sites, continuous-record streamflow is determined.

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 284 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application

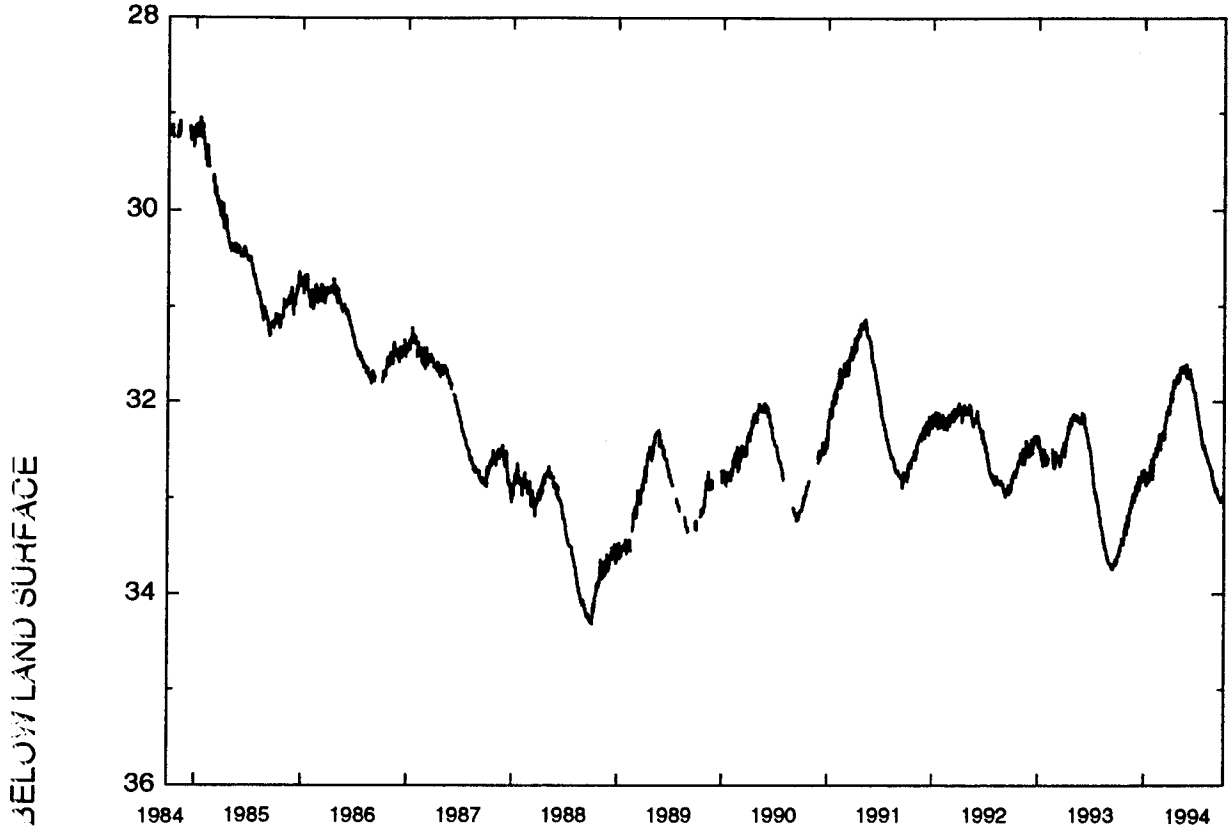


Figure 2.--Water level at observation well 381447085454001

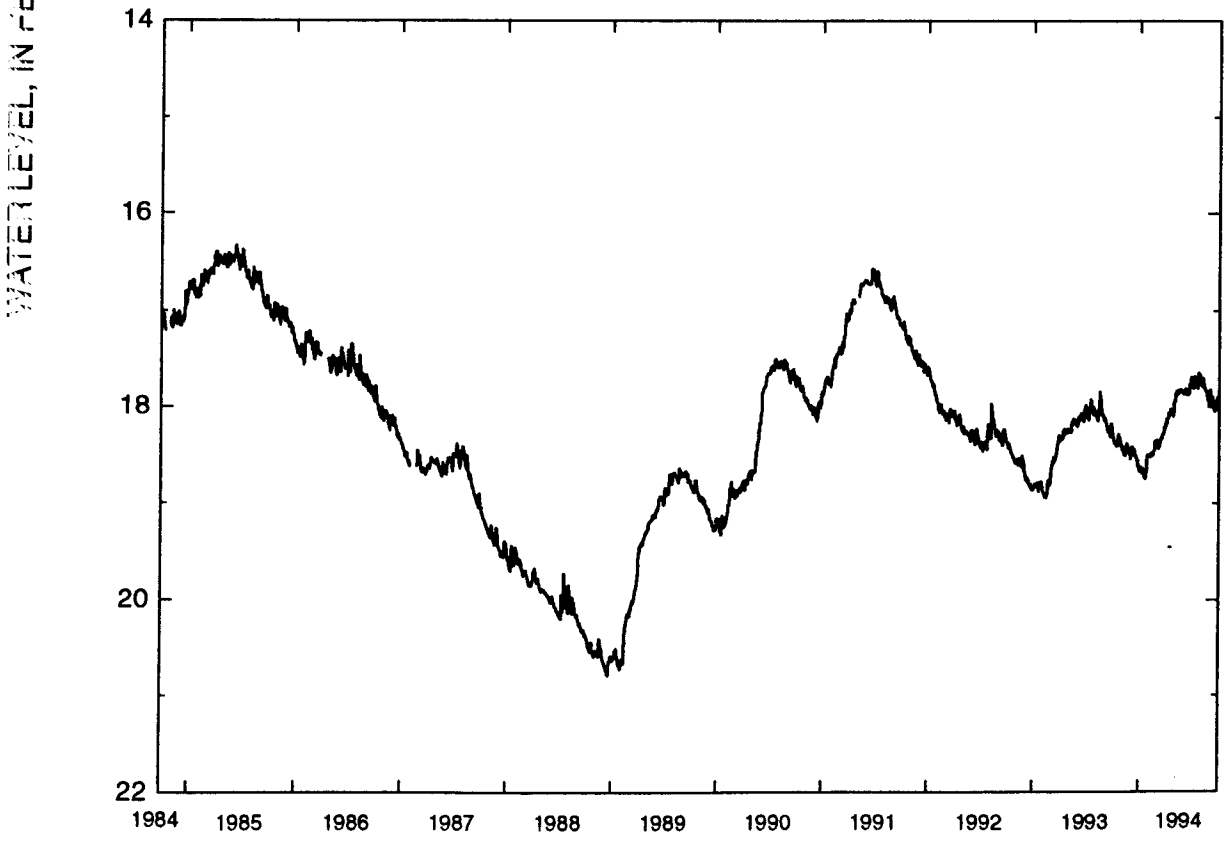


Figure 3.--Water level at observation well 381034085502601

of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1994 water year that began October 1, 1993, and ended September 30, 1994. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, and water-quality data for surface-water gaging stations. The locations of the stations and wells where the data were collected are shown in figures 5-10. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

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

Station Identification Numbers

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

Downstream Order System

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

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

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig.4).

Records of Stage and Water Discharge

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

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

Data Collection and Computation

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

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

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

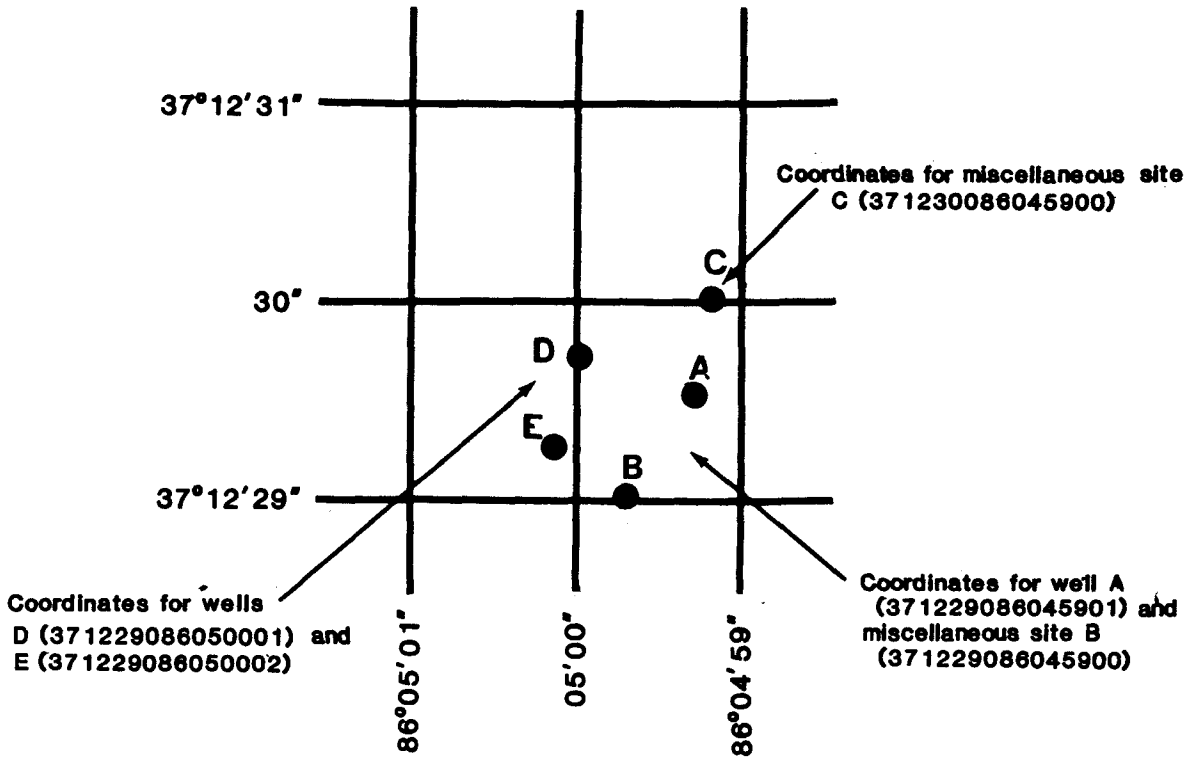


Figure 4. System for numbering wells, springs, and miscellaneous sites (latitude and longitude).

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

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

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

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

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

Station Manuscript

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

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

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

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

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

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

REMARKS.--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In

addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

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

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

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

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

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

Data Table of Daily Mean Values

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

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS __-__, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years.

inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to three significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

Records of Surface-Water Quality

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

Classification of Records

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

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. 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 6 and 7.

Arrangement of Records

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

On-site Measurements and Sample Collection

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

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

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

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

Water Temperature

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

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

Sediment

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

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

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

Laboratory Measurements

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

Remarks Codes

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

PRINT OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

Dissolved Trace-Element Concentrations

NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols will take place during the 1995 water year.

Change in National Trends Network procedures

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

Records of Ground-Water Levels

Water-level data from selected observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes. Locations of observation wells in Kentucky are shown in figures 8-10.

Data Collection and Computation

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

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

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

Records of Precipitation Quality

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

On-Site Measurements and Sample Collection

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

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

Time-composite wet-precipitation samples are collected and brought back to the laboratory and weighed. Rainfall quantity is estimated from the sample weight. A temperature-density correction can be applied if desired but normally this correction results in a very small change in the estimated quantity of rainfall. An estimation of the sampler efficiency is made by computing the ratio of rainfall amount collected in the sample bucket to that measured by the recording rain gage. This collector efficiency ratio is an important indicator of possible collector malfunction. For example, a ratio substantially less than one indicates that the wet/dry collector was not opening properly and thus, excluding rainfall.

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

Data Presentation

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

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

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

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

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

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

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principle Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requester will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 National Center
12201 Sunrise Valley Drive
Reston, VA 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on Compact Disc - Read Only Memory (CD-ROM) discs. Beginning with the 1990 water year, all water-data reports will also be available on CD-ROM. All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products and user charges can be obtained locally from each of the Water Resources Division's District Offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, Box 25286, MS 517, Denver Federal Center, Denver, CO 80225.

DEFINITION OF TERMS

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

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

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

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

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

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

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

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

Total-coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 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 mL of sample.

Fecal-coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°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.

Fecal-streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 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.

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

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

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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 salt water.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic feet per second per square mile [$(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

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

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

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

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

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

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

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

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

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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

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

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

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

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

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

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

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

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

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Water-Quality Assessment (NAWQA) Network is a network of fixed-location and synoptic sampling stations. It is currently limited in Kentucky to the Kentucky River Basin. The U.S. Geological Survey began the National Water-Quality Assessment Program in April 1986 to (1) provide a nationally consistent description of current water-quality status, (2) define recent trends in water quality, and (3) relate past and present water-quality conditions to relevant natural features, the history of land and water use, and land- and waste-management practices. The pilot

study of the Kentucky River Basin is one of four surface-water pilot studies and will be used to test, and modify as necessary, assessment concepts and approaches in preparation for future full-scale implementation of the National program.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

Classification	Size (mm)			Method of analysis
Clay.....	0.00024	-	0.004	Sedimentation
Silt.....	.004	-	.062	Sedimentation
Sand.....	.062	-	2.0	Sedimentation or sieve
Gravel.....	2.0	-	64.0	Sieve

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

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

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

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

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

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

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

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

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

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

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

Milligrams of carbon per area or volume per unit time [mg C/(m^2,time)] for periphyton and macrophytes and [mg C/(m^3,time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O/(m^2,time)] for periphyton and macrophytes and [mg O/(m^3,time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

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

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

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

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

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

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

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

7-day 10-year low flow (7 Q_{10}) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of

dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

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	Hexagenia
Species	Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

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

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

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

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1991, is called the "1991 water year."

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.

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

2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.

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

3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3. Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.

3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS- -TWRI Book 3, Chapter A12. 1986. 34 pages.

3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.

3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.

3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L.L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.

3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.

3-A20. *Simulation of soluable waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.

3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T.E. Reilly, and G.D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.

3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

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

4-A2. *Frequency curves*, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

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

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P.E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D.E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

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

6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS--TWRI Book 6, Chapter A5, 1993. 243 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S.P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

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

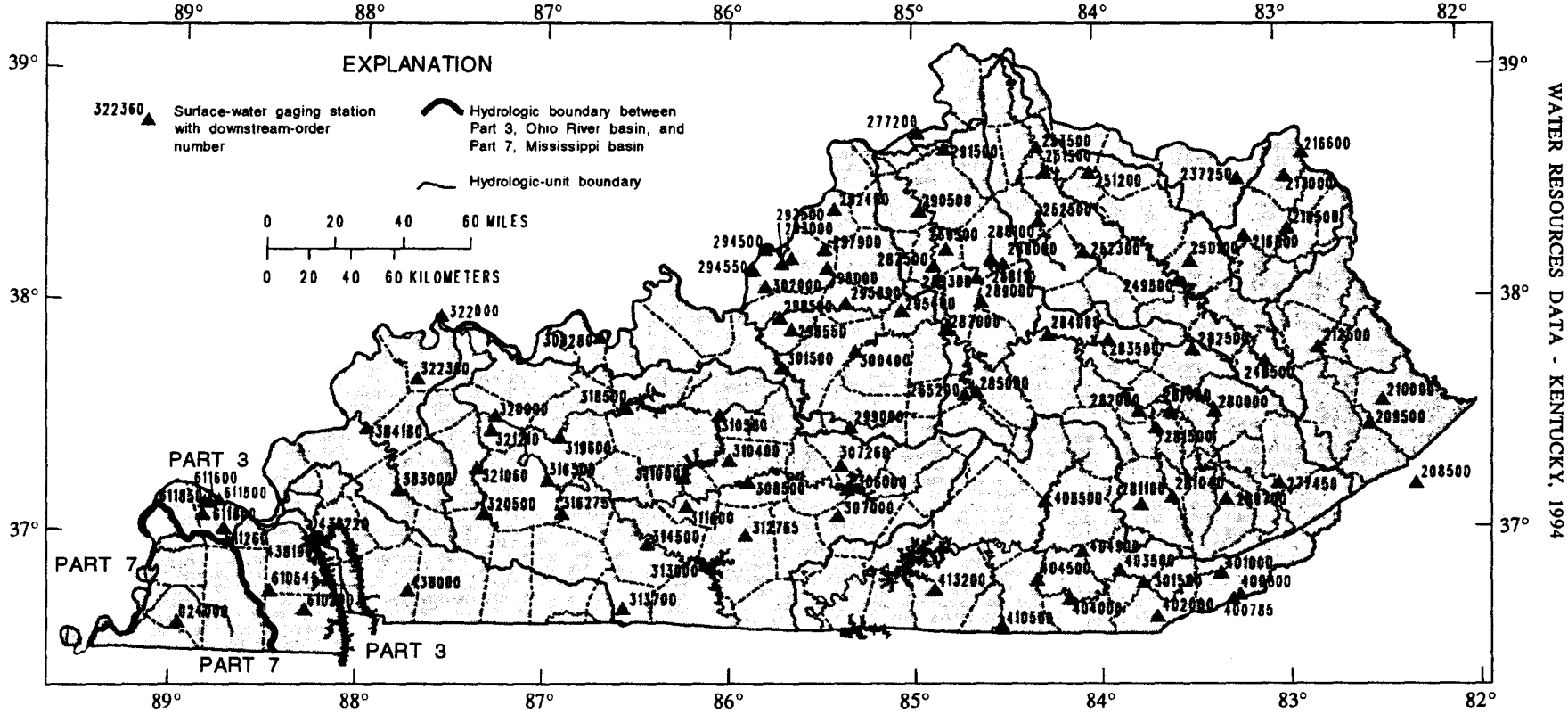


Figure 5. Location of gaging stations in Kentucky.

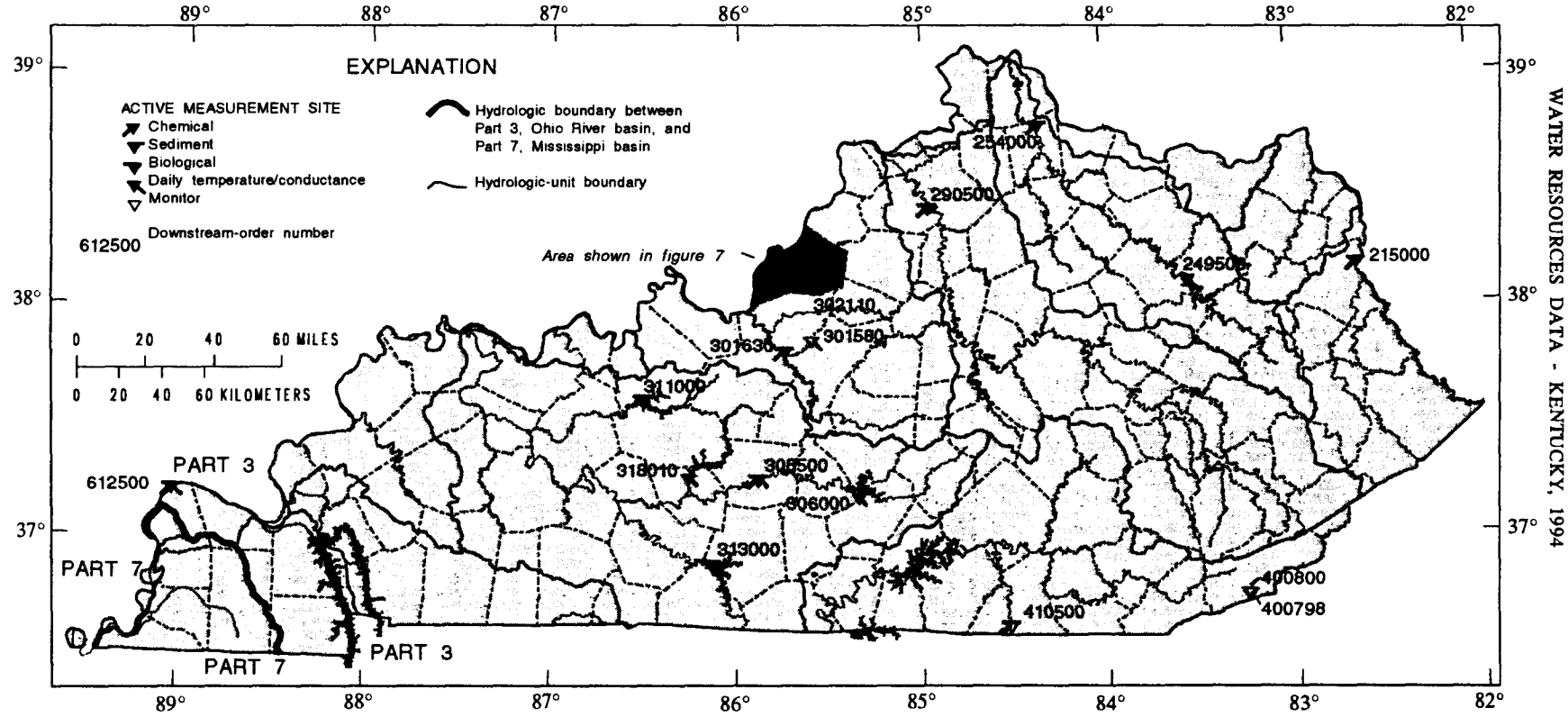


Figure 6. Location of surface water quality stations in Kentucky.

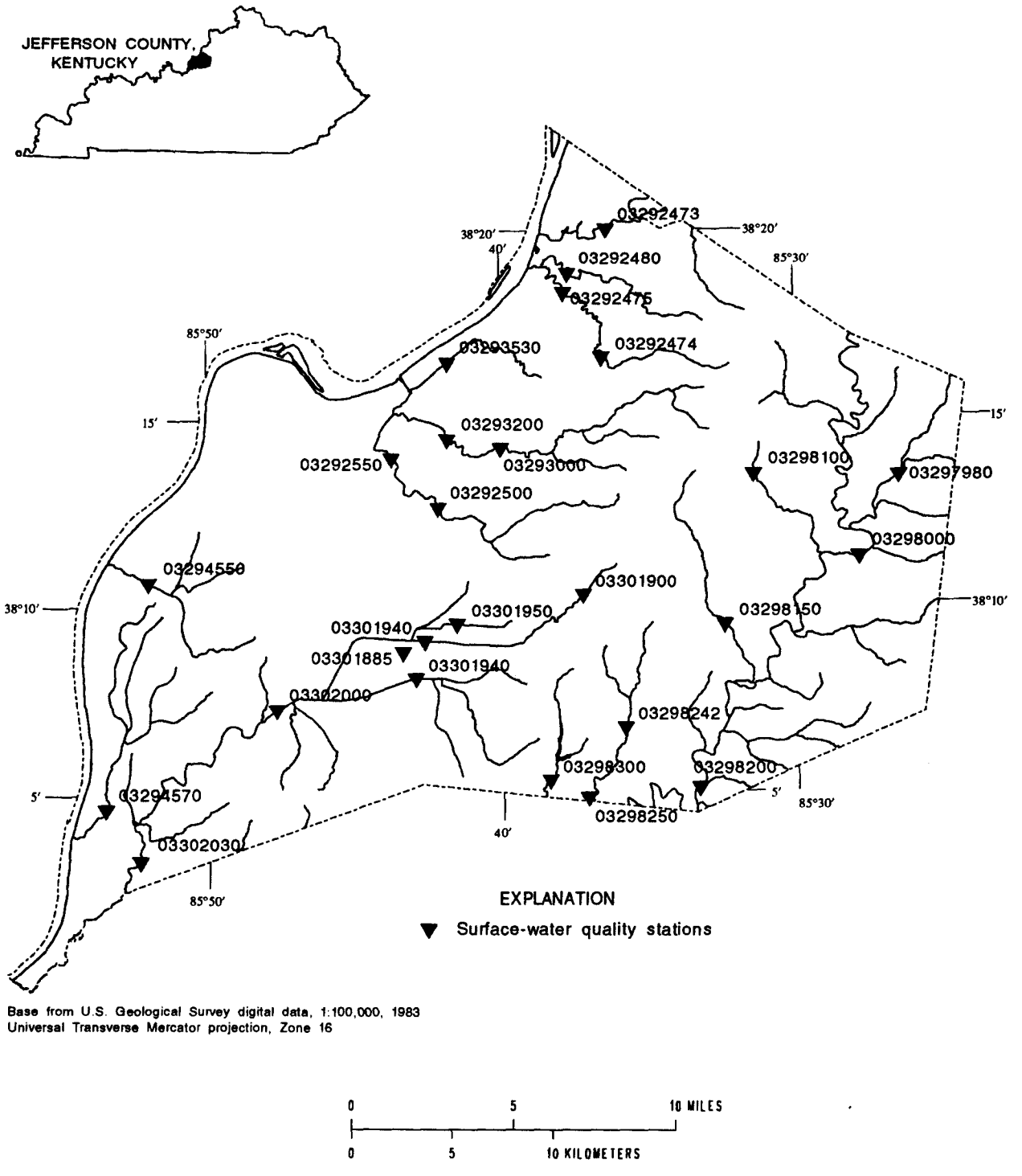


Figure 7. Location of surface-water quality stations in Jefferson County, for the MSD Sampling Network.

BIG SANDY RIVER BASIN

03208500 RUSSELL FORK AT HAYSI, VA

LOCATION.--Lat 37°12'25", long 82°17'45", Dickenson County, Hydrologic Unit 05070202, on right bank, 180 ft downstream from bridge on State Highway 63, at Haysi, and 700 ft downstream from McClure River.

DRAINAGE AREA.--286 mi^2.

PERIOD OF RECORD.--July 1926 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1003: 1926-43. WSP 1385: 1928(M), 1929, 1933(M), 1935(M), 1937-38(M).

GAGE.--Water-stage recorder. Datum of gage is 1,237.61 ft above sea level. Prior to Dec. 21, 1939, nonrecording gage at highway bridge 180 ft upstream at same datum.

REMARKS.--Records good except those for period with ice effect, Jan. 17-23, and period of doubtful gage-height record, June 17-21, which are fair. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station. Maximum discharge, 59,000 ft^3/s, from rating curve extended above 32,000 ft^3/s on basis of slope-area measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	134	131	379	493	536	1300	642	118	68	92	100
2	23	105	104	333	404	2180	1030	551	113	58	115	88
3	25	84	91	355	360	2830	838	488	105	54	296	76
4	22	73	807	2060	311	1560	699	566	96	52	144	69
5	19	70	6430	1110	308	1450	585	540	91	47	176	66
6	18	64	1400	693	300	1090	594	494	87	45	176	75
7	17	56	598	2650	259	833	698	553	90	42	118	72
8	17	47	384	4590	243	909	688	1740	101	39	100	62
9	17	40	279	1360	2730	1690	631	1120	127	40	80	55
10	24	38	253	780	4330	4130	672	736	120	37	68	52
11	27	37	256	574	12200	2120	1080	533	159	36	61	49
12	57	36	217	812	5750	1200	1030	433	147	35	57	46
13	67	34	194	978	2070	886	5130	352	118	36	52	43
14	40	34	189	796	1270	749	2070	295	102	49	57	41
15	28	55	289	568	937	620	1190	274	90	70	114	41
16	24	82	455	444	730	527	1000	311	89	281	79	40
17	22	96	443	e400	600	452	808	233	e80	149	2280	51
18	23	116	374	e360	511	427	681	202	e70	177	1040	93
19	100	103	306	e330	451	387	586	187	e64	189	483	66
20	102	86	248	e320	410	346	506	171	e60	151	347	49
21	92	71	284	e330	560	367	442	160	e58	166	318	43
22	126	58	250	e340	793	439	412	146	105	167	347	39
23	79	51	233	e360	3910	379	366	134	121	114	234	38
24	55	47	206	395	2860	354	325	125	115	74	166	38
25	43	45	196	901	1390	407	296	127	89	68	132	95
26	38	45	174	2150	952	420	279	164	76	77	114	246
27	35	1040	162	1490	698	3320	391	215	324	437	117	106
28	30	643	179	1460	576	13300	572	141	200	436	119	69
29	28	298	438	1220	---	5710	498	121	110	259	96	55
30	50	181	597	832	---	2700	698	120	82	191	90	47
31	123	---	481	622	---	1680	---	120	---	120	82	---
TOTAL	1397	3869	16648	29992	46406	53998	26095	11994	3307	3764	7750	2010
MEAN	45.1	129	537	967	1657	1742	870	387	110	121	250	67.0
MAX	126	1040	6430	4590	12200	13300	5130	1740	324	437	2280	246
MIN	17	34	91	320	243	346	279	120	58	35	52	38
CFSM	.16	.45	1.88	3.38	5.79	6.09	3.04	1.35	.39	.42	.87	.23
IN.	.18	.50	2.17	3.90	6.04	7.02	3.39	1.56	.43	.49	1.01	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

MEAN	87.4	166	336	513	646	767	581	410	178	147	122	64.8
MAX	838	961	1326	2083	1797	2331	1994	1429	715	566	561	608
(WY)	1990	1978	1927	1937	1939	1955	1977	1958	1989	1938	1966	1989
MIN	.98	2.46	11.1	19.6	57.7	168	64.0	63.4	21.6	3.03	8.81	2.07
(WY)	1954	1954	1954	1940	1941	1988	1942	1941	1966	1930	1953	1943

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1926 - 1994	
ANNUAL TOTAL	121648		207230			
ANNUAL MEAN	333		568		334	
HIGHEST ANNUAL MEAN					568	1994
LOWEST ANNUAL MEAN					100	1941
HIGHEST DAILY MEAN	6430	Dec 5	13300	Mar 28	30600	Apr 4 1977
LOWEST DAILY MEAN	14	Sep 14	17	Oct 7	.20	Jun 27 1936
ANNUAL SEVEN-DAY MINIMUM	17	Sep 9	19	Oct 4	.56	Jun 24 1936
INSTANTANEOUS PEAK FLOW			22100	Mar 28	59000	Apr 4 1977
INSTANTANEOUS PEAK STAGE			16.25	Mar 28	28.24	Apr 4 1977
INSTANTANEOUS LOW FLOW			15	Oct 9	.20	Jun 27 1936
ANNUAL RUNOFF (CFSM)	1.17		1.99		1.17	
ANNUAL RUNOFF (INCHES)	15.82		26.95		15.86	
10 PERCENT EXCEEDS	723		1210		734	
50 PERCENT EXCEEDS	131		189		130	
90 PERCENT EXCEEDS	24		41		14	

e Estimated.

BIG SANDY RIVER BASIN

03209500 LEVISA FORK AT PIKEVILLE, KY

LOCATION.--Lat 37°27'51", long 82°31'35", Pike County, Hydrologic Unit 05070203, on right bank 20 ft downstream from bridge on State Highway 1426, 0.75 mi downstream from Lanks Branch, 1.0 mi south of Pikeville, 1.5 mi upstream from Harolds Branch, and at mile 90.5.

DRAINAGE AREA.--1,232 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Dec. 29, Jan. 9-19, and Aug. 18-22. Records good except for periods of estimated record, which are poor. Flow regulated since October, 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680) and since March 1965 by John W. Flannagan Lake (station 03208990). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	709	1070	1560	2100	2680	9060	2510	468	439	410	467
2	625	709	730	1660	5120	6320	7560	2110	446	347	539	614
3	519	759	589	1700	3800	10700	5890	1850	418	315	452	427
4	310	766	932	6250	2170	8280	4790	2060	346	311	548	377
5	180	754	12500	6360	1350	6750	4800	1960	354	301	1750	360
6	171	737	10200	4060	1340	5450	4560	1890	371	273	1360	320
7	167	649	7430	4530	1360	4490	4420	2170	451	251	895	327
8	166	620	4060	3660	1090	4840	3750	8240	493	253	680	317
9	168	566	1900	3400	3530	9160	2540	6100	437	260	500	303
10	405	539	1300	3300	11500	12400	2710	4250	512	272	336	292
11	400	547	1040	3100	19700	10100	4380	2670	526	261	298	284
12	248	546	958	2900	14500	7930	4390	1910	573	244	283	274
13	353	575	959	2800	8280	4690	15100	1420	636	282	271	233
14	450	577	933	2500	8960	3790	11300	1260	534	298	264	228
15	449	632	976	2300	10800	3020	8210	1210	434	331	331	226
16	466	758	1420	1900	11300	2640	5790	1720	389	564	330	224
17	508	971	1950	1800	9920	2330	4370	1370	364	656	4480	271
18	454	1330	1620	1750	5020	2030	3580	1100	337	579	3800	462
19	365	1170	1410	1600	2730	1800	3820	986	323	488	1900	402
20	749	1050	1190	1500	2570	1670	3080	912	317	495	900	308
21	807	988	1260	1550	3050	1710	2280	845	316	432	1300	284
22	717	945	1270	1600	3960	2130	2110	767	356	691	1800	266
23	747	778	1040	1700	10200	2220	1570	738	365	775	1440	259
24	588	677	836	2000	10400	2060	1230	639	440	618	934	304
25	538	551	801	2900	9130	2790	1000	573	526	427	677	455
26	442	537	778	5600	6000	3040	970	621	502	315	452	695
27	458	1540	825	7540	5180	8850	1460	975	1640	757	420	787
28	389	2960	863	5450	3330	21600	3870	859	1540	2080	619	733
29	321	2660	1100	2660	---	9910	2460	720	994	1400	630	626
30	410	2990	1780	1840	---	7940	2720	638	553	941	564	441
31	573	---	1620	1400	---	10900	---	497	---	661	484	---
TOTAL	13770	29590	65340	92870	178390	184220	133770	55570	15961	16317	29647	11566
MEAN	444	986	2108	2996	6371	5943	4459	1793	532	526	956	386
MAX	807	2990	12500	7540	19700	21600	15100	8240	1640	2080	4480	787
MIN	166	537	589	1400	1090	1670	970	497	316	244	264	224

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	848	1177	1689	2364	2866	2954	2370	1945	987	570	484	490
MAX	3939	3991	5385	6861	6371	8081	7646	6067	3492	1855	1022	1606
(WY)	1990	1978	1973	1974	1994	1975	1977	1984	1979	1979	1971	1989
MIN	158	353	300	278	814	529	388	349	210	200	203	168
(WY)	1970	1970	1981	1981	1992	1988	1986	1976	1988	1988	1969	1969

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	498942		827011			
ANNUAL MEAN	1367		2266		1555	
HIGHEST ANNUAL MEAN					2459	1979
LOWEST ANNUAL MEAN					522	1988
HIGHEST DAILY MEAN	14200	Mar 24	21600	Mar 28	69300	Apr 5 1977
LOWEST DAILY MEAN	166	Oct 8	166	Oct 8	66	Dec 3 1970
ANNUAL SEVEN-DAY MINIMUM	183	Sep 8	224	Oct 4	103	Oct 10 1968
INSTANTANEOUS PEAK FLOW			25600	Feb 11	85500	Jan 30 1957
INSTANTANEOUS PEAK STAGE			35.09	Feb 11	52.72	Jan 30 1957
INSTANTANEOUS LOW FLOW			166	Oct 8	66	Dec 3 1970
10 PERCENT EXCEEDS	2840		6160		3600	
50 PERCENT EXCEEDS	643		959		769	
90 PERCENT EXCEEDS	213		313		231	

BIG SANDY RIVER BASIN

03212500 LEVISA FORK AT PAINTSVILLE, KY

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

DRAINAGE AREA.--2,144 mi^2.

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

REVISED RECORDS.--WSP 953: Drainage area.

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

REMARKS.--Estimated daily discharges: Nov. 6-24, Jan. 4, 5, May 12-17, July 14-26, and Sept. 25-30. Records poor. Flow regulated since October 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680), since March 1965 by John W. Flannagan Lake (station 03208990), and since May 1950 by Dewey Lake (station 03211000). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

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 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	874	657	3400	2110	3130	4460	18100	4620	808	855	781	940
2	594	753	1700	2250	6620	7050	15100	4250	775	799	955	853
3	512	931	1350	2870	7050	16700	12400	3750	757	734	827	868
4	657	1060	2190	5000	4060	16700	10200	4010	650	733	746	638
5	621	1320	14000	7000	2860	12000	8110	4170	700	696	2230	556
6	404	1300	19600	8700	2280	8950	6910	3720	720	675	3460	586
7	362	1250	14800	14100	2090	7610	6500	5660	750	644	1950	526
8	327	1100	8390	21600	2130	11700	6400	11600	774	620	1230	506
9	324	1050	4470	21800	7490	17900	5250	13200	833	634	971	486
10	386	975	2990	15400	15200	22700	4560	11600	810	663	837	502
11	584	925	2290	10600	21200	21200	6140	10900	806	706	709	426
12	670	900	1720	9600	25600	17900	7780	8000	805	658	643	408
13	608	925	1570	9020	23200	13000	11200	4000	811	626	600	396
14	614	975	1590	7540	15400	9800	19800	3000	828	700	662	386
15	642	1200	1730	5430	14900	7120	17500	2100	798	780	776	373
16	654	1400	1880	3990	14300	5040	14100	2100	791	875	662	369
17	808	1700	2410	3390	17100	3850	11700	2000	720	950	983	393
18	899	2500	2660	3040	13200	3760	8200	1830	675	840	7670	628
19	805	3400	2320	2830	7170	3380	6720	1610	638	780	4600	696
20	2350	3100	2040	2240	4610	3110	6100	1470	619	720	2160	566
21	2480	2800	2090	2110	5720	3100	4520	1340	611	740	1470	458
22	1920	2300	2220	2150	8000	4210	4290	1250	647	860	2390	420
23	1270	1800	2180	2280	16800	4210	3810	1180	685	1100	2680	394
24	1170	1200	1890	3450	21700	4300	3350	1140	835	1000	1700	379
25	1010	1080	1690	7290	19000	5250	2810	989	825	900	1200	500
26	906	944	1560	11600	12800	6070	2560	938	868	800	932	800
27	738	1870	1340	13300	8570	13400	2610	1000	1160	698	726	1000
28	715	4610	1410	12400	5860	25700	3880	1200	2090	1280	714	920
29	641	4450	1630	7350	---	28200	5180	1080	1620	1680	963	700
30	578	3840	1840	4250	---	19000	4310	1010	1160	1200	830	500
31	673	---	2270	3210	---	17500	---	933	---	884	850	---
TOTAL	25796	52315	113220	227900	308040	344870	240090	115650	25569	25830	47907	17173
MEAN	832	1744	3652	7352	11000	11120	8003	3731	852	833	1545	572
MAX	2480	4610	19600	21800	25600	28200	19800	13200	2090	1680	7670	1000
MIN	324	657	1340	2110	2090	3100	2560	933	611	620	600	369

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	1191	1911	2971	3992	5021	5212	4232	3231	1644	882	794	743
MAX	6560	4908	8870	12030	11000	13160	10040	9664	5338	2384	1837	2054
(WY)	1990	1978	1973	1974	1994	1975	1987	1984	1989	1979	1977	1989
MIN	181	447	570	435	1467	963	594	519	278	257	291	239
(WY)	1970	1970	1981	1981	1988	1988	1986	1976	1988	1988	1969	1969

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	904859		1544360			
ANNUAL MEAN	2479		4231		2640	
HIGHEST ANNUAL MEAN					4234	1975
LOWEST ANNUAL MEAN					830	1988
HIGHEST DAILY MEAN	22200	Mar 25	28200	Mar 29	42000	Apr 6 1977
LOWEST DAILY MEAN	301	Sep 13	324	Oct 9	98	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	335	Sep 8	393	Sep 11	122	Aug 27 1969
INSTANTANEOUS PEAK FLOW			28800	Mar 29	69700	Jan 31 1957
INSTANTANEOUS PEAK STAGE			32.04	Mar 29	45.92	Jan 31 1957
INSTANTANEOUS LOW FLOW			324	Oct 9	98	Oct 1 1968
10 PERCENT EXCEEDS	4820		13200		6350	
50 PERCENT EXCEEDS	1320		1700		1260	
90 PERCENT EXCEEDS	420		624		368	

LITTLE SANDY RIVER BASIN

03216500 LITTLE SANDY RIVER AT GRAYSON, KY

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

DRAINAGE AREA.--400 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Jan. 16-18, and 21-23. Records good except for periods of estimated record, which are fair. Flow regulated since March 1968 by Grayson Lake (station 03216300). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 1937 reached a stage of 25.0 ft, present datum, from floodmarks at site 1.6 mi downstream, discharge, 16,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	212	461	157	671	819	2690	247	56	36	36	41
2	42	184	228	168	1980	1280	2520	186	52	36	34	40
3	42	203	214	304	1980	3070	2390	135	50	36	33	36
4	40	181	535	2560	1930	2310	2290	187	49	35	40	34
5	40	191	3570	2220	1440	2200	2020	234	48	35	94	33
6	40	167	3550	1670	808	1490	1620	232	46	36	89	34
7	40	195	2240	3700	617	839	1300	1790	45	37	57	33
8	39	223	1130	3650	516	2680	437	4080	51	38	45	32
9	40	181	548	3370	3720	5060	329	2870	48	37	40	31
10	40	177	383	2650	2840	8620	315	2400	45	36	37	31
11	40	175	564	2170	3090	4450	339	1620	44	34	35	31
12	49	173	472	2170	2640	2740	339	599	42	34	34	30
13	46	246	375	2470	2510	2550	795	306	41	36	34	31
14	44	467	293	1730	3510	3630	573	254	39	54	34	31
15	43	1070	383	657	3390	3440	1010	326	38	60	32	30
16	49	1510	553	470	3080	3230	3140	1190	37	49	32	30
17	206	1140	450	400	2660	3060	1890	1060	37	46	32	34
18	279	1500	328	500	1900	2830	1680	588	36	41	33	35
19	461	1180	332	575	1230	2140	1950	232	35	38	35	34
20	1070	864	348	271	934	1120	1390	211	36	36	34	33
21	1250	336	336	250	808	688	464	187	57	35	45	32
22	514	226	296	240	1080	692	269	131	38	41	63	31
23	168	226	280	230	3760	974	306	117	35	42	46	31
24	198	277	226	574	2930	673	292	107	35	40	39	31
25	173	233	221	1680	2540	359	273	99	37	39	36	33
26	126	249	214	2910	2190	455	254	94	35	36	34	37
27	114	497	213	2290	1970	3190	175	87	36	41	33	37
28	98	1230	261	4170	1590	5270	198	70	37	40	32	35
29	145	1020	269	1720	---	3070	244	66	40	43	32	34
30	180	831	161	678	---	974	262	62	38	47	31	33
31	257	---	159	445	---	974	---	59	---	39	33	---
TOTAL	5917	15364	19593	47049	58314	74877	31754	19826	1263	1233	1264	998
MEAN	191	512	632	1518	2083	2415	1058	640	42.1	39.8	40.8	33.3
MAX	1250	1510	3570	4170	3760	8620	3140	4080	57	60	94	41
MIN	39	167	159	157	516	359	175	59	35	34	31	30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	186	362	688	719	960	969	700	581	262	158	114	133
MAX	733	993	2630	1954	2886	2415	2291	1890	928	841	382	585
(WY)	1990	1987	1979	1974	1989	1994	1972	1983	1974	1971	1979	1979
MIN	30.1	28.4	53.6	45.2	249	133	113	62.1	39.1	37.5	34.7	33.3
(WY)	1981	1982	1982	1981	1969	1969	1986	1976	1988	1969	1988	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	192673		277452			
ANNUAL MEAN	528		760		484	
HIGHEST ANNUAL MEAN					838	1979
LOWEST ANNUAL MEAN					116	1969
HIGHEST DAILY MEAN	5530	Feb 22	8620	Mar 10	12900	Dec 9 1978
LOWEST DAILY MEAN	39	Aug 30	30	Sep 12	5.8	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	40	Oct 4	31	Sep 10	18	Nov 1 1968
INSTANTANEOUS PEAK FLOW			9240	Mar 10	24500	Sep 22 1950
INSTANTANEOUS PEAK STAGE			23.82	Mar 10	27.53	Sep 22 1950
INSTANTANEOUS LOW FLOW					1.5	Oct 12 1953
10 PERCENT EXCEEDS	1300		2590		1370	
50 PERCENT EXCEEDS	226		221		175	
90 PERCENT EXCEEDS	45		34		41	

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY

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

DRAINAGE AREA.--62,000 mi^2, approximately.

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

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

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft^3/s and those computed using dam operations records, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32500	35800	170000	41200	390000	215000	375000	82900	25400	38000	35700	52300
2	26200	51100	128000	41200	333000	163000	345000	96800	30700	37800	32100	63900
3	29700	52800	110000	47700	236000	216000	316000	83800	28800	45700	27400	55000
4	22300	54800	105000	98100	173000	269000	275000	74300	26200	39600	35700	45900
5	20000	49600	145000	131000	156000	251000	262000	83500	31900	28500	34900	29900
6	19800	67500	239000	140000	140000	214000	228000	83000	27200	26500	53100	24400
7	18200	76800	315000	191000	132000	190000	214000	82600	23100	31700	58000	25300
8	18800	77300	295000	262000	115000	204000	225000	99300	25600	36200	59800	25200
9	16300	75500	225000	290000	206000	257000	216000	317000	21900	30000	31100	21900
10	18900	57100	184000	276000	301000	335000	196000	324000	22700	25300	27000	18100
11	19000	51700	154000	170000	353000	389000	261000	272000	25600	31400	33000	18300
12	15400	42200	141000	140000	375000	400000	320000	193000	21200	27800	17000	20400
13	14400	33000	132000	177000	370000	380000	350000	132000	22500	24700	16000	20000
14	20100	67000	103000	193000	338000	335000	372000	105000	33400	23500	17500	17400
15	19500	103000	86700	190000	291000	278000	394000	85600	31500	24600	49700	17300
16	12900	131000	83700	147000	243000	223000	408000	73400	59900	37200	84000	19800
17	30000	124000	71400	97300	203000	211000	406000	69300	53700	28900	75000	20600
18	22100	151000	70500	70200	181000	198000	380000	69500	45800	23800	85600	19300
19	17800	177000	74000	56300	148000	185000	366000	64000	40100	24800	127000	25200
20	30800	179000	72500	68500	137000	169000	362000	50200	51400	21900	171000	27800
21	42300	154000	70300	52200	149000	155000	321000	45000	34600	27000	154000	19400
22	46000	141000	73400	46700	197000	172000	269000	38600	48400	25300	123000	15900
23	44500	133000	81200	48300	272000	252000	162000	45900	31600	25600	106000	16100
24	44400	110000	63400	59500	354000	287000	142000	29200	32400	25500	98400	15600
25	43000	94900	51400	96800	406000	290000	124000	34700	28000	27200	81000	15300
26	28800	77500	54700	187000	417000	280000	106000	39600	26900	35900	65600	18500
27	26100	72200	47200	257000	364000	297000	96800	51600	33300	31300	46000	29900
28	25700	93400	37100	325000	276000	325000	90600	46200	37400	32200	40500	27800
29	25700	147000	45100	386000	---	377000	88800	52400	42700	45300	38600	26200
30	23700	197000	35500	419000	---	408000	80700	42400	46900	67300	55900	24900
31	24900	---	43600	420000	---	403000	---	34100	---	60600	54800	---
TOTAL	799800	2877200	3507700	5125000	7256000	8328000	7751900	2900900	1010800	1011100	1934400	777600
MEAN	25800	95910	113200	165300	259100	268600	258400	93580	33690	32620	62400	25920
MAX	46000	197000	315000	420000	417000	408000	408000	324000	59900	67300	171000	63900
MIN	12900	33000	35500	41200	115000	155000	80700	29200	21200	21900	16000	15300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	41940	73170	117600	116700	147100	164900	148700	98700	64970	45580	37120	34080
MAX	111300	208600	252700	242700	259100	268600	258400	217400	174000	100700	113600	86310
(WY)	1980	1986	1973	1974	1994	1994	1994	1989	1981	1972	1980	1979
MIN	11310	21910	38500	27170	66240	53550	52660	36610	13440	13060	11270	12000
(WY)	1992	1992	1990	1977	1978	1969	1986	1976	1988	1988	1988	1985

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	31978740		43280400			
ANNUAL MEAN	87610		118600		90570	
HIGHEST ANNUAL MEAN					118600	1994
LOWEST ANNUAL MEAN					49760	1988
HIGHEST DAILY MEAN	420000	Mar 26	420000	Jan 31	540000	Jan 12 1974
LOWEST DAILY MEAN	4810	Jul 24	12900	Oct 16	4810	Jul 24 1993
ANNUAL SEVEN-DAY MINIMUM	11600	Aug 25	17200	Oct 10	9050	Jul 11 1988
INSTANTANEOUS PEAK STAGE			54.17	Jan 31	59.19	Feb 28 1979
10 PERCENT EXCEEDS	209000		318000		205000	
50 PERCENT EXCEEDS	48800		67500		63500	
90 PERCENT EXCEEDS	13700		22200		18000	

TYGARTS CREEK BASIN

03216800 TYGARTS CREEK AT OLIVE HILL, KY

LOCATION.--Lat 38°17'57", long 83°10'25", Carter County, Hydrologic Unit 05090103, on left bank 100 ft downstream from county road 986 at Olive Hill, 0.3 mi downstream from Henderson Branch, 0.6 mi upstream from Bens Run, and at mile 78.0.

DRAINAGE AREA.--59.6 mi^2.

PERIOD OF RECORD.--January 1957 to September 1994 (discontinued).

REVISED RECORDS.--WRD KY-79: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 739.18 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 16-23, Mar. 10, and Sept. 28-30. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	16	67	31	106	77	114	61	3.5	2.1	5.6	62
2	1.3	13	55	49	97	390	89	46	3.3	1.6	3.3	8.7
3	1.3	11	49	216	73	392	80	41	2.6	1.2	4.9	3.1
4	1.2	11	637	634	61	255	73	53	2.3	2.2	6.4	2.0
5	1.1	11	673	249	60	165	63	44	2.1	1.2	127	1.7
6	1.0	11	253	191	51	118	198	35	2.0	.79	38	1.6
7	.84	11	153	1690	42	124	258	1330	24	.78	14	1.8
8	.79	9.7	106	475	603	710	148	798	11	1.3	7.6	2.1
9	.95	8.1	82	204	1950	1500	93	236	5.1	.83	4.8	1.4
10	1.4	7.9	163	145	495	2000	133	131	3.6	.57	3.4	.99
11	1.4	6.7	146	114	472	500	134	89	2.3	.39	2.5	.71
12	1.6	6.1	102	388	429	358	162	67	1.9	.33	2.0	.71
13	1.6	211	90	319	550	278	511	52	1.6	.90	2.0	.35
14	1.7	339	75	207	390	232	188	42	1.2	199	1.6	.30
15	1.6	511	98	130	340	189	817	667	1.1	48	1.5	.37
16	2.2	149	95	100	257	132	629	287	1.1	37	1.2	.40
17	35	443	79	90	184	99	238	108	.76	19	.77	2.0
18	35	283	72	72	147	131	149	72	.69	10	.64	32
19	16	142	71	60	125	97	103	53	.73	5.7	.55	7.4
20	355	89	64	54	111	80	78	43	.63	3.2	.46	1.8
21	149	62	77	48	173	102	59	34	.68	2.9	16	.93
22	70	46	71	44	183	122	54	26	1.3	5.3	12	.62
23	43	37	64	48	1290	90	43	21	1.2	256	2.9	.46
24	29	32	51	345	384	90	37	17	1.2	40	1.7	2.7
25	20	27	51	661	232	77	32	14	1.5	11	1.4	5.2
26	16	24	51	771	153	64	29	13	3.6	6.4	.84	17
27	13	632	40	489	108	1220	47	12	22	22	.61	4.5
28	10	320	37	1430	86	1240	41	9.2	9.3	18	.46	2.8
29	8.4	144	38	403	---	353	51	7.2	4.8	30	.37	2.2
30	8.5	89	41	214	---	189	64	5.3	2.9	36	.26	2.0
31	13	---	32	143	---	149	---	4.3	---	11	6.2	---
TOTAL	842.18	3702.5	3683	10014	9152	11523	4715	4418.0	119.99	774.69	270.96	169.84
MEAN	27.2	123	119	323	327	372	157	143	4.00	25.0	8.74	5.66
MAX	355	632	673	1690	1950	2000	817	1330	24	256	127	62
MIN	.79	6.1	32	31	42	64	29	4.3	.63	.33	.26	.30
CFSM	.46	2.07	1.99	5.42	5.48	6.24	2.64	2.39	.07	.42	.15	.09
IN.	.53	2.31	2.30	6.25	5.71	7.19	2.94	2.76	.07	.48	.17	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

MEAN	28.2	56.8	124	121	158	176	146	101	45.5	44.5	28.0	24.7
MAX	293	228	481	338	512	440	365	334	288	290	130	161
(WY)	1990	1987	1979	1978	1989	1963	1972	1983	1974	1971	1958	1989
MIN	.14	.51	2.22	7.35	31.4	30.4	18.8	12.1	.16	.34	.074	.078
(WY)	1988	1982	1964	1981	1968	1969	1986	1962	1988	1957	1991	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1957 - 1994	
ANNUAL TOTAL	37111.20		49385.16			
ANNUAL MEAN	102		135		88.0	
HIGHEST ANNUAL MEAN					145	1979
LOWEST ANNUAL MEAN					42.7	1977
HIGHEST DAILY MEAN	1910	Feb 21	2000	Mar 10	4620	Dec 8 1978
LOWEST DAILY MEAN	.41	Jul 11	.26	Aug 30	.00	Jun 28 1957
ANNUAL SEVEN-DAY MINIMUM	1.0	Oct 3	.55	Sep 10	.00	Jul 8 1957
INSTANTANEOUS PEAK FLOW			3390	May 7	9470	Apr 22 1972
INSTANTANEOUS PEAK STAGE			11.64	May 7	19.04	Mar 12 1975
INSTANTANEOUS LOW FLOW			.26	Aug 30	.00	Jun 28 1957
ANNUAL RUNOFF (CFSM)	1.71		2.27		1.48	
ANNUAL RUNOFF (INCHES)	23.16		30.82		20.06	
10 PERCENT EXCEEDS	258		386		190	
50 PERCENT EXCEEDS	40		41		27	
90 PERCENT EXCEEDS	2.1		1.1		.67	

TYGARTS CREEK BASIN

03217000 TYGARTS CREEK NEAR GREENUP, KY

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

DRAINAGE AREA.--242 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Dec. 14 to Feb. 4, Sept. 14-30. Records good except for periods of estimated record, which are fair. Occasional regulation at low flow caused by withdrawal of water for cooling purposes by gas transmission plant above station. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	23	199	62	520	285	536	289	36	24	54	12
2	1.5	24	165	150	380	402	451	285	32	20	37	14
3	1.3	27	143	400	300	1530	385	220	28	28	30	19
4	2.4	29	203	900	235	1050	367	214	27	42	25	26
5	2.2	28	2460	540	200	655	342	227	24	24	425	19
6	2.1	26	1500	300	187	445	378	204	23	18	219	15
7	2.1	25	557	1900	180	354	1170	1550	22	27	124	13
8	2.1	25	355	2500	276	592	741	4200	20	65	75	11
9	2.1	24	262	500	3470	1960	501	1490	57	25	51	9.8
10	2.0	23	240	210	3430	5750	483	583	47	17	35	8.4
11	1.6	21	365	300	1080	3440	594	398	32	13	27	7.0
12	1.5	20	303	800	1280	1510	652	312	26	11	23	6.3
13	1.6	43	227	1000	1310	1080	1290	236	23	12	19	5.5
14	1.8	578	190	650	1250	936	1020	190	20	107	88	4.7
15	2.0	1380	170	450	1200	749	1190	222	19	196	183	4.2
16	2.5	686	155	350	993	502	3340	1000	17	124	64	8.5
17	3.3	388	140	280	700	380	1310	538	17	85	37	20
18	3.5	1180	130	250	517	331	722	328	16	59	25	50
19	23	489	120	210	433	370	510	240	14	40	20	90
20	185	275	115	190	374	312	405	191	13	29	17	68
21	541	196	110	170	369	366	320	161	12	23	163	28
22	213	146	100	160	431	945	280	133	12	20	307	11
23	119	115	95	150	2970	506	244	112	11	24	108	6.0
24	80	97	90	245	2210	383	208	95	11	144	72	11
25	58	83	85	1000	959	329	187	82	9.7	76	47	21
26	45	74	80	1800	609	275	169	74	12	45	32	37
27	36	191	78	1600	419	1830	159	65	12	37	24	62
28	30	1260	72	2400	333	3970	179	57	15	57	19	32
29	26	514	70	2500	---	2390	193	51	28	46	16	14
30	23	294	68	1350	---	967	248	45	35	166	13	10
31	23	---	64	840	---	642	---	41	---	63	13	---
TOTAL	1439.6	8284	8911	24157	26615	35236	18574	13833	670.7	1667	2392	643.4
MEAN	46.4	276	287	779	951	1137	619	446	22.4	53.8	77.2	21.4
MAX	541	1380	2460	2500	3470	5750	3340	4200	57	196	425	90
MIN	1.3	20	64	62	180	275	159	41	9.7	11	13	4.2
CFSM	.19	1.14	1.19	3.22	3.93	4.70	2.56	1.84	.09	.22	.32	.09
IN.	.22	1.27	1.37	3.71	4.09	5.42	2.86	2.13	.10	.26	.37	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	59.4	160	395	471	619	685	526	366	169	118	77.7	70.9
MAX	509	869	1954	1665	1953	1556	1513	1258	994	645	445	1031
(WY)	1976	1987	1979	1950	1989	1967	1972	1983	1961	1960	1979	1950
MIN	.35	.70	3.23	31.1	20.7	80.8	90.9	27.6	5.13	5.39	2.09	1.31
(WY)	1954	1954	1954	1977	1954	1941	1941	1941	1988	1964	1944	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	114323.9		142422.7			
ANNUAL MEAN	313		390		308	
HIGHEST ANNUAL MEAN					589	1979
LOWEST ANNUAL MEAN					67.5	1954
HIGHEST DAILY MEAN	6130	Feb 22	5750	Mar 10	20900	Dec 9 1978
LOWEST DAILY MEAN	1.3	Oct 3	1.3	Oct 3	.00	Aug 24 1952
ANNUAL SEVEN-DAY MINIMUM	1.8	Oct 9	1.8	Oct 9	.00	Sep 17 1955
INSTANTANEOUS PEAK FLOW			6660	Mar 10	25400	Dec 9 1979
INSTANTANEOUS PEAK STAGE			17.60	Mar 10	22.75	Dec 9 1979
INSTANTANEOUS LOW FLOW			.86	Oct 1	.00	Aug 24 1952
ANNUAL RUNOFF (CFSM)	1.29		1.61		1.27	
ANNUAL RUNOFF (INCHES)	17.57		21.89		17.31	
10 PERCENT EXCEEDS	781		1120		695	
50 PERCENT EXCEEDS	111		130		92	
90 PERCENT EXCEEDS	8.8		12		5.0	

KINNICONICK CREEK BASIN

03237250 KINNICONICK CREEK AT TANNERY, KY

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

DRAINAGE AREA.--201 mi^2.

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

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

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 30, 1991; Jan. 9, 10, 16-20, 31 to Feb. 10, Dec. 29-31, 1992; Jan. 1, 2, Feb. 1, 6-9, 19 to Mar. 2, July 10 to Aug. 17, Oct. 24 to Nov. 23, 1993; Jan. 18-25, Apr. 2, 3, May 20 to June 2, July 18 to Aug. 14, and Aug. 16-18, 1994. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	19	150	249	132	286	614	151	82	5.6	261	41
2	40	17	267	211	118	257	493	132	59	4.2	198	25
3	31	16	3380	385	102	229	412	145	45	4.6	193	16
4	24	15	588	954	90	204	376	144	42	4.3	550	12
5	20	17	261	711	80	185	426	123	68	4.9	238	9.2
6	19	18	170	419	72	267	402	123	227	7.0	145	6.8
7	27	19	128	295	66	760	361	117	166	32	93	5.1
8	25	20	101	222	60	917	318	144	120	47	67	4.1
9	18	19	85	205	55	732	276	839	106	30	62	3.2
10	15	16	104	195	50	712	246	909	84	19	153	2.3
11	18	15	172	162	45	910	227	682	62	13	96	1.6
12	22	16	136	144	44	694	206	399	113	24	79	1.1
13	25	15	145	135	172	516	176	273	249	24	70	.97
14	21	15	717	151	930	411	155	347	208	15	53	.93
15	19	14	464	263	675	349	149	262	195	8.7	42	.82
16	18	14	273	255	1250	283	143	184	174	6.0	62	.72
17	19	14	193	220	628	249	191	136	170	4.6	90	.58
18	21	16	150	198	460	405	605	120	963	3.5	60	.66
19	23	15	121	180	366	4650	481	145	1280	3.7	44	1.4
20	24	18	97	169	290	1610	375	112	257	2.9	31	1.1
21	22	21	79	128	238	787	910	87	137	3.7	21	3.2
22	26	27	95	118	210	551	1080	67	89	6.7	22	11
23	29	54	459	185	202	542	560	52	64	125	27	74
24	26	45	1340	1020	752	448	404	42	49	208	30	76
25	29	38	492	499	791	370	315	35	40	92	26	47
26	32	29	311	374	570	346	249	31	30	122	17	28
27	39	22	229	289	474	356	209	27	21	1400	11	16
28	50	17	186	251	376	345	201	23	15	935	24	11
29	30	14	271	211	342	312	179	22	11	131	92	5.9
30	23	30	359	183	---	307	164	67	7.7	119	94	4.3
31	20	---	302	153	---	605	---	123	---	249	59	---
TOTAL	815	625	11825	9134	9640	19595	10903	6063	5133.7	3655.4	3010	410.98
MEAN	26.3	20.8	381	295	332	632	363	196	171	118	97.1	13.7
MAX	60	54	3380	1020	1250	4650	1080	909	1280	1400	550	76
MIN	15	14	79	118	44	185	143	22	7.7	2.9	11	.58
CFSM	.13	.10	1.90	1.47	1.65	3.14	1.81	.97	.85	.59	.48	.07
IN.	.15	.12	2.19	1.69	1.78	3.63	2.02	1.12	.95	.68	.56	.08

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

MEAN	26.3	20.8	381	295	332	632	363	196	171	118	97.1	13.7
MAX	26.3	20.8	381	295	332	632	363	196	171	118	97.1	13.7
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
MIN	26.3	20.8	381	295	332	632	363	196	171	118	97.1	13.7
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS FOR 1992 WATER YEAR

ANNUAL TOTAL	80810.08	
ANNUAL MEAN	221	
HIGHEST DAILY MEAN	4650	Mar 19
LOWEST DAILY MEAN	.58	Sep 17
ANNUAL SEVEN-DAY MINIMUM	.83	Sep 12
INSTANTANEOUS PEAK FLOW	7580	Mar 19
INSTANTANEOUS PEAK STAGE	14.74	Jul 27
ANNUAL RUNOFF (CFSM)	1.10	
ANNUAL RUNOFF (INCHES)	14.96	
10 PERCENT EXCEEDS	554	
50 PERCENT EXCEEDS	115	
90 PERCENT EXCEEDS	11	

KINNICONICK CREEK BASIN

03237250 KINNICONICK CREEK AT TANNERY, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	3.0	72	66	135	160	1190	277	1.3	107	2.2	.61
2	9.1	5.3	64	80	133	370	912	214	1.4	326	2.0	.32
3	6.6	8.6	61	126	104	844	703	162	1.3	170	1.8	.26
4	4.7	34	60	155	94	1740	568	149	19	111	1.7	.73
5	2.9	71	55	1860	87	1530	472	163	1270	67	1.6	.57
6	2.7	63	53	957	77	812	397	132	441	41	1.4	5.3
7	2.8	58	48	583	70	598	326	110	182	22	1.3	9.3
8	2.9	58	48	424	65	612	266	93	100	12	1.3	7.6
9	2.8	58	46	330	61	645	252	82	68	6.7	1.2	5.6
10	2.7	54	51	262	61	740	289	72	49	5.4	1.1	3.7
11	2.8	56	365	223	57	790	270	64	40	3.9	1.1	2.3
12	2.6	164	519	309	85	557	248	65	26	2.9	4.0	1.7
13	2.0	730	381	874	266	466	228	56	104	2.1	35	1.5
14	1.4	308	284	793	321	440	186	50	122	10	21	1.4
15	.99	129	206	540	270	374	201	43	74	70	15	1.6
16	.80	80	153	411	375	427	430	33	56	52	10	1.7
17	.73	57	279	327	1200	1400	465	27	40	33	8.0	1.5
18	.63	45	700	252	934	1020	384	28	21	24	26	1.3
19	.56	36	428	179	450	648	333	45	12	17	19	1.2
20	.50	25	403	146	210	510	296	52	6.9	13	17	1.3
21	.52	20	664	180	500	576	257	37	4.5	10	11	1.4
22	.54	37	451	895	3000	680	246	20	4.2	8.4	6.5	1.4
23	.57	391	330	696	2000	849	236	12	3.3	7.2	3.7	1.4
24	.68	354	266	575	1300	1030	244	7.9	2.7	6.0	3.0	1.3
25	.80	498	186	790	840	757	520	5.4	6.1	5.0	2.7	1.4
26	.96	456	153	628	560	579	1470	3.6	4.8	4.5	1.3	1.4
27	1.1	281	123	508	380	472	989	2.3	5.0	3.8	1.0	1.2
28	1.3	165	105	368	270	425	661	1.5	3.3	3.3	.81	1.1
29	1.5	116	88	285	---	404	438	1.0	20	3.0	.63	1.0
30	1.7	88	80	205	---	388	358	.84	93	2.7	.50	.99
31	2.1	---	72	167	---	376	---	.82	---	2.4	.36	---
TOTAL	71.98	4448.9	6794	14194	13905	21219	13835	2009.36	2781.8	1152.3	203.20	62.08
MEAN	2.32	148	219	458	497	684	461	64.8	92.7	37.2	6.55	2.07
MAX	10	730	700	1860	3000	1740	1470	277	1270	326	35	9.3
MIN	.50	3.0	46	66	57	160	186	.82	1.3	2.1	.36	.26
CFSM	.01	.74	1.09	2.28	2.47	3.41	2.29	.32	.46	.18	.03	.01
IN.	.01	.82	1.26	2.63	2.57	3.93	2.56	.37	.51	.21	.04	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

MEAN	14.3	84.6	300	376	413	658	412	130	132	77.5	51.8	7.88
MAX	26.3	148	381	458	497	684	461	196	171	118	97.1	13.7
(WY)	1992	1993	1992	1993	1993	1993	1993	1992	1992	1992	1992	1992
MIN	2.32	20.8	219	295	332	632	363	64.8	92.7	37.2	6.55	2.07
(WY)	1993	1992	1993	1992	1992	1992	1992	1993	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR		FOR 1993 WATER YEAR		WATER YEARS 1992 - 1993	
ANNUAL TOTAL	78859.96		80676.62			
ANNUAL MEAN	215		221		221	
HIGHEST ANNUAL MEAN					221	1993
LOWEST ANNUAL MEAN					221	1992
HIGHEST DAILY MEAN	4650	Mar 19	3000	Feb 22	4650	Mar 19 1992
LOWEST DAILY MEAN	.50	Oct 20	.26	Sep 3	.26	Sep 3 1993
ANNUAL SEVEN-DAY MINIMUM	.57	Oct 18	.48	Aug 30	.48	Aug 30 1993
INSTANTANEOUS PEAK FLOW			3000	Feb 22	7580	Mar 19 1992
INSTANTANEOUS PEAK STAGE			16.00	Feb 22	16.00	Feb 22 1993
ANNUAL RUNOFF (CFSM)	1.07		1.10		1.10	
ANNUAL RUNOFF (INCHES)	14.59		14.93		14.93	
10 PERCENT EXCEEDS	550		646		596	
50 PERCENT EXCEEDS	118		61		82	
90 PERCENT EXCEEDS	2.9		1.3		1.8	

03237250 KINNICONICK CREEK AT TANNERY, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	7.4	25	104	385	287	780	375	16	12	8.0	4.0
2	1.0	6.6	16	103	299	325	500	618	13	15	13	5.6
3	1.1	6.0	12	117	273	1110	540	617	12	20	24	4.3
4	1.1	6.4	62	507	220	1020	608	568	11	28	43	3.1
5	1.1	7.3	2020	591	194	679	695	500	12	40	86	2.8
6	1.1	9.0	1060	474	177	487	502	378	14	49	150	1.7
7	1.1	11	462	4920	155	392	414	350	14	41	66	1.3
8	1.0	12	277	1890	385	523	467	330	14	34	38	1.1
9	1.0	11	197	890	3840	1510	772	288	15	31	23	1.1
10	1.0	9.6	168	555	1430	5380	805	875	15	28	12	1.1
11	.99	8.6	205	378	794	1500	749	4690	16	25	8.5	1.1
12	.95	8.0	166	561	780	1290	557	1310	24	22	6.4	1.1
13	.94	100	136	1120	1050	924	448	678	28	19	5.6	1.1
14	.90	800	120	900	847	954	3250	447	22	17	5.0	1.1
15	.86	2000	121	771	876	767	3050	325	20	15	147	1.1
16	.96	1600	128	458	702	533	1230	257	21	13	60	1.1
17	1.5	1400	115	311	546	393	759	192	19	21	23	1.1
18	1.6	1900	106	268	451	371	532	151	18	35	15	1.1
19	1.8	900	112	235	402	400	435	183	16	47	12	1.1
20	176	470	118	209	370	338	349	140	13	23	11	1.1
21	416	290	136	188	425	359	288	110	12	13	66	1.2
22	101	130	144	173	463	1090	253	90	12	35	154	1.3
23	51	78	133	167	4140	594	233	75	12	120	45	1.3
24	35	48	120	155	1460	452	211	64	12	370	15	1.3
25	27	13	112	150	864	387	185	52	12	80	8.5	2.8
26	22	11	115	3700	589	327	168	45	17	48	5.8	2.0
27	17	46	112	1650	409	275	154	37	18	29	4.2	7.6
28	13	179	106	6930	333	1540	144	32	15	22	4.0	9.6
29	11	77	106	1950	---	3260	141	28	12	19	3.5	8.4
30	10	46	107	818	---	4070	279	23	14	15	2.6	7.6
31	8.5	---	105	523	---	1470	---	20	---	11	1.7	---
TOTAL	908.48	10190.9	6922	31766	22859	33007	19499	13848	469	1297	1066.8	80.2
MEAN	29.3	340	223	1025	816	1065	650	447	15.6	41.8	34.4	2.67
MAX	416	2000	2020	6930	4140	5380	3250	4690	28	370	154	9.6
MIN	.86	6.0	12	103	155	275	141	20	11	11	1.7	1.1
CFSM	.15	1.69	1.11	5.10	4.06	5.30	3.23	2.22	.08	.21	.17	.01
IN.	.17	1.89	1.28	5.88	4.23	6.11	3.61	2.56	.09	.24	.20	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	19.3	170	275	592	546	794	492	236	93.2	65.6	46.0	6.15
MAX	29.3	340	381	1025	816	1065	650	447	171	118	97.1	13.7
(WY)	1994	1994	1992	1994	1994	1994	1994	1994	1992	1992	1992	1992
MIN	2.32	20.8	219	295	332	632	363	64.8	15.6	37.2	6.55	2.07
(WY)	1993	1992	1993	1992	1992	1992	1992	1993	1994	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	87383.12		141913.38			
ANNUAL MEAN	239		389		277	
HIGHEST ANNUAL MEAN					389	1994
LOWEST ANNUAL MEAN					221	1992
HIGHEST DAILY MEAN	3000	Feb 22	6930	Jan 28	6930	Jan 28 1994
LOWEST DAILY MEAN	.26	Sep 3	.86	Oct 15	.26	Sep 3 1993
ANNUAL SEVEN-DAY MINIMUM	.48	Aug 30	.94	Oct 10	.48	Aug 30 1993
INSTANTANEOUS PEAK FLOW			9350	Jan 28	9350	Jan 28 1994
INSTANTANEOUS PEAK STAGE			16.08	Jan 28	16.08	Jan 28 1994
ANNUAL RUNOFF (CFSM)	1.19		1.93		1.38	
ANNUAL RUNOFF (INCHES)	16.17		26.26		18.71	
10 PERCENT EXCEEDS	718		910		705	
50 PERCENT EXCEEDS	67		105		87	
90 PERCENT EXCEEDS	1.2		1.7		1.7	

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, 0.6 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 mi^2.

WATER-DISCHARGE RECORDS

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 (discontinued). All figures of discharge above 2,000 ft^3/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. Datum of gage is 646.55 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 20, 1965.

REMARKS.--Estimated daily discharges: Jan. 8 to Feb. 14, and July 12 to Aug. 8. Water-discharge records good except for periods of estimated record, which are fair. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	1080	2360	520	2400	4040	4370	4100	144	60	145	139
2	238	1070	1880	524	4000	4100	4330	4060	143	60	145	136
3	238	1070	539	714	4150	4360	4310	4030	121	59	145	134
4	240	764	585	1390	4140	4230	4300	4020	103	59	145	134
5	240	518	562	2320	4130	4130	4280	4000	106	57	145	135
6	205	518	1480	2700	4120	4070	4280	3980	104	56	145	138
7	237	516	2740	2090	4100	4050	4410	3580	102	55	170	138
8	236	516	3040	150	3800	4110	4330	972	98	54	225	136
9	238	516	3120	600	1550	449	4250	1360	98	54	241	135
10	242	516	3220	1800	1800	500	4240	3530	98	53	238	134
11	242	516	3230	3600	2800	1990	4250	4040	97	52	240	134
12	199	514	3200	3400	2600	3790	4100	4020	96	52	236	135
13	245	518	3180	3150	2620	3620	4090	3990	95	51	234	141
14	244	526	2980	3400	3680	3880	4270	3970	84	51	235	140
15	241	527	3080	3600	3650	4090	4130	4020	72	50	239	137
16	242	1020	2880	3550	3620	4300	1930	3610	71	50	235	189
17	246	1440	3130	3540	3860	4260	2110	3320	69	50	179	241
18	664	1440	3920	3520	4040	4250	4250	3730	68	50	133	238
19	1500	1440	2290	3510	4030	4240	4230	3920	67	54	133	237
20	1940	1450	1480	3500	3760	4220	4200	3890	65	58	133	236
21	2190	1450	1240	3500	3130	4210	4170	3880	65	55	143	237
22	3690	1930	1040	3480	3150	4220	4160	3860	64	54	140	234
23	2840	2280	732	3470	1910	4190	4140	3830	65	52	140	234
24	2770	2270	520	3450	2590	4170	4120	3660	65	51	141	236
25	2760	2280	518	2600	4190	4160	4110	3260	63	100	139	236
26	2740	2250	520	1600	4140	4140	4090	2050	63	200	137	236
27	2730	2420	520	1050	4090	1990	4080	507	62	240	136	235
28	2450	2270	520	1070	4070	775	4070	234	62	240	136	234
29	1530	2260	520	1150	---	2330	4080	237	62	240	138	234
30	1080	2160	520	1650	---	4380	4160	244	61	220	138	234
31	1080	---	520	1650	---	4370	---	192	---	170	137	---
TOTAL	33975	38046	56066	72248	96120	111614	121840	94096	2533	2707	5266	5537
MEAN	1096	1268	1809	2331	3433	3600	4061	3035	84.4	87.3	170	185
MAX	3690	2420	3920	3600	4190	4380	4410	4100	144	240	241	241
MIN	199	514	518	150	1550	449	1930	192	61	50	133	134

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

MEAN	549	807	1429	1652	1875	2089	1617	1106	808	331	301	433
MAX	2336	1988	3096	3692	3717	3670	4061	3350	2521	1620	836	2360
(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	131
(WY)	1979	1979	1982	1981	1984	1983	1986	1976	1988	1988	1988	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1974 - 1994	
ANNUAL TOTAL	424862		640048			
ANNUAL MEAN	1164		1754		1093	
HIGHEST ANNUAL MEAN					1754	1994
LOWEST ANNUAL MEAN					496	1988
HIGHEST DAILY MEAN	3920	Dec 18	4410	Apr 7	7820	Jan 15 1974
LOWEST DAILY MEAN	74	Jul 24	50	Jul 15	6.1	Jul 21 1983
ANNUAL SEVEN-DAY MINIMUM	81	Jul 21	51	Jul 12	14	Oct 4 1978
INSTANTANEOUS PEAK FLOW			4860	Apr 16	24000	Feb 28 1962
INSTANTANEOUS PEAK STAGE			18.73	Apr 16	31.10	Feb 9 1918
INSTANTANEOUS LOW FLOW			50	Jul 15	.70	Oct 14 1930
10 PERCENT EXCEEDS	3180		4140		3310	
50 PERCENT EXCEEDS	548		1070		348	
90 PERCENT EXCEEDS	135		68		65	

03249500 LICKING RIVER AT FARMERS, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Temperature recorder 3.4 mi downstream from base gaging station and at auxiliary gage station.

PERIOD OF RECORD.--Water years 1949 to September 1994 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1948 to September 1994 (discontinued).
SUSPENDED SEDIMENT DISCHARGE: November 1960 to September 1967.

INSTRUMENTATION.--Temperature recorder since October 1953.

REMARKS.--Specific conductance measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section. Miscellaneous temperature measurements may differ slightly from recorded values due to differences in sampling locations.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE (water years 1949-60, 1963-79, 1981-94): Maximum, 33.5°C, July 19, 1951; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.1°C, July 8; minimum, 1.5°C, Feb. 6.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	15.6	14.8	15.2	10.5	10.2	10.5	4.4	4.4	4.4
2	---	---	---	15.1	14.4	14.7	10.5	10.1	10.4	4.4	4.4	4.4
3	---	---	---	14.8	14.7	14.7	10.4	10.4	10.4	4.8	4.4	4.8
4	---	---	---	14.9	14.3	14.6	10.4	10.3	10.4	4.8	4.4	4.4
5	20.3	19.7	20.0	15.3	14.6	15.1	10.3	10.3	10.3	4.4	4.1	4.3
6	20.6	19.2	20.0	---	---	---	---	---	---	4.1	4.1	4.1
7	20.6	20.2	20.5	13.0	12.6	13.0	9.9	9.9	9.9	4.4	4.1	4.2
8	21.0	20.5	20.9	12.6	11.8	12.2	9.9	9.5	9.6	4.4	4.1	4.3
9	21.3	20.9	21.0	12.2	11.7	12.0	9.5	9.5	9.5	4.1	4.1	4.1
10	21.2	19.3	20.0	12.1	11.7	12.0	9.5	8.9	9.1	3.4	3.0	3.4
11	19.3	17.7	18.1	12.1	11.6	11.8	9.4	8.9	9.3	3.4	3.0	3.1
12	18.0	17.7	17.8	12.3	11.9	12.0	9.1	8.7	8.9	3.0	3.0	3.0
13	18.3	17.9	17.9	13.0	12.3	12.7	8.7	8.5	8.6	---	---	---
14	19.0	18.3	18.6	13.6	12.9	13.2	8.7	8.4	8.5	---	---	---
15	19.0	18.2	18.4	14.0	13.3	13.8	9.1	8.3	8.7	---	---	---
16	19.2	18.5	19.0	13.9	13.5	13.7	8.3	8.3	8.3	---	---	---
17	19.9	19.2	19.6	13.5	13.4	13.4	---	---	---	---	---	---
18	19.9	18.8	19.4	13.4	13.3	13.4	---	---	---	---	---	---
19	18.8	17.9	18.4	13.3	13.0	13.0	---	---	---	---	---	---
20	19.0	18.7	18.8	13.0	12.1	12.6	---	---	---	2.0	2.0	2.0
21	18.9	18.9	18.9	12.1	11.8	12.0	7.6	6.8	7.2	2.0	1.6	2.0
22	19.2	18.8	18.9	12.4	11.7	12.1	6.8	6.8	6.8	2.0	1.6	1.6
23	19.1	18.7	18.8	12.4	12.0	12.2	6.4	6.4	6.4	2.0	1.6	1.6
24	19.1	18.7	18.8	12.3	11.9	12.1	6.4	6.1	6.2	2.0	1.6	3.7
25	19.0	18.6	18.7	12.3	11.5	12.6	6.1	5.7	6.1	2.0	1.6	1.6
26	19.0	18.6	18.9	12.2	11.8	15.6	5.7	4.9	5.3	2.0	1.6	2.0
27	18.9	18.5	18.7	12.2	11.7	11.9	5.3	4.9	5.2	2.3	2.0	2.0
28	18.5	18.1	18.4	11.7	11.4	11.4	5.3	4.5	5.1	2.7	2.3	2.4
29	18.1	17.6	18.1	11.4	11.0	11.1	4.9	4.5	4.6	2.7	2.0	2.3
30	17.6	16.5	17.1	11.0	10.5	10.6	4.5	4.5	4.5	2.3	2.0	2.0
31	16.5	15.6	15.8	---	---	---	4.5	4.4	4.5	2.3	2.0	2.1
MONTH	21.3	15.6	18.9	15.6	10.5	12.9	10.5	4.4	7.9	4.8	1.6	3.1

LICKING RIVER BASIN

03249500 LICKING RIVER AT FARMERS, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.3	2.0	2.1	4.0	3.7	4.0	8.1	7.7	7.7	11.3	10.9	11.0
2	2.0	1.6	1.9	4.1	4.0	4.1	8.4	7.7	8.0	11.7	11.3	11.4
3	2.0	1.6	1.6	4.1	3.8	4.0	8.4	8.4	8.4	11.7	11.7	11.7
4	1.6	1.6	1.6	4.5	4.1	4.2	8.4	8.1	8.4	11.7	11.7	11.7
5	2.0	1.6	1.6	4.5	4.1	4.3	8.4	8.1	8.3	12.1	11.7	11.8
6	2.0	1.5	1.7	4.9	4.5	4.6	8.8	8.4	8.6	12.1	11.7	11.8
7	2.0	1.6	1.8	4.9	4.6	4.8	8.4	8.1	8.4	12.5	12.1	11.5
8	2.0	1.6	2.0	4.9	4.9	4.9	8.4	8.4	8.4	12.1	11.4	11.5
9	2.3	2.0	2.1	4.9	4.9	4.9	9.1	9.1	9.1	11.7	11.4	11.5
10	2.3	1.6	2.0	5.4	4.9	4.9	9.8	9.1	9.6	12.1	11.4	11.8
11	2.0	1.6	1.7	5.4	5.0	5.0	9.5	8.8	9.1	12.5	12.1	12.5
12	2.0	1.6	2.0	5.4	5.0	5.1	10.2	9.1	9.7	12.8	12.5	12.5
13	2.0	2.0	2.0	5.4	5.0	5.2	10.2	9.5	10.0	13.2	12.5	12.8
14	2.0	1.6	1.9	5.8	5.4	5.6	10.2	9.8	10.0	13.5	12.8	13.0
15	2.0	1.6	2.0	5.9	5.4	5.9	10.2	9.8	10.1	13.6	12.9	13.3
16	2.0	2.0	2.0	6.2	5.9	6.0	9.8	9.5	9.6	13.3	13.3	13.3
17	2.1	2.0	2.1	6.2	5.9	6.0	9.8	9.5	9.8	13.6	12.9	13.2
18	2.4	2.1	2.2	6.2	5.9	6.2	10.2	9.8	10.0	14.0	13.3	13.6
19	2.8	2.4	2.5	6.3	6.2	6.3	10.5	10.2	10.3	14.4	13.3	13.9
20	2.8	2.4	2.7	6.7	6.3	6.4	10.9	10.5	10.6	14.0	14.0	14.0
21	3.2	2.8	3.0	7.4	6.7	5.9	10.9	10.5	10.7	14.4	14.0	14.2
22	3.6	3.2	3.2	7.4	6.7	6.9	10.9	10.5	10.7	14.8	14.4	14.6
23	3.9	3.2	3.6	7.7	7.0	7.2	11.3	10.5	11.0	14.8	14.4	14.7
24	3.9	3.6	3.7	7.7	7.4	7.6	10.9	10.5	10.7	14.8	14.8	14.8
25	3.9	3.6	3.6	7.4	6.7	7.2	11.3	10.9	11.0	14.8	14.4	14.5
26	4.0	3.6	3.7	7.7	6.7	7.0	11.3	11.3	11.3	14.8	14.4	14.5
27	3.7	3.7	3.7	7.7	7.7	7.7	11.3	10.9	11.1	14.4	14.0	14.2
28	3.7	3.7	3.7	7.7	7.7	7.7	11.3	10.9	11.2	14.1	13.7	13.8
29	---	---	---	8.1	7.4	7.6	11.3	10.9	11.3	14.5	14.1	14.1
30	---	---	---	7.7	7.4	7.6	11.3	10.9	11.1	15.2	14.5	14.8
31	---	---	---	7.7	7.7	7.7	---	---	---	16.0	15.2	15.6
MONTH	4.0	1.5	2.4	8.1	3.7	5.9	11.3	7.7	9.8	16.0	10.9	13.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.1	16.0	16.6	23.4	22.6	22.8	---	---	---	---	---	---
2	17.5	17.1	17.2	23.5	22.7	22.8	---	---	---	---	---	---
3	17.1	16.4	16.6	23.5	23.5	23.5	---	---	---	---	---	---
4	16.8	16.8	16.6	23.9	23.5	23.6	---	---	---	---	---	---
5	17.2	16.8	17.0	24.8	23.9	24.1	---	---	---	---	---	---
6	18.5	17.2	17.9	25.7	24.8	25.2	---	---	---	---	---	---
7	18.9	18.5	18.8	26.2	25.7	25.8	---	---	---	---	---	---
8	18.9	18.9	18.9	27.1	26.2	26.4	---	---	---	---	---	---
9	19.0	18.6	18.9	26.2	26.2	26.2	---	---	---	---	---	---
10	19.4	19.0	19.0	26.3	25.9	26.0	---	---	---	---	---	---
11	19.5	19.0	19.4	---	---	---	---	---	---	---	---	---
12	19.9	19.5	19.6	---	---	---	---	---	---	---	---	---
13	20.3	19.9	20.1	---	---	---	---	---	---	---	---	---
14	21.2	20.3	20.9	---	---	---	---	---	---	---	---	---
15	21.6	21.6	21.6	---	---	---	---	---	---	---	---	---
16	22.1	21.6	21.6	---	---	---	---	---	---	---	---	---
17	22.5	22.1	22.2	---	---	---	---	---	---	---	---	---
18	22.9	22.5	22.6	---	---	---	---	---	---	---	---	---
19	23.4	22.9	23.0	---	---	---	---	---	---	---	---	---
20	23.4	23.4	23.4	---	---	---	---	---	---	---	---	---
21	24.2	23.8	23.8	---	---	---	---	---	---	---	---	---
22	24.7	23.1	23.4	---	---	---	---	---	---	---	---	---
23	23.5	23.1	23.5	---	---	---	---	---	---	---	---	---
24	24.0	23.5	23.9	---	---	---	---	---	---	---	---	---
25	24.0	22.8	23.0	---	---	---	---	---	---	---	---	---
26	22.8	22.4	22.5	---	---	---	---	---	---	---	---	---
27	22.4	21.7	21.8	---	---	---	---	---	---	---	---	---
28	22.1	21.7	21.8	---	---	---	---	---	---	---	---	---
29	23.0	22.1	22.5	---	---	---	---	---	---	---	---	---
30	23.4	23.0	23.1	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	24.7	16.0	20.7	27.1	22.6	24.6	---	---	---	---	---	---
YEAR	27.1	1.5	11.2									

LICKING RIVER BASIN

03250100 NORTH FORK TRIPLETT CREEK NEAR MOREHEAD, KY

LOCATION.--Lat 38°11'57", long 83°28'50", Rowan County, Hydrologic Unit 05100101, on right downstream wingwall of bridge on State Highway 32, 0.5 mi upstream from Pence Branch, 1.8 mi downstream from Big Brushy Creek, 2.8 mi northwest of Morehead, and at mile 6.1.

DRAINAGE AREA.--84.7 mi^2.

PERIOD OF RECORD.--August 1967 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 678.03 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 2, Jan. 15-22, Feb. 2-6. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	16	50	26	123	101	161	172	4.4	1.2	12	10
2	.38	16	42	39	96	280	133	136	3.4	1.0	8.0	3.9
3	.45	15	39	165	77	491	122	107	3.0	.95	5.7	2.6
4	.49	15	569	704	69	348	123	108	2.6	.80	4.1	1.5
5	.42	16	1130	272	67	208	111	95	2.3	.64	42	1.2
6	.35	17	303	214	63	153	217	80	2.0	.64	27	1.5
7	.34	16	143	3320	55	142	469	1830	1.9	.64	15	1.2
8	.34	15	93	613	579	610	238	1200	9.3	.56	9.3	.95
9	.70	13	69	258	2510	1990	167	243	4.8	.72	6.4	.72
10	2.5	11	134	161	532	2030	164	127	3.0	.56	4.5	.44
11	1.5	9.5	157	127	485	592	175	81	2.2	.50	3.4	.34
12	1.3	8.5	103	437	453	517	225	59	1.6	.34	2.7	.23
13	1.2	155	77	443	579	396	234	43	1.4	1.0	2.2	.12
14	1.2	337	71	289	372	426	170	35	1.1	78	1.8	.10
15	1.2	637	99	156	388	278	964	265	1.1	39	1.4	.10
16	3.0	142	93	128	316	182	997	412	1.0	24	1.2	.07
17	13	378	75	116	226	138	320	119	.95	13	1.0	.93
18	6.1	297	67	100	184	151	186	72	.87	7.2	.87	.72
19	8.8	121	69	87	164	141	138	51	.80	6.9	1.5	.23
20	290	75	67	78	149	123	106	40	.72	4.1	1.9	.23
21	135	51	82	72	254	141	86	32	.72	2.9	126	.23
22	67	39	71	66	284	249	79	25	.64	54	49	.26
23	40	33	65	70	1730	176	67	21	.56	335	21	.23
24	28	28	56	355	552	155	59	17	.72	44	12	.83
25	21	24	44	1190	322	136	53	15	.72	20	7.7	3.0
26	17	22	38	1270	196	115	47	13	2.4	14	5.4	13
27	14	149	32	791	137	1590	66	12	5.4	17	4.1	6.6
28	11	213	28	2660	114	1690	101	9.6	3.7	12	3.4	5.9
29	8.5	105	25	568	---	468	135	8.1	2.4	40	3.5	4.1
30	7.9	67	23	260	---	251	220	6.7	1.6	54	2.6	3.7
31	10	---	21	166	---	195	---	5.3	---	21	9.0	---
TOTAL	693.06	3041.0	3935	15201	11076	14463	6333	5439.7	67.30	795.65	395.67	64.93
MEAN	22.4	101	127	490	396	467	211	175	2.24	25.7	12.8	2.16
MAX	290	637	1130	3320	2510	2030	997	1830	9.3	335	126	13
MIN	.34	8.5	21	26	55	101	47	5.3	.56	.34	.87	.07
CFSM	.26	1.20	1.50	5.79	4.67	5.51	2.49	2.07	.03	.30	.15	.03
IN.	.30	1.34	1.73	6.68	4.86	6.35	2.78	2.39	.03	.35	.17	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

MEAN	36.2	94.0	208	193	253	249	214	159	64.0	51.4	43.1	35.6
MAX	243	311	667	490	1149	475	553	477	233	287	260	231
(WY)	1976	1986	1979	1994	1989	1991	1972	1983	1974	1979	1974	1979
MIN	.080	.72	22.7	11.2	34.6	57.6	37.0	24.1	.49	3.57	.14	.014
(WY)	1988	1982	1982	1977	1978	1969	1986	1991	1988	1984	1984	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1968 - 1994	
ANNUAL TOTAL	44459.87		61505.31			
ANNUAL MEAN	122		169		133	
HIGHEST ANNUAL MEAN					255	1989
LOWEST ANNUAL MEAN					62.6	1977
HIGHEST DAILY MEAN	3400	Feb 21	3320	Jan 7	8630	Feb 14 1989
LOWEST DAILY MEAN	.33	Sep 1	.07	Sep 16	.00	Jul 21 1968
ANNUAL SEVEN-DAY MINIMUM	.40	Oct 2	.20	Sep 10	.00	Sep 30 1983
INSTANTANEOUS PEAK FLOW			6910	Jan 7	10600	Feb 15 1989
INSTANTANEOUS PEAK STAGE			16.88	Jan 7	20.62	Feb 15 1989
ANNUAL RUNOFF (CFSM)	1.44		1.99		1.57	
ANNUAL RUNOFF (INCHES)	19.53		27.01		21.29	
10 PERCENT EXCEEDS	293		418		297	
50 PERCENT EXCEEDS	32		42		42	
90 PERCENT EXCEEDS	1.0		.72		.91	

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, 10 ft downstream of bridge on State Highway 875, 4 mi northeast of Mt. Olivet, and at mile 26.13.

DRAINAGE AREA.--226 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 622.456 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 21 to Jan. 5, 15-24, and Feb. 18 to Mar. 22. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	9.0	176	58	412	350	392	1270	26	5.0	32	6.7
2	1.1	8.0	140	84	307	700	316	576	21	4.4	28	5.2
3	1.2	6.3	166	120	259	1400	263	354	18	4.0	94	4.7
4	1.1	7.0	1050	350	226	800	230	327	15	3.4	214	4.2
5	1.0	9.4	2330	600	194	640	209	305	12	2.7	344	4.1
6	1.1	11	1960	518	185	370	296	248	10	2.3	614	4.0
7	.99	14	621	1750	162	150	879	1870	20	4.4	257	3.4
8	.99	14	344	2590	897	450	708	3750	68	2.5	124	3.1
9	.97	13	253	1510	2970	2000	347	3120	101	2.1	76	2.9
10	.98	11	209	454	2880	4700	1400	680	52	1.9	51	2.7
11	.98	10	187	330	923	1600	1960	368	28	1.8	36	2.6
12	.95	9.5	169	340	544	980	1250	271	18	1.9	27	2.3
13	.84	60	141	783	875	280	949	211	12	3.1	21	2.1
14	.80	964	128	789	937	220	628	225	9.5	517	19	2.1
15	.76	2320	170	500	567	180	818	683	7.3	453	18	2.1
16	.66	1950	182	350	444	140	1790	761	5.9	308	14	1.8
17	.77	1520	194	300	333	130	1940	516	4.7	184	12	2.3
18	.85	2250	178	260	250	110	602	266	4.3	94	15	2.5
19	1.0	1370	163	240	230	100	366	194	4.7	196	14	2.4
20	34	360	148	220	200	90	276	157	4.3	85	10	2.3
21	374	224	130	200	190	220	220	127	3.4	50	39	2.0
22	273	163	110	240	260	560	190	105	2.8	228	195	1.9
23	99	125	100	270	3500	377	164	87	2.6	984	157	1.8
24	56	102	96	400	2400	276	142	74	38	1520	67	1.9
25	35	85	86	1450	1200	229	121	65	21	257	37	2.2
26	25	74	80	3420	450	194	108	67	11	157	23	2.4
27	17	628	76	4100	270	1580	243	64	10	135	16	3.2
28	14	621	70	5910	160	3150	221	52	9.7	88	11	3.6
29	11	442	66	5340	---	2810	1520	45	7.7	125	9.0	18
30	8.9	248	64	2050	---	946	1740	38	6.2	76	7.7	12
31	8.4	---	60	599	---	522	---	31	---	46	7.0	---
TOTAL	973.54	13628.2	9847	36125	22225	26254	20288	16907	554.1	5542.5	2588.7	112.5
MEAN	31.4	454	318	1165	794	847	676	545	18.5	179	83.5	3.75
MAX	374	2320	2330	5910	3500	4700	1960	3750	101	1520	614	18
MIN	.66	6.3	60	58	160	90	108	31	2.6	1.8	7.0	1.8
CFSM	.14	2.01	1.41	5.16	3.51	3.75	2.99	2.41	.08	.79	.37	.02
IN.	.16	2.24	1.62	5.95	3.66	4.32	3.34	2.78	.09	.91	.43	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	14.1	219	409	667	537	827	421	287	88.0	173	55.9	27.1
MAX	31.4	454	727	1165	794	872	676	545	199	296	120	62.7
(WY)	1994	1994	1992	1994	1994	1993	1994	1994	1992	1992	1992	1991
MIN	5.35	14.1	182	369	300	763	260	87.4	4.41	14.5	6.87	3.66
(WY)	1993	1992	1993	1992	1992	1992	1992	1993	1991	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	97912.84		155045.54			
ANNUAL MEAN	268		425		312	
HIGHEST ANNUAL MEAN					425	1994
LOWEST ANNUAL MEAN					233	1993
HIGHEST DAILY MEAN	4090	Feb 22	5910	Jan 28	5910	Jan 28 1994
LOWEST DAILY MEAN	.66	Oct 16	.66	Oct 16	.58	Jul 5 1991
ANNUAL SEVEN-DAY MINIMUM	.80	Oct 12	.80	Oct 12	.67	Jun 30 1991
INSTANTANEOUS PEAK FLOW			6500	Jan 28	6500	Jan 28 1994
INSTANTANEOUS PEAK STAGE			23.24	Jan 28	23.24	Jan 28 1994
INSTANTANEOUS LOW FLOW					.30	Jul 4 1992
ANNUAL RUNOFF (CFSM)	1.19		1.88		1.38	
ANNUAL RUNOFF (INCHES)	16.12		25.52		18.75	
10 PERCENT EXCEEDS	780		1380		771	
50 PERCENT EXCEEDS	70		130		76	
90 PERCENT EXCEEDS	2.3		2.4		2.8	

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 mi^2.

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

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 520.83 ft above sea level. July 23, 1924 to Aug. 9, 1926, nonrecording gage at same site, datum unknown. Nov. 18, 1938 to June 30, 1939, nonrecording gage at present site and datum. Oct. 1, 1949 to Sept. 30, 1957, auxiliary water-stage recorder 4.0 mi downstream.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 2, Jan. 16-26, Feb. 4-7. Records good except those for periods of estimated record, which are fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 47.8 ft from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	1480	3780	1260	13600	6220	8110	12000	521	65	640	160
2	268	1460	3420	1240	5650	6030	7740	8830	484	64	547	146
3	272	1460	3280	1460	4100	8240	7260	7010	447	62	424	144
4	270	1460	6570	3080	3820	11000	6730	6340	428	60	471	205
5	268	1460	12800	6870	3650	10300	6510	6060	421	57	2320	180
6	267	1200	12400	6910	3550	8360	6900	5870	323	59	2380	154
7	264	868	8490	12400	3500	7000	10300	11800	203	58	1480	139
8	263	832	4950	17400	5050	6620	9520	18200	885	56	898	125
9	255	821	4640	16700	11100	10600	8110	18900	544	56	547	119
10	255	802	4710	9280	16800	23800	10800	13600	587	56	466	118
11	263	787	4940	4550	15100	26900	10800	6620	369	56	431	116
12	262	777	5470	5210	11300	25000	10700	5910	272	56	447	110
13	266	942	5150	8980	12800	17900	10500	5730	190	70	452	103
14	275	5210	4780	9690	12400	10800	8800	5540	134	754	380	95
15	261	12900	5360	7600	9800	8540	9840	8150	100	1270	385	91
16	256	9070	5360	6700	8080	7840	15700	8590	76	1950	341	94
17	288	10400	5240	5800	7430	7160	15500	8500	76	1300	311	109
18	295	11100	4920	5200	6800	6780	11200	6710	100	861	297	109
19	308	8360	4650	5000	6540	6560	7100	5180	65	669	283	143
20	1480	4930	4260	9000	6350	6360	6770	5080	58	521	233	252
21	4190	3190	3460	7700	6270	6220	6300	5000	57	353	244	266
22	4490	2640	2870	6500	6300	6730	5950	4860	57	820	959	265
23	3790	2400	2540	6050	17200	6940	5700	4720	57	1890	1100	259
24	3610	2820	2280	5900	18100	6560	5530	4620	58	4710	859	261
25	3560	3010	1870	7200	15800	6190	5360	4540	57	3020	530	269
26	3450	2970	1620	10000	10900	5920	5230	4570	60	1220	386	277
27	3380	6000	1530	14300	8010	12200	5440	3820	62	678	299	304
28	3320	5650	1400	18700	6790	19500	5800	2320	61	567	238	295
29	3280	5590	1300	27000	---	20300	12800	1190	60	562	209	305
30	2830	4610	1200	31200	---	16000	13200	663	63	1480	174	285
31	1900	---	1160	24000	---	9990	---	555	---	794	164	---
TOTAL	44404	115199	136400	302880	256790	338560	260200	211478	6875	24194	18895	5498
MEAN	1432	3840	4400	9770	9171	10920	8673	6822	229	780	610	183
MAX	4490	12900	12800	31200	18100	26900	15700	18900	885	4710	2380	305
MIN	255	777	1160	1240	3500	5920	5230	555	57	56	164	91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

MEAN	1208	2273	4555	4964	5701	6187	4636	3201	2002	1126	935	1181
MAX	4877	5227	13020	10430	13960	10920	9136	11130	5339	5783	3537	8088
(WY)	1976	1987	1979	1974	1989	1994	1975	1983	1974	1979	1979	1979
MIN	121	228	859	275	1837	1006	465	293	100	164	69.9	144
(WY)	1974	1988	1981	1981	1977	1983	1986	1976	1988	1984	1983	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1974 - 1994	
ANNUAL TOTAL	1166655		1721373			
ANNUAL MEAN	3196		4716		3152	
HIGHEST ANNUAL MEAN					5802	1979
LOWEST ANNUAL MEAN					1528	1988
HIGHEST DAILY MEAN	24700	Feb 22	31200	Jan 30	43100	Feb 16 1989
LOWEST DAILY MEAN	174	Jul 28	56	Jul 8	54	Sep 13 1976
ANNUAL SEVEN-DAY MINIMUM	185	Jul 22	57	Jul 6	57	Jul 6 1994
INSTANTANEOUS PEAK FLOW			32700	Jan 30	59100	Mar 10 1964
INSTANTANEOUS PEAK STAGE			34.76	Jan 30	50.26	Mar 10 1964
INSTANTANEOUS LOW FLOW			55	Jul 12	54	Sep 13 1976
10 PERCENT EXCEEDS	8170		11500		7930	
50 PERCENT EXCEEDS	1800		3320		1310	
90 PERCENT EXCEEDS	241		114		190	

LICKING RIVER BASIN

03252300 HINKSTON CREEK NEAR CARLISLE, KY

LOCATION.--Lat 38°14'33", long 84°03'18", Bourbon County, Hydrologic Unit 05100102, at upstream side 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 mi^2, revised.

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

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

REMARKS.--Estimated daily discharges: Dec. 21-26, Jan. 12-22, and Feb. 6-17. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	16	104	57	257	173	370	274	26	7.6	44	5.8
2	2.8	18	85	67	194	269	288	210	18	6.6	18	6.3
3	2.5	33	79	248	163	675	249	147	14	6.1	8.9	6.7
4	2.4	37	757	900	134	622	240	143	13	5.8	7.2	6.9
5	2.5	35	1690	557	119	404	207	127	11	5.8	8.7	6.2
6	1.8	34	823	402	100	270	565	104	10	10	12	5.8
7	1.4	33	391	2430	86	212	834	1150	135	6.9	27	5.7
8	1.9	32	259	2110	82	636	414	2610	459	6.0	15	6.5
9	1.9	31	185	586	1300	1830	303	993	207	5.3	8.1	9.0
10	2.2	34	241	312	940	4110	285	350	104	5.2	6.6	7.3
11	2.3	35	301	228	600	3400	472	231	68	40	5.9	6.2
12	2.3	34	215	195	820	1150	691	175	50	15	5.8	6.1
13	2.3	740	170	175	1100	583	465	134	32	7.7	5.6	5.9
14	2.1	1040	160	160	740	490	325	108	18	7.0	5.7	6.7
15	2.0	1770	317	150	540	395	1150	502	11	6.6	5.5	6.8
16	2.0	582	284	145	380	302	2350	971	9.6	16	5.0	6.3
17	2.3	1070	217	140	290	240	834	299	8.8	21	5.4	6.4
18	14	1210	176	135	228	216	385	209	9.2	42	6.1	6.5
19	34	423	151	130	186	187	267	175	11	65	8.6	23
20	626	244	128	125	158	144	202	150	7.5	52	12	20
21	382	157	110	122	183	158	160	128	6.5	15	127	12
22	131	112	100	120	291	202	136	108	8.7	8.3	170	8.8
23	69	87	94	118	2700	146	115	89	41	17	71	11
24	45	72	88	533	1730	129	95	78	11	128	27	12
25	35	61	83	1610	593	116	82	70	9.1	50	11	15
26	29	51	79	2220	368	84	71	67	8.0	18	8.2	49
27	23	334	81	1380	252	1480	91	72	23	9.8	6.9	55
28	20	383	74	2620	204	2580	135	73	40	7.6	6.5	26
29	18	222	77	2000	---	1310	857	63	30	31	6.4	15
30	15	142	78	603	---	511	455	47	11	263	6.5	11
31	15	---	63	362	---	385	---	34	---	97	6.0	---
TOTAL	1493.8	9072	7660	20940	14738	23409	13093	9891	1410.4	982.3	667.6	374.9
MEAN	48.2	302	247	675	526	755	436	319	47.0	31.7	21.5	12.5
MAX	626	1770	1690	2620	2700	4110	2350	2610	459	263	170	55
MIN	1.4	16	63	57	82	84	71	34	6.5	5.2	5.0	5.7
CFSM	.31	1.96	1.60	4.39	3.42	4.90	2.83	2.07	.31	.21	.14	.08
IN.	.36	2.19	1.85	5.06	3.56	5.65	3.16	2.39	.34	.24	.16	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	21.1	139	237	394	378	582	232	136	76.2	46.1	77.6	13.2
MAX	48.2	302	394	675	526	755	436	319	143	89.3	121	19.0
(WY)	1994	1994	1992	1994	1994	1994	1994	1994	1993	1992	1993	1992
MIN	2.29	16.5	70.6	166	185	374	97.6	41.3	38.3	17.2	21.5	7.97
(WY)	1993	1992	1993	1992	1992	1992	1992	1992	1992	1993	1994	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	75153.5		103732.0			
ANNUAL MEAN	206		284		194	
HIGHEST ANNUAL MEAN					284	1994
LOWEST ANNUAL MEAN					128	1992
HIGHEST DAILY MEAN	3870	Feb 22	4110	Mar 10	4110	Mar 10 1994
LOWEST DAILY MEAN	1.3	Jul 30	1.4	Oct 7	1.3	Jul 30 1993
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 6	2.0	Oct 6	1.6	Oct 25 1992
INSTANTANEOUS PEAK FLOW			4290	Mar 10	4290	Mar 10 1994
INSTANTANEOUS PEAK STAGE			25.14	Mar 10	25.14	Mar 10 1994
INSTANTANEOUS LOW FLOW			1.3	Oct 6	1.3	Oct 6 1993
ANNUAL RUNOFF (CFSM)	1.34		1.85		1.26	
ANNUAL RUNOFF (INCHES)	18.15		25.06		17.11	
10 PERCENT EXCEEDS	542		782		482	
50 PERCENT EXCEEDS	65		89		61	
90 PERCENT EXCEEDS	2.8		6.1		4.2	

LICKING RIVER BASIN

03252500 SOUTH FORK LICKING RIVER AT CYNTHIANA, KY

LOCATION.--Lat 38°23'27", long 84°18'11", Harrison County, Hydrologic Unit 05100102, on left bank at downstream side of bridge on State Highway 356 and 36, at Cynthiana, 0.3 mi downstream from Grays Run, in pool formed by old mill dam 2.6 mi downstream, and at mile 49.1.

DRAINAGE AREA.--621 mi^2.

PERIOD OF RECORD.--April 1938 to September 1994 (discontinued). Gage-height records collected in this vicinity since 1917 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1113: 1943(M). WSP 1505: 1945. WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 688.52 ft above sea level. Prior to Oct. 28, 1952, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 21 to Jan. 1, 15-25, and Mar. 1-4. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	122	777	200	1280	760	1680	1680	88	81	270	15
2	17	107	598	253	930	1500	1390	1080	77	53	122	14
3	17	104	537	314	723	3800	1030	767	67	43	75	14
4	21	100	1600	1560	602	2200	868	641	57	35	105	14
5	45	106	6770	2520	516	1750	761	571	50	30	873	14
6	40	107	4830	1520	445	1200	747	498	36	25	464	14
7	26	107	2290	5910	383	872	3080	2290	48	23	171	14
8	21	107	1330	8450	518	965	2270	9790	215	26	98	14
9	18	107	953	3750	5160	4500	1390	5200	1000	45	81	14
10	17	107	775	1660	6440	14200	1240	2090	402	37	64	14
11	15	109	914	1090	3040	12500	1440	1170	192	22	54	14
12	15	113	981	919	3440	6560	3040	817	130	17	47	13
13	16	183	751	2240	5180	3180	2340	613	77	20	37	13
14	17	3870	651	1680	4340	2240	1530	506	55	31	25	12
15	17	7200	870	1450	2550	1810	1380	540	46	39	20	12
16	16	4690	1250	1220	1910	1380	7710	2250	34	39	18	11
17	16	4830	1060	1100	1350	1040	4930	1740	29	24	17	11
18	16	6690	833	950	985	871	2060	799	35	93	16	10
19	15	3200	701	840	787	751	1260	540	21	102	15	10
20	1210	1710	601	760	650	637	891	430	18	82	14	9.7
21	3480	1080	480	660	586	566	667	354	17	119	15	9.1
22	1520	744	425	900	663	578	540	301	16	645	342	8.5
23	633	570	375	1700	7970	555	458	258	62	211	291	7.8
24	388	474	335	3000	7690	488	389	226	260	135	129	7.4
25	268	406	300	5000	3290	453	336	199	137	87	39	7.2
26	208	359	270	9290	1770	382	294	175	91	117	20	6.9
27	199	1390	240	7220	1310	3220	293	157	58	90	17	6.6
28	129	2930	220	10900	857	9280	346	139	67	72	18	6.3
29	120	1770	200	8360	---	6910	1260	124	94	59	18	6.0
30	132	1050	180	3820	---	3200	2940	115	96	79	15	7.0
31	123	---	170	1910	---	1890	---	104	---	435	15	---
TOTAL	8792	44442	32267	91146	65365	90238	48560	36164	3575	2916	3505	329.5
MEAN	284	1481	1041	2940	2334	2911	1619	1167	119	94.1	113	11.0
MAX	3480	7200	6770	10900	7970	14200	7710	9790	1000	645	873	15
MIN	15	100	170	200	383	382	293	104	16	17	14	6.0
CFSM	.46	2.39	1.68	4.73	3.76	4.69	2.61	1.88	.19	.15	.18	.02
IN.	.53	2.66	1.93	5.46	3.92	5.41	2.91	2.17	.21	.17	.21	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	125	411	1033	1335	1663	1773	1151	655	403	320	201	176
MAX	1892	1996	4567	6038	5189	5219	4731	3677	2421	1768	1356	3480
(WY)	1976	1943	1979	1950	1989	1964	1948	1983	1950	1938	1974	1979
MIN	.65	.74	.89	17.0	80.9	198	115	15.7	6.21	5.94	2.73	1.34
(WY)	1954	1954	1944	1944	1954	1983	1941	1941	1988	1951	1983	1955

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	317687.2		427299.5			
ANNUAL MEAN	870		1171		766	
HIGHEST ANNUAL MEAN					1505	1979
LOWEST ANNUAL MEAN					124	1954
HIGHEST DAILY MEAN	15100	Feb 22	14200	Mar 10	30700	Apr 13 1948
LOWEST DAILY MEAN	5.7	Aug 8	6.0	Sep 29	.30	Oct 23 1953
ANNUAL SEVEN-DAY MINIMUM	6.3	Aug 4	6.8	Sep 24	.30	Nov 10 1953
INSTANTANEOUS PEAK FLOW			14900	Mar 10	35300	Apr 13 1948
INSTANTANEOUS PEAK STAGE			16.62	Mar 10	23.32	Apr 13 1948
ANNUAL RUNOFF (CFSM)	1.40		1.89		1.23	
ANNUAL RUNOFF (INCHES)	19.03		25.60		16.76	
10 PERCENT EXCEEDS	2480		3250		1820	
50 PERCENT EXCEEDS	291		375		190	
90 PERCENT EXCEEDS	18		15		5.9	

03253500 LICKING RIVER AT CATAWBA, KY

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

DRAINAGE AREA.--3,300 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Dec. 29-31, Feb. 1-13. Records good except for periods of estimated record, which are fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	1370	4970	1700	8700	7370	9980	16100	668	238	779	290
2	297	1310	4290	1570	7100	7000	9260	10900	583	240	931	263
3	296	1300	3960	1810	6200	7720	8670	8460	520	242	697	244
4	297	1300	7790	3720	5600	9730	8010	7480	451	243	584	256
5	295	1290	17800	8620	5100	10800	7590	7080	386	235	1670	276
6	290	1210	18300	9210	4650	10100	7480	6820	334	1110	3460	250
7	291	846	12400	15700	4450	8380	11400	13200	296	190	2140	235
8	293	815	7200	25200	4250	8420	12800	22700	376	171	1180	223
9	286	812	6170	22000	27800	8930	9870	25700	533	158	800	216
10	271	803	5900	12800	33300	32200	12900	17700	1220	152	603	214
11	296	793	5910	6600	16000	41600	14900	8910	992	151	561	214
12	295	779	6530	6370	19800	36300	13500	7200	877	153	522	210
13	293	818	6370	9580	27000	23400	14500	6810	716	159	586	202
14	300	4870	5830	11900	16900	14200	11300	6470	587	696	546	194
15	299	20600	7160	9330	13600	10700	10600	9640	496	1170	461	188
16	274	15700	6910	7410	10500	9560	17300	11100	424	1650	433	188
17	301	16900	6780	6300	9240	8550	21500	10700	365	1180	390	196
18	310	19400	6270	6170	8260	7950	15700	8540	329	779	372	203
19	312	13200	5780	6140	7740	7610	9140	6440	305	674	357	198
20	583	7800	5290	7970	7450	7250	8130	5990	282	532	341	253
21	6060	4890	4450	11200	7430	7000	7440	5800	258	446	307	300
22	6870	3670	3660	8470	7250	7310	6930	5550	239	630	578	302
23	4940	3040	3180	7920	16000	7630	6590	5350	224	1890	826	297
24	4110	3240	2840	7140	26800	7340	6360	5180	215	4690	1090	300
25	3800	3450	2400	9880	22400	6930	6130	5030	207	3920	833	307
26	3530	3300	2020	19400	13900	6660	5920	6030	207	1400	592	307
27	3350	7000	1870	26700	9970	13200	6130	4560	231	898	451	319
28	3230	8800	1750	46200	8190	25900	6760	2800	244	677	374	327
29	3160	8090	1460	38900	---	28400	15700	1270	245	736	331	326
30	2850	6500	1320	23700	---	21500	21400	925	242	1270	296	322
31	1940	---	1490	10700	---	13200	---	818	---	889	287	---
TOTAL	50018	163896	178050	390310	355580	422840	323890	261253	13052	27569	23378	7620
MEAN	1613	5463	5744	12590	12700	13640	10800	8428	435	889	754	254
MAX	6870	20600	18300	46200	33300	41600	21500	25700	1220	4690	3460	327
MIN	271	779	1320	1570	4250	6660	5920	818	207	151	287	188

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

MEAN	1576	3061	6219	6681	7892	8253	5996	4185	2615	1525	1294	1649
MAX	7178	6516	18500	15110	21140	15220	11920	16660	8212	6962	4630	12860
(WY)	1976	1987	1979	1974	1989	1975	1975	1983	1974	1979	1974	1979
MIN	264	298	1092	420	2321	1247	666	371	134	291	103	132
(WY)	1988	1988	1981	1981	1977	1983	1986	1976	1988	1984	1986	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1974 - 1994	
ANNUAL TOTAL	1568722		2217456			
ANNUAL MEAN	4298		6075		4228	
HIGHEST ANNUAL MEAN					7730	1979
LOWEST ANNUAL MEAN					2006	1977
HIGHEST DAILY MEAN	38600	Feb 22	46200	Jan 28	74800	Feb 17 1989
LOWEST DAILY MEAN	148	Jul 28	151	Jul 11	25	Jul 8 1988
ANNUAL SEVEN-DAY MINIMUM	213	Jul 22	162	Jul 7	38	Jul 3 1988
INSTANTANEOUS PEAK FLOW			50700	Jan 28	95000	Mar 10 1964
INSTANTANEOUS PEAK STAGE			33.56	Jan 28	52.60	Mar 10 1964
INSTANTANEOUS LOW FLOW			149	Jul 10	2.5	Aug 5 1930
10 PERCENT EXCEEDS	10600		15700		10600	
50 PERCENT EXCEEDS	2210		3800		1700	
90 PERCENT EXCEEDS	296		252		260	

03254000 LICKING RIVER AT BUTLER, KY
(National stream-quality accounting network)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°47'22", long 84°21'05", Pendleton County, Hydrologic Unit 05100101, at bridge on U.S. Highway 27, 0.4 mi downstream from Flour Creek, 1.0 mi east of Butler, and at mile 36.7.

DRAINAGE AREA.--3,375 mi^2.

PERIOD OF RECORD.--Water years 1950, 1975 to August 1994 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1949 to September 1950, October 1974 to July 1981.
WATER TEMPERATURES: October 1949 to September 1951, October 1974 to July 1981.

REMARKS.--Flow regulated by Cave Run Lake. Records of daily discharge are published for gaging station at Catawba (station 03253500) 11.3 mi upstream, drainage area, 3,300 mi^2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 1993												
10...	1130	736	240	7.7	8.5	1.9	10.2	88	70	20	99	28
FEB 1994												
10...	1210	27000	234	7.9	3.5	300	13.5	102	2300	4500	110	37
MAY												
10...	1125	20800	198	7.6	18.0	160	7.8	83	K6700	5800	85	27
AUG												
10...	1130	667	324	8.0	23.0	7.3	6.9	81	450	92	150	49

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 1993											
10...	6.4	4.5	2.8	78	64	63	5.5	32	0.10	4.4	127
FEB 1994											
10...	4.5	2.8	2.7	97	79	79	5.3	22	<0.10	5.5	160
MAY											
10...	4.3	2.0	2.3	83	68	68	2.4	17	<0.10	6.0	126
AUG											
10...	6.3	4.7	4.5	144	118	118	6.1	23	0.20	5.9	180

03254000 LICKING RIVER AT BUTLER, KY--Continued
(National stream-quality accounting network)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	COBALT, DISSOLVED (UG/L AS CO)	IRON, DISSOLVED (UG/L AS FE)
NOV 1993											
10...	<0.010	0.330	0.020	0.30	0.100	0.030	0.040	<10	17	<3	47
FEB 1994											
10...	0.020	1.30	0.100	1.1	0.470	0.150	0.120	1200	14	<3	280
MAY											
10...	0.020	0.720	0.040	1.0	0.320	0.050	0.060	180	15	<3	230
AUG											
10...	<0.010	1.10	0.030	0.60	0.200	0.130	0.130	20	24	<3	31

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 1993											
10...	5	19	<10	<1	<1	<1.0	85	<6	2	4.0	75
FEB 1994											
10...	<4	5	<10	<1	<1	<1.0	71	<6	494	36000	85
MAY											
10...	<4	3	<10	2	<1	<1.0	60	<6	231	13000	93
AUG											
10...	<4	3	<10	<1	<1	<1.0	110	<6	38	68	82

OHIO RIVER MAIN STEM

03277200 OHIO RIVER AT MARKLAND DAM, 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 mi^2, approximately.

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

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

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

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft^3/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.

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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37400	31900	204000	51200	353000	344000	295000	171000	36400	50300	42700	52100
2	37400	57300	182000	49400	335000	262000	334000	120000	25500	46400	34000	65700
3	38500	57200	154000	52700	296000	204000	348000	128000	48100	54000	29400	59500
4	35900	59300	151000	69800	310000	262000	330000	114000	25200	54500	34600	49800
5	35500	61700	201000	139000	239000	304000	312000	117000	22600	44400	38600	34800
6	31000	64900	249000	169000	204000	274000	245000	109000	36700	36400	49800	27900
7	32600	69100	306000	173000	176000	246000	236000	142000	31300	38900	56900	29000
8	29300	75400	332000	208000	168000	232000	244000	213000	32200	40900	63200	28900
9	26800	70000	319000	275000	199000	254000	219000	286000	33400	41500	45200	28300
10	26800	66500	277000	314000	280000	354000	328000	335000	28100	28100	22700	16300
11	29500	47200	218000	304000	361000	385000	388000	326000	29600	29500	37900	21100
12	23400	47800	180000	217000	401000	318000	358000	291000	26800	39600	22000	23900
13	21600	39800	162000	178000	400000	341000	379000	194000	30200	33000	17000	22400
14	21200	74400	152000	193000	371000	345000	374000	146000	32100	37800	21500	21900
15	27000	146000	130000	211000	349000	322000	363000	128000	39400	34000	51400	18100
16	36400	148000	111000	205000	328000	302000	359000	119000	55500	37300	75200	17700
17	27200	190000	104000	164000	263000	267000	324000	104000	67400	47500	78800	21600
18	39100	210000	94500	97900	223000	246000	302000	93700	54000	25100	80300	24100
19	36100	225000	90500	60800	183000	234000	340000	92900	42900	26800	134000	25400
20	42500	232000	95800	56800	177000	207000	361000	58700	49100	27000	163000	27700
21	58100	232000	87100	54600	177000	182000	343000	63100	51000	35000	158000	22800
22	63000	193000	86900	45600	205000	184000	290000	61000	41300	30400	127000	17800
23	65400	166000	90700	47300	294000	220000	215000	55700	44100	24500	111000	15600
24	54200	148000	98400	70100	360000	274000	181000	49100	39200	31800	97600	15500
25	52600	123000	74200	107000	364000	297000	148000	47900	35100	32500	89000	15500
26	41000	113000	70200	207000	375000	304000	131000	46500	37800	37500	69500	27500
27	29200	111000	68100	169000	360000	304000	114000	58400	55300	36300	48700	34500
28	31200	122000	54500	255000	372000	335000	111000	60300	42200	31900	42400	30200
29	30500	145000	45500	322000	---	362000	139000	57400	56600	44200	44900	29000
30	29900	181000	53500	347000	---	377000	167000	58700	56800	63200	58900	29700
31	31700	---	46300	356000	---	320000	---	40800	---	71800	57800	---
TOTAL	1122000	3507500	4488200	5169200	8123000	8862000	8278000	3888200	1205900	1212100	2003000	854300
MEAN	36190	116900	144800	166700	290100	285900	275900	125400	40200	39100	64610	28480
MAX	65400	232000	332000	356000	401000	385000	388000	335000	67400	71800	163000	65700
MIN	21200	31900	45500	45600	168000	182000	111000	40800	22600	24500	17000	15500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	51980	90270	150800	147000	179900	212200	186900	130500	86070	60390	45990	42140
MAX	144100	230600	288700	289900	291200	335400	292200	286300	219100	109500	146200	143800
(WY)	1980	1986	1973	1974	1975	1975	1972	1983	1981	1972	1980	1979
MIN	13910	26500	42150	34060	77100	98440	61160	43510	16250	18530	13060	15500
(WY)	1992	1992	1990	1977	1992	1990	1986	1976	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	41051100		48713400			
ANNUAL MEAN	112500		133500		115300	
HIGHEST ANNUAL MEAN					157300	1979
LOWEST ANNUAL MEAN					60450	1988
HIGHEST DAILY MEAN	388000	Mar 26	401000	Feb 12	542000	Mar 17 1978
LOWEST DAILY MEAN	6900	Sep 8	15500	Sep 24	4320	Sep 23 1984
ANNUAL SEVEN-DAY MINIMUM	14000	Aug 26	20000	Sep 19	7310	Jul 1 1988
INSTANTANEOUS PEAK STAGE			49.12	Jan 31	55.25	Dec 13 1978
10 PERCENT EXCEEDS	280000		329000		260000	
50 PERCENT EXCEEDS	68000		71800		79600	
90 PERCENT EXCEEDS	17900		27800		22000	

KENTUCKY RIVER BASIN

03277400 LEATHERWOOD CREEK AT DAISY, KY

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

DRAINAGE AREA.--40.9 mi^2, includes that of Hicks Branch.

PERIOD OF RECORD.--October 1964 to September 1974. October 1991 to current year.

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

REMARKS.--Estimated daily discharges: Oct. 28 to Nov. 15, Jan. 16-23, Feb. 16-20, Feb. 26 to Mar. 1, and Aug. 18 to Sept. 30. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	42	28	56	76	130	259	82	13	11	8.8	8.6
2	7.1	40	24	52	67	356	195	65	12	9.4	7.4	8.5
3	8.4	36	21	74	60	359	153	59	15	14	7.2	7.9
4	6.0	30	574	234	52	244	130	59	13	12	7.1	7.2
5	5.3	29	813	137	56	189	121	51	12	9.0	17	6.7
6	5.3	24	226	117	51	150	121	48	27	8.2	12	8.5
7	5.8	21	103	623	44	133	146	176	19	8.3	9.5	7.5
8	4.7	17	66	467	42	408	128	461	19	9.0	10	6.6
9	7.0	16	49	212	593	559	122	179	21	10	8.7	6.0
10	10	15	48	139	428	765	185	111	21	8.4	7.3	5.7
11	8.7	14	42	106	1250	316	284	81	20	7.6	6.4	5.4
12	20	14	32	228	525	213	231	69	13	7.2	5.6	5.2
13	8.0	13	28	175	349	166	767	59	12	7.2	4.8	5.4
14	6.6	16	29	140	245	160	297	50	9.8	9.8	5.7	4.9
15	5.8	40	59	113	192	131	324	49	9.6	17	13	4.5
16	6.5	56	66	96	150	107	499	43	12	33	9.8	4.7
17	7.8	60	57	84	130	95	259	36	20	24	23	7.0
18	8.1	61	50	72	100	85	178	33	14	11	16	14
19	173	43	44	62	88	74	134	29	8.8	14	14	7.2
20	56	34	39	54	80	69	106	27	7.8	14	12	4.4
21	39	25	46	48	256	86	86	26	60	16	100	3.7
22	35	21	35	42	233	85	78	23	40	31	45	3.4
23	25	18	31	38	680	76	69	21	35	28	22	3.2
24	19	16	28	145	362	72	60	21	17	16	15	3.5
25	16	15	28	347	227	85	52	22	14	11	12	3.9
26	14	15	28	312	170	75	50	26	13	14	11	5.4
27	12	131	24	192	140	674	62	28	60	17	9.4	4.6
28	11	103	55	207	110	958	49	18	23	15	9.1	3.9
29	9.5	54	100	161	---	420	44	17	18	12	9.0	3.4
30	22	37	83	123	---	263	74	16	16	11	8.8	3.3
31	34	---	69	95	---	320	---	15	---	9.9	8.6	---
TOTAL	604.2	1056	2925	4951	6756	7823	5263	2000	595.0	425.0	455.2	174.2
MEAN	19.5	35.2	94.4	160	241	252	175	64.5	19.8	13.7	14.7	5.81
MAX	173	131	813	623	1250	958	767	461	60	33	100	14
MIN	4.7	13	21	38	42	69	44	15	7.8	7.2	4.8	3.2
CFSM	.48	.86	2.31	3.90	5.90	6.17	4.29	1.58	.48	.34	.36	.14
IN.	.55	.96	2.66	4.50	6.14	7.12	4.79	1.82	.54	.39	.41	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	18.7	35.7	86.4	98.1	94.4	143	112	65.8	31.5	17.9	18.9	13.3
MAX	65.1	135	182	256	241	259	205	182	149	102	47.2	59.2
(WY)	1965	1974	1973	1974	1994	1973	1972	1971	1974	1973	1992	1974
MIN	3.29	3.23	1.75	4.06	22.2	32.0	43.2	12.4	4.06	1.19	2.50	1.59
(WY)	1966	1966	1966	1966	1968	1966	1969	1969	1966	1970	1970	1969

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1965 - 1994	
ANNUAL TOTAL	22548.9		33027.6			
ANNUAL MEAN	61.8		90.5		61.0	
HIGHEST ANNUAL MEAN					108	1974
LOWEST ANNUAL MEAN					22.7	1969
HIGHEST DAILY MEAN	883	Mar 23	1250	Feb 11	2310	Nov 27 1973
LOWEST DAILY MEAN	3.4	Jul 14	3.2	Sep 23	.17	Jul 20 1970
ANNUAL SEVEN-DAY MINIMUM	4.5	Jul 8	3.9	Sep 20	.49	Jul 14 1970
INSTANTANEOUS PEAK FLOW			2850	Feb 11	7370	Mar 7 1967
INSTANTANEOUS PEAK STAGE			9.28	Feb 11	12.26	Mar 7 1967
INSTANTANEOUS LOW FLOW					.14	Jul 20 1970
ANNUAL RUNOFF (CFSM)	1.51		2.21		1.49	
ANNUAL RUNOFF (INCHES)	20.51		30.04		20.26	
10 PERCENT EXCEEDS	149		233		134	
50 PERCENT EXCEEDS	28		33		22	
90 PERCENT EXCEEDS	6.5		7.1		2.6	

KENTUCKY RIVER BASIN

03277450 CARR FORK NEAR SASSAFRAS, KY

LOCATION.--Lat 37°13'52", long 83°02'10", Knott County, Hydrologic Unit 05100201, on left bank 0.3 mi downstream from Sassafras Creek, 0.5 mi downstream from Carr Fork Dam, 0.6 mi upstream from Rowdy Hollow, 1.3 mi northeast of Sassafras, and at mile 8.3.

DRAINAGE AREA.--60.6 mi^2.

PERIOD OF RECORD.--October 1963 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft above sea level. Prior to July 27, 1966, nonrecording gage at site 0.3 mi upstream at datum 6.39 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Carr Fork Lake beginning January 1976 (station 03277446). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	58	51	67	286	261	596	25	16	53	13	13
2	57	84	4.1	56	227	93	587	23	9.9	28	12	12
3	57	104	3.8	82	23	325	355	16	9.9	10	12	12
4	57	73	44	131	23	587	143	11	9.9	10	12	12
5	56	3.3	68	143	93	401	138	79	10	9.9	18	12
6	56	56	88	142	152	276	138	46	12	9.9	14	12
7	56	100	329	191	146	181	139	126	15	9.9	13	13
8	56	98	467	147	145	170	138	357	74	10	18	13
9	56	98	462	129	164	160	137	536	40	10	20	12
10	56	98	458	266	140	154	130	595	19	12	20	13
11	56	97	453	424	151	380	116	255	19	10	14	13
12	56	73	445	322	55	615	306	93	36	11	12	12
13	55	55	326	456	139	609	738	77	49	13	11	12
14	55	56	111	451	491	603	758	48	49	22	12	12
15	55	61	113	445	621	593	765	64	31	64	12	36
16	55	105	112	440	611	446	764	74	22	76	12	46
17	56	144	111	440	604	282	667	73	13	64	13	46
18	57	141	75	287	597	282	424	73	9.9	44	12	46
19	68	136	47	154	587	281	218	41	9.9	20	12	46
20	61	135	49	154	579	186	127	11	10	11	12	46
21	62	133	49	126	589	69	92	12	15	11	78	46
22	74	86	48	109	520	92	75	40	15	17	119	46
23	81	55	49	93	169	53	75	66	21	14	42	46
24	79	54	50	66	341	21	70	39	24	36	12	46
25	65	54	50	118	606	20	66	11	27	49	12	46
26	57	55	49	161	595	20	65	16	40	49	12	46
27	57	69	49	150	585	70	37	47	44	41	12	46
28	57	86	51	217	575	80	22	65	43	19	12	46
29	57	114	87	291	---	460	24	64	46	13	12	46
30	57	147	136	291	---	725	24	43	50	13	12	46
31	58	---	115	289	---	609	---	34	---	12	13	---
TOTAL	1842	2628.3	4549.9	6838	9814	9104	7934	3060	789.5	771.7	610	899
MEAN	59.4	87.6	147	221	350	294	264	98.7	26.3	24.9	19.7	30.0
MAX	81	147	467	456	621	725	765	595	74	76	119	46
MIN	55	3.3	3.8	56	23	20	22	11	9.9	9.9	11	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

MEAN	65.7	86.0	96.1	103	141	123	94.3	71.6	46.0	26.4	21.6	41.7
MAX	256	207	239	299	350	294	264	214	202	62.6	61.1	108
(WY)	1990	1978	1992	1979	1994	1994	1994	1989	1989	1992	1992	1982
MIN	17.8	22.4	11.2	9.56	25.7	18.1	6.52	7.48	5.55	5.54	2.38	13.0
(WY)	1981	1977	1981	1981	1992	1988	1986	1986	1986	1986	1980	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1977 - 1994	
ANNUAL TOTAL	30521.7		48840.4			
ANNUAL MEAN	83.6		134		76.0	
HIGHEST ANNUAL MEAN					134	1994
LOWEST ANNUAL MEAN					24.3	1988
HIGHEST DAILY MEAN	597	Mar 26	765	Apr 15	1500	Apr 8 1977
LOWEST DAILY MEAN	3.3	Nov 5	3.3	Nov 5	.32	Oct 13 1980
ANNUAL SEVEN-DAY MINIMUM	7.9	Jun 1	10	Jul 3	1.4	Oct 8 1980
INSTANTANEOUS PEAK FLOW			940	Mar 29	6390	Mar 7 1967
INSTANTANEOUS PEAK STAGE			10.94	Mar 29	19.24	Mar 7 1967
INSTANTANEOUS LOW FLOW					.00	Aug 7 1969
10 PERCENT EXCEEDS	250		448		190	
50 PERCENT EXCEEDS	52		57		36	
90 PERCENT EXCEEDS	13		12		6.8	

KENTUCKY RIVER BASIN

03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY

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

DRAINAGE AREA.--1,101 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Jan 16-23. Records good except for period of estimated record, which is poor. Small diversions by city of Jackson waterworks. Flow regulated by Carr Fork Lake (station 03277446) beginning January 1976. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	425	908	1440	1420	2500	2770	7280	1820	421	333	325	238
2	352	1020	1140	1380	2080	3500	5590	1900	394	282	269	243
3	308	943	923	1740	1840	9050	4480	1710	351	262	296	201
4	282	861	2360	7880	1460	7100	3590	2080	326	423	333	179
5	258	778	16900	5930	1340	5280	2810	1810	308	273	2860	166
6	243	666	17800	3850	1330	4080	2680	1630	291	245	1860	162
7	229	578	5760	11600	1320	3330	3530	3130	306	225	795	164
8	213	569	3100	22400	1240	8000	3660	10600	478	180	534	160
9	208	526	2380	11200	5580	16900	3140	7960	737	199	391	148
10	275	483	2070	4350	12400	22500	2920	4160	790	171	322	130
11	323	455	1930	3270	15300	15400	6500	3020	523	237	279	121
12	322	435	1680	5170	22900	6480	7400	2110	429	224	247	116
13	485	429	1510	5610	16900	4680	8060	1610	399	191	217	109
14	413	546	1370	4450	7450	4150	12700	1360	387	339	191	101
15	343	2020	1350	3370	5220	3700	6990	1220	337	1070	276	96
16	291	1900	1740	2250	4100	3190	14200	1270	337	1480	266	91
17	293	2740	1720	1750	3390	2640	9480	1230	292	876	549	103
18	314	4860	1580	1500	2900	2280	5400	992	336	615	399	303
19	798	2690	1430	1250	2550	2170	3970	880	362	447	644	308
20	3370	1820	1270	1000	2310	1930	2990	803	270	329	420	295
21	2110	1350	1410	880	4390	2130	2330	707	232	286	467	214
22	1400	1080	1430	800	6790	3320	1990	648	251	253	1110	166
23	1090	906	1300	980	17000	2640	1760	604	428	334	1130	144
24	866	750	1170	1870	17100	2240	1550	609	397	525	662	130
25	700	673	1100	5630	7790	3420	1400	605	479	396	418	151
26	602	642	1050	10700	4910	2830	1270	541	441	312	326	145
27	506	2190	964	6860	3770	10800	1390	771	1060	290	275	138
28	448	4160	964	7730	3120	27300	1870	778	776	357	238	136
29	403	2900	1300	5860	---	23900	1700	612	663	354	211	133
30	401	1880	1610	4200	---	10300	1750	528	425	489	198	123
31	557	---	1530	3160	---	7310	---	480	---	416	214	---
TOTAL	18828	41758	83281	150040	178980	225320	134380	58178	13226	12413	16722	4914
MEAN	607	1392	2686	4840	6392	7268	4479	1877	441	400	539	164
MAX	3370	4860	17800	22400	22900	27300	14200	10600	1060	1480	2860	308
MIN	208	429	923	800	1240	1930	1270	480	232	171	191	91
CFSM	.55	1.26	2.44	4.40	5.81	6.60	4.07	1.70	.40	.36	.49	.15
IN.	.64	1.41	2.81	5.07	6.05	7.61	4.54	1.97	.45	.42	.56	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

MEAN	575	982	1819	1987	2745	2723	2322	1760	977	479	437	330
MAX	4189	3019	4649	5168	6392	7268	4479	7189	4166	1200	945	1154
(WY)	1990	1986	1992	1979	1994	1994	1994	1984	1989	1992	1977	1989
MIN	92.8	152	196	155	790	541	452	614	136	90.2	85.6	83.0
(WY)	1981	1982	1981	1981	1988	1988	1986	1977	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1977 - 1994	
ANNUAL TOTAL	562026		938040			
ANNUAL MEAN	1540		2570		1421	
HIGHEST ANNUAL MEAN					2570	1994
LOWEST ANNUAL MEAN					477	1988
HIGHEST DAILY MEAN	17800	Dec 6	27300	Mar 28	52200	May 8 1984
LOWEST DAILY MEAN	118	Sep 14	91	Sep 16	26	Aug 20 1988
ANNUAL SEVEN-DAY MINIMUM	168	Sep 8	105	Sep 11	30	Aug 16 1988
INSTANTANEOUS PEAK FLOW			29000	Mar 29	53500	Jan 30 1957
INSTANTANEOUS PEAK STAGE			31.88	Mar 29	43.10	Feb 4 1939
INSTANTANEOUS LOW FLOW					.00	Oct 16 1930
ANNUAL RUNOFF (CFSM)	1.40		2.33		1.29	
ANNUAL RUNOFF (INCHES)	18.99		31.69		17.54	
10 PERCENT EXCEEDS	3440		6910		3200	
50 PERCENT EXCEEDS	830		1060		648	
90 PERCENT EXCEEDS	233		221		126	

KENTUCKY RIVER BASIN

03280700 CUTSHIN CREEK AT WOOTON, KY

LOCATION.--Lat 37°9'54", long 83°18'29", Leslie County, Hydrologic Unit 05100202, on right bank 15 ft downstream 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 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 869.84 ft above sea level. Prior to Dec. 26, 1957, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 16-18, and 20-23. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1957 reached a stage of 19.43 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	58	54	98	96	131	277	189	14	16	7.2	7.1
2	7.4	56	46	95	83	581	209	134	14	13	7.1	7.1
3	7.0	49	42	185	77	484	171	117	13	11	6.9	6.4
4	6.1	41	1140	420	67	327	141	104	12	9.6	6.2	5.9
5	5.5	40	1350	233	68	234	123	90	10	8.4	17	5.3
6	5.1	33	326	215	60	183	157	90	31	7.7	13	6.9
7	4.9	26	173	1460	53	185	183	843	28	7.2	6.2	7.2
8	4.7	22	123	529	54	768	169	585	29	7.1	5.4	5.9
9	4.8	19	96	258	865	948	149	244	18	7.8	4.9	5.3
10	6.5	17	99	169	536	893	354	154	29	15	4.8	4.8
11	6.5	16	82	156	2820	341	529	111	21	7.9	4.4	4.7
12	20	16	68	361	623	223	434	89	14	6.4	4.1	4.7
13	8.6	15	63	258	404	183	1020	69	12	6.7	3.8	4.8
14	6.5	20	63	192	268	182	348	58	11	8.4	9.4	4.4
15	5.9	86	98	129	201	157	779	66	24	41	16	4.0
16	5.9	123	104	98	156	135	604	55	25	83	16	4.0
17	6.1	181	99	86	131	117	295	41	25	58	11	6.1
18	8.0	147	93	76	113	115	202	36	13	22	18	13
19	334	95	83	65	99	94	155	32	10	15	8.4	5.6
20	93	69	78	59	92	86	123	30	8.8	13	6.8	3.8
21	65	50	82	54	353	120	101	27	30	24	83	3.2
22	49	40	68	50	346	124	95	25	84	72	33	3.0
23	34	34	62	47	1640	118	81	23	142	72	17	2.8
24	25	31	56	256	515	111	70	21	47	33	12	3.0
25	21	28	56	566	247	111	62	22	27	22	9.4	3.3
26	17	41	50	470	179	99	55	50	21	20	8.5	4.6
27	14	168	49	250	134	1900	73	37	75	24	7.6	4.2
28	13	157	115	255	119	1530	54	25	35	17	7.4	3.4
29	12	99	169	190	---	471	138	21	27	12	7.4	3.2
30	34	71	134	149	---	278	201	19	22	9.4	7.3	3.1
31	52	---	113	119	---	343	---	17	---	8.1	7.1	---
TOTAL	891.0	1848	5234	7548	10399	11572	7352	3424	871.8	677.7	376.3	150.8
MEAN	28.7	61.6	169	243	371	373	245	110	29.1	21.9	12.1	5.03
MAX	334	181	1350	1460	2820	1900	1020	843	142	83	83	13
MIN	4.7	15	42	47	53	86	54	17	8.8	6.4	3.8	2.8
CFSM	.47	1.00	2.75	3.97	6.06	6.09	4.00	1.80	.47	.36	.20	.08
IN.	.54	1.12	3.18	4.58	6.31	7.02	4.46	2.08	.53	.41	.23	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	29.2	63.9	117	147	175	203	164	112	56.3	33.3	24.9	19.4
MAX	287	309	359	597	371	620	428	449	423	144	107	125
(WY)	1990	1978	1973	1974	1994	1975	1977	1983	1989	1958	1966	1974
MIN	.26	6.64	3.30	6.97	27.0	21.4	16.6	14.0	3.17	2.17	1.16	.73
(WY)	1964	1966	1966	1981	1968	1988	1963	1964	1988	1970	1988	1969

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994	
ANNUAL TOTAL	34077.3		50344.6			
ANNUAL MEAN	93.4		138		95.1	
HIGHEST ANNUAL MEAN					212	1974
LOWEST ANNUAL MEAN					27.6	1988
HIGHEST DAILY MEAN	1350	Dec 5	2820	Feb 11	4890	May 7 1984
LOWEST DAILY MEAN	4.7	Oct 8	2.8	Sep 23	.00	Sep 29 1959
ANNUAL SEVEN-DAY MINIMUM	5.4	Oct 4	3.4	Sep 20	.01	Sep 11 1964
INSTANTANEOUS PEAK FLOW			5860	Feb 11	14200	Mar 12 1963
INSTANTANEOUS PEAK STAGE			9.94	Feb 11	16.23	Mar 12 1963
INSTANTANEOUS LOW FLOW			2.8	Sep 23	.00	Sep 29 1959
ANNUAL RUNOFF (CFSM)	1.52		2.25		1.55	
ANNUAL RUNOFF (INCHES)	20.68		30.55		21.07	
10 PERCENT EXCEEDS	205		337		207	
50 PERCENT EXCEEDS	50		54		33	
90 PERCENT EXCEEDS	9.9		6.0		2.7	

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 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Jan. 27 and 28. Records good except for period of estimated record, which is fair. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	383	918	1320	3570	3840	4910	1470	160	198	162	59
2	199	407	465	699	3310	4000	4520	1790	158	196	161	53
3	162	436	399	1160	2340	4850	4270	1750	158	193	136	51
4	110	575	1240	3130	947	4590	4110	1430	158	193	111	50
5	72	589	3590	2060	520	4190	3960	1160	158	152	609	50
6	62	580	3010	2770	621	4030	3880	488	156	119	442	50
7	63	558	3800	5040	612	3690	4160	1170	193	111	242	52
8	63	539	3980	5120	629	4110	3990	3310	204	72	211	51
9	63	393	3860	3070	2720	5550	3900	3700	179	65	201	48
10	82	273	3740	3320	3620	5610	3010	3860	175	72	169	47
11	83	181	3790	3690	5180	3350	3570	3170	158	71	79	47
12	77	180	3650	4360	6180	3970	4690	1680	155	66	66	47
13	76	275	3430	4450	5980	4110	3480	1370	187	67	63	46
14	105	510	2470	4090	5310	4020	4180	1060	207	112	61	45
15	178	1430	1150	3780	4480	3890	4520	471	198	100	63	58
16	233	880	1080	3550	4150	3930	5380	426	179	330	66	61
17	229	1500	1030	3460	3960	3790	4090	586	135	470	60	63
18	292	2790	1030	3270	4010	3670	3410	574	145	1100	58	75
19	400	760	1050	2930	3880	3650	4000	335	182	548	58	73
20	1100	1820	1010	873	3730	3310	3950	298	163	190	57	65
21	2630	1800	750	363	4140	1520	3790	291	142	131	97	62
22	1570	1670	670	272	4550	1630	3660	242	150	140	108	61
23	740	861	683	216	6640	1160	3400	207	98	136	203	61
24	601	646	681	359	4370	1250	1690	193	97	155	216	61
25	388	400	666	2390	4440	1400	383	160	113	237	117	61
26	342	343	527	4190	4070	1070	211	123	176	363	84	64
27	334	769	464	3850	3940	3630	203	117	343	446	87	66
28	324	2020	420	4490	3840	6000	425	113	321	422	85	63
29	320	2070	526	4070	---	4880	636	123	238	271	81	60
30	309	1360	800	3430	---	4480	2030	160	201	173	56	58
31	257	---	1320	3720	---	4670	---	162	---	165	50	---
TOTAL	11699	26998	52199	89492	101739	113840	98408	31989	5287	7064	4259	1708
MEAN	377	900	1684	2887	3634	3672	3280	1032	176	228	137	56.9
MAX	2630	2790	3980	5120	6640	6000	5380	3860	343	1100	609	75
MIN	62	180	399	216	520	1070	203	113	97	65	50	45
CFSM	.70	1.68	3.14	5.38	6.77	6.84	6.11	1.92	.33	.42	.26	.11
IN.	.81	1.87	3.62	6.20	7.05	7.89	6.82	2.22	.37	.49	.30	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	333	595	1003	1300	1486	1674	1204	877	447	220	182	184
MAX	2225	1715	2826	3320	3634	3672	3280	2762	2599	687	623	784
(WY)	1990	1978	1973	1974	1994	1994	1994	1971	1989	1992	1992	1989
MIN	47.5	148	45.5	56.8	270	241	98.7	57.9	49.1	43.6	45.0	45.9
(WY)	1989	1961	1966	1981	1968	1988	1986	1986	1988	1988	1988	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	314923		544682			
ANNUAL MEAN	863		1492		789	
HIGHEST ANNUAL MEAN					1492	1994
LOWEST ANNUAL MEAN					267	1988
HIGHEST DAILY MEAN	4120	Mar 4	6640	Feb 23	10300	Feb 27 1962
LOWEST DAILY MEAN	48	Jul 2	45	Sep 14	11	Sep 27 1981
ANNUAL SEVEN-DAY MINIMUM	65	Jul 1	47	Sep 8	12	Nov 9 1991
INSTANTANEOUS PEAK FLOW			7380	Feb 23	52700	Jan 30 1957
INSTANTANEOUS PEAK STAGE			22.41	Feb 23	43.33	Jan 30 1957
INSTANTANEOUS LOW FLOW					.10	Oct 12 1953
ANNUAL RUNOFF (CFSM)	1.61		2.78		1.47	
ANNUAL RUNOFF (INCHES)	21.82		37.73		19.96	
10 PERCENT EXCEEDS	3150		4110		2530	
50 PERCENT EXCEEDS	371		488		302	
90 PERCENT EXCEEDS	75		63		67	

KENTUCKY RIVER BASIN

03281040 RED BIRD RIVER NEAR BIG CREEK, KY

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

DRAINAGE AREA.--155 mi^2.

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

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

REMARKS.--Estimated daily discharges: Jan. 16-23, and Aug. 23 to Sept. 30. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	171	229	309	330	319	969	331	33	33	89	13
2	36	185	185	289	255	1640	698	297	30	24	68	19
3	30	193	161	372	244	2250	531	261	29	29	54	18
4	26	176	3410	1980	237	1300	440	260	26	39	45	17
5	23	146	7100	981	221	851	353	231	23	23	73	15
6	20	127	1450	668	206	608	415	205	22	17	102	14
7	19	99	654	7050	172	484	813	809	36	14	58	15
8	19	78	418	3210	156	3390	649	3810	45	11	44	13
9	17	64	308	1040	2830	3720	502	972	34	17	35	12
10	19	61	278	612	2470	3950	1580	518	48	77	30	10
11	19	55	274	447	7370	1370	3080	341	88	31	25	9.2
12	20	51	237	1400	2860	783	1910	269	44	27	21	8.3
13	23	48	218	1060	1750	556	2980	215	31	47	18	7.5
14	27	46	211	701	1000	484	1470	174	25	36	29	6.8
15	27	280	215	428	671	384	1690	180	20	643	30	5.9
16	26	501	226	350	473	323	4230	202	20	253	21	5.2
17	27	864	226	300	365	280	1360	135	26	243	18	9.4
18	41	797	226	270	310	273	784	111	18	106	22	17
19	1040	424	226	230	272	247	542	97	15	66	17	12
20	483	304	226	200	246	224	397	86	13	54	14	9.1
21	262	224	226	180	1070	266	317	77	52	93	149	8.0
22	244	178	222	170	1100	436	280	70	66	247	176	7.2
23	166	149	216	160	6040	381	242	64	64	446	70	6.7
24	122	134	190	421	1920	343	216	55	62	184	45	6.2
25	96	120	181	2140	921	323	188	50	44	97	35	5.8
26	79	120	164	2410	592	276	187	82	115	82	27	8.5
27	67	583	146	1130	416	5800	206	135	403	86	22	7.2
28	58	759	257	1450	339	8620	240	70	133	66	19	6.6
29	51	430	608	1010	---	2040	197	52	66	621	18	6.0
30	55	296	498	640	---	994	352	43	45	359	16	5.5
31	112	---	372	438	---	1090	---	38	---	149	15	---
TOTAL	3301	7663	19558	32046	34836	44005	27818	10240	1676	4220	1405	304.1
MEAN	106	255	631	1034	1244	1420	927	330	55.9	136	45.3	10.1
MAX	1040	864	7100	7050	7370	8620	4230	3810	403	643	176	19
MIN	17	46	146	160	156	224	187	38	13	11	14	5.2
CFSM	.69	1.65	4.07	6.67	8.03	9.16	5.98	2.13	.36	.88	.29	.07
IN.	.79	1.84	4.69	7.69	8.36	10.56	6.68	2.46	.40	1.01	.34	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

MEAN	96.9	240	408	458	527	599	441	320	169	86.7	53.4	42.0
MAX	758	796	1180	1150	1244	1678	954	1176	998	351	192	138
(WY)	1990	1978	1991	1974	1994	1975	1977	1984	1989	1992	1990	1979
MIN	3.93	7.84	37.5	19.0	164	99.6	60.8	41.2	10.3	5.28	2.51	1.81
(WY)	1979	1988	1981	1981	1988	1988	1986	1986	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1973 - 1994	
ANNUAL TOTAL	113687.6		187072.1			
ANNUAL MEAN	311		513		286	
HIGHEST ANNUAL MEAN					513	1994
LOWEST ANNUAL MEAN					92.2	1988
HIGHEST DAILY MEAN	7100	Dec 5	8620	Mar 28	16200	May 7 1984
LOWEST DAILY MEAN	2.8	Aug 1	5.2	Sep 16	.20	Oct 4 1983
ANNUAL SEVEN-DAY MINIMUM	5.0	Jul 26	6.5	Sep 24	.53	Sep 28 1983
INSTANTANEOUS PEAK FLOW			12600	Feb 11	28500	Oct 17 1989
INSTANTANEOUS PEAK STAGE			13.35	Feb 11	21.14	Oct 17 1989
INSTANTANEOUS LOW FLOW					.20	Oct 4 1983
ANNUAL RUNOFF (CFSM)	2.01		3.31		1.84	
ANNUAL RUNOFF (INCHES)	27.29		44.90		25.04	
10 PERCENT EXCEEDS	689		1200		608	
50 PERCENT EXCEEDS	134		181		97	
90 PERCENT EXCEEDS	15		17		7.5	

KENTUCKY RIVER BASIN

03281100 GOOSE CREEK AT MANCHESTER, KY

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

DRAINAGE AREA.--163 mi^2.

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

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

REMARKS.--Estimated daily discharges: Jan. 16-23, and Aug. 23 to Sept. 30. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

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 ft^3/s, 37.3 ft, discharge, 29,800 ft^3/s, and 33.5 ft, discharge, 21,500 ft^3/s, respectively, present site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	177	252	314	324	268	855	268	27	31	124	19
2	52	188	204	282	252	968	620	208	24	23	92	22
3	43	179	180	303	227	2010	487	181	21	19	78	19
4	36	157	1870	1320	192	1020	432	195	19	17	59	16
5	30	142	6850	885	184	662	353	173	18	16	80	15
6	26	122	1540	591	173	491	432	152	20	14	95	15
7	23	98	617	4040	150	395	821	292	37	12	62	14
8	20	81	419	4350	140	2420	680	2550	47	10	48	13
9	20	70	312	883	1260	3200	515	811	49	17	38	12
10	19	64	337	538	2000	3640	1040	437	51	34	32	13
11	17	59	336	415	4680	1130	3010	285	75	26	27	12
12	21	55	295	1170	3810	637	1900	209	41	17	23	9.8
13	21	53	267	962	1230	479	1790	163	29	19	20	8.4
14	20	54	252	628	736	416	1110	132	23	24	20	7.2
15	16	315	278	413	531	335	886	140	19	529	17	6.2
16	16	581	311	300	393	276	3220	152	18	298	21	5.5
17	21	967	301	250	314	229	1130	104	16	569	19	6.0
18	53	1210	283	200	265	217	625	83	15	185	19	8.6
19	1300	548	250	180	227	193	444	69	12	93	17	7.8
20	1610	363	221	160	203	171	323	62	10	59	20	9.2
21	450	250	262	150	966	211	249	55	19	128	130	8.6
22	371	195	231	140	1150	491	216	49	63	1500	147	8.0
23	255	167	219	130	5500	409	183	43	26	838	60	7.7
24	183	149	196	297	2050	340	158	39	38	330	50	7.2
25	141	133	190	1410	729	323	140	35	33	157	38	6.4
26	113	133	176	2260	490	273	125	63	82	99	30	6.0
27	93	722	160	1050	354	4510	135	99	339	74	24	6.8
28	77	1120	270	1500	295	8000	136	56	116	59	20	7.0
29	66	547	666	1030	---	2100	152	41	59	717	18	6.4
30	75	348	530	617	---	780	399	34	37	519	17	5.8
31	119	---	390	434	---	853	---	30	---	234	16	---
TOTAL	5375	9247	18665	27202	28825	37447	22566	7210	1383	6667	1461	308.6
MEAN	173	308	602	877	1029	1208	752	233	46.1	215	47.1	10.3
MAX	1610	1210	6850	4350	5500	8000	3220	2550	339	1500	147	22
MIN	16	53	160	130	140	171	125	30	10	10	16	5.5
CFSM	1.06	1.89	3.69	5.38	6.32	7.41	4.61	1.43	.28	1.32	.29	.06
IN.	1.23	2.11	4.26	6.21	6.58	8.55	5.15	1.65	.32	1.52	.33	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	94.5	208	396	443	500	532	429	297	146	101	54.1	47.2
MAX	600	646	1229	1205	1196	1665	983	1158	975	381	178	185
(WY)	1990	1978	1991	1974	1972	1975	1972	1984	1989	1965	1977	1979
MIN	2.13	11.4	28.3	22.9	70.5	111	50.7	29.3	6.48	2.03	3.72	2.11
(WY)	1970	1988	1966	1981	1968	1969	1986	1965	1988	1966	1988	1965

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1965 - 1994	
ANNUAL TOTAL	118304.6		166356.6			
ANNUAL MEAN	324		456		270	
HIGHEST ANNUAL MEAN					456	1994
LOWEST ANNUAL MEAN					107	1988
HIGHEST DAILY MEAN	6850	Dec 5	8000	Mar 28	13700	May 7 1984
LOWEST DAILY MEAN	3.1	Sep 14	5.5	Sep 16	.00	Oct 8 1980
ANNUAL SEVEN-DAY MINIMUM	6.0	Sep 8	6.5	Sep 24	.16	Oct 4 1980
INSTANTANEOUS PEAK FLOW			8690	Mar 28	19200	May 7 1984
INSTANTANEOUS PEAK STAGE			23.15	Mar 28	32.85	May 7 1984
INSTANTANEOUS LOW FLOW					.00	Oct 8 1980
ANNUAL RUNOFF (CFSM)	1.99		2.80		1.65	
ANNUAL RUNOFF (INCHES)	27.00		37.97		22.47	
10 PERCENT EXCEEDS	706		1120		579	
50 PERCENT EXCEEDS	158		163		92	
90 PERCENT EXCEEDS	19		16		6.2	

KENTUCKY RIVER BASIN

03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY

LOCATION.--Lat 37°27'45", long 83°40'38", Owsley County, Hydrologic Unit 05100203, on right bank 600 ft downstream from Buck Creek, 0.2 mi downstream from bridge on State Highway 30 at Booneville, 0.5 mi downstream from Meadow Creek, and at mile 11.5.

DRAINAGE AREA.--722 mi^2.

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. Datum of gage is 642.49 ft above sea level. See WDR KY-92-1 for history of changes prior to Nov. 27, 1929.

REMARKS.--Estimated daily discharges: Jan. 16-23. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	415	1020	1150	1510	1160	4100	2190	161	237	451	111
2	241	568	793	1030	1140	1950	3110	1460	143	181	310	123
3	196	573	682	1320	978	7470	2380	1140	129	148	247	113
4	163	532	1970	5220	840	5140	2070	1490	117	133	222	90
5	142	490	14900	4720	748	3220	1700	1280	107	157	1030	76
6	124	454	13700	2760	709	2290	1610	1080	101	131	852	76
7	111	404	3500	8530	641	1790	2690	2220	106	101	482	68
8	97	344	1930	18200	613	5910	3000	8060	312	86	320	63
9	89	297	1340	8030	4260	13900	2370	5590	288	75	235	56
10	103	264	1110	2770	8720	16800	2210	2400	252	82	187	58
11	104	241	1140	2010	10400	8850	9230	1480	210	120	155	56
12	130	225	969	3540	17400	3420	11300	1020	222	147	132	51
13	113	217	853	4490	9450	2290	5890	791	193	115	115	45
14	107	310	806	3010	4740	1950	5330	643	146	173	100	38
15	101	1390	899	2050	2880	1610	3920	593	131	381	113	34
16	95	1740	1150	1150	2070	1320	11100	687	117	1070	130	30
17	100	2630	1130	1000	1560	1090	7820	609	96	973	116	33
18	104	5270	1040	920	1250	971	3290	469	88	988	93	49
19	415	2710	940	860	1040	914	2190	394	86	486	88	48
20	4740	1520	833	800	907	791	1590	347	77	320	102	52
21	2300	1000	864	750	2980	930	1180	316	67	250	249	51
22	1240	746	871	700	5330	1320	966	284	153	543	583	49
23	885	622	781	820	14000	1430	831	255	300	1700	519	47
24	654	543	724	1030	15200	1250	708	229	240	1000	300	45
25	518	489	684	4120	4560	1250	627	210	325	525	207	38
26	426	453	664	9750	2520	1170	568	196	282	349	160	34
27	358	1440	611	5820	1770	8170	576	267	1430	399	131	39
28	305	4080	617	6500	1370	23300	648	411	1110	319	115	40
29	262	2670	1460	5320	---	20300	766	281	532	269	98	33
30	241	1530	1920	3030	---	5340	3910	216	340	1210	96	31
31	262	---	1430	2070	---	3730	---	183	---	744	97	---
TOTAL	15043	34167	61331	113470	119586	151026	97680	36791	7861	13412	8035	1677
MEAN	485	1139	1978	3660	4271	4872	3256	1187	262	433	259	55.9
MAX	4740	5270	14900	18200	17400	23300	11300	8060	1430	1700	1030	123
MIN	89	217	611	700	613	791	568	183	67	75	88	30
CFSM	.67	1.58	2.74	5.07	5.92	6.75	4.51	1.64	.36	.60	.36	.08
IN.	.78	1.76	3.16	5.85	6.16	7.78	5.03	1.90	.41	.69	.41	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1994, BY WATER YEAR (WY)

MEAN	221	674	1392	1820	2156	2331	1709	1072	570	406	261	150
MAX	2843	2380	4935	5461	5905	7400	4633	5130	2710	2666	1700	827
(WY)	1990	1974	1991	1974	1956	1975	1972	1984	1989	1941	1942	1989
MIN	.084	.32	12.1	104	178	568	222	119	36.7	3.67	4.56	.68
(WY)	1954	1954	1954	1981	1941	1988	1963	1941	1966	1944	1930	1930

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1925 - 1994	
ANNUAL TOTAL	394564		660079			
ANNUAL MEAN	1081		1808		1063	
HIGHEST ANNUAL MEAN					1808	1994
LOWEST ANNUAL MEAN					413	1988
HIGHEST DAILY MEAN	14900	Dec 5	23300	Mar 28	51300	Jan 30 1957
LOWEST DAILY MEAN	45	Jul 9	30	Sep 16	.00	Oct 11 1953
ANNUAL SEVEN-DAY MINIMUM	62	Jul 5	37	Sep 24	.00	Oct 11 1953
INSTANTANEOUS PEAK FLOW			27200	Mar 28	66100	Jan 30 1957
INSTANTANEOUS PEAK STAGE			32.99	Mar 28	43.40	Jan 30 1957
INSTANTANEOUS LOW FLOW					.00	Oct 11 1953
ANNUAL RUNOFF (CFSM)	1.50		2.50		1.47	
ANNUAL RUNOFF (INCHES)	20.33		34.01		20.00	
10 PERCENT EXCEEDS	2400		4900		2420	
50 PERCENT EXCEEDS	546		682		352	
90 PERCENT EXCEEDS	93		92		26	

KENTUCKY RIVER BASIN

03282000 KENTUCKY RIVER AT LOCK 14, AT HEIDELBERG, KY

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

DRAINAGE AREA.--2,657 mi^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.

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

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

REMARKS.--Estimated daily discharges: Nov. 19-21, Jan. 14-23, and April 15-18. Records good above 1,000 ft^3/s, fair between 1,000 ft^3/s and 150 ft^3/s, and poor below 150 ft^3/s and for periods of estimated record. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	1520	4570	4540	9440	9180	21900	6870	833	928	1190	382
2	1010	2150	3380	3850	7920	10300	18600	5810	748	771	890	422
3	846	2260	2720	4430	6500	22600	14400	5590	685	675	737	437
4	675	2210	5990	16400	4450	24000	12300	6340	634	602	692	378
5	575	2130	28700	19600	3370	17700	10300	5810	597	742	2320	334
6	507	2070	35900	13200	3130	13600	9500	4490	578	590	5310	325
7	472	1830	25600	23000	3050	11100	11900	6420	634	512	2500	311
8	445	1650	12700	40200	2930	21000	13100	22400	890	420	1450	299
9	412	1470	9420	33500	12900	36500	11600	25200	1070	345	1060	291
10	488	1280	8380	18400	27200	46900	9590	15800	1350	360	832	279
11	570	1040	8160	11300	32300	36300	19200	10000	1220	371	622	268
12	615	976	7490	14200	41900	24600	29000	6760	926	467	507	248
13	637	963	6730	19400	38600	15100	21700	4710	855	449	453	243
14	763	1470	5750	16100	29600	12500	24000	3830	792	527	401	212
15	787	5760	4420	14500	18400	11200	18000	3300	779	816	416	203
16	829	6150	4600	10700	13700	10100	34000	2930	720	2990	484	203
17	1340	6930	4880	7900	11300	9080	22000	2920	642	2720	489	210
18	1230	16200	4580	5900	10000	8100	17000	2600	530	3210	691	256
19	1850	11100	4240	4500	9060	7720	13400	2080	568	2010	606	418
20	10200	6940	3820	3500	8270	7050	10900	1780	642	1150	769	489
21	10300	4850	3600	2700	11200	5200	8970	1610	507	764	815	438
22	5970	3720	3610	2500	21000	6770	7870	1410	547	826	1210	403
23	3750	3000	3470	2700	34700	6890	7210	1270	699	2240	2110	332
24	2760	2450	3200	3130	40100	5920	5070	1180	743	1870	1730	292
25	2150	2060	2980	9020	28100	6030	3320	1130	870	1440	1080	264
26	1750	1800	2790	28400	16600	6490	2610	1070	946	1190	731	259
27	1510	4230	2530	25500	12100	19400	2510	982	2200	1370	596	280
28	1330	12500	2380	25300	10100	46100	2910	1440	3010	1220	514	283
29	1210	10900	3220	23300	---	52400	3560	1260	1790	1070	468	278
30	1120	6770	4640	15200	---	34300	9210	1050	1290	1760	407	262
31	1080	---	4860	11500	---	22000	---	922	---	1670	372	---
TOTAL	58501	128379	229310	434370	467920	566130	395630	158964	28295	36075	32452	9299
MEAN	1887	4279	7397	14010	16710	18260	13190	5128	943	1164	1047	310
MAX	10300	16200	35900	40200	41900	52400	34000	25200	3010	3210	5310	489
MIN	412	963	2380	2500	2930	5200	2510	922	507	345	372	203
CFSM	.71	1.61	2.78	5.27	6.28	6.87	4.96	1.93	.35	.44	.39	.12
IN.	.82	1.80	3.21	6.08	6.55	7.93	5.54	2.23	.40	.51	.45	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

MEAN	1571	2955	5535	5745	7617	7552	6084	4539	2354	1169	1032	847
MAX	10380	7006	14850	14010	16710	18260	13190	16010	10380	3320	3006	3680
(WY)	1990	1978	1991	1994	1994	1994	1994	1984	1989	1992	1977	1989
MIN	242	431	582	362	2345	1791	855	910	247	206	154	170
(WY)	1989	1988	1981	1981	1988	1988	1986	1986	1988	1988	1988	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1977 - 1994	
ANNUAL TOTAL	1559361		2545325			
ANNUAL MEAN	4272		6973		3898	
HIGHEST ANNUAL MEAN					6973	1994
LOWEST ANNUAL MEAN					1461	1988
HIGHEST DAILY MEAN	35900	Dec 6	52400	Mar 29	85900	May 8 1984
LOWEST DAILY MEAN	249	Jul 10	203	Sep 15	45	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	366	Aug 28	225	Sep 12	53	Jul 4 1988
INSTANTANEOUS PEAK FLOW			54800	Mar 29	120000	Feb 4 1939
INSTANTANEOUS PEAK STAGE			22.61	Mar 29	35.60	Feb 4 1939
INSTANTANEOUS LOW FLOW					4.0	Oct 20 1930
ANNUAL RUNOFF (CFSM)	1.61		2.62		1.47	
ANNUAL RUNOFF (INCHES)	21.83		35.64		19.93	
10 PERCENT EXCEEDS	10800		21300		9830	
50 PERCENT EXCEEDS	2070		2720		1660	
90 PERCENT EXCEEDS	486		431		289	

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 mi^2.

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

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

REMARKS.--Estimated daily discharges: Jan. 16-23. Records good except for period of estimated record, which is poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	40	108	102	155	126	439	171	10	11	10	19
2	15	35	88	107	120	495	312	114	9.0	7.6	7.4	16
3	13	30	78	425	104	668	249	166	7.8	5.8	5.8	10
4	10	29	956	1240	87	453	216	330	7.0	5.2	6.0	7.5
5	9.0	32	1290	425	83	306	170	221	6.2	4.6	289	5.9
6	7.3	41	448	300	74	223	191	191	6.6	3.4	108	6.3
7	6.2	35	259	2170	64	192	298	649	77	2.9	47	6.6
8	5.4	32	179	835	100	1560	254	967	67	2.3	29	5.7
9	5.2	29	132	364	1710	2490	208	359	29	2.3	21	4.7
10	12	27	148	244	692	1520	253	213	26	2.9	15	3.6
11	20	26	129	188	1800	485	1180	138	17	3.0	11	2.9
12	13	24	107	533	930	308	784	98	13	2.9	9.1	2.4
13	11	25	98	374	740	229	629	74	10	2.5	7.2	2.3
14	9.1	106	104	274	468	209	353	60	8.5	70	5.8	2.0
15	7.4	690	152	171	342	159	656	134	7.5	34	5.9	1.9
16	9.0	309	177	100	253	128	970	93	25	21	8.3	4.2
17	60	481	160	82	199	106	393	64	14	98	7.2	7.4
18	44	419	139	70	160	108	261	51	9.4	29	5.5	18
19	326	231	114	64	133	92	189	43	6.8	17	4.4	13
20	441	145	98	58	114	82	138	38	5.6	12	8.3	8.1
21	315	98	111	54	390	196	106	33	4.7	8.7	92	5.3
22	174	77	90	50	529	265	90	28	3.9	25	63	3.4
23	100	64	84	68	2890	190	76	24	5.1	12	31	2.2
24	69	55	76	156	575	155	67	21	6.7	8.2	19	1.8
25	54	49	75	540	328	128	59	36	9.7	5.9	14	1.3
26	44	58	71	693	226	104	56	35	12	4.8	11	1.3
27	36	511	66	539	164	2240	68	25	90	55	27	1.2
28	31	446	94	1230	135	2060	63	20	38	37	14	.99
29	27	236	134	520	---	594	72	17	24	19	9.7	.77
30	27	150	122	306	---	339	321	14	16	16	8.6	.56
31	34	---	111	214	---	521	---	12	---	14	8.2	---
TOTAL	1951.6	4530	5998	12496	13565	16731	9121	4439	572.5	543.0	908.4	166.32
MEAN	63.0	151	193	403	484	540	304	143	19.1	17.5	29.3	5.54
MAX	441	690	1290	2170	2890	2490	1180	967	90	98	289	19
MIN	5.2	24	66	50	64	82	56	12	3.9	2.3	4.4	.56
CFSM	.81	1.95	2.50	5.21	6.27	6.98	3.93	1.85	.25	.23	.38	.07
IN.	.94	2.18	2.89	6.01	6.53	8.05	4.39	2.14	.28	.26	.44	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

MEAN	36.0	105	181	271	335	428	226	84.7	34.0	13.0	28.6	18.3
MAX	63.0	151	193	403	484	540	304	143	49.0	17.5	29.3	31.0
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1993	1994	1994	1993
MIN	8.96	59.4	168	139	186	317	147	26.1	19.1	8.58	27.8	5.54
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1994	1993	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1993 - 1994	
ANNUAL TOTAL	40582.9		71021.82			
ANNUAL MEAN	111		195		146	
HIGHEST ANNUAL MEAN					195	1994
LOWEST ANNUAL MEAN					96.9	1993
HIGHEST DAILY MEAN	1370	Mar 4	2890	Feb 23	2890	Feb 23 1994
LOWEST DAILY MEAN	1.2	Aug 1	.56	Sep 30	.56	Sep 30 1994
ANNUAL SEVEN-DAY MINIMUM	1.5	Jul 26	1.1	Sep 24	1.1	Sep 24 1994
INSTANTANEOUS PEAK FLOW			5810	Feb 23	5810	Feb 23 1994
INSTANTANEOUS PEAK STAGE			12.77	Feb 23	12.77	Feb 23 1994
INSTANTANEOUS LOW FLOW			.50	Sep 30	.50	Sep 30 1994
ANNUAL RUNOFF (CFSM)	1.44		2.52		1.89	
ANNUAL RUNOFF (INCHES)	19.53		34.18		25.62	
10 PERCENT EXCEEDS	274		501		358	
50 PERCENT EXCEEDS	54		67		49	
90 PERCENT EXCEEDS	4.9		5.6		5.2	

KENTUCKY RIVER BASIN

03282500 RED RIVER NEAR HAZEL GREEN, KY

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

DRAINAGE AREA.--65.8 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Jan. 16-23 and Feb. 8. Records fair except for discharges below 10 ft^3/s and periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	31	104	68	189	132	291	138	13	1.2	3.5	1.9
2	8.0	29	82	69	140	447	236	72	4.9	1.2	3.2	1.6
3	7.1	27	71	71	122	530	192	74	3.5	.80	3.0	1.6
4	5.9	24	391	284	99	374	167	195	5.5	1.5	2.9	1.2
5	4.9	48	1180	619	85	265	143	164	13	.66	142	.88
6	4.3	44	550	325	80	200	161	122	3.7	.65	72	.99
7	4.0	32	275	303	68	286	219	447	7.1	.60	23	1.3
8	3.5	23	186	1580	130	1310	195	966	13	.58	12	1.4
9	3.5	19	136	951	1250	1600	172	379	13	.57	7.7	1.6
10	10	16	153	332	784	1680	172	228	17	4.6	5.4	2.6
11	12	15	166	221	907	489	186	149	7.7	3.7	3.9	4.1
12	8.5	13	140	198	757	300	236	97	5.4	.59	1.9	3.9
13	8.5	12	122	401	586	225	308	53	6.5	1.6	1.4	3.1
14	6.7	72	109	317	433	212	228	53	8.2	26	11	3.1
15	5.9	398	148	233	340	170	311	78	11	138	27	2.8
16	10	225	181	160	262	138	752	102	12	80	5.5	3.1
17	152	398	158	110	212	114	363	74	11	28	4.2	2.7
18	122	436	134	90	175	117	239	48	5.5	4.9	2.6	4.0
19	76	204	116	80	146	97	196	41	5.0	1.8	17	1.7
20	569	124	94	70	124	85	118	38	5.1	1.5	5.2	.92
21	300	78	101	60	253	212	91	20	11	.73	7.8	1.1
22	186	56	105	59	350	265	76	17	11	155	9.8	1.2
23	102	44	91	72	1180	198	59	22	10	38	5.2	1.3
24	64	38	83	92	611	158	49	32	9.6	19	2.9	1.7
25	46	32	77	259	328	172	41	13	2.2	13	3.0	3.0
26	32	35	76	708	230	143	34	28	2.8	9.0	4.9	1.4
27	26	350	65	602	170	1180	33	25	16	21	5.2	.73
28	20	428	60	719	138	1490	39	11	8.5	33	5.3	.91
29	16	219	63	916	---	675	26	12	4.3	8.5	5.1	.92
30	16	143	59	361	---	328	174	9.6	1.4	3.7	2.0	.67
31	21	---	57	253	---	319	---	12	---	3.5	1.3	---
TOTAL	1860.4	3613	5333	10583	10149	13911	5507	3719.6	247.9	602.88	406.9	57.42
MEAN	60.0	120	172	341	362	449	184	120	8.26	19.4	13.1	1.91
MAX	569	436	1180	1580	1250	1680	752	966	17	155	142	4.1
MIN	3.5	12	57	59	68	85	26	9.6	1.4	.57	1.3	.67
CFSM	.91	1.83	2.61	5.19	5.51	6.82	2.79	1.82	.13	.30	.20	.03
IN.	1.05	2.04	3.02	5.98	5.74	7.86	3.11	2.10	.14	.34	.23	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

MEAN	17.6	53.6	120	130	184	195	158	92.4	36.3	30.7	26.3	15.3
MAX	138	227	555	357	555	523	472	318	163	157	141	180
(WY)	1990	1986	1979	1974	1989	1955	1972	1983	1974	1981	1974	1974
MIN	.22	.54	2.76	17.5	27.6	49.1	16.6	13.9	1.19	1.52	.27	.17
(WY)	1964	1956	1964	1981	1968	1969	1986	1986	1988	1970	1957	1955

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1954 - 1994	
ANNUAL TOTAL	32225.58		55991.10			
ANNUAL MEAN	88.3		153		88.1	
HIGHEST ANNUAL MEAN					153	1994
LOWEST ANNUAL MEAN					39.6	1969
HIGHEST DAILY MEAN	1180	Dec 5	1680	Mar 10	6170	Dec 9 1978
LOWEST DAILY MEAN	.74	Jul 26	.57	Jul 9	.00	Sep 14 1954
ANNUAL SEVEN-DAY MINIMUM	1.1	Jul 20	.77	Jul 3	.00	Sep 12 1955
INSTANTANEOUS PEAK FLOW			2230	Mar 10	9080	Feb 27 1962
INSTANTANEOUS PEAK STAGE			8.61	Mar 10	22.12	Feb 27 1962
ANNUAL RUNOFF (CFSM)	1.34		2.33		1.34	
ANNUAL RUNOFF (INCHES)	18.22		31.65		18.19	
10 PERCENT EXCEEDS	219		384		200	
50 PERCENT EXCEEDS	34		59		30	
90 PERCENT EXCEEDS	3.4		1.9		1.5	

KENTUCKY RIVER BASIN

03283500 RED RIVER AT CLAY CITY, KY

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

DRAINAGE AREA.--362 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Jan. 16-23, Feb. 26 to Mar. 3, and Apr. 15-18. 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. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	163	545	272	834	800	2140	641	84	46	55	30
2	49	195	423	335	612	1200	1530	482	76	38	45	35
3	41	166	358	608	548	1800	1200	411	67	33	40	34
4	39	148	1340	2650	472	2190	1090	621	62	43	36	27
5	36	142	4580	2280	429	1510	883	660	56	67	120	23
6	32	220	5460	1330	401	1060	927	535	53	40	390	21
7	29	301	1950	3440	353	897	1280	1900	51	30	239	23
8	27	204	1050	5820	390	3570	1100	4710	82	26	132	26
9	25	157	771	5250	3900	7980	934	4470	127	23	89	24
10	29	134	947	1340	6160	11300	980	1350	90	23	67	22
11	40	119	1110	931	5430	8450	1180	828	80	27	53	20
12	57	106	800	2190	5430	3170	1410	589	72	43	43	18
13	46	149	608	2270	4740	1470	1980	462	59	38	36	17
14	40	507	552	1630	2940	1320	1550	375	51	35	31	17
15	36	2140	744	1060	2010	1060	2100	593	46	208	39	16
16	41	1800	759	640	1570	840	4000	621	44	751	108	15
17	705	1630	628	490	1240	690	2300	449	40	360	75	47
18	1010	2780	539	400	1030	650	1500	346	45	171	49	100
19	523	1510	480	315	874	644	947	290	41	104	39	78
20	1380	948	418	280	760	544	716	253	36	79	44	47
21	1830	632	501	240	988	532	559	227	32	65	99	32
22	1050	445	478	200	1560	874	471	201	32	268	129	26
23	612	346	403	300	4640	857	417	177	35	347	93	23
24	384	287	363	612	5900	683	359	155	52	154	64	21
25	265	249	339	1700	2950	589	322	137	55	94	48	20
26	196	221	329	3950	2200	541	291	138	73	66	38	18
27	155	691	294	3220	1600	3620	286	144	77	68	32	17
28	128	2400	292	4000	1100	6990	348	140	132	156	29	17
29	109	1410	308	5290	---	7780	382	119	99	154	28	16
30	96	810	282	2240	---	3460	751	104	62	93	29	16
31	103	---	270	1170	---	1960	---	92	---	66	32	---
TOTAL	9174	21010	27921	56453	61061	79031	33933	22220	1911	3716	2351	846
MEAN	296	700	901	1821	2181	2549	1131	717	63.7	120	75.8	28.2
MAX	1830	2780	5460	5820	6160	11300	4000	4710	132	751	390	100
MIN	25	106	270	200	353	532	286	92	32	23	28	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

MEAN	88.4	281	631	776	1032	1071	838	495	263	264	187	111
MAX	928	1220	3036	2634	3564	3048	2406	1914	1199	1845	1179	1185
(WY)	1990	1987	1979	1950	1989	1955	1972	1983	1950	1938	1938	1974
MIN	4.41	9.75	19.7	43.2	127	258	110	54.6	23.9	5.01	18.2	6.15
(WY)	1964	1954	1954	1931	1954	1969	1986	1941	1988	1944	1957	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1931 - 1994	
ANNUAL TOTAL	231178		319627			
ANNUAL MEAN	633		876		495	
HIGHEST ANNUAL MEAN					884	1989
LOWEST ANNUAL MEAN					158	1941
HIGHEST DAILY MEAN	7470	Feb 22	11300	Mar 10	26100	Dec 9 1978
LOWEST DAILY MEAN	17	Jul 25	15	Sep 16	1.2	Aug 10 1944
ANNUAL SEVEN-DAY MINIMUM	25	Jul 20	18	Sep 10	2.0	Oct 2 1930
INSTANTANEOUS PEAK FLOW			11800	Mar 10	28800	Dec 9 1978
INSTANTANEOUS PEAK STAGE			19.29	Mar 10	26.75	Dec 9 1978
INSTANTANEOUS LOW FLOW			14	Sep 16	1.2	Aug 10 1944
10 PERCENT EXCEEDS	1590		2250		1180	
50 PERCENT EXCEEDS	282		315		181	
90 PERCENT EXCEEDS	43		32		22	

KENTUCKY RIVER BASIN

03284000 KENTUCKY RIVER AT LOCK 10, NEAR WINCHESTER, KY

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

DRAINAGE AREA.--3,955 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 557.37 ft above sea level (Ohio River datum). Feb. 2, 1940 to Aug. 10, 1943, water-stage recorder 1.1 mi upstream at different datum. Aug. 11, 1943 to June 12, 1978, nonrecording gage at present site and datum. Auxiliary nonrecording gage at lock 9, at Valley View, 18.9 mi downstream, discontinued.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 18, Dec. 12-29, Jan. 19-27, Feb. 12-18, Mar. 11-15, Apr. 12-20, May 7-11, and 24 to June 8. Records good above 1,000 ft^3/s and fair below and for periods of estimated record. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section. Flow regulated since January 1976 by Carr Fork Lake (station 03277446), since December 1960 by Buckhorn Lake (station 03280800).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	1790	7420	5970	14700	11500	33600	11900	1800	1490	1800	580
2	1490	2290	5440	5810	12100	12700	25700	8650	1400	1150	1400	573
3	1210	2400	4240	6790	10400	22600	20200	7730	1000	995	1110	588
4	1020	2610	9020	17800	8480	30800	17000	8740	850	983	937	576
5	846	2610	33400	26800	6540	26000	14400	9040	810	872	2770	543
6	715	2370	43300	21500	5510	18700	12900	7740	890	862	5480	499
7	612	2140	43800	28600	5140	14900	15000	9370	990	716	5120	440
8	532	1790	27200	42600	5010	28900	16200	22400	1300	580	2580	402
9	484	1700	13100	45400	20900	49000	15500	33100	1720	462	1770	365
10	485	1600	12100	41400	37500	60200	14400	27900	1790	425	1380	316
11	488	1500	11800	19000	43500	61000	16800	15900	1790	397	1100	266
12	618	1400	12000	18900	46000	51000	30200	11000	1480	408	884	260
13	716	1400	11000	23100	48000	35000	34700	7750	1190	511	730	219
14	773	1700	9500	21700	43000	23000	27700	6070	1050	595	633	207
15	839	6400	8900	16700	33000	15000	29400	6170	993	841	593	217
16	972	10500	8100	12500	24000	13200	39200	6380	945	1810	585	202
17	2390	15000	8000	10400	18000	11700	41700	4980	885	3690	686	583
18	3230	18000	7900	9530	13000	10500	33900	4390	811	3160	696	955
19	2690	18800	7300	7870	11700	9800	19700	3650	713	2940	803	679
20	9590	10800	6970	6700	10500	9070	15200	3060	731	2020	832	643
21	14900	7890	6270	5000	12000	7950	12300	2730	864	1470	1310	701
22	10800	6220	6100	4100	20000	7990	10400	2410	998	1160	1630	679
23	6830	5040	5300	3700	41700	9470	9250	2340	953	1690	1890	598
24	4490	3970	4800	5400	45900	8440	8040	2200	963	2320	2310	485
25	3460	3280	4300	10500	47000	7510	5940	2000	1050	1960	1890	498
26	2780	2810	4000	29000	34300	8000	4240	1900	1190	1640	1380	439
27	2370	3890	3400	35000	17200	25000	3920	1800	1580	1730	1040	411
28	2140	12500	3300	41400	13300	45100	4200	1750	3140	1900	855	435
29	1870	16900	3350	40700	---	50200	4960	1700	2890	1710	773	418
30	1560	13300	5030	30500	---	52700	9790	1700	1980	1800	691	404
31	1460	---	5910	18700	---	47000	---	1800	---	1990	610	---
TOTAL	84020	182600	342250	613070	648380	783930	546440	238250	38746	44277	46268	14181
MEAN	2710	6087	11040	19780	23160	25290	18210	7685	1292	1428	1493	473
MAX	14900	18800	43800	45400	48000	61000	41700	33100	3140	3690	5480	955
MIN	484	1400	3300	3700	5010	7510	3920	1700	713	397	585	202

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	1633	3513	7514	8715	10380	12210	9622	6276	3058	1711	1570	1267
MAX	12850	10270	23400	25490	25060	27650	26100	19600	13380	4640	4916	6676
(WY)	1990	1987	1979	1974	1989	1975	1972	1984	1989	1992	1992	1974
MIN	177	372	416	446	2011	3125	1177	1031	265	292	258	175
(WY)	1970	1964	1966	1981	1968	1988	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	2264885		3582412			
ANNUAL MEAN	6205		9815		5600	
HIGHEST ANNUAL MEAN					9815	1994
LOWEST ANNUAL MEAN					2228	1988
HIGHEST DAILY MEAN	43800	Dec 7	61000	Mar 11	99100	Dec 10 1978
LOWEST DAILY MEAN	373	Sep 15	202	Sep 16	116	Oct 20 1980
ANNUAL SEVEN-DAY MINIMUM	552	Sep 10	241	Sep 10	122	Oct 16 1980
INSTANTANEOUS PEAK FLOW			61800	Mar 11	101000	Dec 10 1978
INSTANTANEOUS PEAK STAGE			26.28	Mar 11	40.15	Dec 10 1978
10 PERCENT EXCEEDS	15800		30300		14200	
50 PERCENT EXCEEDS	3090		4000		2400	
90 PERCENT EXCEEDS	718		594		342	

KENTUCKY RIVER BASIN

03285000 DIX RIVER NEAR DANVILLE, KY

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

DRAINAGE AREA.--318 mi^2.

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

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.10 ft above sea level. Prior to Dec. 16, 1942, nonrecording gage at same site and datum. May to August 1905, nonrecording gage at site 6 mi downstream at different datum. Auxiliary nonrecording gage at site 2 mi downstream from base gage read during periods of possible backwater.

REMARKS.--Estimated daily discharges: Nov. 1, 2, 6 to Dec. 1, 28, 29, Jan. 14-24, Feb. 11, 12, Mar. 2, 8-10, Apr. 10-12, 14, 15, and 28. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	150	300	287	607	435	1660	653	32	25	65	11
2	4.7	76	237	364	465	900	982	386	27	17	37	11
3	6.0	56	216	903	412	2390	740	287	23	13	23	13
4	5.9	49	2430	2410	346	2160	742	497	22	11	18	13
5	4.1	45	6680	1260	306	1350	595	430	19	8.3	495	12
6	3.2	240	2270	863	282	873	601	316	17	7.2	622	12
7	2.9	150	974	4500	240	667	1280	1280	17	6.4	217	12
8	2.5	120	666	3280	226	5800	845	2000	45	9.9	111	11
9	2.2	110	501	1180	4010	16400	630	945	215	9.5	69	9.5
10	2.0	90	893	750	3430	17800	860	547	228	7.5	46	8.4
11	2.0	79	1250	593	5400	4620	1100	380	111	6.4	34	7.3
12	4.0	68	725	2120	4400	2350	3000	282	66	6.0	26	6.5
13	3.2	60	537	1410	3690	1490	1880	226	44	6.0	21	6.4
14	5.4	240	460	800	1890	1030	1100	183	32	6.2	17	6.2
15	6.9	1900	561	600	1210	818	1400	612	25	12	15	6.1
16	11	1600	760	430	885	602	6160	754	21	276	12	6.0
17	520	1500	580	340	681	469	1770	393	18	67	12	5.8
18	560	2500	481	270	544	414	905	260	16	54	11	8.4
19	240	1500	410	220	447	371	650	203	13	35	11	105
20	1000	920	352	180	391	306	490	167	11	24	12	53
21	630	600	420	150	966	293	400	138	9.7	17	24	28
22	330	430	350	130	1340	639	316	116	8.5	15	189	16
23	210	320	310	300	9530	428	260	98	8.3	37	146	11
24	160	250	318	730	4270	316	224	83	8.5	43	70	8.0
25	120	190	293	2720	1470	269	190	67	9.9	25	44	6.4
26	93	150	263	3110	874	230	172	64	13	17	30	6.2
27	73	350	242	2340	619	4690	160	76	46	26	23	6.2
28	59	2500	230	5680	496	7210	180	68	74	128	18	6.2
29	50	1000	240	2420	---	2870	238	55	61	79	15	12
30	45	500	260	1170	---	1350	773	47	42	259	13	11
31	43	---	302	807	---	1840	---	39	---	140	12	---
TOTAL	4203.7	17743	24511	42317	49427	81380	30303	11652	1282.9	1393.4	2458	434.6
MEAN	136	591	791	1365	1765	2625	1010	376	42.8	44.9	79.3	14.5
MAX	1000	2500	6680	5680	9530	17800	6160	2000	228	276	622	105
MIN	2.0	45	216	130	226	230	160	39	8.3	6.0	11	5.8
CFSM	.43	1.86	2.49	4.29	5.55	8.26	3.18	1.18	.13	.14	.25	.05
IN.	.49	2.08	2.87	4.95	5.78	9.52	3.54	1.36	.15	.16	.29	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

MEAN	101	312	690	788	1011	995	684	438	238	153	95.1	163
MAX	1323	1471	3656	3140	4129	2625	2736	2618	933	926	527	3430
(WY)	1980	1987	1979	1950	1989	1994	1972	1983	1981	1958	1958	1979
MIN	.000	.030	.69	17.0	72.1	174	57.1	51.8	8.83	.31	.93	.013
(WY)	1953	1954	1954	1981	1954	1983	1986	1976	1988	1944	1952	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1943 - 1994	
ANNUAL TOTAL	142660.4		267105.6			
ANNUAL MEAN	391		732		470	
HIGHEST ANNUAL MEAN					1184	1979
LOWEST ANNUAL MEAN					119	1954
HIGHEST DAILY MEAN	6680	Dec 5	17800	Mar 10	27100	Dec 8 1978
LOWEST DAILY MEAN	2.0	Oct 10	2.0	Oct 10	.00	Jul 21 1944
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 6	2.7	Oct 6	.00	Jul 29 1944
INSTANTANEOUS PEAK FLOW			28100	Mar 9	44400	Dec 9 1978
INSTANTANEOUS PEAK STAGE			14.95	Mar 9	21.81	Dec 9 1978
ANNUAL RUNOFF (CFSM)	1.23		2.30		1.48	
ANNUAL RUNOFF (INCHES)	16.69		31.25		20.07	
10 PERCENT EXCEEDS	935		1880		1070	
50 PERCENT EXCEEDS	155		228		121	
90 PERCENT EXCEEDS	6.0		8.4		2.7	

KENTUCKY RIVER BASIN

03285200 CLARKS RUN NEAR DANVILLE, KY

LOCATION.--Lat 37°38'31", long 84°43'17", Boyle County, Hydrologic Unit 05100205, on downstream side of bridge on County Highway 1805, 0.4 mi north of State Highway 52, 1.8 mi southeast of Danville, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--26.4 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 803.09 above sea level.

REMARKS.--No estimated daily discharges. Records fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	11	13	26	21	75	62	15	7.4	3.4	3.0	4.0
2	3.6	20	12	22	17	74	46	13	5.7	3.4	11	4.0
3	2.7	8.9	11	21	16	112	34	13	5.1	3.1	5.4	24
4	3.2	6.2	11	92	15	377	27	44	31	2.5	3.9	26
5	6.2	18	10	190	14	201	30	19	17	2.3	4.0	9.6
6	5.0	14	9.1	84	14	130	33	14	8.9	2.4	12	6.8
7	3.6	8.2	9.3	60	14	96	26	13	7.0	2.2	7.3	6.2
8	3.5	7.0	9.2	58	13	78	24	11	5.8	2.1	4.8	6.1
9	9.6	5.9	9.0	48	12	56	53	13	4.7	2.0	3.8	5.7
10	4.8	5.2	25	43	12	50	104	8.7	8.4	1.8	3.5	5.3
11	3.9	5.1	41	51	12	39	74	7.9	44	1.9	15	4.5
12	4.4	36	26	99	32	34	58	11	162	2.6	10	3.9
13	4.0	32	23	113	22	34	51	11	57	2.8	28	4.0
14	4.5	17	21	79	21	31	45	8.6	54	11	12	4.0
15	4.9	13	18	62	21	32	39	7.3	180	30	7.9	6.2
16	5.9	12	17	53	184	48	38	7.2	45	21	8.2	8.5
17	6.8	11	42	42	97	227	37	8.3	29	22	7.1	6.3
18	6.2	10	31	31	63	111	27	15	20	120	6.8	5.4
19	5.8	9.7	26	27	52	83	26	14	16	47	5.8	4.9
20	6.0	11	103	24	46	71	24	8.9	14	18	5.4	4.7
21	4.5	12	61	77	880	63	31	8.2	13	11	5.1	4.6
22	3.7	21	46	58	232	55	31	6.9	12	8.2	5.3	4.2
23	3.6	23	45	46	114	268	25	5.0	9.7	6.4	5.0	5.0
24	4.7	38	34	57	78	140	24	5.3	7.1	6.4	7.2	5.8
25	4.8	58	32	49	63	85	26	5.8	5.2	8.1	9.1	12
26	6.4	35	29	42	67	68	51	6.6	5.2	5.2	5.1	10
27	8.5	27	24	37	62	52	26	4.3	3.9	5.1	4.6	6.9
28	7.8	22	29	31	73	46	21	4.8	3.2	4.3	4.7	6.2
29	6.3	17	28	26	---	38	18	3.1	3.6	4.0	3.8	5.5
30	8.3	15	26	23	---	32	16	3.3	4.0	3.4	3.9	4.6
31	10	---	26	21	---	38	---	8.4	---	3.3	3.8	---
TOTAL	167.4	529.2	846.6	1692	2267	2844	1127	324.6	788.9	366.9	222.5	214.9
MEAN	5.40	17.6	27.3	54.6	81.0	91.7	37.6	10.5	26.3	11.8	7.18	7.16
MAX	10	58	103	190	880	377	104	44	180	120	28	26
MIN	2.7	5.1	9.0	21	12	31	16	3.1	3.2	1.8	3.0	3.9

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

MEAN	5.40	17.6	27.3	54.6	81.0	91.7	37.6	10.5	26.3	11.8	7.18	7.16
MAX	5.40	17.6	27.3	54.6	81.0	91.7	37.6	10.5	26.3	11.8	7.18	7.16
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	5.40	17.6	27.3	54.6	81.0	91.7	37.6	10.5	26.3	11.8	7.18	7.16
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993

SUMMARY STATISTICS FOR 1993 WATER YEAR

ANNUAL TOTAL	11391.0	
ANNUAL MEAN	31.2	
HIGHEST DAILY MEAN	880	Feb 21
LOWEST DAILY MEAN	1.8	Jul 10
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 5
INSTANTANEOUS PEAK FLOW	2980	Feb 21
INSTANTANEOUS PEAK STAGE	6.15	Feb 21
INSTANTANEOUS LOW FLOW	.83	Jul 12
10 PERCENT EXCEEDS	67	
50 PERCENT EXCEEDS	13	
90 PERCENT EXCEEDS	4.0	

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	8.6	28	25	55	63	101	108	9.7	6.0	11	4.5
2	3.4	7.6	23	48	42	134	81	60	8.9	5.2	8.7	5.7
3	3.5	7.1	24	119	35	150	73	55	11	4.8	5.9	5.2
4	3.5	6.7	316	146	32	137	62	57	7.1	4.7	68	3.9
5	3.5	7.0	283	89	30	100	52	46	6.2	4.5	246	3.9
6	3.0	6.8	114	97	26	80	59	44	6.3	4.4	47	4.8
7	3.1	6.3	72	537	22	76	63	187	7.2	3.9	27	4.6
8	3.0	6.1	53	141	25	639	55	149	8.1	3.6	20	4.0
9	3.4	6.1	42	81	457	2570	49	87	198	4.5	15	2.2
10	8.5	6.6	90	58	159	601	84	62	31	3.3	10	1.9
11	5.2	6.0	68	52	440	197	210	45	16	3.1	9.7	2.5
12	5.5	5.7	52	150	292	127	143	37	9.8	3.2	10	2.8
13	4.8	19	42	88	272	98	92	33	7.6	12	6.6	4.1
14	5.4	89	41	72	137	96	67	31	6.8	31	6.5	4.0
15	5.1	147	62	55	98	71	542	131	5.7	20	7.5	3.8
16	15	51	59	54	71	58	282	73	4.3	22	5.1	4.1
17	91	115	51	38	56	48	126	48	5.2	16	4.6	16
18	24	72	45	33	47	49	86	39	5.2	14	4.4	12
19	46	44	38	30	40	41	66	33	3.9	12	4.2	7.0
20	157	31	35	27	45	37	51	31	3.3	11	3.8	5.0
21	32	24	42	25	115	39	43	27	5.2	12	117	4.4
22	19	19	34	23	321	35	39	22	3.7	38	22	3.8
23	14	17	32	26	870	32	35	21	6.0	40	15	3.5
24	12	16	29	168	166	30	33	19	9.1	19	12	2.9
25	11	15	28	268	110	28	32	17	7.4	15	10	2.6
26	9.1	15	26	166	83	26	26	22	25	14	10	3.0
27	8.1	159	24	315	69	827	54	18	33	145	9.0	6.8
28	7.8	77	28	641	61	570	33	15	11	24	4.8	5.6
29	7.6	46	27	177	---	166	80	12	8.1	17	7.6	4.1
30	8.3	35	29	105	---	105	93	11	6.1	15	6.0	3.2
31	11	---	26	74	---	149	---	11	---	11	4.7	---
TOTAL	536.7	1071.6	1863	3928	4176	7379	2812	1551	475.9	539.2	739.1	141.9
MEAN	17.3	35.7	60.1	127	149	238	93.7	50.0	15.9	17.4	23.8	4.73
MAX	157	159	316	641	870	2570	542	187	198	145	246	16
MIN	2.9	5.7	23	23	22	26	26	11	3.3	3.1	3.8	1.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

MEAN	11.4	26.7	43.7	90.6	115	165	65.6	30.3	21.1	14.6	15.5	5.95
MAX	17.3	35.7	60.1	127	149	238	93.7	50.0	26.3	17.4	23.8	7.16
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1993	1994	1994	1993
MIN	5.40	17.6	27.3	54.6	81.0	91.7	37.6	10.5	15.9	11.8	7.18	4.73
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1994	1993	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1993 - 1994	
ANNUAL TOTAL	13319.1		25213.4			
ANNUAL MEAN	36.5		69.1		50.1	
HIGHEST ANNUAL MEAN					69.1	1994
LOWEST ANNUAL MEAN					31.2	1993
HIGHEST DAILY MEAN	880	Feb 21	2570	Mar 9	2570	Mar 9 1994
LOWEST DAILY MEAN	1.8	Jul 10	1.9	Sep 10	1.8	Jul 10 1993
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 5	3.0	Sep 9	2.1	Jul 5 1993
INSTANTANEOUS PEAK FLOW			4120	Mar 9	4120	Mar 9 1994
INSTANTANEOUS PEAK STAGE			7.13	Mar 9	7.13	Mar 9 1994
INSTANTANEOUS LOW FLOW			1.9	Sep 10	1.9	Sep 10 1994
10 PERCENT EXCEEDS	78		148		105	
50 PERCENT EXCEEDS	17		27		20	
90 PERCENT EXCEEDS	3.9		4.2		4.0	

KENTUCKY RIVER BASIN

03287000 KENTUCKY RIVER AT LOCK 6, NEAR SALVISA, KY

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

DRAINAGE AREA.--5,102 mi^2, of which about 101 mi^2 does not contribute directly to surface runoff.

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

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

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

REMARKS.--Estimated daily discharges: Jan. 8-18, 25 to Feb. 16, Mar. 8-14, and July 16 to Sept. 30. Records good above 1000 ft^3/s and fair below and for periods of estimated record. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	1760	10200	6670	17000	14600	51300	12800	2150	1770	2000	540
2	2190	1950	7610	6160	14000	13500	34900	12200	1850	1490	1800	560
3	1570	2080	5870	7380	12000	18400	25400	9810	1190	1000	1400	480
4	1100	2860	6250	12100	10000	28600	20400	9220	1080	789	860	490
5	911	2780	24900	23300	8300	32100	17500	9230	957	601	2000	500
6	637	2730	38900	26800	7100	25600	15300	8720	962	649	4600	470
7	795	2670	43100	30300	6500	19300	15800	8190	1150	817	5500	510
8	515	2600	39800	40000	6300	18000	17500	18900	1210	769	4900	410
9	416	2390	22500	44000	15000	50000	17700	29200	1560	673	2900	390
10	699	2140	15000	45000	26000	70000	16700	32500	1750	638	1900	390
11	619	1810	16200	31000	37000	71000	17400	23000	1530	570	1400	330
12	499	1670	14400	20000	43000	69000	25900	14700	1850	500	1100	290
13	559	1640	12700	19000	51000	53000	35000	10800	1380	584	870	310
14	619	1670	11300	24200	52000	35000	32800	7440	1360	896	720	330
15	558	8080	10500	19000	41000	19700	28000	6440	1250	563	620	420
16	634	13200	10300	14000	29000	16600	46700	7510	1430	1000	550	900
17	1050	12800	9720	11000	21100	14500	47300	6650	1320	1500	500	1200
18	2770	17100	9480	12000	16500	13100	42900	5370	1120	2500	400	1300
19	3880	21000	9030	10700	14900	12000	29500	4620	836	2400	550	840
20	5110	17500	7840	9490	13500	11300	18700	3900	564	2200	900	1700
21	12800	10700	6590	7690	13300	10600	14700	3220	901	1500	1500	1600
22	13400	7960	7120	5760	17100	9610	12600	2830	893	1200	2100	1550
23	10000	6610	6640	4380	38700	10000	11500	2790	1450	1100	2000	1500
24	6580	5420	5770	4550	53300	10700	10400	2980	1090	1150	1800	1400
25	4650	4210	5310	11000	58000	9860	9190	2550	888	1750	1850	740
26	3690	3490	5060	30000	52100	9230	7330	2160	796	1800	1750	400
27	3160	4080	4990	39000	29800	18000	5830	1750	974	1600	1500	350
28	2430	8230	4430	48000	17500	44600	5630	1680	1580	1700	950	360
29	1950	15000	4420	49000	---	56400	5520	1600	2680	2000	810	340
30	2080	14700	4560	35000	---	56800	7220	1870	2610	2200	730	310
31	1990	---	5480	25000	---	57800	---	2110	---	2100	670	---
TOTAL	91071	200830	385970	671480	721000	898900	646620	266740	40361	40009	51130	20910
MEAN	2938	6694	12450	21660	25750	29000	21550	8605	1345	1291	1649	697
MAX	13400	21000	43100	49000	58000	71000	51300	32500	2680	2500	5500	1700
MIN	416	1640	4420	4380	6300	9230	5520	1600	564	500	400	290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	2033	4290	9508	10920	12860	15150	11900	7831	3906	2088	2024	1783
MAX	13680	12450	31030	31910	34850	33640	35920	26910	14700	5406	6238	10850
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1989	1992	1992	1974
MIN	312	493	525	502	2655	3769	1491	1127	362	533	277	229
(WY)	1981	1988	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	2591669		4035021			
ANNUAL MEAN	7100		11050		6997	
HIGHEST ANNUAL MEAN					11050	1994
LOWEST ANNUAL MEAN					2826	1988
HIGHEST DAILY MEAN	48000	Feb 22	71000	Mar 11	125000	Dec 10 1978
LOWEST DAILY MEAN	226	Jul 12	290	Sep 12	83	Sep 4 1984
ANNUAL SEVEN-DAY MINIMUM	428	Jul 9	350	Sep 8	112	Nov 8 1991
INSTANTANEOUS PEAK FLOW			>71000	Mar 11	130000	Dec 10 1978
INSTANTANEOUS PEAK STAGE			>25.63	Mar 11	49.04	Dec 10 1978
10 PERCENT EXCEEDS	17700		32600		17800	
50 PERCENT EXCEEDS	3970		4990		3040	
90 PERCENT EXCEEDS	604		619		486	

> greater than

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 mi^2, (includes that of Benson Creek), of which about 120 mi^2 does not contribute directly to surface runoff.

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

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

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

REMARKS.--Estimated daily discharges: Oct. 1-6, Nov. 6, Jan. 9, 13-23, Mar. 8, 9, July 6-16, and Aug. 13-19. Record good above 1,000 ft^3/s except for period of estimated record, which is fair. Records poor below 1,000 ft^3/s. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3300	1810	11000	6220	19000	15000	51500	12000	2000	2060	2090	564
2	2500	1900	7860	5810	15200	14000	36300	12600	1820	1580	2050	513
3	1900	1990	6170	7110	12900	18900	28400	9930	1210	1070	1510	488
4	1300	2590	8320	11600	11200	29400	22100	9140	992	990	1000	486
5	980	2720	29000	23600	9480	32900	18600	9010	922	962	1380	517
6	760	2600	37900	28000	7930	27500	16400	8690	916	810	3810	484
7	810	2490	42000	33700	7070	20300	17200	11300	1040	730	5770	524
8	674	2440	38800	39500	7160	19000	18200	22000	1120	750	5440	437
9	439	2270	25000	46200	13800	51400	18500	30300	1430	680	3400	419
10	634	2100	15600	47000	33900	82800	17700	33500	1760	620	2220	399
11	719	1800	16800	34900	39500	76700	19200	25400	1730	570	1710	355
12	555	1690	14700	20500	49700	73800	27500	15500	1880	530	1210	337
13	571	2990	12700	19000	55000	66700	34700	11200	1540	510	950	307
14	626	3810	11300	25000	57000	43200	33700	7780	1370	630	820	346
15	627	10400	10500	21000	53700	23000	30600	6910	1160	550	700	285
16	706	13700	10200	17000	36600	17700	45300	8140	1460	1100	580	1070
17	943	20800	9590	12000	23300	15200	47200	6990	1290	1170	560	1300
18	2250	19600	9260	14000	17900	13600	42600	5460	1180	2490	440	1360
19	3760	22800	8810	12000	15300	12300	31900	4580	961	2470	510	872
20	7250	18900	7800	9700	13900	11500	20100	3880	924	2340	853	1750
21	11800	11100	6570	8200	13200	10800	15600	3190	937	1660	1630	1790
22	14100	8170	6780	6400	16500	9900	12800	2750	953	1220	2030	1750
23	10400	6820	6820	5000	41600	9840	11500	2530	1530	1050	2010	1700
24	6900	5650	5560	4680	52200	10800	10400	2830	1310	1060	1950	1750
25	4730	4250	5020	10900	55100	10000	9210	2400	990	1830	2150	787
26	3610	3510	4730	27400	51100	9320	7450	2290	947	1920	1970	445
27	3120	4830	4550	36800	32600	21600	6350	1810	1060	1750	1740	379
28	2360	8530	4080	50500	18600	45000	5630	1680	1670	1870	990	399
29	1980	15100	4100	47900	---	54900	7430	1590	2650	2120	844	361
30	1910	16000	3900	39900	---	57800	8040	1680	2900	2350	817	318
31	2000	---	4810	31400	---	58500	---	1980	---	2270	712	---
TOTAL	94214	223360	390230	702920	780440	963460	672110	279040	41652	41712	53846	22492
MEAN	3039	7445	12590	22670	27870	31080	22400	9001	1388	1346	1737	750
MAX	14100	22800	42000	50500	57000	82800	51500	33500	2900	2490	5770	1790
MIN	439	1690	3900	4680	7070	9320	5630	1590	916	510	440	285

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	2151	4600	10030	11440	13420	15920	12360	8182	4093	2243	2166	1908
MAX	13240	13700	33220	33500	35680	34760	36690	28200	14000	6039	6433	10980
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1989	1992	1992	1974
MIN	289	542	566	540	2885	4175	1518	1142	417	568	336	269
(WY)	1981	1966	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	2646867		4265476			
ANNUAL MEAN	7252		11690		7347	
HIGHEST ANNUAL MEAN					11860	1979
LOWEST ANNUAL MEAN					3182	1988
HIGHEST DAILY MEAN	49300	Feb 22	82800	Mar 10	116000	Dec 10 1978
LOWEST DAILY MEAN	369	Jul 12	285	Sep 15	93	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	550	Jul 9	350	Sep 9	128	Jul 4 1988
INSTANTANEOUS PEAK FLOW			86800	Mar 10	118000	Dec 9 1978
INSTANTANEOUS PEAK STAGE			36.39	Mar 11	48.47	Dec 10 1978
10 PERCENT EXCEEDS	17200		34800		18200	
50 PERCENT EXCEEDS	3900		4830		3320	
90 PERCENT EXCEEDS	723		658		531	

KENTUCKY RIVER BASIN

03288000 NORTH ELKHORN CREEK NEAR GEORGETOWN, KY

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

DRAINAGE AREA.--119 mi^2, of which about 8 mi^2 does not contribute directly to surface runoff.

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

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

REMARKS.--Estimated daily discharges: Dec. 23 to Jan. 1, 16-23, May 28 to June 6, and 10 to July 7. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	32	191	70	311	162	384	332	30	12	28	12
2	5.4	32	152	78	239	157	292	229	27	8.0	19	8.4
3	5.4	29	145	139	196	211	242	172	25	6.0	14	6.4
4	5.0	26	531	295	159	231	226	167	29	5.0	12	5.2
5	4.3	25	1230	284	139	211	187	139	34	4.0	17	5.9
6	4.2	25	645	246	121	175	245	114	42	4.1	21	8.2
7	4.2	24	402	1720	104	153	697	972	47	6.6	23	13
8	4.2	23	293	1090	217	279	435	2550	58	4.7	14	15
9	4.1	21	226	538	1100	1240	313	789	94	4.2	9.5	8.9
10	4.0	19	225	352	851	4120	287	422	63	3.5	7.5	8.1
11	4.0	18	283	265	591	1880	366	275	49	2.6	6.3	6.0
12	4.1	17	222	255	735	1220	716	202	38	3.2	5.6	4.8
13	4.0	129	189	277	981	805	557	145	27	4.7	5.1	4.0
14	4.0	730	178	243	712	614	351	112	23	4.6	4.7	3.2
15	4.0	1580	255	186	569	444	495	208	19	5.6	4.8	2.6
16	4.0	660	253	110	410	323	1660	521	16	23	3.8	2.4
17	4.1	1800	226	102	299	251	703	289	14	17	4.5	2.7
18	4.7	1420	204	90	240	220	409	191	12	12	5.4	2.6
19	12	583	180	80	200	194	281	136	11	20	6.1	2.2
20	467	365	156	70	171	154	208	106	13	17	5.1	2.0
21	414	248	153	62	171	146	159	85	15	10	190	1.9
22	178	185	136	66	179	145	133	71	16	10	181	1.8
23	105	143	112	115	2220	120	109	60	12	19	58	1.7
24	75	118	106	175	956	113	94	53	10	22	33	1.9
25	60	100	97	908	520	115	82	46	15	15	22	2.4
26	50	89	90	1780	337	100	73	43	40	19	16	2.2
27	40	499	82	1560	243	1020	80	54	100	40	12	2.2
28	35	668	76	2770	196	2070	110	48	60	26	9.3	2.3
29	31	374	70	1200	---	1090	257	43	38	27	9.4	2.8
30	28	253	66	654	---	576	409	37	20	85	9.6	4.0
31	30	---	63	451	---	432	---	33	---	53	17	---
TOTAL	1604.5	10235	7237	16231	13167	18971	10560	8644	997	493.8	773.7	146.8
MEAN	51.8	341	233	524	470	612	352	279	33.2	15.9	25.0	4.89
MAX	467	1800	1230	2770	2220	4120	1660	2550	100	85	190	15
MIN	4.0	17	63	62	104	100	73	33	10	2.6	3.8	1.7
CFSM	.43	2.87	1.96	4.40	3.95	5.14	2.96	2.34	.28	.13	.21	.04
IN.	.50	3.20	2.26	5.07	4.12	5.93	3.30	2.70	.31	.15	.24	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	34.8	89.6	257	283	350	386	239	168	88.5	57.0	49.2	45.2
MAX	312	347	1028	798	1169	995	746	881	502	371	375	702
(WY)	1976	1980	1979	1951	1989	1964	1972	1983	1974	1991	1974	1979
MIN	.000	.000	.28	11.5	24.8	39.8	45.6	14.3	4.41	1.59	.41	.000
(WY)	1954	1954	1954	1981	1954	1983	1955	1976	1954	1951	1983	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1950 - 1994	
ANNUAL TOTAL	65655.3		89060.8			
ANNUAL MEAN	180		244		169	
HIGHEST ANNUAL MEAN					319	1979
LOWEST ANNUAL MEAN					28.0	1954
HIGHEST DAILY MEAN	3350	Feb 22	4120	Mar 10	7860	Dec 9 1978
LOWEST DAILY MEAN	4.0	Oct 10	1.7	Sep 23	.00	Sep 11 1951
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 10	2.0	Sep 19	.00	Sep 11 1951
INSTANTANEOUS PEAK FLOW			4400	Mar 10	8730	Dec 9 1978
INSTANTANEOUS PEAK STAGE			13.88	Mar 10	20.22	Dec 9 1978
ANNUAL RUNOFF (CFSM)	1.51		2.05		1.42	
ANNUAL RUNOFF (INCHES)	20.52		27.84		19.33	
10 PERCENT EXCEEDS	437		656		419	
50 PERCENT EXCEEDS	75		89		47	
90 PERCENT EXCEEDS	6.4		4.2		3.2	

KENTUCKY RIVER BASIN

03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY

LOCATION.--Lat 38°13'10", long 84°33'47", Scott County, Hydrologic Unit 05100205, on right bank, 300 ft downstream of bridge on Highway 25, 0.2 mi upstream from railroad bridge, 0.7 mi downstream from Dry Run, and at mile 33.4.

DRAINAGE AREA.--147 mi^2, of which about 8 mi^2 does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 800 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 1-11, 1992; Feb. 18-20, May 13, 14, July 15-19, Oct. 21, 22, 25, Nov. 4-7, 11, 19, 30, Dec. 1, 22, 23, 28-31, 1993; Jan. 1, 8-10, 12-23, Mar. 8-10, Apr. 8-10, and May 1, 1994. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

DISCHARGE, CUBIC FEET PER SECOND, FOR THE PERIOD DECEMBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	170	188	121	226	339	130	21	54	8.4	12
2	---	---	150	176	102	301	294	104	17	59	46	15
3	---	---	140	172	86	711	233	90	17	76	36	17
4	---	---	130	180	78	2190	198	108	81	56	17	73
5	---	---	120	931	73	1890	175	201	1250	37	18	76
6	---	---	110	685	68	911	166	122	423	27	19	38
7	---	---	100	475	63	624	147	85	250	20	20	25
8	---	---	94	353	60	665	131	70	182	16	18	18
9	---	---	120	275	58	525	142	62	106	15	16	15
10	---	---	200	217	56	728	329	56	78	14	13	13
11	---	---	290	218	59	564	235	51	172	13	14	11
12	---	---	277	462	75	433	181	52	469	15	174	9.9
13	---	---	247	686	87	352	157	50	339	17	2800	8.0
14	---	---	222	597	81	285	151	55	240	30	674	8.2
15	---	---	202	456	78	244	167	48	921	60	298	11
16	---	---	185	339	241	242	325	39	485	200	160	11
17	---	---	178	262	590	691	217	36	260	110	107	22
18	---	---	188	199	400	684	173	51	165	80	80	19
19	---	---	170	156	300	475	150	102	113	60	62	13
20	---	---	345	130	250	370	135	94	87	44	47	9.4
21	---	---	448	331	2820	322	151	64	90	31	35	9.7
22	---	---	370	502	4250	270	128	55	67	25	28	10
23	---	---	319	372	987	610	111	50	54	21	25	11
24	---	---	272	369	623	891	132	45	47	18	24	13
25	---	---	232	367	471	585	237	39	40	15	22	8.8
26	---	---	209	299	385	439	768	34	34	16	20	12
27	---	---	188	261	306	335	471	30	33	30	13	9.1
28	---	---	183	217	253	275	304	28	84	23	11	11
29	---	---	202	178	---	229	221	27	127	18	11	10
30	---	---	198	146	---	193	166	26	71	14	12	8.3
31	---	---	191	128	---	172	---	27	---	10	10	---
TOTAL	---	---	6450	10327	13021	17432	6734	2031	6323	1224	4838.4	527.4
MEAN	---	---	208	333	465	562	224	65.5	211	39.5	156	17.6
MAX	---	---	448	931	4250	2190	768	201	1250	200	2800	76
MIN	---	---	94	128	56	172	111	26	17	10	8.4	8.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

MEAN	---	---	208	333	465	562	224	65.5	211	39.5	156	17.6
MAX	---	---	208	333	465	562	224	65.5	211	39.5	156	17.6
(WY)	---	---	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	---	---	208	333	465	562	224	65.5	211	39.5	156	17.6
(WY)	---	---	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993

SUMMARY STATISTICS	WATER YEARS 1992 - 1993	
HIGHEST DAILY MEAN	4250	Feb 22 1993
LOWEST DAILY MEAN	8.0	Sep 13 1993
ANNUAL SEVEN-DAY MINIMUM	10	Sep 10 1993
INSTANTANEOUS PEAK FLOW	6150	Feb 21 1993
INSTANTANEOUS PEAK STAGE	6.24	Feb 21 1993
10 PERCENT EXCEEDS	480	
50 PERCENT EXCEEDS	121	
90 PERCENT EXCEEDS	14	

KENTUCKY RIVER BASIN

03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	28	220	72	391	213	454	450	25	19	40	16
2	7.2	29	184	78	297	211	346	308	23	15	24	12
3	10	27	178	153	240	272	286	227	21	8.3	17	10
4	7.9	28	652	329	194	290	263	213	19	6.1	18	8.4
5	7.5	31	1310	355	168	269	215	175	17	5.9	57	9.7
6	7.4	33	747	283	144	224	289	141	17	5.8	45	17
7	7.0	35	487	1820	119	201	745	933	18	7.2	39	13
8	7.2	34	348	1200	260	400	500	2570	24	5.7	25	17
9	7.9	33	263	700	1160	1500	400	867	48	5.0	16	15
10	9.5	31	253	440	954	4400	360	520	32	4.8	12	12
11	8.1	30	319	323	625	1930	448	350	18	4.7	10	11
12	7.9	30	249	300	774	1170	747	252	14	4.7	8.6	9.1
13	8.3	159	208	330	1030	826	647	184	11	4.7	7.6	6.9
14	11	813	203	270	788	659	449	143	11	5.7	6.5	7.1
15	8.0	1580	299	220	609	512	643	276	9.8	5.4	7.3	6.7
16	7.3	751	294	170	470	387	1580	608	9.2	12	5.9	5.6
17	13	2370	260	140	358	297	786	374	7.3	16	6.5	5.9
18	15	1530	231	120	289	261	505	240	5.8	13	8.0	6.1
19	16	700	205	100	239	226	355	173	6.9	13	8.8	5.6
20	609	466	173	90	205	177	259	135	8.9	20	8.7	5.0
21	640	317	170	80	203	164	197	105	11	18	121	4.7
22	250	235	150	100	231	161	161	84	14	12	235	4.5
23	147	180	130	130	2630	134	130	71	15	13	71	4.7
24	93	144	116	243	1120	128	105	62	6.6	19	40	5.0
25	70	116	111	836	630	127	89	52	9.5	22	28	5.9
26	57	99	106	2100	432	106	79	50	14	35	22	6.2
27	45	578	93	2200	310	1030	107	59	25	41	18	6.2
28	35	758	84	3680	250	2040	131	50	79	40	12	6.0
29	31	464	78	1400	---	1120	379	37	41	65	12	6.5
30	28	300	74	757	---	651	594	31	27	113	11	6.8
31	28	---	70	534	---	506	---	28	---	79	15	---
TOTAL	2206.1	11929	8265	19553	15120	20592	12249	9768	588.0	639.0	955.9	255.6
MEAN	71.2	398	267	631	540	664	408	315	19.6	20.6	30.8	8.52
MAX	640	2370	1310	3680	2630	4400	1580	2570	79	113	235	17
MIN	6.9	27	70	72	119	106	79	28	5.8	4.7	5.9	4.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	71.2	398	237	482	503	613	316	190	115	30.0	93.5	13.0
MAX	71.2	398	267	631	540	664	408	315	211	39.5	156	17.6
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993
MIN	71.2	398	208	333	465	562	224	65.5	19.6	20.6	30.8	8.52
(WY)	1994	1994	1993	1993	1993	1993	1993	1993	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	84857.9		102120.6			
ANNUAL MEAN	232		280		280	
HIGHEST ANNUAL MEAN					280	1994
LOWEST ANNUAL MEAN					280	1994
HIGHEST DAILY MEAN	4250	Feb 22	4400	Mar 10	4400	Mar 10 1994
LOWEST DAILY MEAN	6.9	Oct 1	4.5	Sep 22	4.5	Sep 22 1994
ANNUAL SEVEN-DAY MINIMUM	7.7	Oct 1	5.0	Jul 9	5.0	Jul 9 1994
INSTANTANEOUS PEAK FLOW			4680	Mar 10	6150	Feb 21 1993
INSTANTANEOUS PEAK STAGE			5.37	Mar 10	6.24	Feb 21 1993
10 PERCENT EXCEEDS	593		747		630	
50 PERCENT EXCEEDS	102		105		111	
90 PERCENT EXCEEDS	12		7.1		9.2	

KENTUCKY RIVER BASIN

03288110 ROYAL SPRINGS AT GEORGETOWN, KY

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

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

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

REMARKS.--Estimated daily discharges: Nov. 5-7, Jan. 12-19, Mar. 9, and Apr. 8, 9. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.8	44	15	55	42	50	44	2.8	.53	4.8	4.8
2	2.5	2.6	39	18	52	43	47	41	1.8	.24	4.3	3.8
3	2.6	2.7	39	26	48	42	46	37	2.9	.64	3.9	3.2
4	2.0	2.1	60	34	45	41	43	38	3.7	2.7	4.1	3.0
5	1.8	1.4	71	35	42	40	40	32	2.7	.34	12	7.9
6	1.6	1.5	62	39	39	39	46	29	2.5	.64	7.7	11
7	1.4	1.6	56	85	36	38	53	95	3.0	.37	5.3	6.5
8	1.2	1.3	52	69	45	47	58	97	11	.40	4.0	4.5
9	1.9	.69	48	61	65	75	52	68	5.3	.43	3.5	3.6
10	1.7	1.7	49	53	61	106	48	57	4.8	1.3	3.2	2.9
11	1.7	3.7	47	49	60	86	53	51	2.8	.44	2.8	2.4
12	1.0	3.8	44	43	60	77	58	45	3.0	.59	2.0	1.7
13	.77	37	40	39	64	68	63	37	2.7	1.0	2.1	1.3
14	.25	74	41	35	60	61	56	35	2.7	3.3	2.7	1.1
15	.00	84	44	32	55	56	66	50	1.3	3.7	2.9	1.1
16	.04	67	42	30	52	52	74	49	1.2	3.3	2.3	1.3
17	3.2	131	41	27	49	48	63	43	1.1	2.6	1.7	2.5
18	.82	91	39	25	46	46	55	37	.86	4.9	5.7	2.7
19	1.2	69	38	23	44	43	51	33	.94	2.7	20	1.1
20	76	58	36	22	43	41	47	30	.42	2.9	7.9	.53
21	52	53	36	21	43	40	42	28	.05	19	44	.26
22	34	47	31	20	48	38	38	29	.00	8.7	24	.20
23	24	41	27	20	91	35	34	24	.00	9.6	16	.57
24	18	35	24	38	67	34	31	23	.00	5.1	12	3.0
25	13	30	23	66	58	32	29	22	.00	14	7.9	3.3
26	10	27	21	82	52	31	28	24	2.7	27	6.1	2.9
27	7.0	54	20	100	47	68	34	15	22	18	5.0	4.0
28	4.8	55	19	127	44	85	31	8.8	6.1	12	4.3	3.4
29	4.2	51	18	85	---	67	40	6.9	1.9	10	13	2.6
30	4.4	47	17	68	---	58	49	4.5	.83	10	7.7	2.4
31	4.5	---	16	60	---	54	---	2.6	---	6.8	5.2	---
TOTAL	279.38	1077.89	1184	1447	1471	1633	1425	1135.8	91.10	173.22	248.1	89.56
MEAN	9.01	35.9	38.2	46.7	52.5	52.7	47.5	36.6	3.04	5.59	8.00	2.99
MAX	76	131	71	127	91	106	74	97	22	27	44	11
MIN	.00	.69	16	15	36	31	28	2.6	.00	.24	1.7	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

MEAN	9.01	35.9	38.2	41.9	42.7	51.9	41.5	25.8	16.4	6.58	10.5	4.23
MAX	9.01	35.9	38.2	46.7	52.5	52.7	47.5	36.6	29.7	7.58	13.0	5.48
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993
MIN	9.01	35.9	38.2	37.2	32.9	51.1	35.5	15.0	3.04	5.59	8.00	2.99
(WY)	1994	1994	1994	1993	1993	1993	1993	1993	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1993 - 1994	
ANNUAL TOTAL	9423.97		10255.05			
ANNUAL MEAN	25.8		28.1		28.1	
HIGHEST ANNUAL MEAN					28.1	1994
LOWEST ANNUAL MEAN					28.1	1994
HIGHEST DAILY MEAN	131	Nov 17	131	Nov 17	131	Nov 17 1993
LOWEST DAILY MEAN	.00	Oct 15	.00	Oct 15	.00	Oct 15 1993
ANNUAL SEVEN-DAY MINIMUM	.78	Oct 10	.20	Jun 19	.20	Jun 19 1994
INSTANTANEOUS PEAK FLOW			239	May 7	239	May 7 1994
INSTANTANEOUS PEAK STAGE			3.46	May 7	3.46	May 7 1994
INSTANTANEOUS LOW FLOW					.00	Jul 20 1993
10 PERCENT EXCEEDS	52		61		57	
50 PERCENT EXCEEDS	21		24		22	
90 PERCENT EXCEEDS	2.6		1.2		2.2	

KENTUCKY RIVER BASIN

03289300 SOUTH ELKHORN CREEK NEAR MIDWAY, KY

LOCATION.--Lat 38°08'27", long 84°38'43", Scott County, Hydrologic Unit 05100205, on right bank 5 ft upstream from bridge on U.S. Route 62/421, 2.2 mi southeast of Midway, 6.5 mi downstream from Town Branch, and at mile 27.6.

DRAINAGE AREA.--105 mi^2, of which about 21 mi^2 does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 790 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 7 to Nov. 30, Dec. 26 to Jan. 4, 15-25, Apr. 21 to May 27, and June 15, 16. Records good except for periods of estimated daily discharges, which are fair. 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. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	32	197	64	344	197	334	300	68	50	50	50
2	16	30	174	60	272	219	270	200	46	19	47	43
3	31	29	187	150	226	261	238	170	59	24	37	20
4	30	28	424	210	194	244	227	150	31	30	41	29
5	31	27	808	204	167	220	186	130	40	53	113	38
6	27	26	531	210	148	199	235	120	66	55	98	94
7	35	27	381	1220	136	191	528	115	55	36	59	58
8	33	25	311	916	171	365	364	1650	95	37	56	48
9	29	23	250	556	733	863	289	700	72	18	45	59
10	26	22	331	404	612	2650	293	350	68	70	37	20
11	33	21	322	316	527	1420	349	250	33	56	37	30
12	40	25	265	304	638	981	545	200	35	42	43	41
13	39	150	231	264	741	701	450	170	63	35	13	28
14	38	1000	228	230	598	584	343	150	79	37	32	28
15	38	850	233	180	477	448	414	300	100	76	59	30
16	38	790	208	140	378	352	1090	430	90	98	44	30
17	50	1300	190	125	308	286	560	200	79	61	32	20
18	100	1500	177	110	259	264	384	150	36	92	29	32
19	200	600	167	100	215	220	293	120	26	66	37	33
20	580	350	153	92	191	185	251	100	60	58	31	39
21	450	260	165	88	201	176	190	90	79	118	381	43
22	150	200	146	80	172	166	160	80	93	70	165	39
23	100	150	134	74	1340	138	140	70	66	69	99	31
24	70	120	123	70	763	136	120	66	53	50	72	23
25	58	100	118	150	492	122	105	60	24	51	64	31
26	48	150	90	1110	359	106	100	56	57	130	52	40
27	42	520	86	977	278	640	94	90	236	81	39	42
28	36	400	80	1750	230	1230	130	72	90	79	39	38
29	34	251	75	1020	---	770	260	65	72	67	81	35
30	30	200	70	615	---	491	520	58	57	85	72	31
31	31	---	68	447	---	424	---	74	---	50	55	---
TOTAL	2495	9206	6923	12236	11170	15249	9462	6736	2028	1863	2059	1123
MEAN	80.5	307	223	395	399	492	315	217	67.6	60.1	66.4	37.4
MAX	580	1500	808	1750	1340	2650	1090	1650	236	130	381	94
MIN	16	21	68	60	136	106	94	56	24	18	13	20
CFSM	.77	2.92	2.13	3.76	3.80	4.68	3.00	2.07	.64	.57	.63	.36
IN.	.88	3.26	2.45	4.34	3.96	5.40	3.35	2.39	.72	.66	.73	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

MEAN	70.6	150	249	229	312	260	193	184	133	89.7	72.0	57.4
MAX	151	307	673	395	1030	492	366	718	337	240	255	108
(WY)	1991	1994	1991	1994	1989	1994	1984	1983	1992	1992	1992	1992
MIN	34.5	52.3	86.5	50.4	114	60.1	60.9	58.9	39.5	35.8	32.5	27.7
(WY)	1983	1992	1990	1986	1993	1983	1986	1988	1988	1983	1983	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1982 - 1994	
ANNUAL TOTAL	57006.6		80550			
ANNUAL MEAN	156		221		166	
HIGHEST ANNUAL MEAN					257	1989
LOWEST ANNUAL MEAN					103	1986
HIGHEST DAILY MEAN	1500	Nov 18	2650	Mar 10	7000	Feb 15 1989
LOWEST DAILY MEAN	9.6	Jul 31	13	Aug 13	9.6	Jul 31 1993
ANNUAL SEVEN-DAY MINIMUM	24	Nov 6	24	Nov 6	20	Aug 14 1983
INSTANTANEOUS PEAK FLOW			3150	Mar 10	7270	Feb 15 1989
INSTANTANEOUS PEAK STAGE			15.33	Mar 10	21.28	Feb 15 1989
INSTANTANEOUS LOW FLOW					.00	Oct 7 1992
ANNUAL RUNOFF (CFSM)	1.49		2.10		1.58	
ANNUAL RUNOFF (INCHES)	20.20		28.54		21.47	
10 PERCENT EXCEEDS	332		549		349	
50 PERCENT EXCEEDS	100		100		88	
90 PERCENT EXCEEDS	33		31		33	

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 mi^2 of which about 70 mi^2 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. Datum of gage is approximately 540.20 ft above sea level. See WDR KY-90-1 for history of changes prior to Aug. 31, 1970.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 2, and 12-23. Water-discharge records good except for periods of estimated record, which are fair. City of Lexington diverts water from Hickman Creek in Kentucky River Basin for municipal water supply; return flow of which enters tributary above station.

EXTREMES FOR 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	140	816	245	1900	965	1950	1620	139	110	149	76
2	62	138	644	240	1460	856	1580	1200	121	88	112	66
3	54	131	559	361	1170	1020	1310	897	109	65	84	65
4	51	125	1210	676	949	1020	1210	768	107	66	79	52
5	63	124	4010	949	795	982	1020	702	83	63	103	54
6	61	115	3220	850	690	867	971	580	86	70	165	64
7	52	117	2030	3720	598	766	2210	985	92	70	163	105
8	49	112	1440	5160	688	831	2180	6270	91	71	113	92
9	47	105	1080	2830	2790	2090	1650	4220	121	68	102	72
10	49	100	897	1960	3780	8380	1500	2340	122	52	79	71
11	35	96	1060	1520	2510	7450	1740	1620	113	70	65	55
12	59	91	904	1100	2520	4840	2450	1190	83	70	59	47
13	55	127	738	800	3170	3690	2720	896	83	49	54	53
14	55	2110	653	640	3140	2920	2090	703	84	54	46	45
15	54	4650	780	540	2400	2310	2230	828	71	56	32	41
16	54	3420	847	450	1910	1810	4910	1890	67	83	64	40
17	49	4720	752	360	1520	1430	3730	1430	66	97	49	41
18	99	6830	682	300	1240	1210	2320	896	57	80	42	41
19	109	3320	619	280	1020	1060	1700	681	50	96	41	33
20	945	2050	554	260	877	872	1270	568	48	87	43	39
21	2630	1400	514	240	837	761	968	485	70	60	53	39
22	1020	998	503	230	831	736	785	430	66	114	525	37
23	550	746	442	220	5580	663	662	384	78	103	351	33
24	372	597	397	484	5030	614	558	346	73	86	196	35
25	284	503	373	1940	2860	609	494	319	62	81	136	33
26	237	426	351	5960	2010	546	451	261	51	131	104	39
27	208	767	310	6110	1480	2590	489	293	114	213	91	54
28	181	2320	300	10200	1170	5830	631	241	257	145	66	51
29	160	1600	280	6460	---	4970	1280	202	166	154	73	50
30	140	1110	270	3660	---	3040	2310	170	141	118	85	45
31	134	---	255	2550	---	2270	---	152	---	133	100	---
TOTAL	7972	39088	27490	61295	54925	67998	49369	33567	2871	2803	3424	1568
MEAN	257	1303	887	1977	1962	2193	1646	1083	95.7	90.4	110	52.3
MAX	2630	6830	4010	10200	5580	8380	4910	6270	257	213	525	105
MIN	35	91	255	220	598	546	451	152	48	49	32	33
CFSM	.54	2.75	1.87	4.18	4.15	4.64	3.48	2.29	.20	.19	.23	.11
IN.	.63	3.07	2.16	4.82	4.32	5.35	3.88	2.64	.23	.22	.27	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1994, BY WATER YEAR (WY)

MEAN	129	329	872	1121	1312	1386	935	613	362	240	176	152
MAX	1012	1379	3138	4630	4438	4309	3332	3747	1472	1171	963	2101
(WY)	1976	1943	1979	1950	1989	1964	1948	1983	1974	1960	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1916 - 1994	
ANNUAL TOTAL	269000		352370			
ANNUAL MEAN	737		965		633	
HIGHEST ANNUAL MEAN					1091	1979
LOWEST ANNUAL MEAN					126	1954
HIGHEST DAILY MEAN	9820	Feb 22	10200	Jan 28	25000	Feb 16 1989
LOWEST DAILY MEAN	35	Oct 11	32	Aug 15	.00	Jan 7 1940
ANNUAL SEVEN-DAY MINIMUM	49	Oct 7	36	Sep 19	.00	Jan 7 1940
INSTANTANEOUS PEAK FLOW			11200	Jan 28	28700	Feb 16 1989
INSTANTANEOUS PEAK STAGE			11.70	Jan 28	15.26	Feb 16 1989
INSTANTANEOUS LOW FLOW			1.8	Sep 26		
ANNUAL RUNOFF (CFSM)	1.56		2.04		1.34	
ANNUAL RUNOFF (INCHES)	21.16		27.71		18.17	
10 PERCENT EXCEEDS	1980		2610		1590	
50 PERCENT EXCEEDS	334		360		200	
90 PERCENT EXCEEDS	65		53		31	

KENTUCKY RIVER BASIN

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY

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

DRAINAGE AREA.--6,180 mi^2, of which about 196 mi^2 does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Estimated daily discharges: Feb. 10-14, Apr. 25-28, and May 16-18. Water-discharge records good except for periods of estimated record, which are fair. Flow regulated by Carr Fork Lake beginning January 1976 (station 03277446), Buckhorn Lake beginning December 1960 (station 03280800), Herrington Lake beginning November 1925 (station 03286000), and by hydroelectric plant at lock 7.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3590	2010	13500	6770	24900	20100	61100	15700	2230	2510	2420	926
2	2600	2180	9400	6680	19200	15600	50400	15500	2130	1880	2390	692
3	1980	2250	7230	7620	16800	18500	32700	11900	1590	1430	1990	651
4	1440	2610	10200	11500	13500	28100	26900	10400	1250	1110	1400	633
5	1020	3070	19700	23200	11100	34200	21900	10100	1150	949	2010	670
6	815	2920	31400	29500	9120	30400	19600	9840	1070	713	3470	699
7	854	2830	45100	36200	7920	21600	20200	12800	1250	799	5840	616
8	751	2720	45000	45700	9680	21600	20800	25700	1370	827	5970	590
9	483	2560	30900	47100	15900	40800	21500	33000	1620	773	4000	500
10	502	2430	18200	50000	30000	75100	22000	34900	2040	688	2700	455
11	670	2080	18700	45000	41000	90100	21800	31600	2110	619	1990	426
12	552	1960	17400	28600	52000	88700	28900	19100	2300	583	1440	391
13	499	2540	14700	25800	62000	80700	38300	13500	1980	545	1120	338
14	575	6340	13000	27900	63000	64300	39700	9410	1790	741	944	355
15	630	14200	12300	25500	60800	35800	33500	7880	1500	692	733	291
16	675	17800	11800	20800	50300	29700	46400	9000	1690	835	645	729
17	829	25100	11100	16500	27900	18500	53600	8200	1560	1620	610	1300
18	1620	27500	10600	13800	20900	16200	50100	7000	1530	3100	473	1330
19	3470	25700	10000	12300	18100	14500	40300	5780	1210	3430	519	1060
20	7180	23100	9080	10500	16000	13200	26000	4840	951	3270	985	1450
21	13200	14700	7570	9270	15200	12300	19200	3780	1080	2610	1380	1810
22	16200	9840	7550	7290	17600	11300	14900	3070	1290	1950	2450	1760
23	12300	7830	7900	5280	42200	10800	13000	2700	1550	1690	2590	1680
24	7950	6750	6600	5180	56000	12000	11700	2960	1690	1460	2240	1730
25	5580	5320	5990	11800	60000	11400	11000	2630	1280	2040	2290	1200
26	4190	4370	5630	31300	60100	10300	9300	2540	1150	2380	2250	571
27	3550	5420	5390	43000	51000	21600	8600	2080	1230	2130	1920	413
28	2890	9670	5170	61700	31500	47300	9100	1920	1800	2080	1450	415
29	2360	15400	4700	61000	---	57700	12100	1750	2630	2380	1130	380
30	2150	18800	4730	50000	---	62500	14200	1800	3200	2670	1090	353
31	2370	---	5330	37300	---	62500	---	2190	---	2670	1130	---
TOTAL	103475	270000	425870	814090	903720	1077400	798800	323570	49221	51174	61569	24414
MEAN	3338	9000	13740	26260	32280	34750	26630	10440	1641	1651	1986	814
MAX	16200	27500	45100	61700	63000	90100	61100	34900	3200	3430	5970	1810
MIN	483	1960	4700	5180	7920	10300	8600	1750	951	545	473	291

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	2448	5181	11560	13250	15410	18860	14430	9622	4866	2615	2482	2282
MAX	14120	13960	39510	37850	40170	40410	41540	34340	16050	7268	8589	14740
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1989	1992	1992	1979
MIN	450	603	668	770	4073	4423	2074	1518	508	654	445	385
(WY)	1970	1988	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	3156887		4903303			
ANNUAL MEAN	8649		13430		8553	
HIGHEST ANNUAL MEAN					14030	1979
LOWEST ANNUAL MEAN					3891	1988
HIGHEST DAILY MEAN	58700	Feb 22	90100	Mar 11	121000	Dec 11 1978
LOWEST DAILY MEAN	448	Jul 12	291	Sep 15	131	Oct 4 1981
ANNUAL SEVEN-DAY MINIMUM	559	Oct 9	394	Sep 9	172	Jul 5 1988
INSTANTANEOUS PEAK FLOW			97800	Mar 12	123000	Jan 26 1937
INSTANTANEOUS PEAK STAGE			41.64	Mar 12	56.85	Jan 24 1937
10 PERCENT EXCEEDS	21800		40500		21700	
50 PERCENT EXCEEDS	4730		5780		3840	
90 PERCENT EXCEEDS	785		707		650	

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1991.
WATER TEMPERATURES: January 1973 to September 1991.

REMARKS.--Flow regulated by Buckhorn Lake, Herrington Lake, and hydroelectric plant at lock 7.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 660 microsiemens, Oct. 31, 1986; minimum daily, 100 microsiemens, Sept. 23, 1973.
WATER TEMPERATURES: Maximum daily, 33.0°C, Aug. 10, 11, 1980, July 29, 1988; minimum daily, 0.0°C, on several days during winters.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 1993												
14...	1130	611	310	7.8	19.0	5.4	8.1	88	K4	K8	150	39
DEC												
23...	1040	8470	325	8.0	5.5	17	12.1	97	43	52	140	41
FEB 1994												
08...	1200	7610	270	6.8	3.0	8.9	8.6	65	55	97	120	34
APR												
13...	1050	46300	270	7.7	13.0	27	9.9	96	2100	4000	130	36
JUN												
08...	1100	1330	293	8.4	22.5	3.4	9.1	108	K10	K12	130	37

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 1993											
14...	12	10	3.5	--	--	--	8.6	69	0.20	5.6	201
DEC											
23...	8.9	5.4	2.1	113	92	90	5.3	45	0.10	5.6	186
FEB 1994											
08...	7.9	4.9	1.8	75	62	61	6.0	44	0.10	5.3	163
APR											
13...	8.7	4.4	1.3	88	72	72	4.2	50	0.10	5.4	168
JUN											
08...	9.0	6.1	2.0	103	85	86	5.7	47	0.10	2.6	169

KENTUCKY RIVER BASIN

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	COBALT, DISSOLVED (UG/L AS CO)	IRON, DISSOLVED (UG/L AS FE)
OCT 1993											
14...	0.010	0.850	0.050	<0.20	0.040	0.040	0.050	<10	32	<3	4
DEC											
23...	<0.010	1.10	0.050	<0.20	0.070	0.030	0.060	30	24	<3	29
FEB 1994											
08...	0.020	1.20	0.040	0.20	0.090	0.050	0.040	20	20	<3	30
APR											
13...	0.020	0.810	0.050	0.30	0.180	0.040	0.050	60	21	<3	59
JUN											
08...	0.020	0.390	0.020	0.60	0.060	<0.010	<0.010	30	25	<3	4

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1993											
14...	<4	6	<10	1	<1	<1.0	200	<6	--	--	--
DEC											
23...	<4	14	<10	<1	<1	<1.0	130	<6	29	663	69
FEB 1994											
08...	<4	22	10	2	<1	<1.0	110	<6	32	658	87
APR											
13...	<4	3	<10	1	<1	<1.0	140	<6	111	13900	80
JUN											
08...	<4	1	<10	<1	<1	<1.0	140	<6	43	156	66

KENTUCKY RIVER BASIN

03291500 EAGLE CREEK AT GLENCOE, KY

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

DRAINAGE AREA.--437 mi^2.

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

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

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

REMARKS.--Estimated daily discharges: Dec. 12 to Jan. 1, and 16-22. Records good, except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	34	179	68	440	293	537	5480	53	21	55	25
2	4.5	35	141	105	324	278	475	1360	47	18	35	11
3	4.2	36	242	420	300	270	495	656	43	18	37	5.6
4	3.5	37	4470	755	233	305	711	484	40	19	96	3.9
5	3.5	54	6270	592	223	344	542	402	37	28	84	3.2
6	2.6	54	1610	408	186	290	469	344	34	22	134	2.8
7	2.0	53	559	5290	177	241	2230	5460	35	26	133	2.4
8	1.9	50	326	3470	708	265	961	4150	67	27	124	2.0
9	1.9	48	229	737	7960	292	541	1070	71	25	73	1.8
10	1.9	46	191	407	2360	4250	7300	554	54	26	48	1.6
11	2.0	44	165	306	671	4050	4830	388	42	30	37	1.8
12	2.1	46	144	275	439	2980	3300	303	37	23	30	1.9
13	2.1	219	157	368	463	2240	2710	241	33	25	26	1.6
14	2.1	5650	357	676	880	1830	1590	611	29	75	73	1.5
15	2.0	8310	1950	394	515	1060	917	4310	26	398	83	1.7
16	2.7	1830	1060	210	394	598	3750	3130	23	248	32	1.7
17	3.8	5160	456	160	347	428	1250	890	22	113	25	2.0
18	4.6	5860	290	135	301	378	589	408	30	56	20	2.0
19	8.4	919	227	115	301	345	423	278	25	36	16	1.7
20	25	402	180	105	379	304	325	220	23	28	13	1.5
21	1580	250	155	98	1090	289	255	181	21	78	12	1.3
22	491	182	140	96	869	288	224	153	21	383	10	1.1
23	183	143	125	92	8170	292	188	130	20	267	9.7	1.0
24	105	121	115	279	2870	281	163	112	21	117	8.8	1.2
25	74	105	105	4700	767	245	145	97	19	62	8.0	1.2
26	58	98	96	8130	484	274	130	254	19	58	7.0	1.1
27	49	1220	88	5650	363	4010	348	197	61	35	6.5	1.1
28	42	2030	82	16200	317	6480	643	104	59	28	6.5	.99
29	38	556	76	7240	---	2370	8200	78	35	462	6.7	.84
30	35	271	72	1270	---	885	10100	66	26	510	5.5	.83
31	35	---	68	657	---	589	---	59	---	127	14	---
TOTAL	2774.3	33863	20325	59408	32531	37044	54341	32170	1073	3389	1268.7	87.36
MEAN	89.5	1129	656	1916	1162	1195	1811	1038	35.8	109	40.9	2.91
MAX	1580	8310	6270	16200	8170	6480	10100	5480	71	510	134	25
MIN	1.9	34	68	68	177	241	130	59	19	18	5.5	.83
CFSM	.20	2.58	1.50	4.39	2.66	2.73	4.15	2.37	.08	.25	.09	.01
IN.	.24	2.88	1.73	5.06	2.77	3.15	4.63	2.74	.09	.29	.11	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1994, BY WATER YEAR (WY)

MEAN	110	358	646	955	1116	1308	939	597	409	247	128	111
MAX	1005	1641	1874	3170	3295	5197	2909	2411	1428	1016	755	1355
(WY)	1976	1973	1952	1950	1956	1964	1948	1961	1928	1957	1977	1965
MIN	.000	.000	.000	2.85	44.6	120	131	25.5	1.56	.14	.000	.000
(WY)	1931	1931	1931	1931	1954	1941	1976	1930	1930	1930	1930	1930

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1916 - 1994	
ANNUAL TOTAL	265668.0		278274.36			
ANNUAL MEAN	728		762		572	
HIGHEST ANNUAL MEAN					1059	1973
LOWEST ANNUAL MEAN					117	1954
HIGHEST DAILY MEAN	11900	Feb 22	16200	Jan 28	39300	Mar 10 1964
LOWEST DAILY MEAN	1.9	Oct 8	.83	Sep 30	.00	Jul 15 1930
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 7	1.0	Sep 24	.00	Jul 15 1930
INSTANTANEOUS PEAK FLOW			20500	Jan 28	58200	Mar 10 1964
INSTANTANEOUS PEAK STAGE			17.12	Jan 28	26.05	Mar 10 1964
INSTANTANEOUS LOW FLOW			.75	Sep 29		
ANNUAL RUNOFF (CFSM)	1.67		1.74		1.31	
ANNUAL RUNOFF (INCHES)	22.62		23.69		17.80	
10 PERCENT EXCEEDS	1970		2230		1280	
50 PERCENT EXCEEDS	204		134		96	
90 PERCENT EXCEEDS	7.7		3.0		1.1	

HARRODS CREEK BASIN

03292460 HARRODS CREEK NEAR LA GRANGE, KY

LOCATION.--Lat 38°26'50", long 85°24'33", Oldham County, Hydrologic Unit 05140101, 40 ft upstream from bridge on State Highway 53, 0.5 mi upstream from Ash Run, 3.1 mi northwest of La Grange, and at mile 22.4.

DRAINAGE AREA.--24.1 mi^2.

PERIOD OF RECORD.--December 1967 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 662.64 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 19, 21-23, 25, 26, 28-30, Jan. 17-23, and Mar. 18 to Apr. 5. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.65	13	10	25	16	17	224	.37	.19	.05	.00
2	.00	.79	14	17	39	16	16	53	.34	.15	.02	.00
3	.00	1.5	116	29	13	14	15	32	.34	.08	.01	.00
4	.00	1.2	466	31	11	13	15	27	.31	.05	.00	.00
5	.00	1.3	169	21	11	12	15	21	.30	.01	23	.00
6	.00	1.3	41	31	10	11	19	18	.27	.02	2.0	.00
7	.00	1.2	26	220	9.1	11	27	169	.27	.05	.46	.00
8	.00	.80	21	40	182	11	22	69	.67	.03	.30	.02
9	.00	.66	18	54	311	18	20	27	.47	.07	.20	.02
10	.00	.63	17	24	36	73	449	18	.36	.04	.13	.00
11	.00	.60	15	16	22	141	177	14	.32	.01	.06	.00
12	.00	.56	13	18	17	129	99	12	.26	.00	.05	.00
13	.00	24	13	19	16	90	51	9.9	.23	.00	.03	.00
14	.00	579	21	19	14	66	32	211	.20	.04	.01	.00
15	.00	119	28	34	13	41	48	302	.16	.06	.00	.00
16	.00	27	22	9.9	12	27	46	62	.10	.08	.00	.00
17	.00	238	18	8.6	11	21	28	15	.08	.05	.01	.00
18	.01	42	17	8.0	11	18	22	9.3	.07	.03	.01	.00
19	.16	24	16	7.7	9.8	17	18	6.3	.05	.00	.00	.00
20	14	18	15	7.4	12	16	15	4.2	.04	.00	.00	.00
21	11	15	14	7.2	28	15	14	2.1	.05	.00	.00	.00
22	2.7	13	13	7.0	256	15	13	1.2	.07	.06	.00	.00
23	.60	12	12	19	479	14	12	.92	.05	.06	.00	.00
24	.42	11	12	93	53	55	11	.76	.08	.03	.00	.00
25	.35	11	11	687	30	45	11	.69	.08	4.5	.00	.00
26	.34	11	11	230	20	30	9.8	8.3	.04	7.6	.00	.00
27	.40	51	11	450	17	103	30	1.5	.08	.49	.00	.00
28	.37	26	10	717	16	86	19	.76	.05	.29	.00	.00
29	.34	18	9.5	70	---	45	682	.57	.13	.19	.00	.00
30	.40	15	9.5	33	---	24	542	.50	.23	.11	.00	.00
31	.60	---	9.4	24	---	20	---	.45	---	.07	.00	---
TOTAL	31.69	1265.19	1201.4	2961.8	1683.9	1213	2494.8	1321.45	6.07	14.36	26.34	0.04
MEAN	1.02	42.2	38.8	95.5	60.1	39.1	83.2	42.6	.20	.46	.85	.001
MAX	14	579	466	717	479	141	682	302	.67	7.6	23	.02
MIN	.00	.56	9.4	7.0	9.1	11	9.8	.45	.04	.00	.00	.00
CFSM	.04	1.75	1.61	3.96	2.50	1.62	3.45	1.77	.01	.02	.04	.00
IN.	.05	1.95	1.85	4.57	2.60	1.87	3.85	2.04	.01	.02	.04	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

MEAN	9.65	31.5	54.4	51.4	63.6	65.4	62.1	43.5	26.3	14.4	14.5	8.13
MAX	75.1	99.3	184	108	175	179	174	152	154	68.3	73.2	136
(WY)	1978	1980	1991	1969	1989	1975	1972	1983	1973	1992	1978	1979
MIN	.000	.000	1.28	.69	7.68	8.46	5.95	1.01	.11	.46	.000	.000
(WY)	1988	1992	1977	1977	1992	1983	1976	1985	1988	1994	1983	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1968 - 1994	
ANNUAL TOTAL	13119.46		12220.04			
ANNUAL MEAN	35.9		33.5		36.9	
HIGHEST ANNUAL MEAN					65.7	1979
LOWEST ANNUAL MEAN					16.7	1981
HIGHEST DAILY MEAN	2060	Feb 21	717	Jan 28	2060	Feb 21 1993
LOWEST DAILY MEAN	.00	Jul 30	.00	Oct 1	.00	Aug 24 1976
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 29	.00	Oct 1	.00	Sep 16 1976
INSTANTANEOUS PEAK FLOW			4320	Apr 29	6100	Apr 4 1989
INSTANTANEOUS PEAK STAGE			6.01	Apr 29	9.93	Sep 4 1979
ANNUAL RUNOFF (CFSM)	1.49		1.39		1.53	
ANNUAL RUNOFF (INCHES)	20.25		18.86		20.82	
10 PERCENT EXCEEDS	51		54		71	
50 PERCENT EXCEEDS	9.4		9.3		6.8	
90 PERCENT EXCEEDS	.00		.00		.07	

HARRODS CREEK BASIN

03292473 HARRODS CREEK NEAR PROSPECT, KY

WATER-QUALITY RECORDS

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

DRAINAGE AREA.--92.1 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT					
04...	0940	639	8.0	13.0	7.1
NOV					
01...	0920	524	7.7	7.0	10.5
DEC					
01...	0920	540	8.3	4.0	12.7
JAN					
05...	0930	578	8.1	1.0	13.3
MAR					
02...	0930	489	8.2	4.5	12.9
MAY					
02...	1105	406	8.2	10.5	10.2
JUN					
06...	0915	509	7.7	21.5	6.8
JUL					
06...	0930	594	7.8	26.5	4.1
AUG					
01...	0930	579	7.9	22.5	5.6
SEP					
12...	0920	563	6.6	20.5	5.1

GOOSE CREEK BASIN

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

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'33", long 85°36'22", Jefferson County, Hydrologic Unit 05140101, at bridge on Old Westport Road and at mile 5.5.

DRAINAGE AREA.--6.0 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
04...	1035	1.1	610	8.0	14.0	8.2
NOV						
01...	1245	2.8	515	8.2	8.5	14.7
DEC						
01...	1205	4.0	372	8.5	7.5	15.1
JAN						
05...	1225	5.0	547	8.1	4.0	13.2
FEB						
02...	1040	13	495	7.8	3.5	13.0
MAR						
02...	1210	9.4	358	8.2	6.0	10.5
APR						
04...	1205	11	328	8.9	11.0	16.7
MAY						
02...	1215	14	444	8.4	13.5	10.3
JUN						
06...	1215	1.3	574	8.1	23.0	7.1
JUL						
06...	1215	1.5	605	7.9	26.0	5.3
AUG						
01...	1235	0.50	592	7.9	23.0	5.1
SEP						
12...	1155	0.53	652	6.8	22.0	6.0

GOOSE CREEK BASIN

03292475 GOOSE CREEK AT U.S. HWY 42 NEAR GLENVIEW ACRES, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'12", long 85°37'41", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42, 1.7 mi above Little Goose Creek, and at mile 2.1.

DRAINAGE AREA.--10.1 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
04...	1210	1.5	630	8.3	12.5	10.1
NOV						
01...	1145	4.7	583	8.3	7.0	11.9
DEC						
01...	1110	4.7	581	8.2	5.0	13.2
JAN						
05...	1125	8.6	756	8.2	3.5	13.3
MAR						
02...	1115	14	522	8.4	5.5	12.9
APR						
04...	1050	19	490	8.3	9.0	14.0
MAY						
02...	0910	28	446	8.1	10.0	10.2
JUN						
06...	1115	1.8	553	8.4	21.0	8.8
JUL						
06...	1045	1.4	582	8.2	24.5	7.9
AUG						
01...	1135	0.50	581	8.5	22.0	8.7
SEP						
12...	1100	0.40	583	7.4	19.5	8.1

GOOSE CREEK BASIN

03292480 LITTLE GOOSE CREEK NEAR HARRODS CREEK, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'45", long 85°37'33", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42 and at mile 1.8.

DRAINAGE AREA.--5.8 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
04...	1130	4.0	694	8.3	12.0	10.3
NOV						
01...	1055	4.2	624	8.1	6.5	11.7
DEC						
01...	1010	3.9	625	8.4	4.0	12.9
JAN						
05...	1025	5.2	981	8.1	3.0	13.2
FEB						
02...	0934	27	525	8.0	3.5	13.3
MAR						
02...	1025	7.6	536	8.2	5.0	12.6
APR						
04...	0930	11	354	8.1	6.5	14.4
MAY						
02...	1000	17	451	8.5	10.5	10.9
JUN						
06...	1015	1.5	573	8.2	20.0	8.0
JUL						
06...	1135	1.8	612	8.3	25.0	7.3
AUG						
01...	1045	0.56	615	8.4	22.0	7.7
SEP						
12...	1010	1.2	619	7.5	19.5	8.0

BEARGRASS CREEK BASIN

03292500 SOUTH FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION.--(revised) 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 confluence with Middle Fork, and at mile 6.5.

DRAINAGE AREA.--17.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1940, August 1944 to September 1953, October 1954 to September 1983 (High water records only, October 1962 to June 1970), and June 1988 to current year. Monthly discharge only for October to December 1939, published in WSP 1305.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 445.60 ft, Louisville city datum. Prior to Oct. 29, 1953, at datum 5.00 ft higher. Oct. 29, 1953, to June 24, 1970, at datum 3.00 ft higher. Prior to April 8, 1994, gage located 125 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 24-30, Jan. 17-22, and Apr. 6-8. Water-discharge records good except for estimated daily discharges, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1943 reached a stage of 18.1 ft, present datum, from information furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	7.3	8.2	9.3	34	16	22	72	2.2	1.5	1.7	1.8
2	5.6	5.1	9.9	19	28	12	20	35	2.6	1.3	1.8	2.1
3	3.2	6.5	54	15	25	11	38	29	2.8	1.4	1.7	2.5
4	2.3	5.4	104	15	21	11	20	24	2.6	1.2	2.1	2.4
5	2.1	5.8	57	12	20	9.4	17	20	2.5	1.2	37	36
6	1.7	4.6	31	14	17	8.3	25	20	2.1	42	2.7	7.6
7	1.7	3.8	22	46	11	7.9	20	83	2.2	7.9	1.0	2.6
8	1.6	3.6	19	19	74	16	14	30	6.9	3.3	1.0	1.9
9	6.7	3.7	18	16	71	63	12	22	2.3	2.7	1.2	1.7
10	3.2	3.5	19	14	31	63	38	17	2.0	2.1	1.6	1.8
11	2.3	3.5	15	13	26	47	31	15	1.7	1.9	1.4	1.8
12	2.5	3.5	13	17	23	38	22	12	1.8	1.6	2.3	1.9
13	2.4	50	12	13	19	32	19	8.2	2.0	2.3	2.8	2.1
14	3.4	103	23	11	15	26	16	28	2.5	1.5	3.9	2.4
15	3.5	43	22	8.4	14	22	38	26	2.5	1.3	4.5	2.8
16	22	27	14	7.0	13	17	18	12	1.2	1.4	4.4	2.6
17	59	161	12	6.1	12	14	15	7.6	1.2	1.2	1.3	60
18	10	37	12	5.4	11	15	14	6.3	1.1	1.5	1.2	4.4
19	44	27	10	4.7	10	12	14	5.2	1.1	1.5	1.6	2.2
20	185	21	9.8	4.5	23	13	13	4.8	1.3	1.9	2.2	2.9
21	38	18	11	4.3	15	22	11	4.3	16	40	4.2	4.0
22	23	16	8.9	3.9	114	12	9.6	3.9	7.2	3.4	1.6	4.4
23	18	14	7.8	12	137	10	9.2	3.9	2.2	1.3	1.2	11
24	15	13	6.9	47	45	16	9.2	3.6	8.4	1.2	1.3	15
25	12	11	6.2	150	32	9.2	9.2	3.7	6.0	1.3	1.3	4.0
26	6.7	19	5.9	120	25	11	10	6.8	9.8	1.5	1.3	2.8
27	5.4	28	5.5	201	21	148	43	3.6	14	1.8	1.2	2.8
28	4.8	13	5.2	251	21	88	34	2.2	2.6	1.7	1.7	2.0
29	4.8	11	4.9	91	---	41	66	2.0	1.7	1.7	36	2.2
30	15	8.8	4.7	58	---	32	176	1.8	1.5	2.0	3.9	1.8
31	11	---	7.8	43	---	28	---	2.1	---	1.6	1.8	---
TOTAL	517.9	677.1	559.7	1250.6	908	870.8	803.2	515.0	114.0	138.2	132.9	193.5
MEAN	16.7	22.6	18.1	40.3	32.4	28.1	26.8	16.6	3.80	4.46	4.29	6.45
MAX	185	161	104	251	137	148	176	83	16	42	37	60
MIN	1.6	3.5	4.7	3.9	10	7.9	9.2	1.8	1.1	1.2	1.0	1.7
CFSM	.97	1.31	1.05	2.35	1.89	1.63	1.56	.97	.22	.26	.25	.37
IN.	1.12	1.46	1.21	2.70	1.96	1.88	1.74	1.11	.25	.30	.29	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	7.01	13.8	22.9	31.1	41.3	42.2	32.9	25.8	17.6	15.6	9.81	7.18
MAX	46.7	53.9	73.6	125	107	126	95.2	103	78.3	126	54.7	86.3
(WY)	1978	1974	1979	1950	1989	1945	1948	1961	1950	1973	1974	1979
MIN	.30	.84	1.32	.71	8.52	6.41	3.13	5.51	1.11	.89	.23	.000
(WY)	1953	1953	1977	1940	1953	1983	1976	1962	1959	1956	1952	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	9253.8		6680.9			
ANNUAL MEAN	25.4		18.3		22.4	
HIGHEST ANNUAL MEAN					41.0	1950
LOWEST ANNUAL MEAN					9.35	1959
HIGHEST DAILY MEAN	322	Feb 21	251	Jan 28	1760	Jul 22 1973
LOWEST DAILY MEAN	1.6	Oct 8	1.0	Aug 7	.00	Sep 4 1940
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 2	1.4	Aug 22	.00	Sep 4 1940
INSTANTANEOUS PEAK FLOW			683	Nov 17	4940	Mar 9 1964
INSTANTANEOUS PEAK STAGE			8.49	Nov 17	17.17	Mar 9 1964
ANNUAL RUNOFF (CFSM)	1.47		1.06		1.30	
ANNUAL RUNOFF (INCHES)	20.01		14.45		17.68	
10 PERCENT EXCEEDS	59		41		48	
50 PERCENT EXCEEDS	12		9.2		7.2	
90 PERCENT EXCEEDS	3.8		1.6		.80	

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1988 to September 1992.
pH: May 1988 to September 1992.
WATER TEMPERATURE: May 1988 to September 1992.
DISSOLVED OXYGEN: May 1988 to September 1992.

REMARKS.--Water-quality samples collected monthly.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1010 microsiemens, Dec. 28-29, 1989; minimum, 122 microsiemens, May 16, 1990.
pH: Maximum, 9.5 units, Aug. 10, 1988; minimum, 4.9 units, Mar. 6-7, 1991.
WATER TEMPERATURE: Maximum, 33.6°C, Aug. 17, 1988; minimum, 0.0°C, Dec. 21, 29, 30, 1989.
DISSOLVED OXYGEN: Maximum, 16.2 mg/L, Mar. 1, 1989; minimum, 2.1 mg/L, Aug. 9, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
12...	1045	1.9	560	7.5	15.0	8.7
NOV						
09...	1025	4.3	602	7.6	8.0	12.4
DEC						
15...	1110	26	458	7.3	8.5	9.5
JAN						
11...	1020	14	450	7.6	4.5	11.1
FEB						
03...	1015	25	547	7.6	3.5	11.9
MAR						
08...	1030	16	587	7.4	8.0	9.5
APR						
13...	1050	20	562	7.8	14.0	8.3
MAY						
10...	1100	16	582	7.7	16.5	8.3
JUN						
14...	1040	2.7	460	7.8	25.5	6.3
JUL						
12...	1155	1.9	508	7.9	26.0	6.5
AUG						
10...	1040	1.8	494	7.7	23.0	6.5
SEP						
08...	1020	1.8	421	6.4	21.0	6.6

BEARGRASS CREEK BASIN

03292550 SOUTH FORK BEARGRASS CREEK AT WINTER AVENUE AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'04", long 85°45'50", Jefferson County, Hydrologic Unit 05140101, at bridge on Winter Avenue, 1.4 mi above Middle Fork Beargrass Creek, and at mile 3.3.

DRAINAGE AREA.--22.6 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
12...	0920	3.5	586	7.3	12.5	6.6
NOV						
09...	0900	4.7	644	7.5	6.5	11.7
DEC						
15...	0910	36	466	7.5	8.5	9.8
JAN						
11...	0920	13	670	7.7	4.0	12.4
FEB						
03...	0905	34	599	7.5	4.0	10.6
MAR						
08...	0910	25	581	7.7	8.5	10.1
APR						
13...	0935	21	604	8.1	14.0	10.5
MAY						
10...	0945	22	568	7.8	18.0	7.7
JUN						
14...	0930	3.1	540	7.7	24.0	7.1
JUL						
12...	1110	3.0	572	7.7	23.5	7.8
AUG						
10...	0915	2.4	515	7.5	20.5	6.5
SEP						
08...	0925	2.5	455	6.6	19.0	6.0

BEARGRASS CREEK BASIN

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION.--Lat 38°14'14", long 85°39'53", Jefferson County, Hydrologic Unit 05140101, on right bank 75 ft downstream from bridge on Old Cannons Lane at Louisville, 1.7 mi downstream from Weicher Creek, 5.4 mi upstream from confluence with South Fork, and 7.0 mi upstream from Ohio River.

DRAINAGE AREA.--18.9 mi^2, of which about 0.5 mi^2 does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1625: 1945(M), 1948(M), 1950(P), 1951-52(M), 1954-55(M), 1957(M), drainage area. WRD KY 72-1: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 476.70 ft, Louisville city datum. See WDR KY-90-1 for history of changes prior to July 26, 1971.

REMARKS.--Estimated daily discharges: Dec. 25-31, and Jan. 16-23. Water-discharge records are good except for periods of estimated record, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1943 reached a stage of 9.1 ft, present site and datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	8.0	9.0	7.4	30	16	24	92	2.9	2.7	1.1	2.3
2	3.2	6.2	10	14	24	14	19	43	2.9	2.4	.68	1.7
3	2.9	6.5	47	16	20	12	34	28	2.5	2.7	.88	1.4
4	1.9	5.7	118	15	17	11	20	22	2.5	2.0	1.8	1.2
5	1.4	6.6	74	13	15	11	16	17	2.7	1.9	19	29
6	1.0	5.3	40	13	13	9.9	21	16	2.9	12	2.9	10
7	.68	4.5	27	54	11	9.1	16	102	27	7.7	1.5	4.4
8	.64	4.0	21	27	67	12	13	47	16	5.0	1.1	2.9
9	3.3	3.6	19	21	75	46	11	29	5.8	20	.66	2.0
10	2.2	3.4	18	18	38	63	67	22	4.4	5.7	.58	1.6
11	1.3	3.3	14	15	29	53	43	17	3.3	3.8	.63	1.2
12	1.2	3.1	11	18	25	48	31	18	3.1	2.7	38	1.0
13	1.4	37	11	14	21	42	25	13	2.5	2.4	13	.62
14	1.5	75	20	13	17	36	21	44	2.5	3.2	4.9	.70
15	1.2	49	21	11	15	28	32	48	2.9	1.9	3.7	.79
16	11	27	15	9.4	14	22	22	23	2.0	1.6	2.1	.88
17	49	167	12	8.2	12	19	17	17	1.9	1.7	1.5	41
18	10	46	11	7.3	12	17	14	14	1.9	1.6	1.2	5.5
19	33	30	11	6.6	11	14	12	11	1.8	1.2	.93	2.8
20	157	22	9.8	6.2	21	14	11	8.9	3.1	13	1.1	1.9
21	36	17	9.9	5.7	19	20	10	8.0	60	18	5.0	1.6
22	18	14	8.9	5.2	101	13	8.9	7.1	11	7.0	2.2	1.2
23	12	12	8.1	5.0	145	11	7.8	5.5	8.6	3.5	1.7	4.6
24	9.3	11	7.5	40	55	14	7.6	5.5	13	2.4	1.3	11
25	7.4	10	6.7	158	38	11	7.0	5.1	8.6	1.9	.68	5.2
26	6.0	14	6.2	123	28	12	6.7	11	14	1.3	.52	3.6
27	5.6	32	5.8	193	23	160	26	5.5	21	1.5	.52	3.2
28	5.1	15	5.4	247	18	96	36	4.2	4.6	1.9	.46	2.1
29	4.6	12	5.1	92	---	50	58	3.7	4.8	1.3	53	1.7
30	10	9.8	4.8	58	---	36	174	3.3	3.5	1.1	5.0	1.4
31	9.9	---	4.6	40	---	30	---	2.9	---	.94	3.3	---
TOTAL	409.42	660.0	591.8	1274.0	914	950.0	811.0	693.7	243.7	136.04	170.94	148.49
MEAN	13.2	22.0	19.1	41.1	32.6	30.6	27.0	22.4	8.12	4.39	5.51	4.95
MAX	157	167	118	247	145	160	174	102	60	20	53	41
MIN	.64	3.1	4.6	5.0	11	9.1	6.7	2.9	1.8	.94	.46	.62
CFSM	.70	1.16	1.01	2.17	1.73	1.62	1.43	1.18	.43	.23	.29	.26
IN.	.81	1.30	1.16	2.51	1.80	1.87	1.60	1.37	.48	.27	.34	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	8.25	16.7	26.9	33.4	43.9	49.8	39.2	28.8	19.1	16.6	11.0	9.29
MAX	40.7	54.7	88.9	148	119	195	143	114	83.5	109	42.1	105
(WY)	1978	1974	1979	1950	1956	1964	1970	1961	1950	1973	1978	1979
MIN	.15	.71	1.90	3.31	3.44	4.20	5.27	3.04	.93	.37	.63	.033
(WY)	1954	1954	1954	1981	1954	1954	1954	1954	1954	1954	1953	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1944 - 1994	
ANNUAL TOTAL	8724.71		7003.09			
ANNUAL MEAN	23.9		19.2		25.2	
HIGHEST ANNUAL MEAN					49.2	1979
LOWEST ANNUAL MEAN					3.76	1954
HIGHEST DAILY MEAN	346	Mar 4	247	Jan 28	2000	Mar 9 1964
LOWEST DAILY MEAN	.64	Oct 8	.46	Aug 28	.00	Aug 27 1952
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 8	.97	Sep 10	.00	Sep 28 1952
INSTANTANEOUS PEAK FLOW			516	Jan 28	5200	Apr 2 1970
INSTANTANEOUS PEAK STAGE			4.25	Jan 28	8.30	Apr 2 1970
ANNUAL RUNOFF (CFSM)	1.26		1.02		1.33	
ANNUAL RUNOFF (INCHES)	17.17		13.78		18.09	
10 PERCENT EXCEEDS	50		46		53	
50 PERCENT EXCEEDS	11		10		10	
90 PERCENT EXCEEDS	3.1		1.4		1.9	

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1988 to September 1992.
pH: April 1988 to September 1992.
WATER TEMPERATURE: April 1988 to September 1992.
DISSOLVED OXYGEN: April 1988 to September 1992.

REMARKS.--Water-quality samples collected monthly.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1050 microsiemens, Dec. 19, 1991; minimum, 74 microsiemens, July 19, 1989.
pH: Maximum, 9.7 units, Apr. 19, 1989; minimum, 5.6 units, July 19, 1989.
WATER TEMPERATURE: Maximum, 35.4°C, August 16, 1988; minimum, 1.8°C, Dec. 10-13, 1988.
DISSOLVED OXYGEN: Maximum, 25.1 mg/L, Apr. 28, 1992; minimum, 0.4 mg/L, Oct. 26, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
13...	1100	1.3	665	7.7	12.5	8.7
NOV						
10...	1000	3.3	677	7.8	6.5	11.1
DEC						
14...	1030	30	519	7.8	9.0	10.1
JAN						
13...	1010	14	726	7.7	7.5	9.9
FEB						
08...	1025	41	442	7.9	6.5	11.0
MAR						
15...	1110	28	592	8.1	12.0	13.3
APR						
14...	1055	21	577	8.0	16.0	11.4
MAY						
11...	1050	17	566	7.9	16.0	10.9
JUN						
13...	1125	2.6	606	8.1	25.0	8.6
JUL						
14...	1050	3.5	599	7.9	25.0	6.7
AUG						
11...	1015	0.52	598	7.6	23.0	4.6
SEP						
14...	1030	1.0	636	7.0	22.5	4.8

BEARGRASS CREEK BASIN

03293200 MIDDLE FORK BEARGRASS CREEK AT BEALS BRANCH ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'32", long 85°41'57", Jefferson County, Hydrologic Unit 05140101, at bridge on Beals Branch Road and at mile 1.9.

DRAINAGE AREA.--22.7 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
13...	0920	1.5	522	7.5	11.5	6.4
NOV						
10...	0905	3.4	649	7.9	5.5	11.3
DEC						
14...	0935	20	527	7.7	8.0	9.9
JAN						
13...	0910	11	706	7.7	7.0	10.0
FEB						
08...	0915	12	633	7.8	5.5	10.7
MAR						
15...	0925	35	580	7.9	11.0	8.1
APR						
14...	0930	28	594	8.0	12.5	9.4
MAY						
11...	0920	24	540	8.0	14.0	8.9
JUN						
13...	1020	2.8	556	7.9	24.0	4.0
JUL						
14...	0915	2.5	468	7.8	24.5	3.2
AUG						
11...	0905	0.54	512	7.5	21.5	2.8
SEP						
14...	0950	1.7	618	6.7	21.0	3.8

BEARGRASS CREEK BASIN

03293530 MUDDY FORK AT MOCKINGBIRD VALLEY ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'35", long 85°41'37", Jefferson County, Hydrologic Unit 05140101, at culvert on Mockingbird Valley Road and at mile 1.5.

DRAINAGE AREA.--6.2 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
20...	0915	91	234	7.3	18.0	7.6
NOV						
08...	0920	0.97	761	7.9	3.5	10.9
DEC						
06...	0925	12	683	7.7	10.0	9.9
JAN						
12...	0855	4.5	515	7.8	5.5	11.4
MAR						
09...	0905	5.3	638	7.4	2.0	11.9
APR						
06...	0905	8.0	490	7.6	10.5	8.9
MAY						
04...	0855	8.9	665	8.3	11.5	9.5
JUN						
02...	0950	1.3	653	7.8	17.0	7.9
JUL						
25...	0900	0.62	629	8.2	23.5	6.7
AUG						
03...	0905	0.46	666	8.2	22.0	6.8
SEP						
19...	0925	2.0	621	6.9	16.5	8.0

OHIO RIVER MAIN STEM

03294500 OHIO RIVER AT LOUISVILLE, KY

LOCATION.--Lat 38°16'49", long 85°47'57", Jefferson County, Hydrologic Unit 05140101, on left bank at downstream end of lock guide wall in lower pool at McAlpine Locks, at Louisville, 5.3 mi downstream from Beargrass Creek and at mile 607.3.

DRAINAGE AREA.--91,170 mi^2, approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1935 monthly discharge only, published in WSP 1305. Gage-height records collected in this vicinity since 1871 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 893: 1939.

GAGE.--Water-stage recorder. Datum of gage is 373.18 ft above sea level or 374.00 ft Ohio River datum. Prior to Oct. 1, 1939, and Oct. 1, 1943 to Sept. 30, 1946, various combinations of gages near Louisville were used. Oct. 1, 1939 to Sept. 30, 1943, water-stage recorders at Louisville and Kosmosdale, downstream from McAlpine Dam (4 mi and 20.1 mi, respectively), were used to determine discharge. Oct. 1, 1946 to Sept. 30, 1961, nonrecording gage at site 0.3 mi upstream at same datum. Oct. 1, 1952 to Sept. 30, 1970, upper nonrecording gage at dam 43, 25.9 mi downstream used as an auxiliary gage. Since Oct. 1, 1970, auxiliary water-stage recorder at Kosmosdale, 19.8 mi downstream. Datum of auxiliary gage is 372.75 ft above sea level or 373.67 ft above Ohio River Dam.

REMARKS.--Estimated daily discharges: Jan. 15, 16, 18, 19, 29 to Feb. 7, and Aug. 20-24. Records fair except for estimated periods and those below 20,000 ft^3/s, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36000	32100	219000	60000	468000	394000	469000	224000	34800	56100	53100	57000
2	37400	55600	216000	55500	460000	319000	463000	182000	31300	50000	37300	61300
3	34800	60400	180000	57800	440000	251000	442000	146000	44600	51400	32900	65300
4	36800	59300	174000	73000	412000	239000	407000	135000	30700	60100	34800	56600
5	26400	61900	221000	131000	360000	290000	359000	124000	21400	49000	43400	42500
6	25700	57500	259000	192000	295000	321000	309000	127000	35900	37900	49800	29000
7	24900	64800	316000	211000	220000	306000	274000	144000	33800	35900	59400	31700
8	18600	74700	363000	236000	173000	273000	272000	213000	30800	41100	66700	24400
9	19200	70900	366000	292000	194000	261000	276000	263000	36500	42200	58700	28500
10	17300	67100	328000	350000	250000	313000	294000	329000	28500	33700	23000	17600
11	19300	52800	270000	361000	327000	412000	384000	360000	28200	26500	35400	19400
12	17500	45900	226000	299000	388000	464000	398000	336000	30500	40200	27500	22800
13	17500	49200	190000	220000	425000	477000	415000	267000	31000	30900	14600	20600
14	14500	68000	176000	206000	444000	479000	434000	189000	29300	39500	21800	18600
15	22300	173000	162000	244000	443000	460000	440000	153000	43100	35100	37200	18800
16	21500	188000	133000	250000	419000	410000	441000	147000	46900	37900	87700	16200
17	25300	216000	121000	204000	360000	345000	456000	126000	69600	45500	88200	23900
18	35900	239000	110000	143000	290000	300000	461000	105000	60200	30600	89400	22400
19	23700	249000	104000	96000	250000	276000	458000	99400	44600	33000	128000	22300
20	36500	259000	102000	62900	218000	257000	437000	87000	46700	31500	153000	31000
21	63900	254000	102000	76100	203000	231000	394000	61800	51400	28800	168000	23800
22	73300	234000	94200	72600	209000	201000	336000	60100	40900	32700	142000	18800
23	78500	192000	99600	70300	266000	210000	279000	58200	43900	30200	125000	19700
24	64100	166000	100000	82200	349000	253000	230000	55800	41100	34500	104000	16200
25	52900	141000	90200	112000	403000	291000	186000	40400	36700	35700	98900	16400
26	54500	117000	68900	189000	432000	316000	153000	54700	37300	42100	81800	27400
27	30800	112000	73400	281000	446000	323000	129000	53500	55600	41400	61900	30000
28	36300	121000	64200	408000	436000	351000	123000	67000	47900	37300	43700	29200
29	34200	141000	48200	438000	---	399000	132000	57500	51400	44300	48000	26000
30	30000	186000	60100	455000	---	436000	207000	64600	61400	54300	54900	25100
31	33800	---	51300	470000	---	462000	---	46700	---	79400	62600	---
TOTAL	1063400	3808200	5088100	6398400	9580000	10320000	10058000	4376700	1226000	1268800	2132700	862500
MEAN	34300	126900	164100	206400	342100	332900	335300	141200	40870	40930	68800	28750
MAX	78500	259000	366000	470000	468000	479000	469000	360000	69600	79400	168000	65300
MIN	14500	32100	48200	55500	173000	201000	123000	40400	21400	26500	14600	16200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1994, BY WATER YEAR (WY)

MEAN	37450	69030	123400	165800	195000	244500	207600	139600	82150	55740	44060	33220
MAX	153500	245900	321300	595800	430400	524300	403300	330000	234400	163400	151300	166600
(WY)	1980	1986	1973	1937	1939	1945	1948	1983	1981	1958	1958	1979
MIN	4377	6660	14080	21630	38010	69390	66480	29350	16400	8035	4924	6005
(WY)	1931	1931	1931	1931	1934	1969	1986	1941	1988	1930	1930	1930

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1929 - 1994	
ANNUAL TOTAL	44349860		56182800			
ANNUAL MEAN	121500		153900		116100	
HIGHEST ANNUAL MEAN					176700	1979
LOWEST ANNUAL MEAN					57390	1954
HIGHEST DAILY MEAN	466000	Mar 8	479000	Mar 14	1110000	Jan 27 1937
LOWEST DAILY MEAN	8660	Sep 8	14500	Oct 14	2100	Aug 12 1930
ANNUAL SEVEN-DAY MINIMUM	16000	Sep 12	17700	Oct 8	3530	Oct 15 1930
INSTANTANEOUS PEAK FLOW					1110000	Jan 27 1937
INSTANTANEOUS PEAK STAGE			55.92	Mar 14	85.44	Jan 27 1937
10 PERCENT EXCEEDS	292000		401000		279000	
50 PERCENT EXCEEDS	71800		82200		71600	
90 PERCENT EXCEEDS	18800		26500		16600	

MILL CREEK BASIN

03294550 MILL CREEK CUTOFF NEAR LOUISVILLE, KY

LOCATION.--Lat 38°10'39", long 85°52'01", Jefferson County, Hydrologic Unit 05140102, on left bank at bridge on Highway 1230, 0.8 mi downstream from confluence with Big Run Creek, 1.5 mi upstream from Ohio River, and at mile 616.3.

DRAINAGE AREA.--24.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage undetermined.

REMARKS.--Estimated daily discharges: Nov. 4, Dec. 25-30, Jan. 16-22, 24 to Feb. 5, 10-17, 21 to Mar. 2, 12-18, 30 to Apr. 6, 13-22, June 16-18, July 28, Sept. 7-17, and 21-23. Water-discharge records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	2.2	1.0	3.7	16	30	6.0	44	.94	.86	1.3	.86
2	1.3	1.2	1.6	17	9.0	25	4.6	7.5	1.1	.85	1.4	.82
3	1.2	1.6	55	9.3	6.0	1.9	6.0	3.9	1.1	1.2	1.4	.79
4	.93	2.1	112	6.0	4.0	1.8	6.4	2.9	.97	.87	1.7	.84
5	.74	1.6	30	3.8	2.7	1.6	5.2	2.2	1.0	.88	7.8	7.0
6	.68	.98	6.1	3.4	2.1	1.5	6.8	2.2	.82	.87	1.6	5.1
7	.59	.94	3.2	36	1.8	1.5	4.8	63	17	1.0	1.4	2.0
8	.59	.95	2.2	4.5	56	4.4	2.7	13	8.9	25	1.4	1.7
9	6.2	.93	1.9	2.2	54	36	2.5	3.9	7.6	13	1.3	.98
10	2.9	1.0	5.3	1.6	30	57	28	2.3	4.3	2.8	1.1	1.5
11	.97	1.0	2.6	1.7	20	50	25	1.7	3.2	1.3	1.1	.80
12	.77	.94	1.7	7.2	14	45	11	1.5	3.0	1.2	1.2	.62
13	1.2	30	1.6	4.5	12	35	6.0	1.1	2.9	1.6	1.1	.58
14	.83	110	4.5	2.8	9.0	25	4.3	23	2.4	3.6	1.3	.52
15	.76	26	7.8	1.2	7.0	13	30	34	2.3	1.8	1.5	.51
16	14	5.0	3.3	1.0	5.0	10	10	8.1	2.2	1.4	.97	.51
17	61	141	2.0	.92	3.5	6.6	6.2	2.0	5.6	1.4	1.1	24
18	5.1	8.4	1.6	.88	2.1	4.0	5.0	1.4	2.6	1.6	.93	4.3
19	51	3.6	1.6	.82	2.2	2.5	3.8	1.1	2.3	1.8	.88	1.5
20	168	2.4	1.6	.80	10	2.5	3.0	1.0	2.8	1.9	.98	1.1
21	8.9	1.7	2.0	.78	25	14	2.4	1.0	9.2	93	3.2	1.0
22	2.5	1.3	1.7	.72	88	4.1	1.8	1.0	6.7	9.4	1.2	.68
23	1.3	1.4	1.3	5.5	60	2.8	1.3	1.1	3.2	2.2	1.1	19
24	1.1	1.1	1.2	30	35	2.6	1.3	1.0	7.6	1.3	1.2	34
25	.97	1.1	1.2	70	18	2.1	1.2	1.0	4.0	2.1	1.2	3.4
26	.97	3.0	1.1	50	90	2.1	1.1	6.6	12	2.4	1.3	1.9
27	.91	11	1.1	90	60	194	13	1.3	16	1.3	1.2	2.3
28	.77	2.4	1.0	143	40	62	31	1.0	1.5	1.2	1.3	1.3
29	.81	1.5	.98	95	---	11	67	.97	1.1	1.5	13	.98
30	4.0	1.2	.94	50	---	10	241	1.0	.89	1.9	1.8	.90
31	3.9	---	1.4	30	---	7.8	---	.99	---	1.4	.92	---
TOTAL	345.68	367.54	260.52	674.32	682.4	666.8	538.4	236.76	135.22	182.63	58.88	121.49
MEAN	11.2	12.3	8.40	21.8	24.4	21.5	17.9	7.64	4.51	5.89	1.90	4.05
MAX	168	141	112	143	90	194	241	63	17	93	13	34
MIN	.59	.93	.94	.72	1.8	1.5	1.1	.97	.82	.85	.88	.51
CFSM	.46	.50	.34	.89	1.00	.88	.74	.31	.18	.24	.08	.17
IN.	.53	.56	.40	1.03	1.04	1.02	.82	.36	.21	.28	.09	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

MEAN	4.69	9.65	19.3	25.6	41.0	32.3	14.2	20.0	12.8	9.22	9.61	4.89
MAX	11.2	18.4	73.0	72.3	87.0	68.5	25.0	69.8	49.1	23.5	33.4	11.9
(WY)	1994	1993	1991	1991	1989	1991	1989	1990	1990	1989	1992	1992
MIN	.18	3.25	1.35	6.60	3.97	7.11	4.89	6.36	.042	1.19	1.90	.067
(WY)	1989	1992	1990	1992	1992	1990	1992	1992	1988	1990	1994	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1988 - 1994	
ANNUAL TOTAL	5354.55		4270.64			
ANNUAL MEAN	14.7		11.7		17.1	
HIGHEST ANNUAL MEAN					25.5	1991
LOWEST ANNUAL MEAN					11.6	1992
HIGHEST DAILY MEAN	402	Feb 21	241	Apr 30	1070	Feb 15 1990
LOWEST DAILY MEAN	.38	Feb 10	.51	Sep 15	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.54	Feb 4	.72	Sep 10	.00	May 28 1988
INSTANTANEOUS PEAK STAGE					15.83	Aug 8 1992
ANNUAL RUNOFF (CFSM)	.60		.48		.70	
ANNUAL RUNOFF (INCHES)	8.16		6.51		9.53	
10 PERCENT EXCEEDS	40		32		30	
50 PERCENT EXCEEDS	1.9		2.2		1.6	
90 PERCENT EXCEEDS	.77		.92		.22	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to September 1994 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1988 to September 1992.
pH: May 1988 to September 1992.
WATER TEMPERATURE: May 1988 to September 1992.
DISSOLVED OXYGEN: May 1988 to September 1992.

REMARKS.--Water-quality samples collected monthly.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,062 microsiemens, June 23, 1988; minimum, 76 microsiemens, Aug. 8, 1992.
pH: Maximum, 11.3 units, July 28, 29, 1989; minimum, 4.8 units, Sept. 12, 1988.
WATER TEMPERATURE: Maximum, 34.4°C, Sept. 21, 1989; minimum, 0.6°C, Dec. 28, 1990, Jan. 15, 16, 1992.
DISSOLVED OXYGEN: Maximum, 24.5 mg/L, Aug. 16, 1989; minimum, 0.3 mg/L, July 5, 23, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
05...	1020	0.80	660	8.4	16.0	11.2
NOV						
02...	1115	1.0	530	8.0	7.0	12.9
DEC						
02...	1030	1.0	616	7.8	5.0	12.5
JAN						
04...	1100	5.1	485	7.5	2.0	13.0
FEB						
07...	1110	1.7	482	7.6	3.5	11.6
MAR						
03...	1035	1.8	590	7.6	4.0	11.9
APR						
07...	1010	5.0	344	6.9	7.5	10.3
MAY						
12...	1030	1.8	546	8.3	21.0	10.0
JUN						
07...	1050	1.8	610	8.6	25.5	7.8
JUL						
07...	0945	0.90	587	8.5	26.0	7.9
AUG						
04...	1015	1.1	627	8.7	26.5	10.7
SEP						
01...	1045	0.87	503	7.1	20.5	6.0

MILL CREEK BASIN

03294570 MILL CREEK AT ORELL ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'41", long 85°53'24", Jefferson County, Hydrologic Unit 05140101, at bridge on Orell Road, and at mile 1.5.

DRAINAGE AREA.-- 13.5 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
05...	0910	0.18	302	7.2	14.0	6.8
NOV						
02...	0915	0.96	357	7.1	4.5	10.2
DEC						
02...	0910	0.30	377	7.7	5.0	12.0
JAN						
04...	0925	5.6	464	6.9	1.5	12.4
FEB						
07...	0940	1.4	283	6.7	2.0	12.5
MAR						
03...	0915	2.5	415	7.3	3.0	12.4
APR						
07...	0910	3.0	300	7.0	7.5	9.4
JUN						
07...	0910	9.5	754	8.0	21.5	7.4
JUL						
07...	0830	2.5	793	8.1	23.0	6.9
AUG						
04...	0910	3.0	727	8.3	25.0	6.0
SEP						
01...	0910	4.0	581	7.5	20.0	4.0

SALT RIVER BASIN

03295400 SALT RIVER AT GLENSBORO, KY

LOCATION.--Lat 38°00'07", long 85°03'38", Anderson County, Hydrologic Unit 05140102, on left bank 5 ft downstream from bridge on Highway 53 at Glensboro, 0.9 mi upstream from Timber Creek, 2.0 mi downstream from Indian Creek, and at mile 82.5.

DRAINAGE AREA.--172 mi^2.

PERIOD OF RECORD.--May 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage undetermined.

REMARKS.--Estimated daily discharges: Nov. 6, Dec. 21-26, 28 to Jan. 2, 5 to Feb. 3, Mar. 8, 9, and Sept. 17-30. Records poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	12	111	52	300	158	465	242	20	16	60	16
2	2.2	11	87	48	210	197	314	311	16	10	30	13
3	2.4	9.6	83	342	160	745	241	166	14	7.6	18	12
4	4.3	8.7	925	471	130	547	223	149	12	5.5	13	9.5
5	4.4	9.1	1620	380	113	421	184	129	10	4.3	28	9.4
6	3.9	9.5	716	900	101	284	323	111	8.9	3.7	188	10
7	3.6	9.8	425	2000	85	227	659	2320	8.8	3.8	329	12
8	3.2	8.5	264	700	184	520	419	1160	9.7	4.0	132	10
9	3.1	7.8	187	360	1480	1600	257	510	13	2.5	67	8.9
10	3.7	7.2	378	250	1030	6490	491	338	14	2.0	42	7.7
11	4.1	6.5	653	170	685	2410	1050	237	86	2.1	30	6.8
12	3.8	6.3	364	240	1420	861	965	208	60	23	26	6.5
13	4.1	1070	235	400	1390	619	589	165	31	12	21	6.0
14	4.0	943	195	300	787	549	383	129	20	11	14	6.5
15	8.5	1470	245	250	524	443	812	328	13	9.8	10	7.0
16	9.5	540	312	230	380	314	1890	444	10	6.9	8.9	3.3
17	9.2	2930	246	225	259	237	709	359	9.3	53	8.0	2.0
18	14	1100	198	200	207	212	422	210	12	46	6.9	2.5
19	17	459	166	190	168	187	267	151	116	22	5.6	2.2
20	802	229	140	180	144	166	178	116	39	14	6.3	1.8
21	476	146	125	165	154	160	136	90	20	9.4	31	1.6
22	211	107	112	160	516	165	114	73	13	8.6	664	1.4
23	128	79	105	210	3500	154	97	62	8.8	5.9	348	1.4
24	77	64	100	300	1270	138	81	53	7.1	5.5	178	1.9
25	50	52	91	2400	531	104	72	44	5.9	27	98	2.0
26	33	46	84	1990	348	86	63	141	7.2	20	66	2.0
27	20	437	78	2200	229	1960	178	141	11	17	46	2.1
28	15	579	70	3000	180	2750	149	71	18	12	36	3.2
29	11	271	64	1500	---	1020	288	51	64	16	50	3.4
30	12	155	60	680	---	520	263	38	29	25	47	3.0
31	12	---	54	430	---	463	---	29	---	158	30	---
TOTAL	1953.8	10783.0	8493	20923	16485	24707	12282	8576	706.7	563.6	2637.7	175.1
MEAN	63.0	359	274	675	589	797	409	277	23.6	18.2	85.1	5.84
MAX	802	2930	1620	3000	3500	6490	1890	2320	116	158	664	16
MIN	1.8	6.3	54	48	85	86	63	29	5.9	2.0	5.6	1.4
CFSM	.37	2.09	1.59	3.92	3.42	4.63	2.38	1.61	.14	.11	.49	.03
IN.	.42	2.33	1.84	4.53	3.57	5.34	2.66	1.85	.15	.12	.57	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

MEAN	97.6	172	484	494	510	453	211	201	205	109	63.8	46.0
MAX	262	359	1360	675	642	797	409	358	517	221	137	124
(WY)	1991	1994	1991	1994	1991	1994	1994	1990	1992	1992	1992	1989
MIN	10.9	11.4	123	344	169	99.9	105	118	23.6	6.72	7.25	5.84
(WY)	1993	1992	1990	1993	1992	1990	1992	1991	1994	1993	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1989 - 1994	
ANNUAL TOTAL	79208.28		108285.9			
ANNUAL MEAN	217		297		249	
HIGHEST ANNUAL MEAN					335	1991
LOWEST ANNUAL MEAN					181	1993
HIGHEST DAILY MEAN	5830	Feb 21	6490	Mar 10	9220	Dec 18 1990
LOWEST DAILY MEAN	.86	Jul 31	1.4	Sep 22	.86	Jul 31 1993
ANNUAL SEVEN-DAY MINIMUM	1.6	Jul 27	1.7	Sep 20	1.6	Jul 27 1993
INSTANTANEOUS PEAK FLOW			8050	Mar 9	11600	Dec 18 1990
INSTANTANEOUS PEAK STAGE			9.50	Mar 9	10.75	Feb 21 1993
ANNUAL RUNOFF (CFSM)	1.26		1.72		1.45	
ANNUAL RUNOFF (INCHES)	17.13		23.42		19.70	
10 PERCENT EXCEEDS	512		728		521	
50 PERCENT EXCEEDS	78		98		80	
90 PERCENT EXCEEDS	3.8		5.1		7.8	

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 mi^2.

PERIOD OF RECORD.--July 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 466.85 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 1, 4, 5, 8-10, and 13 to Feb. 3. Records good except those for estimated daily discharges, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	94	156	163	334	275	518	2920	31	6.1	4.2	2.0
2	9.0	101	146	157	280	244	411	1320	26	5.6	3.3	1.9
3	9.1	101	148	252	242	226	363	739	21	4.5	2.8	2.2
4	9.4	101	827	446	334	192	450	543	18	3.6	2.4	3.5
5	8.9	99	1910	399	296	162	376	406	15	3.2	3.8	3.1
6	4.4	97	1080	350	254	142	455	313	13	2.8	15	3.1
7	2.7	96	677	2020	215	129	926	967	12	2.7	46	2.7
8	5.0	91	486	1480	219	143	684	1020	18	2.3	22	2.3
9	6.7	86	377	668	1790	650	545	697	23	2.7	12	7.4
10	8.8	81	334	493	1360	1950	559	471	51	1.7	7.1	6.4
11	9.1	80	313	428	880	1890	1450	327	33	1.6	4.8	4.8
12	10	148	253	358	685	1730	1420	261	24	1.4	4.1	3.9
13	11	192	225	316	831	1230	1450	221	19	3.3	3.3	3.5
14	12	722	232	447	682	938	994	171	15	5.8	3.5	2.8
15	14	1850	364	375	558	681	841	419	12	4.7	3.2	2.2
16	15	893	384	333	441	474	1290	751	9.6	5.2	3.8	1.5
17	19	2190	347	313	359	349	827	361	8.4	10	3.1	.62
18	22	1590	315	283	307	311	569	249	7.8	9.9	2.9	.69
19	37	900	286	265	268	263	431	189	6.2	7.1	3.3	1.2
20	919	609	253	251	251	209	326	152	5.5	5.4	2.8	1.3
21	236	435	241	242	307	199	257	128	9.3	4.4	3.8	1.1
22	157	334	230	295	458	200	216	107	8.5	4.4	2.8	.78
23	126	274	200	367	3320	179	182	92	7.4	3.7	2.7	.54
24	108	237	183	488	1600	160	159	76	7.9	3.2	3.6	.63
25	97	206	182	1730	933	209	141	70	5.5	3.4	6.4	.67
26	89	157	163	2180	579	182	130	63	4.9	2.9	5.5	.66
27	81	165	157	2640	398	2000	318	61	9.4	3.9	4.0	.99
28	81	265	152	3090	325	2770	541	56	9.7	4.8	2.8	.56
29	80	224	166	1630	---	1650	1250	46	7.9	3.6	4.1	.29
30	81	180	236	614	---	995	3210	39	6.0	8.0	2.7	.17
31	86	---	199	433	---	692	---	33	---	5.6	2.2	---
TOTAL	2363.2	12598	11222	23506	18506	21424	21289	13268	445.0	137.5	194.0	63.50
MEAN	76.2	420	362	758	661	691	710	428	14.8	4.44	6.26	2.12
MAX	919	2190	1910	3090	3320	2770	3210	2920	51	10	46	7.4
MIN	2.7	80	146	157	215	129	130	33	4.9	1.4	2.2	.17
CFSM	.29	1.62	1.40	2.93	2.55	2.67	2.74	1.65	.06	.02	.02	.01
IN.	.34	1.81	1.61	3.38	2.66	3.08	3.06	1.91	.06	.02	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

MEAN	40.0	211	484	497	815	577	463	414	213	82.0	46.4	13.1
MAX	240	586	1806	801	1984	838	801	1912	598	219	291	57.1
(WY)	1991	1986	1991	1990	1989	1993	1989	1983	1992	1989	1992	1992
MIN	.012	3.97	116	47.0	212	80.5	48.3	47.1	1.90	4.44	.030	.001
(WY)	1989	1988	1990	1986	1992	1983	1986	1986	1988	1994	1983	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1981 - 1994	
ANNUAL TOTAL	137563.5		125016.20			
ANNUAL MEAN	377		343		319	
HIGHEST ANNUAL MEAN					454	1990
LOWEST ANNUAL MEAN					201	1988
HIGHEST DAILY MEAN	6860	Jun 5	3320	Feb 23	20700	Feb 16 1990
LOWEST DAILY MEAN	2.7	Oct 7	.17	Sep 30	.00	Aug 19 1983
ANNUAL SEVEN-DAY MINIMUM	6.5	Oct 5	.57	Sep 24	.00	Aug 19 1983
INSTANTANEOUS PEAK FLOW			4530	Feb 23	26200	Feb 16 1990
INSTANTANEOUS PEAK STAGE			13.42	Feb 23	27.55	Feb 16 1990
INSTANTANEOUS LOW FLOW			.15	Sep 30	.15	Sep 30 1994
ANNUAL RUNOFF (CFSM)	1.46		1.32		1.23	
ANNUAL RUNOFF (INCHES)	19.76		17.96		16.74	
10 PERCENT EXCEEDS	948		935		766	
50 PERCENT EXCEEDS	180		156		84	
90 PERCENT EXCEEDS	12		2.8		1.0	

SALT RIVER BASIN

03297900 FLOYDS FORK NEAR PEE WEE 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 mi south of Pee Wee Valley, 2.2 mi downstream from Curry's Fork, and at mile 44.3.

DRAINAGE AREA.--60.7 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 599.892 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 6, Dec. 25 to Jan. 1, 8-23, May 24 to June 6, and 10-16. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	21	48	35	105	68	93	676	9.0	1.3	.30	.90
2	4.2	19	45	52	104	64	78	238	8.0	1.0	.24	.97
3	3.7	16	119	103	103	61	84	127	7.2	.91	.38	.77
4	2.9	16	812	152	89	54	92	99	6.5	.91	.54	.64
5	2.9	16	700	158	64	50	73	78	6.0	.72	9.0	5.7
6	2.4	15	190	127	58	45	74	68	5.5	10	5.2	17
7	1.6	14	111	728	54	43	88	349	18	16	1.1	2.8
8	1.3	13	85	200	381	43	72	322	71	6.9	.48	1.2
9	1.7	11	70	250	814	71	66	126	18	36	.29	1.7
10	3.4	10	69	110	268	333	700	87	11	13	.33	2.0
11	5.5	9.5	59	88	266	429	317	69	7.0	5.6	.52	1.4
12	6.3	9.1	50	74	170	386	287	67	5.0	2.8	.99	1.0
13	5.5	83	47	64	106	253	157	54	3.8	2.0	.72	.72
14	5.7	479	91	60	85	197	106	106	3.0	2.7	.35	.59
15	5.7	653	143	55	78	129	118	558	2.4	4.3	.35	.52
16	7.8	157	102	51	70	92	173	315	1.8	4.0	.49	.39
17	18	826	78	48	64	75	93	103	1.6	3.0	.46	1.0
18	14	243	70	46	62	74	75	69	1.4	2.2	.40	2.8
19	9.2	129	64	44	60	63	66	52	1.3	1.6	.33	4.8
20	356	85	57	42	67	59	58	42	.94	1.7	.33	4.4
21	152	64	58	40	158	61	51	34	1.1	4.0	.43	3.9
22	58	53	54	38	256	60	48	27	11	6.3	.34	3.8
23	33	45	47	70	1360	53	43	23	6.2	3.6	.33	4.0
24	23	40	43	111	248	196	40	19	3.4	2.1	.33	6.7
25	18	36	38	939	143	128	38	17	2.8	1.3	.39	6.9
26	14	37	35	1190	99	87	35	16	2.0	1.5	.50	7.0
27	12	201	33	1470	83	1030	53	15	4.6	2.7	.59	6.3
28	8.9	108	31	2230	73	726	68	13	5.4	1.1	.57	5.4
29	9.2	71	29	342	---	249	832	12	3.6	.68	2.5	4.4
30	9.7	57	28	189	---	149	1370	11	1.8	.48	2.1	3.8
31	15	---	27	134	---	121	---	10	---	.38	1.5	---
TOTAL	814.8	3536.6	3433	9240	5488	5449	5448	3802	230.34	140.78	32.38	103.50
MEAN	26.3	118	111	298	196	176	182	123	7.68	4.54	1.04	3.45
MAX	356	826	812	2230	1360	1030	1370	676	71	36	9.0	17
MIN	1.3	9.1	27	35	54	43	35	10	.94	.38	.24	.39
CFSM	.33	1.48	1.39	3.73	2.45	2.20	2.27	1.53	.10	.06	.01	.04
IN.	.38	1.65	1.60	4.30	2.56	2.54	2.54	1.77	.11	.07	.02	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	12.2	65.7	89.7	209	146	230	147	68.4	70.9	18.3	47.2	6.55
MAX	26.3	118	120	298	202	265	182	123	156	37.1	103	14.0
(WY)	1994	1994	1992	1994	1993	1992	1994	1994	1993	1993	1993	1992
MIN	4.53	3.14	38.8	127	43.3	176	86.4	26.5	4.07	1.89	1.04	2.34
(WY)	1993	1992	1993	1992	1992	1994	1992	1993	1991	1991	1994	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	42651.05		37718.40			
ANNUAL MEAN	117		103		96.1	
HIGHEST ANNUAL MEAN					105	1993
LOWEST ANNUAL MEAN					79.5	1992
HIGHEST DAILY MEAN	1760	Feb 21	2230	Jan 28	2230	Jan 28 1994
LOWEST DAILY MEAN	.72	Aug 1	.24	Aug 2	.12	Jul 18 1991
ANNUAL SEVEN-DAY MINIMUM	2.3	Oct 4	.35	Aug 19	.17	Jul 16 1991
INSTANTANEOUS PEAK FLOW			4280	Jan 28	4730	Mar 19 1992
INSTANTANEOUS PEAK STAGE			14.96	Jan 28	16.40	Mar 19 1992
ANNUAL RUNOFF (CFSM)	1.46		1.29		1.20	
ANNUAL RUNOFF (INCHES)	19.86		17.56		16.34	
10 PERCENT EXCEEDS	238		248		177	
50 PERCENT EXCEEDS	48		38		23	
90 PERCENT EXCEEDS	4.9		.91		.74	

SALT RIVER BASIN

03297980 LONG RUN NEAR FISHERVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'10", long 85°26'56", Jefferson County, Hydrologic Unit 05140102, at bridge on State Highway 1531, 0.7 mi below South Long Run and at mile 2.4.

DRAINAGE AREA.-- 22.5 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
18...	1110	3.2	493	7.6	15.5	7.2
NOV						
15...	1045	83	365	7.6	13.5	8.8
DEC						
13...	1055	11	534	8.1	3.5	12.5
JAN						
24...	1135	78	595	7.5	2.0	13.2
FEB						
16...	1040	25	343	8.1	3.5	13.5
MAR						
14...	1110	53	369	7.9	8.5	13.3
APR						
18...	1200	25	456	8.6	15.0	13.3
MAY						
16...	1030	37	396	7.9	16.5	9.3
JUN						
15...	1105	0.08	423	8.2	31.0	8.9
JUL						
13...	1120	0.00	251	9.0	29.5	12.2

SALT RIVER BASIN

03298000 FLOYDS FORK AT FISHERVILLE, KY

LOCATION.--Lat 38°11'18", long 85°27'37", Jefferson County, Hydrologic Unit 05140102, on left bank on downstream side of bridge on former State Highway 155, at Fisherville, 0.2 mi downstream from Brush Run, 1.4 mi upstream from Pope Lick, and at mile 32.7.

DRAINAGE AREA.--138 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year. Monthly discharge only for August 1944, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1946. WSP 1909: 1945(P), 1948(P), 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 542.60 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1-18, Dec. 21 to Jan. 1, 12-22, Jan. 25 to May 27. Records fair except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 16.8 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	18	80	47	220	140	200	550	7.8	6.4	.48	6.5
2	6.0	22	72	87	190	125	150	400	6.4	5.3	.55	5.8
3	5.4	19	183	206	180	120	190	280	5.3	4.6	.54	5.9
4	4.6	17	1600	258	170	110	160	180	3.9	4.6	.74	5.8
5	4.4	16	1660	171	150	100	140	150	2.9	4.6	18	6.2
6	3.5	16	405	146	130	90	130	125	2.4	5.3	12	23
7	2.6	15	222	1550	120	84	150	520	2.2	30	5.2	18
8	2.4	12	163	435	800	80	140	450	15	22	1.4	7.7
9	3.5	10	126	179	1500	250	130	280	23	22	.43	4.6
10	6.0	8.8	127	151	700	680	880	170	13	41	.42	2.5
11	8.8	8.3	108	111	500	880	700	120	7.8	19	.43	1.7
12	9.4	7.2	85	100	400	760	580	110	6.0	11	.54	2.3
13	8.8	92	77	84	220	520	350	100	3.9	8.7	.85	2.1
14	10	729	135	72	170	380	190	350	2.4	7.9	5.2	1.7
15	12	1420	281	64	150	280	230	880	1.6	7.0	4.2	1.4
16	20	246	206	60	140	210	300	450	1.4	5.3	2.9	1.7
17	30	1850	149	56	120	160	200	170	1.4	4.6	1.9	2.8
18	21	560	127	50	115	140	155	84	1.4	4.3	1.3	3.6
19	27	257	113	49	110	120	130	60	2.2	3.2	1.0	6.3
20	935	167	99	47	170	112	120	45	2.9	2.3	1.3	5.2
21	265	119	85	45	340	110	108	36	11	3.1	3.2	4.1
22	78	94	76	44	900	108	92	30	24	11	5.0	2.9
23	41	78	72	56	2800	100	84	24	13	10	5.7	2.2
24	27	67	68	150	700	370	78	20	10	5.3	4.7	2.7
25	20	59	64	2000	350	220	70	17	11	3.3	3.8	6.7
26	16	59	60	2400	250	150	78	15	7.8	1.8	3.3	6.5
27	13	357	56	3000	200	1900	98	13	8.3	1.2	3.8	5.3
28	10	223	53	3900	160	1500	500	12	8.7	.93	3.3	4.4
29	7.4	133	51	800	---	900	1300	11	8.7	.96	9.5	3.8
30	8.9	99	50	560	---	450	900	9.6	8.3	1.1	12	2.6
31	14	---	49	350	---	250	---	8.7	---	.63	7.8	---
TOTAL	1627.5	6778.3	6702	17228	11955	11399	8533	5670.3	223.7	258.42	121.48	156.0
MEAN	52.5	226	216	556	427	368	284	183	7.46	8.34	3.92	5.20
MAX	935	1850	1660	3900	2800	1900	1300	880	24	41	18	23
MIN	2.4	7.2	49	44	110	80	70	8.7	1.4	.63	.42	1.4
CFSM	.38	1.64	1.57	4.03	3.09	2.66	2.06	1.33	.05	.06	.03	.04
IN.	.44	1.83	1.81	4.64	3.22	3.07	2.30	1.53	.06	.07	.03	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	33.5	110	230	285	371	390	285	195	110	61.6	44.7	39.3
MAX	423	485	1025	1252	990	1517	1021	971	588	331	290	1020
(WY)	1978	1974	1991	1950	1956	1964	1970	1983	1973	1973	1979	1979
MIN	.000	.000	.000	3.54	12.4	40.3	34.0	12.2	.90	1.73	.048	.000
(WY)	1949	1954	1954	1977	1954	1954	1959	1965	1988	1954	1962	1948

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1944 - 1994	
ANNUAL TOTAL	85742.43		70652.70			
ANNUAL MEAN	235		194		179	
HIGHEST ANNUAL MEAN					382	1979
LOWEST ANNUAL MEAN					29.0	1954
HIGHEST DAILY MEAN	3240	Feb 21	3900	Jan 28	15400	Mar 9 1964
LOWEST DAILY MEAN	.44	Sep 13	.42	Aug 10	.00	Sep 7 1945
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 8	.71	Jul 29	.00	Sep 7 1945
INSTANTANEOUS PEAK FLOW			3900	Jan 28	28500	Apr 2 1970
INSTANTANEOUS PEAK STAGE			7.87	Jan 28	16.15	Apr 2 1970
ANNUAL RUNOFF (CFSM)	1.70		1.40		1.30	
ANNUAL RUNOFF (INCHES)	23.11		19.05		17.60	
10 PERCENT EXCEEDS	525		500		354	
50 PERCENT EXCEEDS	94		51		33	
90 PERCENT EXCEEDS	6.7		2.4		.39	

WATER-QUALITY RECORDS

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
18...	1210	33	502	7.6	16.0	7.2
NOV						
15...	1200	676	299	7.6	14.5	7.3
DEC						
13...	1210	76	552	7.9	5.5	12.8
JAN						
24...	1235	146	598	7.5	3.0	13.0
FEB						
16...	1205	144	378	8.0	5.0	13.7
MAR						
14...	1215	387	368	7.7	8.5	13.4
APR						
18...	1050	158	493	8.4	15.5	10.0
MAY						
16...	1125	479	373	7.8	18.0	7.7
JUN						
15...	1020	3.6	433	8.2	27.0	7.0
JUL						
13...	1220	8.2	440	8.0	25.5	6.6
AUG						
15...	1105	3.8	432	7.6	22.0	5.5
SEP						
15...	1110	1.5	447	7.1	22.5	6.9

SALT RIVER BASIN

03298100 POPE LICK AT POPE LICK ROAD NEAR MIDDLETOWN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'09", long 85°31'07", Jefferson County, Hydrologic Unit 05140102, at culvert on Pope Lick Road, and at mile 3.2.

DRAINAGE AREA.-- 2.9 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
18...	0925	1.9	550	7.5	15.5	7.0
NOV						
15...	0930	11	523	7.7	14.0	8.3
DEC						
13...	0920	2.2	652	7.5	5.0	10.7
JAN						
24...	1020	6.6	1060	7.4	4.0	11.5
FEB						
16...	0920	3.2	492	7.4	5.5	12.9
MAR						
14...	1005	3.6	506	7.9	8.5	13.7
APR						
18...	0955	3.2	621	8.1	11.5	10.8
MAY						
16...	0915	3.5	530	7.7	15.5	7.5
JUN						
15...	0910	1.6	560	7.7	23.0	5.1
JUL						
13...	0930	0.72	676	7.8	23.0	6.0
AUG						
15...	0920	1.2	629	7.6	19.5	7.3
SEP						
15...	0910	0.43	685	6.8	20.5	6.5

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'36", long 85°32'32", Jefferson County, Hydrologic Unit 05140102, at bridge on Gelhaus Lane, 100 ft above Razor Branch, and at mile 2.3.

DRAINAGE AREA.--11.6 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
20...	1100	145	267	7.7	18.0	8.4
NOV						
08...	1045	5.3	709	8.9	5.5	16.2
DEC						
06...	1115	29	546	8.1	9.0	11.3
JAN						
12...	1000	16	580	7.7	5.5	11.8
FEB						
14...	1020	20	441	8.4	4.0	16.0
MAR						
09...	1030	18	389	8.1	3.0	14.0
APR						
06...	1030	28	416	8.1	11.0	10.5
MAY						
04...	1015	20	532	8.3	13.0	10.5
JUN						
02...	1125	7.2	654	8.6	18.0	11.1
JUL						
25...	1100	4.1	662	9.0	26.0	10.9
AUG						
03...	1015	4.0	677	8.5	24.0	9.2
SEP						
19...	1120	3.0	596	7.9	19.0	11.2

SALT RIVER BASIN

03298200 FLOYDS FORK NEAR MOUNT WASHINGTON, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'07", long 85°33'18", Jefferson County, Hydrologic Unit 05140102, at bridge on U.S. Highway 31E, 0.2 mi below Old Mans Run, and at mile 18.7.

DRAINAGE AREA.--213 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
25...	0930	68	497	7.9	11.0	9.1
NOV						
17...	1040	2300	310	7.5	14.0	8.7
DEC						
20...	0940	138	563	8.2	4.5	12.0
JAN						
31...	1140	460	481	7.9	3.0	12.0
FEB						
23...	0920	4520	232	7.3	10.0	11.2
MAR						
16...	0910	316	400	8.0	8.0	10.4
APR						
25...	0920	90	523	8.3	18.0	7.5
MAY						
18...	0930	179	444	8.0	16.5	7.9
JUN						
16...	0900	12	522	8.1	26.5	5.5
JUL						
20...	0920	8.8	535	7.8	26.0	5.4
AUG						
17...	1020	8.3	510	7.8	23.5	5.9
SEP						
21...	0900	3.9	594	7.1	17.0	6.4

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°06'43", long 85°35'49", Jefferson County, Hydrologic Unit 05140102, at bridge on Fairmount Road, 5.2 mi northwest of Mt. Washington, and at mile 10.9.

DRAINAGE AREA.--7.8 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, FOR THE PERIOD OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
25...	1155	4.5	741	7.8	13.5	9.3
NOV						
17...	1210	85	331	7.2	14.0	8.8
DEC						
20...	1200	7.1	648	8.2	6.0	13.2
JAN						
31...	1030	18	576	7.4	4.0	10.9
FEB						
23...	1209	53	419	7.5	11.5	10.8
MAR						
16...	1130	11	601	8.3	8.5	15.7
APR						
25...	1145	4.0	677	8.8	19.0	16.0
MAY						
18...	1220	7.4	661	8.0	16.0	9.2
JUN						
16...	1055	1.4	832	8.0	24.5	7.1
JUL						
20...	1020	1.4	854	8.2	24.5	7.6
AUG						
17...	1140	0.99	707	7.9	22.0	7.9
SEP						
21...	1135	3.1	795	7.2	18.0	8.0

SALT RIVER BASIN

03298250 CEDAR CREEK AT THIXTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'45", long 85°36'58", Jefferson County, Hydrologic Unit 05140102, at culvert on Thixton Road, 4.2 mi above Pennsylvania Run, and at mile 7.4.

DRAINAGE AREA.--11.1 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
25...	1040	4.0	691	7.9	11.5	10.1
NOV						
17...	0920	111	303	7.4	14.0	8.7
DEC						
20...	1105	9.5	632	8.3	5.5	13.9
JAN						
31...	0915	11	545	7.6	4.5	10.5
FEB						
23...	1120	82	385	6.9	11.5	10.9
MAR						
16...	1025	16	568	8.3	8.0	15.3
APR						
25...	1040	6.2	630	8.6	17.5	11.6
MAY						
18...	1105	9.3	605	8.0	16.0	10.4
JUN						
16...	1005	1.8	801	8.1	24.5	7.8
JUL						
20...	1135	1.3	874	8.0	25.0	7.8
AUG						
17...	0910	1.3	571	8.0	20.5	6.9
SEP						
21...	1025	1.9	777	7.3	17.5	8.6

03298300 PENNSYLVANIA RUN AT MT. WASHINGTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'15", long 85°38'33", Jefferson County, Hydrologic Unit 05140102, at bridge on Mt. Washington Road, and at mile 1.9.

DRAINAGE AREA.--6.4 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
14...	0930	0.80	782	7.1	13.0	5.4
NOV						
18...	0915	22	353	7.4	12.0	9.3
DEC						
21...	0925	5.3	454	7.6	5.0	9.2
JAN						
25...	0940	46	465	7.4	5.5	11.2
FEB						
22...	0910	9.0	371	7.0	7.5	9.8
MAR						
10...	0925	27	436	7.7	6.0	12.2
APR						
20...	0920	5.5	485	7.8	14.5	7.1
MAY						
19...	0905	4.0	364	7.5	15.0	6.7
JUN						
08...	0915	0.91	592	7.5	19.0	3.8
JUL						
19...	0910	0.61	735	7.6	22.5	2.9
AUG						
18...	0920	0.55	655	7.3	26.5	4.0
SEP						
20...	0900	0.58	650	6.6	16.0	1.8

SALT RIVER BASIN

03298500 SALT RIVER AT SHEPHERDSVILLE, KY

LOCATION.--Lat 37°59'06", long 85°43'03", Bullitt County, Hydrologic Unit 05140102, on downstream side of bridge on State Highway 61 at Shepherdsville, 500 ft downstream from Louisville and Nashville Railroad bridge, 2.6 mi downstream from Floyds Fork, and at mile 22.9.

DRAINAGE AREA.--1,197 mi^2.

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 893: 1937(M). WSP 1435: 1955: WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 406.58 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 16, 1969.

REMARKS.--Estimated daily discharges: Nov. 6, Dec. 25 to Jan. 1, 13-18, 20-22, and May 12-15. Water-discharge records good except for periods of estimated record, which are fair. Flow regulated since January 1983 by Taylorsville Lake (station 03295597).

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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	122	916	370	3180	3420	3720	9710	194	55	42	53
2	44	116	660	539	3720	3650	3470	4220	162	50	40	51
3	42	114	609	1010	4150	2420	3900	2910	124	46	37	38
4	42	117	3270	1530	4160	1360	4780	2430	109	42	35	34
5	41	119	6480	1880	3910	1550	4330	2030	86	39	51	35
6	36	113	3750	2070	3070	1140	3770	1350	77	39	80	40
7	33	110	3530	6040	2900	1060	3510	4110	77	41	87	54
8	32	106	3610	5120	2940	1040	3160	5710	346	60	104	57
9	32	241	3070	3150	8410	3900	2660	2700	170	73	86	55
10	32	359	3310	2770	4960	8870	2600	3190	154	66	85	56
11	38	353	2340	3170	4130	7690	4980	3990	142	65	93	67
12	40	348	1910	2650	4830	6420	5850	4450	112	64	288	65
13	35	1520	1710	2030	5480	4860	4990	5600	93	53	386	63
14	35	3650	1250	1600	4550	4380	4280	4650	78	237	86	59
15	33	6790	1830	1350	4780	3970	3520	3600	71	138	71	50
16	34	3180	2060	1100	5340	4010	5410	2740	64	81	60	42
17	40	7980	1750	930	5030	4170	3460	1820	61	62	56	41
18	89	6340	1320	810	4360	3800	2900	2060	69	54	54	40
19	116	3740	1160	617	3960	3160	3510	1200	57	53	53	40
20	5910	3210	1040	650	3820	2970	3750	893	52	47	54	41
21	3190	3440	798	610	3030	2950	3150	498	52	44	69	40
22	861	3230	699	580	2250	2970	2660	371	147	70	70	39
23	553	3090	624	633	13500	2150	910	328	150	76	63	41
24	415	3020	567	961	7090	954	513	286	88	60	56	47
25	343	2960	490	4870	4370	839	451	272	81	55	42	55
26	302	2910	460	12100	4100	743	421	294	81	57	34	58
27	270	2800	420	11300	3460	7400	1640	355	81	60	44	54
28	182	2830	410	21600	3220	10400	1720	279	89	52	39	51
29	108	2110	400	17500	---	6140	4880	245	80	45	63	47
30	102	1160	390	5620	---	4710	9750	223	68	45	62	40
31	112	---	380	3270	---	4210	---	209	---	42	52	---
TOTAL	13187	66178	51213	118430	128700	117306	104645	72723	3215	1971	2442	1453
MEAN	425	2206	1652	3820	4596	3784	3488	2346	107	63.6	78.8	48.4
MAX	5910	7980	6480	21600	13500	10400	9750	9710	346	237	386	67
MIN	32	106	380	370	2250	743	421	209	52	39	34	34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

MEAN	273	1171	2080	2446	4367	2965	2119	1384	934	426	247	191
MAX	1166	2206	6329	5728	12370	5264	3506	4356	2793	871	1018	398
(WY)	1991	1994	1991	1991	1989	1989	1989	1984	1992	1991	1992	1990
MIN	25.9	55.5	258	335	996	1113	377	216	38.9	63.6	40.0	46.6
(WY)	1989	1988	1990	1986	1992	1990	1986	1985	1988	1994	1988	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1984 - 1994	
ANNUAL TOTAL	568705		681463			
ANNUAL MEAN	1558		1867		1534	
HIGHEST ANNUAL MEAN					2571	1989
LOWEST ANNUAL MEAN					995	1986
HIGHEST DAILY MEAN	17900	Feb 22	21600	Jan 28	39100	Feb 16 1990
LOWEST DAILY MEAN	26	Sep 13	32	Oct 8	7.7	Jul 1 1988
ANNUAL SEVEN-DAY MINIMUM	28	Sep 9	35	Oct 7	9.3	Jun 26 1988
INSTANTANEOUS PEAK FLOW			23900	Jan 28	78200	Mar 10 1964
INSTANTANEOUS PEAK STAGE			23.95	Jan 29	41.50	Mar 11 1964
INSTANTANEOUS LOW FLOW			30	Oct 9		
10 PERCENT EXCEEDS	3880		4840		3910	
50 PERCENT EXCEEDS	722		513		491	
90 PERCENT EXCEEDS	46		42		46	

SALT RIVER BASIN

03298550 LONG LICK NEAR CLERMONT, KY

LOCATION.--Lat 37°55'40", long 85°39'13", Bullitt County, Hydrologic Unit 05140102, downstream side of bridge at Jim Beam Distillery, at Clermont, and 10.8 mi upstream from mouth.

DRAINAGE AREA.-- 7.91 mi^2.

PERIOD OF RECORD.--April 1, 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 450 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 13-19 and Mar. 8, 9. Records good except for periods of estimted record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	1.3	1.1	2.0	11	8.1	12	23	.75	.40	.15	.68
2	.36	1.7	1.5	4.2	8.5	8.7	11	12	.91	.31	.13	.79
3	.12	3.0	6.9	8.5	8.6	9.0	14	10	.75	.25	.13	.58
4	.10	3.6	78	8.4	7.6	8.6	15	8.3	.69	.21	.37	.49
5	.10	4.6	35	3.1	6.0	8.4	12	5.5	.69	.16	.62	.60
6	.09	3.2	11	5.9	4.9	7.0	17	6.1	.61	.15	.41	.60
7	.08	2.3	7.4	114	3.8	3.9	19	193	3.3	.15	.49	.56
8	.16	2.8	5.2	21	5.4	52	13	46	5.9	.18	.50	.58
9	.43	2.2	3.3	12	54	77	11	14	1.4	.15	.40	.35
10	.21	3.1	10	7.2	17	87	27	9.8	1.1	.14	.28	.28
11	.18	2.7	8.0	5.2	17	68	121	7.3	.70	.60	.22	.23
12	.19	4.6	4.0	6.3	43	52	48	5.0	.58	.17	.51	.32
13	.17	38	2.2	7.6	49	36	22	3.8	.55	.38	.30	.40
14	.16	41	1.9	5.8	22	23	15	3.6	.52	.55	.33	.62
15	.20	25	7.5	5.0	16	16	31	10	.49	.96	.23	.60
16	.47	3.3	8.4	4.5	12	12	28	8.0	.52	.39	.20	.40
17	.47	76	4.1	4.2	10	9.8	15	3.8	.53	.27	.39	.28
18	.39	12	4.9	3.8	9.0	10	12	2.0	.45	.19	.39	.17
19	1.6	3.2	4.7	3.6	8.1	8.9	9.6	2.1	.44	.16	.28	.16
20	110	1.4	1.9	3.2	16	8.5	8.4	1.8	.42	.17	.42	.14
21	3.2	1.5	2.3	3.2	18	10	6.3	1.7	.39	.55	.42	.18
22	1.5	1.5	1.7	3.0	192	11	6.1	1.5	.37	.74	.47	.21
23	1.4	1.6	1.5	2.8	113	8.8	4.2	1.0	.30	.64	.69	.26
24	1.4	1.4	2.0	22	26	7.9	3.6	1.2	.29	.46	.90	.13
25	2.2	.93	2.7	162	15	5.9	2.7	1.2	.23	.36	.85	.10
26	1.4	2.6	2.7	86	12	6.3	2.7	1.4	.46	.39	.82	.30
27	1.1	15	2.2	120	9.9	207	140	1.3	.42	.38	.71	.48
28	1.6	9.0	3.1	191	7.5	95	18	.83	.43	.32	.56	.44
29	2.0	3.7	2.3	33	---	27	23	.64	.46	.33	.98	.58
30	2.1	1.8	2.3	19	---	17	70	.71	.42	.27	.74	.46
31	1.4	---	1.8	14	---	15	---	.74	---	.19	.91	---
TOTAL	135.18	274.03	231.6	891.5	723.3	924.8	737.6	387.32	25.07	10.57	14.80	11.97
MEAN	4.36	9.13	7.47	28.8	25.8	29.8	24.6	12.5	.84	.34	.48	.40
MAX	110	76	78	191	192	207	140	193	5.9	.96	.98	.79
MIN	.08	.93	1.1	2.0	3.8	3.9	2.7	.64	.23	.14	.13	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	2.40	5.23	4.62	18.8	20.4	29.0	17.7	9.84	7.12	1.51	.75	.79
MAX	4.36	9.13	7.47	28.8	25.8	29.8	24.6	12.5	16.7	3.02	1.22	1.69
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1993	1992	1992	1992
MIN	.43	1.33	1.78	8.87	14.9	28.2	8.82	6.69	.84	.34	.48	.29
(WY)	1993	1993	1993	1993	1993	1993	1992	1992	1994	1994	1994	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	3681.76		4367.74			
ANNUAL MEAN	10.1		12.0		10.3	
HIGHEST ANNUAL MEAN					12.0	1994
LOWEST ANNUAL MEAN					8.63	1993
HIGHEST DAILY MEAN	212	Feb 21	207	Mar 27	212	Feb 21 1993
LOWEST DAILY MEAN	.08	Sep 20	.08	Oct 7	.08	Sep 20 1993
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 17	.14	Oct 2	.11	Sep 17 1993
INSTANTANEOUS PEAK FLOW			2080	May 7	2080	May 7 1994
INSTANTANEOUS PEAK STAGE			6.48	May 7	6.48	May 7 1994
10 PERCENT EXCEEDS	26		25		19	
50 PERCENT EXCEEDS	2.7		2.2		1.8	
90 PERCENT EXCEEDS	.28		.23		.32	

SALT RIVER BASIN

03300400 BEECH FORK AT MAUD, KY

LOCATION.--Lat 37°49'58", long 85°17'46", Nelson County, Hydrologic Unit 05140103, on right bank on downstream side of bridge on State Highway 55, 100 ft upstream from Nealy Run, 0.8 mi north of Maud, 1.7 mi downstream from Chaplin River, and at mile 48.1.

DRAINAGE AREA.--436 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 21 to Jan. 1, and 15-22. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	17	224	110	566	430	1330	921	73	53	86	19
2	2.1	16	177	124	474	465	905	975	60	37	76	17
3	2.3	15	162	173	411	2010	694	533	51	26	53	14
4	1.9	14	1700	556	354	1460	630	403	43	20	33	11
5	1.9	14	4810	618	323	956	552	356	37	15	31	11
6	1.7	14	2070	538	297	665	587	324	32	17	511	9.9
7	1.6	14	756	5380	268	540	1840	1090	28	16	458	8.5
8	1.8	14	483	3960	315	4050	1110	3510	26	11	191	7.1
9	2.5	13	367	1080	4410	8350	730	1280	23	7.8	111	6.3
10	3.9	13	1060	648	3140	15000	1360	671	21	6.4	70	5.3
11	2.9	13	2120	454	2010	6990	2830	470	72	4.9	46	4.3
12	1.7	12	822	518	3910	2080	3210	370	108	3.9	32	4.0
13	1.7	364	495	1070	4190	1220	1490	304	66	3.4	23	3.0
14	1.7	1860	400	757	2260	1020	848	255	50	20	19	1.4
15	2.3	4000	442	635	1190	865	1380	267	38	23	16	.95
16	4.3	1440	641	565	912	684	5670	576	28	20	14	.83
17	6.9	4950	583	530	716	532	2560	661	22	17	11	.85
18	7.0	4450	443	480	576	470	913	354	18	66	9.3	1.1
19	7.5	881	369	450	493	440	645	253	15	45	7.1	.88
20	816	436	317	425	447	382	498	208	13	34	5.5	.76
21	1070	297	275	410	550	366	401	178	11	22	12	.67
22	339	218	250	500	1090	418	342	154	9.7	17	1390	.61
23	174	172	220	622	8770	376	298	134	9.1	13	435	.59
24	106	142	205	828	4520	343	261	116	21	10	201	.84
25	70	121	189	6400	1230	315	234	100	46	14	121	.88
26	51	106	170	4870	757	283	211	261	27	17	78	.91
27	37	369	157	5180	564	4820	337	343	25	17	54	1.4
28	28	1190	145	8170	468	8150	627	211	23	15	39	1.5
29	21	555	134	2770	---	3740	621	139	80	15	36	1.4
30	19	318	125	1040	---	1250	874	113	83	16	28	1.3
31	18	---	119	734	---	1030	---	90	---	71	23	---
TOTAL	2805.8	22038	20430	50595	45211	69700	33988	15620	1158.8	673.4	4219.9	137.27
MEAN	90.5	735	659	1632	1615	2248	1133	504	38.6	21.7	136	4.58
MAX	1070	4950	4810	8170	8770	15000	5670	3510	108	71	1390	19
MIN	1.1	12	119	110	268	283	211	90	9.1	3.4	5.5	.59
CFSM	.21	1.68	1.51	3.74	3.70	5.16	2.60	1.16	.09	.05	.31	.01
IN.	.24	1.88	1.74	4.32	3.86	5.95	2.90	1.33	.10	.06	.36	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

MEAN	192	569	1113	952	1253	1126	770	576	379	208	190	256
MAX	1042	1699	3691	2461	5071	3292	2022	2205	1605	685	939	2284
(WY)	1976	1989	1979	1974	1989	1975	1979	1983	1992	1979	1978	1979
MIN	.011	.24	111	16.2	203	134	103	43.6	3.32	2.45	.87	.43
(WY)	1988	1988	1981	1981	1980	1983	1986	1976	1988	1975	1986	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1972 - 1994	
ANNUAL TOTAL	186226.9		266577.17			
ANNUAL MEAN	510		730		630	
HIGHEST ANNUAL MEAN					1243	1979
LOWEST ANNUAL MEAN					308	1977
HIGHEST DAILY MEAN	14400	Feb 22	15000	Mar 10	31400	Dec 9 1978
LOWEST DAILY MEAN	1.1	Sep 30	.59	Sep 23	.00	Oct 8 1983
ANNUAL SEVEN-DAY MINIMUM	1.7	Sep 25	.75	Sep 19	.00	Oct 23 1987
INSTANTANEOUS PEAK FLOW			16200	Mar 10	33300	Dec 9 1978
INSTANTANEOUS PEAK STAGE			20.90	Mar 10	26.16	Dec 9 1978
ANNUAL RUNOFF (CFSM)	1.17		1.68		1.44	
ANNUAL RUNOFF (INCHES)	15.89		22.74		19.63	
10 PERCENT EXCEEDS	1210		1850		1340	
50 PERCENT EXCEEDS	170		205		168	
90 PERCENT EXCEEDS	3.1		4.2		6.2	

SALT RIVER BASIN

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 mi^2.

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.42 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1971.

REMARKS.--Estimated daily discharges: Dec. 21 to Jan. 1, 8-10, and 18-23. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 55.2 ft, former site, from floodmarks (backwater from Ohio River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	99	795	390	8390	3720	7550	3430	312	199	233	62
2	20	44	598	530	7040	2620	3360	3610	272	179	174	48
3	23	67	512	944	6050	2570	2430	2540	245	140	177	41
4	26	64	1780	1700	4420	5260	2450	1720	219	112	148	37
5	25	61	7550	2560	2250	3880	2360	1550	197	91	171	34
6	22	70	10000	2240	1200	2750	2780	1390	179	79	264	31
7	18	65	6050	6260	997	2060	3750	2300	165	232	634	28
8	18	54	2430	11300	941	7270	5000	5320	166	155	750	25
9	18	56	1960	9130	4030	10900	2930	6070	220	100	392	23
10	23	50	2270	3710	9650	20000	3510	3140	202	77	253	22
11	25	46	4260	2380	10300	27900	13300	2160	160	72	181	21
12	22	40	4030	2210	10300	28700	10700	1760	144	78	137	19
13	20	485	2080	2940	12700	17200	10400	1190	171	75	107	18
14	21	1750	1460	2990	13400	12500	6830	855	195	527	85	16
15	22	5250	1450	2000	10800	9270	5200	1020	164	286	75	15
16	21	6340	1890	1240	7100	7030	10000	1940	139	230	62	14
17	23	7380	1890	990	4850	4470	13200	2310	121	179	50	14
18	29	11500	1590	900	2890	2490	11200	1570	107	140	42	13
19	34	8690	1270	780	1930	1830	7050	998	96	107	36	13
20	975	2440	1060	710	1590	1520	5370	757	85	117	34	13
21	1950	1240	930	670	1870	1440	3970	623	78	124	53	12
22	1380	856	830	630	2800	1480	2430	528	72	118	53	11
23	735	638	720	820	12400	1320	1370	457	66	113	1340	12
24	430	508	650	1030	16600	1180	996	397	64	96	662	12
25	293	421	600	4970	16600	1070	850	354	60	98	341	14
26	219	367	550	12200	10000	1000	748	3120	64	106	222	17
27	174	527	510	15400	5130	7210	1450	1310	118	80	161	19
28	146	1360	470	16600	4360	14200	1830	807	188	95	124	20
29	123	2100	430	18800	---	18100	2650	601	240	340	103	18
30	110	1220	410	17100	---	16300	3510	450	201	333	87	16
31	107	---	400	11700	---	10300	---	370	---	345	71	---
TOTAL	7072	53788	61425	155824	190588	247540	149174	54647	4710	5023	7222	658
MEAN	228	1793	1981	5027	6807	7985	4972	1763	157	162	233	21.9
MAX	1950	11500	10000	18800	16600	28700	13300	6070	312	527	1340	62
MIN	18	40	400	390	941	1000	748	354	60	72	34	11
CFSM	.18	1.38	1.53	3.87	5.24	6.15	3.83	1.36	.12	.12	.18	.02
IN.	.20	1.54	1.76	4.46	5.46	7.09	4.27	1.56	.13	.14	.21	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	311	1076	2428	3000	3882	3753	2837	1771	971	766	427	465
MAX	2778	5310	11050	13420	16320	10070	11350	11810	4183	5339	2806	8265
(WY)	1976	1958	1979	1950	1989	1964	1972	1983	1950	1958	1977	1979
MIN	.57	4.32	5.84	77.0	288	344	353	150	24.4	6.78	24.2	1.89
(WY)	1954	1944	1944	1981	1954	1941	1986	1941	1988	1954	1965	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	584176		937671			
ANNUAL MEAN	1600		2569		1797	
HIGHEST ANNUAL MEAN					4268	1979
LOWEST ANNUAL MEAN					473	1941
HIGHEST DAILY MEAN	21700	Feb 23	28700	Mar 12	64600	Feb 17 1989
LOWEST DAILY MEAN	12	Sep 1	11	Sep 22	.40	Oct 20 1939
ANNUAL SEVEN-DAY MINIMUM	21	Oct 7	12	Sep 18	.40	Oct 3 1953
INSTANTANEOUS PEAK FLOW			31000	Mar 12	66500	Feb 17 1989
INSTANTANEOUS PEAK STAGE			44.01	Mar 12	52.62	Feb 17 1989
INSTANTANEOUS LOW FLOW					.40	Oct 20 1939
ANNUAL RUNOFF (CFSM)	1.23		1.98		1.38	
ANNUAL RUNOFF (INCHES)	16.73		26.85		18.79	
10 PERCENT EXCEEDS	4470		9190		4720	
50 PERCENT EXCEEDS	550		634		496	
90 PERCENT EXCEEDS	33		24		26	

SALT RIVER BASIN

03301575 WILSON CREEK AT HARRISON FORK ROAD NEAR DEATSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°52'10", long 85°35'58", Nelson County, Hydrologic Unit 05140103, Bernheim State Forest, at Harrison Fork Road ford, 300 ft upstream from Harrison Fork, 2.9 mi southwest of Deatsville, 5.4 mi southeast of Clermont, and at mile 13.6.

DRAINAGE AREA.--5.7 mi^2.

PERIOD OF RECORD.--October 1990 to current year.

REMARKS.--Water-quality samples collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
19...	0930	0.90	464	7.8	16.0	7.1
NOV						
16...	1000	6.6	453	8.2	10.5	10.8
DEC						
09...	0930	3.8	310	8.2	5.0	13.8
JAN						
26...	0935	49	273	7.0	4.5	12.1
FEB						
24...	0925	24	357	7.5	5.5	12.0
MAR						
17...	0930	8.6	266	8.1	4.0	14.1
APR						
19...	1035	9.4	404	8.5	14.0	11.7
MAY						
17...	1035	4.3	432	8.0	13.0	9.7
JUN						
10...	0915	1.2	462	8.3	19.0	8.0
JUL						
21...	0935	0.10	502	7.2	23.0	3.4
AUG						
16...	0925	0.07	490	7.6	17.0	5.4
SEP						
22...	0918	0.01	660	7.0	17.0	2.8

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY

LOCATION.--Lat 37°51'49", long 85°36'41", Bullitt County, Hydrologic Unit 05140103, Bernheim State Forest, on right bank, 75 ft upstream from Harts Run, 3.7 mi southwest of Deatsville, 5.0 mi southeast of Clermont, and at mile 12.3.

DRAINAGE AREA.--27.7 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gages. Elevation of gage is 470 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: June 19 to July 6, 1992; Mar. 21, 22, and Sept. 15, 16, 1993; Jan. 16-24, 29 to Feb. 24, Mar. 9 to Apr. 20, 27 to May 17, and Aug. 27, 28, 1994. Water-discharge records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.39	16	4.8	3.5	3.1	31	3.3	15	.82	8.5	.05
2	.00	.37	283	82	3.1	2.7	22	3.2	10	11	5.3	.07
3	.00	.28	99	179	3.0	2.3	17	5.3	8.9	.74	11	.14
4	.00	.24	13	34	3.4	1.9	15	3.6	12	.47	7.9	.15
5	.00	.20	6.5	18	2.9	1.6	12	3.3	11	.35	4.2	1.1
6	.05	.19	4.9	12	2.8	1.7	10	2.7	8.4	.29	2.8	.45
7	.07	.17	3.7	9.3	2.8	3.2	9.9	2.0	7.9	2.4	2.3	.24
8	.05	.15	2.8	7.8	2.6	3.1	8.8	3.2	11	1.8	3.5	.12
9	.04	.14	3.1	6.9	2.3	2.0	8.0	4.0	7.6	1.2	3.0	.05
10	.03	.13	3.6	5.8	2.0	128	7.5	2.7	6.0	.79	2.1	.04
11	.03	.12	2.9	5.1	1.9	34	6.7	1.9	5.1	2.3	1.6	.04
12	.03	.12	2.5	5.0	2.1	23	5.8	2.6	4.6	2.8	1.4	.03
13	.02	.12	87	5.4	54	18	5.2	5.8	4.5	.77	1.2	.03
14	.01	.12	34	148	27	15	5.0	3.4	4.2	.43	1.1	.03
15	.03	.13	10	29	46	13	5.0	2.4	10	.39	1.6	.02
16	.04	.14	5.8	17	22	11	9.7	65	14	1.2	1.4	.01
17	.04	.14	4.4	13	14	11	9.1	32	5.6	26	1.2	.01
18	.04	.15	3.1	9.6	13	396	9.0	91	71	5.7	.88	.65
19	.03	.21	2.2	8.4	10	248	7.2	22	36	3.1	.78	1.8
20	.03	15	1.7	7.1	8.4	48	8.2	13	18	1.9	.61	.30
21	.03	5.0	2.9	6.4	7.5	30	22	11	9.5	3.1	.15	.94
22	.02	2.5	2.9	6.2	6.8	24	15	9.4	7.3	4.5	.12	15
23	.20	1.2	36	8.0	42	18	9.2	7.2	5.6	2.1	.06	3.3
24	1.6	.69	17	7.2	53	15	7.1	6.6	4.2	1.3	.05	1.4
25	1.5	.47	7.6	5.6	14	14	5.5	5.4	3.2	.79	.04	.74
26	.73	.34	5.2	5.0	8.8	16	4.9	4.6	2.5	7.2	.05	.64
27	4.1	.28	4.0	4.6	6.1	20	4.6	3.8	1.9	28	.10	.75
28	3.8	.27	4.0	4.4	5.0	15	4.4	3.4	1.5	12	3.3	.50
29	1.3	.25	10	4.0	4.0	13	3.9	224	1.1	5.1	.80	.30
30	.69	.61	10	4.0	---	150	3.8	117	.93	4.3	.30	.19
31	.45	---	6.1	3.9	---	71	---	27	---	21	.13	---
TOTAL	14.96	30.12	694.9	666.5	374.0	1352.6	292.5	691.8	308.53	153.84	67.47	29.09
MEAN	.48	1.00	22.4	21.5	12.9	43.6	9.75	22.3	10.3	4.96	2.18	.97
MAX	4.1	15	283	179	54	396	31	224	71	28	11	15
MIN	.00	.12	1.7	3.9	1.9	1.6	3.8	1.9	.93	.29	.04	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

MEAN	.48	1.00	22.4	21.5	12.9	43.6	10.1	14.7	5.77	2.81	2.18	.59
MAX	.48	1.00	22.4	21.5	12.9	43.6	10.5	22.3	10.3	4.96	2.18	.97
(WY)	1992	1992	1992	1992	1992	1992	1991	1992	1992	1992	1992	1992
MIN	.48	1.00	22.4	21.5	12.9	43.6	9.75	7.04	1.25	.65	2.18	.20
(WY)	1992	1992	1992	1992	1992	1992	1992	1991	1991	1991	1992	1991

SUMMARY STATISTICS	FOR 1992 WATER YEAR		WATER YEARS 1991 - 1992	
ANNUAL TOTAL	4676.31			
ANNUAL MEAN	12.8		12.8	
HIGHEST ANNUAL MEAN			12.8	1992
LOWEST ANNUAL MEAN			12.8	1992
HIGHEST DAILY MEAN	396	Mar 18	406	Mar 22 1991
LOWEST DAILY MEAN	.00	Oct 1	.00	Jul 23 1991
ANNUAL SEVEN-DAY MINIMUM	.02	Oct 1	.00	Jul 23 1991
INSTANTANEOUS PEAK FLOW	2160	Dec 2	2160	Dec 2 1991
INSTANTANEOUS PEAK STAGE	7.78	Dec 2	7.78	Dec 2 1991
10 PERCENT EXCEEDS	22		19	
50 PERCENT EXCEEDS	3.6		3.1	
90 PERCENT EXCEEDS	.07		.03	

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.52	4.2	7.2	6.3	20	84	7.2	1.6	6.2	.17	.19
2	.13	1.2	4.0	6.6	5.4	94	37	6.4	1.1	5.3	.15	.18
3	.09	3.5	3.5	6.2	5.2	175	25	6.1	1.0	4.0	.14	1.0
4	.08	2.7	3.2	23	4.9	281	21	18	41	3.3	.17	1.7
5	.07	1.9	3.1	55	4.7	91	18	10	106	2.6	.22	.57
6	.05	1.9	2.9	16	4.7	51	15	6.8	9.1	2.2	.19	.31
7	.08	1.6	2.9	11	4.4	37	13	5.6	5.3	1.8	.12	.20
8	.17	1.1	2.7	11	4.3	45	12	5.1	3.8	1.6	.09	.16
9	.48	.84	2.7	10	4.0	28	30	4.6	101	1.2	.06	.14
10	.53	.71	8.2	9.3	3.9	49	60	4.0	39	1.0	.04	.10
11	.42	1.0	11	18	4.1	28	24	3.7	478	.89	.05	.06
12	.35	14	7.3	36	14	21	17	6.0	143	.87	.15	.04
13	.32	21	5.8	25	14	19	16	98	34	.87	2.7	.03
14	.36	5.3	5.2	18	12	15	16	15	88	1.5	.69	.00
15	.28	3.2	4.9	13	9.6	13	29	8.0	68	1.7	.36	.62
16	.36	2.2	4.8	11	70	15	60	6.3	19	1.1	.22	1.4
17	.51	1.6	4.4	9.3	31	39	30	5.4	14	.98	9.9	.49
18	.51	1.1	3.9	7.9	19	27	20	77	11	1.6	2.9	.29
19	.43	.86	3.7	7.0	14	16	16	28	9.6	3.3	.87	.18
20	.43	.73	32	6.6	12	15	14	11	9.0	1.2	.54	.14
21	.45	9.3	12	93	783	13	11	7.0	8.9	.73	.39	.11
22	.52	37	8.4	31	121	12	9.8	5.3	8.0	.56	.26	.08
23	.51	19	7.2	18	44	187	8.9	4.3	7.3	.49	.22	.19
24	.47	9.1	6.0	44	27	51	8.8	3.7	7.1	.42	.27	.34
25	.45	16	5.6	22	22	30	13	3.4	8.2	.35	.73	.64
26	.47	9.0	5.4	15	20	57	43	2.7	19	1.1	.43	1.4
27	.52	6.8	5.1	12	15	34	17	2.3	8.8	2.1	.37	.76
28	.42	5.8	7.3	9.8	14	24	12	1.9	34	.72	.25	.44
29	.27	5.0	8.6	8.0	---	19	9.5	1.6	102	.47	.16	.33
30	.27	4.5	7.4	6.8	---	16	8.3	1.4	9.3	.30	.14	.22
31	.32	---	6.8	6.6	---	95	---	2.8	---	.22	.11	---
TOTAL	10.48	188.46	200.2	573.3	1293.5	1617	698.3	368.6	1395.1	50.67	23.06	12.31
MEAN	.34	6.28	6.46	18.5	46.2	52.2	23.3	11.9	46.5	1.63	.74	.41
MAX	.53	37	32	93	783	281	84	98	478	6.2	9.9	1.7
MIN	.05	.52	2.7	6.2	3.9	12	8.3	1.4	1.0	.22	.04	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

MEAN	.41	3.64	14.4	20.0	29.3	47.9	14.5	13.7	19.3	2.42	1.46	.53
MAX	.48	6.28	22.4	21.5	46.2	52.2	23.3	22.3	46.5	4.96	2.18	.97
(WY)	1992	1993	1992	1992	1993	1993	1993	1992	1993	1992	1992	1992
MIN	.34	1.00	6.46	18.5	12.9	43.6	9.75	7.04	1.25	.65	.74	.20
(WY)	1993	1992	1993	1993	1992	1992	1992	1991	1991	1991	1993	1991

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR		FOR 1993 WATER YEAR		WATER YEARS 1991 - 1993	
ANNUAL TOTAL	4335.47		6430.98			
ANNUAL MEAN	11.8		17.6		15.2	
HIGHEST ANNUAL MEAN					17.6	1993
LOWEST ANNUAL MEAN					12.8	1992
HIGHEST DAILY MEAN	396	Mar 18	783	Feb 21	783	Feb 21 1993
LOWEST DAILY MEAN	.01	Sep 16	.00	Sep 14	.00	Jul 23 1991
ANNUAL SEVEN-DAY MINIMUM	.02	Sep 11	.08	Sep 8	.00	Jul 23 1991
INSTANTANEOUS PEAK FLOW			3650	Jun 11	3650	Jun 11 1993
INSTANTANEOUS PEAK STAGE			10.40	Jun 11	10.40	Jun 11 1993
10 PERCENT EXCEEDS	22		37		28	
50 PERCENT EXCEEDS	4.2		5.3		3.8	
90 PERCENT EXCEEDS	.30		.20		.05	

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	1.9	4.6	4.6	17	17	26	96	2.0	.17	.17	.06
2	.35	1.6	4.5	7.6	15	19	20	48	2.1	.12	.12	.04
3	.64	1.7	8.8	14	14	20	33	32	1.9	.08	.09	.03
4	.73	1.9	145	16	13	18	29	25	1.5	.06	.12	.02
5	.50	2.0	60	9.8	12	16	24	20	1.2	.05	3.4	.02
6	.34	2.0	19	11	11	14	28	16	1.0	.04	1.5	.04
7	.25	1.8	11	246	10	15	33	47	1.2	.04	.58	.04
8	.20	1.7	8.9	31	9.8	98	25	84	3.0	.04	.30	.03
9	.48	1.6	7.7	17	185	170	21	39	2.3	.04	.19	.03
10	3.1	1.6	36	12	98	110	51	26	1.8	.05	.13	.02
11	.52	1.6	18	10	67	70	90	20	1.2	.04	.10	.02
12	.33	1.7	11	11	45	56	66	16	.87	.02	.10	.2
13	.26	135	8.7	11	30	44	35	13	.72	2.3	.10	.02
14	.24	98	9.0	9.4	25	34	24	99	.63	9.9	.09	.4
15	.25	49	18	8.4	22	28	45	46	.52	1.9	.07	.09
16	.34	13	15	7.3	19	23	34	19	.33	1.0	.05	.2
17	2.5	192	10	6.4	17	19	26	10	.29	.82	.03	.4
18	2.4	25	8.8	5.7	15	17	21	7.2	.28	.47	.01	.8
19	2.9	12	7.6	5.1	14	14	17	5.8	.25	.31	.04	1.40
20	151	8.5	6.9	4.6	13	13	14	5.0	.22	.19	.2	1.20
21	8.6	6.5	7.1	4.0	12	28	12	4.3	.18	1.4	1.5	1.00
22	4.0	5.5	6.2	3.6	640	23	11	3.7	.17	4.4	.61	.92
23	3.0	4.8	5.6	3.3	330	17	9.3	3.3	.35	2.4	.20	.84
24	2.3	4.5	5.1	12	48	14	8.7	2.9	.25	.89	.08	1.3
25	1.8	4.2	5.3	123	33	12	8.0	2.7	.26	2.2	.04	1.7
26	1.6	4.2	5.0	149	24	12	7.4	8.6	.81	4.9	.03	1.8
27	1.7	15	4.5	323	19	95	18	4.8	3.5	2.0	.1	.67
28	1.7	9.3	4.7	616	17	250	41	3.4	.89	1.1	.7	.39
29	1.7	6.3	4.8	180	---	110	97	2.9	.51	.54	3.6	.09
30	2.0	5.1	4.7	68	---	62	230	2.6	.27	.34	.69	.04
31	2.3	---	4.4	25	---	38	---	2.3	---	.23	.12	---
TOTAL	198.24	619.0	475.9	1954.8	1774.8	1476	1104.4	715.5	30.50	38.04	15.06	13.81
MEAN	6.39	20.6	15.4	63.1	63.4	47.6	36.8	23.1	1.02	1.23	.49	.46
MAX	151	192	145	616	640	250	230	99	3.5	9.9	3.6	1.8
MIN	.20	1.6	4.4	3.3	9.8	12	7.4	2.3	.17	.02	.01	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	2.41	9.31	14.7	34.4	40.5	47.8	20.1	16.1	14.8	2.12	1.14	.51
MAX	6.39	20.6	22.4	63.1	63.4	52.2	36.8	23.1	46.5	4.96	2.18	.97
(WY)	1994	1994	1992	1994	1994	1993	1994	1994	1993	1992	1992	1992
MIN	.34	1.00	6.46	18.5	12.9	43.6	9.75	7.04	1.02	.65	.49	.20
(WY)	1993	1992	1993	1993	1992	1992	1992	1991	1994	1991	1994	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	7324.98		8416.05			
ANNUAL MEAN	20.1		23.1		17.8	
HIGHEST ANNUAL MEAN					23.1	1994
LOWEST ANNUAL MEAN					12.8	1992
HIGHEST DAILY MEAN	783	Feb 21	640	Feb 22	783	Feb 21 1993
LOWEST DAILY MEAN	.00	Sep 14	.01	Aug 18	.00	Jul 23 1991
ANNUAL SEVEN-DAY MINIMUM	.08	Sep 8	.03	Sep 4	.00	Jul 23 1991
INSTANTANEOUS PEAK FLOW			2530	Jan 28	3650	Jun 11 1993
INSTANTANEOUS PEAK STAGE			8.49	Jan 28	10.40	Jun 11 1993
10 PERCENT EXCEEDS	44		48		32	
50 PERCENT EXCEEDS	6.2		4.7		4.0	
90 PERCENT EXCEEDS	.23		.10		.05	

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 37°51'49", long 85°36'41", Bullitt County, Hydrologic Unit 05140103, Bernheim State Forest, on right bank 75 ft upstream from Harts Run, 3.7 mi southwest of Deatsville, 5.0 mi southeast of Clermont, and at mile 12.3.

DRAINAGE AREA.--27.7 mi^2.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1991 to current year.
pH: March 1991 to current year.
WATER TEMPERATURE: March 1991 to current year.
DISSOLVED OXYGEN: March 1991 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1991.

REMARKS.--Water-quality samples collected monthly. Records good for specific conductance, pH, and water temperature. Record fair for dissolved oxygen.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 744 microsiemens, Nov. 8, 1992; minimum, 72 microsiemens, Jan. 25, 1994.
pH: Maximum, 10.5 units, Apr. 2-3, 1992; minimum, 5.7 units, Mar. 27, 1992.
WATER TEMPERATURE: Maximum, 31.8°C, July 9, 1993; minimum, 0°C, several days in some years.
DISSOLVED OXYGEN: Maximum recorded, 16.8 mg/L, Mar. 24, 1992; minimum recorded, 1.1 mg/L, Oct. 20, 1991.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 656 microsiemens, Aug. 29; minimum, 72 microsiemens, Jan. 25.
pH: Maximum, 9.8 units, Oct. 29; minimum, 6.0 units, Sept. 14.
WATER TEMPERATURE: Maximum, 29.3°C, June 20 and July 5; minimum, 0.1°C, Jan. 18-23.
DISSOLVED OXYGEN: Maximum recorded, 16.2 mg/L, Dec. 3; minimum recorded, 3.0 mg/L, Sept. 6.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	509	500	504	520	514	517	378	362	373	343	318	330
2	512	499	506	524	519	522	377	355	366	335	310	325
3	500	496	498	525	517	521	370	288	356	320	287	310
4	502	494	497	523	517	519	288	88	144	300	265	292
5	509	500	504	527	522	524	233	98	169	295	269	285
6	515	502	509	530	522	527	270	224	242	288	282	285
7	520	508	515	533	529	532	288	259	271	285	84	144
8	523	510	518	534	527	531	304	267	286	229	172	199
9	524	499	518	536	528	532	313	276	296	250	218	234
10	500	413	456	536	528	533	315	230	273	257	247	253
11	413	382	388	536	529	533	255	230	240	271	253	259
12	429	384	400	536	532	535	287	252	272	282	255	264
13	458	429	439	535	184	400	304	267	288	278	260	270
14	476	458	464	426	206	354	307	288	297	280	271	278
15	487	475	478	410	252	345	306	280	295	328	277	289
16	497	487	492	451	401	437	287	274	280	358	326	340
17	505	483	494	401	173	252	296	273	281	350	334	339
18	508	488	499	400	321	369	309	283	289	338	325	332
19	496	478	485	424	400	415	299	291	295	345	328	333
20	498	185	338	436	424	430	308	293	300	338	333	334
21	477	397	446	443	415	439	312	301	302	349	335	341
22	512	477	495	444	433	438	304	302	303	353	344	349
23	522	511	515	439	425	434	318	302	304	349	344	346
24	529	521	525	434	420	427	312	308	310	346	342	343
25	535	528	531	426	410	419	319	312	314	344	72	222
26	535	529	532	422	389	411	324	313	320	186	109	146
27	535	528	532	389	299	338	333	321	323	231	186	210
28	530	526	529	360	320	341	324	321	323	256	231	244
29	528	520	526	376	359	370	325	323	324	270	256	262
30	520	515	518	380	366	374	333	317	329	284	270	274
31	518	512	515	---	---	---	338	318	330	296	284	288
MONTH	535	185	489	536	173	444	378	88	293	358	72	281

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	302	296	298	374	365	369	321	305	310	375	320	351
2	308	299	303	379	374	376	342	320	328	396	375	387
3	319	305	311	390	374	380	348	330	343	413	396	406
4	327	313	320	401	380	389	338	326	331	423	410	418
5	342	327	332	410	394	402	355	338	347	429	418	423
6	350	335	344	418	400	410	360	272	327	434	418	427
7	357	344	351	425	416	420	312	275	296	425	128	316
8	367	357	361	427	313	361	349	312	331	349	235	302
9	381	367	377	317	291	303	373	349	361	386	349	371
10	383	378	381	292	257	272	389	283	331	409	386	400
11	383	378	382	257	233	249	306	277	293	422	409	418
12	379	366	377	247	233	239	285	244	264	433	422	429
13	366	308	321	243	231	235	306	285	296	439	429	435
14	308	297	303	243	230	235	314	306	311	443	395	430
15	316	302	307	261	242	250	327	262	302	397	361	376
16	324	310	316	273	261	265	310	267	292	404	369	390
17	332	317	324	273	256	267	339	310	324	434	403	421
18	343	326	334	279	258	270	376	339	354	445	433	438
19	360	340	348	286	268	278	393	363	378	458	439	443
20	374	360	366	295	277	287	409	378	395	459	440	450
21	388	374	379	299	243	278	418	388	405	464	442	454
22	393	388	391	268	243	255	426	398	414	470	444	457
23	393	340	364	282	268	276	428	402	418	472	449	459
24	340	330	335	297	279	292	433	412	424	459	450	456
25	349	330	338	306	293	300	436	415	427	460	454	457
26	352	340	347	313	292	308	441	419	434	459	424	437
27	357	345	351	292	137	212	438	155	295	437	420	426
28	365	352	358	233	204	213	374	305	344	449	437	441
29	---	---	---	280	233	252	387	325	358	456	446	450
30	---	---	---	296	271	287	360	270	315	460	456	458
31	---	---	---	306	296	301	---	---	---	465	455	460
MONTH	393	296	344	427	137	298	441	155	345	472	128	419
		JUNE			JULY			AUGUST			SEPTEMBER	
1	467	457	463	437	427	433	528	510	520	370	359	363
2	470	464	467	438	429	433	523	424	468	389	369	376
3	473	464	468	438	429	434	575	426	534	397	383	388
4	482	468	474	438	430	435	576	499	528	399	378	394
5	482	474	479	436	430	434	534	402	475	400	387	394
6	490	475	480	435	428	431	429	385	397	413	396	402
7	491	484	487	431	425	428	483	429	454	420	405	412
8	486	466	476	431	427	429	483	408	425	427	410	418
9	466	461	463	433	429	430	429	414	420	435	415	425
10	462	455	458	431	425	429	434	423	428	439	419	431
11	476	455	467	430	421	427	443	431	435	440	421	431
12	480	467	472	429	417	423	450	440	445	442	424	433
13	489	471	478	531	418	424	458	446	451	431	207	317
14	491	477	484	535	401	471	460	452	456	223	146	196
15	496	482	488	429	398	416	466	456	460	---	---	---
16	498	483	489	486	428	449	466	456	462	---	---	---
17	492	480	485	513	486	496	468	457	464	---	---	---
18	497	477	485	536	513	520	481	463	470	---	---	---
19	496	487	492	550	513	526	482	232	379	---	---	---
20	490	478	483	543	486	513	523	221	258	---	---	---
21	486	472	479	486	451	466	543	420	445	---	---	---
22	479	469	473	615	425	480	447	434	442	---	---	---
23	482	467	473	621	598	609	439	435	437	---	---	---
24	482	474	477	598	573	584	439	430	434	---	---	---
25	475	468	472	585	546	562	440	430	435	---	---	---
26	472	463	467	573	481	541	443	429	437	---	---	---
27	464	452	458	571	467	521	446	355	428	---	---	---
28	452	418	434	523	457	477	355	205	242	479	451	466
29	428	414	420	524	490	504	656	216	381	489	469	475
30	434	422	428	547	515	538	365	339	348	481	466	473
31	---	---	---	545	528	536	364	343	351	---	---	---
MONTH	498	414	471	621	398	477	656	205	429	---	---	---

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.7	7.4	7.5	9.5	7.9	8.4	8.0	7.7	7.9	9.0	8.7	8.8
2	7.7	7.5	7.6	9.1	8.4	8.7	8.0	7.8	7.9	8.9	8.7	8.8
3	7.6	7.4	7.5	8.9	8.0	8.4	8.3	7.9	8.1	8.9	8.7	8.8
4	7.7	7.3	7.5	9.3	8.0	8.4	8.2	7.8	7.9	9.0	8.7	8.8
5	7.8	7.4	7.6	9.2	8.5	8.9	8.6	7.6	7.9	9.0	8.7	8.8
6	7.8	7.5	7.7	8.7	8.0	8.2	7.9	7.7	7.8	8.8	8.7	8.8
7	7.9	7.5	7.7	8.0	7.6	7.8	9.2	7.7	8.2	8.7	8.3	8.4
8	7.8	7.5	7.7	7.9	7.4	7.7	9.0	8.4	8.7	8.6	8.2	8.3
9	7.8	7.6	7.7	7.7	7.2	7.5	8.6	8.2	8.3	8.7	8.6	8.6
10	7.8	7.6	7.8	7.7	7.2	7.5	8.9	8.4	8.6	8.7	8.6	8.7
11	7.6	7.2	7.3	7.6	7.1	7.4	8.9	8.5	8.7	8.7	8.6	8.6
12	7.6	7.1	7.3	7.6	7.2	7.4	8.9	8.7	8.8	8.8	8.6	8.7
13	7.6	7.2	7.4	8.5	7.3	7.7	9.1	8.7	8.9	8.8	8.7	8.8
14	7.6	7.3	7.5	8.6	7.9	8.1	9.0	8.7	8.9	8.8	8.5	8.7
15	7.7	7.3	7.5	8.5	7.7	8.0	9.2	8.8	8.9	8.7	8.5	8.6
16	7.6	7.4	7.5	8.1	7.5	7.7	9.0	8.7	8.8	8.7	8.2	8.5
17	7.7	7.5	7.6	8.2	7.6	7.9	9.1	8.8	8.9	8.4	8.1	8.2
18	7.7	7.6	7.6	8.5	7.8	8.1	9.0	8.8	8.9	8.6	8.4	8.5
19	8.0	7.4	7.7	7.9	7.7	7.8	9.1	8.8	8.9	8.7	8.6	8.6
20	8.1	7.7	7.9	7.7	7.6	7.7	9.0	8.8	8.9	8.6	8.4	8.5
21	8.2	7.9	8.1	7.6	7.4	7.5	9.2	8.8	9.0	8.6	8.4	8.5
22	8.0	7.7	7.9	8.6	7.4	8.0	9.1	8.9	9.0	8.6	8.1	8.4
23	8.2	7.7	7.9	8.1	7.7	7.9	9.1	8.9	9.0	8.2	8.0	8.1
24	8.3	7.9	8.0	7.9	7.6	7.8	9.1	8.9	9.0	8.5	8.1	8.3
25	8.5	7.9	8.2	8.5	7.7	7.9	9.2	8.8	9.0	8.5	8.2	8.4
26	8.8	8.3	8.5	8.4	8.0	8.2	9.2	8.9	9.0	8.6	8.4	8.5
27	8.8	8.4	8.6	8.2	8.0	8.1	9.0	8.9	8.9	8.6	8.5	8.5
28	9.7	7.7	8.7	8.1	7.7	7.9	9.1	8.9	9.0	8.7	8.5	8.6
29	9.8	9.2	9.5	7.9	7.6	7.8	9.1	8.9	9.0	8.7	8.6	8.6
30	9.2	8.5	8.8	8.0	7.7	7.9	9.1	8.9	9.1	8.8	8.7	8.8
31	8.5	8.1	8.3	---	---	---	9.1	8.8	9.0	8.8	8.7	8.8
MONTH	9.8	7.1	7.9	9.5	7.1	7.9	9.2	7.6	8.7	9.0	8.0	8.6
		FEBRUARY			MARCH			APRIL			MAY	
1	8.8	8.7	8.7	7.3	7.2	7.2	7.5	6.5	7.0	8.4	8.0	8.2
2	8.7	8.7	8.7	7.2	7.1	7.2	7.5	6.6	7.0	8.5	8.1	8.3
3	8.7	8.7	8.7	7.2	7.1	7.1	7.6	7.0	7.4	8.3	8.1	8.2
4	8.7	8.6	8.7	7.2	7.0	7.1	7.6	6.6	7.1	8.4	8.0	8.2
5	8.8	8.7	8.8	7.3	7.1	7.2	7.6	6.7	7.1	8.4	8.1	8.2
6	8.9	8.8	8.8	7.3	7.0	7.1	7.7	6.8	7.2	8.3	8.0	8.2
7	8.9	8.8	8.9	7.2	7.0	7.1	8.3	7.0	7.6	8.1	7.5	7.9
8	9.0	8.7	8.8	7.2	7.0	7.2	8.3	7.4	8.1	7.9	7.7	7.8
9	9.0	8.6	8.7	7.2	7.0	7.1	8.4	7.9	8.3	7.9	7.8	7.9
10	9.1	8.8	8.9	7.2	6.8	7.2	8.4	8.0	8.4	8.0	7.8	7.9
11	9.1	8.8	8.9	7.1	6.8	7.0	8.5	7.6	8.4	8.1	7.9	8.0
12	9.1	8.7	8.9	7.5	6.9	7.1	8.6	8.4	8.5	8.1	7.9	8.0
13	9.1	8.7	8.9	7.5	7.2	7.3	8.5	8.4	8.5	8.2	7.9	8.0
14	9.2	6.8	8.2	7.3	7.0	7.2	8.5	8.4	8.4	8.1	7.7	8.0
15	7.0	6.9	7.0	8.6	7.2	7.9	8.5	8.3	8.4	7.8	7.7	7.7
16	7.1	7.0	7.0	8.6	8.2	8.4	8.5	8.5	8.5	8.0	7.7	7.8
17	7.1	7.0	7.1	8.8	7.4	8.4	8.5	8.4	8.4	8.2	7.8	8.0
18	7.3	7.1	7.1	8.9	8.5	8.7	8.4	8.4	8.4	8.2	8.0	8.1
19	7.5	7.3	7.4	8.9	8.5	8.7	8.8	8.3	8.5	8.2	8.0	8.1
20	8.0	7.4	7.6	8.8	8.5	8.6	8.8	8.2	8.5	8.2	8.0	8.1
21	8.0	7.8	7.9	8.6	8.5	8.6	8.7	8.3	8.5	8.3	8.0	8.1
22	7.8	7.5	7.7	8.7	8.5	8.6	8.6	8.3	8.5	8.2	8.1	8.2
23	8.0	7.4	7.8	8.8	8.5	8.6	8.6	8.2	8.4	8.2	8.0	8.1
24	8.0	7.6	7.7	8.7	8.5	8.6	8.5	8.2	8.4	8.2	8.0	8.1
25	7.6	7.4	7.5	8.6	8.5	8.5	8.5	8.1	8.3	8.2	8.0	8.1
26	7.4	7.4	7.4	8.6	8.4	8.5	8.4	8.1	8.2	8.2	8.0	8.1
27	7.4	7.3	7.3	8.6	8.1	8.5	8.2	7.7	8.0	8.3	8.1	8.2
28	7.3	7.2	7.3	8.1	6.5	7.3	8.3	7.8	8.1	8.2	8.1	8.2
29	---	---	---	7.5	6.4	6.9	8.1	7.9	8.0	8.3	8.1	8.2
30	---	---	---	7.3	6.5	6.9	8.2	8.0	8.0	8.3	8.1	8.2
31	---	---	---	7.3	6.4	6.8	---	---	---	8.3	8.1	8.2
MONTH	9.2	6.8	8.1	8.9	6.4	7.7	8.8	6.5	8.1	8.5	7.5	8.1

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.2	8.1	8.1	8.9	8.6	8.7	7.9	7.8	7.9	7.0	6.9	7.0
2	8.3	8.1	8.1	8.8	8.3	8.5	7.9	7.9	7.9	8.0	7.0	7.5
3	8.3	8.1	8.2	8.6	8.2	8.4	7.9	7.9	7.9	7.8	7.5	7.7
4	8.3	8.1	8.2	8.3	7.8	8.1	7.9	7.9	7.9	7.7	7.3	7.5
5	8.2	8.1	8.2	8.0	7.6	7.8	7.9	7.9	7.9	7.7	7.3	7.5
6	8.3	7.9	8.1	7.7	7.5	7.6	8.0	7.8	7.9	7.8	7.2	7.5
7	8.3	8.1	8.2	7.7	7.5	7.6	7.9	7.8	7.8	7.6	7.2	7.4
8	8.4	8.2	8.3	7.6	7.5	7.5	7.9	7.8	7.8	7.8	7.2	7.6
9	8.4	8.2	8.3	7.6	7.5	7.5	7.8	7.8	7.8	7.6	6.8	7.0
10	8.3	8.1	8.2	7.6	7.5	7.5	7.9	7.8	7.8	6.8	6.6	6.7
11	8.4	8.1	8.3	7.6	7.5	7.6	7.8	7.8	7.8	6.6	6.4	6.5
12	8.4	8.2	8.3	7.7	7.5	7.6	7.8	7.8	7.8	6.4	6.4	6.4
13	8.4	8.2	8.3	7.7	7.6	7.6	7.8	7.7	7.7	6.4	6.3	6.4
14	8.4	8.1	8.3	7.7	7.6	7.7	7.7	7.7	7.7	6.4	6.0	6.3
15	8.3	8.1	8.2	7.7	7.7	7.7	7.7	7.7	7.7	---	---	---
16	8.4	8.0	8.2	7.8	7.7	7.8	7.8	7.2	7.6	---	---	---
17	8.4	8.2	8.3	7.8	7.8	7.8	7.2	6.8	7.1	---	---	---
18	8.3	8.1	8.3	7.9	7.8	7.9	6.8	6.7	6.7	---	---	---
19	8.4	8.2	8.3	7.9	7.9	7.9	6.7	6.6	6.7	---	---	---
20	8.4	8.2	8.3	8.0	7.9	8.0	6.7	6.6	6.7	---	---	---
21	8.4	8.2	8.3	8.0	8.0	8.0	6.7	6.6	6.7	---	---	---
22	8.4	8.2	8.3	8.0	8.0	8.0	6.7	6.6	6.7	---	---	---
23	8.5	8.2	8.3	8.1	8.0	8.1	6.7	6.6	6.7	---	---	---
24	8.5	8.3	8.4	8.1	7.9	8.0	6.7	6.6	6.6	---	---	---
25	8.7	8.4	8.5	8.0	7.9	7.9	6.7	6.6	6.6	---	---	---
26	9.0	8.6	8.8	8.0	7.9	8.0	6.6	6.6	6.6	---	---	---
27	9.2	9.0	9.1	8.0	7.9	8.0	6.7	6.6	6.7	---	---	---
28	9.1	8.7	8.9	8.0	7.9	8.0	6.8	6.7	6.7	7.6	7.5	7.5
29	8.9	8.6	8.8	8.0	8.0	8.0	6.9	6.8	6.8	7.6	7.5	7.6
30	8.8	8.4	8.6	8.0	8.0	8.0	6.9	6.8	6.9	7.5	7.4	7.4
31	---	---	---	8.0	7.9	7.9	7.0	6.8	6.9	---	---	---
MONTH	9.2	7.9	8.4	8.9	7.5	7.9	8.0	6.6	7.3	---	---	---

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.9	9.8	13.4	---	---	---	6.6	2.7	4.6	.9	.6	.8
2	15.5	13.8	14.7	---	---	---	7.6	4.4	5.8	2.1	.8	1.4
3	15.4	11.9	13.6	---	---	---	10.2	7.6	8.8	4.4	2.1	3.5
4	16.2	11.4	13.7	---	---	---	11.5	10.2	10.9	4.1	2.7	3.4
5	17.8	12.6	14.8	---	---	---	10.8	9.8	10.3	3.3	2.5	3.0
6	19.0	11.9	15.2	---	---	---	9.9	7.9	8.9	5.7	2.9	3.9
7	20.3	13.2	16.6	---	---	---	7.9	6.3	7.3	6.1	3.7	5.5
8	20.7	13.7	17.0	---	---	---	7.3	5.0	6.3	3.7	1.2	2.0
9	19.1	15.7	16.9	---	---	---	7.8	4.0	5.6	1.7	.6	1.2
10	16.0	12.3	13.8	---	---	---	10.4	7.8	9.3	3.0	.6	1.8
11	12.7	9.4	10.4	---	---	---	8.3	4.4	6.4	4.6	2.6	3.6
12	14.0	9.0	11.3	---	---	---	4.5	2.7	3.9	5.6	4.4	5.0
13	15.0	10.9	12.9	---	---	---	6.1	3.6	4.7	5.5	4.6	5.1
14	16.1	11.9	13.8	16.4	13.1	14.5	7.1	6.1	6.6	4.6	.6	2.6
15	16.9	12.0	14.6	14.7	12.7	14.1	8.0	7.0	7.4	.9	.5	.7
16	17.1	15.8	16.5	12.7	10.3	11.7	7.6	6.9	7.3	.8	.6	.7
17	18.2	16.6	17.3	14.1	12.0	12.9	7.4	6.7	7.1	.6	.6	.6
18	16.6	15.7	16.1	12.2	11.3	11.7	7.4	6.4	7.1	.6	.1	.4
19	17.2	15.7	16.4	11.5	9.9	10.9	6.4	5.2	5.8	2.1	.1	.1
20	18.8	16.7	17.7	9.9	6.1	7.7	5.4	4.3	4.9	.1	.1	.1
21	18.4	13.6	16.7	7.3	3.9	5.6	5.3	3.4	4.6	.1	.1	.1
22	---	---	---	7.6	3.7	5.6	3.8	2.1	3.1	.5	.1	.3
23	---	---	---	8.8	4.4	6.5	3.6	2.6	3.1	.6	.1	.5
24	---	---	---	9.8	7.5	8.6	2.8	1.7	2.4	.6	.5	.6
25	---	---	---	11.3	9.1	10.1	2.5	.7	2.2	3.8	.5	1.5
26	---	---	---	11.9	9.3	10.5	2.1	.6	1.2	4.8	3.8	4.4
27	---	---	---	9.3	6.2	7.8	3.0	1.3	2.1	6.2	4.4	5.3
28	---	---	---	6.2	4.2	5.5	2.5	.6	1.1	6.4	4.8	5.9
29	---	---	---	5.1	2.3	3.9	1.2	.6	.9	5.1	4.2	4.7
30	---	---	---	6.2	3.7	4.7	1.2	.6	.8	5.6	3.7	4.5
31	---	---	---	---	---	---	1.5	.6	.9	4.0	2.3	3.5
MONTH	---	---	---	---	---	---	11.5	.6	5.2	6.4	.1	2.5

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.3	.6	1.3	6.3	5.2	5.7	11.4	4.1	7.7	14.5	10.6	11.9
2	2.9	.6	1.7	5.4	4.3	4.8	12.8	6.4	9.5	14.9	9.0	12.1
3	4.1	1.8	2.8	7.3	3.1	5.2	10.6	6.7	8.4	13.2	11.3	12.1
4	5.0	1.4	3.2	10.1	3.9	7.0	11.8	4.6	8.0	13.4	3.2	12.1
5	5.5	3.3	4.3	9.5	5.1	7.7	10.1	6.3	8.5	15.1	10.2	12.8
6	4.5	1.2	3.1	10.5	4.9	8.0	9.4	6.2	8.2	14.5	12.7	13.8
7	4.7	1.4	3.3	9.5	7.1	8.5	11.3	5.3	7.8	15.8	12.4	14.0
8	5.8	3.7	4.6	8.8	6.1	7.0	12.3	4.4	8.2	15.6	11.6	13.4
9	5.7	2.5	4.0	6.1	2.3	3.9	11.8	7.1	9.6	17.3	10.8	14.1
10	3.1	1.7	2.4	7.4	4.4	5.4	11.6	9.4	10.8	16.9	12.7	14.9
11	3.5	2.3	2.8	8.7	4.1	5.8	11.0	8.8	9.5	17.9	11.5	15.0
12	4.8	3.5	4.1	9.4	4.3	6.4	12.6	8.7	10.7	19.2	14.5	16.8
13	5.2	3.5	4.4	7.8	5.2	6.5	11.8	9.2	10.4	17.1	12.8	15.4
14	6.2	2.3	4.1	10.0	5.5	7.6	16.0	7.4	11.4	18.9	14.0	16.6
15	7.1	3.5	5.0	11.4	7.1	8.9	12.5	9.9	11.0	17.2	15.3	16.1
16	6.7	2.6	4.6	9.1	5.7	7.4	12.8	7.8	10.1	18.6	13.5	16.1
17	7.0	2.8	4.9	7.9	3.2	5.8	14.3	7.4	10.6	19.6	12.8	16.5
18	8.7	3.3	6.1	11.3	6.4	8.8	15.5	7.5	11.4	19.5	14.7	17.2
19	10.7	6.1	8.4	9.5	5.1	7.8	20.1	9.8	14.6	19.2	14.1	16.6
20	9.9	8.6	9.1	9.5	7.1	8.4	18.5	11.9	15.4	20.4	14.1	17.0
21	9.8	8.4	9.0	11.2	7.8	9.8	15.9	10.9	13.8	21.3	14.5	17.5
22	8.4	6.8	7.2	11.8	5.4	8.5	17.0	11.2	14.1	22.4	15.4	18.5
23	10.6	7.0	8.6	12.8	5.9	9.5	16.5	9.0	13.3	24.2	17.4	20.2
24	7.8	5.3	6.3	12.3	10.7	11.4	18.0	10.0	14.5	24.8	18.8	21.4
25	8.4	4.0	6.0	11.5	7.8	9.8	20.3	13.4	17.2	24.5	19.6	21.6
26	5.1	2.2	3.7	8.7	6.4	7.6	21.6	15.3	18.6	21.8	19.0	20.2
27	4.9	1.0	3.1	8.3	7.5	7.9	20.0	14.9	17.4	20.6	16.0	18.0
28	6.7	2.3	4.5	9.5	7.2	8.1	19.5	11.3	16.8	21.6	14.2	17.4
29	---	---	---	8.6	5.8	7.2	17.2	.5	15.1	22.9	14.6	18.2
30	---	---	---	7.7	4.7	6.3	15.7	13.4	14.4	23.3	17.2	19.8
31	---	---	---	10.6	5.9	7.8	---	---	---	25.7	18.2	21.4
MONTH	10.7	.6	4.7	12.8	2.3	7.4	21.6	.5	11.9	25.7	3.2	16.4
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.5	20.0	22.8	26.6	21.9	24.2	26.3	22.0	24.1	22.9	20.2	21.2
2	23.1	18.7	20.0	26.9	22.8	24.9	25.9	22.5	24.3	21.5	18.5	19.8
3	23.1	16.7	19.5	27.7	23.7	25.6	26.9	23.2	24.9	20.5	17.0	18.7
4	24.3	17.2	20.4	28.3	24.0	26.1	27.0	23.4	25.1	20.0	15.7	18.0
5	24.9	18.0	21.2	29.3	24.4	26.7	24.9	21.9	23.4	19.2	17.8	18.5
6	25.6	20.9	23.0	27.3	24.8	26.0	23.1	18.7	20.9	21.2	18.9	19.6
7	24.1	21.7	22.8	26.4	23.8	25.3	24.1	18.9	21.3	22.2	17.2	19.4
8	24.5	19.6	22.0	26.5	24.1	25.2	24.8	19.6	22.1	22.2	17.1	19.4
9	23.0	19.8	21.3	25.6	24.1	25.0	25.8	21.2	23.5	22.5	16.9	19.5
10	23.9	19.8	21.6	25.9	22.3	24.0	25.3	21.0	23.0	22.6	17.1	19.8
11	24.7	20.2	22.4	25.5	21.0	23.3	25.1	21.1	23.1	22.1	17.6	20.0
12	25.7	19.9	22.6	24.1	20.1	22.6	26.5	22.1	24.1	22.2	17.5	19.9
13	27.0	21.4	24.1	25.5	22.0	23.6	27.5	22.5	24.9	22.2	16.4	19.3
14	27.1	22.6	24.8	24.7	22.0	23.3	26.4	23.8	24.9	23.2	16.2	19.6
15	28.6	23.2	25.8	24.7	22.5	23.5	24.5	21.0	22.7	---	---	---
16	27.8	23.9	25.9	25.1	22.9	23.9	23.6	19.4	21.4	---	---	---
17	27.6	24.2	25.6	26.7	22.7	24.5	24.0	19.2	21.7	---	---	---
18	28.2	23.3	25.7	27.8	23.8	25.8	23.1	19.1	21.2	---	---	---
19	28.4	24.6	26.5	28.5	24.1	26.3	22.6	18.2	20.6	---	---	---
20	29.3	24.7	27.0	29.1	24.7	26.9	22.1	18.6	20.5	---	---	---
21	29.0	25.7	27.2	27.8	24.8	26.3	23.9	20.2	22.1	---	---	---
22	29.0	24.8	26.5	26.2	23.3	24.5	23.1	19.8	21.6	---	---	---
23	27.8	24.8	26.3	26.7	22.4	24.4	24.4	19.9	21.9	---	---	---
24	26.7	23.3	25.0	27.1	22.7	24.9	24.4	20.3	22.1	---	---	---
25	24.9	21.4	23.2	26.4	23.5	24.8	24.8	20.3	22.6	---	---	---
26	23.6	21.3	22.3	26.7	22.4	24.3	23.9	20.2	22.1	---	---	---
27	22.6	19.5	20.9	24.7	21.7	23.2	24.2	20.0	22.2	---	---	---
28	25.2	19.5	22.1	24.6	20.8	22.6	24.1	19.8	22.1	18.5	14.5	16.2
29	26.1	21.8	23.9	23.1	20.9	22.0	23.7	21.7	22.6	18.7	13.6	15.9
30	25.7	21.9	23.9	24.0	20.1	22.0	24.6	19.0	21.6	18.6	13.7	16.2
31	---	---	---	25.3	20.8	22.9	24.4	21.2	22.7	---	---	---
MONTH	29.3	16.7	23.5	29.3	20.1	24.5	27.5	18.2	22.6	---	---	---

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

SALT RIVER BASIN

03301580 WILSON CREEK NEAR DEATSVILLE, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	6.6	7.6	---	---	---	---	---	---	---	---	---
2	9.1	6.5	7.6	---	---	---	---	---	---	---	---	---
3	9.7	7.3	8.3	---	---	---	---	---	---	---	---	---
4	9.4	7.0	8.1	---	---	---	---	---	---	6.1	4.0	5.2
5	9.3	6.8	7.9	---	---	---	---	---	---	5.4	3.5	4.3
6	8.9	6.2	7.6	---	---	---	---	---	---	5.6	3.0	4.5
7	8.8	6.1	7.4	---	---	---	---	---	---	6.0	3.9	5.1
8	9.3	6.8	8.0	---	---	---	---	---	---	---	---	---
9	9.4	6.9	8.0	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

03301630 ROLLING FORK NEAR LEBANON JUNCTION, KY
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°49'22", long 85°44'52", Hardin County, Hydrologic Unit 05140103, at bridge on State Highway 434, 1.1 mi downstream from Wilson Creek, 1.2 mi southwest of Lebanon Junction, and at mile 12.3.

DRAINAGE AREA.--1,375 mi^2.

PERIOD OF RECORD.--Water year 1975 to August 1994 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1975 to September 1980.
WATER TEMPERATURES: June 1975 to September 1980.

REMARKS.--Records of daily discharge are published for gaging station near Boston (see station 03301500) 7.5 mi upstream.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 1993												
09...	1030	65	475	7.7	6.0	3.6	10.9	88	78	220	210	58
FEB 1994												
24...	1030	16400	239	7.9	7.5	270	9.9	83	K16000	13000	100	32
MAY												
11...	1030	1900	330	7.9	18.5	28	7.6	82	1200	660	150	45
AUG												
11...	1115	190	331	7.8	24.0	9.4	5.6	67	100	190	150	43

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 1993											
09...	16	10	5.4	217	178	177	15	50	0.20	6.1	277
FEB 1994											
24...	5.7	2.1	2.4	94	77	77	3.0	19	0.10	5.1	165
MAY											
11...	9.6	3.2	2.0	151	124	125	3.4	27	0.10	6.2	197
AUG											
11...	9.2	4.6	4.1	140	114	114	6.7	24	0.20	5.6	184

03301630 ROLLING FORK NEAR LEBANON JUNCTION, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	COBALT, DISSOLVED (UG/L AS CO)	IRON, DISSOLVED (UG/L AS FE)
NOV 1993											
09...	0.010	0.600	0.060	2.6	0.240	0.200	0.170	20	28	<3	120
FEB 1994											
24...	0.020	0.830	0.050	1.2	0.810	0.120	0.090	850	12	<3	210
MAY											
11...	<0.010	0.620	0.040	0.40	0.120	0.040	0.050	70	20	<3	90
AUG											
11...	<0.010	0.540	0.040	0.70	0.230	0.090	0.060	<10	29	<3	9

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 1993											
09...	<4	83	<10	2	<1	<1.0	140	<6	--	--	--
FEB 1994											
24...	<4	7	<10	1	<1	<1.0	68	<6	500	22100	85
MAY											
11...	<4	17	<10	<1	<1	<1.0	100	<6	62	319	91
AUG											
11...	4	16	10	<1	<1	<1.0	110	<6	94	48	88

SALT RIVER BASIN

03301880 SOUTHERN DITCH AT MINORS LANE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'04", long 85°42'34", Jefferson County, Hydrologic Unit 05140102, at bridge on Minors Lane, 0.2 mi below Mud Creek, and at mile 4.2.

DRAINAGE AREA.--12.8 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
06...	1115	1.4	737	7.5	16.5	8.5
NOV						
03...	1150	4.5	770	7.2	8.0	10.8
DEC						
08...	1145	12	592	7.6	8.0	11.3
JAN						
10...	1110	12	638	7.6	1.5	12.7
FEB						
15...	1125	15	432	7.5	8.0	11.9
MAR						
07...	1145	8.4	587	7.9	11.5	11.1
APR						
11...	1220	95	470	7.7	11.5	8.6
MAY						
09...	1130	17	479	7.8	16.0	9.5
JUN						
09...	1100	3.4	596	7.8	22.5	6.4
JUL						
11...	1120	0.70	730	8.3	26.0	8.4
AUG						
09...	1135	0.71	661	7.4	25.5	5.6
SEP						
07...	1050	0.55	538	7.0	20.0	2.7

SALT RIVER BASIN

03301885 SLOP DITCH NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'40", long 85°43'15", Jefferson County, Hydrologic Unit 05140102, at bridge on service road at Outer Loop landfill.

DRAINAGE AREA.--1.4 mi^2

PERIOD OF RECORD.--April 1994 to present.

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, FOR THE PERIOD APRIL 1994 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
APR						
11...	1045	4.6	472	7.1	12.0	5.7
MAY						
09...	1225	1.3	474	7.3	21.5	7.0
JUN						
09...	1220	1.0	550	7.6	25.0	5.5
JUL						
11...	1220	0.00	615	8.2	25.0	7.5
AUG						
09...	1255	0.04	377	8.0	28.5	9.5
SEP						
07...	1140	1.4	1280	7.9	22.0	6.8

SALT RIVER BASIN

03301900 FERN CREEK AT OLD BARDSTOWN ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.-- Lat 38°10'32", long 85°36'55", Jefferson County, Hydrologic Unit 05140102, at bridge on Old Bardstown Road, and at mile 3.2.

DRAINAGE AREA.--3.5 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
20...	1220	24	414	7.4	18.5	8.3
NOV						
08...	1040	4.4	747	8.2	8.0	14.3
DEC						
06...	1220	9.0	618	7.9	10.0	9.8
JAN						
12...	1100	6.5	524	7.9	7.0	12.8
FEB						
14...	1150	7.0	501	8.1	7.5	14.8
MAR						
09...	1140	8.2	978	8.0	4.0	12.7
APR						
06...	1135	15	370	7.9	11.0	9.8
MAY						
04...	1115	9.6	622	8.2	13.5	9.7
JUN						
02...	1220	2.0	666	7.9	17.0	7.5
JUL						
25...	1215	1.0	717	8.1	24.5	6.9
AUG						
03...	1105	0.04	712	7.9	24.0	6.8
SEP						
19...	1250	0.85	649	7.1	19.0	7.9

SALT RIVER BASIN

03301940 NORTHERN DITCH AT OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'01", long 85°41'37", Jefferson County, Hydrologic Unit 05140102, at bridge on Preston Highway, 0.1 mi above Spring Ditch, and at mile 5.1.

DRAINAGE AREA.-- 11.1 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
06...	1000	4.3	671	8.3	13.5	14.6
NOV						
03...	1045	8.9	670	8.0	8.5	11.7
DEC						
08...	1040	19	575	8.0	7.5	12.2
JAN						
10...	1000	17	654	7.5	2.5	13.8
FEB						
15...	1030	20	457	7.9	6.0	13.1
MAR						
07...	1100	12	622	8.0	11.5	14.1
APR						
11...	0955	30	531	7.5	12.0	8.6
MAY						
09...	1035	24	513	7.9	16.0	10.6
JUN						
09...	1000	3.8	594	9.0	21.0	16.6
JUL						
11...	1035	3.1	653	8.7	26.0	13.6
AUG						
09...	1030	3.1	603	9.1	24.5	15.5
SEP						
07...	0955	3.6	618	7.5	19.5	10.0

SALT RIVER BASIN

03301950 SPRING DITCH AT PRIVATE DRIVE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'27", long 85°40'57", Jefferson County, Hydrologic Unit 05140102, at bridge on Private Drive, and at mile 1.0.

DRAINAGE AREA.--1.6 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
06...	0905	1.0	699	7.4	14.0	7.5
NOV						
03...	0915	2.0	660	7.3	11.5	7.1
DEC						
08...	0925	3.5	524	7.1	9.0	9.3
JAN						
10...	0905	2.0	703	7.1	5.5	10.2
FEB						
15...	0910	6.9	495	6.9	6.0	11.4
MAR						
07...	1030	0.90	738	7.4	12.5	11.0
APR						
11...	0900	4.6	542	7.0	12.0	7.0
MAY						
09...	0910	3.0	595	7.5	16.5	7.2
JUN						
09...	0905	1.2	703	7.7	18.5	8.4
JUL						
11...	0915	0.50	786	8.3	23.0	14.5
AUG						
09...	0915	0.44	660	7.8	23.5	8.8
SEP						
07...	0855	0.90	606	6.7	18.0	4.8

SALT RIVER BASIN

03302000 POND CREEK NEAR LOUISVILLE, KY

LOCATION.--Lat 38°07'11", long 85°47'45", Jefferson County, Hydrologic Unit 05140102, on upstream side of bridge on Manslick Rd, right bank, 0.4 mi south of Third Street Rd, 0.6 mi downstream from Bee Lick Creek, 1.5 mi downstream from confluence of Northern and Southern Ditches, 2.4 mi south of Louisville city limits, and at mile 15.4.

DRAINAGE AREA.--64.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 430.38 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 16, 1962.

REMARKS.--Estimated daily discharges: Many days. Water-discharge records poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of about 23 ft present datum, backwater from Ohio River, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	35	38	86	55	81	250	11	8.4	6.4	8.3
2	19	28	36	129	67	51	64	130	12	7.0	8.1	7.6
3	18	32	250	121	57	44	81	110	11	7.2	9.2	6.9
4	13	30	580	88	51	39	87	85	9.2	7.0	10	6.4
5	10	29	280	62	50	33	68	64	7.7	5.9	88	40
6	10	27	126	62	44	28	84	57	7.8	16	21	28
7	9.1	24	78	400	90	27	89	400	8.2	11	9.8	12
8	9.1	22	59	111	400	61	71	184	15	7.9	7.5	8.2
9	37	21	50	66	390	110	57	102	25	7.9	6.7	7.5
10	28	22	93	48	260	230	110	71	11	6.4	6.1	7.5
11	12	21	54	42	190	450	170	53	10	6.3	6.4	7.0
12	10	22	38	70	140	250	120	48	10	6.6	7.2	6.7
13	9.7	250	34	61	113	170	94	36	10	6.8	7.5	6.7
14	9.5	480	76	44	81	130	68	74	9.9	6.8	11	6.2
15	9.6	250	99	26	74	102	200	177	11	7.2	11	6.2
16	54	125	64	19	60	74	79	92	8.0	6.6	7.5	6.7
17	178	600	46	17	51	59	61	47	100	6.2	6.3	129
18	52	194	40	15	50	67	44	30	12	6.3	5.8	17
19	200	120	35	13	46	47	35	23	10	6.5	5.7	8.7
20	640	85	31	12	100	43	26	22	20	5.6	6.5	7.0
21	162	61	38	11	200	84	22	18	40	110	30	6.5
22	82	50	30	11	400	56	19	16	17	14	11	6.3
23	58	43	26	45	580	42	16	15	11	9.1	8.0	45
24	47	39	21	259	170	42	15	13	12	6.8	6.9	95
25	38	33	20	580	110	33	15	13	20	8.7	6.4	22
26	31	44	18	450	85	29	13	33	22	15	6.2	13
27	26	144	17	720	66	540	150	16	40	11	6.0	15
28	24	62	16	1000	57	300	130	13	18	14	6.1	9.8
29	23	46	15	400	---	200	300	13	13	10	81	8.1
30	52	39	14	177	---	130	660	10	9.6	10	22	7.2
31	57	---	20	127	---	103	---	10	---	8.0	10	---
TOTAL	1940.0	2981	2339	5224	4068	3629	3029	2225	521.4	366.2	441.3	561.5
MEAN	62.6	99.4	75.5	169	145	117	101	71.8	17.4	11.8	14.2	18.7
MAX	640	600	580	1000	580	540	660	400	100	110	88	129
MIN	9.1	21	14	11	44	27	13	10	7.7	5.6	5.7	6.2
CFSM	.98	1.55	1.18	2.63	2.27	1.83	1.58	1.12	.27	.18	.22	.29
IN.	1.13	1.73	1.36	3.04	2.36	2.11	1.76	1.29	.30	.21	.26	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	27.4	60.1	98.6	130	162	182	135	100	60.9	47.0	35.2	32.3
MAX	117	256	310	614	454	738	551	505	304	282	186	399
(WY)	1976	1974	1979	1950	1989	1964	1970	1983	1950	1973	1992	1979
MIN	1.76	2.60	4.48	8.52	10.1	11.4	22.0	10.6	4.54	2.96	.78	1.15
(WY)	1947	1945	1954	1977	1954	1954	1954	1954	1954	1952	1945	1945

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1944 - 1994	
ANNUAL TOTAL	32405.2		27325.4			
ANNUAL MEAN	88.8		74.9		89.0	
HIGHEST ANNUAL MEAN					159	1950
LOWEST ANNUAL MEAN					11.4	1954
HIGHEST DAILY MEAN	1230	Feb 21	1000	Jan 28	6340	Mar 10 1964
LOWEST DAILY MEAN	8.2	Jul 11	5.6	Jul 20	.10	Sep 3 1945
ANNUAL SEVEN-DAY MINIMUM	10	Sep 8	6.5	Jul 14	.19	Sep 17 1945
INSTANTANEOUS PEAK FLOW					8020	Mar 9 1964
INSTANTANEOUS PEAK STAGE					22.69	Mar 9 1964
ANNUAL RUNOFF (CFSM)	1.39		1.17		1.39	
ANNUAL RUNOFF (INCHES)	18.84		15.88		18.89	
10 PERCENT EXCEEDS	212		180		186	
50 PERCENT EXCEEDS	43		32		26	
90 PERCENT EXCEEDS	12		7.0		5.6	

03302000 POND CREEK NEAR LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1988 to September 1992.
pH: May 1988 to September 1992.
WATER TEMPERATURE: May 1988 to September 1992.
DISSOLVED OXYGEN: June 1988 to September 1992.

REMARKS.--Water-quality samples collected monthly.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1200 microsiemens, Nov. 4, 1988; minimum, 129 microsiemens, Mar. 6, 1989.
pH: Maximum, 10.1 units, Apr. 16, 17, 18, 1991; minimum, 4.5 units, Oct. 18, 1990.
WATER TEMPERATURE: Maximum, 34.0°C, July 15-17 and Aug. 2, 4, and 16, 1988; minimum, 0.0°C, Jan. 22, 23, 1991, and Dec. 19, 1992.
DISSOLVED OXYGEN: Maximum, 20.1 mg/L, June 30, 1991; minimum, 0.7 mg/L, July 3, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
07...	1030	9.6	680	8.2	19.0	8.3
NOV						
04...	1110	29	538	8.0	10.5	10.3
DEC						
07...	1105	74	545	7.5	7.0	9.9
JAN						
06...	1045	52	484	7.7	3.0	11.7
FEB						
01...	1030	82	601	7.4	1.0	11.7
MAR						
01...	1005	54	463	7.8	6.5	10.3
APR						
05...	1010	72	404	7.7	11.5	8.2
MAY						
03...	1025	107	480	7.5	13.0	7.1
JUN						
03...	1000	11	656	7.8	20.0	4.8
JUL						
05...	1055	6.1	664	8.8	31.5	6.8
AUG						
02...	1125	8.3	630	7.9	27.0	4.6
SEP						
06...	1015	28	480	6.6	20.5	3.6

SALT RIVER BASIN

03302030 POND CREEK AT PENDLETON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°03'15", long 85°52'18", Jefferson County, Hydrologic Unit 05140102, at bridge on Pendleton Road, 1.3 mi above Brier Creek and at mile 7.1.

DRAINAGE AREA.--80.3 mi^2.

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

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
07...	0915	8.9	623	8.0	16.0	8.8
NOV						
04...	0915	33	575	7.9	9.5	10.0
DEC						
07...	0925	90	496	7.6	6.5	10.2
JAN						
06...	0935	45	645	7.7	3.0	12.1
MAY						
03...	0910	131	433	7.9	14.5	8.2
JUN						
03...	0845	15	644	7.9	20.0	6.6
JUL						
05...	0955	6.0	566	7.8	26.5	5.5
AUG						
02...	0945	4.8	445	7.8	24.0	6.4
SEP						
06...	0900	35	635	7.5	20.5	6.2

SALT RIVER BASIN

03302110 OTTER CREEK AT OTTER CREEK PARK NEAR ROCK HAVEN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°56'37", long 86°01'47", Mead County, Hydrologic Unit 05140104, 1.4 mi east of Rock Haven, and at mile 3.3.

DRAINAGE AREA.--99.2 mi^2.

PERIOD OF RECORD.--January 1993 to current year.

REMARKS.--Samples were collected monthly.

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

WATER-QUALITY DATA, FOR THE PERIOD OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
14...	1115	11	488	8.0	13.5	9.8
NOV						
18...	1130	301	330	7.7	12.0	9.9
DEC						
21...	1140	65	465	8.3	6.0	13.1
JAN						
25...	1150	1130	340	7.0	6.5	11.1
FEB						
22...	1115	153	314	8.0	10.0	11.1
MAR						
10...	1150	478	298	7.3	9.5	11.3
APR						
20...	1205	118	412	8.3	16.5	11.5
MAY						
19...	1140	92	426	8.4	14.0	12.2
JUN						
08...	1140	32	468	8.2	19.5	9.5
JUL						
19...	1110	19	481	8.3	24.0	8.3
AUG						
18...	1100	11	445	8.0	23.0	8.1
SEP						
20...	1130	10	502	7.6	17.5	8.7

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY

LOCATION.--Lat 37°53'58", long 86°42'20", Hancock County, Hydrologic Unit 05140201, at Cannelton Dam, 0.7 mi upstream from Indian Creek, 3.3 mi upstream from Lead Creek, and at mile 720.8.

DRAINAGE AREA.--97,000 mi^2, approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Gate opening and water-stage recorders. Datum of headwater gage 0.4 mi upstream is 374.0 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 26.0 ft lower.

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft^3/s, which are poor. Daily discharge computed from head, gate openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42400	40600	201000	57500	522000	448000	464000	264000	38700	69300	79300	69000
2	32300	51100	219000	68900	522000	422000	481000	242000	38000	63600	47400	69400
3	38500	64700	207000	62600	512000	358000	487000	188000	49200	53800	41300	76700
4	36000	65500	186000	75200	485000	257000	473000	162000	44200	67200	41500	74200
5	29400	64000	216000	114000	431000	261000	444000	147000	17800	60800	55400	60400
6	21500	58500	251000	150000	348000	287000	400000	143000	36500	46700	53300	33500
7	24000	68300	281000	211000	243000	284000	340000	152000	41700	39100	77200	38900
8	28600	78100	278000	236000	208000	276000	280000	198000	37500	45700	84800	35900
9	13900	81600	337000	272000	196000	268000	266000	251000	40300	52700	81800	30000
10	29300	77700	349000	304000	242000	286000	290000	290000	34400	44700	41200	30000
11	16800	64500	313000	321000	284000	300000	304000	300000	31600	30000	35800	18200
12	24300	48500	267000	329000	287000	404000	365000	333000	31700	37800	44300	32900
13	17400	52700	223000	294000	370000	463000	396000	312000	32400	44800	21200	27000
14	17900	69400	191000	227000	413000	501000	417000	255000	35100	39800	18100	21000
15	21200	168000	178000	226000	441000	518000	436000	191000	43800	42600	47700	18100
16	28600	202000	158000	242000	452000	510000	448000	154000	52800	42200	82800	21100
17	18900	216000	138000	236000	441000	470000	458000	150000	75400	52100	92400	23900
18	44600	245000	126000	192000	397000	409000	472000	127000	71700	40400	92000	32900
19	31300	257000	118000	121000	320000	340000	484000	112000	59100	33500	111000	30000
20	33000	258000	109000	72400	255000	265000	486000	108000	51200	37400	150000	32900
21	79300	261000	113000	73000	240000	253000	469000	84500	62100	31800	171000	35700
22	84400	256000	108000	82400	249000	229000	433000	70300	51900	31000	168000	18100
23	87200	231000	105000	74500	263000	214000	377000	72800	50200	40100	145000	21100
24	80000	192000	107000	79600	297000	233000	261000	67800	48400	33300	126000	26900
25	64100	166000	106000	121000	348000	269000	220000	49000	42700	41600	116000	18000
26	61200	143000	84500	202000	396000	284000	181000	60600	42600	46500	101000	21100
27	40500	124000	81400	289000	430000	294000	159000	62400	61100	47600	84000	47300
28	34000	122000	81700	306000	448000	326000	153000	75800	63300	47200	58000	35700
29	37000	137000	58900	416000	---	361000	144000	67600	50400	42900	55400	38700
30	31800	163000	64500	476000	---	398000	223000	70600	69100	60900	63800	30000
31	33600	---	63900	509000	---	435000	---	63900	---	92800	74200	---
TOTAL	1183000	4026200	5319900	6440100	10040000	10623000	10811000	4824300	1404900	1459900	2460900	1068600
MEAN	38160	134200	171600	207700	358600	342700	360400	155600	46830	47090	79380	35620
MAX	87200	261000	349000	509000	522000	518000	487000	333000	75400	92800	171000	76700
MIN	13900	40600	58900	57500	196000	214000	144000	49000	17800	30000	18100	18000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

MEAN	62060	97430	166500	162600	205400	234000	211300	145600	95280	67200	54110	45320
MAX	155800	222400	334000	368700	358600	347400	360400	374700	235400	105200	148200	186500
(WY)	1980	1986	1979	1991	1994	1979	1994	1983	1981	1992	1980	1979
MIN	13980	28150	54160	36500	94740	125500	72990	46020	16490	18760	13130	14920
(WY)	1992	1992	1990	1977	1992	1983	1986	1976	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1976 - 1994	
ANNUAL TOTAL	46739000		59661800			
ANNUAL MEAN	128100		163500		128500	
HIGHEST ANNUAL MEAN					188900	1979
LOWEST ANNUAL MEAN					72150	1988
HIGHEST DAILY MEAN	473000	Mar 10	522000	Feb 1	617000	Dec 15 1978
LOWEST DAILY MEAN	6420	Aug 7	13900	Oct 9	3540	Sep 16 1985
ANNUAL SEVEN-DAY MINIMUM	13400	Aug 26	20100	Oct 9	7650	Jul 12 1988
INSTANTANEOUS PEAK STAGE			44.52	Feb 1	49.08	Dec 15 1978
10 PERCENT EXCEEDS	279000		411000		284000	
50 PERCENT EXCEEDS	83200		92000		90800	
90 PERCENT EXCEEDS	19000		31800		23400	

GREEN RIVER BASIN

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 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to March 1932, October 1963 to September 1994 (discontinued). Monthly discharge only for October 1930, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Apr. 1, 1932, nonrecording gage at site 1.1 mi downstream, altitude of gage 600 ft, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 16-23. Water-discharge records good. Flow regulated by Green River Lake beginning February 1969.

REVISIONS.--The maximum gage height for the period of record has been corrected to 111.32 ft. The maximum gage height for the 1991 water year has been corrected to 104.02 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1962, reached a stage of 122.6 ft, from floodmarks, discharge, 60,700 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	999	1410	680	3830	5010	5510	4230	244	72	244	262
2	78	775	1040	697	4110	5000	5990	3040	244	72	244	262
3	78	773	713	706	4060	5000	5950	1920	245	71	247	260
4	79	773	752	861	4030	4980	5910	1720	199	71	247	262
5	79	770	756	1200	3980	4950	5550	1360	152	71	250	265
6	79	769	1680	1390	3950	4920	5020	1190	153	71	250	262
7	79	765	3110	1990	3910	4900	5520	964	153	71	250	262
8	79	765	3440	2660	3880	4140	5810	1230	153	71	250	168
9	81	765	3410	2660	3200	1570	5770	1580	153	70	250	89
10	82	764	3420	2650	3250	237	5070	1580	153	70	250	89
11	82	760	3400	2640	4260	228	3200	1370	153	69	247	90
12	82	759	3400	2660	216	1810	1710	738	153	60	247	90
13	82	758	3380	2660	209	4530	3750	359	152	75	244	92
14	82	765	3360	2840	1440	5370	5540	364	151	78	247	92
15	82	1360	3330	3260	4290	5330	5230	836	150	77	244	92
16	83	2150	3270	2150	2760	5290	3120	1620	150	75	241	92
17	85	2140	3260	1510	200	5260	2540	1960	149	74	241	94
18	459	2430	3250	1510	201	5230	4110	1950	109	164	241	92
19	1150	2760	2930	1510	407	5200	5570	1530	75	238	238	92
20	1980	2740	2060	1000	2830	5180	6110	727	75	238	320	92
21	2320	2720	1380	765	4080	5150	6210	361	75	238	208	92
22	2300	2010	1050	765	3840	5120	6160	360	75	239	174	92
23	2280	1420	680	765	1470	5090	6110	292	74	238	265	90
24	2270	1420	680	522	1950	5060	6060	235	74	237	262	301
25	2250	1420	680	737	4290	5030	6010	237	74	237	262	87
26	2240	1410	513	1100	5120	5010	5960	237	75	236	262	87
27	1790	1410	304	1130	5080	4420	5920	236	74	236	262	87
28	1330	1410	402	1160	5030	2380	5860	239	73	238	262	145
29	1180	1410	480	1820	---	3540	4990	241	72	244	265	250
30	1180	1410	491	2990	---	5170	4260	241	72	241	262	250
31	1170	---	437	3480	---	5160	---	242	---	244	262	---
TOTAL	25270	40580	58468	52468	85873	135265	154520	33189	3904	4486	7738	4580
MEAN	815	1353	1886	1693	3067	4363	5151	1071	130	145	250	153
MAX	2320	2760	3440	3480	5120	5370	6210	4230	245	244	320	301
MIN	78	758	304	522	200	228	1710	235	72	60	174	87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	844	1339	1766	2019	2300	1687	1324	1181	813	361	331	627
MAX	3075	2732	4516	4798	5630	4363	5151	4632	4374	1498	1386	2902
(WY)	1980	1987	1980	1979	1982	1994	1994	1984	1983	1971	1977	1982
MIN	99.8	27.5	2.88	74.0	419	210	62.9	44.2	73.1	70.5	65.7	64.9
(WY)	1972	1982	1982	1981	1977	1983	1985	1986	1987	1970	1983	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	313641		606341			
ANNUAL MEAN	859		1661		1210	
HIGHEST ANNUAL MEAN					2077	1979
LOWEST ANNUAL MEAN					535	1988
HIGHEST DAILY MEAN	4170	Feb 24	6210	Apr 21	8350	Jan 23 1974
LOWEST DAILY MEAN	35	Apr 16	60	Jul 12	.00	May 15 1982
ANNUAL SEVEN-DAY MINIMUM	56	Apr 15	69	Jul 6	.58	May 11 1982
INSTANTANEOUS PEAK FLOW			6270	Apr 20	29200	Jan 30 1932
INSTANTANEOUS PEAK STAGE			106.71	Apr 20	111.32	Jan 30 1932
10 PERCENT EXCEEDS	2510		5040		3740	
50 PERCENT EXCEEDS	279		764		420	
90 PERCENT EXCEEDS	73		79		74	

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1963 to current year.

INSTRUMENTATION.--Temperature recorded from A-35 Chart Recorder.

REMARKS.--Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 31.0°C, Aug. 3-5, 1964; minimum, 0.0°C, on many days during 1963-66.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 22.8°C, July 4-6, 11, 17, 18, 24, Aug. 8-20, Sept. 2, 3; minimum, 1.7°C, Jan. 24 to Feb. 2.

WATER TEMPERATURE, IN CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.2	21.1	15.0	14.4	10.0	10.0	5.6	5.6	1.7	1.7	4.4	4.4
2	21.1	21.1	14.4	14.4	10.0	10.0	5.6	5.6	1.7	1.7	5.0	4.4
3	21.1	21.1	14.4	14.4	10.0	10.0	5.6	5.6	2.2	2.2	5.0	5.0
4	21.1	20.6	14.4	14.4	10.0	9.4	5.6	5.0	2.2	2.2	5.0	5.0
5	20.6	21.1	14.4	13.9	9.4	9.4	5.0	5.0	2.2	2.2	5.6	5.0
6	21.7	21.1	13.9	13.9	9.4	9.4	5.0	5.0	2.2	2.2	5.6	5.6
7	21.1	20.6	13.9	13.9	9.4	9.4	5.0	5.0	2.2	2.2	5.6	5.6
8	21.1	20.6	13.9	13.3	9.4	9.4	5.0	4.4	2.2	2.2	6.7	5.6
9	21.1	21.1	12.8	12.8	9.4	9.4	4.4	4.4	2.2	2.2	6.7	6.7
10	21.1	20.6	12.8	12.8	9.4	9.4	4.4	4.4	2.2	2.8	6.7	6.7
11	20.6	19.4	12.8	12.8	9.4	9.4	4.4	3.9	2.8	2.8	6.7	6.7
12	19.4	19.4	12.8	12.8	9.4	9.4	3.9	3.3	2.8	2.8	6.7	6.7
13	19.4	19.4	12.8	12.2	9.4	9.4	3.3	3.3	2.8	2.8	6.7	6.7
14	20.0	19.4	12.2	11.7	9.4	8.9	3.3	3.3	2.8	2.8	7.2	6.7
15	19.4	19.4	11.7	11.7	8.9	8.9	3.3	3.3	2.8	2.8	7.2	7.2
16	19.4	19.4	11.7	11.7	8.9	8.9	3.3	2.8	2.8	2.8	7.2	7.2
17	19.4	18.9	11.7	12.2	8.9	8.3	2.8	2.8	2.8	2.8	7.2	7.2
18	18.3	15.0	12.2	12.2	8.9	8.3	2.8	2.8	2.8	2.8	7.2	7.2
19	15.0	15.0	12.2	12.2	8.3	8.3	2.8	2.8	3.3	2.8	7.2	7.2
20	15.6	15.0	11.7	11.7	8.3	8.3	2.8	2.8	3.3	3.3	7.2	7.2
21	15.6	16.1	11.7	11.7	7.8	7.8	2.8	2.8	3.3	3.3	7.2	7.2
22	16.1	16.1	11.7	11.7	7.8	7.2	2.8	2.2	3.9	3.3	7.8	7.2
23	16.1	16.1	11.7	11.7	7.2	7.2	2.2	2.2	4.4	3.9	7.8	7.8
24	16.1	16.1	11.7	11.7	7.2	7.2	2.2	1.7	4.4	4.4	7.8	7.8
25	16.1	16.1	11.7	11.7	7.2	7.2	1.7	1.7	4.4	4.4	8.3	7.8
26	16.1	16.1	11.7	11.7	7.2	6.7	1.7	1.7	4.4	4.4	8.3	8.3
27	16.1	16.1	11.7	11.7	6.7	6.7	1.7	1.7	4.4	4.4	8.3	8.3
28	16.1	16.1	11.7	11.7	6.7	6.1	1.7	1.7	4.4	4.4	8.9	8.3
29	15.6	15.6	11.7	10.6	6.1	6.1	1.7	1.7	---	---	8.3	8.3
30	15.6	15.6	10.6	10.0	6.1	6.1	1.7	1.7	---	---	8.3	8.3
31	15.6	15.0	---	---	6.1	5.6	1.7	1.7	---	---	8.9	8.3
MONTH	22.2	15.0	15.0	10.0	10.0	5.6	5.6	1.7	4.4	1.7	8.9	4.4

03306000 GREEN RIVER NEAR CAMPBELLSVILLE, KY--Continued

WATER TEMPERATURE, IN CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.9	8.3	12.2	12.2	19.4	19.4	22.2	21.7	22.2	22.2	22.2	22.2
2	8.9	8.9	12.8	12.2	19.4	19.4	22.2	21.7	22.2	22.2	22.8	22.2
3	8.9	8.9	12.2	12.2	19.4	19.4	22.2	21.7	22.2	22.2	22.8	22.2
4	8.9	8.9	12.2	12.2	20.0	19.4	22.8	21.7	22.2	22.2	22.2	22.2
5	8.9	8.9	12.2	12.2	20.0	20.0	22.8	21.7	22.2	22.2	22.2	22.2
6	8.9	8.9	12.2	12.2	20.0	20.0	22.8	21.7	22.2	22.2	21.7	21.7
7	8.9	8.9	12.2	12.2	20.0	20.0	22.2	21.7	22.2	22.2	21.7	21.7
8	8.9	8.9	12.8	12.2	20.6	20.0	22.2	21.7	22.2	22.2	21.7	21.7
9	8.9	8.9	12.8	12.8	20.6	20.6	22.2	22.2	22.8	22.2	21.7	21.1
10	8.9	8.9	12.8	12.8	20.6	20.6	21.7	21.7	22.8	22.8	21.7	21.7
11	10.0	8.9	13.3	12.8	20.6	20.6	22.2	21.7	22.8	22.8	21.7	21.7
12	10.0	10.0	13.3	12.8	20.6	20.6	22.8	22.2	22.8	22.8	21.7	21.7
13	10.0	10.0	12.8	12.8	20.6	20.6	22.2	22.2	22.8	22.8	21.7	21.7
14	10.6	10.0	13.3	13.3	21.1	20.6	22.2	22.2	22.8	22.8	21.7	21.7
15	10.6	10.6	13.9	13.3	21.1	21.1	22.2	21.7	22.8	22.8	21.7	21.7
16	10.6	10.0	13.9	13.9	21.1	21.1	22.2	22.2	22.8	22.8	21.1	21.1
17	10.6	10.6	13.9	13.9	21.1	21.1	22.8	22.2	22.8	22.8	21.1	21.1
18	10.6	10.6	14.4	13.9	22.2	21.1	22.8	22.2	22.8	22.8	21.1	21.1
19	11.1	10.6	14.4	14.4	22.2	21.1	22.2	22.2	22.8	22.8	21.1	20.6
20	11.7	11.1	14.4	13.3	22.2	22.2	22.2	22.2	22.8	14.4	21.1	20.6
21	11.7	11.7	13.3	13.3	22.2	21.1	22.2	22.2	22.2	20.6	21.1	20.6
22	12.8	11.7	13.3	13.3	22.2	21.7	22.2	22.2	21.7	21.7	21.1	20.6
23	12.8	12.8	17.8	13.3	22.2	21.7	22.2	22.2	22.2	21.7	21.1	20.6
24	12.8	12.8	17.8	17.8	21.7	21.1	22.8	22.2	21.7	21.7	20.6	14.4
25	12.8	12.8	17.8	17.8	21.7	21.1	22.2	22.2	21.7	21.7	20.6	19.4
26	12.2	12.2	17.8	17.8	21.1	21.1	22.2	22.2	22.2	21.7	20.0	20.0
27	12.2	12.2	18.3	17.8	22.2	21.1	22.2	22.2	22.2	22.2	20.0	20.0
28	12.2	12.2	18.3	18.3	21.7	21.1	22.2	22.2	22.2	22.2	20.0	19.4
29	12.2	12.2	18.3	18.3	22.2	21.1	22.2	22.2	22.2	22.2	19.4	19.4
30	12.2	12.2	18.3	18.3	21.7	21.1	22.2	22.2	22.2	22.2	19.4	18.9
31	---	---	18.9	18.3	---	---	22.2	22.2	22.2	22.2	---	---
MONTH	12.8	8.3	18.9	12.2	22.2	19.4	22.8	21.7	22.8	14.4	22.8	14.4
YEAR	22.8	1.7										

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 mi^2 (includes Butlers Fork), of which about 15 mi^2 does not contribute directly to surface runoff.

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. Datum of gage is 610.96 ft above sea level. Prior to June 25, 1953, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 25-27, 30 to Jan. 3, and 15-27. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Jan. 1937 reached a stage of about 23 ft, from info. by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	51	126	155	372	343	1050	682	84	35	106	62
2	7.0	47	107	140	299	1140	699	359	76	31	89	51
3	6.9	44	104	150	273	1290	534	268	74	28	170	44
4	8.6	42	2830	380	230	778	495	361	70	26	104	37
5	8.9	43	4160	355	211	536	401	267	62	25	276	35
6	11	43	1070	310	192	414	426	204	61	23	235	41
7	13	43	620	1900	166	379	509	315	132	22	126	47
8	13	40	423	1320	161	2370	409	1170	174	21	90	38
9	14	37	324	660	2750	8690	355	481	98	20	70	33
10	15	36	1140	449	1530	8470	653	321	74	24	58	30
11	15	36	854	356	6720	1390	3490	234	63	30	50	28
12	16	36	513	640	3580	854	2120	184	55	30	45	26
13	20	39	377	592	1650	608	1100	149	50	45	41	24
14	30	287	308	482	983	514	691	306	48	684	42	23
15	34	1050	305	370	688	434	1340	1240	65	678	51	22
16	47	467	315	320	506	355	2320	1050	47	1370	49	21
17	1220	467	249	280	391	294	889	443	41	690	42	25
18	304	582	215	250	330	273	551	306	38	285	45	279
19	546	316	191	220	282	235	402	230	36	163	34	85
20	642	224	172	200	294	207	307	186	35	111	34	50
21	270	163	251	180	1260	201	243	155	33	88	609	38
22	168	128	254	165	1410	203	207	132	38	274	245	33
23	115	106	214	155	7780	173	173	116	52	892	103	31
24	89	93	176	700	1500	166	150	103	40	328	69	36
25	74	85	150	2200	836	222	134	204	36	184	54	44
26	64	79	138	1500	546	201	121	484	40	162	46	37
27	57	242	122	1000	410	3050	170	275	114	315	41	36
28	50	391	156	2630	349	3860	198	166	79	456	38	46
29	47	233	296	1120	---	1350	271	127	49	248	133	39
30	47	166	240	692	---	851	1230	107	41	276	216	32
31	50	---	190	484	---	1500	---	95	---	151	87	---
TOTAL	4009.7	5616	16590	20355	35699	41351	21638	10720	1905	7715	3398	1373
MEAN	129	187	535	657	1275	1334	721	346	63.5	249	110	45.8
MAX	1220	1050	4160	2630	7780	8690	3490	1240	174	1370	609	279
MIN	6.9	36	104	140	161	166	121	95	33	20	34	21
CFSM	.69	1.00	2.85	3.49	6.78	7.10	3.84	1.84	.34	1.32	.58	.24
IN.	.79	1.11	3.28	4.03	7.06	8.18	4.28	2.12	.38	1.53	.67	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	73.6	210	426	481	599	577	400	260	177	132	91.1	116
MAX	636	1047	2540	1779	1588	1787	855	1464	800	751	502	1114
(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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	79620.3		170369.7			
ANNUAL MEAN	218		467		294	
HIGHEST ANNUAL MEAN					651	1979
LOWEST ANNUAL MEAN					118	1941
HIGHEST DAILY MEAN	4160	Dec 5	8690	Mar 9	25000	Dec 9 1978
LOWEST DAILY MEAN	4.5	Aug 25	6.9	Oct 3	.40	Sep 25 1952
ANNUAL SEVEN-DAY MINIMUM	7.1	Aug 19	9.0	Oct 1	.47	Oct 19 1953
INSTANTANEOUS PEAK FLOW			16400	Mar 10	40600	Sep 1 1982
INSTANTANEOUS PEAK STAGE			20.37	Mar 10	26.12	Sep 1 1982
INSTANTANEOUS LOW FLOW			6.3	Oct 3	5.7	Sep 2 1993
ANNUAL RUNOFF (CFSM)	1.16		2.48		1.56	
ANNUAL RUNOFF (INCHES)	15.75		33.71		21.22	
10 PERCENT EXCEEDS	486		1130		632	
50 PERCENT EXCEEDS	99		184		101	
90 PERCENT EXCEEDS	13		33		15	

03307260 LITTLE PITMAN CREEK NEAR CAMPBELLSVILLE, KY

LOCATION.--Lat 37°20'50", long 85°23'25", Taylor County, Hydrologic Unit 05110001, on right bank at bridge on county road 323, 0.6 mi downstream from Buck Creek, 2.4 mi wset of Campbellsville, and at mile 9.1.

DRAINAGE AREA.--19.3 mi^2.

PERIOD OF RECORD.--August 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 685.93 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 17-31, Jan 17-22, May 23, 24, and 29 to June 14. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section. Flow partially regulated by the city of Campbellsville.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	6.4	14	20	60	53	81	29	13	8.8	10	9.0
2	7.0	6.2	14	30	51	98	66	23	12	7.7	8.5	8.5
3	6.2	6.4	20	44	44	89	60	31	11	7.8	7.6	6.8
4	8.2	6.4	306	55	39	75	50	28	11	7.6	8.2	5.9
5	7.5	6.0	217	45	35	60	43	23	10	5.3	23	6.8
6	7.0	4.7	99	44	33	51	92	26	10	6.0	8.9	10
7	7.1	4.7	67	269	29	78	81	35	19	5.7	6.5	9.7
8	6.4	6.2	51	106	57	354	61	36	28	4.9	8.2	8.9
9	9.2	6.1	48	68	381	1570	51	27	19	6.5	7.9	8.1
10	7.2	5.6	184	54	160	357	105	23	12	5.2	7.5	6.0
11	8.6	5.4	90	51	468	152	244	21	11	3.4	7.6	6.9
12	8.7	5.5	63	103	246	104	135	20	9.5	9.5	7.1	8.7
13	7.9	13	50	69	181	84	90	19	8.5	10	5.3	7.4
14	9.1	79	46	59	117	70	67	23	8.2	12	12	7.1
15	6.9	71	58	42	90	57	207	41	12	17	9.5	7.8
16	49	32	47	35	69	45	165	25	9.1	12	8.7	6.8
17	53	135	38	29	58	39	95	21	5.9	8.8	7.5	15
18	12	53	33	26	50	37	69	20	5.7	8.7	7.7	8.5
19	43	34	29	23	44	30	55	19	4.5	7.5	6.2	9.1
20	28	24	25	21	75	28	45	18	6.8	7.0	10	8.1
21	15	19	23	19	90	29	39	18	7.5	9.4	48	7.9
22	10	16	20	18	260	24	34	17	21	12	16	7.8
23	6.6	14	19	21	413	22	29	16	14	11	12	8.3
24	5.5	12	17	85	132	22	26	15	19	6.3	11	15
25	7.8	10	16	346	90	21	25	17	11	8.1	10	8.7
26	6.9	12	15	141	65	21	24	19	31	7.4	9.2	13
27	6.3	45	14	248	54	394	28	17	26	30	8.1	12
28	5.6	27	13	398	48	305	23	16	14	13	5.6	8.7
29	5.0	21	12	148	---	125	22	15	11	21	17	8.5
30	6.5	16	12	101	---	96	35	15	7.9	14	10	7.4
31	4.8	---	15	76	---	118	---	14	---	9.4	9.7	---
TOTAL	379.2	702.6	1676	2794	3439	4608	2147	687	388.6	303.0	334.5	262.4
MEAN	12.2	23.4	54.1	90.1	123	149	71.6	22.2	13.0	9.77	10.8	8.75
MAX	53	135	306	398	468	1570	244	41	31	30	48	15
MIN	4.8	4.7	12	18	29	21	22	14	4.5	3.4	5.3	5.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

MEAN	12.2	18.0	80.0	71.4	81.6	89.6	39.8	20.1	18.5	19.3	12.0	14.3
MAX	12.5	23.4	150	90.1	127	149	71.6	33.1	35.5	49.4	21.0	27.1
(WY)	1992	1994	1991	1994	1991	1994	1994	1992	1992	1992	1992	1992
MIN	11.9	9.99	27.9	48.9	30.0	61.7	24.7	11.1	10.1	8.84	8.01	7.11
(WY)	1993	1992	1993	1993	1992	1993	1993	1991	1991	1991	1993	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1990 - 1994	
ANNUAL TOTAL	9967.3		17721.3			
ANNUAL MEAN	27.3		48.6		39.8	
HIGHEST ANNUAL MEAN					48.6	1994
LOWEST ANNUAL MEAN					24.8	1993
HIGHEST DAILY MEAN	306	Dec 4	1570	Mar 9	1570	Mar 9 1994
LOWEST DAILY MEAN	4.7	Nov 6	3.4	Jul 11	2.2	Sep 3 1990
ANNUAL SEVEN-DAY MINIMUM	5.5	Nov 6	5.3	Jul 5	3.8	Aug 31 1990
INSTANTANEOUS PEAK FLOW			2370	Mar 9	2960	Dec 2 1991
INSTANTANEOUS PEAK STAGE			8.28	Mar 9	8.96	Dec 2 1991
INSTANTANEOUS LOW FLOW			2.1	Jul 11	2.1	Jul 11 1994
10 PERCENT EXCEEDS	61		100		81	
50 PERCENT EXCEEDS	14		19		17	
90 PERCENT EXCEEDS	6.6		6.5		6.6	

GREEN RIVER BASIN

03308500 GREEN RIVER AT MUNFORDVILLE, KY

LOCATION.--Lat 37°16'05", long 85°53'10", Hart County, Hydrologic Unit 05110001, on right bank at downstream side of pier of bridge on U.S. Highway 31W at Munfordville, and at mile 225.8.

DRAINAGE AREA.--1,673 mi^2, of which about 180 mi^2 does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1915 to December 1922, October 1927 to September 1931, December 1936 to February 1937 (in WSP 838), October 1937 to current year. Monthly discharge only October 1937 to March 1938, published in WSP 1305. Gage-height records collected at same site since 1924 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1555: 1916(M), drainage area. WSP 1909: 1937.

GAGE.--Water-stage recorder. Datum of gage is 451.70 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 29, 1940.

REMARKS.--Estimated daily discharges: Dec. 25-27, and Jan. 14-22. Records good except for periods of estimated record, which are fair. Flow regulated by Green River Lake beginning February 1969 (station 03305990).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1913 reached a stage of 54.0 ft at former site, discharge, 67,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	1290	2150	1160	6000	6460	10100	6300	680	357	717	615
2	184	1240	2030	1460	5680	6620	8980	5700	644	316	609	510
3	179	943	1800	1720	5670	9400	7970	4730	629	294	552	456
4	177	904	2540	2000	5420	9120	7910	3350	621	279	537	434
5	175	892	14600	2490	5240	7670	7570	3320	606	265	615	422
6	171	874	12300	2730	5100	6880	7390	2770	571	259	670	426
7	168	865	5900	4860	4950	6450	8080	2370	535	258	793	425
8	168	858	5170	10000	4870	10100	7920	3340	522	246	651	412
9	168	854	4950	7210	7810	20600	7670	3950	947	241	556	407
10	168	855	5870	5300	14600	32600	7610	3200	684	240	501	378
11	166	852	8330	4640	12700	33900	11300	2800	562	248	474	281
12	169	851	6480	4790	18700	24100	18700	2490	499	268	458	249
13	168	877	5360	5440	19900	9330	13300	1890	462	258	443	235
14	169	1000	4910	4650	10400	8070	8170	1100	440	307	467	228
15	170	2770	4800	4250	5860	8240	8570	1780	427	702	679	223
16	177	4060	5020	3900	6400	7630	15900	4310	416	1840	706	218
17	780	4340	4870	3500	5810	7080	13400	3940	425	1470	554	219
18	2450	5300	4600	3190	2730	6760	7360	3390	420	1600	482	223
19	990	4290	4430	3000	1970	6540	6630	3090	483	742	448	227
20	1950	3930	4090	2820	1680	6310	7230	2740	435	553	438	362
21	3200	3640	3400	2650	4470	6160	7290	2000	354	550	1320	293
22	3020	3460	2700	2500	8150	6040	7170	1130	336	948	3140	261
23	2810	3020	2440	2330	16600	5930	6940	989	434	1220	1160	244
24	2710	2060	1750	2660	22000	5800	6750	930	481	1960	681	244
25	2640	1960	1500	6600	14100	5710	6600	887	437	1060	585	246
26	2610	1900	1300	12600	8020	5690	6470	1340	407	774	512	316
27	2580	1960	1130	9480	7340	10800	6410	1770	443	692	468	310
28	2290	2530	1030	14200	6790	18500	6780	1170	575	793	443	251
29	1650	2640	1010	13400	---	19900	6540	905	530	1150	487	237
30	1310	2340	1460	7560	---	10800	6250	791	423	890	601	230
31	1310	---	1370	6410	---	9160	---	730	---	804	631	---
TOTAL	35067	63355	129290	159500	238960	338350	258960	79202	15428	21584	21378	9582
MEAN	1131	2112	4171	5145	8534	10910	8632	2555	514	696	690	319
MAX	3200	5300	14600	14200	22000	33900	18700	6300	947	1960	3140	615
MIN	166	851	1010	1160	1680	5690	6250	730	336	240	438	218

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	1395	2564	4466	4788	5730	4785	3731	3124	1961	1072	943	1431
MAX	5337	5187	12800	12130	13610	12040	8632	13250	6819	3132	3642	6104
(WY)	1976	1978	1979	1974	1989	1975	1994	1983	1981	1973	1977	1979
MIN	244	210	545	255	1952	1066	552	487	214	280	202	192
(WY)	1987	1972	1981	1981	1992	1983	1986	1988	1988	1993	1993	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	725939		1370656			
ANNUAL MEAN	1989		3755		2985	
HIGHEST ANNUAL MEAN					5285	1979
LOWEST ANNUAL MEAN					1348	1988
HIGHEST DAILY MEAN	14600	Dec 5	33900	Mar 11	62800	May 8 1984
LOWEST DAILY MEAN	166	Oct 11	166	Oct 11	157	Jul 8 1988
ANNUAL SEVEN-DAY MINIMUM	168	Oct 7	168	Oct 7	160	Jul 5 1988
INSTANTANEOUS PEAK FLOW			35000	Mar 11	76800	Mar 1 1962
INSTANTANEOUS PEAK STAGE			39.64	Mar 11	57.72	Mar 1 1962
INSTANTANEOUS LOW FLOW			166	Oct 6	157	Jul 8 1988
10 PERCENT EXCEEDS	4900		8430		7100	
50 PERCENT EXCEEDS	1160		1950		1530	
90 PERCENT EXCEEDS	185		259		292	

03308500 GREEN RIVER AT MUNFORDVILLE, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Water tempertaure collected from gage located on right bank at downstream side of pier of bridge on U.S. Highway 31W at Munfordville, and at mile 225.9

DRAINAGE AREA.--1,673 mi^2, of which about 180 mi^2 does not contribute directly to surface runoff.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Water years 1950-77, 1980, 1983-90, August 1992 to current year.

INSTRUMENTATION.--Temperature recorded from Data Collection Platform.

REMARKS.--Specific conductance and temperature measurements made in conjuction with discharge measurements published in the miscellaneous water-quality section.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum daily, 29.0°C July 13-17, 1980; minimum daily, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT PERIOD.--Maximum, 25.9°C, July 21-26; minimum, 2.8°C, Jan. 10.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.4	15.0	15.0	11.0	10.2	10.7	7.4	7.1	7.1	3.5	3.5	3.5
2	15.4	15.4	15.4	10.2	9.9	10.2	7.4	7.1	7.3	3.9	3.5	3.8
3	15.4	14.6	14.9	10.2	10.2	10.2	8.1	7.4	7.9	3.9	3.9	3.9
4	14.6	14.3	14.4	10.2	10.2	10.2	9.5	8.1	8.7	3.9	3.5	3.7
5	15.0	14.3	14.6	10.6	10.2	10.6	10.6	9.5	10.1	3.9	3.9	3.9
6	15.0	14.6	14.7	---	---	---	10.2	9.5	10.0	4.2	3.9	4.0
7	15.4	15.0	15.0	9.9	9.5	9.9	9.5	8.8	9.1	5.7	4.2	4.8
8	15.4	15.4	15.4	9.5	9.2	9.3	8.8	8.5	8.5	6.0	5.3	5.8
9	15.8	15.4	15.7	9.2	8.5	8.8	8.5	8.1	8.1	5.3	3.5	4.2
10	15.8	14.6	15.1	8.5	8.5	8.5	9.2	8.1	8.6	3.5	2.8	3.2
11	14.6	13.5	13.9	8.5	8.5	8.5	9.5	8.8	9.2	3.9	3.2	3.4
12	13.5	13.1	13.3	8.8	8.5	8.6	8.8	7.4	8.0	4.6	3.9	4.3
13	13.5	13.1	13.2	9.5	8.8	9.1	7.4	6.7	7.1	5.4	5.0	5.2
14	13.9	13.5	13.6	10.2	9.5	9.7	7.8	7.1	7.3	---	---	---
15	13.9	13.5	13.8	11.3	10.2	10.7	8.1	7.8	7.9	---	---	---
16	14.3	13.9	14.1	12.1	11.3	11.7	8.1	8.1	8.1	---	---	---
17	15.0	14.3	14.5	12.8	12.1	12.5	8.1	7.8	8.1	---	---	---
18	15.0	15.0	15.0	12.8	12.4	12.5	8.1	7.8	7.9	4.5	4.1	4.2
19	15.0	15.0	15.0	12.4	11.3	11.9	7.8	7.4	7.8	4.5	4.1	3.6
20	15.4	15.0	15.2	11.3	10.6	11.0	7.4	7.1	7.2	4.9	4.2	4.3
21	15.4	15.0	15.4	10.6	9.5	10.0	7.1	6.4	6.7	4.7	4.0	4.3
22	15.4	15.0	15.2	9.5	9.2	9.4	6.7	6.4	6.4	4.7	4.0	4.3
23	15.0	14.3	14.4	9.5	9.2	9.4	6.0	5.7	5.8	4.8	3.5	4.2
24	14.3	13.9	13.9	9.9	9.5	9.5	5.7	4.9	5.4	4.9	3.5	4.1
25	13.9	13.9	13.9	10.2	9.9	9.9	5.3	4.6	4.8	5.0	3.9	4.4
26	14.3	13.9	14.1	10.2	10.2	10.2	4.6	3.9	4.1	5.8	4.3	4.7
27	14.3	14.3	14.3	10.2	9.5	10.0	4.2	3.9	4.0	8.0	5.8	6.8
28	14.3	13.9	14.0	9.5	6.4	8.7	4.2	3.9	4.2	9.5	8.0	8.9
29	13.9	13.1	13.4	8.5	6.2	7.2	3.9	3.5	3.9	9.2	8.6	8.9
30	13.1	12.1	12.5	7.8	7.4	7.5	4.2	3.2	3.5	8.6	7.2	7.9
31	12.1	11.0	11.5	---	---	---	3.9	3.5	3.5	7.2	5.5	6.3
MONTH	15.8	11.0	14.3	12.8	6.2	9.9	10.6	3.2	7.0	9.5	2.8	4.8

GREEN RIVER BASIN

03308500 GREEN RIVER AT MUNFORDVILLE, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.5	4.5	4.9	9.4	9.0	9.2	9.8	9.4	9.6	16.5	16.0	16.4
2	5.3	4.5	5.0	9.4	9.3	9.3	9.9	9.7	9.8	16.4	15.4	15.6
3	5.3	4.4	4.9	9.3	8.8	9.0	9.9	9.9	10.0	15.4	14.9	15.2
4	5.2	4.4	4.8	9.5	8.8	9.2	10.3	9.8	9.9	15.3	14.8	15.1
5	5.5	4.8	5.3	10.1	9.4	9.8	10.1	9.7	9.8	14.8	14.7	14.7
6	5.6	5.3	5.5	10.4	10.0	10.1	10.1	10.0	10.1	14.7	14.6	14.6
7	5.7	5.0	5.4	10.4	10.3	10.3	10.0	9.6	9.8	15.1	14.6	14.9
8	6.5	5.4	5.7	10.3	10.3	10.3	10.0	9.5	9.6	15.2	15.1	15.2
9	8.8	6.5	7.4	10.5	9.3	10.1	11.8	11	10.0	15.7	15.2	15.6
10	9.1	8.1	8.5	9.4	8.3	9.2	13.4	11.8	12.7	16.2	15.7	16.0
11	7.8	6.7	7.3	9.3	8.3	9.0	15.3	13.4	14.5	16.3	16.2	16.2
12	7.5	6.7	7.1	9.9	9.3	9.5	17.2	15.3	16.5	16.4	16.3	16.3
13	9.1	7.5	8.1	10.6	9.9	10.3	17.2	16.8	17.2	16.5	16.4	16.4
14	9.5	9.1	9.3	10.5	10.1	10.4	17.1	17.0	17.0	16.5	16.2	16.5
15	9.6	9.5	9.5	10.7	10.4	10.4	17.0	16.5	16.6	16.9	16.5	16.7
16	9.6	8.7	9.1	10.7	10.3	10.6	16.8	16.3	16.5	17.8	16.9	17.3
17	8.7	8.3	8.5	10.6	9.8	10.0	16.3	16.2	16.3	18.3	17.8	18.2
18	9.8	8.7	9.3	10.1	9.7	9.8	16.6	16.1	16.4	18.3	17.9	18.1
19	11.0	9.8	10.5	10.4	10.1	10.1	16.5	16.0	16.4	18.8	18.7	18.7
20	12.1	11.0	11.6	10.4	10.0	10.0	16.6	16.2	16.5	18.8	18.4	18.6
21	12.6	12.1	12.4	10.3	9.4	10.2	16.5	16.1	16.4	18.7	18.6	18.6
22	12.6	11.9	12.0	12.7	10.1	10.7	16.4	16.0	16.3	18.8	18.8	18.8
23	12.7	12.0	12.2	10.1	9.8	10.0	16.3	15.9	16.1	19.0	18.8	18.9
24	12.9	12.6	12.7	10.7	10.0	10.4	16.2	15.8	16.1	19.1	19.0	19.0
25	12.9	12.1	12.5	10.7	10.3	10.4	16.0	15.9	16.0	19.6	19.1	19.3
26	12.1	10.3	11.0	10.5	10.2	10.3	16.3	14.5	16.0	19.8	19.6	19.7
27	10.3	8.1	9.4	10.9	10.5	10.6	16.2	14.5	16.1	19.9	19.8	19.9
28	9.1	8.8	9.0	11.1	10.7	11.1	16.4	16.0	16.3	20.5	19.9	20.1
29	---	---	---	11.0	10.7	10.7	16.7	16.2	16.3	20.5	20.1	20.2
30	---	---	---	10.7	9.9	10.3	16.6	16.1	16.3	20.4	20.2	20.3
31	---	---	---	9.9	9.4	9.6	---	---	---	20.5	20.4	20.4
MONTH	12.9	4.4	8.5	12.7	8.3	10.0	17.2	9.4	14.2	20.5	14.6	17.5
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.6	20.5	20.6	24.8	24.3	24.5	24.3	24.3	24.3	22.3	22.2	22.3
2	20.8	20.6	20.7	24.3	24.3	24.3	24.3	23.9	24.2	22.2	22.2	22.2
3	21.3	20.8	21.1	24.3	24.2	24.2	23.9	23.9	23.9	22.2	21.7	22.0
4	21.5	21.3	21.4	24.2	23.8	24.2	23.9	23.9	23.9	21.7	21.7	21.7
5	21.6	21.5	21.5	24.2	24.1	24.2	23.9	23.9	23.9	21.7	21.2	21.5
6	21.7	21.6	21.7	24.1	24.1	24.1	24.3	23.9	23.9	21.2	21.2	21.2
7	21.8	21.7	21.8	24.5	24.1	24.3	24.3	23.9	24.0	21.2	20.7	21.1
8	22.1	21.8	22.0	24.5	24.4	24.4	23.9	23.9	23.9	21.1	20.7	21.1
9	22.8	22.1	22.4	24.4	24.4	24.4	23.9	23.9	23.9	21.1	20.3	20.9
10	23.2	22.8	22.9	24.4	24.3	24.4	23.5	23.4	23.4	20.6	20.6	20.6
11	22.4	21.9	21.1	24.3	23.9	24.3	23.4	23.4	23.4	20.5	20.5	20.5
12	22.9	22.4	22.8	24.3	23.9	23.9	23.4	23.3	23.3	20.5	20.4	20.5
13	22.9	22.9	22.9	23.9	23.8	23.8	23.3	23.3	23.3	20.4	20.4	20.4
14	23.0	22.9	23.0	23.8	23.8	23.8	23.3	23.2	23.2	20.4	20.3	20.4
15	23.1	23.0	23.1	24.5	23.7	23.9	23.2	23.2	23.2	20.7	20.3	20.5
16	23.2	23.1	23.2	25.3	24.5	24.9	23.1	23.1	23.1	20.7	20.6	20.7
17	23.7	23.2	23.3	25.3	25.2	25.3	23.1	23.0	23.1	20.6	20.6	20.6
18	23.8	23.7	23.7	25.6	25.2	25.2	23.0	23.0	23.0	20.6	20.5	20.5
19	24.3	23.8	24.0	25.6	25.2	25.6	23.0	22.9	23.0	20.5	20.1	20.4
20	24.3	24.3	24.3	25.6	25.1	25.5	22.9	22.9	22.9	20.1	20.0	20.0
21	24.4	24.3	24.4	25.5	25.5	25.5	23.6	22.8	23.0	20.0	19.7	20.0
22	24.5	24.4	24.5	25.9	25.5	25.9	24.0	23.6	23.9	20.0	19.5	19.9
23	25.0	24.5	24.7	25.9	25.9	25.9	24.0	23.5	23.7	19.9	19.5	19.6
24	25.5	25.0	25.1	25.9	25.9	25.9	23.5	23.1	23.3	19.5	19.4	19.4
25	25.5	25.1	25.3	25.9	25.5	25.8	23.1	23.0	23.0	19.4	18.9	19.3
26	25.3	25.2	25.2	25.5	25.1	25.4	23.0	22.6	22.7	18.9	18.9	18.9
27	25.3	24.9	25.0	25.1	25.1	25.1	22.6	22.5	22.5	18.5	18.5	18.5
28	24.9	24.8	24.9	25.1	24.7	24.7	22.5	22.4	22.5	18.4	18.1	18.2
29	24.8	24.8	24.8	24.7	24.7	24.7	22.4	22.4	22.4	---	---	---
30	24.8	23.9	24.8	24.7	24.3	24.6	22.4	22.3	22.4	---	---	---
31	---	---	---	24.7	24.3	24.4	22.3	22.3	22.3	---	---	---
MONTH	25.5	20.5	23.2	25.9	23.7	24.7	24.3	22.3	23.3	22.3	18.1	20.5
YEAR	25.9	2.8	15.0									

03308500 GREEN RIVER AT MUNFORDVILLE, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950 to August 1994 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1949 to September 1973, October 1978 to September 1980, October 1983 to September 1992.
WATER TEMPERATURES: October 1950 to September 1980, October 1982 to September 1992.
SUSPENDED-SEDIMENT DISCHARGE: April 1951 to September 1993.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1949-73, 1984-90): Maximum daily, 9,420 microsiemens, Oct. 10, 1959; minimum daily, 59 microsiemens, Mar. 25, 1952.
WATER TEMPERATURE (water years 1950-77, 1980, 1983-90): Maximum daily, 29.0°C, July 13-17, 1980; minimum daily, 0.0°C, on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,180 mg/L, June 14, 1952; minimum daily mean, <0.5 mg/L, on several days during winter periods.
SEDIMENT LOADS: Maximum daily, 157,000 tons, Mar. 1, 1962; minimum daily, 0 ton, on several days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 1993												
13...	1106	166	320	7.7	13.0	4.0	8.8	85	840	98	130	42
DEC												
22...	1030	2530	247	7.6	6.0	5.9	12.8	105	60	220	100	32
FEB 1994												
23...	0954	16700	199	7.9	12.0	120	10.9	104	9800	13000	87	28
APR												
12...	0940	20900	136	--	17.0	95	6.9	72	22000	30000	64	21
JUN												
07...	0945	500	269	7.8	22.5	1.2	6.3	75	3700	28000	120	39
AUG												
09...	1040	561	294	7.8	24.0	3.0	7.2	87	120	150	120	38

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 1993											
13...	7.0	13	2.1	137	113	110	16	21	0.10	3.7	179
DEC											
22...	5.8	4.2	1.9	98	80	78	7.0	18	<0.10	5.1	134
FEB 1994											
23...	4.1	2.2	1.7	85	70	70	4.3	12	<0.10	5.2	126
APR											
12...	2.9	1.4	1.2	63	51	51	2.8	8.4	<0.10	4.6	91
JUN											
07...	5.8	5.9	1.8	--	--	--	9.6	15	<0.10	1.6	155
AUG											
09...	6.5	12	2.7	121	99	97	15	21	0.10	5.4	156

03308500 GREEN RIVER AT MUNFORDVILLE, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 1993											
13...	<0.010	0.370	0.040	<0.20	<0.010	<0.010	0.020	<10	25	<3	13
DEC											
22...	<0.010	1.10	0.030	<0.20	0.020	<0.010	0.020	10	24	<3	40
FEB 1994											
23...	0.020	1.20	0.040	0.80	0.220	0.040	0.030	490	20	<3	130
APR											
12...	0.010	0.650	0.060	1.2	0.290	0.040	0.040	130	15	<3	200
JUN											
07...	<0.010	0.560	0.060	0.40	0.040	<0.010	<0.010	10	26	<3	7
AUG											
09...	<0.010	0.620	0.040	0.40	0.090	0.080	0.050	--	--	--	--

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1993											
13...	8	16	<10	<1	<1	<1.0	180	<6	16	7.2	62
DEC											
22...	4	11	<10	<1	<1	<1.0	110	<6	19	128	62
FEB 1994											
23...	<4	8	<10	1	<1	<1.0	81	<6	362	16300	70
APR											
12...	<4	6	<10	2	<1	<1.0	59	<6	444	25100	88
JUN											
07...	4	8	<10	<1	<1	<1.0	150	<6	27	36	61
AUG											
09...	--	--	--	--	--	--	--	--	34	51	69

GREEN RIVER BASIN

03310300 NOLIN RIVER AT WHITE MILLS, KY

LOCATION.--Lat 37°33'03", long 86°02'43", Hardin County, Hydrologic Unit 05110001, on right bank, 0.8 mi southwest of White Mills, 1.6 mi downstream from bridge on State Highway 84, and at mile 78.7.

DRAINAGE AREA.--357 mi^2, of which about 120 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.08 ft above sea level. Prior to Jan. 8, 1960, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 2, and 17-23. Records good except for periods of estimated record, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	92	203	180	1210	806	1310	588	193	96	65	61
2	58	89	192	240	999	772	1100	495	183	92	64	59
3	61	88	190	288	870	748	968	432	177	89	61	58
4	64	85	415	363	767	670	906	405	171	85	64	56
5	63	87	1370	363	688	604	798	386	162	81	173	55
6	61	89	961	341	628	555	779	362	156	79	143	55
7	58	84	667	1220	572	522	1100	393	155	76	107	55
8	56	79	539	1520	539	1660	887	539	154	75	87	56
9	56	76	469	911	953	3220	771	453	154	71	78	53
10	59	76	504	710	1420	7030	954	402	189	71	71	52
11	66	74	744	599	1260	7280	1860	362	163	70	68	51
12	66	71	547	582	2340	3310	2810	330	144	70	66	49
13	65	117	477	661	2560	2220	1950	307	134	79	64	49
14	62	654	440	567	2070	1760	1520	291	128	96	64	49
15	60	1170	432	495	1600	1480	1200	435	123	131	61	48
16	60	614	456	427	1320	1240	1780	857	119	112	60	46
17	61	1300	412	380	1110	1050	1450	575	114	100	61	46
18	68	1850	383	350	962	940	1080	462	111	90	61	46
19	79	817	371	320	846	855	909	406	114	83	60	47
20	778	579	354	300	773	747	780	367	107	78	59	48
21	568	469	338	280	964	688	673	334	103	77	74	47
22	236	380	326	270	935	697	598	305	99	97	98	46
23	172	328	297	260	3460	613	547	281	97	97	77	49
24	142	288	276	440	3790	566	506	264	98	81	65	57
25	126	267	263	2040	1790	531	477	248	100	73	59	58
26	117	244	253	3680	1330	497	448	264	99	70	58	54
27	106	248	230	2560	1060	1710	440	354	124	68	57	64
28	99	265	215	4440	901	3520	481	289	157	68	64	70
29	96	244	200	4110	---	2900	507	253	117	79	71	59
30	95	219	190	2000	---	1720	673	218	102	77	69	55
31	94	---	185	1490	---	1460	---	204	---	69	68	---
TOTAL	3810	11043	12899	32387	37717	52371	30262	11861	4047	2580	2297	1598
MEAN	123	368	416	1045	1347	1689	1009	383	135	83.2	74.1	53.3
MAX	778	1850	1370	4440	3790	7280	2810	857	193	131	173	70
MIN	56	71	185	180	539	497	440	204	97	68	57	46
CFSM	.34	1.03	1.17	2.93	3.77	4.73	2.83	1.07	.38	.23	.21	.15
IN.	.40	1.15	1.34	3.37	3.93	5.46	3.15	1.24	.42	.27	.24	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

MEAN	147	298	647	684	914	945	776	550	282	242	173	207
MAX	692	1206	2356	1603	3807	2571	2447	2715	717	972	966	2258
(WY)	1978	1989	1979	1974	1989	1964	1972	1983	1981	1967	1967	1979
MIN	37.0	48.6	44.7	55.5	156	228	200	131	71.9	83.2	55.5	46.3
(WY)	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1960 - 1994	
ANNUAL TOTAL	145873		202872			
ANNUAL MEAN	400		556		486	
HIGHEST ANNUAL MEAN					971	1979
LOWEST ANNUAL MEAN					283	1977
HIGHEST DAILY MEAN	6220	Feb 22	7280	Mar 11	17500	Feb 16 1989
LOWEST DAILY MEAN	56	Aug 30	46	Sep 16	32	Sep 11 1964
ANNUAL SEVEN-DAY MINIMUM	60	Oct 4	47	Sep 16	33	Sep 9 1964
INSTANTANEOUS PEAK FLOW			8710	Mar 11	19400	Apr 29 1970
INSTANTANEOUS PEAK STAGE			21.13	Mar 11	34.86	Apr 29 1970
INSTANTANEOUS LOW FLOW			35	Sep 10	31	Oct 1 1959
ANNUAL RUNOFF (CFSM)	1.12		1.56		1.36	
ANNUAL RUNOFF (INCHES)	15.20		21.14		18.52	
10 PERCENT EXCEEDS	833		1390		1050	
50 PERCENT EXCEEDS	254		253		237	
90 PERCENT EXCEEDS	68		59		60	

03310400 BACON CREEK NEAR PRICEVILLE, KY

LOCATION.--Lat 37°21'31", long 85°59'53", Hart County, Hydrologic Unit 05110001, on right bank, 1.2 mi southwest of Priceville, 1.3 mi downstream from small unnamed tributary, 2.1 mi upstream from unnamed tributary, and at mile 7.2.

DRAINAGE AREA.--85.4 mi^2, of which about 31 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1959 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 568.13 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 20 to Jan. 1, 15-22, and June 20-28. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of November 1957 reached a stage of 21.8 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	17	17	24	95	112	139	75	24	15	13	9.0
2	8.8	17	16	26	84	116	125	67	23	14	12	8.6
3	9.2	17	16	33	77	117	117	61	23	14	12	8.2
4	9.1	16	66	38	70	105	111	60	23	13	12	7.9
5	8.9	16	130	38	66	98	104	57	22	13	21	8.3
6	8.5	16	86	34	62	91	110	53	21	13	20	8.5
7	8.5	16	68	101	56	89	115	53	23	13	15	8.5
8	8.5	16	55	101	55	260	101	53	22	12	13	8.3
9	8.7	15	46	72	145	880	96	50	22	13	13	8.1
10	9.3	15	75	61	133	1670	113	47	21	13	12	8.1
11	9.4	15	79	54	123	389	190	44	20	13	12	8.1
12	10	14	62	74	190	255	209	42	19	13	11	8.1
13	10	16	54	77	212	205	231	40	18	12	11	7.4
14	10	28	48	67	156	179	159	39	18	12	14	7.1
15	10	112	46	53	132	157	179	58	18	13	23	7.0
16	11	55	51	46	113	139	301	58	17	14	13	6.9
17	13	156	45	41	99	125	179	46	19	13	9.8	7.3
18	14	101	43	37	90	119	148	40	26	12	9.1	7.8
19	18	54	40	34	82	110	131	37	17	12	8.8	7.8
20	41	41	35	32	95	102	116	35	15	11	8.6	7.7
21	38	34	33	30	125	98	106	33	17	11	8.9	7.3
22	21	29	30	29	134	94	99	31	20	12	9.0	7.2
23	18	26	28	28	686	88	92	29	26	12	8.6	7.4
24	16	24	27	79	256	84	87	28	37	12	8.2	8.2
25	16	23	25	305	175	80	83	26	25	11	8.0	8.3
26	15	22	24	280	147	77	78	36	21	11	8.0	8.7
27	15	22	23	158	128	311	75	38	19	14	7.9	9.5
28	14	22	22	460	117	394	74	30	18	20	7.8	9.5
29	15	20	21	235	---	217	67	27	17	16	11	8.5
30	16	18	20	142	---	162	71	26	16	14	11	7.8
31	17	---	20	112	---	154	---	25	---	13	9.8	---
TOTAL	435.3	993	1351	2901	3903	7077	3806	1344	627	404	361.5	241.1
MEAN	14.0	33.1	43.6	93.6	139	228	127	43.4	20.9	13.0	11.7	8.04
MAX	41	156	130	460	686	1670	301	75	37	20	23	9.5
MIN	8.4	14	16	24	55	77	67	25	15	11	7.8	6.9
CFSM	.16	.39	.51	1.10	1.63	2.67	1.49	.51	.24	.15	.14	.09
IN.	.19	.43	.59	1.26	1.70	3.08	1.66	.59	.27	.18	.16	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

MEAN	19.2	35.0	76.7	78.3	108	110	91.9	74.3	35.8	30.2	21.9	23.1
MAX	82.5	121	394	233	579	310	276	413	76.9	115	104	177
(WY)	1978	1973	1979	1974	1989	1975	1979	1983	1973	1967	1982	1979
MIN	5.11	7.03	6.07	9.98	14.3	32.0	26.8	19.3	9.27	8.16	7.99	6.26
(WY)	1988	1964	1964	1981	1964	1983	1986	1988	1988	1964	1986	1985

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1960 - 1994	
ANNUAL TOTAL	14344.0		23443.9			
ANNUAL MEAN	39.3		64.2		58.4	
HIGHEST ANNUAL MEAN					127	1979
LOWEST ANNUAL MEAN					28.2	1986
HIGHEST DAILY MEAN	429	Feb 22	1670	Mar 10	4700	May 7 1984
LOWEST DAILY MEAN	7.6	Aug 30	6.9	Sep 16	4.1	Oct 14 1987
ANNUAL SEVEN-DAY MINIMUM	7.8	Aug 27	7.3	Sep 13	4.5	Oct 13 1987
INSTANTANEOUS PEAK FLOW			2230	Mar 10	6800	May 7 1984
INSTANTANEOUS PEAK STAGE			12.28	Mar 10	20.11	May 7 1984
INSTANTANEOUS LOW FLOW			7.6	Sep 14	3.7	Oct 22 1987
ANNUAL RUNOFF (CFSM)	.46		.75		.68	
ANNUAL RUNOFF (INCHES)	6.25		10.21		9.30	
10 PERCENT EXCEEDS	81		140		113	
50 PERCENT EXCEEDS	27		26		30	
90 PERCENT EXCEEDS	8.9		8.6		9.8	

GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY

LOCATION.--Lat 37°16'42", long 86°14'51", Edmonson County, Hydrologic Unit 05110001, in intake structure of Nolin River Dam on Nolin River, 0.3 mi upstream from Dismal Creek, 1.1 mi northeast of Kyrock, and at mile 7.8.

DRAINAGE AREA.--703 mi^2, of which about 223 mi^2 does not contribute directly to surface runoff. Area at site used Oct. 1, 1960, to Sept. 30, 1973, 707 mi^2.

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 and outflow gate dials. Datum of gage 400 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--No estimated daily discharge. Water-discharge records not rated, see COOPERATION. Maximum gage height for period of record affected by backwater from the Green River. Flow regulated since March 1963 by Nolin Lake (station 03310900). Discharge records computed using gate openings.

COOPERATION.--Record of discharge furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1854, 26.35 ft, in January 1937, from floodmarks, at site and datum used in 1939-50.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	1940	773	284	4060	4500	2070	913	537	90	131	131
2	263	1540	471	284	5490	4650	3030	729	537	90	131	131
3	263	1530	470	285	5620	4140	3390	833	537	90	131	131
4	263	1520	925	285	5540	3960	4110	833	536	90	82	131
5	262	1520	500	381	5450	6030	4080	632	536	90	52	131
6	262	1510	287	477	5360	3160	3130	550	535	90	52	131
7	262	1500	289	714	4940	1340	1790	550	535	90	52	131
8	262	1500	1010	734	3900	2740	1090	550	535	90	102	131
9	262	1490	1870	517	1810	1210	1090	550	534	90	201	131
10	262	1490	1870	968	767	300	815	550	534	90	177	131
11	261	1480	1860	1180	290	308	542	550	533	90	131	131
12	261	1470	1850	1440	293	314	548	458	533	90	131	131
13	261	1470	1840	1440	297	317	553	400	380	90	131	131
14	261	1470	1260	2180	301	1400	2390	401	266	90	131	131
15	261	1470	922	3310	303	3210	4450	673	228	90	131	215
16	261	2090	846	3270	2110	3200	2880	471	200	197	131	266
17	261	2450	696	2240	4340	3190	681	268	200	267	131	266
18	260	2450	696	697	5370	3170	2460	268	200	267	131	266
19	261	2450	696	621	5840	3160	4070	335	200	267	131	266
20	419	1780	457	471	5270	3140	2270	401	200	267	131	265
21	522	1690	282	471	2190	2520	1120	448	200	267	131	265
22	522	1680	283	471	1330	1510	1120	471	200	267	131	265
23	522	1680	283	471	752	717	1120	471	127	267	131	321
24	521	1670	283	472	301	389	1120	471	90	267	131	432
25	1550	1500	283	1090	305	260	953	471	90	267	131	376
26	2150	1420	284	915	1050	260	738	519	90	266	131	265
27	2510	1410	284	296	3210	263	606	539	90	266	131	264
28	2680	1400	284	303	4390	267	719	538	90	199	131	264
29	2660	1400	189	308	---	270	719	538	90	131	131	193
30	2640	1100	189	312	---	273	873	538	90	131	131	193
31	2620	---	284	1740	---	483	---	538	---	131	131	---
TOTAL	24288	49070	22516	28627	80879	60651	54527	16457	9453	5074	3862	6216
MEAN	783	1636	726	923	2889	1956	1818	531	315	164	125	207
MAX	2680	2450	1870	3310	5840	6030	4450	913	537	267	201	432
MIN	260	1100	189	284	290	260	542	268	90	90	52	131

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

MEAN	908	1353	1299	1602	1611	1242	846	1074	741	499	294	551
MAX	4959	3393	4491	4852	4541	5533	4777	4161	4437	2009	1335	2266
(WY)	1980	1973	1978	1979	1985	1989	1975	1984	1983	1967	1967	1982
MIN	.000	452	1.50	122	91.4	203	.63	.39	.000	.000	.000	.000
(WY)	1976	1964	1985	1981	1992	1983	1966	1964	1964	1964	1964	1975

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1964 - 1994	
ANNUAL TOTAL	269511		361620			
ANNUAL MEAN	738		991		998	
HIGHEST ANNUAL MEAN					1880	1989
LOWEST ANNUAL MEAN					597	1969
HIGHEST DAILY MEAN	5020	Feb 27	6030	Mar 5	10300	May 28 1983
LOWEST DAILY MEAN	52	Aug 12	52	Aug 5	.00	May 2 1964
ANNUAL SEVEN-DAY MINIMUM	52	Aug 12	86	Aug 2	.00	May 2 1964
INSTANTANEOUS PEAK FLOW					22700	Jan 30 1932
INSTANTANEOUS PEAK STAGE					59.27	Mar 2 1962
10 PERCENT EXCEEDS	1660		2800		2500	
50 PERCENT EXCEEDS	506		471		470	
90 PERCENT EXCEEDS	89		131		53	

GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY--Continued

WATER-QUALITY RECORDS

LOCATION.--Water tempertaure collected 0.4 mi downstream from Nolin River Dam, and at mile 7.4.

DRAINAGE AREA.--707 mi^2, including that of Dismal Creek, of which about 223 mi^2 does not contribute directly to surface runoff.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Water years 1950, 1963-82, August 1989 to current year.

INSTRUMENTATION.--Temperature recorder since August 1989.

REMARKS.--Specific conductance and temperature measurements made in conjuction with discharge measurements published in the miscellaneous water-quality section.

COOPERATION.--Daily temperatue records were furnished by U.S. Army Corps of Engineers, water years 1950, 1963-1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--Maximum daily, 31.0°C July 19-22, 1969; minimum daily, 0.0°C on many days during winter period 1978, and December 17, 18, 27, 1989.

EXTREMES FOR CURRENT PERIOD.--Maximum, 22.9°C, July 17; minimum, 3.1°C, Feb. 1, 5.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.5	18.1	18.2	15.8	15.4	15.4	---	---	---	7.1	6.7	6.9
2	18.5	18.1	18.2	15.4	15.0	15.3	11.3	11.0	11.3	7.1	6.7	6.7
3	18.1	17.7	17.9	---	---	---	11.3	11.0	11.0	6.7	6.7	6.7
4	18.1	17.3	17.6	---	---	---	11.3	11.0	11.0	6.7	6.7	6.7
5	18.1	17.7	17.8	---	---	---	11.3	11.0	11.0	6.7	6.7	6.7
6	18.1	17.7	17.9	---	---	---	11.0	11.0	11.0	6.7	6.4	6.5
7	18.5	18.1	18.2	---	---	---	11.0	10.6	10.8	6.7	6.4	6.6
8	18.5	18.1	18.3	---	---	---	10.6	10.6	10.6	6.4	6.0	6.4
9	18.5	18.5	18.5	---	---	---	10.6	10.2	10.6	6.4	6.0	6.0
10	18.5	17.3	17.7	---	---	---	10.6	10.2	10.2	6.0	5.7	6.0
11	17.7	16.9	17.0	---	---	---	10.2	10.2	10.2	6.0	5.7	5.8
12	16.9	16.5	16.7	---	---	---	10.2	9.9	10.0	5.7	5.7	5.7
13	16.9	16.5	16.7	---	---	---	9.9	9.5	9.9	5.7	5.7	5.7
14	17.3	16.9	17.0	---	---	---	9.5	9.5	9.5	---	---	---
15	17.3	16.9	17.1	---	---	---	9.5	9.5	9.5	---	---	---
16	17.7	17.3	17.4	---	---	---	9.5	9.5	9.5	---	---	---
17	17.7	17.7	17.7	---	---	---	9.5	9.2	9.5	---	---	---
18	17.7	17.7	17.7	---	---	---	9.5	9.2	9.3	---	---	---
19	18.1	17.7	17.7	---	---	---	9.2	9.2	9.2	4.2	4.2	4.2
20	18.1	17.7	17.9	---	---	---	9.2	8.8	9.2	4.2	3.9	4.1
21	18.1	18.1	18.1	---	---	---	8.8	8.8	8.8	4.2	3.9	4.2
22	17.7	17.1	17.7	---	---	---	8.8	8.8	8.8	4.2	3.9	4.2
23	17.7	17.7	17.7	---	---	---	8.5	8.5	8.5	4.2	4.2	4.2
24	17.7	17.7	17.7	---	---	---	8.5	8.5	8.5	4.2	4.2	4.2
25	17.7	15.4	16.7	---	---	---	8.5	8.1	8.2	4.2	4.2	4.2
26	15.4	14.6	15.0	---	---	---	8.1	7.8	7.9	4.6	4.2	4.2
27	15.0	14.6	14.9	---	---	---	7.9	6.9	7.7	4.9	4.6	4.7
28	15.4	15.0	15.3	---	---	---	7.9	6.9	7.5	4.9	4.9	4.9
29	15.4	15.4	15.4	---	---	---	7.4	7.4	7.4	4.9	4.6	4.8
30	15.8	15.4	15.7	---	---	---	7.4	7.1	7.1	4.6	4.6	4.6
31	15.8	15.4	15.8	---	---	---	7.1	7.1	7.1	5.0	4.6	4.6
MONTH	18.5	14.6	17.2	---	---	---	---	---	---	---	---	---

GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	3.1	4.2	8.1	7.8	7.9	9.2	8.8	9.0	12.1	12.1	12.1
2	4.2	3.9	4.1	8.1	8.1	8.1	9.5	9.2	9.4	12.1	12.1	12.1
3	3.9	3.9	3.9	8.5	8.1	8.2	9.5	9.5	9.5	12.4	12.1	12.2
4	4.2	3.9	4.1	8.5	8.5	8.5	9.9	9.5	9.9	12.4	12.4	12.4
5	5.1	3.1	4.6	8.8	8.5	8.6	10.2	9.9	10.0	12.4	12.4	12.4
6	5.3	4.9	5.1	8.8	8.8	8.8	10.2	10.2	10.2	12.4	12.1	12.2
7	5.7	5.3	5.5	8.8	8.8	8.8	10.2	9.9	10.2	12.4	12.1	12.4
8	6.0	5.7	5.8	8.8	8.8	8.8	10.2	10.2	10.2	12.4	12.4	12.4
9	6.0	6.0	6.0	8.5	8.1	8.4	10.2	10.2	10.2	12.4	12.4	12.4
10	6.0	5.7	6.0	8.5	8.1	8.4	10.6	10.2	10.3	12.4	12.4	12.4
11	5.7	5.7	5.7	8.5	8.5	8.5	10.6	10.2	10.4	12.8	12.4	12.6
12	5.7	5.7	5.7	8.5	8.5	8.5	10.6	10.2	10.4	13.9	12.8	13.1
13	5.7	5.7	5.7	8.5	8.5	8.5	10.6	10.2	10.5	14.3	13.9	14.1
14	5.7	5.7	5.7	8.5	8.5	8.5	11.0	10.2	10.6	14.6	14.3	14.4
15	6.0	5.7	5.7	8.5	8.5	8.5	11.3	11.0	11.1	14.6	14.3	14.5
16	6.0	5.7	5.7	8.8	8.5	8.7	11.3	11.3	11.3	14.6	13.9	14.4
17	6.0	5.7	5.8	8.8	8.8	8.8	11.3	11.0	11.3	15.0	14.6	14.7
18	6.0	6.0	6.0	8.8	8.8	8.8	11.7	11.0	11.2	15.0	14.6	14.8
19	6.4	6.0	6.2	9.2	8.8	8.8	12.1	11.7	12.0	15.4	15.0	15.1
20	6.7	6.4	6.6	9.2	8.8	8.9	12.4	12.1	12.2	15.4	15.0	15.2
21	7.1	6.7	7.1	8.8	8.8	8.8	12.1	11.7	12.0	15.4	15.0	15.3
22	7.4	7.1	7.3	8.8	8.8	8.8	12.1	11.7	12.0	15.4	15.0	15.2
23	7.8	7.4	7.7	9.2	8.8	8.8	12.1	11.7	12.1	15.4	15.0	15.2
24	7.4	7.4	7.4	8.8	8.8	8.8	12.1	12.1	12.1	15.4	15.0	15.0
25	7.4	7.4	7.4	8.8	8.8	8.8	12.4	12.1	12.1	15.4	15.0	15.1
26	7.4	7.4	7.4	8.8	8.8	8.8	12.4	12.1	12.1	15.4	15.0	15.4
27	7.4	7.4	7.4	9.2	8.8	8.9	12.4	12.1	12.2	15.8	15.4	15.5
28	7.8	7.4	7.7	8.8	8.8	8.8	12.4	12.1	12.2	15.8	15.4	15.4
29	---	---	---	8.8	8.8	8.8	12.4	11.7	11.9	15.8	15.4	15.5
30	---	---	---	8.8	8.8	8.8	12.1	11.7	12.0	15.8	15.4	15.7
31	---	---	---	8.8	8.8	8.8	---	---	---	15.8	15.4	15.8
MONTH	7.8	3.1	6.0	9.2	7.8	8.6	12.4	8.8	11.0	15.8	12.1	14.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.8	15.8	15.8	18.1	17.3	17.6	18.1	17.7	18.0	19.3	19.3	19.3
2	15.8	15.8	15.8	18.5	17.7	18.1	18.1	17.0	18.0	19.7	18.9	19.4
3	15.8	15.8	15.8	18.9	18.1	18.5	18.1	18.1	18.1	19.7	19.3	19.4
4	16.1	15.8	15.9	19.3	18.5	18.8	19.3	18.1	18.3	19.3	18.9	19.2
5	16.1	15.8	16.0	19.3	18.5	19.0	19.3	18.5	18.7	19.3	18.9	19.0
6	16.1	16.1	16.1	19.3	18.9	19.1	18.5	18.1	18.3	19.3	18.9	18.9
7	16.1	15.8	16.0	19.3	18.9	18.9	18.1	17.7	18.0	19.3	18.5	18.9
8	16.1	16.1	16.1	19.3	18.5	19.0	18.1	17.7	18.0	19.3	18.5	18.8
9	16.5	16.1	16.1	19.3	18.9	19.1	18.5	18.1	18.3	19.3	18.1	18.8
10	16.5	16.1	16.4	19.3	18.9	19.0	18.9	18.1	18.5	19.3	18.5	18.9
11	16.5	16.1	16.1	19.3	18.1	18.8	18.9	18.1	18.5	19.7	18.5	19.0
12	16.5	16.1	16.3	19.3	18.5	18.7	18.9	18.5	18.8	19.7	18.9	19.2
13	16.5	16.1	16.4	19.3	18.5	18.9	19.3	18.5	19.0	19.7	18.5	19.1
14	16.9	16.1	16.5	19.3	18.5	19.0	19.3	18.9	19.0	19.7	18.9	19.2
15	16.9	16.9	16.9	19.3	18.5	18.8	19.3	18.9	19.1	19.7	18.9	19.4
16	17.3	16.9	17.0	18.9	18.0	18.5	19.3	18.9	18.9	19.7	19.3	19.5
17	17.3	16.9	17.1	22.9	18.1	18.5	18.9	18.5	18.9	19.7	19.7	19.7
18	17.3	16.9	17.2	18.1	17.0	17.7	18.9	18.5	18.7	19.7	19.3	19.4
19	17.3	16.9	17.2	17.7	17.5	17.7	18.9	18.5	18.7	19.7	18.9	19.1
20	17.3	16.9	17.3	17.7	17.7	17.7	18.9	18.9	18.9	19.3	18.5	18.9
21	17.3	17.3	17.3	18.1	17.7	17.7	19.3	18.9	19.1	19.3	18.5	18.9
22	17.7	17.3	17.5	18.1	17.7	17.9	19.3	18.5	18.9	19.3	18.9	18.9
23	18.1	17.3	17.8	18.1	18.1	18.1	18.9	18.5	18.7	19.3	18.9	18.9
24	18.1	17.3	17.6	18.1	18.1	18.1	18.9	18.5	18.8	19.3	18.9	19.1
25	17.3	16.9	17.2	22.6	18.1	18.7	18.9	18.5	18.6	19.3	18.9	19.2
26	18.1	17.3	17.6	18.1	17.7	18.0	18.9	18.5	18.8	18.9	18.1	18.3
27	18.1	17.7	17.8	18.1	18.1	18.1	19.3	18.9	19.0	18.1	18.1	18.1
28	18.1	17.3	17.5	18.5	18.1	18.2	19.3	18.9	19.0	21.4	17.7	18.1
29	17.7	17.3	17.5	18.1	17.7	17.8	19.3	18.9	19.2	18.1	17.3	17.7
30	17.7	17.3	17.3	17.7	17.7	17.7	19.3	18.9	19.2	17.7	16.5	17.2
31	---	---	---	18.1	17.7	17.8	19.3	18.9	19.2	---	---	---
MONTH	18.1	15.8	16.8	22.9	17.0	18.4	19.3	17.0	18.7	21.4	16.5	18.9

GREEN RIVER BASIN

03311600 BEAVERDAM CREEK AT RHODA, KY

LOCATION.--Lat 37°09'18", long 86°13'35", Edmonson County, Hydrologic Unit 05110001, on right bank, 50 ft upstream from bridge on State Hwy 101, 0.1 mi south of Rhoda, 3.4 mi upstream from Shingle Machine Branch, and at mile 7.1.

DRAINAGE AREA.--10.9 mi^2.

PERIOD OF RECORD.--Oct. 1972 to Sept. 1994 (discontinued). Occasional low-flow measurements, water years 1961-72.

REVISED RECORDS.--WRD KY-84-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 513.81 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 13-15, 26-29, Nov. 5-7, Jan. 13-23, Mar. 8, 9, June 18-20, July 11-15, Aug. 12-14, 17-20, 24-28, Sept. 2-4, 9-16, and 19-22. Records good except for periods of estimated record, which are fair. Maximum discharge for period of record is from indirect discharge measurement. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 1, 1962, reached a stage of about 16 ft from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	1.2	2.4	8.8	16	17	22	6.6	1.9	1.8	1.7	1.4
2	.74	.92	2.4	12	13	62	17	5.5	2.0	1.7	1.7	1.3
3	.72	.95	5.6	11	11	32	17	5.9	2.1	1.6	1.7	1.2
4	.68	1.0	220	11	10	21	16	6.9	2.0	1.5	1.6	1.1
5	.58	1.1	74	8.5	9.7	16	15	5.6	1.9	1.4	2.2	1.6
6	.58	1.2	24	9.5	8.4	13	59	5.0	2.0	1.4	1.8	1.7
7	.57	1.1	14	181	7.7	20	28	5.0	68	1.4	1.7	1.5
8	.56	.97	11	32	13	1000	18	5.6	13	1.5	1.6	1.4
9	.61	.85	18	18	198	800	14	4.5	5.5	1.5	1.6	1.2
10	.88	.84	88	13	48	169	128	4.0	3.6	1.3	1.5	1.1
11	.87	.92	23	14	185	56	242	3.6	2.7	1.2	1.4	1.1
12	.71	.86	14	55	102	34	83	3.4	2.2	1.2	1.3	1.0
13	.64	2.3	11	22	66	26	41	3.2	2.0	1.1	1.3	.98
14	.60	12	15	14	40	22	25	3.8	1.9	1.0	1.2	.96
15	.66	15	26	10	33	18	213	13	1.8	1.4	1.4	.92
16	1.5	6.1	16	8.0	23	14	74	9.0	1.7	94	1.3	.90
17	2.2	74	12	6.6	18	12	31	4.3	1.6	12	1.2	1.4
18	1.4	13	10	5.6	15	11	21	3.2	1.5	5.6	1.2	1.4
19	2.6	7.6	8.7	4.8	13	9.5	15	2.8	1.4	3.7	1.1	1.0
20	4.4	5.3	8.2	4.0	97	8.9	12	2.3	1.3	2.9	1.0	.80
21	1.9	3.9	10	3.6	53	8.8	10	2.2	5.8	2.8	1.6	.76
22	1.4	3.0	8.2	3.2	240	7.8	9.3	2.1	5.1	3.0	1.5	.70
23	1.2	2.7	6.9	4.0	261	7.5	8.4	2.0	1.8	2.6	1.4	1.9
24	1.1	2.5	6.1	61	49	7.3	7.7	2.0	25	2.2	1.3	3.6
25	1.0	2.4	6.3	195	28	7.3	7.3	2.6	4.9	2.0	1.2	1.7
26	.92	2.7	5.4	51	19	10	6.7	2.9	3.2	2.1	1.1	1.6
27	.88	6.7	5.5	204	15	450	6.4	2.3	6.2	6.6	1.0	1.8
28	.82	5.2	8.2	231	13	159	6.0	2.1	2.8	3.3	.98	1.3
29	.80	3.7	9.4	47	---	43	5.8	2.0	2.6	2.4	2.3	1.1
30	1.3	2.8	6.8	32	---	27	6.5	2.0	2.0	2.0	1.8	.97
31	1.9	---	6.1	23	---	35	---	1.9	---	1.8	1.5	---
TOTAL	35.30	182.81	682.2	1303.6	1604.8	3124.1	1165.1	127.3	179.5	170.0	45.18	39.39
MEAN	1.14	6.09	22.0	42.1	57.3	101	38.8	4.11	5.98	5.48	1.46	1.31
MAX	4.4	74	220	231	261	1000	242	13	68	94	2.3	3.6
MIN	.56	.84	2.4	3.2	7.7	7.3	5.8	1.9	1.3	1.0	.98	.70
CFSM	.10	.56	2.02	3.86	5.26	9.25	3.56	.38	.55	.50	.13	.12
IN.	.12	.62	2.33	4.45	5.48	10.66	3.98	.43	.61	.58	.15	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

MEAN	3.53	14.2	32.5	26.9	35.9	36.3	22.5	19.1	9.66	8.53	3.35	6.22
MAX	19.4	41.3	98.4	76.2	129	101	71.5	114	37.7	37.9	22.1	43.4
(WY)	1976	1980	1979	1974	1989	1994	1979	1984	1981	1989	1985	1979
MIN	.72	1.38	1.19	.76	9.59	9.45	2.99	1.72	.67	.88	.39	.52
(WY)	1988	1988	1981	1981	1974	1985	1986	1990	1990	1990	1975	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1973 - 1994	
ANNUAL TOTAL	3914.18		8659.28			
ANNUAL MEAN	10.7		23.7		18.1	
HIGHEST ANNUAL MEAN					33.7	1979
LOWEST ANNUAL MEAN					8.47	1986
HIGHEST DAILY MEAN	220	Dec 4	1000	Mar 8	1780	May 7 1984
LOWEST DAILY MEAN	.50	Sep 14	.56	Oct 8	.09	Aug 17 1988
ANNUAL SEVEN-DAY MINIMUM	.59	Sep 8	.61	Oct 3	.12	Aug 12 1988
INSTANTANEOUS PEAK FLOW			1120	Feb 22	4850	May 7 1984
INSTANTANEOUS PEAK STAGE			6.40	Feb 22	11.38	May 7 1984
INSTANTANEOUS LOW FLOW					.09	Aug 17 1988
ANNUAL RUNOFF (CFSM)	.98		2.18		1.66	
ANNUAL RUNOFF (INCHES)	13.36		29.55		22.62	
10 PERCENT EXCEEDS	24		47		32	
50 PERCENT EXCEEDS	3.3		3.9		4.7	
90 PERCENT EXCEEDS	.82		1.0		.90	

03312765 BEAVER CREEK AT HWY 31 E NEAR GLASGOW, KY

LOCATION.--Lat 37°02'05", long 85°54'13", Barren County, Hydrologic Unit 05110002, on downstream side of bridge on U.S. Highway 31 E, 2.7 mi northeast of Glasgow, 8.3 mi upstream from Little Beaver Creek, and at mile 23.1.

DRAINAGE AREA.--49.6 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 651.43 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 25-31 and Jan. 17-22. Records good except for estimated daily discharges, which are fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.8	18	38	132	169	223	42	21	15	12	19
2	3.6	4.3	17	42	111	239	174	37	21	14	12	17
3	3.6	4.3	17	43	93	339	140	35	21	13	12	15
4	3.6	4.3	595	56	80	264	119	37	20	13	11	14
5	3.6	4.7	916	58	75	204	101	36	19	12	18	13
6	3.6	5.3	332	61	67	159	133	34	19	11	17	13
7	3.6	5.5	201	424	59	156	202	37	36	11	13	13
8	3.6	5.5	122	309	56	870	148	67	40	11	11	12
9	3.7	5.5	93	177	544	2930	119	45	28	11	11	11
10	3.8	5.8	371	126	410	2190	141	37	24	17	10	11
11	3.9	5.9	243	102	1560	1020	2060	34	23	16	9.9	10
12	4.0	7.0	145	107	1410	635	1330	32	20	12	9.6	9.7
13	4.0	14	108	100	1120	413	753	30	18	12	9.3	9.4
14	4.2	28	92	88	698	297	414	30	17	58	81	9.3
15	4.3	106	90	69	500	227	481	119	16	104	109	9.1
16	6.3	26	90	57	375	186	1050	77	15	36	28	9.1
17	77	146	75	47	280	154	535	47	15	31	19	9.5
18	11	102	68	40	196	112	262	40	19	25	15	11
19	7.6	52	62	35	163	82	163	35	19	20	13	9.8
20	16	37	56	31	180	72	116	33	16	17	22	8.9
21	8.0	28	56	28	645	68	90	31	15	21	463	8.6
22	5.3	23	52	26	681	63	76	29	20	47	74	8.4
23	3.8	20	46	36	1910	57	64	28	16	35	37	9.0
24	3.1	18	42	209	921	54	56	27	15	27	29	15
25	2.9	17	38	518	567	51	51	33	15	22	23	12
26	2.7	16	36	375	395	47	46	40	16	19	19	10
27	2.7	25	34	324	275	655	43	31	43	18	17	10
28	2.7	33	33	717	190	1420	40	27	27	17	15	9.9
29	3.1	26	32	385	---	811	41	26	20	15	32	9.2
30	3.4	21	31	247	---	426	47	24	17	13	36	8.8
31	3.4	---	31	170	---	293	---	22	---	12	26	---
TOTAL	215.9	799.9	4142	5045	13693	14663	9218	1202	631	705	1213.8	334.7
MEAN	6.96	26.7	134	163	489	473	307	38.8	21.0	22.7	39.2	11.2
MAX	77	146	916	717	1910	2930	2060	119	43	104	463	19
MIN	2.7	3.8	17	26	56	47	40	22	15	11	9.3	8.4
CFSM	.14	.54	2.69	3.28	9.86	9.54	6.19	.78	.42	.46	.79	.22
IN.	.16	.60	3.11	3.78	10.27	11.00	6.91	.90	.47	.53	.91	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	13.7	28.5	121	138	221	254	145	42.6	91.4	26.8	19.1	14.9
MAX	21.9	32.6	156	163	489	473	307	50.2	233	50.1	39.2	36.4
(WY)	1992	1993	1992	1994	1994	1994	1994	1992	1992	1992	1994	1992
MIN	6.96	26.4	72.2	107	78.8	137	63.2	38.8	19.9	7.41	4.53	3.71
(WY)	1994	1992	1993	1993	1992	1993	1993	1994	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	19714.6		51863.3			
ANNUAL MEAN	54.0		142		92.5	
HIGHEST ANNUAL MEAN					142	1994
LOWEST ANNUAL MEAN					49.7	1993
HIGHEST DAILY MEAN	916	Dec 5	2930	Mar 9	2930	Mar 9 1994
LOWEST DAILY MEAN	1.7	Sep 14	2.7	Oct 26	1.7	Sep 14 1993
ANNUAL SEVEN-DAY MINIMUM	1.8	Sep 8	2.9	Oct 24	1.8	Sep 8 1993
INSTANTANEOUS PEAK FLOW			5010	Apr 11	6620	Jun 18 1992
INSTANTANEOUS PEAK STAGE			13.95	Apr 11	15.10	Jun 18 1992
ANNUAL RUNOFF (CFSM)	1.09		2.86		1.86	
ANNUAL RUNOFF (INCHES)	14.79		38.90		25.33	
10 PERCENT EXCEEDS	131		389		180	
50 PERCENT EXCEEDS	23		32		31	
90 PERCENT EXCEEDS	3.6		6.1		5.5	

GREEN RIVER BASIN

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 Port Oliver Ford, 2,500 ft upstream from Difficult Creek, 0.5 mi downstream from Barren River Dam, 2.1 mi southwest of Finney, and at mile 78.7.

DRAINAGE AREA.--942 mi^2, of which 77 mi^2 does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to September 1950, October 1960 to September 1994 (discontinued). Prior to October 1950 published as "at Port Oliver Ford." Monthly discharge only for October to December 1941, published in WSP 1305.

REVISED RECORDS.--WSP 1113: 1945-46(M). WRD KY-80-1: Drainage area. WRD KY-89-1:.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 11, 1943, nonrecording gage, and Oct. 11, 1943 to Sept. 30, 1950, water-stage recorder at same site at datum 73.52 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good except for those below 800 ft^3/s, which are fair. Flow regulated by Barren River Lake beginning March 1964. Maximum gage height from graph based on gage readings. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	2820	966	2260	3460	4440	3200	3380	3170	2850	382	1460
2	224	2800	532	1790	3580	4460	3140	3360	3160	2840	386	1140
3	223	2770	374	1370	3560	4460	3120	3360	3140	2830	386	967
4	1620	2750	1440	1380	3530	4420	3100	3360	3140	2820	323	966
5	2680	2730	1350	1980	3520	4380	2770	3340	3130	2810	206	965
6	2840	2710	1790	1600	3490	4360	2560	3340	3120	2780	204	693
7	2820	2680	3010	1790	3470	4350	3130	3430	3120	2600	203	207
8	2820	2650	2990	2510	3450	4520	3130	3410	3100	2290	203	203
9	2810	2180	2980	3160	3760	3610	3130	3350	3090	2140	203	202
10	2800	1530	3070	3390	3550	1000	3200	3340	3080	1960	202	203
11	2780	1230	3230	3370	2980	656	3680	3320	3070	1900	202	204
12	2760	1220	3320	3360	726	575	930	3320	3060	1740	202	204
13	2750	1220	3300	2460	616	1670	1950	3310	3050	1140	203	204
14	2730	1000	3290	3020	2100	3760	3540	3300	3030	635	205	205
15	2720	1270	3450	2990	4130	4740	3640	3440	3020	406	208	247
16	2710	2030	3540	2720	4280	4700	3710	3410	2990	404	207	264
17	2730	2320	3520	2380	4240	4660	3590	3350	3000	402	207	274
18	2930	2490	3490	2350	4200	4640	3540	3330	2980	759	206	273
19	3080	2600	3460	1820	4170	4620	3520	3310	2970	1420	206	272
20	3070	2170	3440	1140	4220	4590	3490	3300	2960	1150	207	271
21	3070	1380	3420	905	4380	4570	3480	3280	2950	630	218	270
22	3040	849	3400	891	3870	3970	3460	3280	2940	407	210	270
23	3020	845	3380	885	1740	3280	3450	3260	2930	401	209	272
24	3000	841	3350	933	587	2990	3450	3260	2920	757	208	272
25	2980	839	3330	1760	2390	2980	3440	3240	2900	620	208	270
26	2960	428	3290	2230	4500	2970	3430	3230	2900	392	208	271
27	2940	215	3270	1770	4490	3280	3420	3210	2900	404	207	271
28	2920	310	2420	1490	4460	3450	3410	3200	2880	391	206	270
29	2890	866	1930	1080	---	3220	3400	3200	2870	391	210	305
30	2870	1210	2360	1810	---	3140	3380	3190	2860	390	995	397
31	2850	---	2620	2850	---	3340	---	3180	---	387	1460	---
TOTAL	79861	50953	85312	63444	93449	111801	96390	102590	90430	41046	9090	12292
MEAN	2576	1698	2752	2047	3337	3606	3213	3309	3014	1324	293	410
MAX	3080	2820	3540	3390	4500	4740	3710	3440	3170	2850	1460	1460
MIN	223	215	374	885	587	575	930	3180	2860	387	202	202

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	1485	2282	2051	2486	2480	1838	1210	1250	1132	957	567	780
MAX	3175	3402	3475	5198	5206	5151	4595	3437	3254	3235	2201	2705
(WY)	1975	1976	1980	1979	1979	1979	1975	1973	1983	1969	1971	1974
MIN	6.46	3.44	371	191	588	345	53.2	32.2	34.8	34.6	41.2	95.1
(WY)	1977	1977	1970	1981	1977	1988	1969	1966	1966	1966	1991	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1965 - 1994	
ANNUAL TOTAL	405133		836658			
ANNUAL MEAN	1110		2292		1538	
HIGHEST ANNUAL MEAN					2766	1979
LOWEST ANNUAL MEAN					750	1988
HIGHEST DAILY MEAN	3540	Dec 16	4740	Mar 15	7150	Jan 30 1979
LOWEST DAILY MEAN	74	May 22	202	Aug 10	.00	Oct 5 1976
ANNUAL SEVEN-DAY MINIMUM	75	May 18	203	Aug 7	.00	Oct 5 1976
INSTANTANEOUS PEAK FLOW			7470	Apr 11	78000	Feb 27 1962
INSTANTANEOUS PEAK STAGE			90.66	Apr 11	110.60	Feb 27 1962
10 PERCENT EXCEEDS	2950		3550		3580	
50 PERCENT EXCEEDS	374		2820		996	
90 PERCENT EXCEEDS	85		224		73	

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: January 1990 to current year.

INSTRUMENTATION.--Temperature recorder since January 1990.

REMARKS.--Specific conductance and temperature measurements made in conjuction with discharge measurments are published in the miscellaneous water-quality data section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum 26.0°C, July 20, 1992; minimum recorded 2.1°C, Jan. 20-22, 1994.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 22.6°C, Aug. 15; minimum, 2.1°C, Jan. 20-22.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.5	17.3	17.7	15.8	14.6	15.2	10.2	9.5	9.8	4.9	4.6	4.8
2	18.1	17.3	17.7	15.0	14.6	14.9	10.2	9.5	10.0	4.6	4.6	4.6
3	18.1	17.3	17.7	15.0	14.3	14.7	10.2	9.9	10.0	4.6	4.6	4.6
4	20.1	17.3	19.1	14.6	13.9	14.4	10.2	9.5	10.0	4.6	4.2	4.5
5	20.5	19.7	20.2	14.6	13.9	14.0	9.9	9.2	9.6	4.2	4.2	4.2
6	20.5	20.1	20.3	---	---	---	9.9	9.2	9.6	4.2	4.2	4.2
7	20.9	20.1	20.4	13.5	12.8	13.3	9.5	8.8	9.4	4.6	4.2	4.2
8	20.9	20.1	20.6	13.1	12.4	12.7	9.5	9.5	9.5	3.9	3.9	3.9
9	20.9	20.1	20.6	12.8	12.1	12.5	9.9	9.5	9.6	---	---	---
10	20.5	20.1	20.4	12.4	11.7	12.1	9.9	9.5	9.8	3.9	3.5	3.7
11	20.1	19.3	19.9	12.4	11.7	12.1	9.5	9.5	9.5	3.9	3.5	3.8
12	20.1	19.3	19.7	12.1	11.7	12.0	9.5	9.2	9.4	4.6	3.9	4.4
13	19.7	19.3	19.5	13.2	11.3	12.0	9.5	9.2	9.2	---	---	---
14	19.7	18.9	19.5	12.4	12.1	12.1	9.2	9.2	9.2	---	---	---
15	20.1	19.3	19.6	12.4	11.7	12.0	9.2	9.2	9.2	---	---	---
16	20.1	19.3	19.6	12.4	11.3	12.1	9.2	9.2	9.2	---	---	---
17	19.7	18.9	19.3	12.8	11.7	12.3	9.2	9.2	9.2	---	---	---
18	19.3	18.9	19.1	12.4	11.7	12.0	9.2	8.8	9.1	---	---	---
19	19.3	18.9	19.1	12.4	11.7	12.2	9.2	8.8	8.9	---	---	---
20	19.7	18.9	19.3	12.1	11.3	11.8	8.8	8.8	8.8	2.5	2.1	2.4
21	19.7	18.5	19.0	12.1	11.3	11.6	8.8	8.5	8.7	2.1	2.1	2.1
22	18.9	18.5	18.6	12.1	11.0	11.6	8.5	8.5	8.5	2.5	2.1	2.3
23	18.9	18.1	18.4	12.1	11.0	11.5	8.1	7.8	8.1	2.5	2.5	2.5
24	18.9	18.1	18.4	11.7	11.3	11.6	7.8	7.8	7.8	2.8	2.5	2.5
25	18.9	18.1	18.4	11.7	11.3	11.5	7.8	7.1	7.4	2.5	2.5	2.5
26	18.5	17.7	18.2	11.7	11.0	11.4	7.1	6.7	6.8	2.8	2.5	2.6
27	18.5	17.3	17.9	11.3	10.6	11.1	6.7	6.7	6.7	2.8	2.5	2.6
28	18.1	17.3	17.8	11.3	10.2	10.8	8.0	5.3	7.2	3.2	2.5	2.8
29	17.7	16.9	17.4	10.6	9.9	10.4	---	---	---	3.2	2.8	2.9
30	17.3	16.1	16.8	10.6	9.9	10.2	5.7	5.3	5.4	3.2	2.8	2.9
31	16.5	15.4	15.9	---	---	---	5.3	4.9	5.3	3.5	2.8	3.1
MONTH	20.9	15.4	18.9	---	---	---	---	---	---	---	---	---

GREEN RIVER BASIN

03313000 BARREN RIVER AT FINNEY, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	3.2	3.4	7.8	7.4	7.4	10.1	9.7	10.1	13.3	12.6	12.9
2	3.5	3.2	3.3	7.4	7.4	7.4	10.1	9.7	10.0	12.9	12.9	12.9
3	3.9	3.2	3.8	7.4	7.1	7.4	10.2	9.7	10.0	12.9	12.6	12.9
4	3.9	3.5	3.7	7.4	7.4	7.4	10.5	9.8	10.3	12.8	12.9	12.9
5	4.6	3.9	4.3	7.8	7.4	7.6	10.5	10.2	10.5	12.9	12.9	12.9
6	4.6	4.6	4.6	8.5	7.8	8.0	10.2	9.8	10.1	13.3	12.5	13.0
7	5.7	4.6	5.0	8.7	7.8	8.1	10.5	9.8	10.3	13.3	12.9	13.0
8	6.4	5.3	6.1	---	---	---	---	---	---	14.0	12.9	13.3
9	6.4	5.7	5.9	8.1	7.8	8.0	11.3	10.9	11.3	13.3	12.5	13.2
10	5.7	5.3	5.3	8.1	7.8	8.0	11.4	10.6	10.8	13.3	13.3	13.3
11	5.7	5.3	5.3	8.5	8.1	8.1	11.4	10.6	10.9	13.3	13.3	13.3
12	5.7	5.3	5.5	8.5	8.1	8.2	11.0	10.3	10.7	13.6	13.3	13.4
13	5.7	5.3	5.5	8.1	8.1	8.1	11.0	10.3	10.8	13.6	13.3	13.5
14	5.7	5.3	5.4	8.5	8.1	8.1	11.7	11.0	11.4	13.6	13.3	13.5
15	5.7	5.7	5.7	8.5	8.1	8.2	12.1	11.4	11.6	14.0	13.3	13.5
16	6.0	5.7	5.7	8.5	8.1	8.3	12.1	11.4	11.6	14.0	13.4	13.6
17	6.0	5.7	5.8	8.8	8.5	8.5	12.2	11.5	11.8	14.0	13.6	13.7
18	6.4	6.0	6.2	8.8	8.5	8.6	12.6	11.5	12.2	14.0	13.6	13.9
19	6.7	6.4	6.4	8.8	8.5	8.6	12.4	11.8	12.0	14.0	13.6	13.9
20	6.7	6.4	6.4	9.6	8.8	9.1	12.6	11.8	12.2	14.0	14.0	14.0
21	6.7	6.4	6.6	9.6	8.9	9.3	12.6	12.2	12.2	14.0	14.0	14.0
22	7.4	6.7	7.0	9.3	8.9	9.1	12.6	11.8	12.2	14.4	14.0	14.1
23	7.1	6.7	7.0	10.0	9.3	9.6	12.6	11.8	12.2	14.4	14.0	14.2
24	7.1	6.4	6.6	10.0	9.3	9.5	12.6	12.2	12.4	14.4	14.0	14.3
25	7.1	6.7	7.1	9.6	9.1	9.3	12.6	12.2	12.4	14.4	14.0	14.3
26	7.1	7.1	7.1	10.0	9.6	10.0	12.6	12.2	12.5	14.8	14.0	14.4
27	7.4	6.7	7.0	10.2	9.4	9.8	12.9	12.2	12.6	14.8	14.4	14.5
28	7.4	7.1	7.3	10.1	9.7	9.8	12.9	12.2	12.6	14.8	14.4	14.6
29	---	---	---	9.7	9.7	9.7	14.0	12.2	12.7	14.8	14.4	14.7
30	---	---	---	10.1	9.7	9.9	13.2	12.2	12.7	15.1	14.5	14.8
31	---	---	---	10.1	9.7	9.8	---	---	---	15.1	14.8	14.8
MONTH	7.4	3.2	5.7	---	---	---	---	---	---	15.1	12.5	13.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.1	14.7	14.9	18.2	18.2	18.2	20.2	19.8	19.9	---	---	---
2	15.5	14.8	15.0	18.6	18.2	18.4	20.4	19.8	20.0	---	---	---
3	15.1	14.5	15.0	18.6	18.6	18.6	20.2	19.2	20.0	---	---	---
4	15.1	15.1	15.1	19.0	18.3	18.8	20.2	19.2	19.6	---	---	---
5	15.5	15.1	15.2	19.0	18.5	19.0	20.2	19.4	19.9	---	---	---
6	15.5	15.1	15.4	19.4	19.0	19.1	20.2	19.4	19.8	---	---	---
7	15.5	15.1	15.5	19.4	18.6	19.0	20.2	19.8	19.9	---	---	---
8	15.9	15.1	15.5	19.4	19.0	19.2	20.6	19.8	20.0	---	---	---
9	15.9	15.5	15.6	19.4	19.0	19.3	20.6	19.8	20.1	---	---	---
10	15.9	15.5	15.8	19.4	19.0	19.3	20.6	19.5	20.1	---	---	---
11	15.9	15.5	15.9	19.4	19.0	19.4	20.6	19.8	20.1	---	---	---
12	16.3	15.5	16.0	20.2	19.0	19.5	20.6	19.8	20.1	---	---	---
13	16.3	15.9	16.1	19.4	18.6	18.9	20.6	19.5	20.2	---	---	---
14	16.3	15.9	16.2	19.0	18.2	18.6	20.6	19.8	20.2	---	---	---
15	16.3	15.9	16.3	18.6	18.2	18.4	22.6	19.8	21.6	---	---	---
16	16.6	16.2	16.4	19.3	18.2	18.6	---	---	---	---	---	---
17	16.6	16.3	16.5	18.6	18.2	18.5	---	---	---	---	---	---
18	16.6	16.3	16.5	19.0	18.2	18.8	---	---	---	---	---	---
19	17.0	16.3	16.6	20.2	19.8	19.8	---	---	---	---	---	---
20	17.0	16.6	16.6	19.8	19.4	19.7	---	---	---	---	---	---
21	17.0	16.3	16.9	19.4	19.0	19.2	---	---	---	---	---	---
22	17.4	16.5	16.9	19.5	19.0	19.1	---	---	---	---	---	---
23	17.4	17.0	17.1	19.5	19.0	19.2	---	---	---	---	---	---
24	17.4	17.0	17.3	19.8	19.0	19.6	---	---	---	---	---	---
25	17.8	17.0	17.4	19.8	19.4	19.6	---	---	---	---	---	---
26	17.8	17.4	17.5	19.8	19.4	19.5	---	---	---	---	---	---
27	17.8	17.4	17.8	19.8	19.4	19.6	---	---	---	---	---	---
28	18.2	17.8	17.8	19.8	19.4	19.6	---	---	---	---	---	---
29	18.2	17.8	18.0	19.8	19.4	19.7	---	---	---	---	---	---
30	18.2	17.5	18.1	20.2	19.4	19.8	---	---	---	---	---	---
31	---	---	---	20.2	19.5	19.8	---	---	---	---	---	---
MONTH	18.2	14.5	16.4	20.2	18.2	19.2	---	---	---	---	---	---

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 mi^2, of which about 19 mi^2 does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 581.54 ft above sea level. Prior to Oct. 1, 1981, at site 0.8 mi upstream at datum 8.05 ft lower.

REMARKS.--Estimated daily discharges: Oct. 5-17, Dec. 12-19, and Jan. 7-25. Records good except for discharge below 5.0 ft^3/s and periods of estimated record, which are poor. Subsequent to Apr. 24, 1976, records of daily discharge less than about 300 ft^3/s does not include approximately 3 ft^3/s which is diverted by city of Franklin for municipal supply. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	21	39	174	299	254	583	293	47	131	38	19
2	2.0	17	35	155	238	311	420	196	46	101	37	20
3	1.9	16	38	134	201	359	354	303	46	83	35	23
4	1.8	16	795	112	173	296	317	544	41	71	33	23
5	1.7	15	1760	108	156	250	272	340	38	58	49	24
6	1.6	15	693	115	140	210	498	253	60	50	65	26
7	1.5	13	384	700	127	201	486	223	312	47	47	24
8	1.4	13	275	800	121	625	361	791	268	43	39	21
9	1.3	11	639	600	1830	3060	301	329	119	44	34	16
10	1.3	10	594	400	1170	2370	697	237	90	46	31	14
11	1.3	12	322	300	2250	1130	2810	180	128	47	29	13
12	1.2	13	280	260	1710	784	1330	150	82	42	26	12
13	1.2	14	240	280	1390	549	877	137	62	42	24	11
14	1.2	27	200	300	958	434	554	147	50	45	30	13
15	1.3	113	260	240	679	361	774	831	45	58	255	12
16	1.7	121	240	200	480	293	1330	546	41	440	72	10
17	25	133	220	180	379	243	705	360	45	249	43	12
18	42	137	200	160	316	217	454	258	120	133	34	13
19	131	108	180	120	268	184	367	199	67	97	30	11
20	168	86	157	90	321	160	345	163	51	73	29	9.7
21	79	68	236	80	1270	150	289	137	40	71	33	9.3
22	51	54	186	78	1200	132	241	119	124	96	34	8.6
23	39	47	159	100	2760	119	200	102	133	67	28	17
24	32	43	151	300	1100	116	165	86	79	55	23	167
25	28	42	147	500	698	137	139	74	65	67	20	81
26	25	39	146	921	465	129	148	75	67	160	18	48
27	24	43	168	1040	353	925	161	130	215	97	20	48
28	22	52	147	1600	293	1750	137	92	603	71	19	40
29	18	52	188	925	---	955	207	72	411	57	23	33
30	19	46	794	556	---	588	370	62	196	49	24	29
31	20	---	281	389	---	809	---	54	---	43	21	---
TOTAL	748.4	1397	10154	11917	21345	18101	15892	7483	3691	2733	1243	807.6
MEAN	24.1	46.6	328	384	762	584	530	241	123	88.2	40.1	26.9
MAX	168	137	1760	1600	2760	3060	2810	831	603	440	255	167
MIN	1.2	10	35	78	121	116	137	54	38	42	18	8.6
CFSM	.22	.42	2.98	3.49	6.93	5.31	4.82	2.19	1.12	.80	.36	.24
IN.	.25	.47	3.43	4.03	7.22	6.12	5.37	2.53	1.25	.92	.42	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

MEAN	44.6	133	314	301	382	383	260	209	148	65.2	33.6	63.7
MAX	219	474	971	867	1356	1412	568	982	637	251	142	677
(WY)	1976	1980	1979	1974	1989	1975	1979	1983	1974	1989	1971	1979
MIN	1.87	14.5	11.8	10.4	138	118	38.3	22.8	18.7	5.47	2.80	2.28
(WY)	1988	1988	1981	1981	1980	1981	1986	1988	1985	1985	1986	1986

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1968 - 1994	
ANNUAL TOTAL	48485.9		95512.0			
ANNUAL MEAN	133		262		194	
HIGHEST ANNUAL MEAN					351	1989
LOWEST ANNUAL MEAN					87.8	1986
HIGHEST DAILY MEAN	1760	Dec 5	3060	Mar 9	12800	Mar 12 1975
LOWEST DAILY MEAN	1.2	Oct 12	1.2	Oct 12	.00	Sep 19 1985
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 9	1.3	Oct 9	.00	Aug 13 1988
INSTANTANEOUS PEAK FLOW			4500	Mar 9	27300	Mar 12 1975
INSTANTANEOUS PEAK STAGE			10.31	Mar 9	23.20	Mar 12 1975
ANNUAL RUNOFF (CFSM)	1.21		2.38		1.76	
ANNUAL RUNOFF (INCHES)	16.40		32.30		23.97	
10 PERCENT EXCEEDS	301		697		434	
50 PERCENT EXCEEDS	68		120		70	
90 PERCENT EXCEEDS	5.2		15		8.5	

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 mi^2, of which about 490 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1938 to September 1994 (discontinued). 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. Datum of gage is 409.83 ft above sea level. Prior to June 21, 1944, nonrecording gage at same site and datum. Auxiliary water-stage recorder at old TVA powerplant, 7.7 mi downstream. Aug. 10, 1939 to Dec. 31, 1942, auxiliary water-stage recorder or nonrecording gage at site 8.0 mi downstream from base gage.

REMARKS.--Estimated daily discharges: Dec. 5-28, 31, Jan. 1, 7-11, 18-24, and Mar. 11-13. Records good except for periods of estimated record, which are fair. Flow regulated by Barren River Lake beginning March 1964. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

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 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	3210	1440	3600	4930	6320	8290	4720	3620	4200	792	1840
2	283	3200	1130	3000	5070	6330	6750	4650	3590	3790	743	1830
3	281	3170	752	2570	4870	7070	5970	4550	3600	3580	709	1420
4	272	3140	1480	2150	4680	6980	5530	5160	3580	3450	682	1270
5	1970	3100	10400	2420	4550	6600	5190	5140	3540	3370	576	1280
6	2910	3070	6400	3060	4430	6250	4650	4710	3520	3320	484	1280
7	2790	3030	5200	3490	4320	6040	5600	4560	3590	3270	509	983
8	2790	3000	4880	5800	4240	6690	5590	5540	4760	3130	460	437
9	2790	2940	4420	5400	6540	12700	5200	5350	4130	2870	410	371
10	2790	2280	5650	5000	13100	27700	5140	4640	3770	2650	380	348
11	2780	1540	6400	4800	10700	14000	12700	4370	3750	2440	362	337
12	2770	1350	5400	4490	17000	7000	28800	4220	3970	2380	345	324
13	2750	1350	4800	4230	13000	5400	12600	4130	3660	2140	336	316
14	2740	1390	4800	3430	8250	5090	7670	4100	3560	1480	342	313
15	2720	1290	4840	3740	7430	6780	7420	4550	3490	1040	473	308
16	2740	2270	5100	3540	7620	6880	10600	6970	3430	1000	681	337
17	2870	3120	4970	3290	7000	6510	9440	5570	3400	2210	545	437
18	3210	3450	4780	3100	6500	6200	7110	4840	3400	1520	430	456
19	3350	3470	4640	2600	6150	6060	6280	4490	3430	1620	380	454
20	3860	3280	4530	2000	5980	5840	5630	4290	3410	2050	362	426
21	3930	2640	4470	1600	7870	5740	5200	4100	3330	1600	498	409
22	3640	1600	4480	1500	10800	5650	4930	4060	3310	1390	613	401
23	3490	1180	4380	1400	14400	4820	4740	3960	3410	1130	461	444
24	3410	1120	4280	2100	16500	4200	4590	3870	3550	952	399	723
25	3350	1090	4180	3640	6970	4040	4460	3840	3400	1240	361	1090
26	3290	1070	4100	7560	6770	4050	4390	3830	3590	1320	331	872
27	3320	657	4000	5880	7080	5880	4360	3770	3660	2440	324	718
28	3330	412	3600	9070	6610	12100	4350	3780	3870	2180	310	686
29	3300	522	3040	8240	---	12400	4260	3750	6250	1230	374	599
30	3290	1210	3240	4800	---	7920	4390	3690	4990	992	448	556
31	3260	---	3620	4770	---	7370	---	3630	---	872	1400	---
TOTAL	84558	64151	135402	122270	223360	236610	211830	138830	112560	66856	15520	21265
MEAN	2728	2138	4368	3944	7977	7633	7061	4478	3752	2157	501	709
MAX	3930	3470	10400	9070	17000	27700	28800	6970	6250	4200	1400	1840
MIN	272	412	752	1400	4240	4040	4260	3630	3310	872	310	308

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	1782	3098	3909	4371	4789	4126	3034	2715	2106	1523	870	1177
MAX	4027	6097	9210	9141	9830	10450	8368	9408	5825	5059	3468	5358
(WY)	1975	1980	1979	1979	1989	1975	1979	1983	1981	1989	1971	1979
MIN	381	286	573	228	1624	1128	379	247	102	118	110	251
(WY)	1977	1977	1981	1981	1992	1981	1986	1988	1988	1988	1991	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1965 - 1994	
ANNUAL TOTAL	710654		1433212			
ANNUAL MEAN	1947		3927		2781	
HIGHEST ANNUAL MEAN					5001	1979
LOWEST ANNUAL MEAN					1292	1988
HIGHEST DAILY MEAN	10400	Dec 5	28800	Apr 12	57500	Mar 13 1975
LOWEST DAILY MEAN	138	Sep 7	272	Oct 4	75	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	150	Sep 1	326	Sep 10	76	Jul 6 1988
INSTANTANEOUS PEAK FLOW			32300	Apr 12	85000	Feb 28 1962
INSTANTANEOUS PEAK STAGE			*33.24	Mar 10	49.55	Feb 28 1962
INSTANTANEOUS LOW FLOW					44	Sep 19 1954
10 PERCENT EXCEEDS	4600		6970		5990	
50 PERCENT EXCEEDS	1220		3560		2010	
90 PERCENT EXCEEDS	240		455		289	

* backwater

03316275 MUD RIVER NEAR HUNTSVILLE, KY

LOCATION.--Lat 37°07'24", long 86°54'02", Butler County, Hydrologic Unit 05110003, on right bank at upstream side of bridge on State Highway 949, 2.9 mi southwest of Huntsville, 3.7 mi downstream from Lyons Branch, 8.4 mi upstream from Rocky Creek, and at mile 17.1.

DRAINAGE AREA.--268 mi^2, of which about 14.0 mi^2 does not contribute directly to surface runoff.

GAGE.--Water-stage recorder. Datum of gage is 381.18 ft above sea level.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1974 to 1978 and 1980. October 1991 to September 1994 (discontinued). Records collected at this site about 1940-55 in reports of U.S. Army Corps of Engineers.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 2, Dec. 8-13, Jan. 2-6, 11-15, 17-24, 30 to Feb. 8, 16-21, 26 to Mar. 7, 12-24, 30 to Apr. 6, and 15-29. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

REVISIONS.--The maximum discharge for water year 1992 has been revised to 5,560 ft^3/s, Dec. 4, 1991, gage height, 15.98 ft. Revised daily discharges, in cubic feet per second, for high-water periods are given below. These figures supersede those published in the report for 1992.

Dec. 3....1660	Dec. 5....1800	Mar. 11....1530	Mar. 13....2000	Mar. 21....2040
4....4180	15....1700	12....3520	20....1350	22....1980

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	28	56	210	1700	920	2200	226	37	194	29	20
2	13	25	51	190	1100	700	1400	262	35	115	36	23
3	13	21	54	182	760	800	1000	252	34	68	36	23
4	12	15	302	174	580	720	840	222	32	45	34	21
5	11	13	980	166	460	600	760	209	30	35	33	20
6	11	13	1250	158	390	520	840	222	30	30	32	20
7	11	13	1810	556	340	500	950	208	31	29	30	20
8	11	13	1500	950	320	738	1010	189	103	87	28	21
9	10	13	900	1150	592	1330	999	185	247	134	27	23
10	9.0	12	940	1360	1010	3360	957	204	155	82	27	22
11	9.0	11	720	1000	1260	7290	1160	192	89	59	26	17
12	8.8	11	600	800	1630	5600	2460	158	62	43	24	15
13	8.0	16	520	600	2140	3600	5050	133	48	34	24	14
14	6.8	105	536	500	2800	2000	3930	114	39	29	23	13
15	6.1	377	635	500	3030	1300	2500	102	35	29	23	11
16	5.6	573	755	395	2500	1100	1500	199	32	31	23	12
17	8.0	590	651	320	1600	740	1600	587	31	36	22	11
18	10	657	465	280	1300	600	1400	514	28	153	20	9.2
19	16	735	348	240	1000	500	900	270	25	154	19	7.8
20	41	454	284	190	800	400	720	171	26	146	17	17
21	84	237	241	160	1000	340	620	132	30	108	19	20
22	126	172	214	140	1310	280	450	109	26	58	20	15
23	107	136	189	160	2300	260	320	92	22	42	22	11
24	74	109	167	240	3820	240	250	77	22	39	26	11
25	42	91	151	893	4330	231	210	65	22	37	26	9.6
26	37	80	138	1280	2800	226	190	61	55	36	23	9.2
27	32	76	130	1830	1800	1000	180	58	118	29	20	21
28	28	75	131	3190	1300	2930	200	56	425	25	21	20
29	24	70	170	4950	---	6120	200	55	319	23	22	27
30	25	63	253	4000	---	4000	211	47	238	24	23	31
31	26	---	250	2700	---	2500	---	41	---	24	20	---
TOTAL	840.3	4804	15391	29464	43972	51445	35007	5412	2426	1978	775	514.8
MEAN	27.1	160	496	950	1570	1660	1167	175	80.9	63.8	25.0	17.2
MAX	126	735	1810	4950	4330	7290	5050	587	425	194	36	31
MIN	5.6	11	51	140	320	226	180	41	22	23	17	7.8
CFSM	.10	.60	1.85	3.55	5.86	6.19	4.35	.65	.30	.24	.09	.06
IN.	.12	.67	2.14	4.09	6.10	7.14	4.86	.75	.34	.27	.11	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	44.4	157	457	589	820	1063	586	221	152	72.5	33.9	34.2
MAX	89.8	167	707	950	1570	1660	1167	399	241	92.5	61.2	69.6
(WY)	1992	1992	1992	1994	1994	1994	1994	1993	1992	1992	1992	1992
MIN	16.3	142	167	311	333	687	262	88.3	80.9	61.3	15.6	15.8
(WY)	1993	1993	1993	1992	1992	1993	1992	1992	1994	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	103192.5		192029.1			
ANNUAL MEAN	283		526		350	
HIGHEST ANNUAL MEAN					526	1994
LOWEST ANNUAL MEAN					252	1993
HIGHEST DAILY MEAN	2540	May 6	7290	Mar 11	7290	Mar 11 1994
LOWEST DAILY MEAN	5.6	Oct 16	5.6	Oct 16	5.6	Oct 16 1993
ANNUAL SEVEN-DAY MINIMUM	7.5	Oct 11	7.5	Oct 11	7.5	Oct 11 1993
INSTANTANEOUS PEAK FLOW			7590	Mar 11	7590	Mar 11 1994
INSTANTANEOUS PEAK STAGE			17.02	Mar 11	17.02	Mar 11 1994
ANNUAL RUNOFF (CFSM)	1.05		1.96		1.31	
ANNUAL RUNOFF (INCHES)	14.32		26.65		17.76	
10 PERCENT EXCEEDS	899		1400		947	
50 PERCENT EXCEEDS	105		133		113	
90 PERCENT EXCEEDS	11		15		15	

GREEN RIVER BASIN

03316500 GREEN RIVER AT PARADISE, KY

LOCATION.--Lat 37°15'50", long 86°58'40", Muhlenberg County, Hydrologic Unit 05110003, on left bank of reservation of Tennessee Valley Authority generating plant, 0.4 mi southeast of Paradise, 1.1 mi downstream from Jacobs Creek, 2.8 mi upstream from Pond Creek, and at mile 98.8.

DRAINAGE AREA.--6,183 mi^2, of which about 1,380 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1950 (published as "at Green River"), October 1959 to September 1960 (low-water records only), October 1960 to September 1981 and July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 363.19 ft above sea level (levels by Tennessee Valley Authority). See WDR KY-81-1 for history of changes prior to October 31, 1979. Auxiliary water-stage recorder on U.S. Highway 62 bridge at Rockport, 4.4 mi downstream.

REMARKS.--Estimated daily discharges: Jan. 14, 15, and Feb. 26-28. Records fair. Flow regulated by Green River Lake beginning February 1969, Nolin River Lake beginning March 1963, and Barren River Lake beginning March 1964. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	917	7260	5430	5950	25100	25800	34600	14100	5070	6730	2200	1630
2	935	6840	5280	6110	20400	22800	30400	13900	4950	5540	2030	2130
3	918	6230	4900	6000	19900	21100	26800	13100	4870	4760	1880	2350
4	858	5780	6510	6060	18400	21100	24100	12400	4880	4240	1770	2210
5	851	5570	14300	5880	17300	21900	21500	11600	4780	3950	1920	2060
6	1150	5450	22200	5980	16400	21800	20800	10900	4660	3770	1850	1980
7	2130	5330	24700	9230	15500	19700	20200	10100	4920	3690	1790	1920
8	2760	5230	19900	15300	14600	20700	18800	9400	5730	3610	1710	1830
9	3020	5170	14700	18800	17400	29200	18000	9480	6360	3640	1670	1580
10	3120	5110	13800	17800	23600	37200	17700	10200	6000	3420	1610	1380
11	3100	4810	15500	15400	29000	41800	21600	9940	5540	3130	1500	1260
12	3070	4360	16900	14500	32100	44300	29600	8970	5130	2900	1410	1200
13	3090	4330	15800	14500	34700	45700	34400	8050	4930	2780	1330	1120
14	3070	5230	14400	14400	35900	45900	37100	7460	4640	2660	1290	1050
15	3070	7460	14000	14000	36700	45000	37700	7250	4350	2420	1270	995
16	3110	7820	13500	13600	35100	43400	36700	7970	4170	2560	1270	953
17	3210	10600	13000	13200	30300	39300	35300	10200	4120	3610	1450	1010
18	3270	13300	12100	11800	26000	33600	33800	10800	4060	4500	1590	1090
19	4030	13500	11700	9520	21700	28600	31300	9790	4000	4210	1520	1110
20	5850	12400	11000	7970	19500	23400	27200	8740	4000	3700	1430	1140
21	6420	10500	10400	6760	22300	20000	22100	7990	3970	3390	1430	1150
22	6870	9020	9640	5910	21900	17300	17900	7330	3880	3080	1380	1160
23	6910	7940	8750	5290	28900	14800	14400	6520	3750	2770	1940	1270
24	6680	7160	8010	5650	34700	14000	13800	5810	3840	2660	2760	1340
25	6510	6460	7460	11300	36700	12700	13300	5470	4030	2710	2360	1610
26	6820	5860	6850	20800	38300	11700	13800	5380	4110	2980	1870	1910
27	7570	5540	6510	25800	36400	18500	12900	5550	4390	2890	1550	2010
28	7810	5320	6430	31100	30800	30600	12400	5790	4920	3110	1380	1880
29	7990	5170	6360	34000	---	35000	12500	5820	5390	3260	1350	1750
30	7900	5350	5910	34500	---	37300	13000	5550	7110	2760	1280	1600
31	7560	---	5740	32200	---	37600	---	5330	---	2470	1340	---
TOTAL	130569	210100	351680	439310	739600	881800	703700	270890	142550	107900	51130	45678
MEAN	4212	7003	11340	14170	26410	28450	23460	8738	4752	3481	1649	1523
MAX	7990	13500	24700	34500	38300	45900	37700	14100	7110	6730	2760	2350
MIN	851	4330	4900	5290	14600	11700	12400	5330	3750	2420	1270	953

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	5377	8506	14850	17560	16930	17590	14920	9782	6594	3999	3036	4411
MAX	16950	19310	42250	36020	26410	35150	34210	17610	20190	8811	8743	22540
(WY)	1980	1980	1979	1974	1994	1975	1979	1973	1981	1973	1971	1979
MIN	2463	4030	2103	954	6083	6150	4441	2492	2024	1702	623	857
(WY)	1981	1972	1981	1981	1977	1981	1978	1976	1972	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	2369587		4074907			
ANNUAL MEAN	6492		11160		10360	
HIGHEST ANNUAL MEAN					18460	1979
LOWEST ANNUAL MEAN					6044	1993
HIGHEST DAILY MEAN	25200	Mar 5	45900	Mar 14	74300	Dec 13 1978
LOWEST DAILY MEAN	421	Aug 23	851	Oct 5	421	Aug 23 1993
ANNUAL SEVEN-DAY MINIMUM	450	Aug 27	1050	Sep 13	450	Aug 27 1993
INSTANTANEOUS PEAK FLOW			46800	Mar 14	107000	Mar 5 1962
INSTANTANEOUS PEAK STAGE			28.14	Mar 15	40.46	Mar 5 1962
INSTANTANEOUS LOW FLOW					250	Oct 23 1940
10 PERCENT EXCEEDS	14700		30300		24100	
50 PERCENT EXCEEDS	5110		6460		6140	
90 PERCENT EXCEEDS	825		1540		1460	

03318500 ROUGH RIVER AT FALLS OF ROUGH, KY

LOCATION.--Lat 37°35'20", long 86°33'05", Grayson County, Hydrologic Unit 05110004, on left bank 150 ft downstream from bridge on State Highway 110 at Falls of Rough, 3.2 mi downstream from Rock Lick Creek, 6.4 mi downstream from Rough River Dam, and at mile 82.9.

DRAINAGE AREA.--504 mi^2, of which about 110 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1994 (discontinued) (low-water periods only prior to October 1948, published as "near Falls of Rough"). Prior to January 1940 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 420.94 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 21, 1948.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 5. Records good. Flow regulated by Rough River Lake beginning Oct. 1959. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1937 reached a stage of 34.06 ft; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	1540	1690	250	1380	1850	892	895	123	69	55	58
2	88	928	1130	350	2030	1650	870	1320	124	68	55	58
3	86	917	424	390	2540	1460	710	1760	123	67	55	58
4	86	913	928	350	2790	1120	605	1740	123	67	56	57
5	86	915	963	330	2770	866	588	1720	122	67	56	58
6	86	912	611	313	2730	856	694	1350	122	71	56	58
7	86	906	1010	532	2690	629	781	609	122	81	56	58
8	86	899	1690	449	2480	1200	779	945	121	68	55	57
9	87	895	1680	530	1880	1080	598	1590	123	67	55	57
10	87	892	1250	861	2060	1240	840	471	122	66	55	57
11	87	888	1450	1310	2620	1080	1450	184	121	65	55	57
12	182	886	1410	1330	2440	872	1220	689	121	42	56	57
13	241	1280	712	1180	1930	680	1180	657	120	30	56	58
14	240	1190	506	812	1780	930	1830	363	90	63	57	58
15	242	1200	408	640	1930	862	1880	240	65	67	57	58
16	254	593	243	667	2290	1010	1530	414	66	65	56	58
17	267	1030	242	751	2530	954	944	697	66	63	57	60
18	708	681	367	772	2500	1420	601	816	67	62	57	59
19	1080	799	375	767	2460	1420	581	411	67	62	57	59
20	1040	1120	320	403	2440	1400	562	123	67	61	58	59
21	593	1580	275	88	2150	1500	552	121	68	61	59	59
22	1270	1840	262	60	2050	1270	377	121	67	61	58	60
23	1640	1920	231	62	2090	763	242	121	67	60	57	85
24	1860	1900	212	148	1020	402	240	121	72	59	57	160
25	1850	1880	131	1380	1680	137	238	121	68	59	57	76
26	1840	1860	109	1860	2120	140	238	123	70	75	57	72
27	1830	1850	109	1630	2090	1110	244	123	69	61	57	92
28	1830	1820	189	2400	2050	923	246	123	68	57	57	174
29	1810	1800	201	764	---	309	446	123	64	56	62	230
30	1790	1770	120	374	---	586	1080	123	69	56	58	229
31	1780	---	150	575	---	923	---	123	---	56	58	---
TOTAL	23298	37604	19398	22328	61520	30642	23038	18337	2757	1932	1757	2396
MEAN	752	1253	626	720	2197	988	768	592	91.9	62.3	56.7	79.9
MAX	1860	1920	1690	2400	2790	1850	1880	1760	124	81	62	230
MIN	86	593	109	60	1020	137	238	121	64	30	55	57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

MEAN	704	927	970	1169	1383	1097	704	748	556	288	183	297
MAX	1681	1774	2187	2553	2655	2980	2462	2409	1913	873	738	1190
(WY)	1980	1973	1980	1980	1991	1989	1989	1984	1983	1981	1979	1979
MIN	16.0	171	43.5	75.4	122	259	65.9	63.2	49.1	58.5	43.0	55.3
(WY)	1961	1981	1964	1977	1992	1981	1986	1988	1988	1975	1975	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1960 - 1994	
ANNUAL TOTAL	219664		245007			
ANNUAL MEAN	602		671		749	
HIGHEST ANNUAL MEAN					1388	1979
LOWEST ANNUAL MEAN					431	1963
HIGHEST DAILY MEAN	2660	Mar 2	2790	Feb 4	6100	Mar 9 1964
LOWEST DAILY MEAN	19	Aug 11	30	Jul 13	6.0	Dec 22 1980
ANNUAL SEVEN-DAY MINIMUM	49	Aug 5	55	Aug 5	7.3	Dec 17 1980
INSTANTANEOUS PEAK FLOW			2800	Feb 4	12400	Jan 14 1950
INSTANTANEOUS PEAK STAGE			15.00	Feb 4	28.87	Jan 14 1950
10 PERCENT EXCEEDS	1770		1840		1950	
50 PERCENT EXCEEDS	229		330		373	
90 PERCENT EXCEEDS	77		57		59	

03319600 ROUGH RIVER AT HARTFORD, KY

LOCATION.--Lat 37°27'11", long 86°54'39", Ohio County, Hydrologic Unit 05110004, on right bank 10 ft downstream from bridge on State Highway 231 at Hartford, 2.3 mi upstream from Muddy Creek, and at mile 28.9.

DRAINAGE AREA.--880 mi^2, of which about 110 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1991 to September 1994 (discontinued).

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 372.93 ft above sea level (city of Hartford benchmark).

REMARKS.--Estimated daily discharges: Oct. 1-5, Dec. 4-8, Jan. 14-26, 28 to Mar. 23, 31 to Apr. 3, 15-20, 23-28, and June 17 to Sept. 30. Records poor. Flow regulated by Rough River Lake since October 1959. The city of Hartford diverts about 1.8 ft^3/s 500 ft upstream from station. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

REVISIONS.--The maximum discharge for water year 1992 has been revised to 4,570 ft^3/s, April 2, 1992, gage height, 18.94 ft. Revised daily discharges, in cubic feet per second, for high-water periods are given below. These figures supersede those published in the report for 1992.

Dec.	4	2890	Mar. 19	3740	Mar. 31	4170
	14	2980	20	4040	Apr. 1	4390
	15	3240	21	4190	2	4520
	16	3090	22	4100	3	4510
Mar.	11	3440	23	3700	4	4170
	12	3560	24	3270	5	3840
	13	2980	25	2870	6	3520
	18	1940	30	2840	May 31	2930

GREEN RIVER BASIN

03319600 ROUGH RIVER AT HARTFORD, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	1650	1760	293	2400	2300	2400	2690	145	84	80	74
2	92	1550	1730	315	2500	2100	2000	2570	127	84	78	72
3	91	1160	1480	534	2800	1800	1800	1780	127	84	78	70
4	91	1010	1600	691	3000	1700	1430	1880	127	82	76	70
5	91	978	2800	684	3000	1400	1220	1900	120	82	80	70
6	91	954	2200	633	3200	1200	1230	1840	114	82	300	70
7	91	940	1400	921	2800	1000	1490	1640	113	82	220	68
8	90	941	1500	1770	2800	940	1510	1270	112	80	140	68
9	90	940	1790	1500	3000	1800	1410	1170	111	160	100	68
10	88	931	2010	1150	3000	2600	1360	1550	111	130	92	66
11	86	934	1930	1150	3500	3200	2680	1070	110	100	88	66
12	86	937	1750	1550	4000	3600	3750	356	108	90	84	66
13	89	1250	1800	1770	4200	3400	3930	576	107	86	82	66
14	210	2350	1510	1600	3800	3200	3930	788	105	84	80	66
15	292	3260	1450	1400	3200	2600	3400	627	103	200	78	64
16	294	3240	1400	1100	2800	2100	3000	421	102	300	76	64
17	323	2970	1100	740	2900	1800	3400	433	100	220	74	66
18	339	2970	823	580	2900	1700	2800	664	110	140	72	66
19	511	2270	706	320	2800	1800	2000	827	120	110	72	66
20	1420	1400	722	230	3000	1900	1600	680	120	98	70	64
21	1710	1390	666	500	3400	2000	1120	248	120	94	70	64
22	1090	1610	582	280	3800	2100	938	151	110	92	70	62
23	1180	1820	516	220	4200	1800	780	136	100	90	68	64
24	1450	1910	466	300	4000	1370	540	130	98	92	68	100
25	1660	1920	407	1800	3400	985	460	126	96	98	68	200
26	1710	1890	361	3400	3000	603	420	126	94	96	70	150
27	1710	1860	287	4540	2600	2180	380	134	92	90	70	90
28	1690	1840	260	6000	2400	3700	370	140	90	88	68	100
29	1690	1810	282	7000	---	3970	649	135	88	86	68	200
30	1670	1780	360	6000	---	4020	1540	131	86	84	66	250
31	1660	---	363	3000	---	3000	---	172	---	82	80	---
TOTAL	21776	50465	36011	51971	88400	67868	53537	26361	3266	3370	2786	2630
MEAN	702	1682	1162	1676	3157	2189	1785	850	109	109	89.9	87.7
MAX	1710	3260	2800	7000	4200	4020	3930	2690	145	300	300	250
MIN	86	931	260	220	2400	603	370	126	86	80	66	62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	558	1264	1079	1465	1890	2249	1423	759	577	249	252	115
MAX	702	1682	1619	1862	3157	2495	1785	935	965	491	609	156
(WY)	1994	1994	1992	1993	1994	1993	1994	1993	1993	1992	1992	1992
MIN	485	1052	458	857	595	2061	842	491	109	109	56.9	87.7
(WY)	1992	1992	1993	1992	1992	1992	1993	1992	1994	1994	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	390867		408441			
ANNUAL MEAN	1071		1119		985	
HIGHEST ANNUAL MEAN					1119	1994
LOWEST ANNUAL MEAN					895	1992
HIGHEST DAILY MEAN	4410	Mar 6	7000	Jan 29	7000	Jan 29 1994
LOWEST DAILY MEAN	31	Aug 14	62	Sep 22	31	Aug 14 1993
ANNUAL SEVEN-DAY MINIMUM	37	Aug 10	65	Sep 16	37	Aug 10 1993
INSTANTANEOUS PEAK FLOW			7100	Jan 28	7100	Jan 28 1994
INSTANTANEOUS PEAK STAGE			>20.05	Jan 28	>20.05	Jan 28 1994
10 PERCENT EXCEEDS	2870		3000		2800	
50 PERCENT EXCEEDS	582		627		523	
90 PERCENT EXCEEDS	70		74		82	

> greater than

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 mi^2, of which about 1,540 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1930 to current year. Prior to October 1958, published as "at Livermore."

REVISED RECORDS.--WSP 1385: 1939. WDR KY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 353.95 ft above sea level. Auxiliary water-stage recorder at Livermore, 8.0 mi upstream at datum 360.11 ft above sea level. See WDR KY-88-1 for history of changes prior to Sept. 30, 1958.

REMARKS.--Estimated daily discharges: Mar. 8-10, 27, 28, Apr. 25, and 26. Records fair. Flow regulated by Green River Lake beginning February 1969, Nolin Lake beginning March 1963, Barren River Lake beginning March 1964, and Rough River Lake, October 1959. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	9600	7180	6920	38200	34800	41100	16700	5960	8000	2520	1630
2	1110	9130	7020	7150	34800	31400	39100	16600	5760	6620	2270	2270
3	1120	8150	6620	7050	31900	29300	36300	16200	5670	5620	2130	2600
4	1080	7420	8900	7120	30000	29000	33200	15400	5630	5030	1970	2540
5	1020	6880	15700	7150	28000	29400	30800	14400	5520	4660	2080	2340
6	1340	6720	23100	7150	26500	28400	29000	13500	5530	4410	2080	2220
7	2440	6660	27700	9920	25300	25000	28500	12800	5890	4390	2030	2130
8	3190	6540	24900	15100	25100	29700	27700	11800	6600	4270	1900	2010
9	3430	6440	18900	20500	24200	35500	26600	11400	7420	4360	1840	1710
10	3550	6380	16600	21100	26200	40200	24700	12400	7100	4080	1760	1460
11	3570	6060	17400	18500	32700	42000	28500	12400	6580	3710	1660	1300
12	3600	5530	20100	17100	36400	42000	35900	10800	6080	3390	1540	1250
13	3580	5810	19900	17200	38600	40900	39800	9520	5860	3250	1440	1140
14	3610	7580	18100	17000	39800	44200	42200	9190	5580	3060	1310	1020
15	3660	11100	17300	15900	40300	45100	43000	8990	5210	2810	1290	969
16	3750	11400	16000	14900	39400	42900	42800	9150	4940	3060	1300	920
17	3820	13100	16000	15800	38200	43600	42100	11600	4910	4280	1500	942
18	3900	15700	15100	14400	35800	42500	41600	12800	4890	5320	1710	1030
19	4700	15900	13900	12200	32800	39400	40800	11800	4790	5050	1660	1090
20	7670	15300	13200	9960	30000	35700	38400	10600	4770	4480	1520	1150
21	8600	13200	12500	8570	31500	31600	33500	9460	4680	4030	1450	1160
22	8870	11600	11500	7450	30800	27500	27600	8540	4590	3680	1390	1170
23	8740	10400	10400	6590	34500	23600	23600	7610	4470	3250	2030	1230
24	8640	9510	9510	6840	38700	18000	21500	6760	4430	3050	3120	1380
25	8610	8710	8720	14700	40300	15400	20500	6340	4720	3130	2760	1700
26	8920	7800	8080	26800	40700	13500	16900	6150	4770	3400	2090	2140
27	9850	7410	7560	34200	40300	10200	15300	6300	5000	3300	1680	2280
28	10300	7080	7390	38500	38400	26600	14600	6670	5690	3460	1460	2100
29	10400	6820	7340	40500	---	39200	14800	6780	6050	3790	1340	1950
30	10300	7010	6900	41200	---	41600	16300	6500	8120	3240	1350	1800
31	9910	---	6700	40600	---	42000	---	6340	---	2860	1350	---
TOTAL	164470	270940	420220	528070	949400	1020200	916700	325500	167210	127040	55530	48631
MEAN	5305	9031	13560	17030	33910	32910	30560	10500	5574	4098	1791	1621
MAX	10400	15900	27700	41200	40700	45100	43000	16700	8120	8000	3120	2600
MIN	1020	5530	6620	6590	24200	10200	14600	6150	4430	2810	1290	920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	5622	10810	17730	19850	23440	19740	16190	12970	7824	4677	3018	4701
MAX	19100	22770	46530	41100	52100	40370	42430	50460	23850	12260	8763	27360
(WY)	1980	1980	1979	1974	1989	1989	1979	1983	1981	1989	1971	1979
MIN	2138	4874	2496	1223	7116	7479	2260	1706	541	1386	550	879
(WY)	1988	1972	1981	1981	1977	1981	1986	1988	1988	1988	1991	1987

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	2976962		4993911			
ANNUAL MEAN	8156		13680		12150	
HIGHEST ANNUAL MEAN					22070	1979
LOWEST ANNUAL MEAN					7249	1986
HIGHEST DAILY MEAN	31700	Mar 5	45100	Mar 15	79300	Feb 21 1989
LOWEST DAILY MEAN	565	Aug 31	920	Sep 16	291	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	594	Aug 27	1020	Sep 13	329	Jul 4 1988
INSTANTANEOUS PEAK FLOW			45300	Mar 15	208000	Jan 27 1937
INSTANTANEOUS PEAK STAGE			*27.54	Mar 17	42.40	Jan 30 1937
INSTANTANEOUS LOW FLOW					280	Oct 5 1930
10 PERCENT EXCEEDS	17600		38300		31100	
50 PERCENT EXCEEDS	6440		8000		7420	
90 PERCENT EXCEEDS	963		1660		1480	

* backwater

03320500 POND RIVER NEAR APEX, KY

LOCATION.--Lat 37°07'20", long 87°19'10", Muhlenberg County, Hydrologic Unit 05110006, on downstream side of right pier of bridge on State Highway 189, 1.1 mi downstream from Coal Creek, 2.1 mi northeast of Apex, 5.7 mi upstream from West Fork, and at mile 62.8.

DRAINAGE AREA.--194 mi^2.

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.

GAGE.--Water-stage recorder. Datum of gage is 384.53 ft above sea level. Prior to Aug. 21, 1942, nonrecording gage at same site. Prior to Oct. 1, 1974, at datum 6.11 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1-20, Dec. 4-8, Jan. 4 to Feb. 1, 9-17, 23-26, Mar. 13-18, June 29 to July 26, Aug. 13-24, and 26 to Sept. 30. Records poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	4.1	12	56	1400	364	981	189	15	66	2.7	1.0
2	.06	3.6	11	55	541	318	702	188	12	33	2.4	.80
3	.08	3.4	11	57	340	277	545	133	11	20	2.3	.70
4	.10	3.4	210	58	215	219	508	115	9.3	14	2.0	.60
5	.12	3.5	1200	57	155	173	449	110	8.6	10	2.4	.90
6	.14	3.8	1000	56	125	137	912	94	7.9	8.8	2.5	1.4
7	.12	3.8	820	55	105	119	1020	81	7.7	15	2.1	2.0
8	.10	3.8	350	66	133	605	757	86	9.8	18	2.1	1.7
9	.08	3.8	171	80	540	2640	500	87	15	41	1.9	1.2
10	.06	3.8	175	66	740	3540	634	74	17	36	1.5	.80
11	.04	3.8	283	62	540	2740	2590	60	18	20	1.4	.60
12	.04	3.6	202	64	360	2130	2930	51	15	13	1.3	.50
13	.04	5.0	127	78	430	1600	2110	43	11	9.3	1.1	.44
14	.06	44	95	100	870	1100	1570	39	9.2	7.9	.98	.40
15	.08	369	86	110	1500	600	1120	39	8.0	7.2	.92	.40
16	.10	301	81	110	1100	420	1130	44	6.9	7.6	.90	.45
17	.14	328	70	92	720	320	922	62	23	6.7	.80	.50
18	.20	370	59	80	486	250	660	51	16	14	.70	.70
19	.30	199	50	70	327	193	457	38	8.7	17	.60	.90
20	4.8	102	45	64	960	150	293	29	7.1	20	.50	.75
21	16	65	41	58	1950	132	211	27	6.2	14	.45	.80
22	18	46	36	62	2180	122	153	23	5.7	12	.42	1.2
23	17	34	33	98	3000	106	120	19	5.3	9.6	.37	1.5
24	14	27	29	360	1800	97	100	16	5.6	8.6	2.2	1.8
25	11	23	28	1100	1500	95	87	14	6.8	8.3	3.2	2.0
26	9.0	21	27	1600	1200	99	77	13	8.7	6.7	2.0	2.1
27	7.2	19	27	3500	795	2890	71	13	18	6.0	1.5	1.8
28	5.5	18	31	4000	538	4190	103	12	43	4.8	1.0	1.7
29	5.0	17	48	3500	---	2660	115	11	240	4.1	3.0	1.5
30	4.6	14	63	2600	---	1930	116	9.9	210	3.6	2.0	1.4
31	4.6	---	64	1700	---	1440	---	14	---	3.1	1.5	---
TOTAL	118.60	2046.4	5485	20014	24550	31656	21943	1784.9	785.5	465.3	48.74	32.54
MEAN	3.83	68.2	177	646	877	1021	731	57.6	26.2	15.0	1.57	1.08
MAX	18	370	1200	4000	3000	4190	2930	189	240	66	3.2	2.1
MIN	.04	3.4	11	55	105	95	71	9.9	5.3	3.1	.37	.40
CFSM	.02	.35	.91	3.33	4.52	5.26	3.77	.30	.13	.08	.01	.01
IN.	.02	.39	1.05	3.84	4.71	6.07	4.21	.34	.15	.09	.01	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	20.9	180	407	463	637	592	440	309	106	63.4	32.2	60.3
MAX	208	1430	2167	2024	3988	1631	1822	2607	900	440	239	988
(WY)	1986	1958	1979	1950	1989	1975	1979	1984	1969	1989	1984	1979
MIN	.000	.000	.000	3.56	42.6	35.2	39.2	6.46	1.37	.44	.19	.000
(WY)	1954	1954	1964	1981	1941	1941	1986	1941	1964	1964	1993	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1941 - 1994	
ANNUAL TOTAL	61293.90		108929.98			
ANNUAL MEAN	168		298		274	
HIGHEST ANNUAL MEAN					643	1979
LOWEST ANNUAL MEAN					59.8	1941
HIGHEST DAILY MEAN	4400	May 4	4190	Mar 28	28400	Feb 15 1989
LOWEST DAILY MEAN	.00	Aug 25	.04	Oct 1	.00	Oct 21 1940
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 25	.06	Oct 9	.00	Oct 21 1940
INSTANTANEOUS PEAK FLOW			4460	Mar 28	35700	May 7 1984
INSTANTANEOUS PEAK STAGE			17.28	Mar 28	26.81	Nov 19 1957
ANNUAL RUNOFF (CFSM)	.87		1.54		1.41	
ANNUAL RUNOFF (INCHES)	11.75		20.89		19.19	
10 PERCENT EXCEEDS	528		989		720	
50 PERCENT EXCEEDS	28		28		46	
90 PERCENT EXCEEDS	.04		.78		.60	

GREEN RIVER BASIN

03321060 POND RIVER NEAR MADISONVILLE, KY

LOCATION.--Lat 37°19'02", long 87°22'09", Hopkins County, Hydrologic Unit 05110006, on left bank 3 ft downstream from bridge on State Highway 70, 4.2 mi downstream from Flat Creek, 5.0 mi upstream from Earle Creek, 6.3 mi east of Madisonville, and at mile 25.9.

DRAINAGE AREA.--469 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 361.80 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 15-24, 26 to Dec. 1, 4-16, 30, 31, Jan. 4, 5, 7-26, 31 to Mar. 9, 16-26, Apr. 2-7, 10-12, 21-27, and Aug. 24 to Sept. 5. Records poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	30	76	171	2500	1300	3140	447	41	293	19	3.0
2	4.5	28	70	171	1800	1100	2800	501	45	196	16	2.0
3	11	27	78	174	1200	900	2400	528	52	98	22	1.6
4	13	28	190	180	900	800	1800	468	49	61	26	1.3
5	10	27	520	170	700	700	1400	380	43	46	38	3.0
6	8.9	26	860	174	520	500	1600	316	39	39	26	8.9
7	12	24	1000	170	400	400	1800	260	39	41	21	7.9
8	4.8	23	1100	170	360	500	2200	217	39	51	18	3.9
9	3.0	22	1000	220	340	1000	2140	197	49	59	17	2.8
10	2.8	21	800	150	1000	1650	1600	186	52	78	19	1.6
11	2.5	21	600	130	1300	2060	1400	164	64	77	14	1.2
12	1.5	21	500	140	1000	2780	1600	138	62	67	13	.63
13	.43	57	500	200	800	3200	2070	115	55	53	12	.54
14	.46	138	400	180	1000	3280	2440	103	48	45	12	.45
15	.36	480	300	170	1500	3240	2710	148	41	40	11	.69
16	.76	1100	300	150	1300	3000	2810	147	34	44	9.9	6.4
17	8.5	1200	262	130	1000	2600	2760	143	31	45	8.9	7.7
18	11	1300	219	120	800	2000	2690	138	34	45	7.8	9.8
19	14	1200	183	110	600	1600	2600	125	41	43	7.4	5.0
20	115	1000	156	100	700	1000	2490	100	39	42	7.7	6.6
21	114	760	137	96	1000	800	1800	82	32	48	8.9	8.4
22	124	520	122	90	1600	700	1700	71	26	48	8.3	7.5
23	120	340	109	90	1800	640	1600	65	23	43	6.1	9.9
24	105	200	99	150	1900	500	1300	57	22	38	5.0	11
25	82	145	93	600	2000	400	1000	51	24	34	10	10
26	64	120	88	1000	2000	400	700	50	32	30	12	9.7
27	52	100	85	1800	1900	773	400	47	45	27	10	11
28	43	90	89	2550	1800	1190	269	43	53	25	6.0	9.7
29	37	84	99	3110	---	1790	232	41	74	23	10	8.7
30	35	78	120	3520	---	2780	322	41	194	24	8.0	9.8
31	33	---	150	3500	---	3140	---	42	---	23	6.0	---
TOTAL	1037.61	9210	10305	19686	33720	46733	53773	5411	1422	1826	416.0	170.71
MEAN	33.5	307	332	635	1204	1508	1792	175	47.4	58.9	13.4	5.69
MAX	124	1300	1100	3520	2500	3290	3140	528	194	293	38	11
MIN	.36	21	70	90	340	400	232	41	22	23	5.0	.45
CFSM	.07	.65	.71	1.35	2.57	3.21	3.82	.37	.10	.13	.03	.01
IN.	.08	.73	.82	1.56	2.67	3.71	4.27	.43	.11	.14	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	20.9	139	252	491	690	1043	1121	263	118	50.1	17.2	15.7
MAX	33.5	307	342	635	1204	1508	1792	531	212	58.9	33.0	29.6
(WY)	1994	1994	1992	1994	1994	1994	1994	1993	1992	1994	1992	1992
MIN	6.08	53.4	82.5	292	420	730	630	82.4	47.4	36.0	5.13	5.69
(WY)	1992	1992	1993	1992	1993	1992	1992	1992	1994	1993	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	126063.75		183710.32			
ANNUAL MEAN	345		503		348	
HIGHEST ANNUAL MEAN					503	1994
LOWEST ANNUAL MEAN					242	1992
HIGHEST DAILY MEAN	2000	Mar 28	3520	Jan 30	3520	Jan 30 1994
LOWEST DAILY MEAN	.03	Aug 28	.36	Oct 15	.03	Aug 28 1993
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 5	1.1	Sep 9	.88	Oct 17 1991
INSTANTANEOUS PEAK FLOW			3650	Jan 31	3650	Jan 31 1994
INSTANTANEOUS PEAK STAGE			20.33	Jan 31	20.33	Jan 31 1994
ANNUAL RUNOFF (CFSM)	.74		1.07		.74	
ANNUAL RUNOFF (INCHES)	10.00		14.57		10.12	
10 PERCENT EXCEEDS	1100		1800		1100	
50 PERCENT EXCEEDS	113		99		82	
90 PERCENT EXCEEDS	5.0		7.9		8.6	

03321210 CYPRESS CREEK NEAR CALHOUN, KY

LOCATION.--Lat 37°29'20", long 87°17'11", McLean County, Hydrologic Unit 05110006, on left bank at downstream side of bridge on State Highway 1155, 0.2 mi downstream from Pond Drain, 3.4 mi southwest of Calhoun, and at mile 5.7.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--August 1979 to September 1981, March 1990 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 364.72 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1-17, Jan. 16-25, 30 to Feb. 9, 15-21, 23 to Mar. 7, 13-24, 30 to Apr. 8, and 13-26. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section. Maximum gage height affected by backwater from the Green River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	31	52	59	1100	380	600	445	23	25	7.7	2.5
2	9.0	30	50	81	1000	360	400	177	23	21	6.7	2.4
3	11	29	103	93	900	340	300	134	24	16	5.7	2.1
4	9.0	29	540	99	800	320	280	170	24	14	5.6	2.0
5	8.2	29	721	87	700	300	300	151	23	11	24	2.8
6	7.8	29	482	82	580	260	380	122	23	8.1	38	3.3
7	8.6	28	354	106	500	240	500	101	156	3.5	29	2.7
8	9.4	26	323	103	450	649	600	88	72	13	24	3.7
9	9.8	24	292	92	400	712	545	75	52	72	18	4.1
10	9.0	23	290	80	341	894	421	65	50	44	14	4.1
11	9.8	22	290	69	305	1120	637	55	42	39	11	3.7
12	11	19	224	119	490	1340	632	51	40	129	8.7	3.4
13	10	128	146	180	650	1400	700	46	38	86	7.4	2.9
14	11	321	119	147	859	1200	560	128	35	36	6.5	2.4
15	12	508	140	93	800	900	400	352	31	35	5.6	2.2
16	21	372	126	82	700	500	500	161	26	49	4.7	1.9
17	34	508	103	70	580	300	600	93	20	42	4.1	1.7
18	26	434	92	66	460	250	700	71	18	34	3.8	1.5
19	19	371	83	62	400	200	600	51	14	29	3.1	1.3
20	165	336	77	58	500	180	500	41	12	24	2.6	1.3
21	169	304	82	54	600	170	340	35	11	19	3.1	1.3
22	118	241	71	50	718	170	280	32	9.6	17	2.7	1.4
23	95	179	61	50	680	150	200	27	8.3	22	2.7	1.6
24	88	114	56	140	600	140	170	26	8.5	21	3.3	2.4
25	77	86	53	760	540	115	130	24	9.3	20	3.2	2.5
26	64	76	46	1200	480	106	80	27	10	20	3.0	3.8
27	50	74	50	1390	420	688	56	28	13	18	2.4	5.4
28	41	71	46	1520	400	817	55	26	26	14	2.1	5.8
29	35	64	51	1390	---	800	179	23	29	13	2.3	5.7
30	32	57	54	1400	---	780	531	21	28	11	2.7	14
31	31	---	59	1200	---	700	---	20	---	9.5	2.7	---
TOTAL	1205.3	4563	5236	10982	16953	16481	12176	2866	898.7	915.1	260.4	95.9
MEAN	38.9	152	169	354	605	532	406	92.5	30.0	29.5	8.40	3.20
MAX	169	508	721	1520	1100	1400	700	445	156	129	38	14
MIN	4.7	19	46	50	305	106	55	20	8.3	3.5	2.1	1.3
CFSM	.27	1.07	1.19	2.49	4.26	3.74	2.86	.65	.21	.21	.06	.02
IN.	.32	1.20	1.37	2.88	4.44	4.32	3.19	.75	.24	.24	.07	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

MEAN	56.9	131	292	240	305	296	266	151	84.9	61.6	10.3	8.01
MAX	242	523	863	582	695	532	406	343	239	172	16.7	16.1
(WY)	1980	1980	1980	1991	1991	1994	1994	1981	1981	1980	1981	1992
MIN	4.46	25.7	27.5	13.2	98.4	69.7	107	70.2	26.0	10.2	1.72	3.20
(WY)	1992	1981	1981	1981	1981	1981	1991	1992	1980	1991	1991	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1980 - 1994	
ANNUAL TOTAL	54100.9		72632.4			
ANNUAL MEAN	148		199		160	
HIGHEST ANNUAL MEAN					247	1980
LOWEST ANNUAL MEAN					82.5	1992
HIGHEST DAILY MEAN	1100	Feb 22	1520	Jan 28	2070	Nov 26 1979
LOWEST DAILY MEAN	3.0	Aug 30	1.3	Sep 19	.54	Aug 24 1991
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 29	1.4	Sep 17	.86	Aug 12 1991
INSTANTANEOUS PEAK FLOW			1560	Jan 28	2100	Nov 26 1979
INSTANTANEOUS PEAK STAGE			15.29	Mar 18	18.24	Jan 7 1991
ANNUAL RUNOFF (CFSM)	1.04		1.40		1.13	
ANNUAL RUNOFF (INCHES)	14.17		19.03		15.33	
10 PERCENT EXCEEDS	450		613		500	
50 PERCENT EXCEEDS	64		56		48	
90 PERCENT EXCEEDS	5.4		3.7		5.1	

OHIO RIVER MAIN STEM

03322000 OHIO RIVER AT EVANSVILLE, IN

LOCATION.--Lat 37°58'20", long 87°34'35", Vanderburgh County, Hydrologic Unit 05140202, on right bank at Riverside Drive and Court Street, at Evansville, 0.6 mi upstream from Pigeon Creek, and at mile 792.3.

DRAINAGE AREA.--107,000 mi^2, approximately.

PERIOD OF RECORD.--December 1936 to current year (fragmentary prior to October 1940 and after September 1974). Gage-height records collected at same site since 1873 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 328.64 ft above sea level or 329.18 ft, Ohio River datum. Prior to Feb. 20, 1963, and after Sept. 23, 1963, water-stage recorder at same site and datum. Feb. 20, 1963 to Sept. 23, 1963, nonrecording gage 0.6 mi downstream at same datum. Prior to February 1975 auxiliary nonrecording gage at lock and dam 48, 17.3 mi downstream. From February 1975 to May 23, 1985, auxiliary nonrecording gage at Newburgh lock and dam, 16.3 mi upstream. Since May 23, 1985 water-stage recorder at same site.

REMARKS.--No estimated daily discharges. Records good. Discharge values published are days with mean values 100,000 ft^3/s and above. Flow regulated by Ohio River system of Locks and Dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	184000	---	591000	521000	515000	257000	---	---	---	---
2	---	---	209000	---	604000	510000	543000	275000	---	---	---	---
3	---	---	217000	---	603000	459000	556000	235000	---	---	---	---
4	---	---	202000	---	585000	359000	555000	184000	---	---	---	---
5	---	---	214000	107000	542000	306000	534000	159000	---	---	---	---
6	---	---	247000	146000	462000	315000	496000	144000	---	---	---	---
7	---	---	283000	188000	349000	336000	435000	148000	---	---	---	---
8	---	---	329000	221000	269000	337000	363000	173000	---	---	---	---
9	---	---	370000	251000	237000	321000	330000	221000	---	---	---	---
10	---	---	391000	298000	236000	315000	318000	264000	---	---	---	---
11	---	---	373000	348000	271000	355000	329000	319000	---	---	---	---
12	---	---	315000	375000	332000	428000	390000	361000	---	---	---	---
13	---	---	264000	345000	396000	495000	432000	363000	---	---	---	---
14	---	---	226000	276000	443000	549000	463000	315000	---	---	---	---
15	---	145000	198000	233000	485000	581000	492000	245000	---	---	---	---
16	---	199000	174000	235000	514000	592000	514000	184000	---	---	---	---
17	---	219000	147000	242000	521000	572000	527000	162000	---	---	---	---
18	---	244000	136000	215000	494000	521000	540000	142000	---	---	---	---
19	---	265000	126000	143000	421000	447000	553000	123000	---	---	---	---
20	---	271000	119000	101000	337000	370000	561000	116000	---	---	123000	---
21	---	271000	118000	---	286000	326000	554000	103000	---	---	153000	---
22	---	265000	119000	---	254000	289000	526000	---	---	---	163000	---
23	---	247000	113000	---	267000	253000	474000	---	---	---	149000	---
24	---	214000	112000	---	317000	240000	386000	---	---	---	129000	---
25	---	177000	116000	116000	378000	254000	297000	---	---	---	116000	---
26	---	151000	102000	176000	428000	284000	239000	---	---	---	102000	---
27	---	131000	---	244000	473000	324000	196000	---	---	---	---	---
28	---	127000	---	340000	506000	362000	159000	---	---	---	---	---
29	---	134000	---	434000	---	397000	144000	---	---	---	---	---
30	---	153000	---	508000	---	433000	182000	---	---	---	---	---
31	---	---	---	561000	---	475000	---	---	---	---	---	---
TOTAL	---	---	---	---	11601000	12326000	12603000	---	---	---	---	---
MEAN	---	---	---	---	414300	397600	420100	---	---	---	---	---
MAX	---	---	---	---	604000	592000	561000	---	---	---	---	---
MIN	---	---	---	---	236000	240000	144000	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1974, BY WATER YEAR (WY)

MEAN	33050	67340	133200	190500	230600	295800	243400	168300	99760	62350	46830	33900
MAX	87490	214900	394300	475800	518000	633300	493400	353200	208200	178700	174300	130200
(WY)	1955	1973	1973	1950	1950	1945	1948	1958	1946	1958	1958	1950
MIN	7523	9633	22730	32350	66180	81630	90120	32320	26330	18970	14390	10830
(WY)	1954	1954	1944	1956	1954	1969	1971	1941	1966	1944	1965	1953

SUMMARY STATISTICS	FOR 1994 WATER YEAR		WATER YEARS 1941 - 1974	
ANNUAL MEAN			133300	
HIGHEST ANNUAL MEAN			193800	1950
LOWEST ANNUAL MEAN			63210	1954
HIGHEST DAILY MEAN	604000	Feb 2	909000	Mar 15 1964
LOWEST DAILY MEAN			6700	Nov 6 1953
ANNUAL SEVEN-DAY MINIMUM			6760	Nov 4 1953
INSTANTANEOUS PEAK FLOW	606000	Feb 2	1410000	Jan 29 1937
INSTANTANEOUS PEAK STAGE	42.47	Feb 3	53.75	Jan 31 1937
10 PERCENT EXCEEDS			328000	
50 PERCENT EXCEEDS			79600	
90 PERCENT EXCEEDS			20000	

HIGHLAND CREEK BASIN

03322360 BEAVERDAM CREEK NEAR CORYDON, KY

LOCATION.--Lat 37°42'14", Long 87°41'52", Henderson County, Hydrologic Unit 05140202, on left bank 20 ft upstream from bridge on State Highway 145, 2.8 mi southeast of Corydon, and at mile 3.3.

DRAINAGE AREA.--14.3 mi^2.

PERIOD OF RECORD.--July 1972 to September 1982, October 1983 to February 1987, February 1988 to September 1994 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 360 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 18, 19, Jan. 1-28, and May 14 to June 20. Records poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.71	3.3	7.9	8.0	7.6	8.8	13	.20	.16	.00	.00
2	12	.67	19	7.0	8.0	7.0	7.3	5.3	.26	.13	.00	.00
3	.51	.58	91	6.4	7.2	5.0	14	3.7	1.0	.09	.00	.00
4	.10	.88	359	7.0	8.0	5.1	9.4	3.3	.70	.09	.00	.00
5	.02	.58	38	7.4	8.3	4.1	76	2.5	.50	.07	.00	.00
6	.00	.40	14	7.8	7.0	3.9	64	1.9	.40	.04	.00	.00
7	.00	.32	7.8	8.0	6.5	5.7	17	2.8	.30	.03	.00	.00
8	.00	.28	6.2	9.0	21	103	12	2.1	.26	.06	.00	.00
9	.00	.25	6.0	15	20	31	9.8	1.5	.50	.19	.00	.00
10	.00	.22	6.7	10	8.8	67	29	1.0	1.7	.22	.00	.00
11	.00	.22	4.0	8.0	9.3	86	56	.81	.90	.16	.00	.00
12	.00	.26	3.7	10	15	35	51	.70	.68	.10	.00	.00
13	.00	7.4	4.2	9.0	13	23	17	.56	.48	1.3	.00	.00
14	.00	240	5.4	8.6	9.8	16	9.8	.64	.34	.33	.00	.00
15	.00	26	4.6	8.2	9.1	10	41	.80	.26	.20	.00	.00
16	.00	87	3.7	8.0	7.4	6.5	14	2.0	.20	.14	.00	.00
17	23	273	3.6	7.6	7.3	6.0	8.4	1.6	.18	.11	.00	.00
18	1.9	17	3.8	7.4	7.0	10	6.9	1.2	.20	.05	.00	.00
19	4.0	9.3	3.2	7.2	6.7	5.6	5.5	.90	1.0	.02	.00	.00
20	96	5.1	3.6	7.0	70	6.3	4.6	.78	.60	.02	.00	.00
21	5.8	4.0	3.5	6.8	25	50	4.3	.62	.24	.15	.00	.00
22	1.5	3.4	3.0	14	125	11	3.9	.52	.17	.11	.00	.00
23	.89	3.3	2.6	15	55	7.8	3.6	.42	.13	.05	.00	.00
24	.59	3.2	2.7	12	17	6.0	3.5	.36	.16	.03	.00	.00
25	.43	8.1	2.9	20	11	4.7	3.4	.30	.16	.01	.00	.00
26	.33	17	2.3	16	5.9	50	4.0	.28	16	.18	.00	.00
27	.25	8.6	2.3	150	5.5	114	11	.24	.82	.04	.00	.00
28	.24	5.7	2.3	50	6.0	42	5.3	.20	.43	.01	.00	.00
29	.17	4.2	2.7	25	---	14	10	.26	.29	.00	1.6	.00
30	.29	3.4	3.5	16	---	10	64	.24	.17	.00	.12	.00
31	.69	---	3.3	11	---	13	---	.22	---	.00	.03	---
TOTAL	148.71	731.07	621.9	502.3	507.8	766.3	574.5	50.75	29.23	4.09	1.75	0.00
MEAN	4.80	24.4	20.1	16.2	18.1	24.7	19.1	1.64	.97	.13	.056	.000
MAX	96	273	359	150	125	114	76	13	16	1.3	1.6	.00
MIN	.00	.22	2.3	6.4	5.5	3.9	3.4	.20	.13	.00	.00	.00
CFSM	.34	1.70	1.40	1.13	1.27	1.73	1.34	.11	.07	.01	.00	.00
IN.	.39	1.90	1.62	1.31	1.32	1.99	1.49	.13	.08	.01	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

MEAN	1.57	16.6	18.1	16.3	29.3	33.2	20.4	17.5	8.42	7.35	2.62	4.54
MAX	10.2	73.6	65.5	39.1	107	82.6	75.3	59.0	41.6	33.0	17.6	31.7
(WY)	1986	1986	1985	1974	1988	1975	1979	1981	1985	1979	1977	1984
MIN	.000	.029	.008	.005	.34	.22	2.01	.34	.000	.13	.009	.000
(WY)	1989	1977	1977	1981	1981	1981	1981	1988	1988	1994	1973	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1972 - 1994	
ANNUAL TOTAL	6473.81		3938.40			
ANNUAL MEAN	17.7		10.8		14.8	
HIGHEST ANNUAL MEAN					34.1	1979
LOWEST ANNUAL MEAN					4.98	1992
HIGHEST DAILY MEAN	952	Jun 9	359	Dec 4	981	Dec 21 1984
LOWEST DAILY MEAN	.00	Jul 4	.00	Oct 1	.00	Aug 16 1972
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 20	.00	Oct 6	.00	Aug 30 1972
INSTANTANEOUS PEAK FLOW			1890	Nov 17	3360	Apr 29 1983
INSTANTANEOUS PEAK STAGE			13.77	Nov 17	16.40	Apr 29 1983
ANNUAL RUNOFF (CFSM)	1.24		.75		1.04	
ANNUAL RUNOFF (INCHES)	16.84		10.25		14.08	
10 PERCENT EXCEEDS	25		19		24	
50 PERCENT EXCEEDS	2.8		2.0		.90	
90 PERCENT EXCEEDS	.00		.00		.00	

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 mi^2, of which about 9 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1940 to May 1984, March 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.80 ft above sea level. Prior to July 31, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 21, 22, Nov. 5-7, Dec. 28, 29, Jan. 9, 12-23, Mar. 8, 9, Apr. 8, 9, 30 to May 1, Aug. 12-23, and Sept. 12-17. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 19.27 ft, from floodmarks, discharge, 17,000 ft^3/s, by slope-area measurement from U.S. Army Corp of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	13	68	119	2230	359	1730	840	12	138	5.1	.78
2	2.6	12	71	126	1650	326	961	491	12	74	3.9	.53
3	3.4	13	136	135	802	314	456	278	13	45	3.1	.35
4	3.4	16	837	137	332	272	383	209	18	29	2.4	.27
5	2.6	19	1670	137	234	223	412	185	16	20	3.0	.56
6	2.5	22	1710	135	204	192	866	161	13	15	3.1	.85
7	2.5	18	1510	127	178	175	1260	143	9.9	43	2.4	1.4
8	2.0	21	919	179	164	700	1100	140	8.4	65	2.1	1.3
9	1.7	27	386	250	379	1000	700	145	7.5	209	3.1	.84
10	1.3	26	253	171	1060	1290	485	142	9.1	243	2.3	.60
11	1.0	23	239	139	1010	1570	1000	120	34	94	1.5	.50
12	.81	24	247	150	817	1730	1430	101	24	58	1.4	.40
13	.63	170	194	270	1020	1790	1490	82	16	38	1.3	.36
14	.49	788	168	300	1120	1690	1320	71	12	26	1.2	.30
15	.41	1590	172	250	974	1280	789	82	10	20	1.1	.28
16	.86	1690	182	170	682	736	985	123	8.2	16	1.0	.33
17	1.2	1780	155	150	462	443	1080	132	7.4	13	.90	.46
18	1.2	1830	137	140	340	337	772	114	7.2	22	.80	.81
19	1.7	1550	123	120	273	275	476	93	7.7	15	.70	1.4
20	58	899	112	110	463	230	328	76	13	39	.60	1.5
21	220	370	105	100	1390	213	261	58	13	39	.50	1.3
22	260	186	98	94	1550	218	207	46	9.6	27	.40	1.5
23	134	147	91	90	1880	201	169	37	7.7	19	.30	2.2
24	78	127	84	181	2000	178	148	31	6.6	13	2.3	2.5
25	50	111	81	1190	1970	167	130	26	5.9	11	16	2.7
26	34	101	80	1980	1900	172	117	21	13	9.4	4.9	3.1
27	25	99	85	2400	1460	1150	110	18	91	13	.99	2.4
28	19	95	90	2910	679	1890	136	15	145	12	.55	2.0
29	15	86	110	3110	---	2000	414	14	181	8.2	2.2	1.9
30	13	78	122	2860	---	1980	560	15	302	7.0	1.6	1.7
31	13	---	123	2590	---	1980	---	14	---	6.5	1.1	---
TOTAL	951.70	11931	10358	20820	27223	25081	20275	4023	1033.2	1387.1	71.84	35.12
MEAN	30.7	398	334	672	972	809	676	130	34.4	44.7	2.32	1.17
MAX	260	1830	1710	3110	2230	2000	1730	840	302	243	16	3.1
MIN	.41	12	68	90	164	167	110	14	5.9	6.5	.30	.27
CFSM	.12	1.56	1.31	2.63	3.81	3.17	2.65	.51	.14	.18	.01	.00
IN.	.14	1.74	1.51	3.04	3.97	3.66	2.96	.59	.15	.20	.01	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	25.3	215	449	572	757	772	605	386	135	88.7	37.2	52.3
MAX	266	2178	1963	2268	3529	2259	1851	1878	949	946	275	798
(WY)	1986	1958	1979	1950	1989	1964	1979	1983	1969	1989	1985	1950
MIN	.000	.000	.96	4.85	19.2	61.9	53.6	7.09	1.18	.003	.000	.000
(WY)	1941	1954	1964	1964	1964	1941	1986	1941	1944	1952	1952	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1941 - 1994	
ANNUAL TOTAL	118672.10		123189.96			
ANNUAL MEAN	325		338		335	
HIGHEST ANNUAL MEAN					701	1989
LOWEST ANNUAL MEAN					61.6	1941
HIGHEST DAILY MEAN	1990	Apr 11	3110	Jan 29	14000	Feb 16 1989
LOWEST DAILY MEAN	.41	Oct 15	.27	Sep 4	.00	Oct 1 1940
ANNUAL SEVEN-DAY MINIMUM	.77	Oct 11	.38	Sep 11	.00	Oct 1 1940
INSTANTANEOUS PEAK FLOW			3160	Jan 29	14600	Feb 16 1989
INSTANTANEOUS PEAK STAGE			14.93	Jan 29	18.85	Feb 16 1989
ANNUAL RUNOFF (CFSM)	1.28		1.32		1.31	
ANNUAL RUNOFF (INCHES)	17.31		17.97		17.83	
10 PERCENT EXCEEDS	1390		1280		1140	
50 PERCENT EXCEEDS	95		94		60	
90 PERCENT EXCEEDS	2.1		1.2		1.0	

TRADEWATER RIVER BASIN

03383755 CLEAR CREEK NEAR RICHLAND, KY

LOCATION.--Lat 37°17'46", long 87°34'17", Hopkins County, Hydrologic Unit 05140205, near right bank at downstream side of bridge on State Highway 70, 350 ft upstream from Illinois Central Gulf Railroad bridge, 0.6 mi upstream from Sugar Creek, 1.8 mi northeast of Richland, and at mile 20.9.

DRAINAGE AREA.--17.0 mi^2.

PERIOD OF RECORD.--September 1966 to September 1980 (miscellaneous low-flow measurements only), June 1991 to September 1994 (gage heights only) (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above sea level, from topographic map.

REMARKS.--Records good. Stage affected by mining operations within the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.11 ft, Jan. 26, 1994; minimum, 4.82 ft, Sept. 14, 1994.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.08	6.23	6.19	6.24	---	---	6.31	6.39	6.03	6.11	5.64	5.49
2	6.14	6.23	6.23	6.25	---	---	6.29	6.28	6.02	6.07	5.70	5.47
3	6.17	6.23	6.32	6.24	---	---	6.29	6.23	6.03	6.02	5.70	5.23
4	6.15	6.23	6.51	6.25	---	---	6.29	6.23	6.03	5.97	5.72	5.00
5	6.12	6.23	6.65	6.25	---	---	6.30	6.20	6.02	5.95	5.89	5.06
6	6.09	6.21	6.43	6.26	---	---	6.42	6.17	6.04	5.94	5.91	5.14
7	6.07	6.19	6.35	6.27	---	---	6.37	6.16	6.09	5.92	5.89	5.16
8	6.08	6.19	6.32	6.26	---	---	6.32	6.14	6.12	6.09	5.86	5.22
9	6.11	6.19	6.30	6.26	---	---	6.29	6.12	6.29	6.34	5.87	5.25
10	6.11	6.20	6.31	6.26	---	---	6.32	6.07	6.26	6.28	5.90	5.26
11	6.11	6.20	6.29	6.27	---	---	6.38	6.04	6.23	6.20	5.88	5.26
12	6.11	6.21	6.27	6.30	---	---	6.36	6.01	6.21	6.14	5.85	5.26
13	6.12	6.40	6.27	6.30	---	---	6.32	5.99	6.17	6.12	5.83	5.13
14	6.13	6.60	6.29	---	---	---	6.28	6.04	6.14	6.10	5.81	4.88
15	6.12	6.73	6.28	---	---	6.36	6.28	6.17	6.16	6.13	5.77	4.85
16	6.15	6.40	6.27	---	---	6.32	6.33	6.12	6.18	6.27	5.74	4.89
17	6.20	6.59	6.27	---	---	6.30	6.29	6.09	6.22	6.25	5.71	4.94
18	6.19	6.47	6.28	---	---	6.29	6.25	6.09	6.23	6.21	5.68	4.98
19	6.21	6.35	6.24	---	---	6.27	6.22	6.07	6.22	6.16	5.65	4.99
20	6.38	6.30	6.23	---	---	6.26	6.19	6.07	6.21	6.13	5.65	4.98
21	6.38	6.26	6.23	---	---	6.28	6.16	6.07	6.20	6.10	5.67	4.96
22	6.31	6.24	6.23	---	---	6.28	6.13	6.06	6.20	6.07	5.65	4.95
23	6.26	6.22	6.23	---	---	6.26	6.11	6.04	6.19	6.03	5.63	5.00
24	6.23	6.21	6.23	---	---	6.26	6.09	6.03	6.22	6.00	5.63	5.05
25	6.21	6.21	6.22	6.78	---	6.25	6.08	6.02	6.21	5.98	5.61	5.14
26	6.19	6.21	6.21	---	---	6.26	6.08	6.10	6.25	5.95	5.59	5.20
27	6.16	6.21	6.21	---	---	6.58	6.10	6.11	6.24	5.92	5.58	5.20
28	6.14	6.21	6.24	---	---	6.68	6.12	6.08	6.21	5.54	5.55	5.25
29	6.13	6.20	6.24	---	---	6.49	6.32	6.05	6.19	5.32	5.55	5.28
30	6.20	6.19	6.24	---	---	6.37	6.42	6.05	6.15	5.37	5.53	5.28
31	6.23	---	6.24	---	---	6.34	---	6.06	---	5.48	5.50	---
MEAN	6.17	6.28	6.28	---	---	---	6.26	6.11	6.17	6.01	5.71	5.12
MAX	6.38	6.73	6.65	---	---	---	6.42	6.39	6.29	6.34	5.91	5.49
MIN	6.07	6.19	6.19	---	---	---	6.08	5.99	6.02	5.32	5.50	4.85

TRADEWATER RIVER BASIN

03384180 TRADEWATER RIVER NEAR SULLIVAN, KY

LOCATION.--Lat 37°28'46", long 87°57'13", Crittenden County, Hydrologic Unit 05140205, on left bank at downstream side of bridge on U.S. Highway 60 and 641, 1.2 mi southwest of Sullivan, 1.6 mi downstream from Vaughn Ditch, 2.3 mi upstream from Long Branch, and at mile 15.2.

DRAINAGE AREA.--861 mi^2.

PERIOD OF RECORD.--August 1975 to September 1980 (miscellaneous measurements only), October 1980 to September 1981, July 1991 to September 1994 (gage heights and discharge measurements only) (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 321.28 ft above sea level.

REMARKS.--Records fair. Stage affected by backwater from the Ohio River most of the year. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 28.72 ft, Apr. 23, 1994 (backwater from the Ohio River).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 28.72 ft, Apr. 23 (backwater from Ohio River); minimum, 2.46 ft, Sept. 16.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.05	5.07	---	---	25.05	22.58	20.57	18.32	4.04	5.79	3.85	2.92
2	4.20	4.94	---	---	26.15	23.23	21.59	16.95	3.81	6.17	3.66	2.85
3	4.68	4.75	---	---	27.15	23.63	22.54	16.35	3.80	5.81	3.59	2.92
4	4.13	4.61	19.00	---	27.90	23.67	23.37	15.67	3.75	5.10	3.52	3.06
5	3.88	4.49	20.20	---	28.45	23.16	24.11	14.35	3.71	4.59	5.41	3.10
6	3.74	4.42	19.90	---	28.60	21.97	25.31	12.90	3.64	4.20	5.64	2.87
7	3.66	4.29	18.55	---	28.40	20.52	25.25	11.90	3.61	3.92	4.80	2.71
8	3.56	4.20	17.91	---	27.60	20.69	24.60	11.10	3.62	6.01	4.85	2.73
9	3.49	4.08	18.38	---	26.25	20.98	22.70	10.92	7.08	11.16	4.38	2.65
10	3.51	4.00	19.28	---	24.55	20.28	18.60	11.72	5.63	9.41	3.92	2.61
11	3.41	3.89	20.07	---	22.37	20.29	17.35	12.91	4.32	8.88	3.59	2.63
12	3.27	3.87	20.43	---	20.47	21.05	16.45	14.43	4.05	8.90	3.39	2.59
13	3.26	4.52	20.25	---	19.57	21.46	---	15.77	4.05	8.53	3.25	2.73
14	3.29	10.12	19.44	---	19.43	21.95	---	16.40	4.18	7.45	3.14	2.78
15	3.35	16.09	17.96	---	19.87	22.68	---	15.82	4.23	6.39	3.09	2.56
16	3.35	15.80	15.95	---	20.64	23.58	---	13.72	4.22	6.61	3.03	2.49
17	3.93	18.00	13.69	---	21.42	24.48	---	10.36	4.20	7.13	3.12	2.52
18	4.35	17.40	11.70	---	22.09	25.20	---	8.04	4.23	6.43	3.53	2.56
19	3.81	19.00	9.93	---	22.47	25.43	---	6.78	4.15	6.04	3.57	2.60
20	6.33	19.45	8.41	---	22.89	25.06	---	5.99	4.01	5.61	3.73	2.67
21	11.06	19.90	7.61	---	23.10	24.22	27.60	5.53	3.94	5.30	4.36	2.70
22	9.18	20.40	7.24	---	21.94	22.90	28.32	5.02	3.81	5.18	5.04	2.74
23	8.63	20.75	7.04	---	22.38	20.99	28.63	4.67	3.68	5.35	5.17	2.74
24	8.67	20.80	6.74	---	21.67	18.56	28.55	4.47	3.66	5.07	4.65	2.70
25	8.16	19.90	6.59	---	20.44	16.04	27.89	4.43	3.70	4.89	4.09	2.77
26	7.28	18.80	6.47	---	20.39	14.27	26.69	4.22	4.21	5.03	3.81	2.75
27	6.64	17.90	6.20	20.50	21.04	18.03	24.95	4.11	6.21	5.33	3.54	2.79
28	6.13	17.25	6.13	22.03	21.83	19.19	22.65	4.11	5.43	4.65	3.02	3.05
29	5.79	---	6.20	22.93	---	18.71	19.49	4.04	5.60	4.35	2.75	2.75
30	5.40	---	---	23.41	---	18.59	17.87	4.02	5.82	4.23	2.81	2.67
31	5.15	---	---	24.02	---	19.49	---	3.99	---	4.05	3.01	---
MEAN	5.14	---	---	---	23.36	21.38	---	9.97	4.35	6.05	3.85	2.74
MAX	11.06	---	---	---	28.60	25.43	---	18.32	7.08	11.16	5.64	3.10
MIN	3.26	---	---	---	19.43	14.27	---	3.99	3.61	3.92	2.75	2.49

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to current year.
pH: October 1979 to current year.
WATER TEMPERATURES: October 1979 to current year.
DISSOLVED OXYGEN: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Four submersible pumps are located on Martins Fork Dam, at four different elevations referenced to sea level. Pump 1 is located near the bottom of the lake, at an elevation of 1,272 ft; pump 2 is at an elevation of 1,285 ft; pump 3 at an elevation of 1,298 ft; and pump 4 at an elevation of 1,308 ft, occasionally. Each lake level is sampled once every four hours, or six times per day. A maximum and minimum value for each parameter is determined for each level. The monitor was shut down from Oct. 1 to Mar. 22.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	115	87	102	118	106	113
2	---	---	---	---	---	---	99	99	99	118	98	111
3	---	---	---	---	---	---	103	87	94	113	101	106
4	---	---	---	---	---	---	103	87	94	125	101	112
5	---	---	---	---	---	---	99	91	92	121	105	112
6	---	---	---	---	---	---	95	87	90	121	101	108
7	---	---	---	---	---	---	99	91	92	117	105	108
8	---	---	---	---	---	---	91	90	91	120	104	111
9	---	---	---	---	---	---	---	---	---	116	100	109
10	---	---	---	---	---	---	102	90	97	120	104	107
11	---	---	---	---	---	---	94	90	92	112	92	103
12	---	---	---	---	---	---	98	86	93	112	92	102
13	---	---	---	---	---	---	110	86	97	104	96	101
14	---	---	---	---	---	---	82	75	77	108	92	101
15	---	---	---	---	---	---	98	75	88	100	96	97
16	---	---	---	---	---	---	106	98	103	116	100	109
17	---	---	---	---	---	---	110	94	105	120	112	117
18	---	---	---	---	---	---	114	106	109	120	107	112
19	---	---	---	---	---	---	110	102	105	119	107	114
20	---	---	---	---	---	---	106	94	99	119	107	111
21	---	---	---	---	---	---	102	90	97	119	107	111
22	---	---	---	107	107	107	102	94	98	---	---	---
23	---	---	---	111	107	110	102	98	100	123	107	114
24	---	---	---	115	107	110	102	98	100	119	107	112
25	---	---	---	115	107	110	103	102	102	107	103	106
26	---	---	---	115	111	113	103	99	102	123	107	112
27	---	---	---	123	115	119	107	99	104	119	107	114
28	---	---	---	119	83	97	110	102	105	119	107	110
29	---	---	---	111	95	104	118	102	109	124	112	119
30	---	---	---	119	107	116	122	102	109	116	104	108
31	---	---	---	115	91	104	---	---	---	112	104	108
MONTH	---	---	---	123	83	109	122	75	98	125	92	109

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	120	104	109	135	124	128	160	152	155	115	111	113
2	112	104	106	133	128	132	164	160	162	115	111	112
3	125	109	112	136	133	134	163	155	159	119	112	115
4	117	109	112	136	133	135	163	155	157	120	112	115
5	113	109	111	137	136	136	165	155	160	120	112	117
6	113	109	111	137	134	136	154	150	151	121	112	118
7	113	109	110	141	134	137	155	147	151	121	117	119
8	118	114	116	146	135	139	156	151	153	125	121	122
9	118	114	115	142	135	140	157	152	155	126	121	124
10	114	114	114	143	138	140	162	154	158	129	122	125
11	118	110	113	143	139	140	159	154	157	129	126	127
12	122	118	119	143	139	141	164	155	159	156	127	133
13	125	117	121	148	140	142	165	156	160	130	127	129
14	125	117	120	144	140	142	165	161	162	133	129	132
15	125	117	122	149	145	146	166	162	165	137	133	135
16	125	121	122	149	145	148	167	161	165	137	133	134
17	125	121	122	150	146	148	165	161	164	137	133	135
18	125	121	124	150	146	147	164	160	162	137	133	136
19	125	121	124	155	147	151	164	160	163	141	137	139
20	127	120	124	151	150	151	164	160	163	141	137	140
21	124	120	123	150	146	148	164	159	162	145	137	140
22	124	124	124	150	146	149	167	159	162	145	137	142
23	127	122	124	154	149	151	127	104	110	145	141	144
24	126	126	126	153	149	150	104	100	103	145	141	143
25	131	127	129	153	149	151	104	99	100	145	141	144
26	134	127	131	157	149	152	103	98	100	149	141	146
27	134	127	130	153	149	150	103	99	102	148	144	146
28	128	123	126	156	149	153	103	99	101	152	148	149
29	132	128	129	156	152	153	106	102	103	152	148	150
30	132	124	128	156	152	153	110	102	106	155	147	149
31	---	---	---	156	152	154	111	106	109	---	---	---
MONTH	134	104	120	157	124	144	167	99	143	156	111	132
YEAR	167	75	124									

PUMP NUMBER 2

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	103	83	90	110	110	110
2	---	---	---	---	---	---	99	87	95	114	106	112
3	---	---	---	---	---	---	99	87	93	117	105	114
4	---	---	---	---	---	---	95	91	94	132	105	116
5	---	---	---	---	---	---	91	87	88	140	105	120
6	---	---	---	---	---	---	95	87	90	121	105	109
7	---	---	---	---	---	---	91	87	89	117	105	109
8	---	---	---	---	---	---	91	87	90	124	108	119
9	---	---	---	---	---	---	---	---	---	127	108	117
10	---	---	---	---	---	---	98	90	94	139	108	122
11	---	---	---	---	---	---	94	90	92	116	104	110
12	---	---	---	---	---	---	98	90	94	120	104	113
13	---	---	---	---	---	---	110	82	95	127	116	123
14	---	---	---	---	---	---	75	71	74	127	112	120
15	---	---	---	---	---	---	106	79	90	131	120	126
16	---	---	---	---	---	---	106	94	99	147	124	132
17	---	---	---	---	---	---	106	90	100	135	124	129
18	---	---	---	---	---	---	98	94	97	139	111	124
19	---	---	---	---	---	---	106	94	99	130	115	122
20	---	---	---	---	---	---	102	94	97	115	107	112
21	---	---	---	---	---	---	98	90	94	123	111	114
22	---	---	---	111	107	110	102	94	99	---	---	---
23	---	---	---	111	107	108	102	94	99	123	107	117
24	---	---	---	111	107	108	106	98	101	115	107	112
25	---	---	---	111	107	110	103	99	102	126	111	115
26	---	---	---	115	107	112	103	95	98	130	111	122
27	---	---	---	115	103	110	103	99	102	130	111	119
28	---	---	---	103	80	89	106	102	104	123	115	119
29	---	---	---	103	80	90	114	102	104	135	116	123
30	---	---	---	119	87	102	114	102	109	120	112	117
31	---	---	---	107	87	99	---	---	---	120	112	115
MONTH	---	---	---	119	80	104	114	71	96	147	104	118

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	127	108	119	128	120	123	168	160	161	134	123	130
2	135	108	117	140	121	127	164	160	163	134	123	128
3	148	113	131	129	125	127	167	159	163	142	127	132
4	140	117	127	133	121	126	167	159	163	135	127	132
5	125	113	118	134	121	127	161	155	159	135	131	132
6	117	113	116	134	126	129	150	146	149	136	127	132
7	128	113	118	130	126	128	151	150	151	136	128	133
8	122	114	119	130	126	127	156	147	151	132	128	131
9	122	118	121	135	127	130	157	149	153	137	132	134
10	133	118	124	132	127	130	158	153	154	137	133	135
11	133	118	124	132	128	131	163	155	158	141	133	136
12	133	122	127	132	128	130	164	156	160	142	134	137
13	137	117	128	137	129	132	165	156	161	141	133	137
14	128	121	124	140	129	134	166	161	164	141	137	139
15	121	117	120	138	134	135	171	162	167	141	137	138
16	121	117	120	138	134	135	173	161	165	145	137	140
17	125	121	122	142	138	139	169	157	162	145	137	141
18	125	113	119	142	139	140	168	161	166	153	141	146
19	121	117	119	146	139	143	168	152	163	149	141	146
20	121	116	120	150	138	143	172	152	163	149	145	147
21	120	116	119	162	146	151	172	151	160	157	149	154
22	120	116	119	158	150	155	159	112	129	161	149	156
23	122	116	118	162	153	156	124	112	116	161	149	156
24	122	118	120	161	153	155	124	112	118	161	149	154
25	130	119	124	161	153	156	126	111	120	161	149	154
26	119	119	119	165	153	157	130	111	120	157	149	153
27	123	115	120	161	153	159	119	107	116	169	152	157
28	119	111	116	161	156	159	119	110	115	176	156	167
29	128	116	124	164	156	160	125	114	118	172	155	164
30	128	120	123	164	156	161	137	118	126	171	163	170
31	---	---	---	160	156	159	133	125	128	---	---	---
MONTH	148	108	121	165	120	141	173	107	147	176	123	144
YEAR	176	71	127									

PUMP NUMBER 3

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	103	83	91	118	98	107
2	---	---	---	---	---	---	99	91	96	114	101	106
3	---	---	---	---	---	---	99	87	91	117	97	103
4	---	---	---	---	---	---	95	87	92	121	101	111
5	---	---	---	---	---	---	91	87	89	132	113	119
6	---	---	---	---	---	---	91	87	89	125	113	118
7	---	---	---	---	---	---	91	87	90	117	109	112
8	---	---	---	---	---	---	90	87	88	135	108	123
9	---	---	---	---	---	---	---	---	---	131	112	124
10	---	---	---	---	---	---	94	90	93	131	116	124
11	---	---	---	---	---	---	94	90	91	120	112	116
12	---	---	---	---	---	---	94	90	93	143	116	127
13	---	---	---	---	---	---	94	79	90	135	116	126
14	---	---	---	---	---	---	79	71	75	143	124	135
15	---	---	---	---	---	---	90	79	83	135	116	125
16	---	---	---	---	---	---	98	79	86	139	116	128
17	---	---	---	---	---	---	98	86	90	135	120	126
18	---	---	---	---	---	---	90	82	84	134	116	124
19	---	---	---	---	---	---	106	82	89	134	123	126
20	---	---	---	---	---	---	94	86	93	126	119	123
21	---	---	---	---	---	---	98	90	94	126	123	124
22	---	---	---	111	107	108	98	86	93	---	---	---
23	---	---	---	111	107	108	98	86	91	146	126	135
24	---	---	---	111	107	108	98	86	93	130	126	129
25	---	---	---	111	107	110	99	91	95	138	126	130
26	---	---	---	111	107	110	99	91	94	138	126	131
27	---	---	---	119	107	112	107	99	102	134	130	132
28	---	---	---	103	83	91	106	102	103	135	130	134
29	---	---	---	107	80	91	106	98	101	139	131	134
30	---	---	---	123	87	100	114	98	103	135	131	132
31	---	---	---	111	87	100	---	---	---	159	131	141
MONTH	---	---	---	123	80	104	114	71	92	159	97	124

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994

PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	143	131	137	163	147	153	176	168	171	185	177	181
2	144	127	136	168	148	153	176	171	173	185	174	179
3	176	136	157	156	152	155	175	171	173	178	177	177
4	183	132	156	164	148	155	175	167	171	178	175	177
5	152	144	148	165	149	157	181	171	175	178	175	178
6	152	140	147	169	153	158	166	162	165	176	171	174
7	148	140	146	165	153	158	167	163	165	176	172	175
8	149	145	147	157	153	155	164	160	162	176	172	173
9	153	145	148	158	154	156	169	164	166	177	168	173
10	149	141	146	175	158	168	169	162	165	177	173	174
11	153	145	148	167	159	162	171	163	167	177	173	175
12	149	149	149	163	159	161	172	164	168	178	174	175
13	153	144	150	168	160	163	173	164	168	180	174	177
14	152	152	152	160	160	160	178	169	172	177	177	177
15	156	144	151	169	161	166	178	170	174	177	173	175
16	160	152	154	169	165	167	175	169	171	180	173	177
17	156	152	155	170	162	166	173	165	169	180	173	177
18	156	152	154	170	162	166	172	168	169	180	173	177
19	156	148	154	175	162	169	172	164	169	177	173	175
20	155	148	152	171	166	169	168	168	168	177	173	176
21	155	151	152	174	162	167	178	168	172	177	173	176
22	159	147	153	170	162	165	182	167	175	180	177	178
23	157	149	152	173	165	168	178	151	162	180	177	178
24	149	133	143	177	169	172	163	159	160	180	177	180
25	150	142	147	177	169	172	167	154	163	180	177	178
26	150	142	146	177	165	170	166	158	163	180	173	177
27	142	131	138	177	169	173	170	162	167	179	173	176
28	146	132	141	176	172	174	169	161	166	179	172	175
29	159	139	147	172	168	171	176	165	169	179	175	176
30	159	143	54	172	168	171	180	173	176	175	171	174
31	---	---	---	172	168	170	181	173	178	---	---	---
MONTH	183	127	145	177	147	164	182	151	169	185	168	176
YEAR	185	71	143									

PUMP NUMBER 4

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	119	95	106	110	94	101
2	---	---	---	---	---	---	103	91	100	106	97	103
3	---	---	---	---	---	---	95	83	90	109	101	103
4	---	---	---	---	---	---	95	87	90	117	105	108
5	---	---	---	---	---	---	91	87	88	109	101	105
6	---	---	---	---	---	---	91	87	90	121	105	116
7	---	---	---	---	---	---	91	87	88	127	109	114
8	---	---	---	---	---	---	---	---	---	127	108	114
9	---	---	---	---	---	---	---	---	---	131	108	116
10	---	---	---	---	---	---	---	---	---	116	108	112
11	---	---	---	---	---	---	---	---	---	116	112	115
12	---	---	---	---	---	---	---	---	---	127	112	116
13	---	---	---	---	---	---	---	---	---	127	116	120
14	---	---	---	---	---	---	---	---	---	116	112	115
15	---	---	---	---	---	---	---	---	---	120	116	117
16	---	---	---	---	---	---	---	---	---	120	116	119
17	---	---	---	---	---	---	---	---	---	124	116	120
18	---	---	---	---	---	---	---	---	---	123	116	119
19	---	---	---	---	---	---	90	86	87	126	119	123
20	---	---	---	---	---	---	90	86	88	123	119	122
21	---	---	---	---	---	---	90	86	87	142	119	126
22	---	---	---	111	107	109	90	86	89	---	---	---
23	---	---	---	111	107	110	90	86	87	138	123	128
24	---	---	---	115	111	112	90	86	89	130	123	126
25	---	---	---	115	107	111	95	86	92	130	126	127
26	---	---	---	119	111	115	95	91	92	146	126	133
27	---	---	---	127	119	122	95	90	92	146	126	131
28	---	---	---	115	91	105	94	90	91	134	126	130
29	---	---	---	111	99	106	94	90	93	131	127	130
30	---	---	---	123	119	120	94	90	93	135	131	132
31	---	---	---	115	99	108	---	---	---	135	131	133
MONTH	---	---	---	127	91	112	119	83	91	146	94	119

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994--PUMP NUMBER 4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	139	131	136	151	147	149	176	172	174	177	170	174
2	159	135	142	156	147	152	176	171	174	181	174	177
3	160	136	141	156	148	152	175	171	172	181	174	177
4	140	136	137	160	156	157	175	167	169	178	175	177
5	140	136	138	161	156	158	173	169	171	178	175	176
6	140	132	136	161	153	156	166	162	164	179	172	176
7	141	136	138	161	153	156	167	159	164	176	172	174
8	141	137	140	162	150	156	168	160	164	176	168	173
9	145	137	142	158	154	157	169	165	167	177	172	174
10	145	141	142	159	154	157	173	162	167	180	173	177
11	145	141	142	163	159	162	171	166	168	177	173	174
12	145	137	142	164	159	162	172	167	170	178	174	177
13	145	140	144	168	160	164	173	168	170	180	174	177
14	144	140	142	165	160	162	174	169	171	180	173	177
15	144	140	143	165	161	162	178	170	173	180	177	178
16	148	144	147	165	161	162	175	169	171	180	177	178
17	148	140	145	166	162	164	173	165	169	180	173	176
18	148	144	145	178	158	164	173	168	169	180	173	177
19	152	144	148	167	162	164	172	164	169	177	173	174
20	148	147	147	167	158	162	168	164	167	180	173	176
21	151	143	147	166	162	163	172	164	168	177	173	176
22	151	143	146	170	162	165	171	167	169	180	177	178
23	149	145	146	169	165	166	171	167	168	180	177	178
24	150	145	146	169	165	168	171	167	168	180	177	178
25	146	145	147	169	169	169	170	166	168	180	177	178
26	146	142	145	169	165	167	170	166	169	180	177	178
27	146	142	144	169	165	168	170	166	168	177	176	176
28	147	142	143	173	169	172	170	165	168	179	172	174
29	151	143	144	172	168	171	169	165	168	176	172	175
30	---	143	147	172	168	171	176	165	171	178	175	176
31	---	---	---	172	168	171	174	173	173	---	---	---
MONTH	160	131	143	178	147	162	178	159	169	181	168	176
YEAR	181	83	145									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, FOR THE PERIOD APRIL 1994 TO SEPTEMBER 1994
PUMP NUMBER 1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	6.8	6.7	6.6	6.5	6.6	6.6	6.9	6.8	6.5	6.5
2	---	---	6.8	6.7	6.6	6.5	6.6	6.6	6.9	6.9	6.5	6.5
3	---	---	6.8	6.8	6.7	6.7	6.6	6.6	6.9	6.9	6.6	6.6
4	---	---	6.8	6.7	6.7	6.7	6.6	6.6	6.9	6.9	6.6	6.6
5	---	---	6.7	6.7	6.7	6.6	6.6	6.6	6.9	6.8	6.6	6.6
6	---	---	6.9	6.7	6.7	6.6	6.7	6.6	6.8	6.8	6.6	6.6
7	---	---	6.9	6.8	6.7	6.6	6.7	6.5	6.9	6.8	6.7	6.6
8	---	---	6.9	6.9	6.7	6.6	6.6	6.5	6.9	6.8	6.7	6.6
9	---	---	7.0	6.9	6.7	6.6	6.6	6.6	6.7	6.6	6.7	6.7
10	---	---	7.0	6.7	6.7	6.5	6.7	6.6	6.8	6.7	6.9	6.8
11	---	---	6.8	6.7	6.6	6.5	6.7	6.6	6.9	6.9	6.8	6.8
12	---	---	6.8	6.7	6.6	6.6	6.8	6.7	6.9	6.8	6.9	6.8
13	---	---	6.8	6.7	6.6	6.6	6.8	6.7	6.9	6.9	6.9	6.7
14	---	---	6.7	6.7	6.6	6.5	6.8	6.7	7.0	6.9	6.7	6.7
15	---	---	6.7	6.7	6.5	6.5	6.8	6.7	7.0	7.0	6.7	6.7
16	---	---	6.8	6.7	6.5	6.5	6.8	6.7	7.0	6.8	6.7	6.7
17	---	---	6.8	6.7	6.6	6.6	6.8	6.8	6.9	6.8	6.8	6.7
18	---	---	6.8	6.7	6.6	6.6	6.8	6.8	6.9	6.8	6.7	6.7
19	---	---	6.7	6.7	6.6	6.6	6.8	6.8	6.8	6.7	6.7	6.6
20	---	---	6.7	6.6	6.6	6.6	6.8	6.7	6.6	6.6	7.0	6.7
21	---	---	6.7	6.6	6.6	6.6	6.8	6.7	6.7	6.6	7.0	7.0
22	---	---	---	---	6.6	6.6	6.8	6.7	6.7	6.6	7.1	7.0
23	---	---	6.7	6.6	6.6	6.5	6.8	6.7	6.8	6.6	7.1	7.0
24	---	---	6.7	6.6	6.5	6.5	6.9	6.7	6.8	6.8	7.0	7.0
25	6.7	6.6	6.7	6.6	6.5	6.5	6.9	6.8	6.8	6.8	7.0	6.9
26	6.7	6.7	6.7	6.6	6.5	6.5	6.9	6.8	6.8	6.8	6.9	6.9
27	6.7	6.6	6.7	6.6	6.5	6.5	6.8	6.8	6.8	6.8	6.9	6.8
28	6.7	6.7	6.7	6.6	6.5	6.5	6.8	6.8	6.8	6.8	6.8	6.8
29	6.8	6.7	6.7	6.6	6.5	6.5	6.8	6.7	6.8	6.7	6.8	6.7
30	6.8	6.7	6.7	6.6	6.6	6.5	6.8	6.8	6.8	6.5	6.7	6.5
31	---	---	6.6	6.6	---	---	6.8	6.8	6.5	6.5	---	---
MONTH	6.8	6.6	7.0	6.6	6.7	6.5	6.9	6.5	7.0	6.5	7.1	6.5
YEAR	7.1	6.5										

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, FOR THE PERIOD APRIL 1994 TO SEPTEMBER 1994--PUMP NUMBER 2

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	6.9	6.8	6.7	6.6	6.7	6.7	6.7	6.6	6.7	6.6
2	---	---	6.9	6.8	6.7	6.6	6.8	6.6	6.7	6.7	6.6	6.6
3	---	---	6.9	6.9	6.9	6.8	6.7	6.7	6.7	6.7	6.7	6.6
4	---	---	7.0	6.8	6.8	6.8	6.8	6.6	6.7	6.7	6.7	6.6
5	---	---	6.9	6.8	6.8	6.8	6.7	6.7	6.7	6.5	6.7	6.6
6	---	---	7.0	6.8	6.8	6.7	6.8	6.7	6.5	6.5	6.7	6.6
7	---	---	7.0	7.0	6.9	6.7	6.9	6.6	6.6	6.5	6.7	6.6
8	---	---	7.0	7.0	6.8	6.7	6.6	6.5	6.6	6.6	6.6	6.6
9	---	---	7.0	7.0	6.8	6.7	6.7	6.5	6.6	6.6	6.6	6.6
10	---	---	7.0	6.8	6.8	6.6	6.6	6.5	6.6	6.6	6.8	6.7
11	---	---	6.9	6.8	6.7	6.6	6.7	6.5	6.7	6.7	6.7	6.7
12	---	---	6.8	6.8	6.7	6.6	6.7	6.6	6.7	6.7	6.7	6.7
13	---	---	6.8	6.8	6.7	6.7	6.6	6.6	6.8	6.7	6.7	6.5
14	---	---	6.8	6.8	6.7	6.6	6.7	6.6	6.8	6.7	6.5	6.5
15	---	---	6.8	6.8	6.7	6.6	6.6	6.6	6.8	6.8	6.5	6.5
16	---	---	6.9	6.8	6.6	6.6	6.6	6.6	6.8	6.5	6.5	6.5
17	---	---	7.0	6.8	6.7	6.6	6.7	6.6	6.5	6.5	6.5	6.5
18	---	---	6.9	6.8	6.7	6.7	6.6	6.6	6.5	6.5	6.6	6.5
19	---	---	6.8	6.7	6.7	6.7	6.7	6.6	6.7	6.5	6.5	6.4
20	---	---	6.7	6.7	6.7	6.7	6.6	6.5	6.7	6.6	6.8	6.5
21	---	---	6.9	6.7	6.7	6.6	6.5	6.5	6.7	6.6	6.9	6.8
22	---	---	---	---	6.7	6.6	6.5	6.5	6.8	6.7	6.8	6.8
23	---	---	6.8	6.7	6.7	6.5	6.6	6.5	6.8	6.7	6.8	6.8
24	---	---	6.8	6.7	6.6	6.5	6.6	6.5	6.8	6.8	6.8	6.7
25	6.8	6.7	6.8	6.7	6.6	6.5	6.7	6.6	6.8	6.8	6.7	6.7
26	6.8	6.7	6.8	6.7	6.6	6.5	6.6	6.6	6.8	6.8	6.8	6.6
27	6.8	6.7	6.8	6.7	6.6	6.5	6.6	6.6	6.8	6.7	6.9	6.5
28	6.8	6.7	6.8	6.7	6.6	6.5	6.6	6.6	6.8	6.7	6.7	6.5
29	6.9	6.8	6.8	6.7	6.7	6.5	6.6	6.6	6.8	6.7	6.7	6.5
30	6.9	6.8	6.8	6.7	6.9	6.5	6.6	6.6	6.8	6.6	6.7	6.5
31	---	---	6.8	6.7	---	---	6.6	6.6	6.6	6.6	---	---
MONTH	6.9	6.7	7.0	6.7	6.9	6.5	6.9	6.5	6.8	6.5	6.9	6.4
YEAR	7.0	6.4										

PUMP NUMBER 3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	6.9	6.9	7.0	6.9	7.1	7.0	7.1	7.0	6.9	6.8
2	---	---	6.9	6.9	7.1	6.9	7.1	7.0	7.1	7.1	7.0	6.9
3	---	---	7.0	6.9	7.2	7.0	7.1	7.0	7.1	7.1	7.0	7.0
4	---	---	7.0	6.9	7.2	7.1	7.1	6.9	7.1	7.0	7.0	7.0
5	---	---	7.1	6.9	7.2	7.1	7.1	7.0	7.1	6.9	7.0	7.0
6	---	---	7.1	6.9	7.2	7.1	7.1	7.0	6.9	6.8	7.0	7.0
7	---	---	7.3	7.1	7.2	7.1	7.1	6.9	7.0	6.9	7.0	6.9
8	---	---	7.1	7.0	7.2	7.1	7.1	6.9	7.0	7.0	7.0	6.9
9	---	---	7.2	7.0	7.2	7.2	7.1	7.1	7.0	7.0	7.1	6.9
10	---	---	7.2	6.9	7.3	7.2	7.1	6.9	7.2	7.0	7.1	7.0
11	---	---	7.1	6.8	7.4	7.2	7.2	7.0	7.2	7.1	7.1	7.0
12	---	---	6.9	6.8	7.4	7.2	7.2	7.1	7.2	7.1	7.1	7.0
13	---	---	7.1	6.8	7.4	7.3	7.2	7.1	7.1	7.1	7.1	7.0
14	---	---	7.0	6.9	7.3	7.2	7.1	7.1	7.2	7.1	7.0	6.9
15	---	---	7.1	6.8	7.3	7.1	7.2	6.9	7.2	7.1	7.0	6.8
16	---	---	7.0	6.9	7.3	7.1	7.1	7.0	7.2	7.0	7.0	6.9
17	---	---	7.1	7.0	7.3	7.2	7.1	7.0	7.0	6.9	7.0	7.0
18	---	---	7.1	7.0	7.2	7.1	7.0	7.0	6.9	6.8	7.0	6.9
19	---	---	7.1	6.9	7.2	7.1	7.0	6.9	7.0	6.7	7.0	6.9
20	---	---	7.1	7.0	7.2	7.1	7.1	6.9	7.0	6.7	7.2	6.9
21	---	---	7.1	6.9	7.2	7.1	7.1	6.9	7.0	6.7	7.2	7.2
22	---	---	---	---	7.1	7.1	7.1	7.0	6.7	6.6	7.2	7.1
23	---	---	7.0	6.9	7.1	7.0	7.1	6.9	6.9	6.7	7.2	7.1
24	---	---	7.0	6.9	7.1	7.0	7.2	7.0	6.8	6.8	7.1	7.0
25	6.8	6.8	7.1	6.9	7.1	7.0	7.2	7.0	6.9	6.8	7.0	7.0
26	6.9	6.8	7.0	6.9	7.1	7.1	7.2	7.0	6.9	6.8	7.0	6.8
27	6.9	6.8	7.1	6.9	7.1	7.0	7.0	7.0	6.9	6.8	6.9	6.8
28	6.8	6.8	7.1	6.9	7.1	6.9	7.1	7.0	7.0	6.8	6.9	6.7
29	6.9	6.8	7.1	6.9	7.1	6.9	7.0	7.0	7.0	6.8	6.8	6.7
30	6.9	6.9	7.1	6.9	7.1	6.9	7.0	7.0	7.0	6.8	6.9	6.7
31	---	---	7.0	6.9	---	---	7.0	7.0	7.0	6.9	---	---
MONTH	6.9	6.8	7.3	6.8	7.4	6.9	7.2	6.9	7.2	6.6	7.2	6.7
YEAR	7.4	6.6										

PH, WATER, WHOLE, FIELD, STANDARD UNITS, FOR THE PERIOD APRIL 1994 TO SEPTEMBER 1994--PUMP NUMBER 4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.1	7.1	7.2	7.1	7.3	7.2	7.3	7.1	7.1	7.0
2	---	---	7.1	7.1	7.3	7.1	7.2	7.2	7.3	7.2	7.1	7.0
3	---	---	7.1	7.1	7.4	7.2	7.3	7.1	7.2	7.2	7.2	7.1
4	---	---	7.1	7.1	7.5	7.2	7.2	7.2	7.2	7.2	7.2	7.1
5	---	---	7.2	7.1	7.3	7.2	7.2	7.1	7.2	7.0	7.1	7.0
6	---	---	7.2	7.2	7.3	7.2	7.2	7.1	7.0	6.9	7.1	7.0
7	---	---	7.3	7.2	7.3	7.2	7.2	7.1	7.1	6.9	7.0	7.0
8	---	---	7.3	7.2	7.3	7.2	7.1	7.1	7.1	7.0	7.0	7.0
9	---	---	7.3	7.2	7.4	7.2	7.2	7.1	7.2	7.1	7.1	7.0
10	---	---	7.2	7.0	7.3	7.2	7.2	7.1	7.3	7.1	7.1	7.1
11	---	---	7.1	7.0	7.3	7.2	7.2	7.1	7.3	7.2	7.2	7.1
12	---	---	7.1	7.0	7.3	7.2	7.2	7.2	7.3	7.2	7.2	7.1
13	---	---	7.1	7.1	7.3	7.2	7.2	7.2	7.3	7.2	7.1	7.0
14	---	---	7.2	7.1	7.3	7.2	7.2	7.2	7.4	7.2	7.1	7.0
15	---	---	7.2	7.1	7.3	7.2	7.2	7.1	7.3	7.3	7.1	7.0
16	---	---	7.2	7.1	7.3	7.2	7.2	7.1	7.3	7.1	7.1	7.0
17	---	---	7.2	7.1	7.3	7.3	7.2	7.1	7.1	7.0	7.1	7.0
18	---	---	7.2	7.1	7.3	7.2	7.2	7.1	7.1	7.0	7.1	7.0
19	---	---	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.0	7.0	6.9
20	---	---	7.1	7.1	7.2	7.2	7.2	7.1	7.1	6.9	7.3	7.0
21	---	---	7.2	7.1	7.3	7.2	7.2	7.1	7.1	6.9	7.3	7.2
22	---	---	---	---	7.4	7.2	7.2	7.1	6.9	6.9	7.3	7.2
23	---	---	7.2	7.1	7.2	7.1	7.2	7.1	7.0	6.9	7.2	7.2
24	---	---	7.1	7.1	7.2	7.1	7.3	7.1	7.0	7.0	7.2	7.1
25	7.0	7.0	7.1	7.1	7.2	7.1	7.3	7.2	7.0	6.9	7.1	7.1
26	7.0	6.9	7.1	7.1	7.2	7.1	7.2	7.2	7.0	7.0	7.1	7.0
27	7.0	6.9	7.1	7.1	7.1	7.1	7.2	7.2	7.1	7.0	7.0	6.9
28	7.0	6.9	7.1	7.1	7.1	7.1	7.2	7.0	7.1	7.0	6.9	6.8
29	7.1	7.0	7.2	7.1	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.8
30	7.1	7.0	7.2	7.1	7.2	7.0	7.2	7.0	7.1	7.0	6.9	6.7
31	---	---	7.4	7.1	---	---	7.2	7.1	7.1	7.1	---	---
MONTH	7.1	6.9	7.4	7.0	7.5	7.0	7.3	7.0	7.4	6.9	7.3	6.7
YEAR	7.5	6.7										

WATER TEMPERATURE, DEGREES CELSIUS, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994--PUMP NUMBER 1

	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.9	10.7	10.8	13.7	13.5	13.6
2	---	---	---	---	---	---	10.9	10.7	10.7	14.3	13.5	13.9
3	---	---	---	---	---	---	11.6	10.7	11.1	14.5	14.1	14.4
4	---	---	---	---	---	---	11.1	10.5	10.8	14.7	14.1	14.4
5	---	---	---	---	---	---	11.1	10.7	10.8	14.5	14.1	14.3
6	---	---	---	---	---	---	12.6	10.7	11.5	14.5	14.3	14.4
7	---	---	---	---	---	---	11.6	10.9	11.2	14.9	14.5	14.7
8	---	---	---	---	---	---	11.2	11.1	11.2	14.9	14.5	14.7
9	---	---	---	---	---	---	---	---	---	15.5	14.9	15.1
10	---	---	---	---	---	---	11.3	11.2	11.3	15.5	14.9	15.3
11	---	---	---	---	---	---	11.7	11.3	11.5	15.3	14.7	15.1
12	---	---	---	---	---	---	11.7	11.3	11.4	15.3	14.9	15.1
13	---	---	---	---	---	---	13.3	11.5	12.3	15.3	14.9	15.1
14	---	---	---	---	---	---	13.1	12.7	12.9	15.4	15.1	15.2
15	---	---	---	---	---	---	12.7	12.3	12.6	15.6	15.0	15.3
16	---	---	---	---	---	---	12.5	12.1	12.4	16.4	15.2	15.8
17	---	---	---	---	---	---	12.9	12.5	12.6	16.5	15.8	16.3
18	---	---	---	---	---	---	12.7	12.3	12.6	16.5	16.0	16.2
19	---	---	---	---	---	---	13.0	12.5	12.8	16.0	15.8	15.9
20	---	---	---	---	---	---	13.4	13.0	13.2	16.0	15.6	15.8
21	---	---	---	---	---	---	14.0	13.0	13.4	16.0	15.8	15.9
22	---	---	---	11.0	10.6	10.7	14.0	13.4	13.6	---	---	---
23	---	---	---	12.9	10.4	11.0	14.0	13.4	13.7	16.1	15.9	16.0
24	---	---	---	12.9	10.6	11.2	14.2	13.6	13.9	16.5	16.1	16.2
25	---	---	---	11.7	10.8	11.0	14.8	13.7	14.1	16.6	16.3	16.4
26	---	---	---	12.5	11.1	11.5	14.3	13.5	13.9	16.6	16.1	16.4
27	---	---	---	11.5	10.6	11.2	13.9	13.5	13.7	16.4	16.1	16.3
28	---	---	---	11.8	11.1	11.4	13.9	13.7	13.8	16.4	16.1	16.3
29	---	---	---	11.4	11.1	11.2	14.1	13.5	13.9	16.4	16.3	16.4
30	---	---	---	11.2	10.9	11.1	13.9	13.5	13.7	16.6	16.3	16.4
31	---	---	---	11.1	10.7	10.9	---	---	---	16.6	16.3	16.5
MONTH	---	---	---	12.9	10.4	11.1	14.8	10.5	12.5	16.6	13.5	15.4

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994--PUMP NUMBER 1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.3	16.1	16.2	19.2	19.0	19.1	18.6	18.4	18.5	21.0	20.8	21.0
2	16.6	15.9	16.3	19.0	18.8	19.0	18.6	18.4	18.5	21.0	20.8	20.9
3	16.6	16.4	16.5	18.8	18.6	18.7	18.7	18.4	18.4	21.0	20.8	20.9
4	16.6	16.4	16.5	18.8	18.6	18.8	18.7	18.5	18.6	21.0	20.8	20.9
5	16.8	16.4	16.5	18.6	18.6	18.6	18.7	18.0	18.3	21.0	20.8	20.8
6	16.8	16.4	16.6	18.6	18.4	18.5	18.2	18.0	18.0	20.8	20.6	20.8
7	16.6	16.4	16.5	18.6	18.4	18.5	18.2	18.0	18.1	20.8	20.6	20.7
8	16.6	16.4	16.5	18.6	18.4	18.5	18.2	18.0	18.1	20.8	20.6	20.7
9	16.8	16.4	16.6	18.6	18.2	18.4	18.2	18.0	18.1	20.8	20.6	20.7
10	17.0	16.8	17.0	18.4	18.2	18.2	18.2	18.0	18.0	20.6	20.4	20.6
11	17.5	17.0	17.2	18.4	18.2	18.4	18.2	18.0	18.1	20.6	20.4	20.6
12	17.9	17.7	17.8	18.4	18.2	18.3	18.2	18.0	18.0	20.6	20.4	20.5
13	18.3	17.7	18.0	18.4	18.2	18.2	18.2	18.0	18.1	20.6	20.4	20.5
14	18.4	17.8	18.0	18.4	18.0	18.2	18.4	18.0	18.2	20.6	20.4	20.4
15	17.8	17.4	17.6	18.2	18.2	18.2	18.2	18.0	18.1	20.4	20.2	20.4
16	17.6	17.4	17.4	18.2	18.0	18.1	18.2	18.0	18.2	20.4	20.2	20.3
17	17.7	17.5	17.6	18.2	18.0	18.1	18.2	18.0	18.1	20.4	20.2	20.3
18	17.9	17.7	17.7	18.2	18.0	18.2	18.2	18.0	18.1	20.4	20.2	20.2
19	18.0	17.7	17.9	18.2	18.0	18.1	18.2	18.0	18.1	20.4	20.2	20.3
20	18.2	18.0	18.1	18.2	18.0	18.1	18.2	18.0	18.2	20.4	20.2	20.3
21	18.2	18.0	18.2	18.0	18.0	18.0	18.2	18.0	18.1	20.4	20.2	20.3
22	18.5	18.1	18.3	18.3	18.1	18.2	18.2	18.0	18.1	20.2	20.0	20.2
23	18.5	17.8	18.2	18.3	18.1	18.1	21.7	20.6	21.4	20.2	20.0	20.1
24	18.0	17.8	18.0	18.1	18.1	18.1	21.7	21.4	21.6	20.2	20.0	20.2
25	17.8	17.6	17.7	18.2	18.0	18.1	21.7	21.5	21.6	20.2	20.0	20.2
26	17.6	17.4	17.5	18.4	18.0	18.2	21.7	21.4	21.6	20.2	20.0	20.2
27	17.8	18.0	17.6	18.4	18.2	18.4	21.5	21.4	21.4	20.2	20.0	20.1
28	18.4	18.0	18.3	18.5	18.2	18.4	21.4	21.2	21.2	20.2	20.0	20.1
29	18.6	18.4	18.5	18.5	18.3	18.4	21.4	21.2	21.2	20.2	20.0	20.1
30	19.0	18.8	18.9	18.5	18.3	18.4	21.2	21.0	21.0	20.4	20.0	20.2
31	---	---	---	18.6	18.3	18.4	21.2	20.8	21.0	---	---	---
MONTH	19.0	15.9	17.5	19.2	18.0	18.4	21.7	18.0	19.1	21.0	20.0	20.4
YEAR	21.7	10.4	16.9									

PUMP NUMBER 2

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.4	11.1	11.3	14.5	14.3	14.4
2	---	---	---	---	---	---	11.2	10.9	11.1	15.5	14.1	14.7
3	---	---	---	---	---	---	12.0	10.7	11.2	16.1	14.7	15.3
4	---	---	---	---	---	---	11.1	10.5	10.8	15.5	14.9	15.2
5	---	---	---	---	---	---	11.6	10.9	11.1	15.7	14.9	15.4
6	---	---	---	---	---	---	12.6	10.7	11.5	15.9	14.9	15.3
7	---	---	---	---	---	---	11.4	11.1	11.2	15.9	14.9	15.5
8	---	---	---	---	---	---	11.4	11.2	11.3	15.9	15.3	15.7
9	---	---	---	---	---	---	---	---	---	15.9	15.3	15.6
10	---	---	---	---	---	---	11.3	11.0	11.2	16.8	15.5	16.1
11	---	---	---	---	---	---	11.7	11.3	11.5	15.9	15.5	15.7
12	---	---	---	---	---	---	12.3	11.5	11.9	16.3	15.7	15.9
13	---	---	---	---	---	---	12.9	11.7	12.2	15.9	15.5	15.7
14	---	---	---	---	---	---	13.1	12.3	12.7	16.0	15.7	15.8
15	---	---	---	---	---	---	12.7	12.1	12.4	16.4	16.0	16.2
16	---	---	---	---	---	---	12.5	12.3	12.4	16.7	16.0	16.4
17	---	---	---	---	---	---	12.9	12.5	12.6	17.3	16.7	17.1
18	---	---	---	---	---	---	12.9	12.7	12.8	17.1	16.7	16.9
19	---	---	---	---	---	---	13.1	12.7	13.0	16.9	16.2	16.5
20	---	---	---	---	---	---	13.8	13.0	13.5	16.4	16.2	16.4
21	---	---	---	---	---	---	14.2	13.4	13.7	17.1	16.4	16.6
22	---	---	---	14.1	12.9	13.6	15.2	13.4	14.0	---	---	---
23	---	---	---	13.9	12.1	12.9	14.6	13.8	14.1	16.8	16.5	16.6
24	---	---	---	14.1	13.1	13.6	15.2	14.0	14.5	17.0	16.5	16.8
25	---	---	---	13.9	12.7	13.5	15.4	14.1	14.8	17.4	16.8	16.9
26	---	---	---	13.9	12.9	13.4	15.1	14.1	14.4	17.2	16.8	16.9
27	---	---	---	13.5	11.5	12.7	14.5	13.9	14.2	17.0	16.6	16.9
28	---	---	---	12.2	11.6	11.8	14.3	14.1	14.2	17.4	17.0	17.1
29	---	---	---	11.8	11.4	11.6	14.5	14.3	14.4	17.6	16.8	17.2
30	---	---	---	11.4	11.2	11.3	14.5	14.1	14.3	17.6	17.0	17.3
31	---	---	---	11.4	11.1	11.2	---	---	---	17.4	16.8	17.1
MONTH	---	---	---	14.1	11.1	12.6	15.4	10.5	12.7	17.6	14.1	16.2

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	16.8	16.8	21.5	21.2	21.3	24.3	23.7	23.9	23.1	22.9	23.0
2	17.6	16.6	17.1	22.3	20.6	21.3	24.1	23.5	23.8	23.1	22.7	23.0
3	17.6	17.2	17.4	21.4	20.8	21.3	24.5	23.3	24.0	23.3	22.9	23.1
4	17.4	17.2	17.3	21.7	20.4	21.2	24.8	23.6	24.0	23.3	22.7	23.1
5	17.6	17.4	17.6	21.9	21.0	21.4	24.8	23.5	24.1	23.1	22.9	23.0
6	17.6	17.2	17.5	22.1	20.6	21.5	24.1	23.5	23.8	23.1	22.9	23.1
7	17.6	17.0	17.3	21.9	20.8	21.5	23.9	23.5	23.7	23.3	22.7	23.0
8	17.4	17.0	17.3	22.1	21.4	21.6	24.3	23.7	23.9	23.1	22.7	22.9
9	17.6	17.4	17.6	22.9	21.0	21.9	24.3	23.1	23.9	23.3	22.7	23.0
10	18.0	17.8	17.9	22.5	20.6	21.6	24.3	23.3	24.0	23.1	22.7	22.8
11	18.9	17.8	18.2	21.9	21.2	21.5	24.5	23.5	24.0	23.1	22.5	22.9
12	19.1	18.1	18.7	21.9	21.4	21.6	24.7	23.9	24.1	23.1	22.7	22.8
13	19.3	18.7	19.1	22.1	21.2	21.6	24.7	23.9	24.2	23.1	22.7	22.9
14	19.6	19.0	19.3	23.5	20.8	21.8	24.9	23.5	24.1	22.9	22.7	22.8
15	19.0	18.6	18.7	22.7	21.0	21.7	24.7	23.9	24.3	23.1	22.7	22.8
16	19.0	18.4	18.7	22.5	21.4	21.8	24.1	23.9	24.1	22.9	22.5	22.7
17	19.3	18.7	19.0	22.9	20.8	22.0	24.7	23.9	24.1	23.1	22.5	22.8
18	19.3	18.9	19.1	22.3	21.0	21.8	24.3	23.7	24.1	23.3	22.5	23.0
19	19.6	19.1	19.2	23.1	21.9	22.5	24.5	23.9	24.3	23.3	22.5	22.9
20	19.6	19.2	19.4	24.5	22.3	23.0	24.5	23.7	24.2	23.1	22.5	22.8
21	19.8	19.2	19.5	24.3	22.5	23.2	24.9	23.3	23.8	23.3	22.9	23.0
22	19.7	19.4	19.6	23.8	23.0	23.4	22.9	22.3	22.6	23.3	22.5	22.9
23	19.9	19.2	19.5	24.2	22.8	23.5	22.5	22.1	22.3	23.1	22.5	22.8
24	19.4	18.8	19.2	23.8	22.6	23.2	22.9	22.3	22.7	22.9	22.7	22.7
25	19.8	19.0	19.4	24.3	22.6	23.4	23.1	22.7	22.9	22.9	22.5	22.6
26	19.8	19.2	19.4	24.1	22.3	23.4	23.5	22.5	22.9	22.7	22.3	22.5
27	20.6	19.2	19.8	23.5	23.1	23.3	22.9	22.3	22.7	22.9	22.1	22.5
28	21.0	20.0	20.5	24.2	23.1	23.6	23.1	22.3	22.7	22.9	21.9	22.7
29	21.9	20.4	20.9	24.4	23.4	23.9	23.1	22.3	22.9	22.5	22.1	22.3
30	22.3	20.4	21.2	24.0	23.0	23.7	23.3	21.7	22.8	22.3	22.1	22.3
31	---	---	---	24.1	23.6	23.8	23.1	22.7	22.9	---	---	---
MONTH	22.3	16.6	18.7	24.5	20.4	22.3	24.9	21.7	23.6	23.3	21.9	22.8
YEAR	24.9	10.5	19.1									

PUMP NUMBER 3

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.4	11.1	11.3	17.6	16.3	16.9
2	---	---	---	---	---	---	12.2	11.2	11.4	17.6	16.4	17.0
3	---	---	---	---	---	---	12.2	11.2	11.6	17.6	16.6	17.0
4	---	---	---	---	---	---	11.4	11.1	11.2	17.8	16.8	17.3
5	---	---	---	---	---	---	13.2	11.2	12.0	17.4	17.2	17.3
6	---	---	---	---	---	---	13.4	12.2	12.7	18.4	16.4	17.4
7	---	---	---	---	---	---	12.6	11.6	11.9	19.0	17.4	18.2
8	---	---	---	---	---	---	11.8	11.7	11.8	17.2	16.3	17.0
9	---	---	---	---	---	---	---	---	---	18.8	16.4	17.5
10	---	---	---	---	---	---	13.9	11.9	13.2	18.0	16.4	17.2
11	---	---	---	---	---	---	13.7	13.1	13.4	19.8	16.6	18.2
12	---	---	---	---	---	---	14.9	13.5	13.8	18.2	16.8	17.6
13	---	---	---	---	---	---	16.5	12.7	14.2	19.0	17.2	18.1
14	---	---	---	---	---	---	13.5	12.9	13.2	18.7	17.9	18.2
15	---	---	---	---	---	---	13.5	12.7	13.2	19.5	17.1	18.2
16	---	---	---	---	---	---	13.9	12.7	13.4	19.3	17.9	18.6
17	---	---	---	---	---	---	14.1	13.1	13.5	20.3	18.5	19.4
18	---	---	---	---	---	---	14.3	13.5	13.7	20.3	18.7	19.6
19	---	---	---	---	---	---	14.5	13.6	14.1	19.9	17.7	19.2
20	---	---	---	---	---	---	15.0	14.2	14.7	19.9	19.1	19.5
21	---	---	---	---	---	---	16.0	14.8	15.1	19.7	18.1	19.2
22	---	---	---	14.1	11.1	13.0	16.6	15.2	15.6	---	---	---
23	---	---	---	13.7	12.1	12.9	16.0	15.2	15.8	20.0	19.0	19.4
24	---	---	---	13.9	13.1	13.6	18.9	15.4	16.7	19.8	19.2	19.5
25	---	---	---	13.9	12.7	13.5	17.4	15.7	16.4	20.2	18.6	19.6
26	---	---	---	13.7	12.7	13.2	18.8	15.9	17.0	20.4	18.8	19.8
27	---	---	---	13.5	11.7	12.7	18.8	15.7	17.0	20.6	19.2	19.7
28	---	---	---	12.2	11.6	12.0	17.0	16.4	16.7	20.4	19.2	19.8
29	---	---	---	11.8	11.6	11.7	17.4	16.1	16.6	20.6	19.2	19.7
30	---	---	---	11.6	11.2	11.4	17.6	16.3	16.8	20.8	19.4	20.2
31	---	---	---	11.6	11.2	11.4	---	---	---	20.6	20.0	20.3
MONTH	---	---	---	14.1	11.1	12.5	18.9	11.1	14.1	20.8	16.3	18.6

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994

PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	20.0	20.4	26.1	25.7	25.9	27.4	27.1	27.2	26.1	25.7	25.8
2	21.4	20.0	20.4	26.3	25.5	26.0	27.4	27.2	27.4	25.9	25.5	25.7
3	21.2	20.4	20.8	26.3	26.1	26.2	28.2	27.1	27.6	25.7	25.5	25.5
4	21.5	20.8	21.2	26.8	25.9	26.4	28.1	27.3	27.7	25.5	25.3	25.3
5	21.9	20.6	21.5	26.8	26.1	26.6	27.5	26.7	27.0	25.5	25.1	25.3
6	21.9	21.2	21.6	27.2	26.7	26.8	26.7	26.5	26.6	25.3	24.9	25.1
7	22.3	20.6	21.7	28.6	26.3	27.1	27.4	26.3	26.7	25.1	24.9	25.0
8	22.3	21.4	21.9	28.0	27.2	27.7	26.7	26.7	26.7	24.9	24.7	24.8
9	22.3	21.7	22.0	28.0	27.6	27.8	26.7	26.5	26.7	24.9	24.7	24.8
10	22.3	21.7	22.1	27.6	27.0	27.3	26.8	26.7	26.7	24.9	24.7	24.8
11	22.3	21.5	21.9	27.4	27.2	27.2	27.0	26.7	26.9	24.9	24.7	24.8
12	22.6	21.5	22.0	27.2	27.0	27.1	27.4	26.8	27.0	25.1	24.7	24.8
13	22.8	22.2	22.6	27.0	26.7	26.8	28.2	26.8	27.3	24.9	24.7	24.8
14	23.6	22.8	23.1	27.2	26.7	27.0	28.2	26.7	27.6	24.9	24.7	24.9
15	24.1	22.9	23.5	27.4	26.1	26.8	27.6	27.2	27.4	24.9	24.7	24.8
16	24.0	23.3	23.5	27.0	26.5	26.8	27.6	27.0	27.2	25.1	24.7	24.9
17	24.2	23.4	23.8	27.2	26.7	26.9	27.0	26.7	26.8	25.1	24.7	24.9
18	24.8	23.8	24.4	27.2	26.7	27.0	26.7	26.7	26.7	24.9	24.7	24.8
19	25.1	24.0	24.5	27.4	26.7	27.1	26.8	26.3	26.6	24.7	24.5	24.6
20	25.1	24.5	24.7	27.4	27.0	27.3	27.0	26.1	26.7	24.7	24.3	24.4
21	25.7	24.9	25.2	28.2	27.0	27.6	27.0	25.5	26.3	24.5	24.3	24.3
22	25.8	25.2	25.5	28.3	27.5	27.8	25.7	24.9	25.3	24.3	24.1	24.2
23	26.2	24.5	25.5	27.9	27.7	27.7	25.3	24.5	25.0	24.3	24.1	24.2
24	27.8	25.9	27.1	27.7	27.1	27.5	25.5	25.1	25.3	24.1	23.7	23.9
25	27.0	25.3	26.3	28.0	27.0	27.6	25.9	25.3	25.5	24.3	23.7	23.9
26	26.7	25.3	26.3	28.0	27.6	27.8	25.9	25.3	25.6	24.3	23.7	23.8
27	25.9	24.7	25.3	27.6	27.4	27.5	26.1	25.5	25.7	23.7	23.5	23.6
28	26.7	24.9	25.6	27.6	27.3	27.4	26.3	25.3	25.9	23.7	23.1	23.3
29	26.7	24.5	25.6	27.5	27.1	27.3	26.3	25.9	26.0	23.3	22.9	23.0
30	26.3	25.5	25.7	27.3	27.0	27.1	26.1	25.5	25.8	22.7	22.5	22.6
31	---	---	---	27.4	27.0	27.2	26.3	25.9	26.1	---	---	---
MONTH	27.8	20.0	23.5	28.6	25.5	27.1	28.2	24.5	26.5	26.1	22.5	24.6
YEAR	28.6	11.1	22.0									

PUMP NUMBER 4

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.1	10.9	11.0	20.4	18.8	19.8
2	---	---	---	---	---	---	11.1	10.7	10.8	20.2	18.6	19.0
3	---	---	---	---	---	---	12.4	11.1	11.7	18.8	18.0	18.5
4	---	---	---	---	---	---	11.6	11.2	11.4	18.0	17.8	17.9
5	---	---	---	---	---	---	13.2	11.2	12.1	18.8	17.6	18.1
6	---	---	---	---	---	---	13.4	12.0	12.8	18.8	17.6	18.3
7	---	---	---	---	---	---	12.8	11.6	12.0	19.0	18.0	18.5
8	---	---	---	---	---	---	12.1	11.6	11.8	18.6	17.8	18.2
9	---	---	---	---	---	---	---	---	---	19.4	17.4	18.5
10	---	---	---	---	---	---	---	---	---	20.2	17.2	18.7
11	---	---	---	---	---	---	---	---	---	20.6	18.0	19.4
12	---	---	---	---	---	---	---	---	---	20.6	18.6	19.5
13	---	---	---	---	---	---	---	---	---	21.2	18.6	19.9
14	---	---	---	---	---	---	---	---	---	21.8	19.6	20.8
15	---	---	---	---	---	---	---	---	---	21.5	20.7	21.2
16	---	---	---	---	---	---	---	---	---	22.0	20.5	21.1
17	---	---	---	---	---	---	---	---	---	22.0	20.5	20.8
18	---	---	---	---	---	---	---	---	---	22.6	20.1	21.1
19	---	---	---	---	---	---	---	---	---	20.9	19.7	20.1
20	---	---	---	---	---	---	16.2	15.2	15.7	21.3	19.3	20.2
21	---	---	---	---	---	---	17.3	15.4	16.4	21.8	19.3	20.2
22	---	---	---	10.4	10.0	10.2	17.7	16.0	17.2	---	---	---
23	---	---	---	11.0	10.2	10.6	19.7	16.9	17.4	23.7	20.6	21.6
24	---	---	---	11.1	10.6	10.7	19.5	17.3	18.6	24.1	21.6	22.8
25	---	---	---	11.0	10.6	10.7	21.2	18.3	19.9	23.7	22.7	23.1
26	---	---	---	11.0	10.8	10.9	21.4	19.0	20.3	22.7	21.9	22.1
27	---	---	---	11.1	10.8	10.9	21.0	19.0	20.2	22.1	20.8	21.4
28	---	---	---	11.6	11.4	11.4	23.9	19.8	21.6	23.1	20.4	21.7
29	---	---	---	11.2	11.1	11.2	23.1	19.6	21.4	23.3	21.0	22.0
30	---	---	---	11.4	11.1	11.2	22.5	20.8	21.6	23.9	21.5	22.8
31	---	---	---	11.2	11.1	11.1	---	---	---	25.1	22.5	23.6
MONTH	---	---	---	11.6	10.0	10.9	23.9	10.7	16.0	25.1	17.2	20.4

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.7	22.9	23.7	28.6	25.9	26.9	28.0	27.4	27.7	26.3	25.9	26.1
2	24.7	22.9	23.7	28.4	26.5	27.4	27.6	27.2	27.3	26.5	25.3	25.8
3	24.7	22.5	23.4	29.0	27.0	27.5	28.1	27.1	27.5	26.1	25.3	25.7
4	25.9	22.9	24.4	29.2	26.8	28.1	28.3	27.3	27.7	26.7	25.3	25.8
5	26.3	24.3	25.3	29.0	27.4	28.3	27.7	26.7	27.2	25.5	24.9	25.1
6	25.3	24.7	24.9	29.8	27.8	28.9	27.4	26.3	26.7	25.7	24.7	25.1
7	26.1	24.3	25.1	29.6	28.2	28.8	27.6	26.3	26.9	25.7	24.7	25.0
8	25.7	24.5	25.0	28.6	27.8	28.1	28.0	26.5	27.2	26.5	24.5	25.4
9	25.7	24.5	24.9	28.2	27.4	27.8	28.8	26.5	27.4	25.9	24.5	25.1
10	25.5	24.5	25.0	28.4	27.4	27.9	27.4	26.8	27.2	26.1	24.5	25.3
11	26.2	24.7	25.4	27.6	27.0	27.2	28.4	26.7	27.5	25.5	24.7	25.0
12	26.8	25.6	26.1	27.0	26.8	26.9	28.8	27.2	28.0	26.1	24.5	25.2
13	27.1	25.8	26.5	27.0	26.7	26.9	29.0	27.2	28.1	26.5	24.7	25.5
14	27.6	25.9	26.9	27.4	26.7	27.0	28.2	27.4	27.9	26.1	24.9	25.5
15	27.6	26.7	27.0	27.6	27.0	27.3	28.2	27.4	27.7	26.7	24.9	25.7
16	29.0	26.3	27.3	28.0	27.0	27.5	27.4	26.7	26.9	26.3	25.5	25.8
17	28.9	26.6	27.8	28.6	27.0	27.6	26.8	26.5	26.7	25.5	24.9	25.2
18	29.3	27.5	28.1	29.6	27.4	28.4	27.8	26.5	26.9	25.5	24.7	25.0
19	29.8	27.3	28.4	29.0	27.4	28.2	27.8	26.3	27.0	25.5	24.1	24.6
20	30.0	27.8	28.9	29.8	27.6	28.3	27.2	26.7	26.8	25.7	24.1	24.8
21	28.8	28.2	28.5	28.6	27.6	28.2	26.8	26.1	26.4	25.5	24.3	24.9
22	29.9	27.5	28.7	28.1	27.7	27.9	26.1	25.7	25.9	25.3	24.3	24.7
23	28.6	27.8	28.3	28.3	27.5	27.9	26.7	25.5	26.0	24.5	23.9	24.1
24	28.0	27.0	27.6	28.9	27.5	28.0	26.8	26.1	26.3	25.1	23.7	24.2
25	27.2	26.7	26.9	29.0	27.8	28.4	26.7	25.9	26.2	24.1	23.7	24.0
26	26.8	26.1	26.5	28.6	27.8	28.2	27.0	25.9	26.5	24.5	23.5	23.9
27	26.5	25.9	26.1	28.0	27.4	27.6	27.2	26.3	26.6	23.5	23.1	23.4
28	26.5	25.5	126	28.1	27.0	27.4	27.0	26.1	26.5	23.3	22.7	23.0
29	26.5	25.9	26.2	28.1	27.0	27.5	26.7	26.1	26.3	23.7	22.5	23.0
30	26.8	25.7	26.3	28.7	26.8	27.8	27.2	25.7	26.4	24.5	22.3	23.3
31	---	---	---	29.0	27.1	28.0	26.7	25.9	26.3	---	---	---
MONTH	30.0	22.5	29.6	29.8	25.9	27.8	29.0	25.5	27.0	26.7	22.3	24.8
YEAR	30.0	10.0	24.1									

OXYGEN DISSOLVED (MG/L), FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 1

	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	9.1	8.7	8.9
2	---	---	---	---	---	---	---	---	---	9.1	8.9	9.0
3	---	---	---	---	---	---	---	---	---	9.1	8.0	8.7
4	---	---	---	---	---	---	---	---	---	8.5	8.0	8.3
5	---	---	---	---	---	---	---	---	---	8.3	7.9	8.2
6	---	---	---	---	---	---	---	---	---	8.0	6.9	7.6
7	---	---	---	---	---	---	---	---	---	7.6	6.1	6.9
8	---	---	---	---	---	---	11.2	11.1	11.1	7.8	7.2	7.5
9	---	---	---	---	---	---	---	---	---	8.1	7.6	7.8
10	---	---	---	---	---	---	---	---	---	8.7	7.1	7.9
11	---	---	---	---	---	---	10.4	9.0	9.6	8.9	7.9	8.4
12	---	---	---	---	---	---	10.6	9.3	10.1	9.0	8.0	8.6
13	---	---	---	---	---	---	8.9	8.2	8.4	9.0	8.6	8.8
14	---	---	---	---	---	---	8.9	8.3	8.5	9.4	8.7	8.9
15	---	---	---	---	---	---	9.1	8.0	8.7	8.9	7.6	8.6
16	---	---	---	---	---	---	9.6	8.7	9.2	8.8	7.6	8.4
17	---	---	---	---	---	---	9.9	9.3	9.6	8.5	8.5	8.6
18	---	---	---	---	---	---	10.1	9.2	9.8	7.8	7.8	8.2
19	---	---	---	---	---	---	10.0	9.3	9.7	7.5	7.4	7.6
20	---	---	---	---	---	---	9.7	9.3	9.6	7.5	6.6	7.3
21	---	---	---	---	---	---	9.7	9.2	9.5	7.5	6.3	7.2
22	---	---	---	---	---	---	9.7	8.8	9.2	---	---	---
23	---	---	---	---	---	---	9.4	8.7	9.1	7.1	6.3	6.8
24	---	---	---	---	---	---	9.4	9.1	9.3	7.3	6.1	6.8
25	---	---	---	---	---	---	9.8	9.1	9.4	7.4	5.7	6.6
26	---	---	---	---	---	---	9.9	9.4	9.7	6.1	5.3	5.8
27	---	---	---	---	---	---	9.6	8.0	9.0	7.2	5.3	6.4
28	---	---	---	---	---	---	9.3	8.6	8.9	7.2	6.5	6.9
29	---	---	---	---	---	---	8.9	8.1	8.6	7.5	6.8	7.1
30	---	---	---	---	---	---	8.8	7.8	8.3	7.4	6.8	7.1
31	---	---	---	---	---	---	---	---	---	7.3	6.7	7.0
MONTH	---	---	---	---	---	---	11.2	7.8	9.3	9.4	5.3	7.7

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.7	4.9	6.2	3.5	3.0	3.3	5.1	4.8	4.9	1.5	1.1	1.3
2	7.1	4.9	6.1	2.9	2.4	2.6	5.3	4.9	5.1	1.2	.9	1.0
3	7.2	6.3	6.8	2.5	2.3	2.4	5.7	5.4	5.5	.9	.7	.8
4	7.1	6.5	6.8	2.8	2.5	2.7	5.9	5.6	5.8	1.0	.8	.9
5	7.1	6.5	6.8	3.0	2.8	2.9	5.9	1.2	3.5	1.0	.9	1.0
6	6.9	6.1	6.6	3.1	2.9	3.0	1.3	1.2	1.3	1.2	1.0	1.1
7	6.6	6.0	6.3	3.4	2.2	2.8	1.2	.9	1.1	1.2	1.1	1.2
8	6.6	5.7	6.2	2.5	2.4	2.4	.9	.6	.8	1.3	1.2	1.3
9	6.7	5.8	6.2	2.7	2.5	2.6	1.0	.8	.9	1.5	1.4	1.4
10	6.3	5.1	5.7	2.9	2.1	2.5	2.2	1.0	1.5	1.6	1.5	1.5
11	6.4	5.2	5.8	2.9	2.8	2.9	3.2	2.4	2.9	1.7	1.6	1.7
12	6.7	5.6	6.4	3.2	2.9	3.0	3.8	3.3	3.6	1.8	1.7	1.8
13	7.1	6.1	6.7	3.2	3.0	3.0	4.3	3.9	4.1	1.9	.4	1.2
14	7.0	6.5	6.7	3.3	3.0	3.2	4.7	4.2	4.4	.8	.5	.7
15	6.4	6.2	6.3	3.2	2.9	3.0	5.0	4.2	4.6	.9	.8	.8
16	6.3	6.0	6.1	3.6	3.1	3.3	5.2	1.8	3.5	1.2	1.0	1.1
17	6.2	5.8	6.0	3.8	3.5	3.7	1.9	1.5	1.8	1.4	1.2	1.2
18	6.3	6.0	6.2	3.9	3.8	3.8	1.5	1.4	1.5	1.6	1.3	1.4
19	6.1	5.7	6.0	4.1	3.5	3.8	2.0	1.5	1.7	1.7	1.6	1.6
20	6.1	5.7	5.9	4.1	1.7	3.1	2.3	2.0	2.2	1.9	1.7	1.8
21	6.0	5.5	5.8	2.1	1.9	2.0	2.4	2.1	2.3	2.0	1.9	2.0
22	5.6	5.3	5.4	2.3	1.9	2.0	2.8	2.5	2.6	2.2	2.1	2.2
23	5.1	3.0	4.2	2.5	2.1	2.3	---	---	---	2.4	2.3	2.4
24	3.6	2.5	3.2	2.7	2.5	2.6	---	---	---	2.6	2.4	2.5
25	3.3	2.5	2.9	3.0	2.8	2.9	---	---	---	2.9	2.7	2.8
26	3.3	2.2	2.9	3.2	3.0	3.1	---	---	---	3.1	2.9	3.0
27	3.3	2.1	2.7	3.6	3.2	3.4	---	---	---	3.2	.3	1.7
28	4.2	3.6	3.8	3.9	3.6	3.8	---	---	---	.6	.5	.5
29	3.9	2.9	3.6	4.1	4.0	4.0	---	---	---	.7	.5	.6
30	3.6	3.3	3.4	4.5	4.1	4.4	---	---	---	.9	.7	.8
31	---	---	---	4.7	4.4	4.6	2.3	1.7	2.0	---	---	---
MONTH	7.2	2.1	5.5	4.7	1.7	3.1	5.9	.6	2.9	3.2	.3	1.4
YEAR	11.2	.3	4.8									

PUMP NUMBER 2

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	9.3	9.1	9.2
2	---	---	---	---	---	---	---	---	---	9.4	8.9	9.2
3	---	---	---	---	---	---	---	---	---	9.4	8.2	9.0
4	---	---	---	---	---	---	---	---	---	8.8	8.4	8.6
5	---	---	---	---	---	---	---	---	---	8.8	8.5	8.6
6	---	---	---	---	---	---	---	---	---	8.3	7.5	7.9
7	---	---	---	---	---	---	11.1	10.9	11.0	8.2	6.6	7.4
8	---	---	---	---	---	---	11.2	10.9	11.0	7.9	7.6	7.8
9	---	---	---	---	---	---	---	---	---	8.1	7.8	8.0
10	---	---	---	---	---	---	---	---	---	8.5	7.3	8.1
11	---	---	---	---	---	---	10.4	9.4	9.8	8.9	8.0	8.6
12	---	---	---	---	---	---	10.6	9.1	10.2	8.9	8.1	8.7
13	---	---	---	---	---	---	9.1	8.2	8.7	9.1	8.9	9.0
14	---	---	---	---	---	---	9.0	8.4	8.7	9.3	8.6	9.0
15	---	---	---	---	---	---	9.3	8.4	8.8	9.3	7.7	8.6
16	---	---	---	---	---	---	9.2	8.7	9.0	9.1	8.2	8.6
17	---	---	---	---	---	---	9.6	9.1	9.5	9.2	8.9	9.0
18	---	---	---	---	---	---	9.9	9.6	9.8	8.8	8.3	8.5
19	---	---	---	---	---	---	9.9	9.6	9.8	8.5	8.2	8.2
20	---	---	---	---	---	---	9.9	9.4	9.6	8.3	7.2	7.9
21	---	---	---	---	---	---	9.7	9.2	9.5	8.5	6.8	7.9
22	---	---	---	---	---	---	9.5	8.6	9.2	---	---	---
23	---	---	---	---	---	---	9.5	8.4	9.1	7.9	6.8	7.7
24	---	---	---	---	---	---	9.4	9.0	9.2	7.9	6.7	7.5
25	---	---	---	---	---	---	9.8	8.7	9.4	7.9	6.7	7.4
26	---	---	---	---	---	---	9.9	9.6	9.8	8.4	6.4	6.9
27	---	---	---	---	---	---	9.7	8.4	9.3	8.0	6.5	7.5
28	---	---	---	---	---	---	9.4	8.8	9.2	8.2	7.7	7.9
29	---	---	---	---	---	---	9.2	8.4	8.8	8.3	7.6	8.0
30	---	---	---	---	---	---	9.4	8.3	8.7	8.5	7.5	8.1
31	---	---	---	---	---	---	---	---	---	8.5	7.9	8.2
MONTH	---	---	---	---	---	---	11.2	8.2	9.5	9.4	6.4	8.2

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.9	6.3	7.3	6.1	5.3	5.7	4.7	4.5	4.6	5.1	4.7	5.0
2	8.3	6.4	7.6	5.6	4.2	5.1	4.9	4.5	4.8	5.1	4.5	4.8
3	8.3	7.3	7.9	5.3	4.8	5.1	5.2	4.9	5.1	4.9	3.5	4.3
4	8.3	7.8	8.1	5.7	4.4	5.2	5.5	5.2	5.3	4.5	3.9	4.3
5	8.4	7.5	8.1	5.5	5.0	5.3	5.3	1.3	3.3	4.2	3.7	3.9
6	8.3	7.9	8.1	5.7	4.5	5.4	1.8	1.5	1.6	3.8	3.5	3.6
7	8.1	7.3	7.7	5.6	4.7	5.3	1.7	1.3	1.5	3.8	3.0	3.4
8	8.2	7.2	7.7	5.7	4.9	5.1	1.7	.7	1.0	3.2	2.6	2.9
9	7.8	7.3	7.6	6.0	4.5	5.3	1.0	.8	.9	3.4	2.1	2.8
10	8.2	6.4	7.2	5.0	3.3	4.6	2.2	1.3	1.7	3.7	2.3	3.0
11	7.3	6.3	6.9	5.2	4.4	4.6	3.0	2.4	2.8	3.2	2.1	2.8
12	7.8	6.7	7.4	4.8	4.5	4.7	3.8	3.1	3.3	3.0	2.2	2.5
13	8.3	7.6	8.0	4.9	4.2	4.6	4.3	3.5	3.7	2.3	1.5	1.9
14	8.4	7.9	8.2	5.0	4.0	4.4	4.1	3.7	4.0	1.6	.5	1.1
15	8.2	7.7	7.9	5.0	3.5	4.3	4.5	3.6	4.2	2.0	.5	1.3
16	8.3	7.6	7.9	4.9	3.9	4.4	4.5	1.7	2.8	2.0	1.0	1.5
17	7.8	7.6	7.7	5.1	3.7	4.6	1.8	1.1	1.6	2.8	1.3	1.9
18	7.9	7.6	7.8	4.7	4.0	4.4	1.4	1.1	1.2	3.4	1.4	2.2
19	7.7	7.6	7.6	4.9	4.0	4.6	3.6	1.5	2.4	2.7	1.5	2.1
20	7.7	7.2	7.5	4.8	2.9	3.9	3.5	2.7	3.1	2.5	1.9	2.1
21	7.6	7.3	7.4	3.6	2.9	3.4	3.4	2.7	3.1	3.2	2.3	2.9
22	7.3	6.9	7.1	3.5	2.7	3.2	---	---	---	3.9	2.1	2.9
23	6.9	5.9	6.4	3.8	2.8	3.4	---	---	---	3.2	2.4	2.9
24	6.2	4.9	5.6	3.7	2.7	3.3	---	---	---	2.9	2.7	2.8
25	6.4	5.3	5.8	4.1	3.0	3.4	---	---	---	3.1	2.7	2.9
26	6.6	5.3	6.0	4.0	3.3	3.5	---	---	---	3.2	2.9	3.0
27	7.0	4.9	6.0	3.8	3.4	3.6	---	---	---	4.0	.3	1.6
28	7.5	6.2	6.7	4.1	3.8	3.9	---	---	---	5.0	.8	3.2
29	6.9	6.0	6.4	4.4	4.0	4.1	---	---	---	4.8	.7	2.7
30	6.9	5.4	6.2	4.4	4.1	4.2	---	---	---	5.0	2.1	4.3
31	---	---	---	4.6	4.3	4.5	5.4	5.1	5.2	---	---	---
MONTH	8.4	4.9	7.3	6.1	2.7	4.4	5.5	.7	3.1	5.1	.3	2.9
YEAR	11.2	.3	5.8									

PUMP NUMBER 3

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	8.8	8.1	8.5
2	---	---	---	---	---	---	---	---	---	8.8	8.3	8.6
3	---	---	---	---	---	---	---	---	---	8.6	7.8	8.2
4	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
5	---	---	---	---	---	---	---	---	---	8.3	8.1	8.2
6	---	---	---	---	---	---	---	---	---	8.5	7.2	7.8
7	---	---	---	---	---	---	---	---	---	8.2	7.3	7.7
8	---	---	---	---	---	---	11.3	10.6	11.0	7.8	7.6	7.7
9	---	---	---	---	---	---	---	---	---	8.1	7.7	7.9
10	---	---	---	---	---	---	10.6	9.5	10.0	8.8	7.8	8.2
11	---	---	---	---	---	---	10.2	8.8	9.3	8.9	7.8	8.6
12	---	---	---	---	---	---	10.1	8.4	9.4	8.9	8.5	8.6
13	---	---	---	---	---	---	8.9	7.8	8.4	9.1	8.8	8.9
14	---	---	---	---	---	---	8.8	8.1	8.4	9.1	8.9	9.0
15	---	---	---	---	---	---	8.8	8.0	8.5	10.0	7.6	8.7
16	---	---	---	---	---	---	9.2	8.3	8.9	9.3	8.3	8.8
17	---	---	---	---	---	---	9.3	9.2	9.3	9.2	8.6	9.0
18	---	---	---	---	---	---	9.8	9.0	9.5	8.7	8.0	8.4
19	---	---	---	---	---	---	9.7	9.0	9.4	8.5	8.2	8.4
20	---	---	---	---	---	---	9.3	9.0	9.2	8.4	7.6	8.2
21	---	---	---	---	---	---	9.2	8.6	9.0	8.7	7.4	8.3
22	---	---	---	---	---	---	9.1	8.3	8.6	---	---	---
23	---	---	---	---	---	---	9.1	8.1	8.6	8.5	7.1	8.0
24	---	---	---	---	---	---	9.3	8.1	8.7	8.4	7.1	7.9
25	---	---	---	---	---	---	9.6	8.6	9.1	8.5	7.1	7.9
26	---	---	---	---	---	---	9.3	8.8	9.1	8.4	6.5	7.4
27	---	---	---	---	---	---	9.0	8.1	8.6	8.7	7.3	8.1
28	---	---	---	---	---	---	8.7	8.2	8.5	9.2	8.0	8.5
29	---	---	---	---	---	---	8.6	7.3	8.0	8.7	8.0	8.4
30	---	---	---	---	---	---	8.7	7.5	8.0	9.2	8.6	8.8
31	---	---	---	---	---	---	---	---	---	8.9	8.5	8.7
MONTH	---	---	---	---	---	---	11.3	7.3	9.0	10.0	6.5	8.3

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.9	7.6	8.3	7.3	7.0	7.1	6.4	6.2	6.3	7.3	6.2	6.7
2	9.0	7.8	8.5	8.1	6.6	7.0	6.5	6.1	6.3	7.4	7.1	7.2
3	9.1	8.2	8.8	7.2	6.7	7.0	6.6	6.4	6.5	7.6	7.1	7.4
4	9.2	8.6	9.0	6.9	6.6	6.8	6.9	6.6	6.8	7.4	7.1	7.2
5	9.2	8.3	8.7	7.4	6.6	6.8	6.8	5.9	6.4	7.2	7.1	7.2
6	9.4	8.5	8.8	7.6	6.5	7.0	6.1	5.6	5.9	6.9	6.7	6.8
7	9.2	8.3	8.8	7.8	7.0	7.4	6.1	5.4	5.8	7.1	6.8	7.0
8	9.7	8.3	8.9	7.9	7.7	7.8	5.9	4.4	5.2	7.1	6.8	7.0
9	9.3	8.5	8.8	7.9	7.5	7.8	5.0	4.0	4.5	7.4	7.0	7.2
10	9.3	8.3	8.8	8.2	7.6	7.8	6.2	5.3	5.7	7.6	6.7	7.2
11	9.7	8.5	9.2	8.0	7.5	7.8	6.7	6.2	6.4	7.7	7.2	7.4
12	9.9	8.7	9.3	8.0	7.7	7.8	6.8	6.4	6.5	7.6	7.3	7.4
13	10.1	9.1	9.7	8.0	7.5	7.7	6.8	6.5	6.6	7.3	6.7	7.1
14	10.0	9.0	9.6	7.7	7.3	7.6	6.8	6.0	6.4	7.0	6.6	6.8
15	9.7	9.0	9.4	7.8	6.8	7.2	7.0	6.2	6.6	7.2	5.9	6.7
16	9.7	9.2	9.4	7.7	7.1	7.3	7.0	6.3	6.6	7.4	6.9	7.1
17	9.4	9.0	9.3	8.0	7.1	7.4	6.1	4.9	5.4	7.2	7.0	7.1
18	9.1	8.7	9.0	7.3	6.9	7.2	4.4	4.3	4.4	7.6	6.3	7.1
19	9.0	8.3	8.7	7.3	6.6	7.0	5.3	3.4	4.4	7.2	6.7	6.9
20	8.9	8.4	8.6	7.2	6.7	7.0	5.2	3.1	4.6	7.2	6.7	6.8
21	8.7	8.1	8.4	7.4	6.1	7.0	4.9	4.2	4.5	7.1	6.4	6.7
22	8.4	8.1	8.3	7.2	6.7	7.0	---	---	---	6.8	6.4	6.6
23	8.8	7.7	8.1	7.2	6.8	7.0	---	---	---	6.8	6.5	6.6
24	7.7	6.8	7.3	7.2	6.6	6.9	---	---	---	6.6	6.0	6.2
25	8.7	7.3	7.8	7.3	6.3	6.9	---	---	---	6.9	6.1	6.4
26	8.6	7.3	7.8	7.0	6.6	6.8	---	---	---	6.5	5.6	6.2
27	8.6	7.3	8.0	6.4	6.1	6.3	---	---	---	6.4	5.3	5.8
28	8.4	7.4	8.0	6.5	6.2	6.4	---	---	---	6.7	4.6	5.7
29	7.7	6.9	7.5	6.4	6.2	6.2	---	---	---	6.2	4.7	5.4
30	7.5	6.9	7.1	6.4	6.3	6.3	---	---	---	6.1	4.8	5.4
31	---	---	---	6.5	6.1	6.3	7.7	7.2	7.4	---	---	---
MONTH	10.1	6.8	8.6	8.2	6.1	7.1	7.7	3.1	5.9	7.7	4.6	6.7
YEAR	11.3	3.1	7.6									

PUMP NUMBER 4

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	8.3	8.0	8.2
2	---	---	---	---	---	---	---	---	---	8.7	8.0	8.4
3	---	---	---	---	---	---	---	---	---	8.7	8.0	8.4
4	---	---	---	---	---	---	---	---	---	8.7	8.0	8.4
5	---	---	---	---	---	---	---	---	---	8.9	8.5	8.7
6	---	---	---	---	---	---	---	---	---	8.5	7.7	8.0
7	---	---	---	---	---	---	---	---	---	8.2	7.1	7.6
8	---	---	---	---	---	---	---	---	---	8.3	8.0	8.1
9	---	---	---	---	---	---	---	---	---	8.1	7.8	8.0
10	---	---	---	---	---	---	---	---	---	8.9	7.8	8.4
11	---	---	---	---	---	---	---	---	---	8.9	8.5	8.6
12	---	---	---	---	---	---	---	---	---	9.1	8.2	8.7
13	---	---	---	---	---	---	---	---	---	9.3	8.8	9.0
14	---	---	---	---	---	---	---	---	---	8.9	8.8	8.8
15	---	---	---	---	---	---	---	---	---	9.3	7.8	8.5
16	---	---	---	---	---	---	---	---	---	8.8	8.2	8.5
17	---	---	---	---	---	---	---	---	---	8.8	8.5	8.7
18	---	---	---	---	---	---	---	---	---	8.7	8.0	8.2
19	---	---	---	---	---	---	9.2	8.7	9.0	8.5	8.2	8.4
20	---	---	---	---	---	---	9.1	8.7	9.0	8.5	8.0	8.2
21	---	---	---	---	---	---	8.8	8.4	8.6	8.6	7.6	8.3
22	---	---	---	---	---	---	8.7	8.2	8.4	---	---	---
23	---	---	---	---	---	---	8.8	8.0	8.4	8.5	7.6	8.1
24	---	---	---	---	---	---	8.7	8.4	8.6	8.2	7.5	7.9
25	---	---	---	---	---	---	8.9	8.4	8.6	8.2	7.1	7.6
26	---	---	---	---	---	---	8.7	8.5	8.6	7.8	7.3	7.5
27	---	---	---	---	---	---	8.5	7.4	8.1	9.0	7.6	8.3
28	---	---	---	---	---	---	8.0	7.7	7.8	8.8	8.4	8.7
29	---	---	---	---	---	---	8.0	7.4	7.6	9.0	8.7	8.8
30	---	---	---	---	---	---	8.0	7.2	7.6	9.0	8.6	8.8
31	---	---	---	---	---	---	---	---	---	9.7	8.4	8.8
MONTH	---	---	---	---	---	---	9.2	7.2	8.4	9.7	7.1	8.4

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), FOR THE PERIOD FEBRUARY 1994 TO SEPTEMBER 1994
PUMP NUMBER 4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.3	7.7	8.5	8.1	7.0	7.2	6.4	6.2	6.3	7.8	7.5	7.6
2	9.1	7.6	8.6	6.9	6.8	6.9	6.6	6.1	6.3	7.7	7.3	7.5
3	9.3	8.4	8.8	7.3	6.6	7.0	6.7	6.5	6.6	7.7	7.3	7.5
4	9.5	8.4	8.8	6.9	6.6	6.8	7.0	6.9	7.0	7.5	7.3	7.4
5	8.9	8.1	8.5	7.2	6.5	6.8	7.1	6.6	6.9	7.5	7.2	7.4
6	8.9	7.9	8.4	7.0	6.6	6.8	6.5	6.2	6.3	7.3	6.8	7.1
7	8.5	8.0	8.2	8.0	6.8	7.6	6.3	6.1	6.2	7.4	7.0	7.2
8	8.6	7.9	8.4	8.1	7.8	7.9	5.9	4.8	5.3	7.2	6.9	7.1
9	8.5	8.0	8.3	8.0	7.6	7.8	5.5	4.4	4.8	7.8	7.2	7.4
10	8.1	7.4	7.8	8.0	7.6	7.8	6.8	5.2	6.0	7.6	7.2	7.5
11	8.0	7.5	7.8	8.1	7.9	8.0	6.5	6.4	6.4	8.2	7.4	7.8
12	8.0	7.5	7.8	8.1	7.7	8.0	6.7	6.4	6.6	7.7	7.5	7.6
13	8.3	7.7	8.0	7.9	7.8	7.8	6.7	6.5	6.6	7.5	6.8	7.1
14	8.3	8.1	8.2	7.8	7.6	7.7	6.8	6.3	6.6	7.1	7.0	7.1
15	8.3	7.8	8.1	7.7	7.4	7.6	7.3	6.4	6.9	7.3	7.0	7.1
16	8.3	7.9	8.2	7.6	7.2	7.4	7.3	6.5	6.8	7.8	7.2	7.4
17	8.3	7.7	8.0	7.8	7.4	7.6	6.2	5.0	5.6	7.7	7.2	7.4
18	7.9	7.7	7.8	7.6	6.9	7.4	5.1	4.5	4.7	8.1	7.5	7.7
19	7.7	7.2	7.5	7.8	7.1	7.4	5.3	4.5	4.9	7.5	7.0	7.2
20	7.7	7.3	7.4	7.9	6.9	7.3	5.3	4.9	5.2	7.3	6.9	7.0
21	7.7	7.3	7.4	7.4	6.7	7.2	5.2	4.6	4.9	7.2	7.1	7.1
22	7.7	7.0	7.3	7.3	6.8	7.1	---	---	---	7.2	7.0	7.1
23	7.5	6.7	7.1	7.1	7.0	7.1	---	---	---	7.1	7.0	7.1
24	7.4	6.8	7.1	7.1	6.8	6.9	---	---	---	6.9	6.3	6.6
25	7.8	7.2	7.5	6.9	6.7	6.8	---	---	---	7.1	6.7	6.8
26	7.8	7.3	7.6	6.9	6.7	6.8	---	---	---	6.9	6.5	6.7
27	7.8	7.0	7.5	6.8	6.5	6.7	---	---	---	6.6	5.8	6.4
28	7.8	7.5	7.7	6.7	6.5	6.6	---	---	---	6.1	5.3	6.1
29	7.9	7.0	7.4	6.5	6.3	6.4	---	---	---	6.0	5.2	6.0
30	7.5	7.0	7.2	6.5	6.4	6.4	---	---	---	5.9	5.1	5.9
31	---	---	---	6.4	6.2	6.3	7.5	7.4	7.4	---	---	---
MONTH	9.5	6.7	7.9	8.1	6.2	7.2	7.5	4.4	6.1	8.2	5.1	7.1
YEAR	9.7	4.4	7.5									

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY

LOCATION.--Lat 36°45'08", long 83°15'27", Harlan County, Hydrologic Unit 05130101, on left bank 150 ft downstream from State Highway 987 bridge, 0.3 mi downstream from Martins Fork Dam, 0.7 mi downstream from Crane Creek, 1.0 mi north of Smith, and at mile 15.3.

DRAINAGE AREA.--55.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1968-71, and annual maximums, water years 1968-70. April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,259.00 ft above sea level. July 25, 1967 to Apr. 9, 1971, crest-stage gage at site 30 ft downstream at same datum, and Apr. 10, 1971 to Sept. 30, 1977, water-stage recorder at site 0.8 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	51	306	146	350	462	586	48	5.5	83	27	26
2	34	34	264	145	342	459	574	185	35	28	27	32
3	34	34	197	161	282	462	562	250	39	28	28	36
4	24	34	139	182	168	461	547	172	31	28	28	36
5	15	32	160	235	141	454	531	86	31	28	29	36
6	8.6	28	423	291	139	444	446	86	20	22	30	21
7	9.0	28	589	291	139	299	382	87	11	15	30	11
8	14	38	575	304	101	238	310	88	11	10	30	11
9	17	59	559	359	174	335	257	189	27	8.1	30	11
10	17	68	545	389	375	390	253	237	37	8.3	30	11
11	17	79	533	382	760	465	296	149	62	8.7	30	11
12	58	60	520	381	1280	493	351	80	106	9.0	20	11
13	86	36	444	380	1250	485	490	54	104	9.4	12	12
14	84	36	316	336	1040	475	548	45	57	18	13	12
15	45	53	310	301	676	462	581	46	11	25	14	12
16	19	87	304	295	515	449	658	274	11	24	16	13
17	19	111	255	293	503	354	605	426	13	25	70	15
18	18	122	184	254	489	237	538	156	17	20	107	14
19	71	147	182	210	476	193	529	17	17	46	67	29
20	100	164	142	205	458	190	519	17	17	78	33	37
21	80	160	68	130	445	167	507	17	16	90	36	36
22	48	84	68	48	436	152	372	17	16	48	161	18
23	45	66	68	48	469	151	285	17	16	5.6	258	5.5
24	46	125	68	49	501	150	281	42	16	6.0	253	8.4
25	45	59	68	67	507	150	223	59	15	7.0	209	12
26	27	47	67	173	496	148	82	59	16	19	100	13
27	17	28	67	310	484	178	27	58	100	26	33	13
28	18	27	68	363	474	452	47	58	147	26	33	14
29	51	231	69	366	---	606	55	58	146	26	52	15
30	69	359	112	364	---	605	48	58	145	26	63	44
31	67	---	147	358	---	597	---	26	---	26	42	---
TOTAL	1228.6	2487	7817	7816	13470	11163	11490	3161	1295.5	827.1	1911	575.9
MEAN	39.6	82.9	252	252	481	360	383	102	43.2	26.7	61.6	19.2
MAX	100	359	589	389	1280	606	658	426	147	90	258	44
MIN	8.6	27	67	48	101	148	27	17	5.5	5.6	12	5.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

MEAN	57.2	107	161	174	215	186	127	120	67.7	26.9	26.1	30.0
MAX	181	217	452	357	481	360	383	322	267	75.3	61.6	117
(WY)	1990	1987	1992	1982	1994	1994	1994	1983	1989	1990	1994	1989
MIN	20.2	28.9	16.4	10.1	81.6	33.5	12.4	36.7	12.5	9.34	9.43	9.49
(WY)	1981	1981	1981	1981	1988	1988	1986	1987	1988	1988	1988	1984

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1980 - 1994	
ANNUAL TOTAL	36471.6		63242.1			
ANNUAL MEAN	99.9		173		108	
HIGHEST ANNUAL MEAN					173	1994
LOWEST ANNUAL MEAN					58.0	1988
HIGHEST DAILY MEAN	589	Dec 7	1280	Feb 12	1310	Dec 4 1991
LOWEST DAILY MEAN	8.6	Oct 6	5.5	Jun 1	5.5	Jun 1 1994
ANNUAL SEVEN-DAY MINIMUM	11	Jul 27	9.8	Jul 7	6.7	Jul 16 1980
INSTANTANEOUS PEAK FLOW			1290	Feb 12	9000	Apr 4 1977
INSTANTANEOUS PEAK STAGE			13.84	Feb 12	24.24	Apr 4 1977
INSTANTANEOUS LOW FLOW					.10	Oct 30 1978
10 PERCENT EXCEEDS	266		484		294	
50 PERCENT EXCEEDS	49		68		49	
90 PERCENT EXCEEDS	11		14		11	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1971 to current year.
pH: December 1979 to current year.
WATER TEMPERATURE: October 1971 to current year.
DISSOLVED OXYGEN: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1971.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1972-77, 1980 to current year): Maximum, 561 microsiemens, Feb. 12, 1972; minimum, 49 microsiemens, Feb. 26, 1985.
pH: Maximum, 8.2 units, July 2, 1980; minimum, 6.2 units, Jan. 12, 1980, May 17, 1984, July 6, 1989.
WATER TEMPERATURE: Maximum, 32.5°C, Aug. 6, 1982; minimum, 0.0°C, on many days during winter months.
DISSOLVED OXYGEN: Maximum, 15.6 mg/L, Jan. 20, 21, 1985; minimum, 4.6 mg/L, Aug. 10, 1994.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 204 microsiemens, several days in Nov.; minimum, 74 microsiemens, Apr. 14.
pH: Maximum, 7.4 units, Oct. 18; minimum, 6.6 units, many days during the year.
WATER TEMPERATURE: Maximum, 30.4°C, Aug. 13; minimum, 3.7°C, Jan. 20-21.
DISSOLVED OXYGEN: Maximum, 13.6 mg/L, Nov. 26; minimum, 4.6 mg/L, Aug. 10.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	192	192	192	204	188	194	180	169	176	125	122	124
2	192	192	192	204	200	201	176	165	173	122	122	122
3	192	192	192	204	200	201	176	176	176	133	122	129
4	196	192	194	204	200	202	176	173	175	137	118	124
5	196	196	196	204	200	203	176	141	160	141	118	129
6	200	196	196	---	---	---	157	106	128	122	114	118
7	200	196	197	204	204	204	165	141	155	118	114	117
8	196	196	196	204	204	204	161	133	145	---	---	---
9	196	192	195	204	200	202	161	133	149	---	---	---
10	196	196	196	200	196	200	149	133	139	110	102	105
11	196	188	193	200	196	197	141	137	138	125	114	119
12	196	192	194	200	196	197	137	133	135	125	114	121
13	192	188	191	200	196	199	137	133	137	---	---	---
14	192	188	189	200	196	200	137	129	135	---	---	---
15	192	188	188	204	192	198	129	129	129	---	---	---
16	192	188	190	196	192	195	133	129	130	---	---	---
17	192	188	189	200	184	195	129	129	129	---	---	---
18	192	188	191	200	196	199	133	129	131	---	---	---
19	192	188	190	200	196	198	133	129	131	129	125	127
20	192	188	192	196	196	196	133	129	131	129	129	129
21	196	192	193	196	196	196	133	129	130	145	129	135
22	192	192	192	196	196	196	133	133	133	149	145	148
23	192	188	192	196	184	192	133	129	133	149	149	149
24	192	188	192	188	180	184	133	133	133	153	149	152
25	192	192	192	184	180	181	133	133	133	173	141	151
26	192	192	192	184	180	183	133	129	131	145	133	140
27	192	188	192	184	180	182	129	129	129	137	122	131
28	192	188	188	188	184	184	133	129	130	122	110	118
29	192	188	188	188	176	182	129	129	129	125	106	117
30	192	188	188	180	176	180	129	129	129	118	110	111
31	188	188	188	---	---	---	133	125	129	122	110	114
MONTH	200	188	192	---	---	---	180	106	140	---	---	---

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	110	106	109	106	94	100	112	96	102	122	118	120
2	110	98	106	98	94	97	104	96	100	118	114	117
3	102	94	97	98	94	96	100	88	95	118	114	115
4	110	98	104	98	94	95	100	92	95	118	114	116
5	110	106	107	106	94	102	96	91	92	118	114	114
6	114	106	111	102	94	96	99	91	93	114	114	114
7	118	106	112	110	90	99	95	91	93	118	114	115
8	118	102	109	106	94	105	95	91	91	122	114	117
9	118	94	105	102	98	99	---	---	---	118	114	114
10	129	114	118	114	90	105	99	91	96	122	110	115
11	137	94	119	114	90	93	95	91	94	110	98	104
12	98	82	93	114	90	99	98	90	94	106	98	103
13	102	82	94	114	86	102	106	78	92	102	102	102
14	102	86	97	118	90	108	82	74	77	110	98	101
15	106	90	99	118	98	107	98	82	92	118	110	113
16	106	98	103	106	94	99	106	90	99	137	114	127
17	102	94	98	106	94	103	105	86	100	137	129	134
18	106	94	100	102	98	102	101	93	99	129	118	124
19	102	90	97	110	102	107	109	93	100	122	118	118
20	106	94	100	110	110	110	101	97	99	118	118	118
21	102	94	99	114	110	110	101	97	99	118	114	117
22	102	94	97	118	110	113	105	96	101	118	118	118
23	102	90	95	118	110	113	104	100	103	122	118	118
24	102	90	95	118	114	116	108	100	103	125	122	124
25	102	86	97	118	113	116	110	104	107	125	125	125
26	118	90	105	124	117	120	110	106	108	125	118	123
27	106	98	101	128	117	123	118	110	113	122	118	120
28	106	94	101	124	89	102	118	114	115	118	114	117
29	---	---	---	113	93	99	122	118	119	118	114	118
30	---	---	---	121	105	111	122	122	122	122	118	118
31	---	---	---	120	96	107	---	---	---	122	118	120
MONTH	137	82	102	128	86	105	---	---	---	137	98	117
		JUNE			JULY			AUGUST			SEPTEMBER	
1	122	122	122	125	118	121	152	147	151	145	141	142
2	122	118	119	122	114	117	153	148	151	145	137	141
3	118	118	118	122	114	117	158	149	153	149	141	143
4	118	114	116	122	114	116	159	150	153	149	141	143
5	114	114	114	118	114	115	156	149	151	145	141	142
6	114	114	114	118	110	113	160	150	154	145	141	143
7	114	114	114	122	110	115	160	150	155	141	129	135
8	114	114	114	118	110	113	159	152	156	133	118	126
9	114	114	114	122	110	116	162	155	159	---	---	---
10	119	114	116	122	118	119	165	159	162	---	---	---
11	125	119	121	122	114	117	169	162	165	---	---	---
12	131	125	127	122	114	118	179	165	171	---	---	---
13	133	128	130	122	114	119	185	169	176	149	141	145
14	135	130	132	125	118	122	185	172	177	149	141	144
15	137	135	137	125	118	123	184	174	181	149	145	146
16	138	124	131	129	122	124	192	166	181	153	145	147
17	126	122	124	129	125	128	192	184	188	149	145	147
18	128	121	124	133	125	129	192	184	189	157	145	150
19	125	115	121	133	122	129	188	180	185	157	145	152
20	133	115	118	146	129	137	188	176	183	161	153	157
21	130	122	126	155	138	144	188	173	182	161	157	160
22	129	124	126	164	143	154	173	141	156	165	157	163
23	136	118	126	161	153	158	145	137	141	157	145	151
24	125	118	119	174	153	153	145	133	139	145	137	142
25	118	114	117	179	162	168	145	137	141	---	---	---
26	114	110	112	172	164	169	145	133	140	161	153	156
27	125	110	114	169	162	165	137	129	134	157	149	153
28	114	110	111	163	154	158	141	129	135	165	149	157
29	125	110	117	160	151	156	141	133	136	169	149	159
30	125	118	119	156	149	152	149	137	142	169	153	163
31	---	---	---	154	149	152	149	137	144	---	---	---
MONTH	138	110	120	179	110	133	192	129	159	---	---	---

03400800 MARTINS FORK NEAR SMITH, KY--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.9	6.9	7.4	7.3	7.0	7.0	6.8	6.7	6.9	6.8	6.6	6.6
2	6.9	6.9	7.3	7.3	7.0	7.0	6.8	6.7	6.8	6.8	6.6	6.6
3	6.9	6.9	7.3	7.3	7.0	6.9	6.9	6.8	6.9	6.8	6.7	6.6
4	7.3	6.9	7.3	7.3	7.0	6.9	7.0	6.9	6.9	6.8	6.7	6.7
5	7.2	7.0	7.3	7.3	7.0	7.0	7.0	6.9	6.9	6.9	6.7	6.7
6	7.1	7.0	---	---	7.0	6.8	7.0	7.0	6.9	6.9	6.7	6.7
7	7.1	7.0	7.3	7.3	6.9	6.8	7.1	7.0	6.9	6.9	6.7	6.7
8	7.1	7.0	7.3	7.3	6.9	6.8	7.0	7.0	6.9	6.9	6.7	6.7
9	7.2	7.1	7.3	7.3	6.8	6.8	7.0	7.0	7.1	6.9	6.7	6.6
10	7.1	7.1	7.3	7.2	6.8	6.8	6.9	6.9	7.0	6.9	6.7	6.7
11	7.1	7.1	7.2	7.2	6.8	6.8	7.0	6.9	6.9	6.8	6.7	6.7
12	7.1	7.1	7.3	7.2	6.9	6.8	7.0	7.0	6.9	6.8	6.7	6.6
13	7.1	7.0	7.3	7.2	6.9	6.8	---	---	6.8	6.7	6.7	6.6
14	7.1	7.0	7.3	7.2	6.9	6.8	---	---	6.7	6.7	6.7	6.6
15	7.1	7.0	7.3	7.2	6.8	6.8	---	---	6.7	6.7	6.6	6.6
16	7.1	7.0	7.3	7.1	6.8	6.8	---	---	6.7	6.7	6.7	6.6
17	7.1	7.1	7.3	7.2	6.9	6.8	---	---	6.7	6.7	6.7	6.6
18	7.4	7.1	7.3	7.1	6.9	6.8	---	---	6.7	6.6	6.7	6.7
19	7.2	7.2	7.2	7.1	6.8	6.8	6.9	6.9	6.8	6.7	6.7	6.7
20	7.3	7.1	7.2	7.2	6.8	6.8	6.9	6.8	6.7	6.6	6.7	6.7
21	7.3	7.1	7.2	7.1	6.9	6.8	6.9	6.9	6.6	6.6	6.7	6.7
22	7.3	7.2	7.1	7.0	6.9	6.9	6.9	6.9	6.6	6.6	6.7	6.7
23	7.3	7.2	7.1	7.0	6.8	6.8	6.9	6.9	6.7	6.6	6.7	6.7
24	7.3	7.2	7.0	7.0	6.8	6.8	7.0	6.9	6.7	6.6	6.7	6.7
25	7.3	7.2	7.0	6.9	6.9	6.8	7.0	6.9	6.7	6.6	6.7	6.7
26	7.2	7.1	7.0	6.9	6.9	6.9	6.9	6.9	6.6	6.6	6.7	6.7
27	7.2	7.1	6.9	6.9	6.9	6.8	7.0	6.9	6.6	6.6	6.7	6.7
28	7.3	7.1	7.0	6.9	6.9	6.8	6.9	6.9	6.7	6.6	6.7	6.6
29	7.3	7.2	7.1	7.0	6.8	6.8	6.9	6.9	---	---	6.7	6.6
30	7.3	7.3	7.1	7.1	6.9	6.8	6.9	6.9	---	---	6.8	6.7
31	7.3	7.3	---	---	6.8	6.8	6.9	6.9	---	---	6.7	6.7
MONTH	7.4	6.9	7.4	6.9	7.0	6.8	7.1	6.7	7.1	6.6	6.8	6.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.7	6.7	6.8	6.8	6.8	6.8	6.9	6.8	6.7	6.7	7.0	7.0
2	6.7	6.7	6.8	6.7	6.8	6.6	6.9	6.9	6.7	6.7	7.0	6.9
3	6.7	6.7	6.8	6.7	6.8	6.7	6.9	6.9	6.7	6.7	7.0	6.9
4	6.7	6.7	6.8	6.7	6.8	6.7	6.9	6.9	6.7	6.7	7.0	6.9
5	6.7	6.7	6.8	6.7	6.8	6.7	6.9	6.8	6.8	6.7	6.9	6.9
6	6.7	6.7	6.8	6.7	6.8	6.7	6.9	6.8	6.8	6.8	7.0	6.8
7	6.7	6.6	6.8	6.7	6.7	6.7	6.9	6.8	6.8	6.7	7.0	6.8
8	6.7	6.7	6.9	6.8	6.7	6.6	6.9	6.8	6.8	6.7	7.1	6.9
9	6.8	6.7	6.8	6.8	6.7	6.6	6.9	6.8	6.8	6.7	7.1	6.9
10	6.7	6.7	6.9	6.8	6.7	6.6	6.9	6.8	6.7	6.7	7.2	7.0
11	6.8	6.7	6.9	6.8	6.7	6.6	6.9	6.7	6.7	6.7	---	---
12	6.8	6.7	6.9	6.9	6.7	6.6	6.8	6.7	6.7	6.6	---	---
13	6.9	6.8	6.9	6.9	6.7	6.6	6.8	6.7	6.7	6.6	7.0	6.9
14	6.9	6.9	6.9	6.9	6.7	6.6	6.9	6.7	6.7	6.6	7.0	6.9
15	6.9	6.8	7.0	6.9	6.7	6.6	6.8	6.8	6.7	6.6	7.0	6.9
16	6.8	6.8	7.0	6.8	6.6	6.6	6.8	6.8	6.9	6.7	7.0	6.8
17	6.8	6.8	7.0	6.9	6.6	6.6	6.8	6.8	6.9	6.7	7.0	6.8
18	6.8	6.8	6.9	6.9	6.6	6.6	6.8	6.7	6.7	6.7	7.1	6.7
19	6.8	6.8	6.9	6.9	6.6	6.6	6.7	6.6	6.9	6.7	6.7	6.6
20	6.8	6.8	6.9	6.9	6.7	6.6	6.8	6.6	6.9	6.8	6.8	6.6
21	6.8	6.7	6.9	6.9	6.7	6.7	6.8	6.7	6.9	6.8	6.7	6.6
22	6.8	6.7	6.9	6.9	6.7	6.7	6.7	6.7	6.9	6.7	6.9	6.7
23	6.8	6.7	6.9	6.9	6.7	6.6	6.8	6.7	6.9	6.8	6.9	6.7
24	6.8	6.7	6.9	6.8	6.9	6.7	6.8	6.8	6.9	6.8	7.1	6.7
25	6.9	6.7	6.8	6.8	6.8	6.8	6.8	6.7	6.9	6.8	7.0	6.7
26	6.9	6.8	6.8	6.8	6.8	6.7	6.8	6.8	6.9	6.8	7.3	6.9
27	6.9	6.9	6.9	6.8	7.0	6.7	6.8	6.8	6.9	6.9	6.9	6.8
28	6.9	6.8	6.8	6.8	6.8	6.7	6.8	6.7	6.9	6.9	6.9	6.8
29	6.9	6.8	6.8	6.8	6.9	6.7	6.8	6.7	6.9	6.9	6.9	6.8
30	6.9	6.8	6.8	6.7	6.8	6.7	6.8	6.7	6.9	6.9	6.9	6.8
31	---	---	6.8	6.7	---	---	6.7	6.7	7.1	6.9	---	---
MONTH	6.9	6.6	7.0	6.7	7.0	6.6	6.9	6.6	7.1	6.6	7.3	6.6
YEAR	7.4	6.6										

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.7	19.8	21.3	14.9	13.7	14.5	10.0	9.6	9.8	4.7	4.5	4.5
2	22.5	21.2	21.8	13.9	13.3	13.6	9.8	9.4	9.6	4.9	4.5	4.6
3	22.1	20.8	21.4	13.7	13.1	13.6	9.8	9.6	9.6	5.1	4.5	4.8
4	21.7	20.6	21.0	13.7	13.1	13.4	10.0	9.6	9.8	5.1	4.3	4.6
5	22.1	20.2	20.9	13.9	13.5	13.6	10.4	9.6	10.1	5.1	4.3	4.6
6	23.1	20.0	21.1	---	---	---	10.6	10.0	10.2	5.1	4.5	4.7
7	23.1	20.2	21.1	---	---	---	10.2	10.0	10.1	5.5	5.1	5.2
8	21.9	20.2	20.7	12.7	11.3	11.9	10.4	10.0	10.2	4.9	4.7	4.8
9	21.9	20.2	20.9	12.1	11.5	11.7	10.2	9.8	10.1	---	---	---
10	20.6	19.2	19.9	11.9	11.1	11.5	10.2	10.0	10.1	4.9	4.7	4.8
11	20.4	19.0	19.5	11.1	11.0	11.0	10.0	9.2	9.5	5.5	4.9	5.1
12	19.4	18.8	19.1	11.9	11.0	11.4	9.2	8.6	8.8	5.5	5.3	5.4
13	19.8	18.8	19.1	12.1	11.3	11.8	8.6	8.4	8.5	---	---	---
14	19.8	18.6	19.1	13.5	11.7	12.6	8.6	8.2	8.5	---	---	---
15	20.6	18.6	19.4	13.3	12.1	12.8	8.4	8.2	8.2	---	---	---
16	20.6	19.4	19.9	12.5	12.1	12.3	8.2	8.0	8.2	---	---	---
17	20.0	19.4	19.7	13.7	12.1	12.7	8.8	8.2	8.5	---	---	---
18	20.6	19.4	19.9	12.7	11.9	12.3	8.8	8.6	8.7	---	---	---
19	19.8	19.0	19.4	12.9	12.1	12.5	8.6	8.0	8.3	---	---	---
20	20.0	19.0	19.4	12.9	12.1	12.4	8.0	7.8	7.9	4.3	3.7	4.0
21	19.6	18.8	19.1	12.3	11.7	12.0	8.0	7.2	7.6	4.9	3.7	4.2
22	18.8	17.6	18.3	14.7	11.5	12.7	7.4	7.0	7.3	5.3	3.9	4.5
23	18.8	17.4	17.9	14.9	11.1	12.5	7.0	6.6	6.9	4.9	4.7	4.8
24	18.8	17.2	17.8	11.5	11.0	11.2	6.8	6.4	6.7	5.1	4.9	4.9
25	18.6	17.2	17.8	11.7	10.8	11.2	6.6	5.5	6.2	5.1	4.9	4.9
26	18.6	17.2	17.7	12.5	10.8	11.6	5.5	5.1	5.3	4.9	4.7	4.8
27	18.2	16.8	17.3	12.3	11.1	11.6	5.8	5.1	5.3	4.7	4.5	4.6
28	17.6	15.9	16.7	11.5	10.8	11.1	5.5	5.5	5.5	5.1	4.7	4.8
29	16.6	15.5	16.2	11.0	10.6	10.7	5.7	5.5	5.6	5.1	4.7	4.9
30	16.4	15.5	16.1	10.6	10.0	10.2	4.9	4.5	4.7	5.5	5.1	5.3
31	15.5	14.7	15.2	---	---	---	5.1	4.5	4.8	5.5	5.3	5.3
MONTH	23.1	14.7	19.2	14.9	10.0	12.2	10.6	4.5	8.1	5.5	3.7	4.8
		FEBRUARY			MARCH			APRIL			MAY	
1	5.3	5.1	5.2	7.4	7.0	7.1	10.4	9.4	9.8	15.7	14.9	15.4
2	5.5	4.9	5.2	7.0	6.4	6.7	10.4	9.4	9.8	16.3	14.5	15.4
3	5.5	5.1	5.2	6.8	6.2	6.5	11.3	9.8	10.5	15.7	15.1	15.5
4	5.5	4.9	5.2	7.6	6.2	6.9	10.6	9.6	10.0	15.9	15.1	15.4
5	5.5	5.3	5.4	7.4	6.8	7.0	11.1	9.8	10.4	15.9	14.9	15.4
6	5.5	5.3	5.3	8.4	6.6	7.4	12.3	10.4	11.2	16.4	15.3	15.6
7	5.7	5.1	5.4	9.4	6.8	8.0	10.8	10.0	10.2	16.4	15.5	15.8
8	6.0	5.5	5.7	---	---	---	---	---	---	16.1	15.5	15.7
9	6.8	6.0	6.5	---	---	---	---	---	---	16.4	15.3	15.8
10	7.0	6.2	6.8	8.2	7.4	7.7	10.8	10.6	10.6	16.4	16.1	16.3
11	7.0	6.4	6.7	7.8	7.2	7.5	11.7	10.8	11.2	16.8	15.7	16.1
12	7.0	6.4	6.7	8.2	7.0	7.5	12.1	11.3	11.6	16.6	15.7	16.1
13	7.0	6.4	6.8	8.2	7.2	7.6	12.9	11.5	12.3	17.0	15.3	16.0
14	7.0	6.0	6.5	8.6	7.2	7.7	13.1	12.5	12.8	17.2	15.7	16.3
15	7.2	6.4	6.8	9.0	7.2	8.0	12.9	12.5	12.6	17.4	16.3	16.6
16	7.2	6.6	6.9	8.2	7.6	7.8	13.1	12.1	12.6	17.8	16.1	17.0
17	7.2	6.6	6.9	8.0	7.2	7.6	13.3	12.3	12.8	18.4	17.0	17.6
18	7.2	6.6	6.9	9.2	7.8	8.5	13.3	12.5	13.0	20.2	17.0	18.2
19	8.0	6.8	7.3	9.0	7.8	8.4	13.7	13.1	13.4	18.4	16.3	17.2
20	7.4	6.2	6.7	9.2	7.6	8.4	13.9	13.3	13.6	18.8	16.3	17.4
21	7.0	6.4	6.7	11.3	8.6	9.5	14.3	13.1	13.7	19.4	16.4	17.7
22	7.4	6.4	6.8	10.0	8.4	9.3	14.7	13.5	13.8	---	---	---
23	9.6	6.8	8.0	12.3	8.4	9.8	14.5	13.3	14.0	20.0	16.6	18.1
24	8.8	7.2	7.7	11.0	9.4	10.2	15.7	13.9	14.6	18.8	17.0	17.8
25	9.2	7.2	8.0	10.6	9.4	9.9	15.5	14.5	14.9	18.6	17.4	17.9
26	8.6	7.0	7.5	10.6	9.2	9.9	17.6	14.3	15.5	17.8	17.4	17.7
27	7.6	7.0	7.3	10.8	10.0	10.3	16.1	14.9	15.3	18.4	17.2	17.7
28	7.8	6.8	7.3	11.0	10.4	10.7	16.8	14.9	15.6	19.0	17.0	17.8
29	---	---	---	10.6	9.6	10.2	16.3	14.9	15.5	19.2	17.2	18.1
30	---	---	---	10.4	9.4	9.8	16.6	15.3	15.8	19.4	17.6	18.3
31	---	---	---	10.0	9.6	9.9	---	---	---	24.7	17.6	20.6
MONTH	9.6	4.9	6.5	12.3	6.2	8.5	17.6	9.4	12.8	24.7	14.5	16.9

03400800 MARTINS FORK NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.1	18.6	20.4	24.1	22.3	23.0	26.3	24.7	25.4	24.1	23.1	23.5
2	19.8	18.0	18.7	24.3	22.1	23.0	26.1	24.7	25.3	24.1	22.7	23.3
3	20.2	18.0	18.9	24.3	22.3	23.0	27.0	24.7	25.6	24.3	22.9	23.4
4	20.6	18.2	19.1	24.5	22.3	23.2	27.2	25.1	25.7	24.5	22.9	23.4
5	20.6	18.4	19.2	24.5	22.5	23.3	26.1	25.1	25.5	23.3	22.9	23.2
6	20.4	18.8	19.3	25.1	22.5	23.6	26.8	24.7	25.6	25.3	23.1	24.1
7	21.7	18.8	19.8	25.5	22.7	23.9	27.4	25.1	25.9	23.7	20.6	21.6
8	21.0	18.8	19.6	24.1	22.7	23.5	27.2	25.3	26.0	21.9	18.4	20.2
9	20.0	18.8	19.2	26.5	22.9	24.2	27.6	25.3	26.2	22.3	19.2	20.8
10	20.4	19.0	19.4	25.9	23.1	24.2	27.6	25.5	26.3	22.5	19.4	21.0
11	20.6	19.0	19.5	24.5	22.7	23.3	27.8	25.5	26.4	---	---	---
12	20.2	19.2	19.6	24.3	22.9	23.4	30.0	25.9	27.4	---	---	---
13	20.8	19.4	19.9	25.1	22.9	23.6	30.4	25.9	27.8	25.5	22.3	24.0
14	23.3	19.6	20.9	24.7	23.1	23.6	29.6	25.7	27.2	25.1	22.1	23.3
15	22.5	19.8	20.6	24.7	22.9	23.7	29.0	25.7	27.1	25.5	22.5	23.5
16	23.9	19.6	21.3	24.5	23.1	23.7	26.1	24.5	25.4	25.9	22.5	23.6
17	23.1	19.6	20.8	24.9	23.3	23.9	25.7	24.7	25.3	23.9	22.7	23.1
18	22.7	19.6	20.8	25.9	23.3	24.3	26.3	25.3	25.6	24.9	21.9	23.1
19	22.7	19.8	20.9	24.5	23.1	23.8	26.9	25.5	25.9	24.1	21.4	22.6
20	23.3	19.4	20.6	24.9	23.7	24.3	26.5	25.2	25.7	24.1	22.3	23.0
21	21.0	19.0	19.6	25.5	24.1	24.7	25.9	24.4	25.1	23.9	22.5	23.0
22	21.9	19.0	20.0	27.6	24.5	25.6	24.4	23.2	23.7	23.9	22.3	23.2
23	21.9	19.2	20.2	27.4	24.7	25.8	23.7	22.9	23.3	22.3	19.4	20.2
24	22.3	19.4	20.6	29.0	24.5	26.4	23.6	23.0	23.3	21.5	18.6	20.0
25	22.5	20.4	21.3	29.0	24.7	26.4	23.6	23.1	23.4	21.2	20.0	20.5
26	21.4	20.4	20.8	26.1	24.9	25.2	24.6	23.3	23.8	24.1	17.8	21.3
27	21.5	20.4	21.1	25.5	24.5	24.8	24.8	23.4	23.9	22.9	20.2	21.4
28	22.3	21.2	21.7	26.7	24.3	25.0	24.7	23.3	23.8	23.9	20.4	21.6
29	22.9	21.4	22.2	26.8	24.3	25.0	23.6	22.9	23.3	24.1	19.6	21.4
30	22.9	21.9	22.5	26.7	24.1	25.2	24.5	23.1	23.6	22.5	19.8	21.3
31	---	---	---	26.8	24.5	25.4	24.5	23.3	23.6	---	---	---
MONTH	23.9	18.0	20.3	29.0	22.1	24.3	30.4	22.9	25.2	25.9	17.8	22.3
YEAR	30.4	3.7	15.4									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.8	8.2	8.5	11.0	9.7	9.9	11.5	10.5	11.0	12.9	11.8	12.2
2	8.8	8.5	8.6	10.1	9.9	10.0	11.4	10.7	10.8	12.8	11.9	12.1
3	8.6	8.3	8.5	10.0	9.8	9.9	11.6	10.8	10.9	12.4	11.5	11.9
4	8.4	7.9	8.2	10.0	9.8	9.9	11.4	10.5	10.7	12.7	11.5	11.9
5	10.2	8.0	8.8	9.9	9.6	9.7	11.5	10.7	10.9	12.8	11.8	12.1
6	13.1	10.1	11.8	---	---	---	11.4	10.5	10.8	12.3	11.8	11.9
7	11.6	11.0	11.2	---	---	---	11.6	10.7	11.0	12.3	11.7	11.8
8	11.7	7.8	9.4	10.7	10.4	10.6	11.7	10.7	11.1	12.5	12.1	12.3
9	8.2	7.8	8.0	10.8	10.6	10.7	11.4	10.9	11.0	---	---	---
10	8.4	7.8	8.1	10.8	10.6	10.7	11.7	10.6	10.9	12.5	12.1	12.4
11	8.5	8.2	8.3	10.7	10.7	10.7	11.5	10.7	11.1	12.7	11.8	12.1
12	8.8	8.2	8.5	10.6	10.2	10.4	11.8	11.0	11.2	11.9	11.8	11.9
13	8.8	8.7	8.7	10.4	10.0	10.3	11.8	10.9	11.3	---	---	---
14	8.8	8.7	8.8	10.3	9.7	10.0	11.7	11.1	11.2	---	---	---
15	11.2	8.0	9.4	10.3	9.7	10.0	12.1	11.1	11.4	---	---	---
16	11.0	9.2	9.8	11.1	10.1	10.3	11.6	10.8	11.1	---	---	---
17	10.9	9.0	9.7	10.7	9.8	10.0	10.9	10.7	10.8	---	---	---
18	10.8	9.2	9.9	11.0	9.9	10.2	10.7	10.4	10.7	---	---	---
19	9.7	9.0	9.3	10.7	9.8	10.0	11.5	10.7	10.9	---	---	---
20	9.0	8.8	8.9	10.9	9.8	10.1	11.5	10.7	10.8	12.7	12.2	12.4
21	8.9	8.8	8.8	10.7	10.0	10.3	11.4	10.7	11.0	13.2	12.2	12.4
22	9.0	8.7	8.9	12.2	10.0	10.9	11.7	11.0	11.1	12.8	12.0	12.2
23	9.0	8.7	8.9	12.8	10.1	11.6	11.8	11.1	11.2	12.1	11.9	12.0
24	9.1	8.8	8.9	10.4	9.6	9.8	11.8	11.1	11.3	12.0	11.8	11.9
25	9.2	8.8	9.0	10.7	9.6	9.8	12.0	11.1	11.3	12.5	11.8	12.0
26	9.0	8.6	8.8	13.6	9.7	11.0	11.8	11.6	11.8	12.5	11.8	11.9
27	8.9	8.6	8.7	13.4	12.1	13.0	12.4	11.7	11.8	12.5	11.8	12.0
28	9.0	8.6	8.6	13.4	12.1	12.9	12.4	11.7	11.8	12.5	11.8	12.0
29	9.4	8.7	9.2	13.5	10.7	11.6	12.0	11.7	11.7	12.6	12.0	12.3
30	9.4	9.3	9.4	10.9	10.4	10.6	12.5	11.9	12.1	12.2	12.2	12.2
31	9.8	9.4	9.6	---	---	---	12.6	11.8	12.1	12.3	12.2	12.3
MONTH	13.1	7.8	9.1	---	---	---	12.6	10.4	11.2	---	---	---

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.4	12.2	12.3	11.8	11.0	11.2	12.5	11.3	11.9	10.9	10.2	10.6
2	12.4	11.9	12.1	11.7	10.6	11.1	12.5	11.5	11.9	10.5	9.7	10.1
3	12.8	11.9	12.2	11.7	10.5	11.2	12.4	11.1	11.7	10.5	9.8	10.0
4	12.8	11.9	12.2	11.4	10.8	11.1	12.2	11.4	11.7	10.5	9.8	10.0
5	12.5	11.8	12.0	11.6	10.9	11.1	12.2	11.2	11.8	10.7	10.0	10.1
6	12.6	11.8	12.0	11.8	10.7	11.2	12.0	10.9	11.3	10.4	9.7	10.0
7	12.7	11.8	12.1	11.7	10.5	11.0	12.0	11.2	11.6	9.9	9.7	9.8
8	12.5	11.5	11.9	---	---	---	11.7	11.6	11.7	10.3	9.6	9.8
9	12.0	11.2	11.5	---	---	---	---	---	---	10.0	8.7	9.6
10	11.8	11.4	11.5	11.4	10.7	11.1	11.5	11.4	11.5	9.6	9.3	9.5
11	12.3	11.3	11.6	11.6	10.9	11.1	12.0	11.1	11.4	9.8	9.4	9.7
12	12.2	11.9	12.1	11.6	10.9	11.1	11.9	11.0	11.3	9.9	8.8	9.7
13	12.8	11.5	12.1	11.7	10.8	11.1	11.7	10.7	10.9	10.4	9.6	9.8
14	12.8	11.5	12.1	11.6	10.7	11.0	10.9	8.1	10.6	9.8	9.6	9.7
15	12.0	11.5	11.7	11.6	10.5	10.9	11.0	10.7	10.8	9.9	9.6	9.7
16	12.1	11.3	11.7	11.4	10.6	10.9	11.6	10.6	11.1	10.1	9.4	9.7
17	11.9	11.1	11.6	11.5	10.8	11.1	11.5	10.3	11.0	10.1	9.5	9.8
18	12.5	11.6	11.8	10.8	10.6	10.7	11.4	10.2	10.9	11.0	9.0	10.1
19	12.2	11.2	11.8	11.3	10.8	10.9	11.3	10.4	10.7	10.9	10.0	10.6
20	12.2	11.8	12.0	10.9	10.5	10.8	11.3	10.5	10.7	10.6	10.1	10.3
21	12.0	11.8	11.9	10.9	10.2	10.7	11.4	10.2	10.7	10.4	9.5	10.2
22	11.9	11.5	11.7	11.8	10.6	11.3	11.1	10.0	10.5	10.2	9.1	9.6
23	11.6	10.4	11.2	12.5	11.0	11.7	11.1	10.1	10.4	10.0	9.0	9.2
24	11.4	11.1	11.2	11.7	11.2	11.4	10.7	9.7	10.2	9.4	9.1	9.2
25	11.5	10.4	11.1	11.9	11.2	11.5	11.1	9.8	10.2	9.1	9.0	9.1
26	11.5	10.9	11.4	12.0	11.1	11.4	10.9	9.8	10.3	9.1	8.9	9.0
27	11.6	10.9	11.3	11.2	11.1	11.1	11.1	10.0	10.3	9.4	8.9	9.0
28	11.5	10.9	11.2	12.1	10.7	11.2	11.3	10.2	10.8	9.4	8.5	9.1
29	---	---	---	12.4	11.4	11.7	11.0	10.2	10.6	9.3	8.9	9.0
30	---	---	---	12.5	11.6	12.0	11.0	10.2	10.4	8.9	8.9	8.9
31	---	---	---	12.2	11.9	12.1	---	---	---	9.7	8.0	9.0
MONTH	12.8	10.4	11.8	---	---	---	---	---	---	11.0	8.0	9.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.9	7.8	8.1	8.2	4.7	7.8	7.1	6.5	6.8	7.8	7.5	7.7
2	8.9	7.8	8.4	8.4	7.7	8.0	6.8	6.4	6.6	7.9	7.6	7.7
3	8.9	8.1	8.6	8.4	7.9	8.2	7.0	6.3	6.5	8.0	7.6	7.8
4	9.0	8.2	8.6	8.5	8.0	8.2	6.8	6.2	6.5	8.0	7.7	7.8
5	9.0	8.2	8.5	8.3	7.7	8.1	7.0	6.0	6.5	8.0	7.7	7.8
6	8.4	8.0	8.3	8.1	7.5	7.8	6.3	5.4	5.9	8.1	7.7	7.8
7	8.4	7.8	8.1	7.9	6.9	7.4	6.1	5.3	5.6	---	---	---
8	8.2	7.8	8.0	6.9	6.5	6.8	5.9	5.1	5.4	---	---	---
9	8.3	6.7	8.0	7.3	6.6	6.9	5.8	4.8	5.3	---	---	---
10	8.6	7.9	8.2	7.2	6.6	6.9	5.4	4.6	4.9	---	---	---
11	8.6	8.2	8.4	7.2	6.5	6.7	5.5	4.7	4.9	8.6	8.5	8.5
12	8.4	8.0	8.2	7.1	6.7	6.9	7.2	4.7	5.9	9.1	8.4	8.8
13	8.3	7.8	8.1	7.4	6.7	7.0	7.1	6.4	6.7	8.6	7.3	8.0
14	8.3	7.7	7.9	7.8	6.9	7.3	7.0	6.4	6.6	8.3	7.1	7.7
15	7.8	7.3	7.6	7.8	7.1	7.4	6.9	6.4	6.6	8.2	7.1	7.5
16	7.5	7.1	7.3	7.7	7.1	7.4	6.7	5.8	6.3	8.2	7.1	7.5
17	7.6	4.9	7.2	7.9	7.2	7.5	6.7	5.8	6.3	8.1	7.0	7.4
18	7.6	5.8	7.3	7.9	7.2	7.5	6.9	6.7	6.9	8.0	7.1	7.5
19	7.5	7.1	7.3	8.0	7.1	7.5	7.1	6.7	6.9	8.0	7.2	7.6
20	8.0	7.0	7.4	8.5	7.3	7.8	7.0	6.8	6.8	7.8	7.5	7.6
21	7.8	7.3	7.6	8.2	7.1	7.5	7.1	6.7	6.9	7.8	7.3	7.6
22	7.8	7.2	7.5	7.5	6.9	7.2	7.8	6.9	7.3	7.8	7.5	7.6
23	7.8	7.1	7.5	7.4	6.8	7.1	8.3	7.8	7.9	---	---	---
24	7.9	7.3	7.6	7.6	6.7	7.1	8.3	7.8	8.1	---	---	---
25	8.1	7.4	7.8	7.6	6.7	7.0	8.1	7.9	8.0	---	---	---
26	8.1	7.5	7.7	7.5	6.7	7.0	8.1	7.6	7.9	7.5	7.0	7.2
27	8.3	7.6	7.9	7.1	6.6	6.8	8.2	7.3	7.7	7.6	7.0	7.3
28	8.4	7.7	8.0	7.3	6.6	6.8	8.4	8.2	8.3	7.6	7.1	7.3
29	7.9	7.7	7.8	7.4	6.5	6.8	8.5	8.2	8.3	7.5	7.1	7.2
30	8.2	7.2	7.9	7.5	6.4	6.8	8.2	7.8	8.0	8.1	7.1	7.7
31	---	---	---	7.4	6.5	6.8	7.9	7.5	7.7	---	---	---
MONTH	9.0	4.9	7.9	8.5	4.7	7.3	8.5	4.6	6.8	---	---	---

CUMBERLAND RIVER BASIN

03401000 CUMBERLAND RIVER NEAR HARLAN, KY

LOCATION.--Lat 36°50'48", long 83°21'21", Harlan County, Hydrologic Unit 05130101, on left bank 10 ft downstream from bridge on State Highway 840 at Loyall, 1.6 mi upstream from Fourmile Branch, 1.8 mi west of Harlan, 2.3 mi downstream from confluence of Poor and Clover Forks, and at mile 691.9.

DRAINAGE AREA.--374 mi^2.

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

REVISED RECORDS.--WSP 953: 1940(M). WSP 1173: 1947(M).

GAGE.--Water-stage recorder. Datum of gage is 1,140.10 ft above sea level. Prior to Nov. 4, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 16-23. Records good except for period of estimated record, which is poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	191	718	833	1290	1490	2440	1120	227	525	194	223
2	73	151	573	762	1090	2740	2110	1040	207	285	179	193
3	90	140	514	893	981	3390	1850	1080	239	242	175	183
4	82	147	4380	2670	755	2580	1650	1000	200	215	151	181
5	62	179	10900	1790	705	2420	1460	738	199	195	300	178
6	52	192	3440	1440	674	2050	1490	655	201	181	265	191
7	43	190	2150	3550	600	1690	1930	755	183	160	200	156
8	42	161	1650	5260	568	1890	1810	1800	203	150	166	126
9	53	155	1370	2470	7680	3510	1460	1540	202	160	154	119
10	112	155	1430	1770	6370	10100	1750	1270	316	153	139	105
11	88	164	1350	1450	18700	3720	2870	959	288	134	127	99
12	140	162	1200	2210	8280	2520	2450	700	291	129	127	96
13	189	124	1090	2150	4110	2030	12700	529	272	123	109	86
14	162	120	873	1740	3110	1830	3940	468	248	180	117	89
15	144	290	869	1320	2330	1590	3190	559	174	194	176	95
16	75	365	879	1050	1790	1400	5020	1020	195	411	239	92
17	65	543	891	900	1580	1220	3140	983	401	1230	491	105
18	78	842	778	790	1420	1010	2280	685	317	599	772	140
19	81	584	711	680	1310	851	1850	367	198	564	481	118
20	208	487	641	600	1200	778	1610	353	180	604	299	111
21	211	394	634	550	1860	794	1480	297	182	434	1770	108
22	185	341	541	490	2400	860	1310	293	207	348	1610	101
23	155	202	494	450	8930	755	1090	263	160	274	1080	79
24	129	293	441	593	4970	723	952	257	161	218	836	75
25	117	221	420	1820	2960	712	895	298	206	182	653	83
26	110	215	389	4030	2220	660	704	403	181	174	473	90
27	80	2580	363	2950	1790	7650	642	493	1230	239	286	78
28	69	1880	469	3670	1570	11300	745	342	908	274	250	69
29	69	953	1140	2840	---	5090	715	297	692	320	247	64
30	151	899	1250	1980	---	3130	943	277	769	272	272	61
31	179	---	1020	1560	---	2720	---	275	---	240	256	---
TOTAL	3345	13320	43568	55261	91243	83203	66476	21116	9437	9409	12594	3494
MEAN	108	444	1405	1783	3259	2684	2216	681	315	304	406	116
MAX	211	2580	10900	5260	18700	11300	12700	1800	1230	1230	1770	223
MIN	42	120	363	450	568	660	642	257	160	123	109	61
CFSM	.29	1.19	3.76	4.77	8.71	7.18	5.92	1.82	.84	.81	1.09	.31
IN.	.33	1.32	4.33	5.50	9.08	8.28	6.61	2.10	.94	.94	1.25	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	181	458	925	1177	1344	1455	1046	716	385	315	220	128
MAX	1129	2004	2704	2767	3259	4148	2771	2003	1789	1414	1202	864
(WY)	1990	1978	1992	1974	1994	1963	1977	1984	1989	1941	1942	1989
MIN	9.00	25.8	43.6	63.5	105	334	211	119	76.0	21.4	40.0	14.3
(WY)	1954	1954	1966	1981	1941	1988	1986	1941	1948	1944	1951	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	256514		412466			
ANNUAL MEAN	703		1130		693	
HIGHEST ANNUAL MEAN					1130	1994
LOWEST ANNUAL MEAN					293	1941
HIGHEST DAILY MEAN	10900	Dec 5	18700	Feb 11	33900	Apr 4 1977
LOWEST DAILY MEAN	41	Sep 23	42	Oct 8	5.0	Oct 9 1953
ANNUAL SEVEN-DAY MINIMUM	45	Sep 19	61	Oct 3	6.7	Oct 7 1953
INSTANTANEOUS PEAK FLOW			27900	Feb 11	64500	Apr 5 1977
INSTANTANEOUS PEAK STAGE			20.61	Feb 11	30.20	Apr 5 1977
INSTANTANEOUS LOW FLOW					3.0	Oct 9 1953
ANNUAL RUNOFF (CFSM)	1.88		3.02		1.85	
ANNUAL RUNOFF (INCHES)	25.51		41.03		25.16	
10 PERCENT EXCEEDS	1510		2580		1560	
50 PERCENT EXCEEDS	370		494		330	
90 PERCENT EXCEEDS	67		110		53	

CUMBERLAND RIVER BASIN

03402000 YELLOW CREEK NEAR MIDDLESBORO, KY

LOCATION.--Lat 36°40'05", long 83°41'19", Bell County, Hydrologic Unit 05130101, on left bank 35 ft downstream from bridge on U.S. Highway 25E, 1.2 mi downstream from Browne Branch, 4.6 mi north of Middlesboro, and at mile 11.4.

DRAINAGE AREA.--60.6 mi^2. Area at site used prior to Oct. 1970, 58.2 mi^2 and at site used Oct. 1, 1970 to Sept. 30, 1973, 62.8 mi^2.

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

REVISED RECORDS.--WSP 953: 1941(M). WSP 973: 1942(M). WSP 1436: Drainage area. WRD KY 1969: 1965(M), 1967(M).

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,097.99 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--Estimated daily discharges: Jan. 16-24, Feb. 9-15, Apr. 13, and 16-18. Records good except for periods of estimate record, which are poor. Occasional regulation from Fern Lake. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	30	34	115	147	172	245	195	37	32	15	86
2	8.3	27	30	106	122	1150	199	138	40	31	44	46
3	12	24	28	182	109	942	179	129	33	26	35	33
4	8.6	27	1550	651	96	440	159	126	29	24	28	27
5	7.4	35	2130	308	99	310	136	105	26	19	121	25
6	7.7	32	433	208	89	222	307	91	38	17	47	25
7	7.9	28	186	945	77	185	374	123	35	16	31	21
8	8.0	24	120	917	74	388	267	374	76	16	24	18
9	28	21	89	340	1800	681	191	179	46	17	20	16
10	46	20	276	213	1600	1310	279	130	130	16	18	14
11	16	19	212	169	5000	472	1060	102	91	29	17	14
12	24	18	140	573	1100	277	956	86	58	20	16	14
13	14	17	111	375	560	205	2920	73	44	17	16	14
14	12	17	96	250	310	175	603	65	37	20	15	12
15	12	112	89	154	230	141	1320	80	39	18	18	12
16	12	69	75	110	173	118	3200	96	45	31	16	12
17	13	83	64	100	143	103	900	60	40	29	19	42
18	20	72	59	94	125	99	350	52	35	30	15	34
19	16	46	55	87	111	87	226	46	27	188	18	17
20	16	40	57	82	102	78	171	44	24	36	21	14
21	21	31	108	75	333	93	137	42	30	26	394	12
22	28	27	75	69	384	87	119	39	29	42	98	12
23	20	24	69	74	3040	73	103	35	24	35	48	11
24	17	23	60	110	875	71	90	32	35	24	31	12
25	15	21	57	595	366	76	80	33	35	19	25	12
26	14	27	50	1110	235	69	72	258	40	19	29	11
27	13	118	47	607	173	2320	102	186	90	23	22	9.9
28	12	100	123	1170	145	3010	78	87	41	23	18	9.3
29	13	62	334	495	---	862	112	61	42	19	45	9.1
30	26	44	209	281	---	400	224	49	59	17	33	8.9
31	29	---	147	194	---	336	---	41	---	15	44	---
TOTAL	505.5	1238	7113	10759	17618	14952	15159	3157	1355	894	1341	603.2
MEAN	16.3	41.3	229	347	629	482	505	102	45.2	28.8	43.3	20.1
MAX	46	118	2130	1170	5000	3010	3200	374	130	188	394	86
MIN	7.4	17	28	69	74	69	72	32	24	15	15	8.9
CFSM	.27	.68	3.79	5.73	10.4	7.96	8.34	1.68	.75	.48	.71	.33
IN.	.31	.76	4.37	6.60	10.82	9.18	9.31	1.94	.83	.55	.82	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	25.3	78.1	169	210	238	255	178	117	65.2	53.7	36.1	20.1
MAX	155	416	609	551	677	610	551	539	298	345	197	109
(WY)	1978	1974	1991	1974	1991	1975	1977	1984	1989	1967	1942	1982
MIN	3.05	5.35	7.34	14.4	14.9	47.6	34.9	17.2	13.8	4.26	6.00	3.02
(WY)	1954	1941	1966	1981	1941	1988	1986	1941	1988	1944	1951	1954

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1941 - 1994	
ANNUAL TOTAL	39752.6		74694.7			
ANNUAL MEAN	109		205		120	
HIGHEST ANNUAL MEAN					219	1991
LOWEST ANNUAL MEAN					49.5	1941
HIGHEST DAILY MEAN	3620	Mar 23	5000	Feb 11	7000	Apr 4 1977
LOWEST DAILY MEAN	6.9	Aug 1	7.4	Oct 5	1.2	Oct 7 1952
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 18	8.6	Oct 2	1.6	Sep 17 1955
INSTANTANEOUS PEAK FLOW			7420	Feb 11	11700	Apr 4 1977
INSTANTANEOUS PEAK STAGE			19.40	Feb 11	23.35	Apr 4 1977
INSTANTANEOUS LOW FLOW					.00	Sep 26 1952
ANNUAL RUNOFF (CFSM)	1.80		3.38		1.98	
ANNUAL RUNOFF (INCHES)	24.40		45.85		26.91	
10 PERCENT EXCEEDS	208		396		256	
50 PERCENT EXCEEDS	39		57		45	
90 PERCENT EXCEEDS	9.9		15		7.6	

CUMBERLAND RIVER BASIN

03402900 CUMBERLAND RIVER AT PINE ST 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 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 970.00 ft, Sandy Hook datum.

REMARKS.--Estimated daily discharges: Jan. 16-22. Records good except for period of estimated record, which is poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Specific conductance and temperature made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	360	1010	1560	2250	2320	4390	2320	422	713	318	499
2	125	360	837	1400	1860	5500	3690	2080	373	530	336	381
3	123	313	740	1380	1660	8690	3180	1880	350	378	351	315
4	151	292	5590	5510	1400	5700	2810	1770	367	326	282	286
5	148	314	22300	4190	1260	4520	2400	1460	334	298	480	273
6	132	352	10900	2830	1220	3680	2710	1230	338	273	566	288
7	114	386	4110	7030	1070	3010	3680	1260	374	252	397	285
8	102	325	2610	12800	1000	3680	3610	3370	489	225	319	244
9	107	284	1990	5680	13900	7100	2850	2950	423	223	278	205
10	218	275	2330	3400	17500	16200	2980	2140	943	243	247	186
11	213	266	2440	2580	28100	9630	6860	1660	1010	253	224	177
12	217	264	2030	4230	30100	4940	6470	1280	602	258	219	170
13	250	270	1740	4510	11900	3620	18100	1050	517	218	215	166
14	273	237	1480	3430	6110	3110	11400	886	462	219	193	156
15	239	606	1360	2470	4220	2590	7320	901	438	326	231	150
16	208	892	1280	2000	3110	2200	15300	1600	442	616	331	147
17	170	813	1240	1700	2560	1940	7540	1350	378	840	496	181
18	164	1280	1160	3600	2230	1690	4730	1180	591	977	721	301
19	228	1000	1040	4000	1990	1450	3540	808	417	715	684	234
20	234	796	979	3300	1800	1290	2870	643	335	726	528	194
21	311	663	1160	2950	2760	1300	2370	592	327	668	2220	177
22	369	561	1060	2600	4420	1560	2090	531	348	632	2680	174
23	312	476	943	2450	15500	1380	1740	503	326	522	1370	167
24	265	355	840	2300	14300	1300	1490	466	296	389	957	158
25	223	426	780	4260	6230	1260	1360	445	323	317	782	140
26	205	363	727	9670	4100	1170	1170	777	339	328	635	147
27	188	1750	668	7120	3060	11400	1120	1160	703	324	495	154
28	166	3720	815	8030	2550	26200	1210	761	1310	370	350	145
29	146	1590	2490	6390	---	15800	1360	596	783	386	346	124
30	175	1190	2760	3990	---	7010	2770	528	871	408	402	119
31	291	---	1970	2880	---	5150	---	477	---	347	415	---
TOTAL	6209	20779	81379	130240	188160	166390	133110	38654	15231	13300	18068	6343
MEAN	200	693	2625	4201	6720	5367	4437	1247	508	429	583	211
MAX	369	3720	22300	12800	30100	26200	18100	3370	1310	977	2680	499
MIN	102	237	668	1380	1000	1170	1120	445	296	218	193	119
CFSM	.26	.90	3.41	5.46	8.73	6.97	5.76	1.62	.66	.56	.76	.27
IN.	.30	1.00	3.93	6.29	9.09	8.04	6.43	1.87	.74	.64	.87	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

MEAN	224	644	3442	2518	3182	4093	2668	1003	768	407	508	240
MAX	330	715	5204	4201	6720	5367	4437	1247	1418	617	583	347
(WY)	1993	1993	1992	1994	1994	1994	1994	1994	1992	1992	1994	1992
MIN	142	524	2498	1540	1020	2139	1132	796	378	176	389	162
(WY)	1992	1992	1993	1993	1992	1992	1992	1993	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1992 - 1994	
ANNUAL TOTAL	488236		817863			
ANNUAL MEAN	1338		2241		1636	
HIGHEST ANNUAL MEAN					2241	1994
LOWEST ANNUAL MEAN					1330	1992
HIGHEST DAILY MEAN	24700	Mar 24	30100	Feb 12	30800	Dec 3 1991
LOWEST DAILY MEAN	93	Sep 23	102	Oct 8	91	Oct 14 1991
ANNUAL SEVEN-DAY MINIMUM	108	Sep 19	125	Oct 3	100	Nov 2 1991
INSTANTANEOUS PEAK FLOW			38700	Feb 11	38700	Feb 11 1994
INSTANTANEOUS PEAK STAGE			43.67	Feb 11	43.67	Feb 11 1994
INSTANTANEOUS LOW FLOW					87	Oct 12 1991
ANNUAL RUNOFF (CFSM)	1.74		2.91		2.13	
ANNUAL RUNOFF (INCHES)	23.59		39.51		28.88	
10 PERCENT EXCEEDS	2910		5500		3440	
50 PERCENT EXCEEDS	636		815		739	
90 PERCENT EXCEEDS	143		205		163	

CUMBERLAND RIVER BASIN

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY

LOCATION.--Lat 36°44'36", long 84°09'22", Whitley County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 296E at Williamsburg, 2.0 mi downstream from Clear Fork, and at mile 590.4.

DRAINAGE AREA.--1,607 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Gage-height records collected in this vicinity since 1908 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 891.52 ft above sea level. See WDR KY-90-1 for history of changes prior to June 26, 1990.

REMARKS.--Estimated daily discharges: Jan. 17-25. Records good except for period of estimated record, which is fair. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	499	2220	3890	4960	4420	19500	4870	784	1230	687	1520
2	306	653	1680	3210	3950	6320	11000	4170	715	1100	642	1260
3	255	672	1360	2920	3370	15600	6630	3550	657	868	670	843
4	227	623	3920	5750	2960	15700	5570	3320	596	679	607	628
5	226	552	21100	9310	2650	12200	4810	3060	561	578	669	517
6	231	531	25800	7600	2490	8340	5030	2610	545	505	1010	475
7	225	533	21200	8360	2310	6390	6200	2320	776	453	1010	468
8	205	544	17400	17600	2050	6820	6520	4040	1930	430	754	449
9	186	527	7890	17900	8710	11000	6040	6550	1340	495	586	414
10	185	460	4190	15100	21500	17000	5220	5150	1190	472	489	357
11	236	419	5060	7990	27600	18600	10400	3600	2600	501	426	315
12	324	397	4510	6460	35800	18200	17100	2810	2140	466	378	288
13	329	380	3720	8660	38500	13500	17200	2270	1270	490	347	265
14	325	385	3230	8010	34200	7010	18100	1850	1030	488	335	252
15	334	665	2860	6130	27500	5220	19200	1630	866	604	313	244
16	334	1780	2670	4330	18600	4370	25500	1850	840	1790	301	229
17	319	2280	2430	3900	8160	3750	24900	2360	816	2730	389	240
18	316	2520	2240	5000	4580	3330	18900	2030	689	1770	557	343
19	300	2850	2100	4800	3920	2980	12100	1750	769	1710	668	466
20	561	2240	1900	4400	3500	2620	6210	1330	719	1210	795	416
21	1000	1530	2070	3800	4130	2420	4660	1050	577	1080	1160	333
22	707	1170	2400	3700	7770	2660	3930	965	705	1280	3210	285
23	683	962	2230	3500	15000	2860	3490	880	933	1480	3150	257
24	601	839	1970	3600	22900	2630	2990	805	843	1290	1820	251
25	491	687	1710	7000	20700	2560	2600	739	760	910	1210	251
26	416	645	1560	12400	18000	2510	2340	828	652	663	917	240
27	363	1050	1410	15200	10600	9250	2270	2410	1630	673	848	221
28	327	4250	1480	15600	5400	27200	2350	2210	1700	649	718	212
29	295	5440	4050	14500	---	31700	2400	1430	2000	645	614	213
30	283	3240	5740	10900	---	29500	4120	1060	1420	1160	690	205
31	342	---	5090	6950	---	25600	---	895	---	952	644	---
TOTAL	11318	39323	167190	248470	361810	322260	277280	74392	32053	29351	26614	12457
MEAN	365	1311	5393	8015	12920	10400	9243	2400	1068	947	859	415
MAX	1000	5440	25800	17900	38500	31700	25500	6550	2600	2730	3210	1520
MIN	185	380	1360	2920	2050	2420	2270	739	545	430	301	205
CFSM	.23	.82	3.36	4.99	8.04	6.47	5.75	1.49	.66	.59	.53	.26
IN.	.26	.91	3.87	5.75	8.38	7.46	6.42	1.72	.74	.68	.62	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

MEAN	641	1757	3771	4654	5306	6018	4341	2827	1477	964	681	481
MAX	4413	6552	9751	11860	13550	14670	9717	9572	8305	4906	2142	3280
(WY)	1990	1978	1992	1974	1956	1963	1977	1984	1989	1967	1971	1989
MIN	10.2	50.6	150	203	1190	1193	730	705	277	122	109	33.3
(WY)	1954	1954	1966	1981	1968	1988	1986	1962	1988	1952	1954	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1951 - 1994	
ANNUAL TOTAL	955032		1602518			
ANNUAL MEAN	2617		4390		2732	
HIGHEST ANNUAL MEAN					4390	1994
LOWEST ANNUAL MEAN					1159	1988
HIGHEST DAILY MEAN	28700	Mar 25	38500	Feb 13	47600	Feb 1 1957
LOWEST DAILY MEAN	161	Sep 14	185	Oct 10	6.1	Oct 26 1953
ANNUAL SEVEN-DAY MINIMUM	188	Jul 23	212	Oct 4	6.9	Oct 22 1953
INSTANTANEOUS PEAK FLOW			38900	Feb 13	49700	Jan 31 1957
INSTANTANEOUS PEAK STAGE			31.96	Feb 13	35.03	Apr 7 1977
INSTANTANEOUS LOW FLOW			185	Oct 10	6.1	Oct 23 1953
ANNUAL RUNOFF (CFSM)	1.63		2.73		1.70	
ANNUAL RUNOFF (INCHES)	22.11		37.10		23.10	
10 PERCENT EXCEEDS	5500		15000		6560	
50 PERCENT EXCEEDS	1070		1750		1200	
90 PERCENT EXCEEDS	236		328		160	

03404500 CUMBERLAND RIVER AT CUMBERLAND FALLS, KY

LOCATION.--Lat 36°50'14", long 84°20'36", McCreary County, Hydrologic Unit 05130101, on left bank 0.1 mi downstream from bridge on State Highway 90, 0.2 mi upstream from Cumberland Falls, and at mile 562.4.

DRAINAGE AREA.--1,977 mi^2.

PERIOD OF RECORD.--August 1907 to December 1911, October 1914 to September 1994 (discontinued). Monthly discharge only for October 1914 to March 1915 and October 1931 to July 1932, published in WSP 1306.

REVISED RECORDS.--WSP 1386: 1919. WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.49 ft above Sandy Hook datum; 825.28 ft above sea level. 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.--Estimated daily discharges: Jan. 18-25, May 2-23, and Sept. 29, 30. Records good except for periods of estimated record, which are poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	585	498	2590	4570	6030	5190	22600	5950	1000	1450	971	963
2	429	739	2080	3640	4680	7150	14400	5100	882	1370	810	1990
3	338	849	1750	3260	3840	17300	8340	4800	821	1140	838	1220
4	280	829	6540	6690	3380	17900	6680	4250	737	961	782	894
5	250	746	26400	10300	3060	14400	5780	3900	656	755	756	705
6	239	665	26900	9080	2820	10100	5550	3600	629	645	1010	599
7	238	637	22100	10900	2630	7620	7330	3200	660	547	1200	554
8	237	637	18600	20100	2400	9310	7530	5200	1480	485	1070	525
9	220	649	10500	19100	12100	15100	7140	7100	2040	481	812	488
10	204	593	5180	16600	25800	21600	6330	5900	1360	571	646	431
11	193	512	5900	10200	36500	20300	13500	4600	2050	526	537	371
12	257	464	5370	7650	40600	19200	21300	3500	2540	551	464	325
13	354	449	4220	9810	39600	15500	20000	2850	1740	534	408	296
14	357	437	3620	9360	36600	8760	19600	2200	1220	576	372	277
15	349	623	3220	7170	29900	6210	19800	1900	1110	1090	369	262
16	355	1620	2940	5040	21200	5120	29700	2100	955	1410	349	254
17	368	2940	2700	4020	11000	4270	27500	2600	941	3160	341	255
18	361	3240	2480	6000	5610	3730	21100	2200	877	2290	461	305
19	374	3060	2360	6050	4530	3360	15000	1950	751	1870	668	420
20	475	2760	2180	5400	3990	2990	7940	1600	868	1640	867	523
21	925	2000	2230	4900	4880	2730	5520	1400	730	1300	1250	429
22	1110	1580	2600	4700	9200	2910	4490	1200	801	1470	2520	337
23	851	1310	2520	4400	20700	3110	3880	1050	1080	1550	3650	294
24	817	1130	2260	4700	25400	3010	3390	979	1110	1590	2370	274
25	685	993	2060	8100	22300	2900	2930	913	1030	1270	1610	263
26	563	851	1890	14800	19500	2900	2630	907	884	914	1220	255
27	471	1230	1760	16800	13300	14300	2540	2410	1290	728	1030	247
28	402	3650	1770	19200	6730	38200	2610	2710	2290	790	968	223
29	362	6050	4430	17200	---	34600	2850	1940	1980	844	815	220
30	349	4020	6540	13100	---	31700	6850	1420	1890	978	1440	215
31	369	---	6030	8680	---	27700	---	1150	---	1270	999	---
TOTAL	13367	45761	191720	291520	418280	379170	324810	90579	36402	34756	31603	14414
MEAN	431	1525	6185	9404	14940	12230	10830	2922	1213	1121	1019	480
MAX	1110	6050	26900	20100	40600	38200	29700	7100	2540	3160	3650	1990
MIN	193	437	1750	3260	2400	2730	2540	907	629	481	341	215
CFSM	.22	.77	3.13	4.76	7.56	6.19	5.48	1.48	.61	.57	.52	.24
IN.	.25	.86	3.61	5.49	7.87	7.13	6.11	1.70	.68	.65	.59	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1994, BY WATER YEAR (WY)

MEAN	686	1840	3851	5817	6324	7077	5027	3277	1736	1337	925	555
MAX	5330	7963	17620	17570	15740	18510	11390	11230	8954	6379	4171	4410
(WY)	1990	1978	1927	1937	1939	1917	1977	1984	1989	1941	1942	1989
MIN	10.5	44.2	141	227	462	1572	987	417	103	47.5	37.3	23.0
(WY)	1954	1940	1940	1981	1941	1988	1963	1936	1936	1944	1925	1925

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1908 - 1994	
ANNUAL TOTAL	1082863		1872382			
ANNUAL MEAN	2967		5130		3190	
HIGHEST ANNUAL MEAN					5196	1927
LOWEST ANNUAL MEAN					1324	1988
HIGHEST DAILY MEAN	29200	Mar 25	40600	Feb 12	57500	Jan 28 1918
LOWEST DAILY MEAN	167	Jul 30	193	Oct 11	4.0	Sep 19 1954
ANNUAL SEVEN-DAY MINIMUM	192	Jul 25	226	Oct 5	7.1	Oct 23 1953
INSTANTANEOUS PEAK FLOW			44400	Feb 12	59600	Jan 28 1918
INSTANTANEOUS PEAK STAGE			12.68	Feb 12	15.50	Jan 28 1918
INSTANTANEOUS LOW FLOW					4.0	Sep 19 1954
ANNUAL RUNOFF (CFSM)	1.50		2.59		1.61	
ANNUAL RUNOFF (INCHES)	20.38		35.23		21.93	
10 PERCENT EXCEEDS	6560		17000		7890	
50 PERCENT EXCEEDS	1280		2000		1390	
90 PERCENT EXCEEDS	275		369		157	

CUMBERLAND RIVER BASIN

03404900 LYNN CAMP CREEK AT CORBIN, KY

LOCATION.--Lat 36°57'05", long 84°05'37", Whitley County, Hydrologic Unit 05130101, on left bank 40 ft downstream from bridge on State Highway 312, (East Masters Street) at Corbin, 0.8 mi downstream from East Fork Lynn Camp Creek, and at mile 3.9.

DRAINAGE AREA.--53.8 mi^2.

PERIOD OF RECORD.--Annual maximums, water years 1957-73, October 1973 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,049.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: Jan. 16-23, July 9-12, Aug. 11-13, 15-20, and 23-27. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	45	59	87	105	104	242	96	19	18	23	18
2	20	33	50	84	87	372	181	72	17	13	117	11
3	16	28	47	134	81	562	161	68	15	11	87	7.9
4	16	26	814	456	74	406	161	81	13	11	37	6.4
5	13	25	1540	218	74	251	122	64	13	9.7	208	6.2
6	11	25	380	165	74	173	177	55	14	8.2	98	9.2
7	9.8	23	172	983	65	171	239	290	37	7.4	55	7.9
8	8.9	20	113	875	62	832	167	533	169	7.1	40	5.9
9	8.9	18	92	244	535	998	136	168	91	e6.6	29	4.4
10	8.9	18	215	156	612	855	470	110	55	e5.5	24	3.7
11	9.7	16	139	143	1740	332	1030	85	36	e5.0	e20	3.4
12	11	15	100	444	948	207	579	71	25	e6.0	e26	3.3
13	11	15	88	251	375	157	527	62	17	16	e20	3.0
14	10	23	84	178	231	135	260	56	14	33	16	3.0
15	8.5	143	87	115	167	109	348	89	25	189	e12	3.1
16	9.4	112	84	e90	128	89	848	89	17	390	e10	3.0
17	17	511	74	e84	104	78	299	56	9.9	142	e8.2	10
18	23	416	70	e70	94	77	190	46	8.9	65	e7.0	35
19	284	124	66	e58	85	69	148	40	8.4	34	e6.0	12
20	189	90	65	e50	89	66	118	38	6.8	21	e13	8.6
21	79	64	93	e44	531	121	99	36	32	17	266	7.0
22	70	50	79	e42	394	126	88	34	79	98	119	5.8
23	46	40	74	e40	1340	83	81	32	20	109	e44	5.1
24	34	37	69	192	543	76	72	29	49	46	e22	6.0
25	30	34	68	624	229	82	65	28	34	28	e12	6.2
26	26	46	63	692	148	70	65	59	90	19	e60	12
27	23	281	61	309	114	1150	76	75	148	16	e135	8.3
28	21	248	143	721	98	1220	64	36	57	16	30	5.2
29	19	106	220	324	---	552	74	28	36	196	88	4.4
30	28	75	130	187	---	264	162	23	27	59	47	3.8
31	41	---	98	135	---	355	---	21	---	25	21	---
TOTAL	1125.1	2707	5437	8195	9127	10142	7249	2570	1183.0	1627.5	1700.2	228.8
MEAN	36.3	90.2	175	264	326	327	242	82.9	39.4	52.5	54.8	7.63
MAX	284	511	1540	983	1740	1220	1030	533	169	390	266	35
MIN	8.5	15	47	40	62	66	64	21	6.8	5.0	6.0	3.0
CFSM	.67	1.68	3.26	4.91	6.06	6.08	4.49	1.54	.73	.98	1.02	.14
IN.	.78	1.87	3.76	5.67	6.31	7.01	5.01	1.78	.82	1.13	1.18	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

MEAN	34.3	88.2	127	151	164	157	106	88.0	50.0	39.0	26.6	32.4
MAX	133	267	378	372	326	458	242	387	171	110	78.4	100
(WY)	1990	1974	1991	1974	1994	1975	1994	1983	1989	1978	1979	1982
MIN	1.35	10.8	10.4	5.13	56.9	41.9	16.5	9.47	2.38	2.11	2.50	1.89
(WY)	1981	1979	1981	1981	1977	1988	1986	1986	1988	1975	1976	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1967 - 1994	
ANNUAL TOTAL	32049.1		51291.6			
ANNUAL MEAN	87.8		141		88.3	
HIGHEST ANNUAL MEAN					141	1994
LOWEST ANNUAL MEAN					36.5	1988
HIGHEST DAILY MEAN	1540	Dec 5	1740	Feb 11	4150	May 7 1984
LOWEST DAILY MEAN	2.9	Jul 9	3.0	Sep 13	.02	Jun 24 1988
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 6	3.2	Sep 10	.02	Jun 24 1988
INSTANTANEOUS PEAK FLOW			2140	Feb 11	9000	Jan 29 1957
INSTANTANEOUS PEAK STAGE			8.51	Feb 11	22.50	Jan 29 1957
INSTANTANEOUS LOW FLOW			3.0	Sep 13	.02	Jun 24 1988
ANNUAL RUNOFF (CFSM)	1.63		2.61		1.64	
ANNUAL RUNOFF (INCHES)	22.16		35.47		22.29	
10 PERCENT EXCEEDS	181		373		196	
50 PERCENT EXCEEDS	45		65		37	
90 PERCENT EXCEEDS	7.9		8.8		3.4	

CUMBERLAND RIVER BASIN

03406500 ROCKCASTLE RIVER AT BILLOWS, KY

LOCATION.--Lat 37°10'16", long 84°17'46", Laurel County, Hydrologic Unit 05130102, on left bank 200 ft upstream from bridge on State Highway 80 at Billows, 0.9 mi upstream from Pine Creek, 1.1 mi downstream from Hawk Creek, 13 mi west of London, and at mile 24.4.

DRAINAGE AREA.--604 mi^2.

PERIOD OF RECORD.--July 1936 to current year.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.90 ft above sea level. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 16-23. Records good except for period of estimated record, which is poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	239	716	865	1490	1130	3700	1310	142	117	184	103
2	86	259	605	830	1150	1640	2650	1030	125	89	114	104
3	73	242	542	944	990	4890	2020	860	112	71	128	100
4	63	226	2070	5350	849	4410	1820	1440	101	73	128	75
5	57	231	13400	4070	757	3440	1470	1360	93	67	215	62
6	53	259	7350	2310	689	2400	1360	1130	89	55	1060	56
7	48	288	2660	5740	606	1800	1960	1740	103	52	529	51
8	42	247	1670	11500	556	5720	1890	6650	244	45	339	47
9	38	223	1210	3970	6320	13900	1610	3440	258	40	227	44
10	38	206	1310	2230	9810	19700	1800	1920	337	49	164	40
11	36	194	1930	1630	10500	7690	7330	1290	247	50	121	35
12	39	182	1450	2730	13600	3200	11400	976	171	46	97	31
13	56	178	1180	3220	6960	2190	5480	762	128	76	79	27
14	58	195	1040	2280	4670	1840	3320	621	104	101	75	25
15	50	2530	1060	1640	2970	1540	2610	1040	92	383	187	23
16	50	2670	1180	1040	2130	1240	10300	1370	84	318	241	22
17	184	1810	1060	835	1630	1040	4920	984	95	423	139	25
18	701	4190	974	770	1300	942	2640	756	79	459	91	30
19	1050	2120	884	740	1100	892	1850	617	73	265	70	34
20	4200	1320	779	690	972	754	1380	527	65	172	63	42
21	2170	930	781	630	1780	713	1080	456	59	122	216	41
22	1420	703	768	570	3360	1350	908	395	51	92	926	36
23	857	572	644	550	14200	1140	772	340	49	78	474	30
24	605	495	589	606	12500	990	658	293	57	71	305	27
25	476	442	553	1940	3830	972	589	256	63	67	210	25
26	385	398	542	8400	2380	905	534	245	106	56	152	23
27	316	555	493	6050	1660	9160	494	266	311	56	114	23
28	263	1600	568	9900	1310	19200	527	259	489	107	106	24
29	226	1240	1200	7630	---	10300	497	220	259	195	128	24
30	208	914	1120	3160	---	3880	1470	184	162	297	92	23
31	209	---	947	2030	---	3330	---	161	---	313	97	---
TOTAL	14165	25658	51275	94850	110069	132298	79039	32898	4348	4405	7071	1252
MEAN	457	855	1654	3060	3931	4268	2635	1061	145	142	228	41.7
MAX	4200	4190	13400	11500	14200	19700	11400	6650	489	459	1060	104
MIN	36	178	493	550	556	713	494	161	49	40	63	22
CFSM	.76	1.42	2.74	5.07	6.51	7.07	4.36	1.76	.24	.24	.38	.07
IN.	.87	1.58	3.16	5.84	6.78	8.15	4.87	2.03	.27	.27	.44	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1994, BY WATER YEAR (WY)

MEAN	202	579	1304	1672	1961	2007	1478	921	518	362	206	158
MAX	2887	2374	5279	5990	5236	5860	4051	4207	2861	1830	1263	1052
(WY)	1990	1987	1991	1937	1956	1975	1972	1983	1947	1941	1977	1974
MIN	3.18	11.5	16.5	56.9	208	507	188	115	37.9	10.8	10.1	4.95
(WY)	1954	1954	1954	1981	1941	1983	1986	1941	1988	1944	1957	1936

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1936 - 1994	
ANNUAL TOTAL	340053		557328			
ANNUAL MEAN	932		1527		943	
HIGHEST ANNUAL MEAN					1575	1979
LOWEST ANNUAL MEAN					345	1954
HIGHEST DAILY MEAN	13400	Dec 5	19700	Mar 10	46200	Dec 9 1978
LOWEST DAILY MEAN	21	Sep 2	22	Sep 16	.90	Sep 9 1957
ANNUAL SEVEN-DAY MINIMUM	25	Aug 28	24	Sep 24	1.4	Sep 11 1964
INSTANTANEOUS PEAK FLOW			21200	Mar 10	50000	Dec 9 1978
INSTANTANEOUS PEAK STAGE			28.64	Mar 10	47.17	Dec 9 1978
INSTANTANEOUS LOW FLOW			22	Sep 15	.80	Sep 9 1957
ANNUAL RUNOFF (CFSM)	1.54		2.53		1.56	
ANNUAL RUNOFF (INCHES)	20.94		34.33		21.21	
10 PERCENT EXCEEDS	2230		3920		2150	
50 PERCENT EXCEEDS	422		555		325	
90 PERCENT EXCEEDS	45		50		24	

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY

LOCATION.--Lat 36°37'37", long 84°32'00", McCreary County, Hydrologic Unit 05130104, 400 ft upstream from Salt Branch, on right bank 1,000 ft below Bear Creek, 5.5 mi southwest of Stearns, and at mile 49.6.

DRAINAGE AREA.--954 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1113: 1946(M). WSP 1436: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 763.83 ft above sea level; prior to Oct. 1, 1980 at site 1,000 ft upstream at datum 0.98 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached a stage of 52.9 ft from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	128	583	2370	2650	2030	6430	2140	308	1100	474	483
2	137	128	474	1920	2070	6200	4720	1740	263	753	367	952
3	115	151	406	1800	1720	13100	3600	1420	247	571	304	1040
4	100	156	7080	5300	1490	7240	3130	1580	231	455	267	877
5	88	152	36400	5150	1350	5050	2630	1720	210	358	311	565
6	81	149	8790	3510	1320	3730	7150	1420	201	308	628	431
7	73	346	3920	6700	1220	2880	9590	1220	215	266	657	358
8	71	288	2400	15000	1090	3130	5610	1480	920	228	432	315
9	70	224	1700	6470	7030	5790	4040	1780	755	205	426	270
10	70	187	4190	3940	16900	12200	3270	1370	582	372	324	229
11	72	162	7800	2810	44800	7560	13900	1120	1100	443	254	193
12	74	145	4080	5170	35400	4640	11800	929	959	738	210	170
13	102	138	2620	6640	9420	3420	12700	780	636	628	186	161
14	113	133	1960	4410	5470	2740	8060	683	712	750	283	143
15	97	310	1700	3070	3950	2270	5930	740	502	721	235	131
16	92	867	1670	2000	3030	1870	28400	976	643	2580	183	119
17	96	1150	1500	1910	2400	1560	9580	997	506	4950	177	117
18	99	1390	1330	2590	1990	1380	5150	732	471	2600	176	132
19	117	1240	1190	2060	1720	1240	3640	583	387	2680	156	179
20	127	767	1090	1750	1520	1110	2690	504	300	2550	165	192
21	117	554	1280	1700	2990	1070	2090	444	265	1740	360	180
22	120	429	1860	1390	9340	1230	1720	398	345	1470	1050	145
23	119	358	1690	1330	20500	1250	1460	357	470	1160	781	126
24	152	308	1450	1360	15900	1100	1250	319	512	845	495	122
25	153	272	1240	3520	6350	1230	1100	286	510	639	359	125
26	131	252	1100	12100	4160	1580	977	640	518	510	288	121
27	117	359	963	7800	2960	15900	1200	1300	7020	466	319	111
28	104	1050	1050	12900	2330	50700	1280	978	3760	523	253	118
29	94	1170	5350	10000	---	17300	1820	642	1880	551	281	108
30	98	801	5320	5230	---	7190	3590	465	1380	644	388	96
31	115	---	3310	3600	---	6210	---	369	---	503	456	---
TOTAL	3284	13764	115496	145500	211070	193900	168507	30112	26808	32307	11245	8309
MEAN	106	459	3726	4694	7538	6255	5617	971	894	1042	363	277
MAX	170	1390	36400	15000	44800	50700	28400	2140	7020	4950	1050	1040
MIN	70	128	406	1330	1090	1070	977	286	201	205	156	96
CFSM	.11	.48	3.91	4.92	7.90	6.56	5.89	1.02	.94	1.09	.38	.29
IN.	.13	.54	4.50	5.67	8.23	7.56	6.57	1.17	1.05	1.26	.44	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

MEAN	407	1277	2714	3314	3610	3678	2561	1682	867	617	409	377
MAX	2553	4556	7388	9615	8747	10580	6038	6555	5152	3772	2997	2983
(WY)	1990	1958	1991	1950	1956	1975	1977	1984	1989	1967	1971	1982
MIN	20.8	30.6	150	145	725	1248	568	224	72.8	34.5	65.4	29.6
(WY)	1954	1954	1964	1981	1968	1985	1986	1948	1988	1944	1951	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1943 - 1994	
ANNUAL TOTAL	563943		960302			
ANNUAL MEAN	1545		2631		1785	
HIGHEST ANNUAL MEAN					3023	1973
LOWEST ANNUAL MEAN					810	1988
HIGHEST DAILY MEAN	36400	Dec 5	50700	Mar 28	80200	Mar 13 1975
LOWEST DAILY MEAN	42	Aug 2	70	Oct 9	11	Sep 18 1954
ANNUAL SEVEN-DAY MINIMUM	47	Jul 30	73	Oct 6	12	Sep 13 1954
INSTANTANEOUS PEAK FLOW			66700	Feb 11	93200	May 28 1973
INSTANTANEOUS PEAK STAGE			37.86	Feb 11	46.29	May 28 1973
INSTANTANEOUS LOW FLOW			67	Oct 10	11	Oct 4 1948
ANNUAL RUNOFF (CFSM)	1.62		2.76		1.87	
ANNUAL RUNOFF (INCHES)	21.99		37.45		25.42	
10 PERCENT EXCEEDS	3810		6540		4080	
50 PERCENT EXCEEDS	587		976		717	
90 PERCENT EXCEEDS	92		128		83	

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-72, 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1980 to September 1990.
pH: May 1980 to September 1990.
WATER TEMPERATURE: May 1980 to September 1990.
DISSOLVED OXYGEN: May 1980 to September 1990.
TURBIDITY: May 1980 to September 1987.
SUSPENDED SEDIMENT DISCHARGE: May 1980 to September 1990.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since May 1980.

REMARKS.--Miscellaneous samples prior to 1979. Miscellaneous measurement values may fall outside the range observed for that day by the water quality monitor due to minor differences in sampling location.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 434 microsiemens, July 17, 1985; minimum recorded, 40 microsiemens, May 7, 1984.
pH: Maximum recorded, 8.6 units, Aug. 10, 1989; minimum recorded, 5.2 units, May 19, Nov. 24, 1980.
WATER TEMPERATURE: Maximum recorded, 34.6°C, Aug. 31, Sept. 1, 1989; minimum recorded, 0.0°C, Dec. 25-27, 1983.
DISSOLVED OXYGEN: Maximum recorded, 14.3 mg/L, Dec. 21, 1981, Jan. 1, 2, 1984; minimum recorded, 4.5 mg/L, May 22, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,980 mg/L, Aug. 9, 1981; minimum daily mean, 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 ton, Nov. 25, 1987.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 1993												
06...	1110	78	177	--	17.5	0.50	8.2	87	7	50	59	15
DEC												
07...	1220	3730	89	7.2	8.5	22	10.7	93	--	--	32	7.7
FEB 1994												
08...	1210	1050	119	6.9	4.0	0.90	12.4	98	K4	K6	43	9.7
APR												
05...	1210	2620	89	6.8	9.5	1.3	--	--	12	26	33	7.4
JUN												
14...	1225	688	197	7.1	23.5	1.5	8.0	96	24	110	68	17
AUG												
02...	1020	361	123	7.1	24.0	0.80	7.6	92	K18	85	45	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 1993											
06...	5.3	8.2	2.0	--	--	--	4.3	40	0.10	2.0	106
DEC											
07...	3.1	2.1	1.4	13	11	11	1.7	24	0.10	4.4	62
FEB 1994											
08...	4.6	3.2	1.0	17	14	15	2.8	32	<0.10	4.7	70
APR											
05...	3.6	2.1	1.0	11	9	10	1.4	24	<0.10	4.9	56
JUN											
14...	6.3	8.0	1.7	39	32	32	3.6	55	<0.10	3.5	135
AUG											
02...	4.2	5.3	1.6	--	--	--	2.7	26	0.10	3.6	71

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 1993											
06...	<0.010	0.095	0.030	<0.20	<0.010	<0.010	<0.010	10	29	<3	76
DEC											
07...	<0.010	0.330	0.020	0.20	0.040	<0.010	<0.010	80	22	<3	86
FEB 1994											
08...	0.020	0.270	0.020	<0.20	0.020	0.010	<0.010	--	--	--	--
APR											
05...	<0.010	0.260	0.210	<0.20	<0.010	<0.010	<0.010	70	21	<3	60
JUN											
14...	<0.010	0.140	0.030	<0.20	0.010	<0.010	<0.010	40	34	<3	48
AUG											
02...	<0.010	0.150	0.160	0.40	0.020	<0.010	<0.010	--	--	--	--

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1993											
06...	<4	23	<10	<1	<1	<1.0	53	<6	10	2.2	23
DEC											
07...	<4	70	<10	2	<1	<1.0	25	<6	31	314	79
FEB 1994											
08...	--	--	--	--	--	--	--	--	3	7.4	41
APR											
05...	<4	52	<10	3	<1	<1.0	26	<6	6	41	30
JUN											
14...	<4	16	<10	<1	<1	<1.0	56	<6	32	60	61
AUG											
02...	--	--	--	--	--	--	--	--	10	10	26

CUMBERLAND RIVER BASIN

03413200 BEAVER CREEK NEAR MONTICELLO, KY

LOCATION.--Lat 36°47'51", long 84°53'46", Wayne County, Hydrologic Unit 05130103, on left bank upstream of bridge on State Highway 200, 0.6 mi downstream from unnamed tributary, 0.8 mi northeast of Bethesda, 0.9 mi upstream from unnamed tributary, 3.8 mi southwest of Monticello, and at mile 24.0.

DRAINAGE AREA.--43.4 mi^2.

PERIOD OF RECORD.--October 1968 to September 1983, October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 804.72 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 13-23, 29, and Feb. 13. Records good except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1946 reached a stage of 10.8 ft from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	5.7	3.1	47	76	68	209	20	15	5.0	48	4.9
2	1.9	5.5	2.4	40	59	235	145	19	14	4.5	21	3.9
3	1.7	5.1	2.2	43	49	254	115	19	14	4.5	14	3.4
4	1.8	4.5	418	144	41	199	98	35	11	4.3	11	3.0
5	1.9	5.4	641	89	37	136	84	25	9.6	3.8	120	2.9
6	1.7	5.0	122	80	34	103	108	21	8.9	3.6	38	2.9
7	1.6	4.4	63	1070	31	89	112	46	18	2.9	22	2.9
8	1.6	3.7	39	367	28	240	96	136	28	2.9	16	2.5
9	1.5	3.4	30	159	179	936	81	60	14	2.9	13	2.5
10	1.7	3.5	102	104	52	617	127	41	12	2.9	10	2.2
11	2.2	3.3	83	82	68	233	2620	32	9.4	2.5	8.8	2.4
12	2.9	3.3	51	188	240	149	484	27	8.0	3.2	7.6	2.5
13	3.1	3.5	38	120	226	115	227	22	7.0	3.8	6.5	2.2
14	2.8	5.0	33	72	180	97	156	21	6.5	4.9	6.4	2.2
15	2.2	29	30	52	136	81	423	24	5.9	4.5	5.9	2.2
16	3.3	23	31	45	104	63	630	23	5.5	24	5.5	2.2
17	5.1	24	28	40	86	53	215	18	5.4	21	5.4	2.3
18	5.4	29	25	34	63	47	134	16	5.0	9.2	5.0	2.5
19	6.7	10	22	28	54	40	106	14	4.5	6.3	4.9	2.5
20	8.7	7.6	21	24	50	36	82	13	4.4	5.5	5.0	2.5
21	7.0	6.3	47	22	231	35	64	12	3.9	4.8	17	2.4
22	6.0	4.9	41	20	196	35	52	11	3.8	5.7	14	2.3
23	5.1	3.5	34	21	1320	32	41	10	3.8	7.8	7.4	2.5
24	4.4	2.8	28	103	323	32	37	9.6	4.1	7.5	5.9	2.5
25	4.7	2.5	26	343	175	52	33	9.6	5.2	5.4	5.2	3.2
26	4.5	2.0	23	302	121	44	30	105	5.6	4.4	5.0	3.8
27	3.5	3.9	21	185	95	935	28	112	19	13	4.4	3.4
28	3.1	9.8	77	577	77	1150	26	40	12	83	4.0	2.9
29	2.9	6.4	149	270	---	314	22	28	8.5	64	4.3	2.9
30	3.8	4.3	83	140	---	179	20	22	6.3	53	11	2.5
31	4.8	---	59	102	---	275	---	18	---	38	6.4	---
TOTAL	109.7	230.3	2372.7	4913	4331	6874	6605	1009.2	278.3	408.8	458.6	83.0
MEAN	3.54	7.68	76.5	158	155	222	220	32.6	9.28	13.2	14.8	2.77
MAX	8.7	29	641	1070	1320	1150	2620	136	28	83	120	4.9
MIN	1.5	2.0	2.2	20	28	32	20	9.6	3.8	2.5	4.0	2.2
CFSM	.08	.18	1.76	3.65	3.56	5.11	5.07	.75	.21	.30	.34	.06
IN.	.09	.20	2.03	4.21	3.71	5.89	5.66	.87	.24	.35	.39	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	25.9	34.9	112	122	119	133	122	55.7	42.2	18.7	19.1	17.9
MAX	281	109	459	265	225	479	234	215	193	101	124	106
(WY)	1990	1980	1991	1974	1991	1975	1977	1983	1981	1971	1971	1982
MIN	1.72	3.47	2.41	2.36	28.1	24.0	28.4	16.6	4.83	3.13	1.89	1.17
(WY)	1981	1972	1981	1981	1981	1983	1978	1982	1980	1980	1980	1980

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	15529.7		27673.6			
ANNUAL MEAN	42.5		75.8		68.3	
HIGHEST ANNUAL MEAN					103	1979
LOWEST ANNUAL MEAN					32.5	1969
HIGHEST DAILY MEAN	641	Dec 5	2620	Apr 11	4280	Oct 17 1989
LOWEST DAILY MEAN	1.5	Oct 9	1.5	Oct 9	.50	Oct 2 1968
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 3	1.7	Oct 3	.95	Sep 4 1980
INSTANTANEOUS PEAK FLOW			8900	Apr 11	9300	Oct 17 1989
INSTANTANEOUS PEAK STAGE			8.10	Apr 11	8.37	Oct 17 1989
INSTANTANEOUS LOW FLOW			1.5	Oct 9	.50	Oct 2 1968
ANNUAL RUNOFF (CFSM)	.98		1.75		1.57	
ANNUAL RUNOFF (INCHES)	13.31		23.72		21.39	
10 PERCENT EXCEEDS	106		179		137	
50 PERCENT EXCEEDS	14		20		21	
90 PERCENT EXCEEDS	2.3		2.8		2.7	

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 mi^2, of which about 94 mi^2 does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1173: 1942-43, 1946(M), 1949. WSP 1306: 1940(M). WSP 1626: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 391.45 ft above sea level. Prior to July 31, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 14-18. Records good except for period of estimated record, which is fair. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	33	75	131	831	675	1010	434	132	215	60	42
2	39	34	70	130	718	652	861	413	128	188	57	40
3	42	37	79	129	621	608	763	366	125	167	55	36
4	42	34	975	131	553	550	745	342	126	150	51	35
5	41	36	1500	123	508	501	696	322	109	137	53	36
6	37	31	766	118	457	456	903	304	101	127	69	37
7	36	30	550	999	418	421	973	287	106	122	58	58
8	35	31	444	860	395	418	785	270	105	116	49	44
9	35	29	380	532	539	2420	693	266	104	112	46	39
10	30	27	460	422	885	4080	1410	252	91	100	44	39
11	29	28	577	363	961	2340	4100	237	85	89	44	38
12	27	29	405	344	1980	1650	3790	227	81	85	43	35
13	27	35	351	373	1970	1260	1950	215	76	81	42	34
14	30	142	336	420	1670	1060	1420	208	73	76	40	35
15	31	488	318	360	1310	909	1240	203	70	75	37	36
16	31	305	282	320	1050	764	1330	198	67	72	35	35
17	33	412	253	300	862	660	1070	192	64	69	36	67
18	28	419	231	280	734	603	877	184	69	87	37	79
19	37	267	213	227	642	538	761	175	74	83	37	76
20	188	201	204	205	1070	492	669	170	64	71	36	47
21	220	168	192	187	2340	456	600	178	61	70	39	41
22	103	145	176	171	2120	421	545	174	83	73	44	39
23	72	129	163	216	4070	392	496	164	122	90	44	44
24	57	120	150	490	2440	369	454	160	197	72	38	44
25	49	110	144	1230	1480	346	424	157	237	62	36	58
26	44	102	136	1690	1100	361	420	153	608	89	34	47
27	40	98	129	2600	881	3990	404	159	848	132	35	44
28	36	95	129	3870	756	4910	409	144	453	115	34	60
29	34	87	141	2040	---	2360	448	137	322	91	35	58
30	34	79	143	1360	---	1590	402	135	257	77	52	47
31	34	---	137	1020	---	1230	---	133	---	68	59	---
TOTAL	1557	3781	10109	21641	33361	37482	30648	6959	5038	3161	1379	1370
MEAN	50.2	126	326	698	1191	1209	1022	224	168	102	44.5	45.7
MAX	220	488	1500	3870	4070	4910	4100	434	848	215	69	79
MIN	27	27	70	118	395	346	402	133	61	62	34	34
CFSM	.21	.52	1.34	2.86	4.88	4.96	4.19	.92	.69	.42	.18	.19
IN.	.24	.58	1.54	3.30	5.09	5.71	4.67	1.06	.77	.48	.21	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	57.3	209	459	564	701	745	565	402	195	146	91.6	96.3
MAX	200	1677	1985	2168	2130	2432	1924	1875	583	790	381	925
(WY)	1985	1958	1979	1950	1989	1975	1979	1984	1981	1989	1950	1950
MIN	12.3	14.1	14.2	27.3	39.6	28.1	37.5	21.4	34.0	29.6	23.9	15.7
(WY)	1944	1941	1964	1963	1963	1941	1941	1941	1963	1988	1952	1941

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	88506		156486			
ANNUAL MEAN	242		429		351	
HIGHEST ANNUAL MEAN					738	1979
LOWEST ANNUAL MEAN					58.9	1941
HIGHEST DAILY MEAN	1780	May 4	4910	Mar 28	12100	May 7 1984
LOWEST DAILY MEAN	23	Aug 30	27	Oct 12	3.6	Oct 3 1941
ANNUAL SEVEN-DAY MINIMUM	29	Oct 10	29	Oct 10	7.0	Oct 24 1940
INSTANTANEOUS PEAK FLOW			5750	Mar 28	20200	May 7 1984
INSTANTANEOUS PEAK STAGE			14.15	Mar 28	22.45	May 7 1984
INSTANTANEOUS LOW FLOW					1.0	Oct 3 1941
ANNUAL RUNOFF (CFSM)	.99		1.76		1.44	
ANNUAL RUNOFF (INCHES)	13.49		23.86		19.54	
10 PERCENT EXCEEDS	568		1060		830	
50 PERCENT EXCEEDS	145		145		135	
90 PERCENT EXCEEDS	34		36		27	

03438190 BARKLEY-KENTUCKY CANAL NEAR GRAND RIVERS, KY

LOCATION.--Lat 36°59'23", long 88°13'17", Lyon County, Hydrologic Unit 05130205, on north pier of bridge on State Highway 453, 1.1 mi southeast of Grand Rivers, and 2.9 mi upstream from Kentucky Dam.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Deflection-meter recorder and water-stage recorder. Prior to Apr. 8, 1967, water-stage recorders. Datum of stage gages is 299.69 ft above sea level. Prior to Apr. 20, 1990 datum of gages was considered to be 300.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records fair. Figures of discharge represent net flow between Lake Barkley in Cumberland River Basin and Kentucky Lake in Tennessee River Basin. Canal initially opened on June 13, 1966. Discharges shown as minus are flow from Kentucky Lake to Lake Barkley. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-18700	-2790	-16700	-24100	-34800	-3540	-590	-17900	-18700	-31700	-27300	-8720
2	-612	-7820	-14500	-18900	-38300	-6250	-13200	-10000	-17000	-29900	-32600	-12700
3	-6070	-3570	-16100	-21400	-30900	-16900	-8460	2850	-12900	-21100	-30000	-8660
4	-6050	-2690	-14500	-25700	-24800	-12500	-15400	-210	1600	-7240	-30000	-8350
5	-7390	5860	-5490	-32300	-18600	-11100	-8860	-9420	836	-8760	-30100	-17600
6	-10400	-1180	10600	-23600	-11600	-8560	-8510	-7090	-1770	-16100	-29000	-19900
7	-15700	2690	-2190	-14300	-4370	-6170	-7220	499	-3630	-17900	-13100	-18500
8	-6410	-3860	-22900	-9940	-6540	-3470	-3680	-4360	-6650	-14200	-9050	-15800
9	-2140	-9500	-34300	3930	980	-3960	-3910	-5070	-23100	-6640	-10800	-13800
10	-3660	-8470	-30400	5450	16200	17300	4980	-14500	-33600	-7200	-14900	-19900
11	-2640	-564	-23500	603	10400	30000	21700	-22200	-36200	-4570	1740	-18400
12	-3790	-2920	-23900	-2540	9330	32700	37200	-12000	-26600	-15000	8070	-16800
13	4780	4110	-28200	-381	17200	29200	45500	-9490	-28400	-16800	-11100	-17500
14	3260	433	-29500	-4170	13500	17100	36700	-9510	-27400	-22600	-12700	-24100
15	3730	2390	-20300	-15300	3980	13200	9360	3230	-24300	-31100	-9050	-18600
16	-212	-24100	-16400	-20100	8100	3910	3150	5440	-21100	-18000	-10400	-18500
17	1570	-25300	-21000	-4200	7810	-2690	13600	-48	-17200	-6700	-16900	-7420
18	3180	-27100	-16700	-11600	-13900	1940	3640	-7730	-4090	-17700	-12200	-5440
19	1340	-23800	-14300	-18500	-22700	8640	-1630	-4600	2140	-23500	-11100	-7180
20	-3720	-17700	-13800	-18200	-20700	10900	-8760	-7490	-2130	-19900	-14500	-16800
21	-524	1100	-25000	-16600	-13100	8600	-17400	-2960	-11000	-29200	6080	-21300
22	581	-5320	-22400	-18600	-4920	759	-18500	4170	-5840	-25800	-410	-24100
23	-1710	-11100	-20200	-20700	12300	6780	-12900	3190	-12500	-15100	-3150	-20300
24	968	-8420	-22100	-20500	32300	8560	-9130	-4150	-3820	-5150	-3800	-11500
25	139	-5280	-16800	-15800	36200	-9860	-9140	-330	-3490	-7820	-18000	-1750
26	-896	-1760	-21500	1840	32600	-23700	-9610	-3520	10500	-16100	-26000	-559
27	710	-3650	-12700	8250	16900	-3890	-11600	-4220	13300	-9310	-12700	-18400
28	-3280	-484	4310	16900	-3330	12200	-12000	-7600	-17400	-8970	-4740	-23200
29	3720	-2140	-6850	24900	---	22200	-18500	-5210	-20500	-13000	-3930	-20500
30	-1880	-15200	-16400	14600	---	21400	-28300	-7260	-27300	-36200	-14400	-18900
31	-3600	---	-17200	-14700	---	14700	---	-7890	---	-38800	-6790	---
TOTAL	-75406	-198135	-530920	-295658	-30760	147499	-52470	-165379	-378244	-542060	-402830	-455179
MEAN	-2432	-6604	-17130	-9537	-1099	4758	-1749	-5335	-12610	-17490	-12990	-15170
MAX	4780	5860	10600	24900	36200	32700	45500	5440	13300	-4570	8070	-559
MIN	-18700	-27100	-34300	-32300	-38300	-23700	-28300	-22200	-36200	-38800	-32600	-24100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

MEAN	-7714	-10520	-9997	-7440	-8612	-6480	-1346	-6124	-5519	-7718	-7869	-6656
MAX	4584	3266	6337	19250	3980	8049	9814	11120	6507	4620	5562	1523
(WY)	1982	1982	1979	1991	1989	1989	1972	1984	1981	1966	1966	1966
MIN	-24200	-30180	-25820	-23210	-24390	-21560	-10380	-24140	-19220	-18440	-16570	-22440
(WY)	1976	1993	1972	1984	1987	1990	1991	1991	1991	1975	1979	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1966 - 1994	
ANNUAL TOTAL	-2756538		-2979542			
ANNUAL MEAN	-7552		-8163		-7292	
HIGHEST ANNUAL MEAN					-849	1988
LOWEST ANNUAL MEAN					-13190	1990
HIGHEST DAILY MEAN	35200	Mar 28	45500	Apr 13	68300	Feb 23 1989
LOWEST DAILY MEAN	-34300	Dec 9	-38800	Jul 31	-48000	May 28 1974
ANNUAL SEVEN-DAY MINIMUM	-27500	Dec 8	-32100	Jul 30	-39200	Oct 10 1975
INSTANTANEOUS PEAK STAGE			66.47	Apr 23	70.34	May 11 1984
10 PERCENT EXCEEDS	3470		8370		6250	
50 PERCENT EXCEEDS	-5530		-8470		-6980	
90 PERCENT EXCEEDS	-23300		-24100		-22500	

03438220 CUMBERLAND RIVER NEAR GRAND RIVERS, KY

LOCATION.--Lat 37°01'18", long 88°13'16", Lyon County, Hydrologic Unit 05130205, on right bank in powerhouse at Barkley Dam, 0.7 mi upstream from bridge on U.S. Highway 62 and 641, 1.5 mi northeast of Grand Rivers, and at mile 30.6.

DRAINAGE AREA.--17,598 mi^2.

PERIOD OF RECORD.--February 1939 to current year (fragmentary prior to April 1940). Monthly discharge only for some periods, published in WSP 1306. Prior to October 1964, published as "at Smithland."

REVISED RECORD.--WSP 1173: 1974(M). WSP 1336: 1940-43.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above sea level (levels by U.S. Army Corps of Engineers). Auxiliary water-stage recorder at Dycysburg at mile 19.6. See WDR KY-88-1 for history of changes prior to Dec. 28, 1965.

REMARKS.--No estimated daily discharges. Records fair except those below 10,000 ft^3/s, which are poor. Regulation of navigation dams on Cumberland River, and by Lake Cumberland, Dale Hollow Reservoir, Great Falls Lake, Center Hill Reservoir, Old Hickory Lake, J. Percy Priest Reservoir, and Lake Barkley. Barkley-Kentucky Canal (station 03438190) diverts water from or to Kentucky Lake in Tennessee River Basin and is included in this record since October 1965.

COOPERATION.--Discharges for days of negative fall or excessive fall were provided by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January to February 1937 reached a stage of 51.1 ft, former site and datum, 60.3 ft, present site and datum (from U.S. Army Corps of Engineers river profile).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15600	8160	23600	51100	134000	96300	148000	135000	28900	54200	57700	28200
2	14300	8000	25500	51300	110000	100000	131000	106000	28700	54500	58600	26300
3	14000	8390	24100	51000	77500	107000	115000	68900	29000	55800	57300	26600
4	15200	8160	38400	51100	70000	105000	112000	64800	7030	42300	57300	27500
5	14100	8560	53300	49000	70300	105000	103000	64600	7260	35300	59100	32900
6	15900	6200	65800	46000	61200	105000	106000	57400	13100	33200	49400	32600
7	17800	6120	77000	46100	54800	104000	108000	51000	13800	27100	31300	30200
8	16600	14600	78400	50900	55600	102000	111000	50200	21100	26500	31800	30800
9	5160	14500	81300	51100	57500	106000	112000	56700	40700	21500	31600	23100
10	5170	9500	80800	50500	64800	115000	112000	62800	45200	20900	38800	26100
11	5310	9980	82600	50300	93200	129000	128000	63700	46800	19800	11500	26400
12	5420	10000	82300	50000	118000	124000	148000	56900	46800	19400	11400	33700
13	5970	6100	83100	54300	125000	114000	145000	49700	45400	31800	33300	27600
14	8640	6150	82300	51900	136000	118000	140000	49200	33000	41500	34400	34000
15	11500	15900	68400	50700	149000	113000	133000	38900	33400	41400	34200	34200
16	13400	48800	53200	52100	135000	107000	95400	39800	34300	22300	33500	39100
17	12600	47000	54300	53400	118000	108000	55900	39400	28400	21500	34000	22900
18	12800	51500	54500	54200	119000	94300	67500	37800	16500	34700	27900	20800
19	12900	52200	55500	53100	119000	76500	101000	29100	14900	40900	27000	24000
20	12200	31100	55800	60000	118000	75500	123000	30400	22200	38400	29800	28200
21	9030	18100	56100	60100	121000	75800	118000	21700	20400	51400	19100	35200
22	18600	19500	56500	60100	116000	61600	114000	13500	20700	33400	27700	32300
23	8250	18800	55700	59900	119000	44300	113000	13600	18500	26600	28500	31300
24	6240	17100	55900	67200	128000	51300	114000	15300	20000	18200	28700	12400
25	6090	16500	42500	61700	136000	63300	127000	6090	20300	27500	44600	11500
26	6160	14800	43000	56000	128000	82300	147000	15200	22400	35300	44800	12700
27	6270	10300	43900	71600	100000	95800	151000	19900	31100	23400	26700	30800
28	6190	9910	26400	99400	96600	129000	149000	21400	55600	14500	25100	31000
29	7740	11800	29800	107000	---	153000	150000	21700	50000	25800	27400	30000
30	7010	19600	50100	110000	---	155000	149000	21700	56400	57900	26600	32100
31	10800	---	51200	122000	---	154000	---	21900	---	58800	26800	---
TOTAL	326950	527330	1731300	1903100	2930500	3170000	3626800	1344290	871890	1055800	1075900	834500
MEAN	10550	17580	55850	61390	104700	102300	120900	43360	29060	34060	34710	27820
MAX	18600	52200	83100	122000	149000	155000	151000	135000	56400	58800	59100	39100
MIN	5160	6100	23600	46000	54800	44300	55900	6090	7030	14500	11400	11500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

MEAN	21310	30800	49660	55630	56860	53820	41630	38660	28650	25900	24930	21110
MAX	55260	62960	97370	114400	104700	118300	120900	99410	63640	57470	39380	53030
(WY)	1990	1980	1973	1974	1994	1975	1994	1984	1973	1989	1979	1979
MIN	6085	7718	8592	6245	23010	14450	4744	4965	6139	5759	7780	6398
(WY)	1966	1966	1981	1981	1977	1981	1986	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1966 - 1994	
ANNUAL TOTAL	11377400		19398360			
ANNUAL MEAN	31170		53150		37340	
HIGHEST ANNUAL MEAN					56740	1973
LOWEST ANNUAL MEAN					14900	1988
HIGHEST DAILY MEAN	83100	Dec 13	155000	Mar 30	202000	Mar 16 1975
LOWEST DAILY MEAN	3000	Jul 23	5160	Oct 9	50	Oct 30 1965
ANNUAL SEVEN-DAY MINIMUM	4300	Aug 5	6530	Oct 24	3090	Apr 23 1986
INSTANTANEOUS PEAK FLOW			162000	Mar 30	209000	Mar 16 1975
INSTANTANEOUS PEAK STAGE			40.45	Apr 26	49.04	Mar 30 1975
10 PERCENT EXCEEDS	53800		118000		67900	
50 PERCENT EXCEEDS	28900		43000		31800	
90 PERCENT EXCEEDS	6260		11500		8030	

TENNESSEE RIVER BASIN

03610200 CLARKS RIVER AT ALMO, KY

LOCATION.--Lat 36°41'30", long 88°16'25", Calloway County, Hydrologic Unit 06040006, on left bank at downstream side of bridge on State Highway 464, 0.3 mi southeast of Almo, 5.1 mi upstream from Rockhouse Creek, and at mile 53.5.

DRAINAGE AREA.--134 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 413.46 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 7, 8, Dec. 28-31, Jan 8-10, 14-22, 29 to Feb. 7, 10, 11, 14-18, 24-28, June 28, and 29. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	10	30	39	130	90	113	399	42	20	7.7	6.4
2	13	9.8	44	38	110	94	95	125	34	18	7.3	113
3	9.4	10	503	36	100	76	147	82	27	17	7.1	14
4	5.8	11	4650	36	86	65	164	67	25	16	7.4	6.7
5	5.2	13	1030	32	80	55	266	55	21	16	249	10
6	4.9	11	280	31	70	47	822	47	43	78	34	14
7	4.9	9.1	160	1900	66	41	264	57	787	21	13	6.7
8	5.1	9.3	106	400	82	289	155	287	146	29	9.9	5.6
9	5.5	11	87	150	934	2380	116	70	311	22	8.6	5.2
10	5.2	10	453	92	500	872	2520	45	340	15	7.6	4.9
11	4.9	10	170	81	300	533	3620	35	84	13	7.4	4.5
12	4.9	13	90	143	763	246	661	32	406	12	8.9	4.6
13	5.0	30	81	125	774	171	328	28	81	18	6.7	4.8
14	5.2	832	164	100	360	138	163	44	43	35	6.2	4.7
15	5.2	1310	138	88	240	111	1400	55	32	46	5.6	4.9
16	14	409	94	78	170	81	1260	33	27	21	5.7	5.0
17	6.9	3050	67	70	150	65	215	27	24	16	5.5	6.3
18	5.3	360	55	66	130	61	133	23	21	14	5.4	5.9
19	238	185	45	62	155	50	95	26	19	13	5.5	4.8
20	1450	130	41	58	1620	44	72	26	17	12	5.3	5.1
21	170	94	37	56	883	43	61	22	17	12	7.9	5.1
22	35	68	33	62	1390	38	50	19	17	78	6.0	5.3
23	20	56	31	133	2780	35	43	18	20	19	5.7	11
24	15	47	30	456	350	33	38	17	208	14	5.5	7.1
25	13	42	29	1120	200	37	36	128	75	11	6.8	30
26	12	47	26	847	120	149	186	833	443	16	6.2	8.6
27	11	44	27	3510	96	5620	58	78	490	16	6.1	7.8
28	11	38	70	3290	82	2870	1120	40	58	11	5.7	5.7
29	10	34	64	500	---	391	274	30	34	9.7	6.7	5.2
30	12	31	50	250	---	208	452	50	25	8.1	8.1	5.2
31	11	---	40	150	---	147	---	99	---	7.6	8.2	---
TOTAL	2123.2	6934.2	8725	13999	12721	15080	14927	2907	3917	654.4	486.7	328.1
MEAN	68.5	231	281	452	454	486	498	93.8	131	21.1	15.7	10.9
MAX	1450	3050	4650	3510	2780	5620	3620	833	787	78	249	113
MIN	4.8	9.1	26	31	66	33	36	17	17	7.6	5.3	4.5
CFSM	.51	1.72	2.10	3.37	3.39	3.63	3.71	.70	.97	.16	.12	.08
IN.	.59	1.93	2.42	3.89	3.53	4.19	4.14	.81	1.09	.18	.14	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

MEAN	56.1	201	414	231	529	251	246	214	83.4	62.5	20.5	15.6
MAX	205	684	1065	550	1693	576	623	925	243	264	135	36.0
(WY)	1986	1989	1983	1988	1989	1984	1983	1983	1989	1989	1985	1990
MIN	2.96	23.1	43.6	27.4	109	62.7	21.6	12.4	3.88	4.95	2.40	2.36
(WY)	1988	1988	1993	1987	1983	1988	1986	1988	1988	1986	1983	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1983 - 1994	
ANNUAL TOTAL	59925.3		82802.6			
ANNUAL MEAN	164		227		192	
HIGHEST ANNUAL MEAN					367	1989
LOWEST ANNUAL MEAN					69.8	1987
HIGHEST DAILY MEAN	4650	Dec 4	5620	Mar 27	11200	Feb 14 1989
LOWEST DAILY MEAN	4.1	Sep 19	4.5	Sep 11	1.6	Aug 29 1983
ANNUAL SEVEN-DAY MINIMUM	4.7	Sep 8	4.8	Sep 10	1.7	Aug 31 1983
INSTANTANEOUS PEAK FLOW			6710	Mar 27	16000	Dec 25 1982
INSTANTANEOUS PEAK STAGE			14.96	Mar 27	17.40	Dec 25 1982
ANNUAL RUNOFF (CFSM)	1.23		1.69		1.43	
ANNUAL RUNOFF (INCHES)	16.64		22.99		19.44	
10 PERCENT EXCEEDS	359		470		353	
50 PERCENT EXCEEDS	35		41		29	
90 PERCENT EXCEEDS	5.5		5.7		4.8	

03610545 WEST FORK CLARKS RIVER NEAR BREWERS, KY

LOCATION.--Lat 36°46'48", long 88°28'03", Marshall County, Hydrologic Unit 06040006, on left bank at downstream side of bridge on State Highways 58 and 80, 400 ft upstream from Moss Branch, 1.3 mi upstream from Soldier Creek, 1.7 mi northwest of Brewers, and at mile 20.8.

DRAINAGE AREA.--68.7 mi^2.

PERIOD OF RECORD.--October 1968 to September 1983, December 1988 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 370.05 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 15-23. Records fair except for period of estimated record, which is poor. Maximum discharge for period of record from rating curve extended above 3,800 ft^3/s. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section. Gage heights published in Kentucky WDR Reports 1983-89 are incorrect. Correct figures may be obtained by subtracting 0.48 feet.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	26	26	41	82	59	77	161	23	17	5.6	5.1
2	19	26	42	41	67	53	64	92	60	15	5.6	6.8
3	18	26	597	37	55	45	88	70	40	14	5.4	4.9
4	15	27	1220	36	50	45	77	57	20	13	88	4.6
5	15	28	458	31	47	41	367	48	18	13	54	8.6
6	15	26	243	33	41	38	410	41	17	113	15	12
7	12	25	146	87	38	37	154	47	23	121	11	8.4
8	12	25	92	48	39	99	98	43	25	92	9.3	6.2
9	14	25	73	36	206	424	77	37	20	53	8.3	5.6
10	13	25	79	31	104	431	965	32	20	30	6.8	5.3
11	13	25	60	33	144	348	997	28	41	21	6.0	5.2
12	14	25	49	63	338	191	605	25	26	17	5.6	5.0
13	14	98	52	52	318	121	289	23	19	18	5.3	4.9
14	14	691	76	43	170	94	168	24	16	17	5.2	4.8
15	14	409	67	37	116	77	527	25	14	15	5.2	4.9
16	20	450	53	36	87	61	306	24	13	15	4.8	4.8
17	20	1020	45	34	72	52	154	20	13	14	4.7	8.5
18	18	209	41	32	61	47	107	19	12	13	4.5	8.4
19	23	116	37	30	53	41	84	18	12	12	4.6	6.0
20	451	62	36	28	628	40	70	16	11	11	5.4	5.7
21	113	46	34	27	307	45	59	16	10	12	8.6	5.7
22	52	38	31	26	689	35	51	15	9.8	13	5.5	5.6
23	41	33	29	60	617	32	45	15	12	10	5.0	14
24	35	31	28	251	235	32	41	14	72	9.7	4.9	11
25	31	34	29	815	138	33	38	262	27	9.1	4.8	9.5
26	29	44	25	522	89	119	112	340	244	9.2	4.8	10
27	27	41	26	926	69	1510	58	113	140	8.4	4.7	11
28	26	33	57	685	56	695	247	58	43	7.5	4.4	9.4
29	26	30	52	307	---	281	106	37	28	7.2	4.7	8.7
30	28	27	41	187	---	164	359	33	20	6.7	6.5	8.5
31	29	---	37	119	---	103	---	30	---	6.2	6.3	---
TOTAL	1183	3721	3881	4734	4916	5393	6800	1783	1048.8	733.0	320.5	219.1
MEAN	38.2	124	125	153	176	174	227	57.5	35.0	23.6	10.3	7.30
MAX	451	1020	1220	926	689	1510	997	340	244	121	88	14
MIN	12	25	25	26	38	32	38	14	9.8	6.2	4.4	4.6
CFSM	.56	1.81	1.82	2.22	2.56	2.53	3.30	.84	.51	.34	.15	.11
IN.	.64	2.01	2.10	2.56	2.66	2.92	3.68	.97	.57	.40	.17	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	17.8	65.5	168	138	207	160	165	91.2	51.0	42.4	20.7	26.2
MAX	61.5	306	583	302	974	804	482	470	300	144	99.0	172
(WY)	1991	1974	1991	1974	1989	1975	1979	1983	1981	1989	1982	1979
MIN	5.99	8.93	10.8	7.03	15.1	40.5	20.3	15.3	6.74	5.33	2.79	2.37
(WY)	1969	1972	1977	1977	1977	1983	1971	1992	1972	1970	1983	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1969 - 1994	
ANNUAL TOTAL	28372.8		34732.4			
ANNUAL MEAN	77.7		95.2		91.4	
HIGHEST ANNUAL MEAN					190	1979
LOWEST ANNUAL MEAN					25.6	1977
HIGHEST DAILY MEAN	2690	Apr 9	1510	Mar 27	7000	Feb 14 1989
LOWEST DAILY MEAN	5.7	Aug 4	4.4	Aug 28	1.1	Aug 23 1982
ANNUAL SEVEN-DAY MINIMUM	6.0	Jul 30	4.8	Aug 23	1.2	Sep 7 1983
INSTANTANEOUS PEAK FLOW			2620	Nov 16	9370	Mar 12 1975
INSTANTANEOUS PEAK STAGE			10.80	Nov 16	17.61	Mar 12 1975
ANNUAL RUNOFF (CFSM)	1.13		1.39		1.33	
ANNUAL RUNOFF (INCHES)	15.36		18.81		18.09	
10 PERCENT EXCEEDS	157		255		185	
50 PERCENT EXCEEDS	32		33		24	
90 PERCENT EXCEEDS	9.2		6.1		6.0	

MASSAC CREEK BASIN

03611260 MASSAC CREEK NEAR PADUCAH, KY

LOCATION.--Lat 37°02'29", long 88°42'39", McCracken County, Hyrologic 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 mi^2.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--1983 (M), 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 345.53 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 6-18, 20-22, Nov. 5-7, 10-14, Nov. 22 to Dec. 1, Dec. 3-8, 14-17, 22, 23, 28-30, Jan. 7, 8, 12-23, Mar. 8, 9, 15-25, 29, 30, Apr. 8-10, 30, and May 1. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	.75	2.4	3.7	9.9	9.7	5.2	20	1.5	1.2	.72	.75
2	3.3	.75	35	3.6	8.5	9.1	4.4	6.7	1.5	1.2	.74	.67
3	.91	.80	250	3.3	7.0	8.2	7.4	4.8	1.5	1.1	.74	.63
4	.59	.91	200	3.0	6.7	8.0	4.9	4.0	1.5	1.1	2.2	.64
5	.59	.83	70	2.6	6.4	7.3	63	3.2	1.4	.93	1.3	1.1
6	.54	.76	26	2.9	5.4	7.1	62	2.8	69	.92	.75	.73
7	.52	.75	14	2.9	4.8	7.1	11	3.0	14	.89	.74	.72
8	.54	.76	7.8	2.1	5.2	30	7.0	2.8	2.6	4.2	.72	.76
9	.58	.76	7.9	2.0	9.3	40	5.3	2.6	2.2	1.1	.74	.63
10	.60	.74	9.3	2.1	8.4	55	80	2.5	2.0	.87	.71	.61
11	.68	.72	6.7	3.0	17	107	221	2.2	2.3	.85	.70	.60
12	.66	1.0	5.5	15	35	73	126	2.2	2.2	32	.70	.61
13	.68	3.0	9.9	6.7	22	35	23	2.1	1.9	5.2	.70	.59
14	.66	140	20	3.4	12	19	12	1.9	1.9	1.7	.67	.59
15	.66	25	24	2.0	9.2	14	135	1.9	1.9	1.5	.66	.58
16	.70	170	14	1.8	6.9	9.5	28	1.8	1.8	37	.64	.67
17	1.4	432	8.0	1.6	6.0	8.0	15	1.7	1.7	1.9	.66	.94
18	.90	17	5.9	1.4	5.4	6.0	12	1.7	1.5	1.3	.65	.62
19	1.1	7.4	4.8	1.2	5.0	5.4	10	1.6	1.2	1.1	.70	.59
20	30	4.2	4.7	1.1	113	5.0	8.7	1.6	1.1	.97	.99	.58
21	2.6	2.8	4.1	.96	28	6.9	7.9	1.6	1.9	.91	.86	.59
22	.88	2.5	3.8	.90	213	5.2	6.9	1.6	1.4	.85	.70	.66
23	.84	2.0	3.2	10	76	5.4	6.2	1.6	1.2	.79	.70	2.9
24	.82	1.8	3.0	161	24	6.6	5.7	1.5	5.7	.75	.70	.77
25	.83	20	3.2	417	15	7.1	4.8	6.6	1.2	.74	.67	.70
26	.78	40	2.8	165	11	93	4.5	2.5	1.4	.72	.66	.62
27	.74	17	2.7	280	9.6	208	3.9	1.6	1.5	.71	.65	.58
28	.74	7.0	5.3	165	9.2	50	27	1.6	1.3	.71	.64	.58
29	.75	4.5	5.5	36	---	12	8.8	1.5	1.3	.74	.75	.58
30	.88	3.0	7.0	21	---	8.5	190	1.5	1.2	.70	.66	.58
31	.82	---	2.9	14	---	6.5	---	1.5	---	.73	.69	---
TOTAL	56.86	908.73	769.4	1336.26	688.9	872.6	1106.6	94.2	132.8	105.38	24.11	22.17
MEAN	1.83	30.3	24.8	43.1	24.6	28.1	36.9	3.04	4.43	3.40	.78	.74
MAX	30	432	250	417	213	208	221	20	69	37	2.2	2.9
MIN	.52	.72	2.4	.90	4.8	5.0	3.9	1.5	1.1	.70	.64	.58
CFSM	.13	2.07	1.70	2.95	1.69	1.93	2.53	.21	.30	.23	.05	.05
IN.	.14	2.32	1.96	3.40	1.76	2.22	2.82	.24	.34	.27	.06	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

MEAN	3.32	14.7	29.6	21.7	39.2	30.9	32.9	16.6	7.54	9.13	2.57	4.54
MAX	19.4	41.6	105	48.1	160	103	121	58.8	33.9	37.3	13.9	50.1
(WY)	1986	1989	1983	1974	1989	1975	1973	1983	1975	1983	1982	1985
MIN	.25	.37	.71	.58	4.19	8.36	2.14	1.17	.32	.37	.30	.23
(WY)	1982	1972	1977	1977	1977	1987	1986	1992	1972	1974	1980	1976

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1972 - 1994	
ANNUAL TOTAL	5629.63		6118.01			
ANNUAL MEAN	15.4		16.8		17.6	
HIGHEST ANNUAL MEAN					37.9	1979
LOWEST ANNUAL MEAN					6.53	1987
HIGHEST DAILY MEAN	498	Apr 9	432	Nov 17	1780	Feb 13 1989
LOWEST DAILY MEAN	.44	Sep 10	.52	Oct 7	.09	Nov 13 1971
ANNUAL SEVEN-DAY MINIMUM	.46	Sep 16	.57	Oct 4	.10	Nov 10 1971
INSTANTANEOUS PEAK FLOW			1840	Nov 17	5990	Sep 5 1985
INSTANTANEOUS PEAK STAGE			11.51	Nov 17	15.86	Sep 5 1985
INSTANTANEOUS LOW FLOW					.06	Nov 14 1971
ANNUAL RUNOFF (CFSM)	1.06		1.15		1.20	
ANNUAL RUNOFF (INCHES)	14.34		15.59		16.37	
10 PERCENT EXCEEDS	26		31		30	
50 PERCENT EXCEEDS	2.2		2.2		2.1	
90 PERCENT EXCEEDS	.52		.66		.40	

OHIO RIVER MAIN STEM

03611500 OHIO RIVER AT METROPOLIS, IL

LOCATION.--Lat 37°08'51", long 88°44'27", McCracken County, Hydrologic Unit 05140206, near center of span on downstream side of pier of Paducah & Illinois Railroad bridge at Metropolis, 9.5 mi downstream from Tennessee River, 37 mi upstream from mouth, and at mile 944.1.

DRAINAGE AREA.--203,000 mi^2, approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to April 1928 monthly discharge only, published in WSP 1305. Gage-height records collected 9.6 mi upstream at Paducah since 1890 are contained in reports of National Weather Service. Occasional discharge measurements 1881 to 1924 in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 276.27 ft above sea level. Prior to Dec. 22, 1936, water-stage recorders (temporary installations) at Paducah, Ky., Metropolis and Joppa, Ill., and Dam 52. Auxiliary water-stage recorder near Grand Chain, 0.5 mi upstream from Dam 53, and 18 mi downstream from base gage. Prior to May 29, 1936, auxiliary nonrecording gage at Dam 53.

REMARKS.--Estimated daily discharges: Oct. 2, 3, 9-12, 19, Sept. 10, 11, 18, and 23-26. Records fair except those below 100,000 ft^3/s and for periods of estimated record, which are poor. Flow regulated by many dams and reservoirs. Maximum daily discharge includes overflow through Bay Creek and Cache River Valleys. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127000	101000	393000	214000	829000	813000	934000	639000	160000	213000	201000	150000
2	120000	107000	399000	210000	839000	840000	929000	614000	137000	217000	196000	141000
3	110000	118000	420000	218000	830000	863000	933000	556000	133000	207000	161000	148000
4	116000	127000	464000	214000	833000	873000	922000	512000	123000	191000	149000	151000
5	106000	138000	485000	220000	847000	866000	929000	472000	104000	192000	154000	159000
6	112000	138000	504000	244000	855000	843000	945000	427000	82100	174000	167000	155000
7	124000	127000	564000	283000	847000	811000	952000	404000	103000	154000	150000	118000
8	112000	144000	591000	317000	829000	792000	945000	395000	133000	115000	152000	134000
9	95000	159000	601000	359000	789000	783000	934000	415000	146000	129000	167000	123000
10	70000	144000	615000	421000	739000	782000	913000	455000	178000	140000	168000	100000
11	75000	137000	632000	462000	721000	807000	903000	482000	167000	137000	138000	80000
12	80000	126000	641000	510000	738000	818000	934000	513000	150000	122000	121000	87500
13	79600	113000	638000	550000	781000	805000	945000	530000	131000	138000	119000	85000
14	85000	121000	618000	559000	819000	798000	926000	550000	130000	164000	106000	95900
15	84100	180000	567000	519000	863000	811000	871000	548000	134000	164000	107000	108000
16	71600	287000	515000	472000	890000	823000	821000	505000	152000	152000	145000	109000
17	91900	389000	454000	459000	903000	842000	741000	433000	162000	126000	154000	98200
18	90200	426000	364000	439000	901000	846000	748000	368000	152000	137000	161000	80000
19	86000	458000	321000	420000	896000	820000	823000	313000	153000	158000	178000	90500
20	84800	473000	314000	367000	900000	806000	892000	278000	144000	145000	189000	89100
21	126000	462000	297000	305000	893000	778000	927000	246000	142000	160000	198000	98100
22	164000	453000	289000	279000	872000	707000	947000	215000	145000	135000	230000	112000
23	165000	471000	286000	284000	837000	633000	961000	179000	138000	120000	254000	82000
24	166000	511000	275000	298000	814000	513000	965000	167000	131000	120000	249000	90000
25	165000	517000	259000	300000	835000	476000	954000	154000	122000	115000	227000	60000
26	157000	503000	252000	350000	849000	473000	949000	146000	126000	139000	219000	68000
27	152000	467000	244000	446000	830000	514000	922000	141000	154000	149000	190000	94900
28	126000	404000	215000	593000	802000	640000	860000	149000	188000	144000	149000	131000
29	132000	401000	201000	700000	---	782000	776000	153000	198000	131000	136000	127000
30	135000	397000	206000	763000	---	865000	690000	151000	199000	157000	131000	124000
31	117000	---	211000	802000	---	908000	---	151000	---	195000	145000	---
TOTAL	3525200	8599000	12835000	12577000	23381000	23731000	26891000	11261000	4317100	4740000	5211000	3289200
MEAN	113700	286600	414000	405700	835000	765500	896400	363300	143900	152900	168100	109600
MAX	166000	517000	641000	802000	903000	908000	965000	639000	199000	217000	254000	159000
MIN	70000	101000	201000	210000	721000	473000	690000	141000	82100	115000	106000	60000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1994, BY WATER YEAR (WY)

MEAN	101600	164000	290500	398300	469900	523200	466600	328300	207600	151800	120300	99580
MAX	335600	450300	717500	1022000	1217000	967300	896400	917800	492800	441200	331100	383500
(WY)	1980	1986	1973	1937	1937	1945	1994	1983	1928	1928	1958	1979
MIN	22710	33400	48610	71650	77370	154700	129900	75180	53840	23350	25390	29330
(WY)	1931	1931	1931	1940	1934	1941	1986	1941	1936	1930	1930	1930

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1928 - 1994	
ANNUAL TOTAL	109758600		140357500			
ANNUAL MEAN	300700		384500		275000	
HIGHEST ANNUAL MEAN					436600	1979
LOWEST ANNUAL MEAN					120300	1931
HIGHEST DAILY MEAN	823000	Apr 2	965000	Apr 24	1850000	Feb 1 1937
LOWEST DAILY MEAN	47000	Aug 7	60000	Sep 25	15000	Jul 20 1930
ANNUAL SEVEN-DAY MINIMUM	52000	Aug 5	77900	Oct 10	16600	Jul 20 1930
INSTANTANEOUS PEAK FLOW			976000	Apr 23	1850000	Feb 1 1937
INSTANTANEOUS PEAK STAGE			53.46	Apr 21	66.60	Feb 2 1937
10 PERCENT EXCEEDS	598000		861000		635000	
50 PERCENT EXCEEDS	206000		220000		188000	
90 PERCENT EXCEEDS	90000		109000		66700	

BAYOU CREEK BASIN

03611800 BAYOU CREEK NEAR HEATH, KY

LOCATION.--Lat 37°05'58", long 88°49'27", McCracken County, Hydrologic Unit 05140206, on left downstream wingwall of bridge on Dyke Road, 1.0 mi southwest of Paducah Gaseous Diffusion Plant, 2.0 mi northwest of Heath, 3.0 mi upstream from Brushy Creek, and at mile 7.3.

DRAINAGE AREA.--6.55 mi^2.

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 366.06 ft above sea level (levels by U.S. Department of Energy).

REMARKS.--Estimated daily discharges: Jan. 14-23. Records fair except for period of estimated record, which is poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.33	.36	.53	2.1	1.4	1.3	4.9	.22	.12	.16	.21
2	.73	.34	10	.56	1.8	1.3	1.1	2.4	.23	.13	.17	.19
3	.22	.40	120	.49	1.3	1.0	3.6	1.6	.17	.15	.16	.14
4	.11	.41	90	.44	1.3	.91	2.2	1.3	.17	.15	1.6	.14
5	.11	.44	9.9	.29	1.3	.70	38	.93	.18	.26	1.4	1.4
6	.10	.41	3.2	.35	1.1	.60	29	.62	.24	2.1	.11	.16
7	.08	.40	1.6	.31	1.0	.89	4.3	.72	.18	.74	.10	.13
8	.10	.43	1.0	.20	1.1	26	2.6	.54	.20	1.5	.10	.14
9	.11	.39	.94	.18	3.1	12	2.2	.35	.18	.30	.11	.15
10	.11	.39	1.1	.15	2.0	19	63	.25	.17	.11	.14	.15
11	.14	.41	.60	.69	5.4	51	70	.17	.49	.09	.14	.15
12	.13	.46	.44	5.7	8.7	32	74	.13	.15	.11	.15	.14
13	.14	.96	1.8	2.0	4.7	11	5.9	.12	.11	.10	.14	.17
14	.13	79	4.7	1.2	2.5	4.9	3.0	.18	.10	.09	.18	.20
15	.13	5.3	4.9	.72	1.9	3.0	109	.17	.08	.10	.16	.23
16	.15	121	1.8	.62	1.5	1.9	8.2	.13	.08	.19	.16	.29
17	.39	198	1.1	.54	1.2	1.5	3.7	.14	.09	.10	.20	.38
18	.15	3.0	.86	.48	1.1	1.3	2.5	.15	.10	.11	.13	.35
19	.28	1.3	.53	.44	1.0	1.0	1.7	.15	.11	.12	.14	.35
20	8.0	.57	.49	.40	92	.95	1.3	.16	.10	.12	.25	.41
21	1.2	.27	.42	.36	7.7	1.2	1.0	.16	.12	.17	.27	.37
22	.23	.17	.30	.32	169	.80	.91	.16	.12	.13	.23	.46
23	.15	.14	.22	1.5	32	.71	.67	.17	.22	.12	.24	1.6
24	.17	.13	.20	35	6.3	1.1	.53	.17	.40	.12	.21	.51
25	.19	5.7	.24	182	3.4	.97	.44	.21	.13	.13	.16	.54
26	.18	18	.18	43	1.8	52	.43	.25	.28	.15	.17	.13
27	.20	4.4	.20	91	1.5	61	.35	.21	.15	.15	.19	.13
28	.20	1.7	.45	40	1.3	9.8	2.6	.23	.13	.15	.16	.13
29	.21	.89	.46	6.6	---	3.4	1.1	.24	.12	.14	.46	.11
30	.48	.53	.72	3.9	---	2.3	64	.27	.12	.14	.23	.11
31	.37	---	.51	2.5	---	1.6	---	.24	---	.16	.22	---
TOTAL	14.97	445.87	259.22	422.47	359.1	307.23	498.63	17.42	5.14	8.25	8.24	9.57
MEAN	.48	14.9	8.36	13.6	12.8	9.91	16.6	.56	.17	.27	.27	.32
MAX	8.0	198	120	182	169	61	109	4.9	.49	2.1	1.6	1.6
MIN	.08	.13	.18	.15	1.0	.60	.35	.12	.08	.09	.10	.11
CFSM	.07	2.27	1.28	2.08	1.96	1.51	2.54	.09	.03	.04	.04	.05
IN.	.09	2.53	1.47	2.40	2.04	1.74	2.83	.10	.03	.05	.05	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	.91	5.40	22.8	13.5	14.2	10.6	10.8	6.94	1.57	.25	.24	.92
MAX	1.72	14.9	37.2	13.6	15.6	11.3	16.6	13.3	4.18	.39	.33	2.11
(WY)	1991	1994	1991	1994	1991	1991	1994	1991	1993	1991	1991	1993
MIN	.48	.45	8.36	13.3	12.8	9.91	4.90	.56	.17	.089	.12	.32
(WY)	1994	1991	1994	1991	1994	1994	1991	1994	1994	1993	1993	1994

SUMMARY STATISTICS	FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	2356.11			
ANNUAL MEAN	6.46		7.37	
HIGHEST ANNUAL MEAN			8.28	1991
LOWEST ANNUAL MEAN			6.46	1994
HIGHEST DAILY MEAN	198	Nov 17	478	Dec 21 1990
LOWEST DAILY MEAN	.08	Oct 1	.05	Sep 7 1991
ANNUAL SEVEN-DAY MINIMUM	.09	Jun 14	.06	Jul 2 1993
INSTANTANEOUS PEAK FLOW	1560	Nov 17	1820	May 12 1991
INSTANTANEOUS PEAK STAGE	6.90	Nov 17	8.45	May 12 1991
ANNUAL RUNOFF (CFSM)	.99		1.13	
ANNUAL RUNOFF (INCHES)	13.38		15.29	
10 PERCENT EXCEEDS	7.0		5.0	
50 PERCENT EXCEEDS	.40		.38	
90 PERCENT EXCEEDS	.12		.11	

BAYOU CREEK BASIN

03611850 BAYOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'41", long 88°49'38", McCracken County, Hydrologic Unit 05140206, near right bank on downstream side of bridge on State Highway 358, 750 ft downstream of Brushy Creek, 1.4 mi north of Paducah Gaseous Diffusion Plant, 3.6 mi northwest of Grahamville, and at mile 4.1.

DRAINAGE AREA.--14.9 mi^2.

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 330 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 15-22, Mar. 22-24, Apr. 19-29, and May 3-9. Records fair except for periods of estimated record, which are poor. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	8.4	8.6	7.4	11	9.8	7.4	23	12	3.8	6.7	5.2
2	21	8.2	45	7.5	10	10	7.0	19	12	3.3	6.9	4.6
3	5.2	8.0	255	7.2	9.8	9.5	11	16	9.0	3.7	6.4	2.0
4	4.1	7.4	219	7.2	9.4	9.1	8.3	13	9.3	3.3	10	3.1
5	4.0	7.1	35	7.0	9.5	9.1	86	9.8	10	11	10	18
6	4.1	7.3	13	7.2	9.5	8.9	81	7.8	14	13	6.4	4.2
7	4.4	7.2	9.9	8.4	9.1	9.6	14	8.3	15	10	6.6	3.1
8	4.5	7.1	8.8	8.2	9.3	116	8.9	10	14	13	6.5	3.2
9	5.2	7.0	8.1	8.0	18	51	8.9	9.8	13	8.1	7.8	3.1
10	5.0	7.6	8.1	8.0	15	64	123	8.8	12	7.2	8.0	3.2
11	5.5	7.7	7.9	11	20	125	188	8.4	13	7.1	8.0	3.1
12	5.1	8.1	7.6	26	28	91	159	8.3	7.0	6.8	9.0	3.2
13	5.1	11	10	10	18	36	19	8.2	7.2	6.8	8.2	3.1
14	4.2	179	16	9.0	13	18	11	8.4	7.5	6.3	8.3	3.2
15	4.0	25	17	8.9	11	13	186	8.3	7.6	6.1	8.0	3.2
16	4.1	203	9.9	8.9	10	11	29	8.0	7.8	6.7	7.8	3.2
17	11	359	8.4	8.8	10	11	19	7.9	8.0	6.2	7.3	6.0
18	4.9	18	8.1	8.7	9.6	9.9	16	8.0	7.4	6.2	6.4	4.2
19	7.2	11	8.0	8.6	9.2	9.5	15	8.2	7.4	6.2	6.2	4.5
20	45	9.0	8.2	8.4	198	9.9	14	8.3	7.6	6.3	8.8	4.6
21	11	8.0	7.9	8.2	27	10	13	7.8	7.4	5.6	8.1	7.3
22	7.6	7.5	7.1	8.0	261	9.0	9.8	8.0	7.2	4.4	6.6	8.6
23	7.1	7.4	6.7	13	106	8.0	9.2	7.9	7.9	3.8	6.4	28
24	6.9	8.0	6.4	94	22	7.0	9.2	7.2	9.8	3.6	6.2	16
25	6.8	30	6.7	391	14	6.5	8.9	7.0	5.9	3.9	6.3	12
26	6.8	72	6.5	119	11	69	8.6	7.4	9.1	4.1	6.2	10
27	7.1	19	6.6	230	9.6	156	8.9	6.2	6.1	6.0	6.0	8.8
28	7.5	11	8.8	116	9.3	27	14	5.1	5.8	6.0	6.1	8.4
29	7.9	9.6	8.6	23	---	10	14	5.4	4.5	6.0	14	9.0
30	10	8.9	8.5	15	---	7.9	122	7.8	3.9	6.4	5.0	8.6
31	8.9	---	7.8	13	---	7.8	---	11	---	6.6	4.1	---
TOTAL	245.3	1087.5	793.2	1214.6	897.3	949.5	1229.1	288.3	268.4	197.5	228.3	204.7
MEAN	7.91	36.2	25.6	39.2	32.0	30.6	41.0	9.30	8.95	6.37	7.36	6.82
MAX	45	359	255	391	261	156	188	23	15	13	14	28
MIN	4.0	7.0	6.4	7.0	9.1	6.5	7.0	5.1	3.9	3.3	4.1	2.0
CFSM	.53	2.43	1.72	2.63	2.15	2.06	2.75	.62	.60	.43	.49	.46
IN.	.61	2.72	1.98	3.03	2.24	2.37	3.07	.72	.67	.49	.57	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	7.34	16.6	43.1	35.8	35.0	29.1	29.1	17.7	11.6	6.75	6.81	8.37
MAX	8.31	36.2	60.7	39.2	37.9	30.6	41.0	26.1	18.4	6.99	7.36	12.6
(WY)	1991	1994	1991	1994	1991	1994	1994	1991	1993	1993	1994	1993
MIN	5.79	5.76	25.6	32.4	32.0	27.5	17.2	9.30	7.56	6.37	6.51	5.70
(WY)	1992	1991	1994	1991	1994	1991	1991	1994	1991	1994	1993	1991

SUMMARY STATISTICS	FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	7603.7			
ANNUAL MEAN	20.8		20.5	
HIGHEST ANNUAL MEAN			20.8	1994
LOWEST ANNUAL MEAN			20.2	1991
HIGHEST DAILY MEAN	391	Jan 25	592	Dec 21 1990
LOWEST DAILY MEAN	2.0	Sep 3	2.0	Sep 3 1994
ANNUAL SEVEN-DAY MINIMUM	3.1	Sep 7	3.1	Sep 7 1994
INSTANTANEOUS PEAK FLOW	1490	Nov 17	1490	Nov 17 1993
INSTANTANEOUS PEAK STAGE	11.70	Nov 17	11.70	Nov 17 1993
ANNUAL RUNOFF (CFSM)	1.40		1.38	
ANNUAL RUNOFF (INCHES)	18.98		18.70	
10 PERCENT EXCEEDS	27		22	
50 PERCENT EXCEEDS	8.3		7.9	
90 PERCENT EXCEEDS	4.6		4.4	

BAYOU CREEK BASIN

03611900 LITTLE BAYOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'22", long 88°47'26", McCracken County, Hydrologic Unit 05140206, on left bank on reservation of Tennessee Valley Authority Shawnee Steam Plant, 30 ft upstream of bridge on unnamed county road, 1.1 mi southwest of Shawnee Steam Plant, 2.2 mi upstream from Bayou Creek, and 2.3 mi north of Grahamville.

DRAINAGE AREA.--5.78 mi^2.

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 324.80 ft above sea level (levels by U.S. Department of Energy).

REMARKS.--Estimated daily discharges: Jan. 14-23, and Apr. 13-27. Records fair except for periods of estimated record, which are poor. Some regulation from Paducah Gaseous Diffusion Plant, 0.4 mi upstream. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	2.6	1.4	1.5	2.6	1.6	1.5	12	.91	.82	1.1	.89
2	5.6	2.7	11	1.4	2.1	1.5	1.4	3.3	.89	.84	1.2	.94
3	.70	4.1	77	1.2	1.6	1.4	4.7	1.8	.88	.83	1.1	.84
4	.46	4.6	88	1.2	1.5	1.3	3.3	1.4	.82	.84	1.5	.85
5	.44	4.6	21	1.2	1.5	1.2	29	1.2	.89	2.1	2.7	7.9
6	.41	4.5	6.1	1.3	1.5	1.1	45	1.2	1.2	2.3	1.0	1.4
7	.40	4.9	2.6	1.2	1.2	1.6	8.3	1.3	2.0	1.4	.98	.84
8	.40	4.8	1.8	1.2	1.3	50	3.8	1.2	.83	4.3	.95	.78
9	.50	5.7	1.6	1.1	7.0	24	3.9	1.1	.91	1.4	1.2	1.3
10	.42	5.7	1.7	1.1	5.5	28	54	1.0	.89	.99	1.2	.79
11	.45	5.6	1.4	1.5	7.3	44	74	.99	1.0	.92	1.1	.83
12	.44	5.8	1.3	8.1	13	37	72	.99	1.3	1.4	1.1	.85
13	.39	9.4	2.1	3.0	7.3	18	12	.93	.91	1.0	1.1	.82
14	.43	42	7.0	2.0	3.2	7.9	8.0	1.1	.91	1.0	1.1	.94
15	.47	13	9.3	1.9	2.3	4.2	90	1.0	.92	.94	1.1	.75
16	.47	94	3.4	1.9	1.7	2.1	18	.95	.95	1.1	1.1	.67
17	3.0	195	2.1	1.8	1.5	1.5	5.2	.95	1.0	1.1	1.1	.87
18	.38	7.1	1.6	1.8	1.5	1.4	2.5	.91	1.0	1.0	1.1	.70
19	.98	2.7	1.5	1.7	1.4	1.3	2.4	1.0	.96	.95	1.1	.71
20	16	1.7	1.3	1.7	63	1.9	2.3	.92	.92	.98	1.3	.76
21	3.8	1.4	1.3	1.6	14	2.2	2.2	.90	.79	1.2	1.7	.74
22	1.3	1.3	1.2	1.6	100	1.5	2.1	.88	.91	1.1	1.1	.69
23	1.3	1.3	1.1	4.0	47	1.2	1.9	1.2	.92	1.0	1.1	8.1
24	1.6	1.3	1.1	28	11	1.9	1.7	.97	2.2	1.0	1.0	1.6
25	1.7	8.5	1.1	139	4.4	1.4	1.6	1.0	.94	1.1	1.1	2.2
26	2.0	28	1.1	43	2.5	23	1.6	1.2	1.8	1.1	1.1	.54
27	2.3	10	1.1	81	1.8	80	1.5	.91	.97	1.1	1.1	.56
28	2.5	3.3	2.0	50	1.4	20	6.9	.87	.83	1.4	1.1	.54
29	2.4	2.0	2.1	12	---	5.5	4.0	.85	.81	.96	4.5	.54
30	5.1	1.5	2.3	5.4	---	2.9	111	.87	.82	1.0	1.1	.50
31	3.5	---	1.8	2.9	---	2.2	---	.87	---	1.0	.86	---
TOTAL	60.36	479.1	259.4	406.3	310.1	372.8	575.8	45.76	31.08	38.17	39.89	40.44
MEAN	1.95	16.0	8.37	13.1	11.1	12.0	19.2	1.48	1.04	1.23	1.29	1.35
MAX	16	195	88	139	100	80	111	12	2.2	4.3	4.5	8.1
MIN	.38	1.3	1.1	1.1	1.2	1.1	1.4	.85	.79	.82	.86	.50
CFSM	.34	2.76	1.45	2.27	1.92	2.08	3.32	.26	.18	.21	.22	.23
IN.	.39	3.08	1.67	2.61	2.00	2.40	3.71	.29	.20	.25	.26	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	2.14	6.27	20.9	15.5	14.0	10.8	12.4	4.95	1.97	1.00	1.07	1.89
MAX	3.11	16.0	33.5	17.9	17.0	12.0	19.2	8.43	3.69	1.23	1.29	2.98
(WY)	1991	1994	1991	1991	1991	1994	1994	1991	1993	1994	1994	1993
MIN	1.37	1.33	8.37	13.1	11.1	9.48	5.62	1.48	1.04	.82	.96	1.35
(WY)	1992	1992	1994	1994	1994	1991	1991	1994	1994	1991	1991	1994

SUMMARY STATISTICS	FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	2659.20			
ANNUAL MEAN	7.29		7.84	
HIGHEST ANNUAL MEAN			8.40	1991
LOWEST ANNUAL MEAN			7.29	1994
HIGHEST DAILY MEAN	195	Nov 17	292	Dec 21 1990
LOWEST DAILY MEAN	.38	Oct 18	.38	Oct 18 1993
ANNUAL SEVEN-DAY MINIMUM	.43	Oct 7	.43	Sep 25 1991
INSTANTANEOUS PEAK FLOW	842	Nov 17	842	Nov 17 1993
INSTANTANEOUS PEAK STAGE	8.56	Nov 17	8.56	Nov 17 1993
ANNUAL RUNOFF (CFSM)	1.26		1.36	
ANNUAL RUNOFF (INCHES)	17.11		18.43	
10 PERCENT EXCEEDS	12		10	
50 PERCENT EXCEEDS	1.4		1.1	
90 PERCENT EXCEEDS	.83		.65	

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°12'11", long 89°02'30", Pulaski County, Hydrologic Unit 05140206, at auxiliary gaging station, 0.5 mi upstream from Gar Creek, 3.0 mi southwest of Grand Chain, 18.1 mi downstream from gaging station at Metropolis, and at mile 962.2.

DRAINAGE AREA.--203,100 mi^2, approximately.

PERIOD OF RECORD.--Water years 1955 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1954 to September 1970, January 1973 to September 1990.
WATER TEMPERATURES: October 1954 to September 1970, January 1973 to September 1990.

REMARKS.--Records of daily discharge are published for station at Metropolis, IL, (station 03611500). Flow regulated by many days dams and reservoirs.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 693 microsiemens, Nov. 25, 1968; minimum daily, 170 microsiemens, Feb. 9, 1957, Jan. 21, 1973.
WATER TEMPERATURES: Maximum daily, 31.0°C, July 15, 1964, July 17-21, 25, 1977; minimum daily, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT^3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 1993												
13...	1051	100000	336	7.9	17.5	15	8.0	83	110	43	140	36
DEC												
07...	1234	590000	262	7.6	8.5	56	10.7	91	320	710	130	36
FEB 1994												
03...	1148	832000	239	8.4	2.5	85	15.0	108	150	450	99	29
APR												
05...	1117	929000	213	7.4	11.0	43	11.3	103	250	300	84	25
JUN												
08...	1132	136000	283	7.7	24.5	17	6.3	--	520	K10	120	33

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 1993											
13...	11	12	3.4	124	102	102	15	39	0.20	5.6	192
DEC											
07...	9.2	10	2.8	106	87	86	13	40	0.10	5.7	183
FEB 1994											
03...	6.4	9.4	2.4	79	65	65	13	33	0.10	5.6	360
APR											
05...	5.3	6.1	1.7	65	53	53	7.4	31	<0.10	5.2	115
JUN											
08...	8.5	8.1	1.8	94	77	77	11	33	0.10	0.93	153

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	COBALT, DISSOLVED (UG/L AS CO)	IRON, DISSOLVED (UG/L AS FE)
OCT 1993											
13...	0.020	1.00	0.070	0.50	0.110	0.060	0.060	30	34	<3	18
DEC											
07...	0.010	1.10	0.070	0.60	0.250	0.060	0.060	40	35	<3	63
FEB 1994											
03...	0.030	0.970	0.130	1.4	0.300	0.050	0.050	--	--	--	--
APR											
05...	0.040	0.710	0.060	0.50	0.150	0.040	0.030	130	35	<3	95
JUN											
08...	0.020	0.670	0.050	0.40	0.060	0.010	<0.010	10	32	<3	5

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1993											
13...	<4	1	<10	1	<1	<1.0	140	<6	20	5350	75
DEC											
07...	<4	12	<10	2	<1	<1.0	150	<6	137	219000	73
FEB 1994											
03...	--	--	--	--	--	--	--	--	132	297000	67
APR											
05...	<4	6	<10	1	<1	<1.0	96	<6	119	297000	76
JUN											
08...	5	4	<10	2	<1	<1.0	120	<6	--	--	--

MAYFIELD CREEK BASIN

07023100 MAYFIELD CREEK NEAR BLANDVILLE, KY

LOCATION.--Lat 36°55'56", long 88°56'45", Carlisle County, Hydrologic Unit 08010201, near center of channel at downstream side of bridge on State Highway 121, at the Carlisle/Ballard County line, 1.2 mi southeast of Blandville, 2.8 mi downstream from Wilson Creek, 3.2 mi upstream from West Fork, and at mile 14.5.

DRAINAGE AREA.--295 mi^2.

PERIOD OF RECORD.--July 1991 to September 1994 (gage heights only) (discontinued). Discharge records for April 1938 to September 1972 published as "at Lovelaceville."

GAGE.--Water-stage recorder. Datum of gage is 311.63 ft above sea level.

REMARKS.--Records good. Stream has been channelized.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 13.67 ft, Apr. 11, 1993; minimum gage height, 5.85 ft (observed), June 21, 1994 (may have been lower). Maximum discharge known at Mayfield Creek at Lovelaceville (07023000), located 6.8 mi upstream, 19,800 ft^3/s, January 1937, gage height, 21.1 ft, site and datum then in use.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.30	7.09	---	6.58	8.79	7.13	7.91	9.65	---	---	---	6.20
2	6.46	7.08	---	6.67	8.06	6.83	6.96	8.79	---	---	---	6.20
3	6.52	7.09	---	6.69	7.62	6.62	6.57	7.93	---	---	---	6.22
4	6.42	7.11	---	6.68	7.37	6.54	6.29	6.94	---	---	---	6.24
5	6.38	7.12	---	6.65	7.18	6.42	6.52	---	---	---	---	6.30
6	6.37	7.13	---	6.94	7.04	6.30	8.72	---	---	---	---	6.32
7	6.39	7.12	---	7.29	6.93	6.22	9.88	---	---	---	---	6.37
8	6.41	7.13	9.60	7.27	6.83	6.64	9.86	---	---	---	---	6.36
9	6.49	7.12	8.60	7.25	6.93	7.42	8.31	---	---	---	---	6.67
10	6.53	7.11	8.04	7.29	6.98	8.43	7.66	---	---	6.60	---	6.79
11	6.56	7.12	7.65	7.36	7.59	10.22	9.87	---	---	6.88	---	6.79
12	6.60	7.16	7.44	7.52	8.44	11.01	12.64	---	---	6.51	---	6.77
13	6.63	7.64	7.33	7.52	8.67	10.66	12.34	---	---	---	---	6.71
14	6.65	8.45	7.34	7.56	9.54	9.54	11.41	---	---	---	---	6.66
15	6.65	9.94	7.31	7.60	9.46	8.40	10.59	---	---	---	---	6.61
16	6.69	11.09	7.34	---	8.65	7.44	10.88	---	---	---	---	6.54
17	6.78	12.63	7.43	---	7.94	6.82	11.12	---	---	---	---	6.51
18	6.82	12.85	7.40	---	7.49	6.48	10.23	---	---	---	---	6.52
19	6.87	7.62	7.29	---	7.21	6.29	9.32	---	---	---	---	6.56
20	7.11	7.17	7.19	---	8.13	6.12	9.07	---	---	---	---	6.58
21	7.35	7.22	7.09	---	8.68	---	8.83	---	---	---	---	6.58
22	7.75	7.42	6.94	7.48	10.54	---	8.31	---	---	---	---	6.57
23	8.17	7.67	6.83	7.52	11.74	---	7.74	---	---	---	---	6.75
24	8.07	7.52	6.76	7.95	12.12	---	7.26	---	---	---	---	6.84
25	7.63	7.54	6.71	10.36	10.99	---	6.92	---	---	---	---	6.96
26	7.28	---	6.63	12.85	9.33	6.96	6.70	---	---	---	---	7.02
27	7.09	---	6.57	13.07	8.15	10.25	6.45	---	---	---	---	7.00
28	7.04	---	6.57	12.93	7.51	11.98	6.36	---	---	---	---	6.91
29	7.05	---	6.47	12.57	---	12.34	6.08	---	---	---	---	6.81
30	7.07	---	6.44	11.33	---	10.89	8.51	---	---	---	6.17	6.73
31	7.09	---	6.46	9.97	---	9.22	---	---	---	---	6.15	---
MEAN	6.88	---	---	---	8.43	---	8.64	---	---	---	---	6.60
MAX	8.17	---	---	---	12.12	---	12.64	---	---	---	---	7.02
MIN	6.30	---	---	---	6.83	---	6.08	---	---	---	---	6.20

BAYOU DE CHIEN BASIN

07024000 BAYOU DE CHIEN NEAR CLINTON, KY

LOCATION.--Lat 36°37'43", long 88°57'50", Hickman County, Hydrologic Unit 08010201, on right bank at downstream side of bridge on U.S. highway 51, 1.1 mi upstream from Cane Creek, 3.2 mi southeast of Clinton, and at mile 15.1.

DRAINAGE AREA.--68.7 mi^2.

PERIOD OF RECORD.--October 1939 to September 1950 (monthly discharge only for some periods, published in WSP 1311), October 1950 to September 1978, September 1984 to current year. Published as "Bayou du Chien near Clinton," October 1954 to September 1968.

REVISED RECORDS.--WSP 1311: 1940 (M), 1942-44 (M). WSP 1711: Drainage area. WDR-KY-89: 1985-89 (m).

GAGE.--Water-Stage recorder. Datum of gage is 307.71 ft above sea level. Prior to Aug. 2, 1951, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 21, 22, Nov. 5-7, 15, 18, Dec. 5, 6, Jan. 7-9, 12-22, 24 to Feb. 1, Mar. 5-11, 23, 24, Apr. 8-10, May 1, 20-24, Sept. 29, and 30. Records fair except for periods of estimated record, which are poor. Maximum gage height affected by backwater from the Mississippi River. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	40	39	52	55	47	56	25	18	15	22
2	27	19	73	39	51	53	48	41	24	18	15	22
3	25	21	491	36	47	47	73	35	26	18	15	18
4	22	21	1440	37	46	46	57	33	26	18	18	17
5	20	22	1000	31	45	44	271	32	27	18	41	19
6	20	20	110	32	41	42	312	32	26	36	17	20
7	20	19	60	35	40	40	78	40	25	72	16	18
8	20	21	49	30	40	76	52	37	101	82	16	17
9	20	21	46	28	186	280	42	30	53	23	16	17
10	20	20	50	29	78	340	550	29	22	18	16	17
11	21	20	43	35	204	330	1200	27	21	17	16	17
12	20	23	39	70	324	160	1210	26	20	17	16	17
13	21	105	43	50	184	94	542	26	19	18	16	17
14	22	397	58	40	95	72	98	28	18	21	16	17
15	21	550	49	36	70	60	501	35	18	18	16	16
16	24	318	43	34	56	48	193	29	18	18	16	16
17	24	1430	39	32	48	44	86	26	25	20	16	22
18	22	390	37	30	44	43	60	26	18	17	16	19
19	31	73	36	29	43	40	46	25	17	16	17	17
20	313	54	36	28	444	40	41	24	17	16	17	16
21	52	48	35	27	161	40	38	23	17	17	18	16
22	25	44	34	26	492	36	34	22	17	17	17	17
23	20	43	32	110	974	34	32	22	17	16	17	36
24	20	43	32	500	160	32	31	21	47	16	17	24
25	19	84	32	840	84	37	31	26	20	16	17	40
26	19	143	31	520	58	105	41	28	76	15	17	27
27	19	77	31	1000	53	1170	30	26	29	15	17	25
28	19	53	51	800	50	1290	182	25	20	15	17	24
29	19	44	48	400	---	189	55	25	19	15	19	23
30	22	41	41	200	---	71	173	25	18	16	18	22
31	21	---	36	100	---	53	---	26	---	15	17	---
TOTAL	987	4184	4185	5243	4170	5011	6154	906	826	672	538	615
MEAN	31.8	139	135	169	149	162	205	29.2	27.5	21.7	17.4	20.5
MAX	313	1430	1440	1000	974	1290	1210	56	101	82	41	40
MIN	19	19	31	26	40	32	30	21	17	15	15	16
CFSM	.46	2.03	1.97	2.46	2.17	2.35	2.99	.43	.40	.32	.25	.30
IN.	.53	2.27	2.27	2.84	2.26	2.71	3.33	.49	.45	.36	.29	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	32.7	83.2	131	157	190	217	141	99.5	67.2	56.9	39.1	34.6
MAX	165	520	557	586	672	1138	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	30628		33491			
ANNUAL MEAN	83.9		91.8		104	
HIGHEST ANNUAL MEAN					268	1976
LOWEST ANNUAL MEAN					18.7	1941
HIGHEST DAILY MEAN	1900	Apr 10	1440	Dec 4	7150	Jan 2 1966
LOWEST DAILY MEAN	16	Jul 6	15	Jul 26	4.0	May 29 1943
ANNUAL SEVEN-DAY MINIMUM	16	Jul 5	15	Jul 26	4.7	Jun 20 1942
INSTANTANEOUS PEAK FLOW			1790	Dec 5	9460	Jan 2 1966
INSTANTANEOUS PEAK STAGE			14.54	Dec 5	16.22	Mar 12 1965
ANNUAL RUNOFF (CFSM)	1.22		1.34		1.51	
ANNUAL RUNOFF (INCHES)	16.58		18.13		20.52	
10 PERCENT EXCEEDS	135		185		190	
50 PERCENT EXCEEDS	37		30		22	
90 PERCENT EXCEEDS	18		17		11	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. At a few of these stations crest stages are determined from continuous water-stage recorder graphs. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1994

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		BIG SANDY RIVER BASIN					
03208000	Levisa Fork below Fishtrap Dam, near Millard, Ky.	Lat 37°25'33", long 82°24'45", Pike County, Hydrologic Unit 05070202, on right bank, 0.4 mi downstream from Fishtrap Dam, 1.1 mi upstream from Lower Pompey Branch, 1.9 mi northeast of Millard, 2.4 mi upstream from Russell Fork, and at mile 129.6.	392	1939-92†, 1993-94	02-11-94	86.95	10,800
03209300	Russell Fork at Elkhorn City, Ky.	Lat 37°18'14", long 82°20'35", Pike County, Hydrologic Unit 05070202, on left bank 10 ft downstream from steel highway bridge on abandoned section of State Highway 80, at Elkhorn City, 0.9 mi upstream from Elkhorn Creek, and at mile 13.2.	554	1957-60, 1961-92†, 1993-94	03-28-94	16.05	20,700

See footnote at end of table.

Annual maximum discharge at crest-stage partial-record stations during water year 1994--Continued

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		BIG SANDY RIVER BASIN--Continued					
03211500	Johns Creek near Van Lear, Ky.	Lat 37°44'37", long 82°43'27", Floyd County, Hydrologic Unit 05070203, on right bank 100 ft upstream from Long Branch, 0.3 mi upstream from Daniels Creek, 0.7 mi downstream from Dewey Dam, 2.5 mi southeast of Van Lear, and at mile 4.7.	206	1940-92†, 1993-94	03-28-94	15.36	3,300
		LITTLE SANDY RIVER BASIN					
03216350	Little Sandy River below Grayson Dam, near Leon, Ky.	Lat 38°15'14", long 82°59'28", Carter County, Hydrologic Unit 05090104, on right bank 0.3 mi downstream from Grayson Dam (new channel), 0.3 mi upstream from Big Sinking Creek, 2.4 mi southwest of Leon, and at mile 50.3.	196	1967-92†, 1993-94	03-13-94	99.28	2,940
		CUMBERLAND RIVER BASIN					
03400500	Poor Fork at Cumberland, Ky.	Lat 36°58'26", long 82°59'38", Harlan County, Hydrologic Unit 05130101, at left upstream side of New York Avenue bridge at Cumberland, 250 ft upstream from Cloverlick Creek, 0.6 mi downstream from Looney Creek, and at river mile 718.8.	82.3	1941-92†, 1993-94	02-11-94	11.01	6,240
03404820	Laurel River at Municipal Dam, near Corbin, Ky.	Lat 36°58'13", long 84°07'11", Laurel County, Hydrologic Unit 05130101, on left bank adjacent to State Highway 709, 200 ft upstream from Corbin Municipal Dam, 0.1 mi upstream from Lynn Camp Creek, 2.0 mi northwest of Corbin, and at mile 21.4.	140	1974-92†, 1993-94	03-28-94	24.13	5,970

† Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Special study and miscellaneous sites

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the State.

Discharge measurements made at special study and miscellaneous sites during water year 1994

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
BIG SANDY RIVER BASIN						
03207965 Grapevine Creek	Levisa Fork	Lat 37°25'57", long 82°21'14", Pike County, 1.3 mi downstream from Dicks Fork, 1.3 mi southwest of Phyllis, and at mile 1.1.	6.20	1974-82†, 1989-92†, 1993-94	10-13-93	1.13
					12-07-93	5.56
					3-16-94	8.90
					3-31-94	26.9
					5-10-94	15.0
					6-28-94	2.38
					8-22-94	7.09
03210000 Johns Creek	Levisa Fork	Lat 37°34'01", long 82°27'29", Pike County, at bridge on U.S. Highway 119, 1.2 mi southwest of Meta, and at mile 42.7.	56.3	1941-93†, 1994	10-13-93	11.6
					11-30-93	25.7
					3-15-94	143
					3-31-94	296
					5-10-94	133
					5-25-94	22.5
					6-28-94	15.9
					8-22-94	68.6
LICKING RIVER BASIN						
03248500 Licking River	Ohio River	Lat 37°45'03", long 83°05'04", Magoffin County, at bridge on State Highway 30, 1.2 mi west of Salyersville, and at mile 266.9.	140	1939-92†, 1993-94	10-07-92	19.6
					2-03-93	76.4
					4-06-93	399
					5-12-93	52.1
					6-02-93	28.2
					7-13-93	21.2
					9-08-93	21.7
					10-12-93	51.3
					11-26-93	96.8
					3-04-94	807
					4-14-94	516
					5-17-94	110
					7-26-94	17.6

See footnotes at end of table.

Discharge measurements made at special study and miscellaneous sites during water year 1994--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		KENTUCKY RIVER BASIN				
03280600 Middle Fork Kentucky River	Kentucky River	Lat 37°08'13", long 83°22'17", Leslie County, 0.4 mi downstream from Munsey Creek, 1.7 mi south of Hyden, and at mile 76.1.	202	1958-92†, 1993‡, 1994	4-13-94	5,390
03284750 Dix River	Kentucky River	Lat 37°27'27", long 84°28'41", Lincoln County, at bridge on unmarked road, 0.6 mi below Copper Creek, 0.8 mi above Flax Creek, 1.6 mi east of Crab Orchard, at at mile 72.6.	70.5	1973-76, 1988, 1994	6-20-94 7-12-94 8-18-94	2.93 1.21 1.96
		GREEN RIVER BASIN				
03316000 Mud River	Green River	Lat 37°00'15", long 86°54'26", Logan County, at bridge on State Highway 106, 2.5 mi northwest of Lewisburg, and 7.5 mi downstream from Motts Lick Creek.	90.5	1940-72†, 1978, 1980, 1988, 1990-94	12-07-93 6-22-94	287 10
03316275 Mud River	Green River	Lat 37°07'24", long 86°54'02", Butler County, at bridge on State Highway 949, 2.9 mi southwest of Huntsville, and at mile 17.1.	268	1974, 1978, 1980, 1992-93†, 1994‡	10-07-92 11-09-92 12-22-92 2-08-93 3-24-93 5-04-93 6-22-93 8-09-93 10-07-93 12-06-93 1-24-94 1-28-94 2-24-94 3-15-94 4-25-94 6-21-94	19.1 41.9 260 101 865 947 37.2 16.4 12.5 1,220 193 3,190 3,890 1,370 212 32.7

† Operated as a continuous-record gaging station.
‡ Gage heights only.

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
BIG SANDY RIVER BASIN									
03207965 GRAPEVINE CREEK NEAR PHYLLIS, KY (LAT 37 25 57N LONG 082 21 14W)									
OCT 1993					MAY 1994				
13...	1335	1.1	1290	11.5	10...	1150	15	613	14.0
DEC					JUN				
07...	1300	5.6	548	9.0	28...	1235	2.4	1520	21.0
MAR 1994					AUG				
16...	1005	8.9	595	6.5	22...	1320	7.1	950	20.5
31...	1435	27	502	8.5					
03209500 LEVISA FORK AT PIKEVILLE, KY (LAT 37 27 51N LONG 082 31 35W)									
OCT 1993					JUN 1994				
13...	1020	314	646	13.0	29...	0820	1150	536	20.5
MAR 1994					AUG				
11...	1320	9970	450	3.5	23...	0810	1530	420	19.0
MAY									
11...	0800	2850	429	14.0					
03210000 JOHNS CREEK NEAR META, KY (LAT 37 34 01N LONG 082 27 29W)									
OCT 1993					MAY 1994				
13...	1445	12	864	11.5	10...	1355	133	329	14.5
NOV					25...	1010	23	847	19.5
30...	1300	26	656	5.0	JUN				
MAR 1994					28...	1420	16	680	22.5
15...	1055	143	459	8.0	AUG				
31...	1625	296	331	8.0	22...	1500	69	457	20.5
03212500 LEVISA FORK AT PAINTSVILLE, KY (LAT 37 48 55N LONG 082 47 30W)									
OCT 1993					MAY 1994				
04...	1320	675	430	10.5	17...	1400	2370	456	17.0
NOV					JUN				
23...	1100	1480	465	--	24...	1210	847	657	27.0
MAR 1994					JUL				
07...	1120	7820	320	9.0	26...	1130	798	635	27.0
APR									
14...	1205	23400	395	13.0					
LITTLE SANDY RIVER BASIN									
03216500 LITTLE SANDY RIVER AT GRAYSON, KY (LAT 38 19 48N LONG 082 56 22W)									
OCT 1993					MAY 1994				
06...	1145	40	266	13.5	18...	1040	772	164	14.0
APR 1994					JUL				
15...	0940	544	420	13.5	28...	1250	39	272	21.5
TYGARTS CREEK BASIN									
03216800 TYGARTS CREEK AT OLIVE HILL, KY (LAT 38 17 57N LONG 083 10 25W)									
OCT 1993					MAY 1994				
08...	1315	0.80	357	16.5	24...	1235	17	225	20.0
FEB 1994					JUN				
04...	1125	65	190	1.5	20...	1410	0.60	220	26.0
APR					JUL				
19...	0835	104	159	13.0	29...	1355	6.8	306	22.0
03217000 TYGARTS CREEK NEAR GREENUP, KY (LAT 38 33 51N LONG 082 57 08W)									
OCT 1993					MAY 1994				
07...	1530	1.9	298	15.0	20...	1250	189	197	14.5
FEB 1994					JUN				
04...	1440	229	228	1.5	21...	1450	12	250	28.0
APR					AUG				
19...	1245	532	184	14.5	01...	1115	56	270	22.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
KINNICONICK CREEK BASIN									
03237250 KINNICONICK CREEK NEAR TANNERY, KY (LAT 38 32 36N LONG 083 13 29W)									
OCT 1993					MAR 1994				
05...	1055	1.1	175	15.0	22...	0945	1240	65	8.5
NOV					JUN				
23...	1145	79	106	6.5	02...	1120	15	107	20.5
JAN 1994					JUL				
05...	1030	591	96	1.0	29...	1130	20	110	23.5
28...	1415	9350	58	5.5					
FEB									
16...	1120	748	77	3.5					
LICKING RIVER BASIN									
03248500 LICKING RIVER NEAR SALYERSVILLE, KY (LAT 37 45 03N LONG 083 05 04W)									
OCT 1993					APR 1994				
12...	1405	51	442	11.0	14...	1645	516	650	13.5
NOV					MAY				
26...	1330	97	349	11.0	17...	1110	110	346	15.5
MAR 1994					JUL				
04...	1120	807	630	4.0	26...	0850	18	531	23.5
03249500 LICKING RIVER AT FARMERS, KY (LAT 38 06 55N LONG 083 32 36W)									
OCT 1993					MAR 1994				
04...	1230	231	142	19.0	21...	1155	4420	120	7.0
NOV					APR				
22...	1250	2380	158	12.0	26...	1005	4310	112	11.5
JAN 1994					JUN				
03...	1410	944	162	5.0	02...	1520	146	122	17.0
FEB					JUL				
15...	1100	3660	141	2.0	11...	1505	50	--	25.0
03250100 NORTH FORK TRIPLETT CREEK NEAR MOREHEAD, KY (LAT 38 11 57N LONG 083 28 50W)									
OCT 1993					MAR 1994				
04...	1040	0.52	189	10.0	21...	1535	153	165	10.0
NOV					APR				
22...	1545	38	105	6.5	25...	1140	50	84	15.5
JAN 1994					MAY				
04...	1530	522	190	2.5	27...	1135	25	102	16.5
FEB					JUL				
15...	1540	335	83	4.0	11...	1155	0.49	160	24.0
03251200 NORTH FORK LICKING RIVER NEAR MT OLIVET, KY (LAT 38 35 41N LONG 084 01 13W)									
OCT 1993					APR 1994				
05...	1405	1.0	392	14.0	26...	1355	101	356	16.5
NOV					JUN				
23...	1505	112	443	6.5	03...	1015	19	426	18.5
JAN 1994					JUL				
05...	1350	617	435	0.0	12...	1415	2.0	317	23.5
MAR					AUG				
22...	1500	551	350	10.0	10...	1205	49	391	21.5
28...	1535	3280	242	8.5					
03251500 LICKING RIVER AT MCKINNEYSBURG, KY (LAT 38 35 52N LONG 084 16 00W)									
OCT 1993					MAR 1994				
07...	1350	263	169	17.5	24...	1225	6550	175	10.0
NOV					APR				
24...	1045	2860	215	9.0	27...	1040	5330	150	15.0
JAN 1994					JUN				
07...	1025	13200	254	3.0	02...	0940	489	231	20.5
FEB					JUL				
17...	1340	7180	211	3.5	14...	1225	1050	223	26.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
LICKING RIVER BASIN--Continued									
03252300 HINKSTON CREEK NEAR CARLISLE, KY (LAT 38 14 33N LONG 084 03 09W)									
OCT 1993					APR 1994				
06...	1020	1.8	425	12.5	28...	0955	127	377	20.0
JAN 1994					JUN				
07...	1425	2870	238	5.0	14...	1225	17	360	23.5
FEB					JUL				
17...	1015	290	384	4.5	12...	1045	14	514	23.5
MAR					AUG				
25...	1120	102	512	13.5	10...	1420	6.5	360	23.0
28...	1215	2650	233	8.5					
03252500 SOUTH FORK LICKING RIVER AT CYNTHIANA, KY (LAT 38 23 27N LONG 084 18 11W)									
OCT 1993					MAR 1994				
06...	1250	40	361	17.5	23...	1425	553	421	12.0
DEC					APR				
02...	0910	580	451	6.0	27...	1415	270	181	15.0
JAN 1994					JUN				
06...	1455	1340	455	2.5	01...	1545	82	389	24.0
FEB					JUL				
14...	1515	3840	329	5.0	14...	1000	23	363	26.0
03253500 LICKING RIVER AT CATAWBA, KY (LAT 38 42 31N LONG 084 18 38W)									
OCT 1993					APR 1994				
07...	1120	286	184	15.0	28...	1310	6440	214	16.0
DEC					JUN				
03...	1045	3680	260	8.0	02...	1245	572	271	22.0
JAN 1994					JUL				
06...	1140	9040	350	1.5	13...	1215	139	287	28.5
MAR					AUG				
23...	1110	7570	234	9.5	11...	1400	555	306	24.0
KENTUCKY RIVER BASIN									
03277400 LEATHERWOOD CREEK AT DAISY, KY (LAT 37 06 48N LONG 083 05 33W)									
OCT 1993					APR 1994				
13...	0905	8.8	317	10.0	18...	1425	173	157	14.5
NOV					JUN				
16...	1345	58	188	13.5	07...	1340	15	320	21.5
JAN 1994					JUL				
11...	1500	96	177	4.5	20...	1325	9.7	--	25.0
MAR									
01...	1405	89	278	6.5					
03277450 CARR FORK NEAR SASSAFRAS, KY (LAT 37 13 52N LONG 083 02 10W)									
OCT 1993					MAR 1994				
01...	1125	56	425	16.5	01...	1115	42	375	7.0
NOV					MAY				
16...	1130	139	476	13.0	19...	1625	11	408	16.0
JAN 1994					JUL				
11...	1205	456	387	4.5	20...	1120	11	--	20.0
03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY (LAT 37 32 46N LONG 083 22 21W)									
OCT 1993					MAR 1994				
14...	1000	429	733	14.0	01...	1630	2790	481	5.0
NOV					APR				
16...	1615	1750	406	13.0	18...	1710	5110	334	14.0
JAN 1994					JUN				
12...	0910	5140	393	3.5	07...	1745	310	916	22.0
03280600 MIDDLE FORK KENTUCKY RIVER NEAR HYDEN, KY (LAT 37 08 13N LONG 083 22 17W)									
APR 1994									
13...	1310	5390	94	12.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

KENTUCKY RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
03280700 CUTSHIN CREEK AT WOOTON, KY (LAT 37 09 54N LONG 083 18 29W)				
JAN 1994				
03...	1110	91	276	4.5
FEB				
28...	1145	118	288	3.0
APR				
21...	1305	104	305	13.5
MAY 1994				
20...	1300	31	424	16.0
AUG				
26...	1425	8.5	432	26.0
03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY (LAT 37 33 18N LONG 083 35 38W)				
OCT 1993				
14...	1315	92	322	14.0
NOV				
17...	0910	904	252	12.0
JAN 1994				
12...	1200	4500	126	5.0
MAR				
02...	0850	3890	140	7.0
APR 1994				
19...	0830	4140	121	14.0
JUN				
08...	0905	220	158	20.0
JUL				
21...	0835	130	--	24.0
03281040 RED BIRD RIVER NEAR BIG CREEK, KY (LAT 37 10 43N LONG 083 35 35W)				
OCT 1993				
04...	1005	27	283	14.0
NOV				
15...	1035	285	212	13.5
JAN 1994				
03...	1320	264	162	4.0
FEB				
28...	1430	320	201	4.5
APR 1994				
11...	1145	3390	91	11.0
13...	1030	3860	105	12.5
JUN				
03...	1135	28	365	20.0
JUL				
19...	1303	63	--	24.0
03281100 GOOSE CREEK AT MANCHESTER, KY (LAT 37 09 07N LONG 083 45 37W)				
OCT 1993				
04...	1230	35	315	14.0
NOV				
15...	1325	406	226	14.0
JAN 1994				
06...	1055	578	129	4.0
MAR				
04...	1410	931	104	6.5
APR 1994				
11...	1415	3250	83	12.0
JUN				
03...	1355	21	--	20.0
JUL				
19...	1450	88	--	24.0
03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY (LAT 37 28 45N LONG 083 40 38W)				
OCT 1993				
13...	1550	106	282	13.5
NOV				
18...	1415	5660	128	13.0
JAN 1994				
12...	1525	4610	140	4.0
FEB 1994				
25...	1150	4140	114	7.5
APR				
19...	1140	2220	127	14.0
03282040 STURGEON CREEK AT CRESSMONT, KY (LAT 37 30 02N LONG 083 48 37W)				
OCT 1993				
08...	1145	5.6	170	14.0
NOV				
18...	1140	375	89	11.5
JAN 1994				
13...	1255	361	102	5.0
28...	1305	1440	70	7.5
MAR 1994				
02...	1315	291	140	4.5
28...	1027	2380	60	9.0
JUN				
09...	1305	28	175	20.5
JUL				
25...	1310	5.2	186	24.0
AUG				
30...	1130	8.2	--	21.0
03282500 RED RIVER NEAR HAZEL GREEN, KY (LAT 37 48 44N LONG 083 27 50W)				
OCT 1993				
26...	1500	32	127	13.5
NOV				
29...	1330	213	135	--
FEB 1994				
09...	1100	1250	250	3.0
APR				
18...	1400	229	150	13.5
MAY 1994				
25...	1030	13	129	19.5
JUN				
22...	1320	8.1	189	27.0
AUG				
02...	0845	3.3	188	22.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

KENTUCKY RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
03283500 RED RIVER AT CLAY CITY, KY (LAT 37 51 53N LONG 083 56 01W)									
OCT 1993					MAY 1994				
26...	1310	192	152	12.5	25...	1330	132	240	20.0
JAN 1994					JUN				
11...	1300	884	140	2.0	22...	1105	37	215	25.5
APR					AUG				
18...	1055	1280	275	13.0	02...	1130	44	491	24.0
03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY (LAT 37 53 41N LONG 084 15 44W									
OCT 1993					APR 1994				
05...	1430	819	385	21.0	05...	0855	14500	216	9.5
DEC					JUN				
01...	1015	7570	223	8.0	16...	1200	1090	457	27.5
JAN 1994					JUL				
11...	0945	17900	194	3.5	12...	1045	400	550	30.5
FEB					AUG				
18...	0915	13800	217	5.5	19...	0915	806	422	28.0
03285000 DIX RIVER NEAR DANVILLE, KY (LAT 37 38 31N LONG 084 39 39W)									
OCT 1993					APR 1994				
06...	1210	3.4	317	18.0	06...	1050	493	267	11.5
DEC					JUN				
01...	1530	271	377	5.0	09...	1340	143	311	24.0
JAN 1994					JUL				
12...	1320	2690	264	4.5	13...	0950	4.8	335	25.5
FEB					AUG				
17...	1650	630	260	7.0	13...	1330	11	305	26.0
03285200 CLARKS RUN NEAR DANVILLE, KY (LAT 37 38 20N LONG 084 43 16W)									
OCT 1993					APR 1994				
06...	1045	3.0	1700	12.5	06...	1340	45	468	12.5
DEC					JUN				
02...	1000	21	598	7.5	09...	1530	125	298	20.5
JAN 1994					JUL				
12...	1705	107	427	6.5	13...	1155	4.1	1230	24.5
28...	1020	543	292	8.5					
FEB									
16...	1815	67	428	7.5					
03286500 KENTUCKY RIVER AT LOCK 7 AT HIGHBRIDGE, KY (LAT 37 49 45N LONG 084 43 26W)									
OCT 1993					APR 1994				
06...	1020	793	401	19.5	07...	0920	16300	236	9.5
DEC					JUN				
03...	1050	5310	249	8.0	15...	0945	1440	323	24.5
JAN 1994					JUL				
28...	1410	51300	240	4.0	08...	1010	837	498	28.0
FEB					AUG				
22...	1115	17200	258	7.0	18...	1000	592	335	30.0
MAR									
10...	1140	91900	180	6.0					
11...	1300	78300	158	6.5					
03287000 KENTUCKY RIVER AT LOCK 6 NEAR SALVISA, KY (LAT 37 55 32N LONG 084 49 17W)									
DEC 1993					APR 1994				
02...	1455	6680	280	7.5	08...	0945	18500	249	10.0
JAN 1994					JUN				
13...	1100	23800	240	4.0	17...	1230	1130	310	24.5
FEB					JUL				
16...	1355	30400	201	5.5	11...	1345	562	455	28.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
KENTUCKY RIVER BASIN--Continued									
03287500 KENTUCKY RIVER AT LOCK 4 AT FRANKFORT, KY (LAT 38 12 06N LONG 084 52 54W)									
OCT 1993					JUN 1994				
05...	1000	987	297	19.5	14...	1035	1530	287	25.0
DEC					JUL				
06...	1155	42100	274	8.5	06...	1000	610	369	27.5
MAR 1994					AUG				
03...	1055	18800	239	6.0	17...	1100	589	461	26.0
APR									
04...	1000	21800	224	9.0					
03288000 NORTH ELKHORN CREEK NEAR GEORGETOWN, KY (LAT 38 12 20N LONG 084 30 49W)									
OCT 1993					APR 1994				
04...	1850	4.6	438	14.0	11...	1045	314	376	13.0
NOV					MAY				
30...	1625	242	403	7.0	27...	1500	57	396	20.5
JAN 1994					JUL				
26...	1215	1590	296	4.5	07...	1526	5.9	390	26.0
FEB									
15...	1625	577	380	6.5					
03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY (LAT 38 13 10N LONG 084 33 48W)									
OCT 1993					MAY 1994				
04...	1645	7.8	550	15.5	27...	1625	68	483	20.5
JAN 1994					JUL				
10...	1515	443	434	3.5	05...	1500	5.5	432	29.0
FEB					AUG				
18...	1505	282	424	7.5	16...	1345	5.5	576	25.5
22...	0920	195	443	10.0					
APR									
05...	1330	208	403	11.5					
03288110 ROYAL SPRINGS AT GEORGETOWN, KY (LAT 38 12 34N LONG 084 33 43W)									
OCT 1993					JUL 1994				
04...	1525	1.2	711	18.5	07...	1505	3.9	605	18.5
APR 1994					AUG				
05...	1500	41	470	11.0	16...	1200	2.1	768	18.5
03289300 SOUTH ELKHORN CREEK NEAR MIDWAY, KY (LAT 38 08 27N LONG 084 38 43W)									
OCT 1993					APR 1994				
07...	1110	35	681	15.0	07...	1345	501	355	10.5
NOV					MAY				
29...	1705	262	484	8.0	27...	1240	111	319	19.0
JAN 1994					JUL				
13...	1600	250	525	8.0	06...	1435	76	685	28.0
MAR					AUG				
03...	1450	249	449	6.0	17...	1540	78	483	24.0
03289500 ELKHORN CREEK NEAR FRANKFORT, KY (LAT 38 16 07N LONG 084 48 53W)									
OCT 1993					APR 1994				
04...	1240	55	534	13.5	04...	1350	1100	408	11.5
DEC					MAY				
07...	0930	2030	425	8.5	26...	1120	242	457	11.5
JAN 1994					JUL				
10...	1210	1790	456	4.0	05...	1235	65	565	27.5
FEB									
14...	1040	2790	416	5.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
KENTUCKY RIVER BASIN--Continued									
03291500 EAGLE CREEK AT GLENCOE, KY (LAT 38 42 18N LONG 084 49 26W)									
OCT 1993					JUN 1994				
07...	0925	1.8	344	14.5	03...	1420	42	465	22.0
DEC					JUL				
02...	1320	141	375	4.5	15...	1155	307	306	24.0
JAN 1994					AUG				
11...	1045	305	372	0.5	12...	1230	28	315	24.0
28...	1010	19800	160	3.0	SEP				
MAR					15...	1330	1.5	307	25.0
25...	1410	246	546	13.0					
APR									
28...	1240	609	200	20.5					
HARRODS CREEK BASIN									
03292460 HARRODS CREEK NEAR LA GRANGE, KY (LAT 38 26 50N LONG 085 24 33W)									
NOV 1993					APR 1994				
17...	1615	153	331	12.0	06...	1355	24	502	10.5
JAN 1994					MAY				
14...	1115	18	563	0.5	05...	1100	21	491	13.0
28...	0840	850	214	4.0	JUL				
FEB					25...	1045	0.01	385	24.0
28...	1045	17	336	1.5					
BEARGRASS CREEK BASIN									
03292700 MIDDLE FK BEARGRASS CREEK TRIB NEAR MIDDLETOWN, K(LAT 38 15 05N LONG 085 33 36									
DEC 1993					APR 1994				
14...	1420	40	486	8.5	13...	1440	5.3	527	13.5
14...	1555	2.1	412	10.5	13...	1605	2.3	552	14.5
FEB 1994					JUN				
08...	1433	38	139	4.0	14...	1435	0.25	583	23.5
					JUL				
					12...	1625	0.15	612	23.5
SALT RIVER BASIN									
03295400 SALT RIVER AT GLENSBORO, KY (LAT 38 00 07N LONG 085 03 38W)									
OCT 1993					MAY 1994				
06...	1615	3.6	703	15.5	03...	1225	147	461	14.0
NOV					JUN				
24...	1600	64	489	9.5	14...	1555	17	454	27.5
FEB 1994					JUL				
03...	1525	152	473	2.5	19...	1655	19	451	30.5
22...	1550	263	483	9.0					
APR									
05...	1635	183	433	12.5					
03295890 BRASHEARS CREEK AT TAYLORSVILLE, KY (LAT 38 02 13N LONG 085 20 27W)									
OCT 1993					MAY 1994				
07...	1000	2.4	441	15.0	03...	1530	732	375	13.0
NOV					JUN				
26...	1245	134	456	9.0	17...	1125	8.3	437	15.5
FEB 1994					JUL				
03...	1320	421	406	0.5	20...	1025	5.5	403	26.5
23...	1100	5170	294	7.0	AUG				
APR					24...	1125	3.0	483	22.5
06...	1650	531	408	11.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
				SALT RIVER BASIN--Continued					
	03297900		FLOYDS FORK NEAR PEWEE VALLEY, KY (LAT 38 17 07N LONG 085 28 04W)						
OCT 1993					MAY 1994				
07...	1300	1.1	595	13.0	05...	1330	78	524	13.0
NOV					JUN				
26...	1520	32	589	10.0	17...	1445	1.7	460	32.5
JAN 1994					JUL				
14...	1425	65	610	1.0	20...	1305	1.3	439	25.0
28...	0915	4360	155	4.5	SEP				
FEB					02...	1420	0.96	562	20.0
23...	1515	701	353	8.0					
APR									
06...	0940	73	314	11.0					
	03298500		SALT RIVER AT SHEPHERDSVILLE, KY (LAT 37 59 06N LONG 085 43 03W)						
OCT 1993					MAY 1994				
04...	1050	42	430	15.5	11...	1200	3320	348	15.0
NOV					JUN				
22...	1130	3420	362	9.0	13...	0950	98	420	24.5
JAN 1994					JUL				
10...	1100	2590	427	0.5	18...	1000	54	342	26.0
FEB					AUG				
18...	1005	5150	370	3.5	22...	1120	69	353	23.5
APR									
04...	1040	4170	357	9.5					
	03298550		LONG LICK AT CLERMONT, KY (LAT 38 55 40N LONG 085 39 15W)						
OCT 1993					MAY 1994				
04...	1615	0.10	993	17.5	04...	1535	8.4	400	14.5
NOV					JUN				
22...	1515	2.3	780	9.5	14...	1010	0.55	505	21.0
JAN 1994					JUL				
11...	1110	4.8	398	5.0	19...	1045	0.13	640	22.0
FEB					AUG				
22...	0950	12	302	7.5	22...	1340	0.44	514	22.5
APR									
05...	1005	11	--	9.5					
	03300400		BEECH FORK AT MAUD, KY (LAT 37 49 58N LONG 085 17 46W)						
OCT 1993					MAY 1994				
06...	1320	1.5	319	15.0	11...	1540	450	385	17.0
NOV					JUN				
24...	1255	138	372	7.5	14...	1255	48	476	25.5
JAN 1994					JUL				
11...	1355	494	384	1.5	19...	1335	46	361	26.5
FEB					AUG				
22...	1300	778	458	9.5	23...	1420	342	179	21.5
APR									
05...	1250	546	450	10.5					
	03301500		ROLLING FORK NEAR BOSTON, KY (LAT 37 46 02N LONG 085 42 14W)						
OCT 1993					MAY 1994				
05...	1425	25	423	14.5	04...	1200	1730	346	14.5
NOV					JUN				
23...	1155	644	373	7.5	13...	1340	187	414	25.5
JAN 1994					JUL				
10...	1540	2810	329	2.0	18...	1355	134	361	26.0
FEB					AUG				
18...	1435	2400	362	5.5	23...	1000	1940	316	23.5
APR									
04...	1520	2510	356	10.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
SALT RIVER BASIN--Continued									
03301580 WILSON CREEK NEAR DEATSVILLE, KY (LAT 37 51 49N LONG 085 36 41W)									
OCT 1993					MAY 1994				
19...	1330	2.3	478	16.0	17...	1225	10	424	16.0
DEC					JUN				
09...	1435	7.3	301	6.0	10...	1045	1.8	458	21.0
FEB 1994					JUL				
24...	1125	46	332	5.5	21...	1140	0.15	463	26.0
MAR					AUG				
17...	1325	19	273	7.0	16...	1110	0.05	458	21.0
APR									
19...	1155	18	393	17.5					
03301585 HARTS RUN AT MOUTH NEAR DEATSVILLE, KY (LAT 37 51 49N LONG 085 36 44W)									
DEC 1993					APR 1994				
09...	1505	1.1	190	8.0	19...	1535	2.9	260	19.5
FEB 1994					MAY				
24...	1210	8.2	160	5.0	17...	1440	1.3	300	17.5
MAR					JUN				
17...	1230	2.5	178	7.5	10...	1130	0.08	381	18.0
03302000 POND CREEK NEAR LOUISVILLE, KY (LAT 38 07 11N LONG 085 47 45W)									
NOV 1993					APR 1994				
04...	1430	29	538	10.5	05...	1000	72	404	11.5
DEC					MAY				
07...	1320	74	545	7.0	03...	1155	107	480	13.0
JAN 1994					JUL				
06...	1305	52	484	3.0	05...	1140	6.1	664	31.5
FEB					AUG				
01...	1245	82	601	1.0	02...	1405	8.3	630	27.0
MAR									
01...	1000	54	463	6.5					
GREEN RIVER BASIN									
03306000 GREEN RIVER NEAR CAMPBELLSVILLE, KY (LAT 37 14 25N LONG 085 20 50W)									
OCT 1993					APR 1994				
05...	1445	76	234	21.0	07...	1545	5330	95	9.0
NOV					MAY				
30...	1505	1430	162	10.5	05...	1000	1530	102	12.0
JAN 1994					JUN				
12...	1650	2780	146	4.0	15...	1315	150	109	21.0
FEB									
24...	1310	3300	131	4.5					
03307000 RUSSELL CREEK NEAR COLUMBIA, KY (LAT 37 07 09N LONG 085 23 38W)									
OCT 1993					MAY 1994				
05...	0930	8.3	282	14.0	05...	1305	271	260	14.0
DEC					JUN				
01...	1145	126	251	4.0	16...	1415	50	261	26.5
JAN 1994					JUL				
13...	1440	511	215	6.5	21...	1510	84	235	26.5
FEB					AUG				
25...	1050	860	188	7.0	25...	1135	56	268	22.5
APR									
08...	1005	433	189	9.0					
03307260 LITTLE PITMAN CREEK NEAR CAMPBELLSVILLE, KY (LAT 37 20 50N LONG 085 23 25W)									
OCT 1993					MAY 1994				
05...	1240	9.0	2210	19.5	04...	1445	25	857	16.5
NOV					JUN				
30...	1120	17	710	7.0	16...	1030	7.3	2140	26.5
JAN 1994					JUL				
13...	1005	70	532	7.0	22...	0920	9.6	1580	25.5
FEB					AUG				
24...	1630	110	352	10.0	26...	0955	11	224	25.5
APR									
07...	1925	69	464	14.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

GREEN RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
03310300					NOLIN RIVER AT WHITE MILLS, KY (LAT 37 33 03N LONG 086 02 43W)				
OCT 1993					APR 1994				
04...	1140	61	767	14.0	19...	1042	877	253	15.0
NOV					MAY				
30...	0900	214	430	6.0	25...	1000	251	353	18.0
JAN 1994					JUN				
06...	0925	336	385	5.0	28...	1000	188	418	21.0
FEB					AUG				
07...	0935	570	378	7.5	01...	1050	63	472	21.5
03310400					BACON CREEK NEAR PRICEVILLE, KY (LAT 37 21 31N LONG 085 59 53W)				
OCT 1993					APR 1994				
04...	1345	8.7	447	12.5	19...	1250	132	263	16.0
NOV					MAY				
30...	1115	17	236	4.0	25...	1315	28	306	18.0
JAN 1994					JUN				
06...	1100	36	350	4.5	28...	1250	19	314	20.0
FEB					AUG				
07...	1110	55	366	6.5	01...	1325	11	313	21.0
MAR									
15...	1013	152	243	12.0					
03311600					BEAVERDAM CREEK AT RHODA, KY (LAT 37 09 18N LONG 086 13 35W)				
OCT 1993					APR 1994				
08...	0830	0.60	246	14.5	21...	0920	11	126	13.0
DEC					MAY				
02...	0800	2.2	241	6.0	24...	1705	2.1	217	20.0
JAN 1994					JUN				
07...	0830	355	98	7.0	29...	1250	2.3	216	21.0
FEB					AUG				
17...	0836	18	95	5.5	03...	0915	1.7	229	21.0
MAR									
17...	1255	12	108	9.0					
03312765					BEAVER CREEK AT HWY 31 E NEAR GLASGOW, KY (LAT 37 02 05N LONG 085 54 13W)				
OCT 1993					APR 1994				
04...	1450	4.1	543	14.5	19...	1623	140	227	15.5
NOV					MAY				
30...	1335	20	432	6.5	25...	0745	26	397	18.5
JAN 1994					JUN				
10...	0830	134	315	7.0	28...	1455	27	371	19.5
FEB					AUG				
07...	1310	59	339	8.5	01...	1600	12	433	22.0
MAR									
15...	1600	218	169	12.0					
17...	0915	164	165	8.5					
03313000					BARREN RIVER NEAR FINNEY, KY (LAT 36 53 42N LONG 086 08 02W)				
OCT 1993					APR 1994				
18...	1252	3050	193	13.0	20...	1333	3480	118	12.5
DEC					MAY				
07...	1235	3050	365	9.0	26...	1415	3210	134	14.5
JAN 1994					JUN				
10...	1115	3420	266	3.0	30...	1045	2850	190	18.5
FEB					AUG				
08...	0835	3430	186	6.0	02...	1445	374	233	20.0
MAR									
16...	1530	4500	112	8.0					
03313700					WEST FORK DRAKES CREEK NEAR FRANKLIN, KY (LAT 36 43 24N LONG 086 33 08W)				
OCT 1993					APR 1994				
19...	1500	88	252	15.5	26...	0900	141	250	18.0
20...	0827	186	293	12.5	JUN				
DEC					22...	0700	53	268	25.0
07...	0823	402	224	9.5	AUG				
JAN 1994					23...	0738	27	273	23.0
25...	0800	431	170	3.5					
MAR									
16...	0800	296	221	12.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
				GREEN RIVER BASIN--Continued					
	03314500			BARREN RIVER AT BOWLING GREEN, KY (LAT 37 00 04N LONG 086 25 51W)					
OCT 1993					APR 1994				
19...	0958	3280	199	15.0	20...	0855	5670	163	14.0
DEC					MAY				
01...	1200	1480	306	8.5	26...	0915	3730	153	16.0
JAN 1994					JUN				
11...	1215	4840	273	4.0	30...	1325	4830	191	21.0
FEB					AUG				
09...	0910	5000	217	6.5	02...	1010	730	282	22.5
MAR									
16...	1020	6510	144	9.5					
	03316000			MUD RIVER NEAR LEWISBURG, KY (LAT 37 00 15N LONG 086 54 26W)					
JUN 1994									
22...	1030	10	447	25.5					
	03316500			GREEN RIVER AT PARADISE, KY (LAT 37 15 50N LONG 086 58 40W)					
OCT 1993					MAR 1994				
07...	1400	2360	370	25.0	23...	0930	16600	215	11.0
DEC					JUL				
01...	1415	5250	281	12.0	12...	1354	2860	286	29.5
FEB 1994									
16...	1436	42300	219	10.0					
	03318500			ROUGH RIVER AT FALLS OF ROUGH, KY (LAT 37 35 20N LONG 086 33 05W)					
DEC 1993					APR 1994				
08...	1000	1690	275	8.5	22...	0813	373	158	12.0
JAN 1994					MAY				
05...	1130	346	276	3.0	24...	1145	121	198	16.5
FEB					JUN				
16...	1255	2760	121	5.0	27...	1715	69	241	18.0
MAR					AUG				
18...	0930	152	1150	8.0	04...	0930	54	227	17.0
	03319600			ROUGH RIVER AT HARTFORD, KY (LAT 37 27 11N LONG 086 54 39W)					
OCT 1993					JUN 1994				
20...	1400	1520	200	19.0	21...	0721	120	266	26.5
APR 1994									
25...	1410	469	204	16.5					
	03320000			GREEN RIVER AT LOCK 2 AT CALHOUN, KY (LAT 37 32 02N LONG 087 15 50W)					
OCT 1993					MAR 1994				
07...	1100	2250	522	22.0	18...	1322	48500	208	10.0
DEC					JUL				
01...	1041	7620	288	9.5	12...	0951	3210	318	28.0
FEB 1994									
16...	0947	46400	207	6.5					
	03320500			POND RIVER NEAR APEX, KY (LAT 37 07 20N LONG 087 19 10W)					
OCT 1993					APR 1994				
18...	0749	0.18	281	16.5	25...	0830	90	308	19.0
DEC					JUN				
06...	0947	693	200	9.0	24...	0755	5.2	308	27.0
JAN 1994					JUL				
27...	0848	2900	106	5.5	26...	1410	6.5	320	32.0
FEB					AUG				
24...	1330	1610	156	8.0	23...	1215	0.37	314	28.5
MAR									
15...	0829	639	184	9.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
GREEN RIVER BASIN--Continued									
03321060 POND RIVER NEAR MADISONVILLE, KY (LAT 37 19 02N LONG 087 22 09W)									
FEB 1994					AUG 1994				
24...	0900	1930	345	8.5	24...	0845	4.8	3770	23.0
JUN									
23...	0740	23	1430	29.0					
03321210 CYPRESS CREEK NEAR CALHOUN, KY (LAT 37 29 20N LONG 087 17 10W)									
OCT 1993					JUN 1994				
07...	0936	8.1	2470	16.5	23...	1050	10	1410	29.5
FEB 1994					JUL				
24...	1148	606	539	8.5	26...	1030	21	2320	26.5
APR									
25...	1145	137	1060	20.5					
HIGHLAND CREEK BASIN									
03322360 BEAVERDAM CREEK NEAR CORYDON, KY (LAT 37 42 14N LONG 087 41 52W)									
OCT 1993					JUN 1994				
19...	1335	4.5	335	20.0	20...	0850	0.61	544	24.5
APR 1994									
21...	1130	4.7	468	16.5					
TRADEWATER RIVER BASIN									
03383000 TRADEWATER RIVER AT OLNEY, KY (LAT 37 13 26N LONG 087 46 53W)									
OCT 1993					JUL 1994				
18...	1130	1.1	283	16.5	07...	0734	13	329	26.5
DEC					SEP				
02...	1200	68	--	9.0	01...	1015	0.72	362	23.0
APR 1994									
22...	1135	216	265	17.5					
CUMBERLAND RIVER BASIN									
03400800 MARTINS FORK NEAR SMITH, KY (LAT 36 45 08N LONG 083 15 27W)									
OCT 1993					MAY 1994				
04...	1055	25	193	--	26...	1140	62	123	18.0
NOV					JUL				
15...	1135	42	123	13.0	07...	1300	14	122	25.5
JAN 1994					AUG				
03...	1230	173	123	4.5	16...	1325	5.2	184	24.5
MAR					29...	1405	66	140	22.5
03...	1225	459	93	6.5					
APR									
25...	1150	270	99	13.0					
03401000 CUMBERLAND RIVER NEAR HARLAN, KY (LAT 36 50 48N LONG 083 21 21W)									
OCT 1993					APR 1994				
04...	0850	88	512	15.0	20...	0950	1640	251	12.0
NOV					MAY				
16...	1015	354	402	14.0	25...	1100	267	520	--
JAN 1994					JUL				
13...	1000	2290	210	6.0	08...	1140	135	541	25.0
MAR					AUG				
04...	0930	2830	210	5.0	17...	0920	320	--	20.5
28...	1000	11400	121	9.5					
29...	1135	4660	166	8.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

CUMBERLAND RIVER BASIN--Continued

03402000 YELLOW CREEK NEAR MIDDLESBORO, KY (LAT 36 40 05N LONG 083 41 19W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1993					APR 1994				
04...	1255	8.0	547	16.0	14...	0850	509	203	11.0
NOV					18...	0920	316	263	11.0
17...	0855	45	412	14.0	MAY				
JAN 1994					23...	1038	33	498	18.5
12...	1100	592	248	5.5	JUL				
MAR					06...	0950	17	524	25.0
07...	1045	181	290	8.0	AUG				
					18...	0815	15	624	21.5

03402900 CUMBERLAND R AT PINE ST BR AT PINEVILLE, KY (LAT 36 45 47N LONG 083 41 31W)

OCT 1993					APR 1994				
06...	1030	126	305	16.5	18...	1355	4440	247	12.5
NOV					MAY				
17...	1125	781	389	14.0	23...	1326	539	505	19.0
FEB 1994					JUL				
03...	1200	1630	325	1.5	06...	1220	290	466	27.0
MAR					AUG				
07...	1305	3030	275	8.5	18...	1200	780	532	22.5
28...	1330	28700	121	9.5					

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY (LAT 36 44 38N LONG 084 09 30W)

OCT 1993					APR 1994				
04...	1320	226	--	16.0	25...	1100	2530	334	16.0
NOV					JUN				
16...	1005	1640	415	12.5	03...	1155	724	410	21.0
JAN 1994					JUL				
14...	1020	8160	227	5.0	25...	0815	949	293	23.5
FEB					28...	1025	671	348	24.0
14...	1015	32800	147	5.0					
15...	1110	28100	180	6.5					

03404500 CUMBERLAND RIVER AT CUMBERLAND FALLS, KY (LAT 36 50 14N LONG 084 20 36W)

OCT 1993					APR 1994				
01...	0950	599	--	14.0	12...	0915	22000	161	13.0
NOV					MAY				
18...	1200	2890	279	12.5	24...	0925	988	323	19.0
JAN 1994					JUL				
10...	0955	17300	143	3.5	05...	0945	736	--	26.0
MAR					AUG				
02...	1140	6010	272	5.0	19...	0840	696	445	25.0

03404900 LYNN CAMP CREEK AT CORBIN, KY (LAT 36 57 05N LONG 084 05 37W)

OCT 1993					APR 1994				
01...	1430	21	442	17.5	12...	0945	549	209	14.0
NOV					JUN				
15...	1305	155	355	15.0	07...	1330	11	823	26.5
JAN 1994					JUL				
12...	0945	502	237	4.0	21...	1150	17	404	25.0
FEB									
28...	1120	97	519	5.0					

03406500 ROCKCASTLE RIVER AT BILLOWS, KY (LAT 37 10 16N LONG 084 17 46W)

OCT 1993					APR 1994				
01...	1045	109	227	14.5	13...	1030	5890	101	14.0
NOV					JUN				
15...	0940	2340	208	12.0	07...	1010	81	239	21.5
JAN 1994					JUL				
13...	1120	3050	154	5.5	21...	0900	124	215	24.5
MAR									
01...	1020	1150	156	5.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN--Continued									
03413200 BEAVER CREEK NEAR MONTICELLO, KY (LAT 36 47 51N LONG 084 53 46W)									
OCT 1993					APR 1994				
07...	1115	1.6	626	15.5	15...	1030	121	229	14.5
NOV					JUN				
17...	1040	12	424	14.5	08...	1140	31	315	17.5
JAN 1994					JUL				
10...	1015	108	260	8.0	20...	1140	5.3	227	21.5
FEB					AUG				
23...	1055	1530	144	11.0	30...	1100	12	481	18.0
03438000 LITTLE RIVER NEAR CADIZ, KY (LAT 36 46 40N LONG 087 43 18W)									
OCT 1993					APR 1994				
20...	1238	218	420	17.0	28...	0740	371	376	18.0
DEC					JUN				
08...	0735	471	253	11.0	29...	1320	313	360	18.0
JAN 1994					SEP				
25...	1454	1480	--	7.5	01...	1500	43	491	21.5
MAR									
17...	0723	686	350	11.0					
29...	1400	2130	253	12.0					
03610200 CLARKS RIVER AT ALMO, KY (LAT 36 41 30N LONG 088 16 25W)									
OCT 1993					APR 1994				
21...	1121	125	125	18.0	11...	1158	3980	77	15.5
DEC					29...	0957	233	136	20.0
09...	0746	83	149	8.5	JUN				
JAN 1994					28...	1315	56	166	25.0
26...	1359	561	--	5.0	JUL				
MAR					26...	1340	13	171	27.0
18...	0725	61	157	10.5	AUG				
28...	1055	2730	99	9.0	31...	1155	8.0	--	25.0
29...	0908	377	116	9.5					
03610545 WEST FORK CLARKS RIVER NEAR BREWERS, KY (LAT 36 46 48N LONG 088 28 03W)									
OCT 1993					APR 1994				
21...	0807	133	105	17.0	29...	0707	120	100	20.0
NOV					JUN				
17...	1515	507	90	13.0	28...	0910	43	145	26.0
DEC					JUL				
08...	1336	83	99	8.5	26...	1155	10	97	28.0
JAN 1994					AUG				
26...	0802	469	--	4.0	31...	0920	8.8	93	24.0
MAR									
17...	1148	53	95	9.0					
28...	1320	590	94	11.0					
MASSAC CREEK BASIN									
03611260 MASSAC CREEK NEAR PADUCAH, KY (LAT 37 02 29N LONG 088 42 39W)									
OCT 1993					APR 1994				
01...	1008	0.53	111	15.0	12...	1006	302	98	16.0
NOV					12...	1130	199	98	16.0
17...	1530	69	98	12.0	29...	1341	8.4	144	18.0
DEC					JUN				
08...	1357	7.8	133	7.5	27...	0835	1.4	179	21.0
13...	1334	5.3	139	6.5	JUL				
FEB 1994					25...	1000	0.75	131	25.0
08...	1230	5.5	141	--	AUG				
					30...	0910	0.66	--	22.0
OHIO RIVER MAIN STEM									
03611500 OHIO RIVER AT METROPOLIS, IL (LAT 37 08 51N LONG 088 44 27W)									
DEC 1993									
07...	1103	580000	262	8.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
BAYOU CREEK BASIN									
03611800 BAYOU CREEK NEAR HEATH, KY (LAT 37 05 58N LONG 088 49 27W)									
OCT 1993					MAY 1994				
12...	1045	0.12	267	13.0	06...	1038	0.58	189	17.5
NOV					JUN				
17...	0849	44	74	12.5	27...	1040	0.14	350	21.5
DEC					JUL				
10...	1018	1.1	192	10.5	25...	1130	0.18	258	25.5
FEB 1994					AUG				
14...	1445	2.3	166	5.0	30...	1355	0.18	266	26.0
23...	1415	26	102	9.5					
APR									
12...	1310	56	82	19.0					
03611850 BAYOU CREEK NEAR GRAHAMVILLE, KY (LAT 37 08 41N LONG 088 49 38W)									
OCT 1993					MAY 1994				
12...	1135	5.2	1160	16.0	06...	1300	8.0	800	21.5
NOV					JUN				
17...	1217	98	192	12.5	27...	1425	6.0	--	24.0
DEC					JUL				
10...	1130	8.0	685	12.0	25...	1500	3.9	592	31.0
FEB 1994					AUG				
14...	1300	12	550	6.5	30...	1045	5.6	824	26.0
23...	1054	126	160	9.5					
APR									
12...	1140	255	111	17.5					
03611900 LITTLE BAYOU CREEK NEAR GRAHAMVILLE, KY (LAT 37 08 22N LONG 088 47 26W)									
NOV 1993					MAY 1994				
17...	1035	68	60	12.5	06...	1148	1.1	249	18.0
DEC					JUN				
10...	1248	1.7	230	10.5	27...	1240	0.87	610	24.0
FEB 1994					JUL				
14...	1005	2.9	168	3.5	25...	1320	1.1	234	27.5
23...	1243	41	92	9.5	AUG				
APR					30...	1230	0.92	235	23.0
12...	1018	155	75	16.5					
BAYOU DE CHIEN BASIN									
07024000 BAYOU DE CHIEN NEAR CLINTON, KY (LAT 36 37 43N LONG 088 57 50W)									
OCT 1993					JUN 1994				
12...	1225	20	58	12.5	21...	1155	17	76	26.5
DEC					JUL				
08...	1150	48	101	7.0	26...	0952	15	71	23.5
MAR 1994					SEP				
28...	1110	1560	81	10.5	01...	1030	18	71	20.0
MAY									
03...	1130	36	105	15.0					

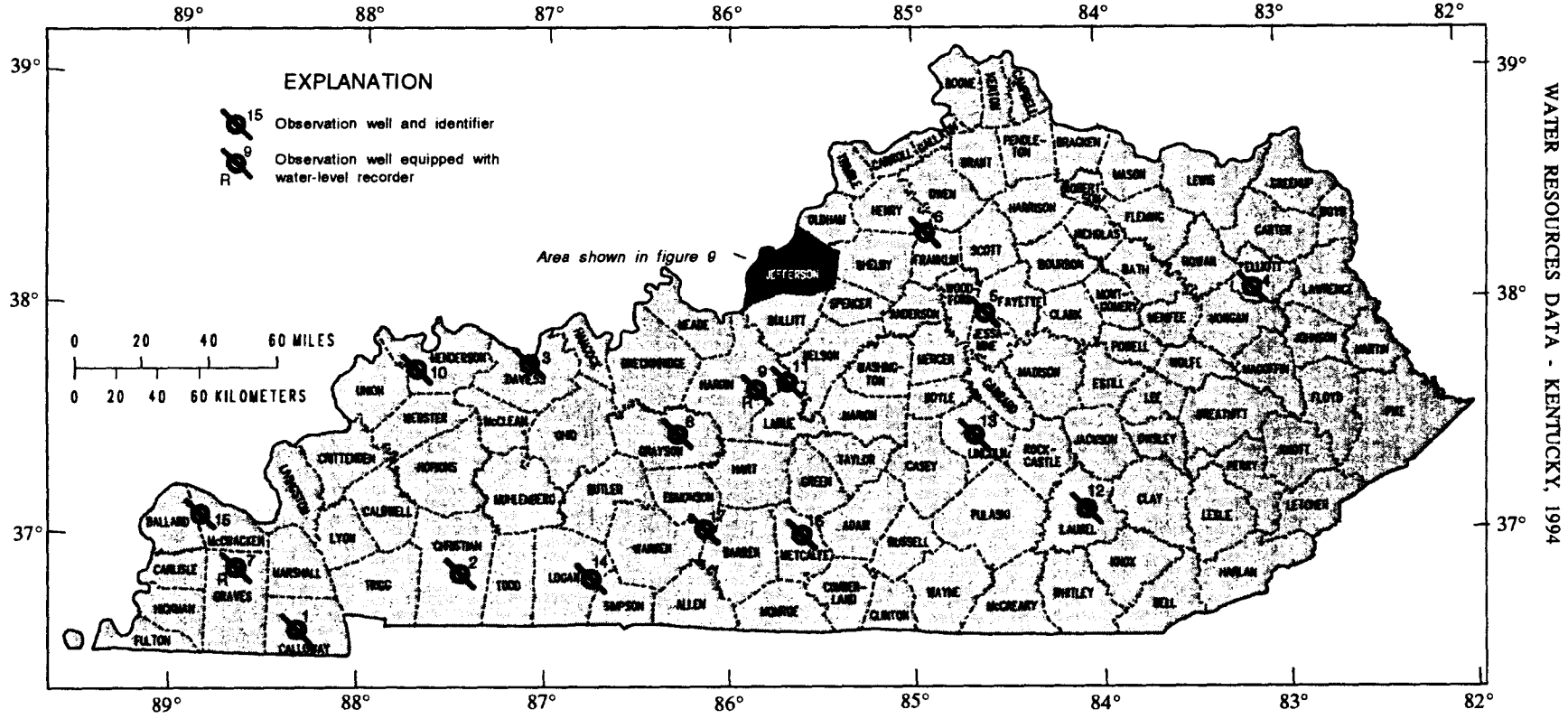
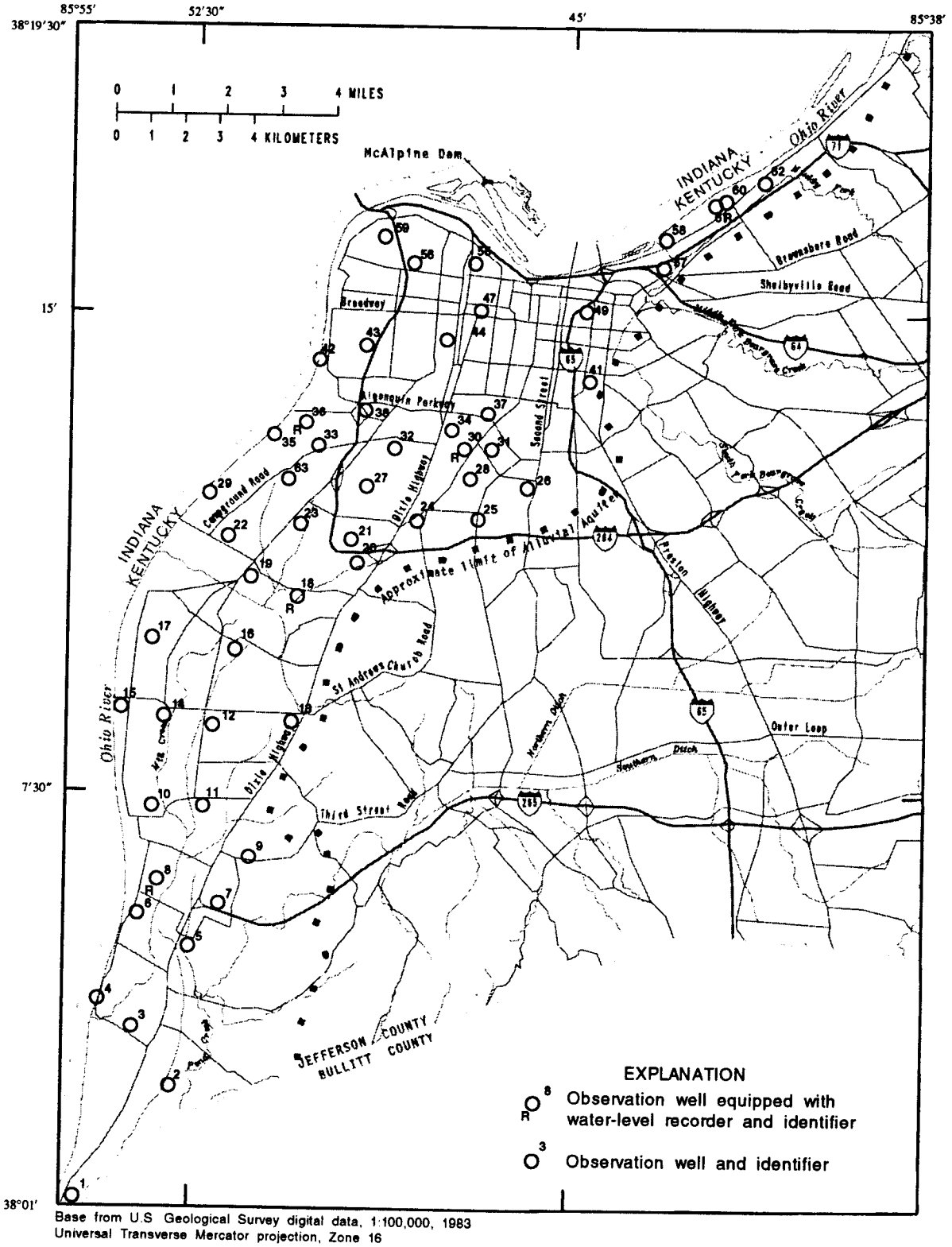


Figure 8. Location of observation wells in Kentucky.



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

Figure 9. Location of observation wells in Jefferson County.

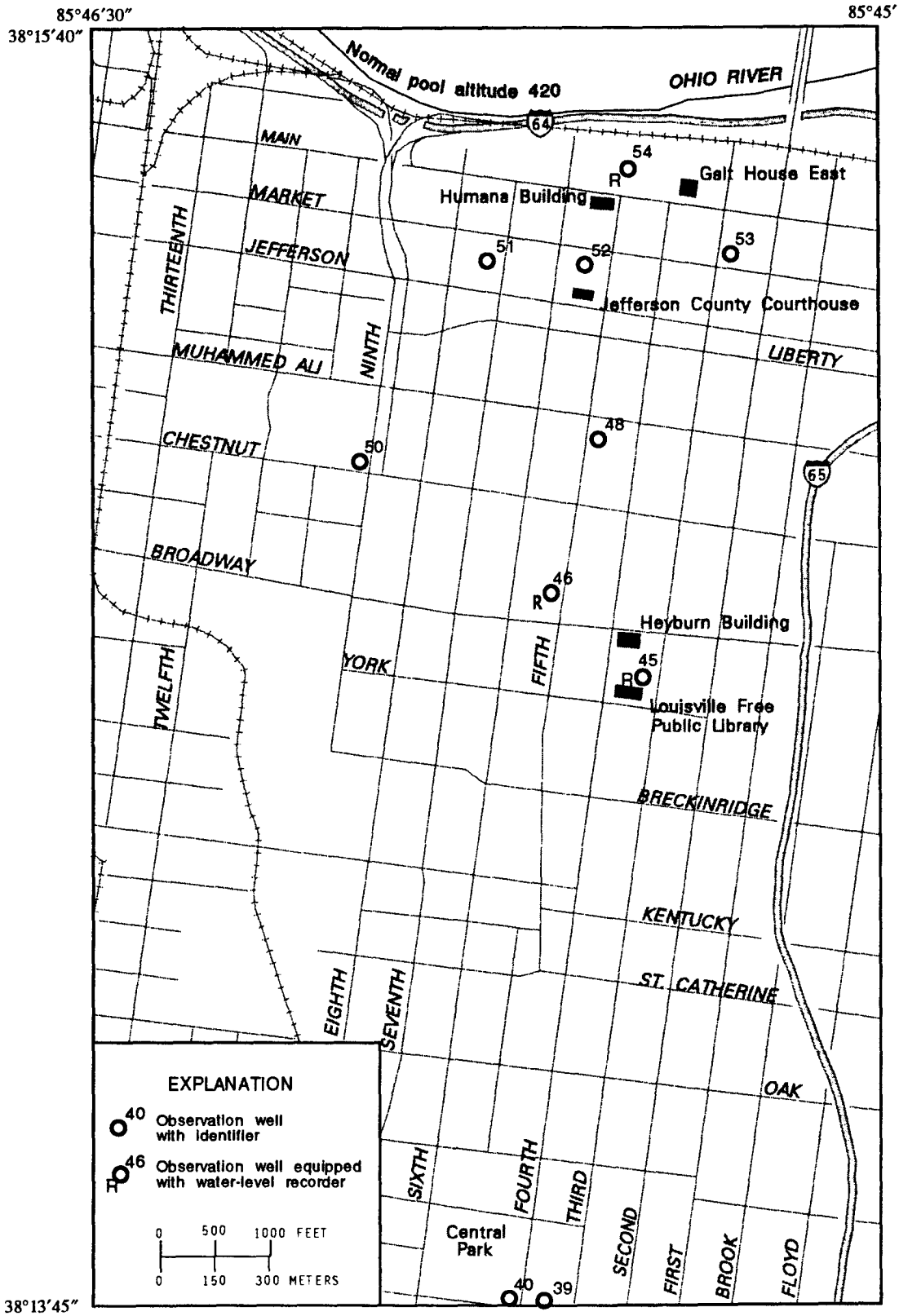


Figure 10. Location of observation wells in downtown Louisville.

CALLOWAY COUNTY

363634088191601. Map number 1.
LOCATION.--Lat 36°36'34", long 88°19'16", Hydrologic Unit 06040006, County Code 035, Murray quadrangle, 200 ft southeast of the intersection of 15th and Main Streets, in Murray. Owner: Joe Parks.
AQUIFER.--Sand of McNairy Formation of Late Cretaceous age. Aquifer code: 211MCNR.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 345 ft, screened 290-328, 330-334 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum is 549.14 ft above sea level. Measuring point: Floor of recorder shelter 4.75 ft above land-surface datum.
REMARKS.--Reported that well was used for several years to dispose of waste motor oil from a gasoline service station.
PERIOD OF RECORD.--March 1948 to September 1983 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 123.23 ft below land-surface datum, Mar. 3, 1953; lowest measured, 130.09 ft below land-surface datum, Aug. 8, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 9, 1993	124.75	Mar. 18	124.08	June 28	124.45
Jan. 26, 1994	125.20	Apr. 29	124.29	Aug. 31	125.25

CHRISTIAN COUNTY

365142087270401. Map number 2.
LOCATION.--Lat 36°51'42", long 87°27'04", Hydrologic Unit 05130205, County Code 047, Hopkinsville quadrangle, at Western State Hospital, 75 ft west of gravel road, 500 ft south of U.S. Highway 68, 2.0 mi east of Hopkinsville. Owner: State of Kentucky.
AQUIFER.--Ste. Genevieve Limestone of Late Mississippian age. Aquifer code: 333SGVV.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 85 ft, cased to 10 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 550 ft. Measuring point: Floor of shelter 3.06 ft above land-surface datum.
PERIOD OF RECORD.--February 1950 to September 1983 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.26 ft below land-surface datum, Feb. 22, 1961, lowest measured, 25.01 ft below land-surface datum, Sept. 25, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 7, 1993	12.63	Mar. 16	12.68	June 29	13.91
Jan. 25, 1994	18.68	Apr. 28	12.68	Sept. 1	16.01

DAVIESS COUNTY

374638087054101. Map number 3.
LOCATION.--Lat 37°46'38", long 87°05'41", Hydrologic Unit 05140201, County Code 059, Owensboro East quadrangle, at Owensboro Municipal Utilities water treatment plant, 100 ft south of south bank of Ohio River, 0.1 mi northeast of Daviess County High School, 0.3 mi north of U.S. Highway 60, in Owensboro. Owner: Owensboro Municipal Utilities.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 104 ft, screened 74 to 104 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 405 ft. Measuring point: Floor of recorder shelter 4.33 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby wells.
PERIOD OF RECORD.--February 1951 to September 1983 and March to September 1990.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.16 ft below land-surface datum, May 5, 1983; lowest, 63.21 ft below land-surface datum, Sept. 17, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 20, 1993	54.69	Mar. 16	50.02	June 20	57.23
Dec. 8	41.87	Apr. 26	47.77	Aug. 22	52.46
Jan. 26, 1994	54.27				

ELLIOTT COUNTY

380425083091901. Map number 4.
LOCATION.--Lat 38°04'25", long 83°09'19", Hydrologic Unit 05090104, County Code 063, Sandy Hook quadrangle, in a hay field, 100 ft south of a tobacco barn, 250 ft north of State Highway 7, 1.9 mi southwest of Sandy Hook. Owner: Roy Adkins.
AQUIFER.--Lee Formation of Early Pennsylvanian age. Aquifer code: 327LEE.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 70 ft, length of casing unknown, open hole below casing.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 780 ft. Measuring point: Floor of recorder shelter 3.55 ft above land-surface datum.
REMARKS.--Pump test run Oct. 10, 1965. Estimated yield based on recovery, 0.4 gal/min.
PERIOD OF RECORD.--September 1952 to September 1984 and July 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.50 ft below land-surface datum, July 18, 1971; lowest measured, 46.35 ft below land-surface datum, Dec. 17, 1953.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 8, 1993	24.58	May 19	23.93	July 25	24.93
Apr. 15, 1994	22.58	June 20	24.72		

FAYETTE COUNTY

375928084362001. Map number 5.
LOCATION.--Lat 38°59'28", long 84°36'20", Hydrologic Unit 05100205, County Code 067, Nicholasville quadrangle, 50 ft west of a farmhouse, 15 ft east of an old chicken house, 600 ft north of where Keene Road crossed the Fayette-Jessamine County line, 1.2 mi southwest of South Elkhorn. Owner: Donald Todd, formerly M.A. Kehrt.
AQUIFER.--Grier Limestone Member of Lexington Limestone of Middle Ordovician age. Aquifer code: 364GRIR.
WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 6 in., depth 132 ft, cased to 15 ft, open hole 15 to 132 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 940 ft. Measuring point: Floor of recorder shelter 2.75 ft above land-surface datum.
REMARKS.--Lowest water level is a pumping level.
PERIOD OF RECORD.--November 1952 to September 1984 and June 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft below land-surface datum, Jan. 11, 1974; lowest measured, 48.56 ft below land-surface datum, Mar. 12, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 6, 1993	12.65	Feb. 22	11.45	July 22	12.40
Nov. 29	7.29	Apr. 8	8.74	Aug. 16	12.53
Jan. 14, 1994	9.54	May 27	12.22		

FRANKLIN COUNTY

382031084553901. Harp Road Test Well. Map number 6.
LOCATION.--Lat 38°20'31", long 84°55'39", Hydrologic Unit 05100205, County Code 073, Polsgrove quadrangle, in a pasture at an old farmhouse site, 50 ft north of Harp Road, 2.3 mi northeast of junction of Harp Road and U.S. Highway 421, 2.3 mi southwest of Polsgrove. Owner: Franklin County.
AQUIFER.--Kope and Clays Ferry Formations of Late Ordovician age (previously published as Lexington Limestone of Middle Ordovician age). Aquifer code: 361KOCL (previously published as 364LXNG).
WELL CHARACTERISTICS.--Drilled unused artesian and water-table test well, diameter 6 in., depth 450 ft, cased to 15 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 890 ft. Measuring point: Top of pipe plug .50 ft above land-surface datum.
PERIOD OF RECORD.--August 1973 to January 1983 and October 1988 to current year. August 1973 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.87 ft below land-surface datum, Sept. 14, 1979; lowest measured, 119.82 ft below land-surface datum, Sept. 12, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 6, 1993	34.37	Apr. 11	34.56	July 5	40.32
Jan. 25, 1994	30.94	May 26	38.19	Aug. 16	37.36
Feb. 25	34.83				

GROUND-WATER LEVELS

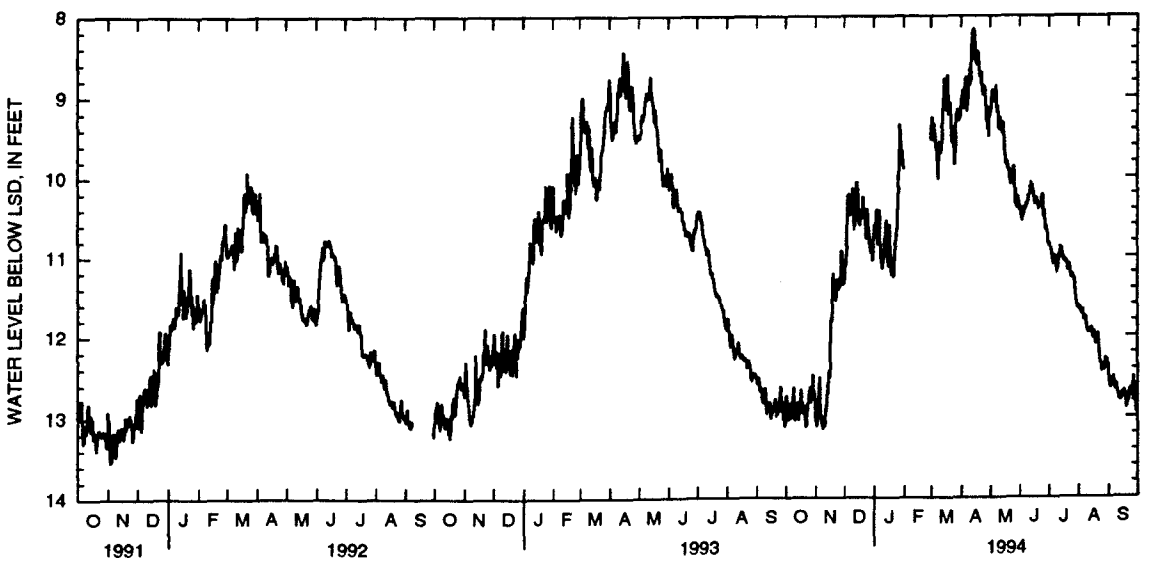
GRAVES COUNTY

365210088391301. Map number 7.
LOCATION.--Lat 36°52'10", long 88°39'13", Hydrologic Unit 08010201, County Code 083, Hickory quadrangle, in a cultivated field, 200 ft east of a private road, 1.2 mi northwest of Viola. Owner: J. Whittemore.
AQUIFER.--Sand of Claiborne Group of Eocene age. Aquifer Code: 124CLBR.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 106 ft, cased to 85 ft, screened 85-105 ft.
INSTRUMENTATION.--ADR recorder -- 60-minute punch.
DATUM.--Altitude of land-surface datum is 405.65 ft above sea level. 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, 8.20 ft below land-surface datum, Apr. 13, 1994; lowest measured, 19.24 ft below land-surface datum, Jan. 10, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.75	13.11	11.27	10.61	9.87	9.42	9.09	9.24	10.40	10.87	11.67	12.57
2	12.89	13.09	11.10	10.65	---	9.26	9.02	9.14	10.48	10.88	11.68	12.64
3	13.03	12.92	10.91	10.43	---	9.53	9.03	8.93	10.55	10.97	11.72	12.64
4	12.84	12.62	10.23	10.64	---	9.34	9.12	8.99	10.51	11.03	11.72	12.62
5	12.99	12.66	10.34	10.82	---	9.60	8.82	9.06	10.46	11.10	11.78	12.54
6	13.02	12.93	10.38	10.42	---	9.67	8.80	9.01	10.41	11.07	11.80	12.58
7	12.94	13.12	10.46	10.81	---	9.76	9.18	8.87	10.38	11.01	11.78	12.66
8	12.78	13.14	10.46	11.08	---	10.02	9.03	9.19	10.36	11.06	11.85	12.64
9	12.64	13.12	10.26	11.15	---	9.56	8.85	9.18	10.31	11.20	11.94	12.67
10	13.04	13.11	10.20	11.04	---	9.66	8.76	9.37	10.24	11.14	11.96	12.73
11	12.94	12.96	10.66	11.00	---	9.70	8.74	9.39	10.18	11.03	11.95	12.78
12	12.85	12.90	10.51	10.83	---	9.55	8.36	9.37	10.13	10.93	11.96	12.80
13	12.93	12.70	10.24	10.58	---	9.17	8.20	9.44	10.11	10.90	11.96	12.80
14	13.03	12.45	10.06	10.77	---	8.97	8.25	9.32	10.16	10.95	11.91	12.78
15	12.96	12.50	10.31	11.08	---	8.90	8.21	9.45	10.29	11.03	12.03	12.74
16	12.80	12.21	10.57	10.91	---	9.17	8.57	9.72	10.34	11.06	11.98	12.72
17	12.72	11.78	10.60	10.67	---	9.08	8.60	9.83	10.31	11.07	12.02	12.70
18	12.94	11.64	10.49	11.13	---	8.89	8.52	9.84	10.31	11.08	12.10	12.79
19	12.96	11.21	10.51	11.17	---	9.22	8.52	9.89	10.36	11.09	12.09	12.89
20	12.86	11.47	10.25	11.14	---	9.09	8.75	9.93	10.40	11.17	12.01	12.87
21	13.12	11.50	10.46	11.24	---	9.22	8.72	10.01	10.38	11.15	12.09	12.82
22	13.10	11.55	10.47	10.99	---	9.57	8.84	10.08	10.37	11.13	12.23	12.69
23	12.97	11.39	10.73	10.83	---	9.38	8.97	10.07	10.34	11.22	12.35	12.66
24	12.82	11.28	10.64	10.79	---	9.56	8.93	10.01	10.23	11.27	12.44	12.75
25	12.72	11.41	10.55	10.41	---	9.84	8.94	9.92	10.50	11.25	12.43	12.72
26	12.66	11.37	10.63	10.11	---	9.60	9.00	9.95	10.42	11.26	12.39	12.51
27	12.82	11.19	10.86	9.66	---	9.28	9.24	10.33	10.66	11.29	12.42	12.79
28	12.57	11.04	10.95	9.55	9.54	9.16	9.31	10.39	10.62	11.42	12.37	12.79
29	12.64	11.14	10.85	9.70	---	9.29	9.48	10.31	10.69	11.56	12.38	12.93
30	12.70	11.35	11.05	9.75	---	9.28	9.14	10.31	10.82	11.64	12.37	12.91
31	12.86	---	10.87	9.89	---	9.25	---	10.42	---	11.66	12.43	---
MAX	13.12	13.14	11.27	11.24	---	10.02	9.48	10.42	10.82	11.66	12.44	12.93
MIN	12.57	11.04	10.06	9.55	---	8.89	8.20	8.87	10.11	10.87	11.67	12.51

WTR YR 1994 HIGH 8.20 LOW 13.14



GRAYSON COUNTY

372822086165801. Map number 8.
LOCATION.--Lat 37°28'22", long 86°16'58", Hydrologic Unit 05110004, County Code 085, Leitchfield quadrangle, at the end of a city park road, 500 ft north of a dam and lake, 1,000 ft northeast of the old city water treatment plant, 0.8 mi southeast of Grayson County Courthouse, in Leitchfield. Owner: City of Leitchfield.
AQUIFER.--Hardinsburg Sandstone of Late Mississippian age. Aquifer code: 332HDBG.
WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 7 in., depth 384 ft, length casing unknown.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is 660 ft. Measuring point: Top of pipe flange 5.12 ft above land-surface datum.
PERIOD OF RECORD.--December 1979 to September 1983 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.14 ft below land-surface datum, Mar. 17, 1994; lowest measured, 84.65 ft below land-surface datum, June 6, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 20, 1993	75.88	Feb. 10	74.79	May 24	74.87
Dec. 3	75.56	Mar. 17	74.14	June 28	74.86
Jan. 6, 1994	74.97	Apr. 21	74.38	Aug. 3	75.50

GROUND-WATER LEVELS

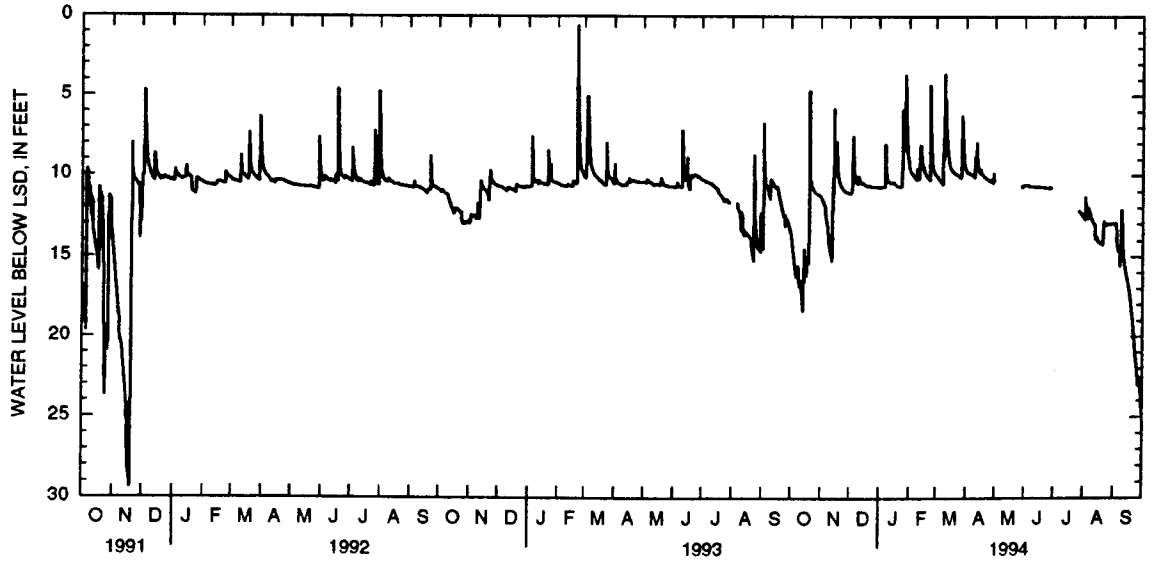
HARDIN COUNTY

373925085540301. Local number OW-6, map number 9.
LOCATION.--Lat 37°39'25", long 85°54'03", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, from road U.S 62, 1.8 mi south on Gaither Station Road, 100 ft south on gravel road, 70 ft west of railroad tracks, 150 ft east of Gaither Spring. Owner: City of Elizabethtown.
AQUIFER.--St. Genevieve Limestone of Late Mississippian age. Aquifer Code: 333SGVV.
WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 12 in., depth 100 ft, with 17 ft of 12 in. surface casing.
INSTRUMENTATION.--Digital recorder -- 30-minute punch.
DATUM.--Elevation of land-surface datum is 669.99 ft above sea level. Measuring point: Floor of shelter, 2.8 ft above land-surface datum.
REMARKS.--Water levels affected by stage of nearby Gaither Spring.
PERIOD OF RECORD.--January 1989 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 2.61 ft above land surface datum, Feb. 15, 1989; lowest, 28.97 ft below land-surface datum, Nov. 18, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.67	11.38	11.11	10.71	9.58	10.04	9.72	---	10.57	---	12.65	12.96
2	14.31	11.55	11.13	10.72	9.75	10.09	9.81	---	10.56	---	11.33	12.95
3	14.88	11.64	11.01	10.69	9.85	10.18	9.81	---	10.59	---	12.22	12.94
4	15.41	11.80	9.81	10.69	9.93	10.26	9.86	---	10.61	---	12.65	14.42
5	15.90	11.92	9.11	10.69	10.01	10.35	9.90	---	10.64	---	11.98	14.61
6	16.27	12.65	10.05	10.70	10.10	10.45	9.93	---	10.66	---	12.21	14.67
7	15.62	13.02	10.28	8.07	10.19	10.54	9.95	---	10.67	---	12.42	15.58
8	15.66	13.36	10.45	10.06	10.25	7.62	10.01	---	10.67	---	12.64	14.76
9	16.84	14.25	10.51	10.24	9.59	7.54	10.08	---	10.67	---	12.80	12.16
10	16.56	14.55	10.04	10.35	10.18	5.85	8.87	---	10.67	---	12.93	14.59
11	17.00	14.86	10.32	10.42	10.14	6.86	9.27	---	10.68	---	12.96	15.20
12	17.62	15.24	10.38	10.44	9.22	7.92	8.91	---	10.68	---	13.85	15.64
13	18.39	10.82	10.46	10.42	8.53	8.69	9.57	---	10.69	---	13.71	15.97
14	16.63	11.15	10.51	10.46	9.31	9.21	9.75	---	10.69	---	13.87	16.30
15	15.92	9.44	10.47	10.43	9.59	9.44	9.85	---	10.68	---	14.02	16.58
16	16.22	9.97	10.54	10.47	9.44	9.60	9.82	---	10.69	---	14.06	16.89
17	15.62	7.89	10.61	10.53	9.85	9.70	9.93	---	10.70	---	14.09	17.26
18	15.37	9.68	10.61	10.58	9.94	9.76	10.00	---	10.71	---	14.16	17.76
19	15.43	10.16	10.66	10.66	10.09	9.83	10.04	---	10.71	---	14.14	18.41
20	4.70	10.46	10.63	10.67	10.17	9.89	10.09	---	10.71	---	14.21	19.01
21	10.70	10.62	10.64	10.67	10.20	9.91	10.16	---	10.72	---	12.80	19.79
22	10.59	10.71	10.67	10.69	10.26	9.92	10.19	---	10.73	---	12.91	20.48
23	10.76	10.80	10.68	10.69	6.92	9.96	10.24	---	10.74	---	12.98	21.29
24	10.89	10.90	10.68	10.61	8.78	10.01	10.28	---	10.74	---	13.00	21.79
25	11.00	10.95	10.70	6.02	9.52	10.09	10.30	---	10.74	---	13.00	22.47
26	11.07	11.01	10.70	7.62	9.72	10.13	10.33	---	10.76	12.13	12.97	23.08
27	11.13	11.01	10.70	6.20	9.85	7.71	10.22	---	10.73	12.22	13.00	22.53
28	11.17	11.01	10.71	3.68	9.95	7.01	10.37	10.67	---	12.29	12.98	23.24
29	11.21	11.08	10.71	7.29	---	8.66	9.86	10.67	---	12.41	12.96	24.15
30	11.21	11.10	10.71	8.61	---	9.41	10.38	10.59	---	12.49	12.93	24.77
31	11.27	---	10.72	9.00	---	9.61	---	10.57	---	12.56	12.95	---
MAX	18.39	15.24	11.13	10.72	10.26	10.54	10.38	---	---	---	14.21	24.77
MIN	4.70	7.89	9.11	3.68	6.92	5.85	8.87	---	---	---	11.33	12.16

WTR YR 1994 HIGH 3.68 LOW 24.77



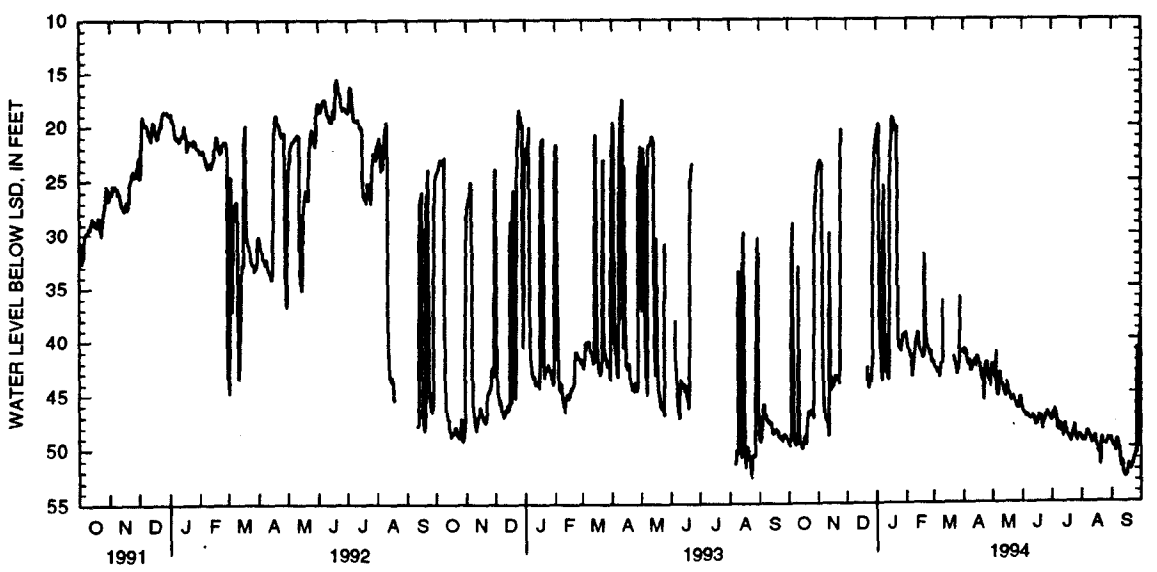
HARDIN COUNTY

374035085525401. Local number OW-1-82, map number 9.
LOCATION.--Lat 37°40'35", long 85°52'54", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, 0.30 mi west of Elizabethtown Water Plant, 0.20 mi west on gravel road to sewage lagoon parallel to RR tracks, 100 ft south of RR tracks, 75 ft east of electric power tower, 10 ft north of gravel road. Owner: City of Elizabethtown.
AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer Code: 333STLS.
WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 6 in., depth 120 ft, with 14 ft of 8 in. surface casing.
INSTRUMENTATION.--Graphical recorder--continuous.
DATUM.--Elevation of land-surface datum is 692.25 ft above sea level. Measuring point: Floor of shelter, 1.4 ft above land-surface datum.
REMARKS.-- Water levels affected by pumping from nearby wells and proximity to RR tracks.
PERIOD OF RECORD.--September 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 8.99 ft below land surface datum, May 3, 1983; lowest, 78.77 ft below land-surface datum, July 14, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.73	23.50	---	20.33	40.35	42.41	41.39	42.73	46.66	47.45	49.41	49.76
2	49.55	23.35	---	19.94	40.83	42.69	40.91	43.25	46.85	46.90	49.49	49.79
3	49.20	23.45	---	30.00	41.40	42.68	41.00	43.69	47.10	46.92	49.36	49.89
4	31.32	23.56	---	40.45	41.60	43.00	41.80	41.25	47.18	46.53	49.49	50.39
5	29.06	34.24	---	42.52	41.44	43.09	42.27	45.14	47.00	47.26	48.92	49.88
6	48.58	45.06	---	43.40	42.92	42.97	41.99	45.30	47.21	48.27	48.70	49.35
7	49.73	46.48	---	39.84	43.09	43.49	42.01	44.39	47.36	48.49	48.68	49.51
8	49.71	47.52	---	25.46	41.79	42.51	42.85	43.45	47.38	47.84	49.03	50.10
9	49.46	47.46	---	39.58	41.14	42.27	42.89	43.72	47.38	48.37	49.14	50.87
10	49.39	47.70	---	42.44	40.20	42.22	42.68	44.23	47.35	48.52	49.50	51.47
11	33.15	48.28	---	43.10	39.82	36.30	42.32	44.50	47.13	48.47	49.66	51.63
12	48.80	40.76	---	43.49	39.37	---	42.05	45.02	47.34	48.80	49.50	51.53
13	49.64	39.12	---	43.75	40.15	---	41.92	45.02	47.75	48.67	49.33	52.44
14	49.89	44.69	---	26.57	40.90	---	42.10	45.32	48.00	47.91	48.99	52.47
15	50.00	44.21	---	22.38	41.14	---	41.65	44.57	47.85	48.53	49.48	52.54
16	49.60	44.46	---	20.90	41.49	---	42.21	44.65	47.94	48.70	49.89	52.69
17	49.24	43.80	---	19.23	41.69	---	42.26	45.07	47.20	49.00	50.52	52.14
18	49.25	43.74	---	19.37	41.65	---	42.69	45.18	47.11	49.13	50.31	51.56
19	49.56	43.37	---	20.06	---	---	43.37	45.57	47.20	49.28	50.57	51.85
20	48.03	43.65	---	20.22	---	---	43.75	45.40	47.47	49.51	51.58	52.06
21	46.96	43.76	24.36	20.04	39.86	---	43.95	45.56	48.35	49.48	49.18	51.81
22	46.71	44.05	43.86	30.19	40.62	41.93	44.43	45.35	47.78	48.86	49.59	51.54
23	46.91	43.03	44.49	40.07	40.86	42.21	42.52	45.76	47.54	48.49	49.70	51.03
24	46.57	22.80	43.89	40.60	41.46	42.64	42.25	45.94	47.30	48.03	49.72	50.73
25	46.77	20.80	43.52	41.04	41.04	43.27	42.18	46.22	47.06	48.95	49.76	50.36
26	46.98	19.50	43.18	40.86	41.72	42.85	43.57	46.13	46.77	49.34	49.89	50.55
27	43.20	---	40.09	40.36	41.97	42.32	43.93	46.45	47.11	49.51	49.44	43.81
28	28.73	---	25.01	39.76	42.05	---	43.80	45.76	47.32	49.05	49.20	49.61
29	26.16	---	22.90	39.49	---	---	43.46	45.44	47.48	48.95	49.35	48.52
30	25.24	---	21.82	39.45	---	---	42.40	45.69	47.64	48.99	49.43	38.40
31	24.22	---	20.80	39.61	---	---	---	46.33	---	49.08	49.24	---
MAX	50.00	---	---	43.75	---	---	44.43	46.45	48.35	49.51	51.58	52.69
MIN	24.22	---	---	19.23	---	---	40.91	41.25	46.66	46.53	48.68	38.40

WTR YR 1994 HIGH 19.23 LOW 52.69



GROUND-WATER LEVELS

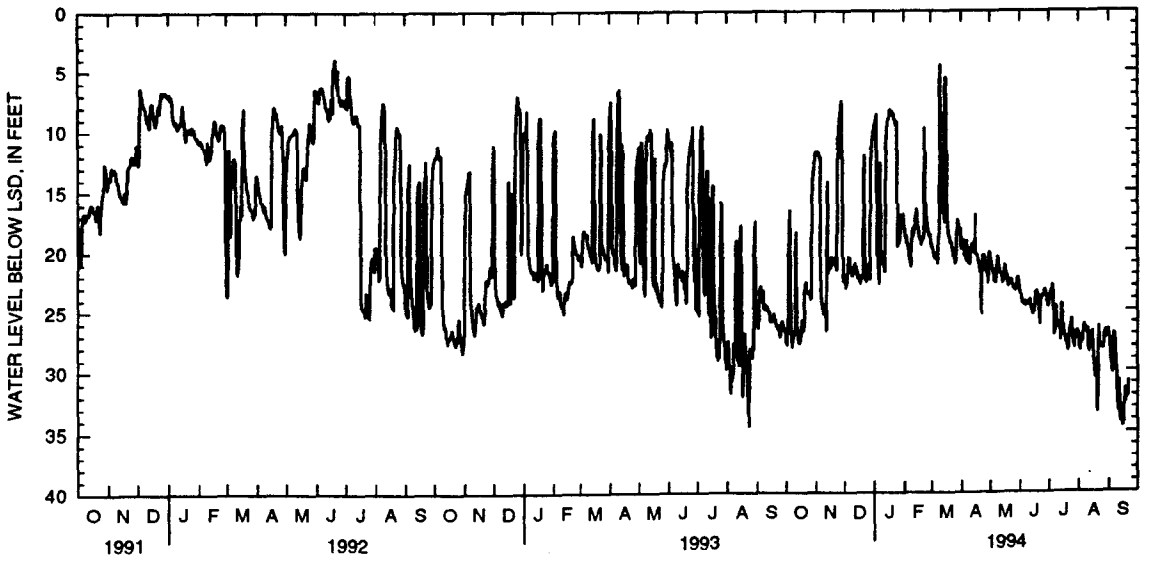
HARDIN COUNTY

374037085524801. Local number TW-2-82, map number 9.
LOCATION.--Lat 37°40'37", long 85°52'48", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, 0.20 mi west of Elizabethtown Water Plant, 0.10 mi west on gravel road to sewage lagoon parallel to RR tracks, 400 ft south of RR tracks, 300 ft south of gravel road, 20 ft north of Valley Creek. Owner: City of Elizabethtown.
AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer Code: 333STLS.
WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 6 in., depth 118 ft, with 14 ft of 8 in. surface casing.
INSTRUMENTATION.--Digital recorder -- 30-minute punch.
DATUM.--Elevation of land-surface datum is 680.84 ft above sea level. Measuring point: Floor of shelter, 2.2 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby wells and stage of Valley Creek.
PERIOD OF RECORD.--September 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 0.74 ft below land surface datum, Mar. 1, 1987; lowest, 41.96 ft below land-surface datum, Oct. 20, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.76	11.88	22.54	9.50	18.59	19.45	19.24	20.59	23.65	24.20	28.01	27.02
2	26.87	11.85	23.07	9.04	18.96	19.81	19.04	21.33	23.81	23.55	28.33	28.18
3	23.45	11.86	22.86	15.05	19.34	20.11	19.52	21.80	24.42	23.20	27.49	28.86
4	17.32	12.24	21.35	21.24	19.59	20.64	20.39	22.10	24.47	22.89	27.66	30.24
5	20.83	12.19	20.60	22.00	19.58	20.34	20.63	22.56	24.24	23.37	26.60	28.42
6	27.04	23.68	21.07	18.25	20.99	20.49	19.44	22.70	24.59	27.05	26.16	26.94
7	27.98	24.49	21.53	16.78	21.33	21.03	20.55	21.40	24.32	26.71	26.60	27.17
8	27.18	25.25	22.04	20.25	19.66	19.11	21.02	20.67	24.54	24.66	26.82	29.02
9	26.79	24.58	22.05	20.56	18.18	17.77	21.14	21.07	24.40	26.36	26.99	31.35
10	26.59	24.78	21.35	21.16	18.68	4.58	20.35	21.57	24.30	26.42	28.06	32.80
11	18.38	25.79	21.05	21.75	18.22	16.44	20.12	21.90	24.06	26.48	28.45	33.01
12	26.51	21.43	21.39	17.93	17.11	16.81	19.62	22.15	24.54	26.71	27.70	32.76
13	27.23	14.20	21.92	10.74	16.52	16.85	19.81	22.51	25.08	26.73	27.44	33.85
14	27.65	21.82	22.27	9.65	17.63	17.60	20.14	22.57	25.30	24.46	26.88	33.86
15	27.67	20.79	22.09	9.07	18.06	6.54	16.99	21.67	24.88	26.33	27.91	33.82
16	27.18	21.48	22.49	8.55	18.92	5.71	20.25	21.52	25.08	26.86	28.85	34.22
17	25.79	20.62	22.76	8.43	18.99	17.51	20.39	22.05	23.45	27.33	30.61	32.74
18	26.38	20.83	22.28	8.52	19.47	18.69	20.87	22.10	23.40	27.64	29.67	31.75
19	26.66	20.69	22.21	8.53	19.26	18.82	21.46	22.90	23.69	27.78	30.46	32.49
20	23.30	21.07	18.06	8.79	18.96	19.31	21.77	22.66	24.12	28.24	33.38	32.15
21	22.66	21.27	12.01	9.04	15.15	19.34	22.01	22.56	26.14	28.08	26.33	---
22	23.32	21.58	22.45	9.22	12.78	19.79	21.80	22.44	24.52	26.59	27.78	---
23	23.56	17.06	22.57	9.44	17.01	20.01	20.57	22.78	24.02	26.24	27.95	---
24	23.36	10.67	22.19	9.41	17.78	20.57	20.38	23.02	23.74	25.76	28.12	---
25	23.63	9.38	21.21	19.61	18.40	21.09	20.58	23.21	23.65	27.26	28.13	---
26	23.91	8.57	21.04	19.37	18.66	20.77	21.85	22.97	23.30	27.77	28.20	---
27	19.64	7.56	22.38	19.08	18.58	18.31	21.48	23.35	23.58	28.11	26.97	---
28	14.73	8.96	12.22	17.08	19.17	17.62	21.99	22.97	23.81	26.94	26.67	---
29	13.39	21.34	11.00	17.07	---	18.03	21.02	22.32	24.48	26.98	26.96	---
30	12.30	22.34	10.41	16.94	---	18.27	20.17	22.76	24.69	26.81	27.20	---
31	11.79	---	9.84	18.07	---	18.72	---	23.23	---	27.05	26.69	---
MAX	27.98	25.79	23.07	22.00	21.33	21.09	22.01	23.35	26.14	28.24	33.38	---
MIN	11.79	7.56	9.84	8.43	12.78	4.58	16.99	20.59	23.30	22.89	26.16	---

WTR YR 1994 HIGH 4.58 LOW 34.22



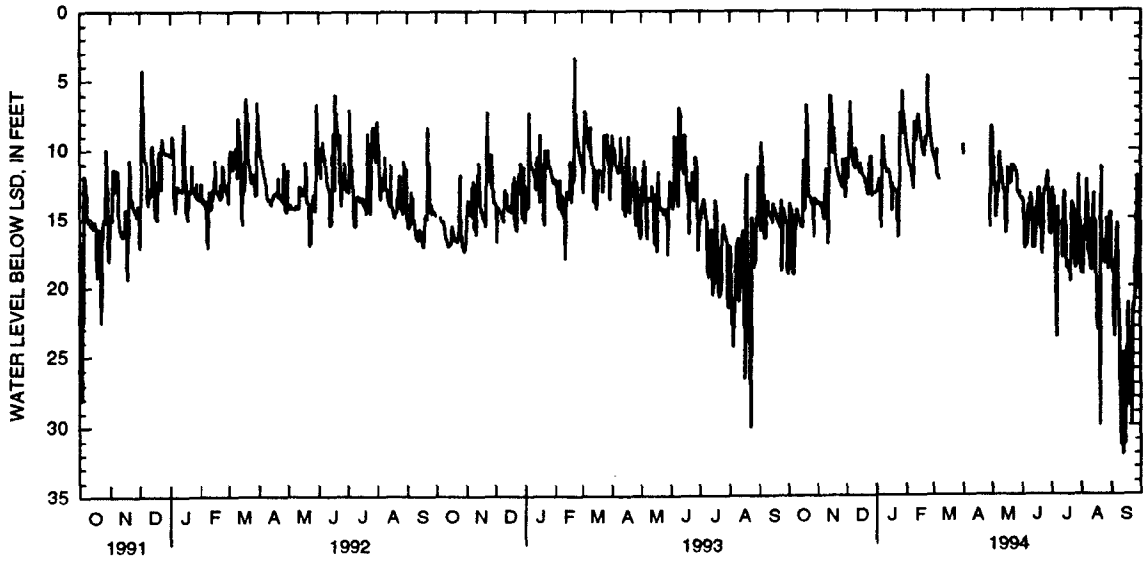
HARDIN COUNTY

374046085523501. Local number OW-1-81, map number 9.
LOCATION.--Lat 37°40'46", long 85°52'35", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, at Elizabethtown Water Plant, 300 ft south of blue water tank, 25 ft east of engineer's office, next to gravel driveway. Owner: City of Elizabethtown.
AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer Code: 333STLS.
WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 6 in., depth 100 ft, with 6 ft of 6 in. surface casing.
INSTRUMENTATION.--Graphical recorder--continuous.
DATUM.--Elevation of land-surface datum is 685.89 ft above sea level. Measuring point: Floor of shelter, 1.9 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby wells.
PERIOD OF RECORD.--September 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 3.41 ft below land surface datum, Feb. 21, 1993; lowest, 49.47 ft below land-surface datum, Oct. 8, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.87	14.00	11.10	13.07	9.90	10.35	---	9.05	13.69	13.62	19.07	18.57
2	15.23	13.86	11.33	12.83	10.35	10.75	---	10.59	13.77	13.41	19.15	18.98
3	14.38	14.06	10.76	12.18	10.82	10.38	---	12.61	17.25	13.45	16.09	21.77
4	14.38	13.97	7.54	12.26	11.21	9.98	---	12.88	17.03	14.85	15.86	22.77
5	15.20	13.93	9.27	15.16	11.48	11.86	---	14.92	17.06	18.29	14.43	18.75
6	19.11	14.57	9.90	13.36	12.05	---	---	13.19	16.85	23.69	12.21	15.41
7	18.95	14.95	10.68	8.99	12.57	---	---	13.09	14.19	18.26	13.78	16.39
8	15.70	13.93	11.12	10.01	11.36	---	---	10.23	14.04	15.28	17.80	21.61
9	15.47	11.42	11.38	10.84	8.64	---	---	11.14	13.29	15.51	15.17	25.92
10	14.38	13.17	9.89	11.34	9.18	---	---	11.67	13.64	15.38	18.64	29.06
11	14.56	16.88	10.61	11.68	8.92	---	---	12.53	16.18	15.48	18.89	27.69
12	15.05	11.94	11.19	11.58	8.12	---	---	12.96	17.19	17.94	15.78	30.36
13	15.36	6.11	11.50	11.60	7.80	---	---	13.02	17.21	14.46	13.24	28.85
14	15.61	8.59	11.67	11.71	8.51	---	---	14.00	17.09	13.09	15.58	27.97
15	15.59	7.03	11.01	12.42	8.97	---	---	15.78	14.30	14.38	15.24	24.84
16	15.41	10.24	11.70	12.66	9.52	---	---	12.43	14.29	18.08	19.98	28.61
17	10.79	8.39	11.89	14.47	9.88	---	---	12.11	12.89	18.71	23.19	24.99
18	14.26	9.74	11.95	12.76	10.19	---	---	12.35	12.88	18.71	19.70	21.30
19	14.06	10.48	12.11	12.83	10.45	---	---	12.51	15.67	18.67	20.79	24.03
20	6.76	11.25	12.51	12.96	9.16	---	---	12.40	15.82	19.65	29.96	28.64
21	8.61	11.69	12.34	13.08	9.18	---	---	11.18	17.66	16.46	11.31	24.44
22	12.90	11.98	13.15	13.14	9.03	---	---	11.18	15.56	13.96	17.70	24.14
23	13.33	12.12	13.28	16.34	6.89	---	---	11.25	13.27	14.23	16.72	21.61
24	13.45	12.23	13.15	14.14	7.99	---	---	11.55	12.95	14.49	18.29	20.94
25	13.78	12.53	10.57	7.39	8.70	---	---	11.61	12.47	18.60	18.28	18.20
26	13.97	12.74	10.50	8.58	9.23	---	---	12.25	13.00	18.71	18.32	20.18
27	14.94	11.30	13.37	7.38	9.79	---	---	13.15	12.97	18.33	15.07	14.07
28	14.14	11.81	13.13	7.06	10.29	---	13.60	13.27	13.95	18.39	15.14	18.46
29	13.89	13.14	13.19	8.07	---	---	8.69	13.45	16.19	14.74	16.46	19.86
30	13.71	10.67	13.19	8.62	---	---	8.42	13.49	16.19	15.11	14.81	19.78
31	13.83	---	13.09	9.39	---	---	---	13.60	---	18.69	14.70	---
MAX	19.11	16.88	13.37	16.34	12.57	---	---	15.78	17.66	23.69	29.96	30.36
MIN	6.76	6.11	7.54	7.06	6.89	---	---	9.05	12.47	13.09	11.31	14.07

WTR YR 1994 HIGH 6.11 LOW 30.36



HENDERSON COUNTY

374441087421001. Map number 10.
LOCATION.--Lat 37°44'41", long 87°42'10", Hydrologic Unit 05140202, County Code 101, Poole quadrangle, in a vacant lot, 30 ft north of a gravel street, 100 ft south of U.S. Highway 60, near the center of Corydon. Owner: Town of Corydon.
AQUIFER.--Sturgis Formation of Late Pennsylvanian and early Permian age. Aquifer code: 321STRG. (Previously published as Lisman Formation of Late Pennsylvanian age. Aquifer Code: 321LSMN).
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 157 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 435 ft. Measuring point: Floor of recorder shelter, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--March 1952 to August 1983 and June 1988 to current year. March 1952 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.82 ft below land-surface datum, July 29, 1976; lowest measured, 119.83 ft below land-surface datum, Nov. 24, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 19, 1993	64.14	Mar. 15	63.45	Aug. 22	63.61
Dec. 6	64.03	Apr. 21	63.52		
Jan. 28, 1994	63.74	June 20	63.20		

JEFFERSON COUNTY

380122085545001. Local number 80-1, map number 1.
LOCATION.--Lat 38°01'22", long 85°54'50", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 12 ft west of an old private driveway, 40 ft north of Kentucky Highway 44, 0.25 mi southeast of junction of U.S. Highway 31W and Kentucky Highway 44, 0.9 mi southwest of Kosmosdale. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 100 ft, screened 93.0-95.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 431.64 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--May 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.36 ft below land-surface datum, May 13, 1994; lowest measured, 42.66 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	41.43	May 13, 1994	27.36

380252085530601. Local number 79-3, map number 2.
LOCATION.--Lat 38°02'52", long 85°53'06", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, on the south side of the first building inside the gate at Old Boone Distillery, at the south end of Bohannon Avenue, 0.9 mi south of Pendleton Road, 1.5 mi northeast of Kosmosdale. Owner: Ronald Clark.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled used water-table well, diameter 12 in., depth 90 ft cased and screened.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 440.75 ft above sea level. Measuring point: Top of metal well cover, 0.70 ft above land-surface datum.
REMARKS.--Water levels affected by pumping.
PERIOD OF RECORD.--March 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.08 ft below land-surface datum, May 8, 1991; lowest measured, 40.75 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	35.82	May 13, 1994	33.14

JEFFERSON COUNTY

380341085534501. Local number 83-1, map number 3.
LOCATION.--Lat 38°03'41", long 85°53'45", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, across street from 135111 Wilken Way, at east edge of Watson Lane Elementary School playground, 8 ft west of blacktop pavement, 9 ft east of a powerline pole, 2 mi north of Kosmosdale, in Meadow Lawn subdivision. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 64 ft, screened 62-64 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 441.25 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--March 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.13 ft below land-surface datum, May 8, 1991; lowest measured, 44.68 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	42.86	May 11, 1994	35.50

380423085541501. Local number, Genewien number 2, map number 4.
LOCATION.--Lat 38°04'23", long 85°54'15", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 31 ft south of Louisville Gas & Electric power line pole number 47, 33 ft west of center line of Cane Run Road, 0.7 mi south of Orell Road, 1.5 mi north of Louisville Gas & Electric Mill Creek Generating Plant, 2.5 mi north of Kosmosdale. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 65 ft, screened 63-65 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 431.49 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.11 ft below land-surface datum, May 11, 1994; lowest measured, 44.32 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	42.53	May 11, 1994	25.11

380458085523201. Local number 86-4, map number 5.
LOCATION.--Lat 38°04'58", long 85°52'32", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, southeast of the first 90° curve on Deering Road off of Dixie Highway, 26' north of ash tree, on east bank of Madora Br. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 45.4 ft, screened 43-45 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 437.71 ft above sea level. Measuring point: Top of casing at ground level.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.80 ft below land-surface datum, May 8, 1991; lowest measured, 31.60 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	29.40	May 4, 1994	27.38

JEFFERSON COUNTY

380517085535201. Local number 77-1, map number 6.
LOCATION.--Lat 38°05'17", long 85°53'52", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, inside fenced area at southwest Jefferson County sewage pumping station, 125 ft east of the center line of Lower River Road, 0.4 mi north of Orell Road, 0.2 mi east of Ohio River, and 1.5 mi southwest of Valley Station. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 83.2 ft, screened 80.2-83.2 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 444.96 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--October 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.81 ft below land-surface datum, Apr. 30, 1984; lowest measured, 57.75 ft below land-surface datum, Nov. 10, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	54.37	May 11, 1994	40.45

380532085515301. Local number 51-5-2, (76-1), map number 7.
LOCATION.--Lat 38°05'32", long 85°51'53", Hydrologic Unit 05140102, County Code 111, Valley Station quadrangle, in back yard at 11212 Deering Road in Valley Station. Owner: Jim Robinson.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 88 ft, screened 85-88 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 458.24 ft above sea level. Measuring point: Top of casing, 0.30 ft above land-surface datum.
REMARKS.--Water-level elevations previously published referenced to sea level.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.03 ft below land-surface datum, June 24, 1980; lowest measured, 46.73 ft above land-surface datum, Oct. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	44.86	May 13, 1994	43.41

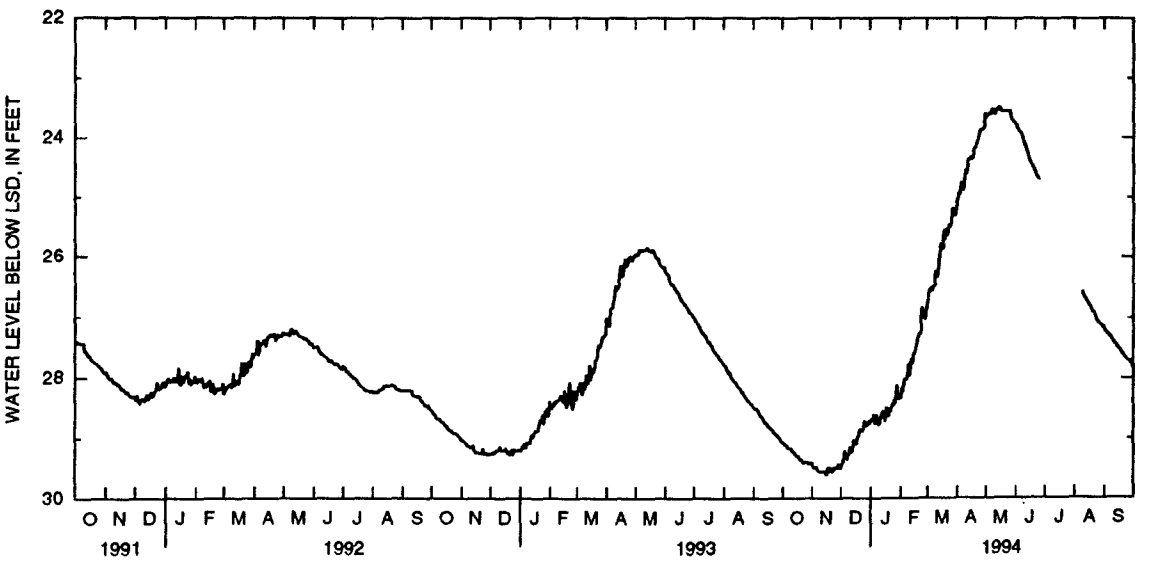
JEFFERSON COUNTY

380606085531301. Local number 53-6-1, (RR-46), map number 8.
LOCATION.--Lat 38°06'06", long 85°53'13", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, at entrance to Sun Valley Park, 20 ft south of Bethany Lane, 0.2 mi east of Lower River Road, in Valley Station. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 92 ft, screened 88-90 ft.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 433.89 ft above sea level. Measuring point: Floor of recorder shelter, 2.93 ft above land-surface datum.
PERIOD OF RECORD.--July 1945 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.14 ft below land-surface datum, May 19, 1975; lowest, 40.87 ft below land-surface datum, Feb. 19, 1961.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.07	29.46	29.47	28.69	28.33	26.75	25.11	23.63	23.77	---	---	27.20
2	29.09	29.49	29.42	28.68	28.23	26.57	25.02	23.65	23.82	---	---	27.24
3	29.11	29.49	29.40	28.66	28.18	26.58	24.93	23.63	23.86	---	---	27.26
4	29.11	29.49	29.26	28.62	28.08	26.51	24.95	23.61	23.88	---	---	27.27
5	29.13	29.48	29.30	28.75	28.01	26.55	24.79	23.61	23.90	---	---	27.28
6	29.16	29.52	29.30	28.63	28.01	26.55	24.75	23.61	23.92	---	---	27.30
7	29.16	29.55	29.35	28.65	28.02	26.48	24.89	23.54	23.95	---	---	27.32
8	29.16	29.56	29.28	28.75	27.87	26.47	24.84	23.57	24.00	---	---	27.35
9	29.16	29.56	29.25	28.77	27.83	26.32	24.68	23.57	24.07	---	26.59	27.37
10	29.21	29.56	29.15	28.74	27.95	26.27	24.55	23.59	24.11	---	26.63	27.39
11	29.22	29.56	29.23	28.66	27.76	26.32	24.60	23.60	24.15	---	26.66	27.41
12	29.23	29.56	29.22	28.60	27.73	26.30	24.46	23.53	24.20	---	26.69	27.44
13	29.25	29.56	29.14	28.57	27.71	26.05	24.36	23.53	24.24	---	26.71	27.46
14	29.27	29.56	29.05	28.58	27.71	25.93	24.36	23.52	24.30	---	26.74	27.48
15	29.29	29.59	29.04	28.66	27.57	25.79	24.33	23.49	24.36	---	26.77	27.50
16	29.29	29.61	29.09	28.68	27.57	25.85	24.36	23.53	24.41	---	26.80	27.51
17	29.29	29.49	29.08	28.49	27.50	25.87	24.36	23.55	24.45	---	26.81	27.53
18	29.33	29.56	28.99	28.59	27.42	25.57	24.31	23.55	24.48	---	26.86	27.56
19	29.34	29.49	28.97	28.63	27.34	25.71	24.19	23.55	24.52	---	26.90	27.60
20	29.35	29.53	28.90	28.55	27.27	25.70	24.18	23.55	24.55	---	26.90	27.60
21	29.37	29.55	28.87	28.55	27.26	25.55	24.13	23.55	24.59	---	26.90	27.63
22	29.40	29.56	28.86	28.49	27.22	25.64	24.07	23.55	24.63	---	26.95	27.65
23	29.40	29.54	28.86	28.44	26.84	25.54	24.04	23.55	24.67	---	27.00	27.67
24	29.40	29.49	28.84	28.43	26.94	25.47	23.94	23.55	24.68	---	27.04	27.69
25	29.40	29.50	28.71	28.41	26.98	25.49	23.89	23.55	24.75	---	27.06	27.70
26	29.40	29.49	28.79	28.38	27.01	25.46	23.86	23.55	---	---	27.08	27.70
27	29.42	29.49	28.78	28.32	27.02	25.19	23.86	23.64	---	---	27.10	27.71
28	29.42	29.43	28.79	28.12	26.85	25.23	23.85	23.70	---	---	27.11	27.75
29	29.43	29.46	28.73	28.30	---	25.29	23.82	23.71	---	---	27.13	27.80
30	29.41	29.49	28.76	28.34	---	25.32	23.71	23.73	---	---	27.15	27.83
31	29.41	---	28.72	28.33	---	25.21	---	23.76	---	---	27.17	---
MAX	29.43	29.61	29.47	28.77	28.33	26.75	25.11	23.76	---	---	---	27.83
MIN	29.07	29.43	28.71	28.12	26.84	25.19	23.71	23.49	---	---	---	27.20

WTR YR 1994 HIGH 23.49 LOW 29.61



JEFFERSON COUNTY

380619085512301. Local number 86-3, map number 9.
LOCATION.--Lat 38°06'19", long 85°51'23", Hydrologic Unit 05140101, County Code 111, Valley Station quadrangle, northwest side of Valley Station and Grafton Hall Roads, 21.0 ft northwest of north corner of drain, and 17.4 ft northeast of telephone pole. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 55 ft, screened 52-55 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.03 ft above sea level. Measuring point: Top of casing, 0.20 ft above land-surface datum.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.10 ft below land-surface datum, Nov. 1, 1991; lowest measured, 38.90 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	36.63	May 13, 1994	36.45

380709085531101. Local number C-5-m, map number 10.
LOCATION.--Lat 38°07'09", long 85°53'11", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 3 ft west of a gravel field road, 20 ft west of west bank of Mill Creek, 550 ft northwest of Johnsontown Road, in Louisville. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 51.5 ft, screened 48.5-51.5 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 427.1 ft above sea level. Measuring point: Top edge of metal well cover, at land-surface datum.
REMARKS.--EPA, Mill Creek EIS test well.
PERIOD OF RECORD.--October 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.55 ft below land-surface datum, May 7, 1991; lowest measured, 19.95 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	18.17	May 13, 1994	14.83

380716085521801. Local number 52-7-2, (RR-47), map number 11.
LOCATION.--Lat 38°07'16", long 85°52'18", Hydrologic Unit 05140101, County Code 111, Valley Station quadrangle, at 5510 Johnsontown Road, 0.9 mi west of junction of Dixie Highway and Johnsontown Road, on the south shoulder of Johnsontown Road, in Valley Station. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, screened 101.5-103.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 449.91 ft above sea level. Measuring point: Top of plug, 2.50 ft above land-surface datum.
PERIOD OF RECORD.--July 1945 to current year. July 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.56 ft below land-surface datum, Apr. 16, 1980; lowest measured, 42.20 ft below land-surface datum, Mar. 27, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	33.41	May 11, 1994	32.95

JEFFERSON COUNTY

380816085520701. Local number 52-8-1, map number 12.
LOCATION.--Lat 38°08'16", long 85°52'07", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, between the house and a tool shed at a vegetable farm, 0.5 mi south of Greenwood Road, 0.1 mi west of Canna Road, in Louisville. Owner: Anna Dohn.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 30 in., depth 70 ft, shored.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 457.47 ft above sea level. Measuring point: Top of wooden well cover, 0.62 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby well.
PERIOD OF RECORD.--November 1943 to current year. November 1943 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.13 ft below land-surface datum, Oct. 27, 1980; lowest measured, 51.20 ft below land-surface datum, Feb. 10, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	39.12	May 11, 1994	39.04

380827085503001. Local number 86-5, map number 13.
LOCATION.--Lat 38°08'27", long 85°50'30", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, South of Dixie Highway and Greenwood Road, west on Seibel Court, 17.9 ft east of south corner of culvert wall behind Little Reds Mister Fix It. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 44 ft, screened 42-44 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 453.75 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.44 ft below land-surface datum, May 8, 1991; lowest measured, 31.70 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	29.60	May 13, 1994	29.65

380843085530701. Local number B-3-d, map number 14.
LOCATION.--Lat 38°08'43", long 85°53'07", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, in a field 60 ft east of southeast corner of church yard fence, 200 ft southeast of Greenwood Road, 300 ft west of Mill Creek, in Louisville. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth unknown, screened interval unknown.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 424.9 ft above sea level. Measuring point: Top edge of metal well cover, at land-surface datum.
REMARKS.--EPA, Mill Creek EIS test well.
PERIOD OF RECORD.--October 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.78 ft below land-surface datum, Oct. 29, 1980; lowest measured, 18.69 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	16.70	May 11, 1994	14.24

JEFFERSON COUNTY

380850085534701. Local number 78-2, map number 15.
LOCATION.--Lat 38°08'50", long 85°53'47", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, at the southwest corner of Cane Run Road and Greenwood Road, 25 ft west of Cane Run Road, 44 ft south of Greenwood Road, and 0.4 mi east of Ohio River, in Louisville. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 86.6 ft, screened 84.6-86.6 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 450.07 ft above sea level. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--May 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.68 ft below land-surface datum, May 2, 1979; lowest measured, 50.62 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	50.47	May 11, 1994	42.15

380940085514001. Local number 81-1, map number 16.
LOCATION.--Lat 38°09'40", long 85°51'40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 7 ft west of a fence corner, 10 ft east of center of a gravel road, 20 ft north of the west bank of Black Pond Creek, 40 ft north of northeast corner of concrete bridge, 400 ft south of Lower Hunters Trace, 1.5 mi west of Dixie Highway, in Louisville. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 70.0 ft, screened 63.0-65.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS annual personnel.
DATUM.--Elevation of land-surface datum is 444.58 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--April 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.57 ft below land-surface datum, Apr. 26, 1985, May 7, 1991; lowest measured, 26.40 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	24.48	May 11, 1994	24.06

380955085531801. Local number 83-2, map number 17.
LOCATION.--Lat 38°09'55", long 85°53'18", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, 19 ft northwest of a fire plug, 22 ft south of concrete curb on Riverport Drive, 100 ft southeast of a concrete bridge and drainage ditch, 3 mi northwest of Pleasure Ridge Park. Owner: Jefferson County.
AQUIFER.--Glacial and and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 97 ft, screened 95-97 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 441.8 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--July 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.92 ft below land-surface datum, May 7, 1991; lowest measured, 40.04 ft below land-surface datum, Oct. 27, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	38.79	May 11, 1994	32.07

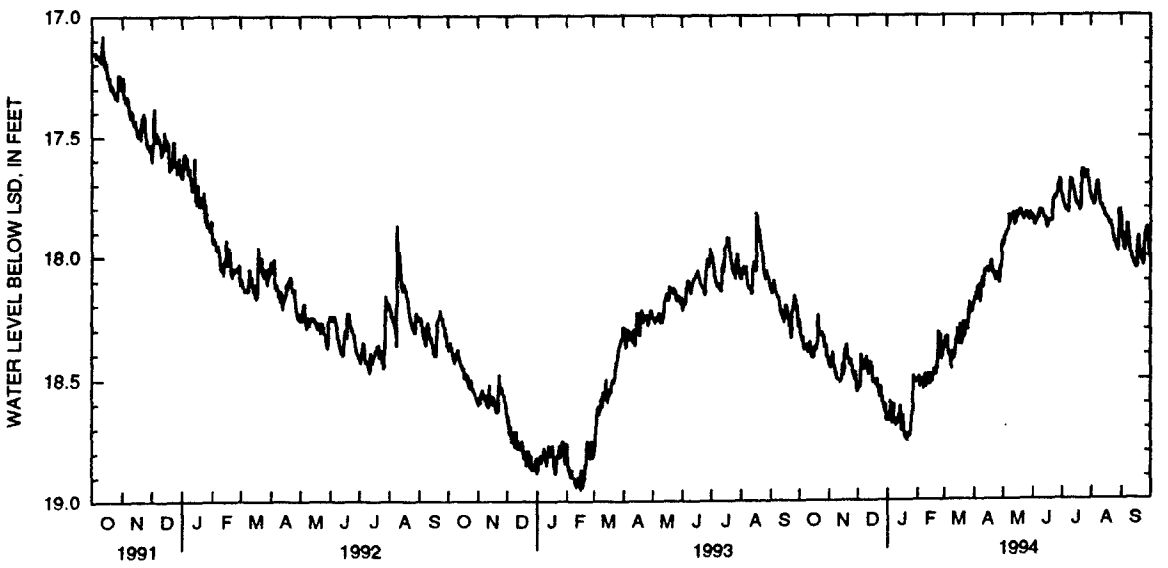
JEFFERSON COUNTY

381034085502601. Local number 50-10-2 (RR-30), map number 18.
LOCATION.--Lat 38°10'34", long 85°50'26", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on south edge of Rockford Lane near west bank of Mill Creek, in Shively. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 94 ft, screened 90-92 ft.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 442.96 ft above sea level. Measuring point: Floor of recorder shelter, 4.31 ft above land-surface datum.
REMARKS.--Water-quality sample May 6, 1945.
PERIOD OF RECORD.--April 1945 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 15.38 ft below land-surface datum, Apr. 14, 1980; lowest 31.55 ft below land-surface datum, Apr. 2, 1957.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.26	18.45	18.54	18.64	18.51	18.37	18.18	17.96	17.84	17.76	17.77	17.90
2	18.32	18.45	18.53	18.67	18.49	18.33	18.17	17.95	17.87	17.77	17.77	17.94
3	18.34	18.42	18.53	18.62	18.53	18.37	18.18	17.92	17.87	17.79	17.79	17.97
4	18.33	18.41	18.40	18.64	18.51	18.33	18.15	17.91	17.86	17.80	17.79	17.98
5	18.37	18.41	18.44	18.67	18.50	18.40	18.13	17.90	17.85	17.81	17.72	17.98
6	18.38	18.45	18.43	18.60	18.51	18.40	18.13	17.89	17.84	17.81	17.70	17.90
7	18.38	18.48	18.46	18.66	18.54	18.41	18.19	17.83	17.84	17.80	17.70	17.89
8	18.37	18.49	18.46	18.68	18.49	18.46	18.14	17.86	17.81	17.82	17.73	17.92
9	18.37	18.50	18.44	18.69	18.53	18.39	18.11	17.83	17.81	17.71	17.76	17.96
10	18.39	18.50	18.41	18.68	18.52	18.41	18.12	17.84	17.82	17.68	17.79	17.99
11	18.36	18.50	18.48	18.68	18.48	18.42	18.11	17.83	17.82	17.69	17.79	18.01
12	18.36	18.51	18.47	18.65	18.48	18.40	18.06	17.87	17.84	17.71	17.80	18.02
13	18.40	18.50	18.45	18.64	18.52	18.34	18.06	17.87	17.84	17.72	17.81	18.03
14	18.41	18.47	18.43	18.68	18.50	18.33	18.07	17.86	17.86	17.74	17.81	18.04
15	18.41	18.47	18.46	18.71	18.48	18.34	18.06	17.82	17.88	17.76	17.84	18.05
16	18.41	18.48	18.51	18.69	18.51	18.36	18.07	17.84	17.88	17.78	17.84	18.05
17	18.37	18.38	18.51	18.68	18.49	18.32	18.06	17.83	17.86	17.79	17.84	17.99
18	18.38	18.41	18.50	18.72	18.48	18.31	18.03	17.82	17.86	17.79	17.86	17.93
19	18.37	18.36	18.52	18.73	18.47	18.35	18.02	17.83	17.86	17.80	17.87	17.96
20	18.27	18.41	18.50	18.74	18.48	18.31	18.07	17.83	17.86	17.81	17.86	18.00
21	18.31	18.42	18.53	18.75	18.46	18.27	18.07	17.84	17.85	17.80	17.88	18.02
22	18.32	18.44	18.54	18.74	18.42	18.31	18.08	17.85	17.77	17.65	17.89	18.03
23	18.32	18.44	18.57	18.72	18.32	18.28	18.10	17.84	17.76	17.64	17.92	18.04
24	18.31	18.43	18.57	18.73	18.39	18.28	18.08	17.83	17.75	17.66	17.94	17.96
25	18.33	18.48	18.54	18.68	18.32	18.30	18.08	17.82	17.76	17.67	17.95	17.91
26	18.33	18.48	18.57	18.65	18.42	18.26	18.09	17.82	17.74	17.68	17.95	17.89
27	18.37	18.50	18.61	18.56	18.41	18.24	18.11	17.85	17.70	17.65	17.97	17.90
28	18.37	18.47	18.63	18.50	18.38	18.20	18.05	17.85	17.69	17.68	17.98	17.90
29	18.40	18.51	18.60	18.51	---	18.23	18.05	17.84	17.69	17.71	17.85	17.97
30	18.40	18.55	18.67	18.51	---	18.23	17.95	17.84	17.74	17.74	17.81	18.01
31	18.42	---	18.67	18.51	---	18.20	---	17.85	---	17.76	17.83	---
MAX	18.42	18.55	18.67	18.75	18.54	18.46	18.19	17.96	17.88	17.82	17.98	18.05
MIN	18.26	18.36	18.40	18.50	18.32	18.20	17.95	17.82	17.69	17.64	17.70	17.89

WTR YR 1994 HIGH 17.64 LOW 18.75



JEFFERSON COUNTY

381050085511001. Local number 51-10-1, (RR-29), map number 19.
LOCATION.--Lat 38°10'50", long 85°51'10", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 50 ft south of Rockford Lane, at the edge of an apartment house parking area, 0.3 mi southeast of the junction of Cane Run Road and Rockford Lane. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 64 ft, screened 62.5-64.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 444.18 ft above sea level. Measuring point: Top of plug, 3.60 ft above land-surface datum.
REMARKS.--Water-quality sample Apr. 3, 1945.
PERIOD OF RECORD.--April 1945 to current year. April 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.80 ft below land-surface datum, Apr. 16, 1980; lowest measured, 37.61 ft below land-surface datum, Mar. 21, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	25.93	May 11, 1994	25.21

381102085485601. Local number 86-2, map number 20.
LOCATION.--Lat 38°11'02", long 85°48'56", Hydrologic Unit 05140101, County Code 111, Louisville West quad quadrangle, enter through Louisville Memorial Park Cemetery, on south bank of Mill Creek behind Korfhage Florist, 18.2 ft southwest of MSD access gate, in Louisville. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 50 ft, screened 48-50 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 450.32 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.35 ft below land-surface datum, May 7, 1991; lowest measured, 24.76 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	22.38	May 11, 1994	21.88

381123085491401. Local number 49-11-1, (RR-32), map number 21.
LOCATION.--Lat 38°11'23", long 85°49'14", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the east edge of a private driveway, at 2134 Garrs Lane, 150 ft south of Garrs Lane, 400 ft southeast of the junction of Garrs and Eden Lanes, in Shively. Owner: Joseph A. Winkle.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 108 ft, screened 106.5-108.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.55 ft above sea level. Measuring point: Top of plug, 2.60 ft above land-surface datum.
PERIOD OF RECORD.--May 1945 to current year. May 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.86 ft below land-surface datum, Apr. 25, 1985; lowest measured, 45.76 ft below land-surface datum, Mar. 21, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	29.65	May 11, 1994	29.13

JEFFERSON COUNTY

381130085515001. Local number 51-11-1, map number 22.
LOCATION.--Lat 38°11'30", long 85°51'50", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in a concrete well pit on the west side of a tool shed at the Thieneman Brothers vegetable farm, 0.3 mi northeast of the junction of Camp Ground Road and Lees Lane, in Louisville. Owner: Thieneman Brothers.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 70 ft, cased and screened.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 453.64 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby well.
PERIOD OF RECORD.--February 1944 to current year. February 1944 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.11 ft below land-surface datum, May 6, 1991; lowest measured, 59.80 ft below land-surface datum, Jan. 24, 1956.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	46.47	May 11, 1994	43.59

381139085502301. Local number 81-2, map number 23.
LOCATION.--Lat 38°11'39", long 85°50'23", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 12 ft west of west bank of a drainage ditch, 21 ft northeast of west end of guardrail, 30 ft north of north edge of blacktop on S. Crums Lane, 40 ft northwest of northwest corner of concrete bridge, 1,000 ft east of junction of Cane Run Road and S. Crums Lane, in Louisville. Owner: Metropolitan Sewer District.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 54 ft, screened 41.5-43.5 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 444.91 ft above sea level. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--May 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.52 ft below land-surface datum, May 6, 1991; lowest measured, 30.21 ft below land-surface datum, Oct. 27, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	27.58	May 11, 1994	26.69

381142085475702. Local number, 47-11-4, (RR-42), map number 24.
LOCATION.--Lat 38°11'42", long 85°47'57", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the concrete curb on the west side of Manslick Road, 0.1 mi south of junction of Manslick Road and Berry Boulevard, in Louisville. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, screened 101.5-103.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 453.91 ft above sea level. Measuring point: Top of plug, 2.00 ft above land-surface datum.
PERIOD OF RECORD.--July 1945 to current year. July 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.02 ft below land-surface datum, Apr. 25, 1985; lowest measured, 49.27 ft below land-surface datum, Apr. 5, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	23.70	May 11, 1994	23.30

JEFFERSON COUNTY

381143085465801. Local number 46-11-2, (RR-25), map number 25.
LOCATION.--Lat 38°11'43", long 85°46'58", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in the center of the concrete sidewalk at the driveway to Most Blessed Sacrament Catholic Church, 100 ft northeast of the junction of Taylor Boulevard and Hathaway Street, in Louisville. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 60 ft, screened 59-60 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 458.66 ft above sea level. Measuring point: Top of plug, 0.97 ft below land-surface datum.
REMARKS.--Water quality sample Mar. 1, 1945.
PERIOD OF RECORD.--March 1945 to current year. March 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.42 ft below land-surface datum, Oct. 31, 1985; lowest measured, 52.63 ft below land-surface datum, Apr. 25, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	25.96	May 11, 1994	25.62

381204085455301. Local number CP-16, map number 26.
LOCATION.--Lat 38°12'04", long 85°45'53", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, near the south end of Wayside Park, 32 ft west of South Third Street curb, 52 ft east of Oakdale Avenue curb, 160 ft north of intersection with Southern Parkway, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered well, diameter 1.5 in., depth 23 ft, screened 21-23 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 456.82 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--May 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.46 ft below land-surface datum, Apr. 24, 1984; lowest measured, 13.84 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	12.66	May 11, 1994	11.90

381207085484601. Local number 48-12-15, (RR-41), map number 27.
LOCATION.--Lat 38°12'07", long 85°48'46", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the east edge of a private driveway at the south end of a hedge, 3 ft west of a chain-link fence, 100 ft northeast of junction of Farnsley and Janell Roads, in Shively. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 91 ft, screened 89.5-91.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 457.25 ft above sea level. Measuring point: Top of plug, 0.12 ft below land-surface datum.
REMARKS.--Water-quality sample June 29, 1945.
PERIOD OF RECORD.--June 1945 to current year. June 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.68 ft below land-surface datum, Apr. 25, 1985; lowest measured, 52.81 ft below land-surface datum, Mar. 22, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	30.68	May 11, 1994	30.12

JEFFERSON COUNTY

381209085472101. Local number 47-12-3, (C-7), map number 28.
LOCATION.--Lat 38°12'09", long 85°47'21", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in an open field near a sewer manhole, 200 ft west of the west end of Weyler Avenue, 0.2 mi east of 7th Street Road and Yellowstone Distillery, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 97 ft, screened 95-97 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 448.60 ft above sea level. Measuring point: Top of plug, 2.75 ft above land-surface datum.
PERIOD OF RECORD.--October 1935 to current year. October 1935 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.95 ft below land-surface datum, Apr. 25, Oct. 31, 1985; lowest measured, 52.19 ft below land-surface datum, Feb. 19, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	17.67	May 11, 1994	17.35

381213085521701. Local number 52-12-2, (RR-22), map number 29.
LOCATION.--Lat 38°12'13", long 85°52'17", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 50 ft south of Ohio River at the Stauffer Chemical Company Plant, 0.9 mi north of junction of Camp Ground Road and Lees Lane, in Louisville. Owner: Stauffer Chemical Company.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 101 ft, screened 99-101 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 434.30 ft above sea level. Measuring point: Floor of recorder shelter, 4.16 ft above land-surface datum.
REMARKS.--Water levels affected by Ohio River. Water-quality sample collected Feb. 12, 1945.
PERIOD OF RECORD.--August 1945 to current year. August 1945 to September 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.50 ft below land-surface datum, Apr. 20, 1948; lowest measured, 51.79 ft below land-surface datum, June 18, 1962.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Water level	Date	Water level
Oct. 29, 1993	46.57	May 11, 1994	26.35

381222085505201. Local number 50-12-16 (RR-27), map number 63.
LOCATION.--Lat 38°12'22", long 85°50'52", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the south edge of Kramers Lane, at the east side of the entrance driveway to Marathon Oil Company storage terminal, 300 ft southwest of the junction of Camp Ground Road and Kramers Lane, in Louisville. Owner: Jefferson County.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 112 ft, screened 110.5-112.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 445.58 ft above sea level. Measuring point: Floor of recorder shelter, 3.40 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby wells. Water-quality sample collected Mar. 23, 1945.
PERIOD OF RECORD.--March 1945 to current year. March 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.79 ft below land-surface datum, May 11, 1994; lowest measured, 68.37 ft below land-surface datum, Oct. 7, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	40.61	May 11, 1994	34.79

GROUND-WATER LEVELS

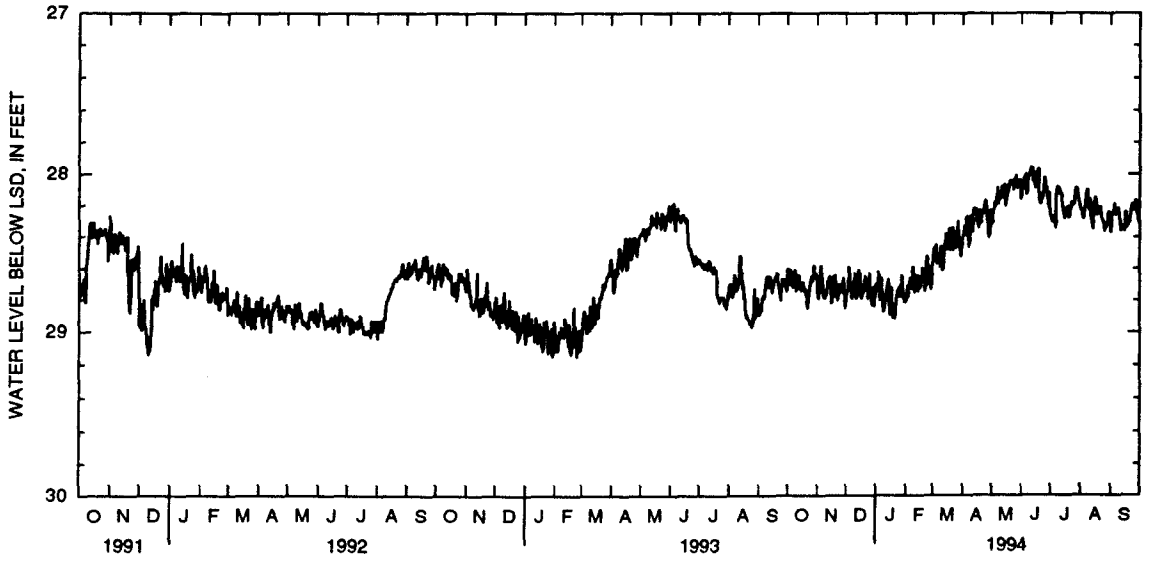
JEFFERSON COUNTY

381246085470601. Local number 47-12-4, (owner's number TW-2), map number 30.
LOCATION.--Lat 38°12'46", long 85°47'06", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of a used car lot, Seventh Street Road at Wathen Lane, 100 ft southeast of a Ranney collector well, in Louisville. Owner: Joseph E. Seagram and Sons Distillery.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, cased and screened.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 458.64 ft above sea level. Measuring point: Floor of recorder shelter, 4.39 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby collector well.
PERIOD OF RECORD.--October 1943 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.44 ft below land-surface datum, Jan. 11, 1985; lowest, 88.37 ft below land-surface datum, Mar. 9, 1944.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.61	28.78	28.81	28.70	28.81	28.58	28.40	28.31	28.14	28.27	28.22	28.31
2	28.65	28.79	28.75	28.73	28.73	28.47	28.36	28.31	28.08	28.30	28.23	28.28
3	28.70	28.70	28.73	28.66	28.78	28.54	28.35	28.24	28.04	28.27	28.26	28.26
4	28.62	28.64	28.59	28.68	28.71	28.45	28.37	28.20	28.02	28.30	28.28	28.25
5	28.70	28.60	28.72	28.80	28.66	28.57	28.28	28.21	28.00	28.29	28.23	28.19
6	28.71	28.69	28.72	28.67	28.68	28.54	28.27	28.16	28.13	28.32	28.18	28.26
7	28.71	28.78	28.79	28.74	28.73	28.52	28.46	28.09	28.11	28.11	28.12	28.25
8	28.65	28.79	28.77	28.83	28.60	28.59	28.43	28.19	28.01	28.08	28.15	28.24
9	28.61	28.79	28.72	28.87	28.69	28.46	28.35	28.14	28.00	28.11	28.22	28.24
10	28.74	28.77	28.63	28.85	28.75	28.53	28.30	28.16	27.98	28.10	28.19	28.29
11	28.69	28.72	28.79	28.81	28.65	28.61	28.37	28.13	27.97	28.12	28.19	28.36
12	28.66	28.72	28.78	28.74	28.65	28.60	28.25	28.14	28.01	28.13	28.31	28.35
13	28.70	28.65	28.70	28.69	28.73	28.45	28.22	28.13	28.04	28.20	28.35	28.33
14	28.73	28.69	28.62	28.74	28.71	28.42	28.24	28.07	27.99	28.23	28.29	28.35
15	28.74	28.79	28.65	28.85	28.66	28.41	28.22	28.18	28.09	28.27	28.21	28.36
16	28.70	28.81	28.77	28.87	28.72	28.48	28.32	28.18	28.03	28.24	28.15	28.28
17	28.69	28.65	28.79	28.72	28.67	28.47	28.34	28.15	28.07	28.22	28.18	28.34
18	28.74	28.78	28.71	28.87	28.64	28.35	28.30	28.11	27.97	28.24	28.26	28.29
19	28.73	28.64	28.75	28.90	28.63	28.48	28.24	28.09	28.16	28.21	28.24	28.32
20	28.74	28.75	28.67	28.87	28.70	28.44	28.31	28.07	28.18	28.28	28.23	28.30
21	28.81	28.78	28.71	28.90	28.72	28.34	28.27	28.06	28.18	28.26	28.21	28.27
22	28.82	28.80	28.70	28.81	28.71	28.48	28.25	28.05	28.16	28.22	28.26	28.23
23	28.77	28.76	28.78	28.74	28.52	28.40	28.25	28.06	28.14	28.20	28.29	28.19
24	28.71	28.70	28.75	28.76	28.64	28.40	28.20	28.07	28.07	28.20	28.31	28.23
25	28.68	28.75	28.63	28.72	28.58	28.47	28.18	28.03	28.05	28.19	28.36	28.21
26	28.65	28.70	28.72	28.78	28.72	28.41	28.25	28.01	28.08	28.14	28.35	28.17
27	28.68	28.75	28.81	28.70	28.73	28.36	28.36	28.09	28.11	28.09	28.34	28.23
28	28.62	28.66	28.83	28.69	28.63	28.41	28.33	28.09	28.16	28.10	28.31	28.24
29	28.63	28.75	28.72	28.79	---	28.48	28.37	28.04	28.17	28.13	28.31	28.30
30	28.63	28.85	28.84	28.81	---	28.52	28.23	28.04	28.22	28.17	28.24	28.32
31	28.65	---	28.78	28.80	---	28.45	---	28.15	---	28.20	28.30	---
MAX	28.82	28.85	28.84	28.90	28.81	28.61	28.46	28.31	28.22	28.32	28.36	28.36
MIN	28.61	28.60	28.59	28.66	28.52	28.34	28.18	28.01	27.97	28.08	28.12	28.17

WTR YR 1994 HIGH 27.97 LOW 28.90



JEFFERSON COUNTY

381246085463201. Local number CP 18A, map number 31.
LOCATION.--Lat 38°12'46", long 85°46'32", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Colorado and Tennessee Avenue in the northeast corner of South Central Park, 10 ft east of CP18. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 44.3 ft. screened 42-44 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 460.11 ft above sea level. Measuring point: Top of casing, 0.35 ft. below land-surface datum.
PERIOD OF RECORD.--October 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.51 ft below land-surface datum, Apr. 23, 1985; lowest measured, 33.18 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	29.86	May 10, 1994	29.44

381251085483501. Local number 48-12-2, (C-3), map number 32.
LOCATION.--Lat 38°12'51", long 85°48'35", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in an open field, 200 ft east of Tucker Avenue, 300 ft north of the Stitzel-Weller Distillery, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 117 ft, screened 115-117 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 465.95 ft above sea level. Measuring point: Top of casing, .60 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby wells.
PERIOD OF RECORD.--October 1935 to current year. October 1935 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.72 ft below land-surface datum, Apr. 25, 1985; lowest measured, 78.99 ft below land-surface datum, Nov. 1, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	43.55	May 11, 1994	42.91

381251085500501. Local number 50-12-18, (RR-35), map number 33.
LOCATION.--Lat 38°12'51", long 85°50'05", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 60 ft north of Camp Ground Road, 1,500 ft northeast of junction of Camp Ground Road and Ralph Avenue, in Louisville. Owner: Air Reduction Company, Inc.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 120 ft, screened 118-120 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.54 ft above sea level. Measuring point: Floor of recorder shelter, 5.02 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby wells. Water-quality sample collected May 24, 1945.
PERIOD OF RECORD.--May 1945 to current year. May 1945 to September 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.53 ft below land-surface datum, May 6, 1991; lowest measured, 78.35 ft below land-surface datum, Mar. 20, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	50.76	May 11, 1994	45.65

JEFFERSON COUNTY

381257085471801. Local number 47-12-15, (TW-4), map number 34.
LOCATION.--Lat 38°12'57", long 85°47'18", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in the truck parking lot at the National Distillers Products Company Plant, 50 ft north of Wathen Lane, 0.3 mi east of Dixie Highway, in Louisville. Owner: National Distillers Products Company.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 84 ft, cased and screened.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.07 ft above sea level. Measuring point: Top of casing, 4.70 ft above land-surface datum.
REMARKS.--Water level affected by pumping from nearby wells.
PERIOD OF RECORD.--July 1942 to current year. July 1942 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.71 ft below land-surface datum, Apr. 24, 1985; lowest measured, 72.47 ft below land-surface datum, Feb. 19, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 28, 1993	25.92	May 10, 1994	25.37

381259085511002. Local number 51-13-1, (RR-21), map number 35.
LOCATION.--Lat 38°12'59", long 85°51'10", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on south bank of Ohio River directly behind the Du Pont Chemical Company Plant, 200 ft northeast of a large brick pump house, 0.8 mi southwest of junction of Ralph Avenue and Camp Ground Road, in Louisville. Owner: Du Pont Chemical Company.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 107 ft, screened 105.5-107.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 440.20 ft above sea level. Measuring point: Top of plug, 1.90 ft above land-surface datum.
PERIOD OF RECORD.--February 1945 to current year. February 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.87 ft below land-surface datum, Apr. 9, 1975; lowest measured, 64.39 ft below land-surface datum, Nov. 12, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 29, 1993	54.11	May 11, 1994	33.70

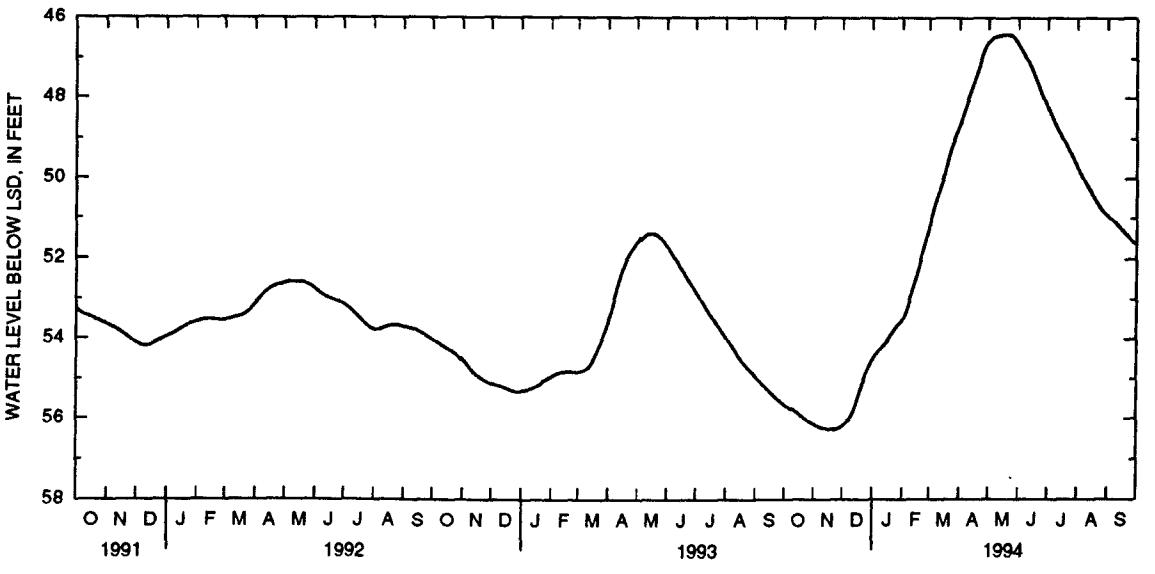
JEFFERSON COUNTY

381315085502602. Local number 50-13-79, (NC-TW-D), map number 36.
LOCATION.--Lat 38°13'15", long 85°50'26", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 800 ft south of Bells Lane, 0.3 mi east of the Ohio River, at the National Carbide Plant in Louisville.
Owner: Air Reduction Company, Inc.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 108 ft, cased and screened.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 448.68 ft above sea level. Measuring point: Floor of recorder shelter, 4.72 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby wells.
PERIOD OF RECORD.--January 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.34 ft below land-surface datum, May 23, 1984; lowest, 87.29 ft below land-surface datum, Nov. 13, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.66	56.15	56.17	54.49	53.49	51.16	48.68	46.59	46.67	48.26	49.74	50.94
2	55.68	56.17	56.15	54.45	53.45	51.06	48.61	46.56	46.71	48.31	49.79	50.97
3	55.69	56.18	56.13	54.41	53.40	50.97	48.53	46.53	46.75	48.37	49.84	50.99
4	55.71	56.19	56.10	54.38	53.34	50.87	48.46	46.51	46.79	48.42	49.88	51.01
5	55.72	56.20	56.08	54.34	53.26	50.78	48.38	46.49	46.84	48.47	49.93	51.03
6	55.73	56.21	56.05	54.31	53.17	50.69	48.29	46.48	46.88	48.53	49.98	51.05
7	55.75	56.22	56.03	54.28	53.08	50.61	48.21	46.46	46.92	48.58	50.02	51.07
8	55.76	56.23	56.00	54.25	52.99	50.53	48.14	46.46	46.97	48.63	50.07	51.09
9	55.76	56.23	55.97	54.23	52.90	50.45	48.06	46.45	47.01	48.68	50.12	51.11
10	55.78	56.24	55.92	54.21	52.83	50.37	47.99	46.45	47.06	48.73	50.16	51.14
11	55.79	56.24	55.87	54.18	52.74	50.30	47.92	46.44	47.10	48.77	50.21	51.16
12	55.81	56.25	55.81	54.15	52.66	50.23	47.85	46.44	47.16	48.81	50.25	51.19
13	55.83	56.25	55.75	54.12	52.58	50.16	47.79	46.43	47.21	48.86	50.29	51.21
14	55.84	56.25	55.67	54.09	52.50	50.08	47.72	46.42	47.27	48.90	50.33	51.24
15	55.86	56.26	55.59	54.06	52.41	49.99	47.65	46.41	47.32	48.94	50.38	51.26
16	55.88	56.26	55.50	54.03	52.33	49.90	47.58	46.41	47.38	48.99	50.42	51.28
17	55.90	56.26	55.42	53.99	52.24	49.81	47.51	46.40	47.44	49.03	50.46	51.31
18	55.92	56.27	55.34	53.95	52.14	49.71	47.44	46.40	47.50	49.08	50.50	51.33
19	55.94	56.27	55.26	53.91	52.04	49.61	47.36	46.40	47.56	49.12	50.55	51.36
20	55.96	56.27	55.19	53.87	51.94	49.51	47.29	46.40	47.62	49.17	50.59	51.39
21	55.98	56.27	55.11	53.84	51.85	49.41	47.21	46.40	47.68	49.21	50.62	51.42
22	56.00	56.27	55.04	53.80	51.75	49.33	47.12	46.41	47.74	49.26	50.66	51.44
23	56.02	56.27	54.98	53.77	51.65	49.24	47.04	46.42	47.80	49.30	50.70	51.47
24	56.04	56.26	54.91	53.73	51.57	49.17	46.97	46.44	47.86	49.35	50.73	51.50
25	56.05	56.25	54.85	53.70	51.48	49.10	46.89	46.45	47.92	49.40	50.76	51.53
26	56.07	56.24	54.79	53.66	51.40	49.04	46.82	46.47	47.98	49.45	50.80	51.55
27	56.08	56.23	54.73	53.64	51.32	48.97	46.76	46.50	48.03	49.49	50.82	51.57
28	56.10	56.22	54.68	53.60	51.24	48.91	46.70	46.53	48.09	49.54	50.85	51.59
29	56.11	56.20	54.63	53.58	---	48.85	46.66	46.56	48.15	49.59	50.87	51.60
30	56.12	56.19	54.58	53.55	---	48.80	46.62	46.59	48.21	49.64	50.90	51.61
31	56.14	---	54.54	53.53	---	48.74	---	46.63	---	49.69	50.92	---
MAX	56.14	56.27	56.17	54.49	53.49	51.16	48.68	46.63	48.21	49.69	50.92	51.61
MIN	55.66	56.15	54.54	53.53	51.24	48.74	46.62	46.40	46.67	48.26	49.74	50.94

WTR YR 1994 HIGH 46.40 LOW 56.27



JEFFERSON COUNTY

381320085464101. Local number CP-15, map number 37.
LOCATION.--Lat 38°13'20", long 85°45'41", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the northeast corner of Samuel Jones Park, Patton Court and South 13th Street, 14 ft south of chain-link fence, 22 ft south of curb on south side of Patton Court, 45 ft west of curb on west side of south 13th Street. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 100 ft, screened 96.5-100.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface surface datum is 453.68 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--December 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.84 ft below land-surface datum, Apr. 23, 1985; lowest measured, 30.03 ft below land-surface datum, Dec. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	24.81	May 10, 1994	24.54

381331085491601. Local number 49-13-40, (RR-26), map number 38.
LOCATION.--Lat 38°13'31", long 85°49'40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of Algonquin Parkway and 39th Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 115 ft, screened 113.5-115.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 450.43 ft above sea level. Measuring point: Top of plug, 1.40 ft above land-surface datum.
REMARKS.--Water-quality samples Mar. 13, 1945 to June 28, 1966.
PERIOD OF RECORD.--March 1945 to current year. March to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.01 ft below land-surface datum, Apr. 25, 1985; lowest measured, 76.25 ft below land-surface datum, Nov. 29, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	39.50	May 10, 1994	39.44

381346085453801. Local number 45-13-2 (St. Patrick's well), map number 39.
LOCATION.--Lat 38°13'46", long 85°45'38", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the rear of Van Brook Manor Nursing Home, 1382 South Third Street, in Louisville. Owner: Van Brook Manor, Inc.
AQUIFER.--Knox Dolomite of Early Ordovician age. Aquifer code: 367KNOX.
WELL CHARACTERISTICS.--Drilled artesian (flowing) gas test, diameter 1-3/4 in., depth 1952 ft, length of wooden casing unknown.
INSTRUMENTATION.--Bi-annual volumetric measurement by USGS personnel.
DATUM.--Elevation of land-surface datum is 458.15 ft above sea level. Measuring point: Valve at pressure gage, 0.30 ft below land-surface datum.
REMARKS.--Water-quality samples Feb. 9, 1938 to July 7, 1981.
PERIOD OF RECORD.--February 1971 to current year. February 1971 to September 1977 unpublished, on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Maximum water flow measured, 0.50 gal/min Mar. 6, 1978; minimum measured, zero flow (frozen) Jan. 31, 1977.

WATER FLOW, IN GALLONS PER MINUTE (GAL/MIN), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water flow	Date	Water flow
Oct. 28, 1993	.10 gal/min	May 13, 1994	.04 gal/min

JEFFERSON COUNTY

381346085454201. Local number CP 1, map number 40.
LOCATION.--Lat 38°13'46", long 85°45'42", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of Central Park, 100 ft north of a concrete retaining wall on Magnolia Street, 20 ft west of concrete retaining wall on South Fourth Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 106.2 ft, screened 103.2-106.2 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 459.86 ft above sea level. Measuring point: Top of casing, at land-surface datum.
REMARKS.--Water-quality sample collected June 16, 1978 to Sept. 17, 1981.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.98 ft below land-surface datum, Apr. 23, 1985; lowest measured, 41.23 ft below land-surface datum, June 16, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	32.26	May 10, 1994	31.88

381400085445001. Local number CP 6, map number 41.
LOCATION.--Lat 38°14'00", long 85°44'45", Hydrologic Unit 05140101, County Code 111, Louisville East quadrangle, at the northwest corner of Shelby Park, 70 ft south of an alley, 80 ft east of South Jackson Street, 300 ft southeast of the junction of East Oak and South Jackson Streets, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 79.2 ft, screened 52.2-55.2 ft, 76.2-79.2 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 459.26 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.86 ft below land-surface datum, Oct. 30, 1984; lowest measured, 39.95 ft below land-surface datum, July 5, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	33.38	May 10, 1994	32.30

381417085500301. Local number 50-14-4 (RR-23), map number 42.
LOCATION.--Lat 38°14'17", long 85°50'03", Hydrologic Unit 05140101, County Code 111, at the Louisville Refining Company Plant, 1300 South Western Parkway, on top of Ohio River flood wall, 200 ft southeast of a river barge loading dock, in Louisville. Owner: Ashland Oil Company.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 101 ft, screened 99.5-101.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 453.83 ft above sea level. Measuring point: Top of plug, 5.60 ft above land-surface datum.
REMARKS.--Water-quality sample collected Feb. 15, 1945.
PERIOD OF RECORD.--February 1945 to current year. February 1945 to November 1976 published in hydrograph form and on file at the district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.22 ft below land-surface datum, Apr. 26, 1984; lowest measured, 77.08 ft below land-surface datum, Dec. 17, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	56.90	May 10, 1994	48.40

JEFFERSON COUNTY

381428085485701. Local number 78-6, map number 43.
LOCATION.--Lat 38°14'28", long 85°48'57", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Virginia Avenue, I-264 South Exit, 19 ft east of curb on east side of exit road, 24 ft southeast of south end of a metal guardrail, 100 ft north of curb on north edge of Virginia Avenue, in Louisville. Owner: Kentucky Highway Department.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 98 ft, screened 96-98 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 440.28 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--February 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.96 ft below land-surface datum, May 6, 1991; lowest measured, 29.75 ft below land-surface datum, Dec. 13, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	27.19	May 11, 1994	25.63

381430085472501. Local number CP-17, map number 44.
LOCATION.--Lat 38°14'30", long 85°47'25", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 21 ft west of the west curb on 22nd Street, 45 ft north of north curb on Greenwood Street, at the southeast corner of Victory Park, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 86.0 ft, screened 84.0-86.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 451.78 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--March 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.20 ft below land-surface datum, Apr. 23, 1985; lowest measured, 29.96 ft below land-surface datum, Oct. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	28.52	May 10, 1994	28.50

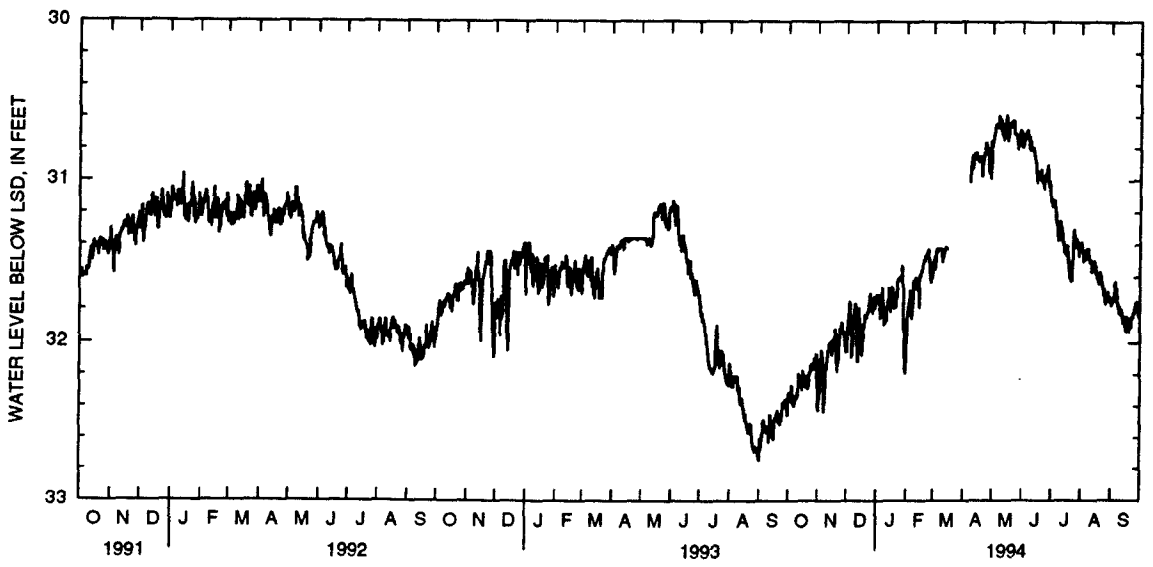
JEFFERSON COUNTY

381441085452701. Local number 45-14-71, (owner's number A-2), map number 45.
LOCATION.--Lat 38°14'41", long 85°45'27", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the Louisville Free Public Library, 301 West York Street, on east side of building at base of the TV-radio tower, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 105 ft, cased and screened.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 454.23 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Water-quality sample collected May 8, 1956.
PERIOD OF RECORD.--February 1937 to current year. February 1937 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 28.09 ft below land-surface datum, May 20, 1984; lowest, 77.82 ft below land-surface datum, Sept. 18, 1955.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.32	32.43	32.06	31.71	31.96	31.55	---	30.78	30.79	31.16	31.41	31.77
2	32.34	32.36	31.91	31.75	31.81	31.49	---	30.73	30.78	31.12	31.45	31.75
3	32.37	32.23	31.85	31.71	31.79	31.55	---	30.67	30.75	31.14	31.50	31.73
4	32.27	32.12	31.75	31.77	31.78	31.42	---	30.64	30.70	31.16	31.48	31.70
5	32.37	32.06	31.84	31.85	31.79	31.44	---	30.65	30.71	31.24	31.48	31.64
6	32.39	32.09	32.09	31.75	31.85	31.42	---	30.65	30.73	31.26	31.43	31.68
7	32.40	32.44	32.00	31.73	31.83	31.42	---	30.59	30.74	31.34	31.42	31.75
8	32.35	32.31	31.92	31.78	31.65	31.43	30.96	30.63	30.81	31.37	31.46	31.79
9	32.33	32.21	31.83	31.89	31.65	31.42	30.88	30.61	30.75	31.31	31.50	31.82
10	32.35	32.14	31.76	31.81	31.63	31.50	30.87	30.71	30.80	31.25	31.49	31.82
11	32.26	32.08	31.86	31.87	31.60	31.48	30.88	30.66	30.79	31.33	31.50	31.83
12	32.20	32.05	32.12	31.75	31.61	31.45	30.84	30.74	30.82	31.38	31.55	31.82
13	32.23	32.00	31.85	31.74	31.68	31.42	30.83	30.69	30.86	31.40	31.52	31.88
14	32.28	32.00	31.85	31.74	31.78	31.42	30.85	30.61	30.88	31.44	31.50	31.87
15	32.30	32.06	31.92	31.79	31.59	31.42	30.85	30.59	30.98	31.45	31.57	31.89
16	32.26	32.05	32.06	31.75	31.59	---	30.87	30.71	31.01	31.44	31.58	31.93
17	32.22	31.97	32.00	31.66	31.57	---	30.87	30.74	30.96	31.40	31.58	31.84
18	32.23	32.02	31.90	31.76	31.52	---	30.85	30.67	30.94	31.51	31.58	31.85
19	32.28	31.92	31.91	31.78	31.50	---	30.85	30.65	30.97	31.55	31.64	31.92
20	32.22	32.12	31.83	31.73	31.50	---	30.97	30.63	31.00	31.60	31.60	31.87
21	32.28	32.18	31.84	31.75	31.48	---	30.89	30.63	31.01	31.62	31.59	31.91
22	32.27	32.14	31.83	31.72	31.45	---	30.82	30.65	30.98	31.62	31.61	31.84
23	32.23	32.01	31.82	31.62	31.43	---	30.81	30.70	31.05	31.41	31.64	31.85
24	32.20	31.92	31.76	31.61	31.51	---	30.76	30.70	30.96	31.31	31.71	31.81
25	32.14	31.93	31.70	31.61	31.56	---	30.83	30.71	30.96	31.41	31.73	31.79
26	32.13	31.88	31.73	31.62	31.60	---	30.82	30.72	30.93	31.40	31.76	31.75
27	32.14	31.95	31.79	31.59	31.63	---	30.95	30.80	30.99	31.39	31.70	31.78
28	32.12	31.93	31.81	31.56	31.60	---	30.91	30.77	31.03	31.42	31.74	31.76
29	32.12	31.98	31.72	31.98	---	---	30.98	30.70	31.06	31.47	31.73	31.83
30	32.08	32.06	31.79	32.17	---	---	30.75	30.76	31.13	31.40	31.75	31.85
31	32.22	---	31.75	32.09	---	---	---	30.78	---	31.39	31.74	---
MAX	32.40	32.44	32.12	32.17	31.96	---	---	30.80	31.13	31.62	31.76	31.93
MIN	32.08	31.88	31.70	31.56	31.43	---	---	30.59	30.70	31.12	31.41	31.64

WTR YR 1994 HIGH 30.59 LOW 32.44



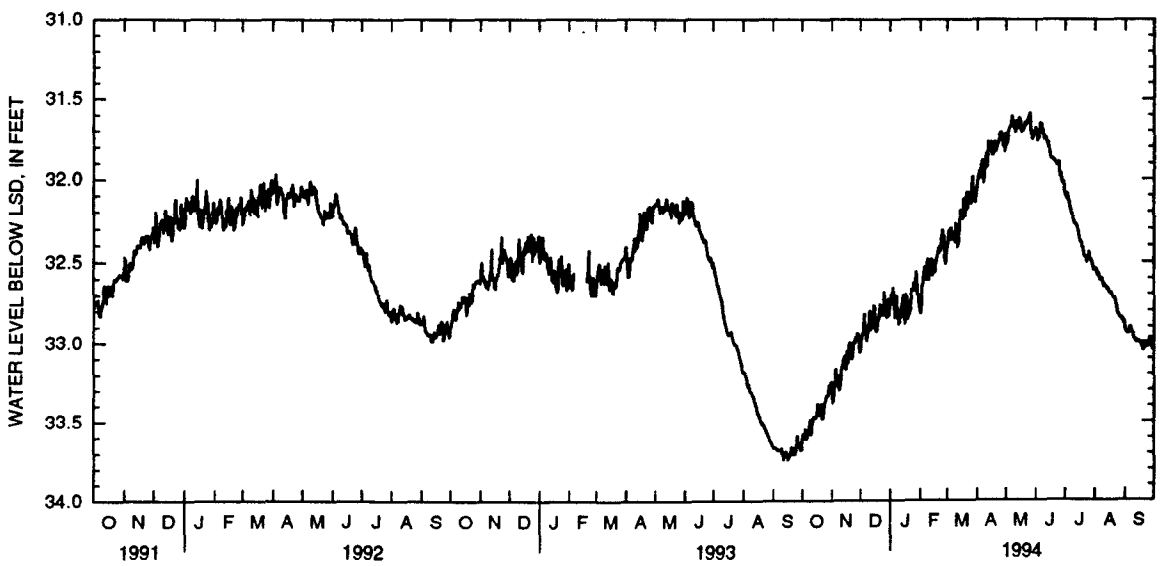
JEFFERSON COUNTY

381447085454001. Local number 45-14-66, (owner's number 5), map number 46.
LOCATION.--Lat 38°14'47", long 85°45'40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Courier Journal-Louisville Times, Sixth and Broadway Streets in subbasement below building entrance walkway from Armory Street, in Louisville. Owner: Gannett.
AQUIFER.--Louisville Limestone and Laurel Dolomite of Middle Silurian age. Aquifer code: 354LVLL.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 190 ft, cased to 121 ft, open-hole 121-190 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land-surface datum is 455.83 ft above sea level. Measuring point: Top of metal well cover, 15.87 ft below land-surface datum.
REMARKS.--Earthquake monitor well. Water-quality samples collected Aug. 29, 1949 and Aug. 18, 1950.
PERIOD OF RECORD.--October 1953 to current year. October 1953 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 28.80 ft below land-surface datum, June 2, 1984; lowest, 86.85 ft below land-surface datum, Sept. 20, 1955.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.58	33.38	33.02	32.71	32.80	32.40	32.01	31.79	31.70	32.10	32.54	32.93
2	33.61	33.36	32.95	32.74	32.68	32.31	31.97	31.76	31.76	32.11	32.55	32.94
3	33.61	33.28	32.94	32.69	32.65	32.37	31.97	31.71	31.75	32.09	32.58	32.94
4	33.55	33.21	32.83	32.73	32.58	32.29	31.95	31.69	31.73	32.13	32.57	32.94
5	33.61	33.17	32.93	32.84	32.53	32.37	31.90	31.68	31.69	32.16	32.59	32.91
6	33.59	33.20	32.91	32.71	32.56	32.34	31.89	31.66	31.66	32.18	32.61	32.90
7	33.57	33.29	32.99	32.78	32.61	32.35	32.02	31.61	31.67	32.20	32.60	32.93
8	33.53	33.30	32.95	32.85	32.48	32.38	31.97	31.68	31.71	32.22	32.62	32.94
9	33.49	33.27	32.88	32.88	32.59	32.27	31.90	31.64	31.73	32.26	32.63	32.96
10	33.58	33.21	32.80	32.86	32.57	32.35	31.87	31.70	31.74	32.27	32.65	32.98
11	33.51	33.16	32.92	32.84	32.49	32.41	31.91	31.69	31.76	32.27	32.65	32.99
12	33.48	33.15	32.91	32.77	32.48	32.39	31.77	31.67	31.78	32.28	32.65	33.00
13	33.48	33.10	32.84	32.72	32.58	32.25	31.79	31.69	31.77	32.30	32.67	32.99
14	33.48	33.09	32.77	32.77	32.56	32.23	31.79	31.64	31.81	32.32	32.66	33.00
15	33.47	33.16	32.80	32.85	32.52	32.20	31.77	31.62	31.84	32.36	32.69	33.00
16	33.43	33.14	32.92	32.84	32.56	32.24	31.85	31.69	31.87	32.38	32.69	33.00
17	33.40	33.05	32.93	32.71	32.50	32.20	31.85	31.71	31.87	32.38	32.69	33.00
18	33.46	33.10	32.85	32.82	32.47	32.12	31.80	31.70	31.87	32.41	32.71	33.03
19	33.43	33.00	32.86	32.84	32.44	32.21	31.77	31.70	31.88	32.43	32.72	33.05
20	33.40	33.06	32.79	32.80	32.41	32.13	31.83	31.67	31.89	32.46	32.72	33.04
21	33.48	33.10	32.81	32.80	32.44	32.08	31.80	31.67	31.90	32.47	32.74	33.03
22	33.48	33.10	32.79	32.72	32.38	32.16	31.78	31.66	31.91	32.47	32.76	33.02
23	33.43	33.03	32.83	32.67	32.31	32.08	31.77	31.64	31.91	32.50	32.80	33.01
24	33.38	32.99	32.79	32.67	32.41	32.09	31.73	31.62	31.89	32.49	32.82	33.03
25	33.35	33.00	32.69	32.63	32.34	32.15	31.72	31.60	31.98	32.44	32.83	33.00
26	33.33	32.96	32.76	32.68	32.50	32.05	31.72	31.63	31.96	32.48	32.84	32.97
27	33.34	32.96	32.84	32.60	32.51	32.05	31.78	31.75	32.01	32.48	32.85	33.01
28	33.28	32.96	32.84	32.61	32.42	32.06	31.78	31.75	32.02	32.50	32.84	33.00
29	33.29	33.00	32.73	32.72	---	32.13	31.83	31.72	32.02	32.52	32.87	33.04
30	33.25	33.06	32.83	32.78	---	32.13	31.72	31.72	32.08	32.55	32.88	33.04
31	33.25	---	32.78	32.81	---	32.07	---	31.71	---	32.55	32.89	---
MAX	33.61	33.38	33.02	32.88	32.80	32.41	32.02	31.79	32.08	32.55	32.89	33.05
MIN	33.25	32.96	32.69	32.60	32.31	32.05	31.72	31.60	31.66	32.09	32.54	32.90

WTR YR 1994 HIGH 31.60 LOW 33.61



JEFFERSON COUNTY

381501085464601. Local number CP 10, map number 47.
LOCATION.--Lat 38°15'01", long 85°46'46", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the center of the west side of Sheppard Park, 10 ft south of a concrete walkway, 17 ft east of south 17th Street, 150 ft north of the junction of Magazine and South 17th Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 59.0 ft, screened 56.0-59.0 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 460.73 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--August 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.65 ft below land-surface datum, Oct. 31, 1984; lowest measured, 45.14 ft below land-surface datum, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	37.56	May 10, 1994	37.03

381503085453301. Local number 45-15-36, map number 48.
LOCATION.--Lat 38°15'03", long 85°45'33", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, in subbasement of Kentucky Towers Apartments, on east side of South Fifth Street, at Fifth and Walnut Streets, in Louisville. Owner: Kentucky Towers (formerly Kentucky Hotel).
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., depth 104 ft, screened 84-104 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 460.00 ft above sea level. Measuring point: Floor of recorder shelter 22.81 ft below land-surface datum.
PERIOD OF RECORD.--September 1948 to current year. November 1973 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.53 ft below land-surface datum, Apr. 24, 1984; lowest measured, 87.74 ft below land-surface datum, Sept. 23, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	38.90	May 10, 1994	36.69

381504085443202. Local number CP 7A, map number 49.
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: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 84.6 ft, screened 71.1-74.1 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 467.19 ft above sea level. Measuring point: Top of casing, at land-surface datum.
REMARKS.--Replaces destroyed well 381504085443201 (CP 7), which was 10 ft north.
PERIOD OF RECORD.--July 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.42 ft below land-surface datum, Apr. 24, 1984; lowest measured, 47.02 ft below land-surface datum, Oct. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	47.19	May 10, 1994	44.24

JEFFERSON COUNTY

381508085455701. Local number CP 4, map number 50.
LOCATION.--Lat 38°15'08", long 85°45'57", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southwest corner of Beecher Park, 15 ft west of the South 9th Street sidewalk, 20 ft north of the Walnut Street sidewalk, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 109.8 ft, screened 106.8-109.8 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 459.47 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.43 ft below land-surface datum, Apr. 24, 1984; lowest measured, 43.31 ft below land-surface datum, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	38.23	May 10, 1994	36.45

381518085454401. Local number 86-10 (Mazzoni), map number 51.
LOCATION.--Lat 38°15'18", long 85°45'44", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, southwest side of Congress Alley and 7th Street, 3 ft south of alley, west of entrance 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 98 ft, screened 41-43 ft, 61-63 ft, 96-98 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.13 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.
REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 32.73 ft below land-surface datum, Nov. 18, 1986; lowest, 37.14 ft below land-surface datum, Aug. 24, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	35.78	May 10, 1994	33.65

JEFFERSON COUNTY

381518085453402. Local number 86-11 (Courthouse Annex), map number 52.
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.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 461.63 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.
REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.
PERIOD OF RECORD.--November 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 40.24 ft below land-surface datum, Nov. 18, 1986; lowest, 46.82 ft below land-surface datum, July 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	44.28	May 10, 1994	41.90

381518085451801. Local number 87-1 (Levy's), map number 53.
LOCATION.--Lat 38°15'18", long 85°45'18", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at 3rd and Market Streets, in west corner of basement in old Levy's building, under east sidewalk on 3rd Street. Owner: Metts Co., Inc.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 99 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 464.72 ft above sea level. Measuring point: Top of casing, 11.5 ft below land-surface datum.
REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.
PERIOD OF RECORD.--January 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.46 ft below land-surface datum, Apr. 10, 1989; lowest, 49.26 ft below land-surface datum, July 27, 28, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	46.70	May 10, 1994	44.16

GROUND-WATER LEVELS

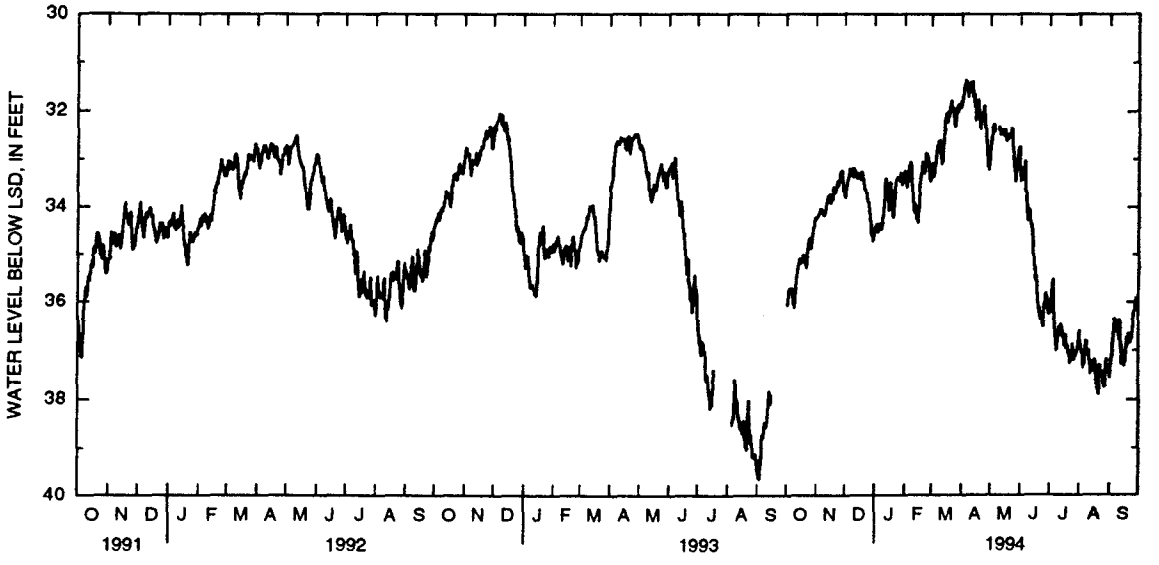
JEFFERSON COUNTY

381527085453001. Local number 86-7 (Belvedere Well), map number 54.
LOCATION.--Lat 38°15'27", long 85°45'30", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at Place Montpelier and Main Street, 3 ft east of east sidewalk. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 89.9 ft, screened 85.1-87.1 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land-surface datum is 452.43 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.
REMARKS.-- Water levels affected by Ohio River stage and pumping from nearby wells.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.99 ft below land-surface datum, Nov. 11 1986; lowest, 39.64 ft below land-surface datum, Sept. 2-3, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.02	34.25	33.79	34.44	33.41	33.19	31.84	32.72	33.43	36.23	36.81	37.55
2	36.06	34.22	33.67	34.40	33.50	33.12	31.66	32.49	33.37	36.12	36.96	37.27
3	35.82	34.17	33.53	34.46	33.61	33.37	31.49	32.45	33.35	35.79	37.00	37.15
4	35.77	34.13	33.43	34.55	33.47	33.14	31.47	32.28	33.38	35.59	37.15	36.78
5	35.72	34.05	33.32	34.47	33.17	32.97	31.41	32.55	33.13	36.07	37.29	36.50
6	35.73	34.04	33.27	34.37	33.15	32.70	31.56	32.45	33.62	36.57	37.05	36.35
7	35.91	34.11	33.33	34.35	33.11	32.70	31.70	32.40	33.99	36.84	36.93	36.39
8	36.04	34.17	33.34	34.44	33.46	32.60	31.55	32.30	34.28	36.99	37.00	36.47
9	36.11	34.17	33.38	34.21	33.86	32.67	31.59	32.40	34.14	36.76	37.08	36.60
10	35.81	34.11	33.21	33.92	34.11	32.97	31.49	32.34	34.04	36.71	37.01	36.78
11	35.49	33.94	33.25	33.69	33.93	33.10	31.52	32.44	34.36	36.62	37.29	36.38
12	35.30	33.83	33.35	33.40	34.15	33.03	31.68	32.41	34.43	36.54	37.47	37.00
13	35.18	33.77	33.40	33.49	34.25	32.51	31.79	32.47	34.52	36.59	37.42	37.27
14	35.09	33.74	33.41	33.85	34.32	32.40	31.90	32.38	34.96	36.72	37.42	37.22
15	35.09	33.93	33.33	34.07	34.10	32.15	32.19	32.38	35.33	36.75	37.39	37.27
16	35.08	33.87	33.38	33.68	33.70	32.18	32.02	32.49	35.53	36.90	37.24	37.32
17	35.04	33.85	33.43	33.49	33.43	32.23	31.82	32.62	35.46	36.81	37.30	37.23
18	35.03	33.76	33.27	33.87	33.29	32.14	32.13	32.58	35.82	36.96	37.59	36.86
19	35.16	33.59	33.39	34.16	33.06	32.04	32.21	32.48	36.07	36.97	37.85	36.91
20	35.12	33.70	33.47	34.14	33.13	31.86	32.37	32.52	36.21	37.06	37.89	36.67
21	35.27	33.67	33.62	33.82	33.31	31.93	32.27	32.50	36.33	37.11	37.43	36.80
22	35.05	33.61	33.65	33.67	33.10	31.95	32.14	32.39	36.35	37.26	37.48	36.85
23	34.91	33.51	33.78	33.43	32.94	32.01	32.01	32.67	36.45	37.12	37.50	36.78
24	34.72	33.56	33.88	33.38	33.03	32.27	31.90	32.83	36.50	37.00	37.55	36.58
25	34.66	33.41	33.91	33.40	32.97	32.31	32.36	33.18	36.15	37.06	37.62	36.35
26	34.83	33.28	34.13	33.45	33.32	32.10	32.59	33.31	36.13	37.20	37.74	36.20
27	34.72	33.25	34.31	33.46	33.46	31.91	32.91	33.30	35.80	37.14	37.65	36.17
28	34.53	33.37	34.57	33.36	33.41	32.00	33.15	33.08	35.98	37.12	37.27	35.94
29	34.44	33.57	34.53	33.53	---	31.94	33.22	32.90	36.15	37.04	37.46	35.97
30	34.28	33.75	34.71	33.44	---	31.88	33.02	32.78	36.23	36.94	37.33	35.97
31	34.22	---	34.59	33.31	---	31.93	---	33.14	---	36.70	37.37	---
MAX	36.11	34.25	34.71	34.55	34.32	33.37	33.22	33.31	36.50	37.26	37.89	37.55
MIN	34.22	33.25	33.21	33.31	32.94	31.86	31.41	32.28	33.13	35.59	36.81	35.94

WTR YR 1994 HIGH 31.41 LOW 37.89



JEFFERSON COUNTY

381539085465201. Local number CP 9, map number 55.
LOCATION.--Lat 38°15'39", long 85°46'52", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southeast corner of Boone Square Park, 20 ft north of Rowan Street, 150 ft west of South 19th Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 42.7 ft, screened 39.7-42.7 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 456.99 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.38 ft below land-surface datum, Apr. 24, 1985; lowest measured, 40.51 ft below land-surface datum, July 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	34.25	May 10, 1994	33.67

381543085480101. Local number CP 14, map number 56.
LOCATION.--Lat 38°15'43", long 85°48'01", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southwest corner of Westonia Park, South 30th Street at an unnamed alley south of Rowan Street, 5 ft north of curb on north side of alley, 8 ft east of a telephone pole at the curb on east side of South 30th Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 45 ft, screened 43-45 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 455.71 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--July 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.35 ft below land-surface datum, Aug. 25, 1980; lowest measured, 36.13 ft below land-surface datum, Dec. 13, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	34.60	May 10, 1994	34.38

381553085431602. Local number M-2, map number 57.
LOCATION.--Lat 38°15'53", long 85°43'16", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 15 ft west of the northwest corner of Metropolitan Sewer District, Beargrass Creek Pump Station Building, 100 ft west of end of Letterle Avenue, 150 ft south of I-71, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 98 ft, screened 96-98 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 446.77 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--December 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.93 ft below land-surface datum, Dec. 15, 1978; lowest measured, 28.28 ft below land-surface datum, Nov. 20, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	27.72	May 10, 1994	24.43

JEFFERSON COUNTY

381604085430501. Local number 43-16-8, (WC-1), map number 58.
LOCATION.--Lat 38°16'04", long 85°43'05", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 100 ft northeast of junction of River Road and entrance road to Bandman Park, 0.2 mi east of Beargrass 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 101 ft, screened 99-101 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 438.88 ft above sea level. Measuring point: Floor of recorder shelter, 4.83 ft above land-surface datum.
REMARKS.--Water levels affected by Ohio River. Water-quality samples collected Apr. 2, 1944 and July 10, 1979.
PERIOD OF RECORD.--May 1946 to current year. May 1946 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.09 ft below land-surface datum, Sept. 14, 1979; lowest measured, 27.90 ft below land-surface datum, Feb. 10, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	19.00	May 9, 1994	15.57

381607085483601. Local number CP 3, map number 59.
LOCATION.--Lat 38°16'07", long 85°48'36", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the northwest corner of Taylor Park, 150 ft east of North 38th Street, 200 ft north of Jewell Street, in Louisville. Owner: City of Louisville.
AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 55.7 ft, screened 52.7-55.7 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 445.33 ft above sea level. Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.97 ft below land-surface datum, May 6, 1991; lowest measured, 46.67 ft below land-surface datum, June 29, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	33.66	May 10, 1994	30.55

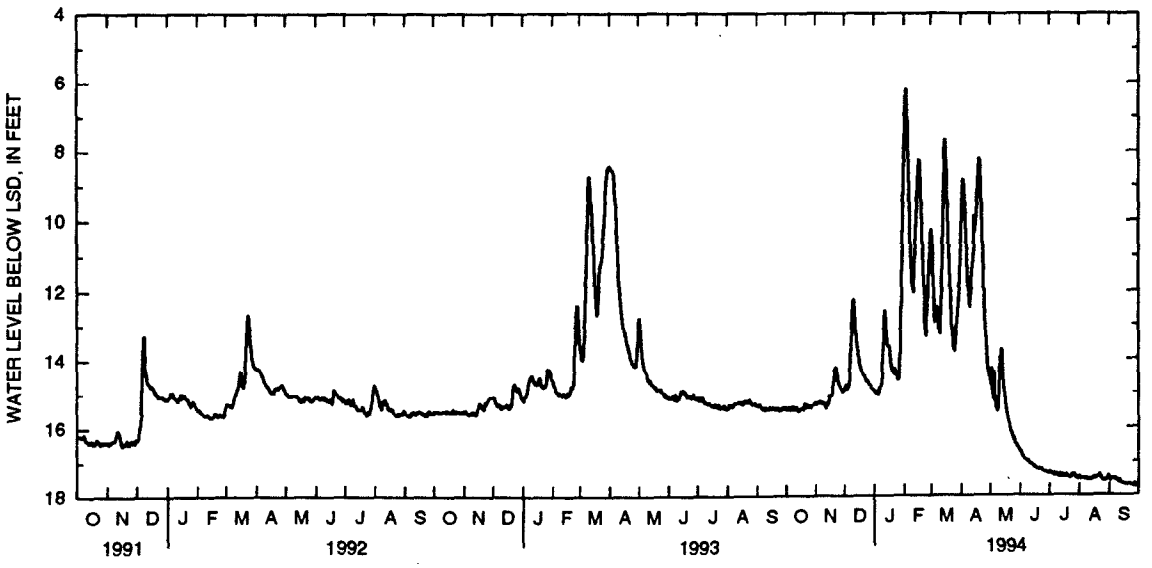
JEFFERSON COUNTY

381638085415801. Local number 41-16-3, (WC-4), map number 60.
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 observation water-table well, diameter 4 in., depth 104 ft, screened 98-100 ft.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 435.79 ft above sea level. 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. Water-quality sample collected July 10, 1979.
PERIOD OF RECORD.--April 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.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.48	15.33	14.82	14.95	7.02	10.40	9.72	14.72	16.74	17.31	17.52	17.52
2	15.43	15.29	14.76	15.02	6.30	11.00	9.03	14.28	16.77	17.34	17.51	17.54
3	15.45	15.29	14.88	14.97	6.57	12.09	8.84	15.04	16.85	17.36	17.50	17.52
4	15.42	15.26	14.80	15.03	7.30	12.87	9.25	15.21	16.90	17.34	17.50	17.50
5	15.50	15.24	14.73	14.99	8.66	12.76	9.99	15.03	16.95	17.39	17.50	17.52
6	15.44	15.28	14.37	14.88	9.96	12.50	10.74	15.32	16.94	17.43	17.48	17.53
7	15.42	15.28	13.65	14.80	10.99	12.56	11.55	15.45	16.99	17.43	17.52	17.50
8	15.47	15.28	13.01	14.70	11.46	12.94	11.97	15.53	16.99	17.38	17.50	17.58
9	15.43	15.30	12.47	14.09	11.94	13.22	12.32	15.34	17.02	17.43	17.52	17.55
10	15.47	15.36	12.26	13.27	12.03	13.10	12.05	14.51	17.06	17.43	17.54	17.61
11	15.43	15.44	12.53	12.73	11.14	12.27	11.70	13.99	17.08	17.46	17.53	17.60
12	15.46	15.37	13.22	12.67	10.44	11.20	11.34	13.70	17.08	17.38	17.54	17.62
13	15.51	15.29	13.56	13.37	9.84	9.75	11.07	13.94	17.12	17.46	17.52	17.64
14	15.53	15.34	13.73	13.60	9.09	8.45	9.88	14.73	17.16	17.40	17.51	17.65
15	15.49	15.14	13.94	13.60	8.45	7.68	10.22	14.96	17.14	17.45	17.52	17.65
16	15.47	15.09	14.11	13.60	8.25	8.09	9.94	15.16	17.19	17.43	17.46	17.68
17	15.46	15.07	14.26	13.97	8.64	9.41	9.40	15.43	17.20	17.41	17.51	17.65
18	15.44	14.84	14.32	14.21	9.55	10.37	8.74	15.62	17.23	17.41	17.46	17.68
19	15.48	14.63	14.43	14.33	10.45	11.07	8.28	15.80	17.23	17.44	17.47	17.69
20	15.40	14.36	14.47	14.33	11.25	11.79	8.36	15.91	17.23	17.47	17.45	17.66
21	15.40	14.28	14.52	14.44	11.81	12.53	9.09	16.06	17.23	17.48	17.44	17.66
22	15.34	14.28	14.59	14.29	13.07	13.18	9.97	16.15	17.25	17.48	17.43	17.67
23	15.34	14.53	14.65	14.45	13.30	13.57	10.88	16.23	17.27	17.44	17.51	17.71
24	15.37	14.72	14.66	14.60	12.59	13.56	11.97	16.29	17.29	17.40	17.54	17.72
25	15.41	14.77	14.69	14.53	11.93	13.57	12.74	16.40	17.30	17.39	17.57	17.72
26	15.36	14.85	14.73	14.49	11.42	13.19	13.33	16.41	17.31	17.40	17.56	17.66
27	15.43	14.89	14.76	13.89	10.79	12.98	13.81	16.49	17.33	17.43	17.57	17.74
28	15.36	14.95	14.85	12.70	10.29	12.63	14.16	16.54	17.34	17.49	17.55	17.71
29	15.34	14.94	14.89	11.13	---	12.19	14.49	16.59	17.35	17.49	17.50	17.69
30	15.34	14.89	14.89	9.53	---	11.56	14.53	16.63	17.31	17.52	17.46	17.68
31	15.28	---	14.96	8.13	---	10.64	---	16.69	---	17.46	17.51	---
MAX	15.53	15.44	14.96	15.03	13.30	13.57	14.53	16.69	17.35	17.52	17.57	17.74
MIN	15.28	14.28	12.26	8.13	6.30	7.68	8.28	13.70	16.74	17.31	17.43	17.50

WTR YR 1994 HIGH 6.30 LOW 17.74



JEFFERSON COUNTY

381648085421201. Local number 42-16-15, (WC-5), map number 61.
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.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 435.11 ft above sea level. 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 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	14.64	May 9, 1994	13.52

381653085413302. Local number (WC-9A), map number 62.
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 observation water-table well, diameter 1.5 in., depth 90 ft, screened 76-78 ft, 88-90 ft.
INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 437.65 ft above sea level. 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 measured, 13.04 ft below land-surface datum, Apr. 21, 1987; lowest measured, 19.04 ft below land-surface datum, July 21, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water level	Date	Water level
Oct. 27, 1993	17.90	May 9, 1994	16.84

LARUE COUNTY

374151085413201. Map number 11.
LOCATION.--Lat 37°41'51", long 85°41'32", Hydrologic Unit 05110001, County Code 123, Nelsonville quadrangle, 150 ft west of blacktop road, 1.6 mi northeast of Roanoke, 2.8 mi south of the junction of State Highway 583 and the Blue Grass Parkway. Owner: Charles Wagner.
AQUIFER.--Warsaw Limestone of Late Mississippian age. Aquifer code: 333WRSW.
WELL CHARACTERISTICS.--Drilled unused artesian oil test well, diameter 10 in., depth 605 ft, plugged at 363 ft, cased to 65 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum is 905.34 ft above sea level. Measuring point: Top of casing 1.00 ft above land-surface datum.
REMARKS.--Quality water sample collected and pump test run Apr. 10, 1971. Pumped for 3 hours at 9 gal/min with 4.1 ft of drawdown.
PERIOD OF RECORD.--October 1971 to April 1983 and October 1988 to current year. October 1971 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 101.81 ft below land-surface datum, Apr. 14, 1980; lowest measured, 111.22 ft below land-surface datum, Nov. 12, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 5, 1993	110.73	Feb. 18	109.35	June 13	109.98
Nov. 23	111.15	Apr. 4	109.36	July 18	109.89
Jan. 10, 1994	110.42	May 4	110.49	Aug. 23	110.15

LAUREL COUNTY

370757084045001. Map number 12.
LOCATION.--Lat 37°07'57", long 84°04'50", Hydrologic Unit 05130101, County Code 125, London quadrangle, in back yard at 116 Boering Drive, 0.1 mi northeast of Marymount Hospital, in London. Owner: J.R. Hale.
AQUIFER.--Lee Formation of Early Pennsylvanian age. Aquifer Code: 327LEE.
WELL CHARACTERISTICS.--Drilled unused artesian and water-table well in sandstone, diameter 12 in., depth 370 ft, length of casing unknown, open hole below casing.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 1,190 ft above sea level. Measuring point: Floor of recorder shelter, 4.13 ft above land-surface datum.
REMARKS.--Lowest water level is a pumping level. Water-quality sample collected and pump test ran Oct. 14, 1965. Pumped 1.2 hours at 11 gal/min with 47.30 ft of drawdown.
PERIOD OF RECORD.--October 1947, May 1951 to September 1962, June 1965 to September 1984 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.69 ft below land-surface datum, May 9, 1990, lowest measured, 225.00 ft below land-surface datum, Oct. 25, 1947.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Nov. 19, 1993	41.73	Mar. 1	45.25	July 21	41.94
Jan. 10, 1994	41.59	Apr. 13	41.06		

LINCOLN COUNTY

372739084402101. Map number 13.
LOCATION.--Lat 37°27'39", long 84°40'21", Hydrologic Unit 05110001, County Code 137, Halls Gap quadrangle, in a pasture, 100 ft north of gravel road, 0.8 mi northeast of Green River Church, 2.1 mi southwest of Halls Gap. Owner: Sarah Peck.
AQUIFER.--Sandstone and shale of Borden Formation of Early Mississippian age. Aquifer code: 338BRDN.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 33 ft, cased to 10 ft, open hole 10 to 33 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is 1,060 ft above sea level. Measuring point: Floor of recorder shelter, 2.25 above land-surface datum.
REMARKS.--Water levels affected by atmospheric pressure.
PERIOD OF RECORD.--April 1953 to September 1984 and October 1988 to current year. Well test pump, Oct. 14, 1965. Estimated yield base on recovery, 0.1 gal/min.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.30 ft below land-surface datum, Nov. 6, 1981; lowest measured, 11.03 ft below land-surface datum, Oct. 6, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 6, 1993	11.03	Feb. 17	7.49	July 12	10.53
Dec. 1	9.65	Apr. 6	7.28	Aug. 18	10.68
Jan. 12, 1994	7.52	June 9	10.00		

LOGAN COUNTY

365046086444901. Map number 14.
LOCATION.--Lat 36°50'46", long 86°44'49", Hydrologic Unit 05130206, County Code 141, Auburn quadrangle, at the southeast corner of an abandoned farmhouse, 90 ft east of Kentucky Highway 980, 0.6 mi south of U.S. Highway 68, 2.4 mi southwest of Auburn. Owner: W.D. Appling.
AQUIFER.--Girkin Formation of Late Mississippian age. Aquifer code: 332GRKN.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 70 ft, length of casing unknown.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is 685 ft. Measuring point: Top of casing 0.70 ft above land-surface datum.
REMARKS.--8 in. surface casing, lined with 6 in. casing.
PERIOD OF RECORD.--May to November 1982 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.10 ft below land-surface datum, Feb. 1, 1990; lowest measured, 49.64 ft below land-surface datum, Sept. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 7, 1993	26.68	Mar. 16	26.39	June 22	40.16
Jan. 25, 1994	32.84	Apr. 26	28.93	Aug. 23	42.98

MCCRACKEN COUNTY

370551088510401. Map number 15.
LOCATION.--Lat 37°05'51", long 88°51'04", Hydrologic Unit 05140206, County Code 145, Heath quadrangle, 35 ft south of a gravel road in field of brush, at former Kentucky Ordnance Works, (now managed by Kentucky Department of Fish & Wildlife Resources), 3.4 mi northwest of Heath. Owner: State of Kentucky.
AQUIFER.--Sand of McNairy Formation of Late Cretaceous age. Aquifer code: 211MCNR.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 192 ft, cased to 192 ft.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 435 ft. Measuring point: Floor of recorder shelter, 4.76 ft above land-surface datum.
PERIOD OF RECORD.--October 1969 to September 1983 and October 1988 to current year. August 1969 to September 1976, published in hydrograph form and on file at Paducah subdistrict office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.64 ft below land-surface datum, June 27, 1994; lowest measured, 111.50 ft below land-surface datum, Jan. 25, 1972 and Nov. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 10, 1993	107.54	Mar. 21	106.80	June 27	105.64
Feb. 14, 1994	107.35	May 26	105.88		

METCALFE COUNTY

370211085364301. Map number 16.
LOCATION.--Lat 37°02'11", long 85°36'43", Hydrologic Unit 05110001, County Code 169, East Fork quadrangle, at an old homesite 150 ft south of a blacktop road, 0.5 mi southwest of Metcalfe County Lake, 0.9 mi northwest of junction of U.S. Highway 68 and State Highway 544, 6 mi southeast of Sulphur well. Owner: Larry Froedge.
AQUIFER.--Salem and Warsaw Limestones of Late Mississippian age. Aquifer code: 333SMWR
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 106 ft, length of casing unknown.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 885 ft. Measuring point: Top of casing, 0.58 ft above land-surface datum.
PERIOD OF RECORD.--October 1979 to April 1983 and October 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.67 ft below land-surface datum, Feb. 25, 1994; lowest measured, 77.88 ft below land-surface datum, Jan. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 5, 1993	76.59	Feb. 25	72.67	June 16	74.55
Dec. 1	76.72	Apr. 8	72.98	July 21	75.03
Jan. 13, 1994	75.45	May 5	73.24	Aug. 25	75.32

WARREN COUNTY

370342086080101. Map number 17.
LOCATION.--Lat 37°03'42", long 86°08'01", Hydrologic Unit 05110002, County Code 227, Smiths grove quadrangle, in a pasture 50 ft southwest of a stone farm house, 200 ft south of State Highway 65, 0.6 mi southeast of Rocky Hill. Owner: Earl Estes.
AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer code: 333STLS.
WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 6 in., depth 95 ft, length of casing unknown.
INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.
DATUM.--Altitude of land-surface datum (from topographic map) is about 645 ft. Measuring point: Floor of recorder shelter, 2.10 ft above land-surface datum.
PERIOD OF RECORD.--November 1961 to January 1983 and October 1988 to current year. November 1961 to September 1976 published in hydrograph form and on file at district office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.19 ft below land-surface datum, Mar. 15, 1975; lowest measured, 76.95 ft below land-surface datum, Dec. 31, 1962.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Water Level	Date	Water Level	Date	Water Level
Oct. 15, 1993	71.26	Feb. 10	67.29	May 27	70.15
Dec. 2	71.17	Mar. 17	68.20	June 29	69.98
Jan. 7, 1994	70.16	Apr. 21	69.00	Aug. 3	70.65

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°06'58", Long 83°33'18", Rowan County, Hydrologic Unit 05100101 at Clark State Fish Hatchery, 0.9 mi southwest of Clark State Fish Hatchery office, 1.2 mi west of Cave Run Reservoir Dam.
PERIOD OF RECORD.--September 1983 to current year.
INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.
REMARKS.--Samples collected on weekly basis by observer.
COOPERATION.--Chemical quality data were provided by the National Atmospheric Deposition Program.

CHEMICAL ANALYSES, OCTOBER 1993 TO SEPTEMBER 1994

DATE	TOTAL PRECIP-ITATION FOR DEFINED PERIOD (IN)	VOLUME ATM DEP WET (L)	PH FIELD ATM DEP WET T (UNITS)	CALCIUM ATM DEP WET DIS (MG/L)	MAG-NESIUM ATM DEP WET DIS (MG/L)	SODIUM ATM DEP WET DIS (MG/L)
OCT 1993 05-12	0.40	0.707	4.15	0.140	0.028	0.098
OCT 12-19	1.75	3.071	6.05	0.045	0.006	0.044
OCT 19-26	1.09	1.913	4.49	0.050	0.009	0.052
OCT 26-NOV 02	--	0.847	5.54	0.664	0.454	0.092
NOV 02-09	0.12	0.157	5.65	0.187	0.024	0.193
NOV 09-16	1.63	2.875	6.62	0.140	0.094	0.227
NOV 16-23	0.62	1.073	4.54	0.034	0.015	0.104
NOV 23-30	0.84	1.433	--	0.048	0.009	0.062
NOV 30-DEC 07	1.65	2.699	--	0.314	0.068	0.094
DEC 07-14	0.44	0.752	--	0.078	0.013	0.030
DEC 14-21	0.73	1.272	4.86	0.063	0.004	0.032
DEC 21-29	0.50	1.011	4.25	0.072	0.014	0.110
JAN 1994 05-11	0.80	1.308	4.51	0.062	0.011	0.081
JAN 11-22	1.87	2.580	4.56	0.220	0.092	0.513
JAN 25-FEB 01	1.05	1.833	4.51	0.046	0.011	0.043
FEB 08-15	3.13	5.311	4.33	0.080	0.021	0.070
FEB 15-22	0.47	0.827	4.47	0.042	0.018	0.142
FEB 22-MAR 01	1.36	2.405	4.37	0.057	0.008	0.063
MAR 01-08	2.21	3.827	4.27	0.041	0.006	0.036
MAR 08-15	2.56	4.551	4.27	0.045	0.007	0.044
MAR 15-22	0.38	0.675	4.24	0.246	0.031	0.081
MAR 22-29	2.49	4.525	4.45	0.078	0.007	0.018
MAR 29-APR 05	0.52	--	4.43	1.03	0.193	0.083

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1993 TO SEPTEMBER 1994

DATE	TOTAL PRECIP-ITATION FOR DEFINED PERIOD (IN)	VOLUME ATM DEP WET (L)	PH FIELD ATM DEP WET T (UNITS)	CALCIUM ATM DEP WET DIS (MG/L)	MAG-NESIUM ATM DEP WET DIS (MG/L)	SODIUM ATM DEP WET DIS (MG/L)
APR 05-12	0.86	1.485	4.23	0.218	0.037	0.076
APR 12-19	2.13	3.766	6.57	0.388	0.109	0.151
APR 19-26	0.14	0.255	3.98	0.839	0.129	0.080
APR 26-MAY 03	1.43	2.436	7.27	0.914	0.297	0.212
MAY 03-10	1.89	3.297	4.27	0.102	0.017	0.018
MAY 10-17	1.19	2.086	4.33	0.072	0.011	0.039
MAY 17-24	<0.01	0.00	--	0.177	0.012	0.084
MAY 24-31	0.03	0.058	--	0.801	0.079	0.064
JUN 07-14	0.27	0.434	3.93	0.572	0.055	0.037
JUN 14-21	0.04	0.072	3.82	1.43	0.147	0.326
JUN 21-28	1.27	2.190	5.38	0.454	0.039	0.058
JUN 28-JUL 05	0.40	0.703	7.40	0.448	0.191	0.450
JUL 05-12	0.80	1.422	4.64	0.101	0.014	0.059
JUL 12-19	2.27	4.029	4.43	0.115	0.010	0.035
JUL 19-26	<0.01	2.847	4.58	0.407	0.023	0.016
JUL 26-AUG 02	<0.01	2.778	4.34	0.151	0.014	0.015
AUG 09-16	0.25	0.440	4.05	0.257	0.035	0.084
AUG 16-23	1.56	2.648	4.94	0.049	0.005	0.033
AUG 23-30	0.04	0.079	3.98	0.429	0.043	0.106
AUG 30-SEP 06	0.52	0.652	3.96	0.162	0.014	0.039
SEP 06-13	0.01	0.031	--	2.44	0.201	0.162
[1]SEP 13-20	1.10	1.954	4.37	0.063	0.005	0.032
[2]SEP 20-27	0.20	0.377	4.31	0.522	0.114	0.037

[1]Specific conductance, field: 18.4 microsiemens, Sept. 13-20.

[2]Specific conductance, field: 31.9 microsiemens, Sept. 20-27.

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1993 TO SEPTEMBER 1994

DATE	POTASSIUM ATM DEP WET DIS (MG/L)	SULFATE ATM DEP WET DIS AS SO4 (MG/L)	CHLORIDE ATM DEP WET DIS (MG/L)	NITROGEN NITRATE ATM DEP WET DIS AS NO3 (MG/L)	NITROGEN AMMON. ATM DEP WET DIS AS NH4 (MG/L)	PHOSPHORUS ORTHO ATM DEP WET DIS AS PO4 (MG/L)
OCT 1993 05-12	0.053	3.97	0.20	2.58	0.580	<0.020
OCT 12-19	<0.003	0.85	0.09	0.67	0.100	<0.020
OCT 19-26	0.012	1.85	0.10	1.13	0.240	<0.020
OCT 26-NOV 02	2.77	2.85	0.37	2.70	0.360	<0.020
NOV 02-09	0.025	4.15	0.32	3.74	0.850	<0.020
NOV 09-16	0.992	1.35	0.36	0.56	1.41	0.470
NOV 16-23	0.019	1.36	0.15	0.78	0.120	<0.020
NOV 23-30	0.006	1.19	0.09	0.77	0.080	<0.020
NOV 30-DEC 07	0.502	0.99	0.17	0.81	0.630	0.178
DEC 07-14	0.015	1.79	0.07	1.55	0.240	0.005
DEC 14-21	0.009	1.56	0.09	1.61	0.220	<0.003
DEC 21-29	0.014	1.88	0.29	2.67	0.340	<0.003
JAN 1994 05-11	0.008	0.97	0.16	1.14	0.110	<0.003
JAN 11-22	0.028	2.38	0.74	1.78	0.250	<0.030
JAN 25-FEB 01	0.006	0.86	0.12	0.90	0.080	0.004
FEB 08-15	0.121	2.73	0.14	1.23	0.200	<0.003
FEB 15-22	0.009	1.18	0.25	0.81	0.090	<0.003
FEB 22-MAR 01	0.005	1.79	0.10	1.27	0.190	<0.003
MAR 01-08	0.011	2.12	0.09	1.33	0.250	0.004
MAR 08-15	0.013	2.42	0.10	1.20	0.050	0.004
MAR 15-22	0.038	2.77	0.12	2.01	0.600	0.003
MAR 22-29	0.014	1.59	0.05	0.93	0.160	<0.003
MAR 29-APR 05	0.543	3.58	0.18	3.60	1.70	0.977

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1993 TO SEPTEMBER 1994

DATE	POTASSIUM ATM DEP WET DIS (MG/L)	SULFATE ATM DEP WET DIS AS SO4 (MG/L)	CHLORIDE ATM DEP WET DIS (MG/L)	NITROGEN NITRATE ATM DEP WET DIS AS NO3 (MG/L)	NITROGEN AMMON. ATM DEP WET DIS AS NH4 (MG/L)	PHOSPHORUS ORTHO ATM DEP WET DIS AS PO4 (MG/L)
APR 05-12	0.094	2.95	0.15	1.58	0.280	0.003
APR 12-19	0.508	1.36	0.24	0.77	1.96	0.790
APR 19-26	0.099	9.00	0.21	3.69	1.52	0.013
APR 26-MAY 03	2.16	4.42	0.39	1.49	7.18	3.51
MAY 03-10	0.028	3.05	0.06	1.46	0.400	<0.003
MAY 10-17	0.037	2.01	0.08	0.94	0.290	<0.003
MAY 17-24	0.014	0.04	0.06	0.22	0.030	<0.003
MAY 24-31	0.083	3.36	0.16	3.62	0.400	<0.003
JUN 07-14	0.055	6.24	0.18	4.30	0.540	<0.003
JUN 14-21	0.203	12.1	0.73	9.82	0.990	0.162
JUN 21-28	0.245	2.78	0.18	1.79	0.870	0.117
JUN 28-JUL 05	2.52	7.74	0.98	1.92	11.9	3.35
JUL 05-12	0.021	2.24	0.11	1.07	0.200	<0.003
JUL 12-19	0.015	3.13	0.11	1.74	0.280	0.005
JUL 19-26	0.025	2.79	0.07	1.29	0.410	<0.003
JUL 26-AUG 02	0.012	3.50	0.10	1.65	0.270	<0.003
AUG 09-16	0.027	8.36	0.18	2.82	1.35	<0.003
AUG 16-23	0.015	1.14	0.04	0.82	0.140	<0.003
AUG 23-30	0.049	5.17	0.26	3.90	0.220	<0.003
AUG 30-SEP 06	0.024	7.15	0.12	3.26	0.720	<0.003
SEP 06-13	0.171	8.41	0.30	5.51	2.01	<0.013
SEP 13-20	0.007	2.08	0.04	0.83	0.190	<0.003
SEP 20-27	0.438	3.11	0.14	2.09	0.120	<0.003

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 MOUTHCARD, KY	03207845	4.18	1973-75	E	E			
FEDS CR AT FEDS CR, KY	03207875	11.60	1973-75	E	E			
BIG CR AT DUNLAP, KY	03207905	9.55	1974-76	E	E			
ELKFOOT BRANCH NR NIGH, KY	03207915	.70	1980-84	E	E			
ISLAND CR NR PHYLLIS, KY	03207925	2.42	1974	E	E			
LICK CR AT LICK CR, KY	03207935	6.70	1973-76	E	E			
MILLERS CR NR PHYLLIS, KY	03207940	1.68	1973-75	E	E			
DICKS FK AT PHYLLIS, KY	03207962	.82	1975-84	E	E			
GRAPEVINE CR NR PHYLLIS, KY	03207965	6.20	1974-82	E		E	E	
			1989-92					
LEVISA FK BELOW FISHTRAP DAM, NR MILLARD, KY	03208000	392	1938-92*	E		C	E	
ELKHORN CR NR ELKHORN CITY, KY	03209400	48.80	1967-72	E		E	E	
SHELBY CR AT DORTON, KY	03209440	12.60	1971-76*	E	E	E	E	
SHELBY CR AT SHELBIANA, KY	03209460	112.00	1965				E	
			1972-81					
MUD CR AT HAROLD, KY	03209545	51.90	1975-81				E	
BILL D BR NR KITE, KY	03209575	3.17	1976-86			E		
RIGHT FK BEAVER CR AT WAYLAND, KY	03209600	73.90	1959-75				E	
BEAVER CR AT MARTIN, KY	03209700	228.00	1953-72				E	
LEVISA FK AT PRESTONSBURG, KY	03209800	1702.00	1964-81		E			
MIDDLE CR NR PRESTONSBURG, KY	03209890	62.10	1975-81				E	
RACCOON CR NR ZEBULON, KY	03210040	14.80	1974-75*	E	E			
CANEY FK NR GULNARE, KY	03210160	3.74	1974-75*	E	E	E		
BRUSHY FK AT HEENON, KY	03210310	20.40	1974-76	E	E			
BUFFALO CR NR ENDICOTT, KY	03210420	6.21	1974-75*	E	E			
JOHNS CR NR PRESTONSBURG KY	03210500	197.00	1938-40		E			
JOHNS CR NR VAN LEAR, KY	03211500	206	1939-92*	E		C	E	
OPEN FK PAINT CR NR RELIEF, KY	03211945	25.50	1975-81				E	
PAINT CR NR STAFFORDSVILLE, KY	03212000	103.00	1950-75*	E	E	E	E	
KERSHAW BR NR HURLEY, VA	03213577	.60	1981-82		E			
CAMP CR NR ARGO, KY	03213594	1.60	1981-82		E			
KNOX CR AT ARGO, KY	03213600	95.90	1958-72				E	
R FK HURRICANE CR NR STOPOVER, KY	03213630	.82	1980-83		E			
BIG CR NR HATFIELD, KY	03213790	59.10	1975-81				E	
WOLF CR AT PILGRIM, KY	03214400	62.80	1975-81				E	
ROCKCASTLE CR AT CLIFFORD, KY	03214730	121.00	1965-65					E
			1972-81					
BIG SANDY R AUXILIARY AT LOUISA, KY	03214980	3885.00	1938-76		E			
BIG SANDY R AT LOUISA, KY	03215000	3897.00	1939-77		E			C
BLAINE CR ABOVE CAINS CR NR BLAINE, KY	03215362	64.70	1975-81				E	
BLAINE CR NR BLAINE, KY	03215410	119.00	1972-76				E	
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1915-75*	E	E	E	E	
OHIO R AT ASHLAND, KY	03216000	60750.00	1939-75		E			
LITTLE SANDY R AT SANDY HOOK, KY	03216190	35.70	1970-74				E	
LITTLE SANDY R NR SANDY HOOK, KY	03216200	60.40	1954-69				E	
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196	1966-92	E		C	E	
LITTLE SANDY R AT LEON, KY	03216400	255.00	1962-80		C			
LITTLE FK LITTLE SANDY R NR WILLARD, KY	03216438	58.10	1975-81				E	
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1965-65					E
			1972-81					
BECKWITH BR TRIBUTARY NR GRAYSON, KY	03216505	.51	1977-86			E		
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1972-91	E	E	E	E	
E FK LITTLE SANDY R NR CANNNONSBURG, KY	03216550	38.20	1980-81		E		E	
MILE BR NR COALTON, KY	03216564	1.61	1977-86			E		
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1968-76				E	
TYGARTS CREEK AT OLIVE HILL, KY	03216800	59.6	1957-94	E	E	E	E	
TROUGH CAMP CR TRIB NR OLIVE HILL, KY	03216901	1.11	1976-86			E		
TYGARTS CR NR KEHOE, KY	03216935	124.00	1963-74		E			E
BUFFALO CR BELOW GRASSY CR AT KEHOE, KY	03216965	54.60	1975-81				E	
KINNICONICK CR NR KINNICONICK, KY	03237225	60.10	1975-81				E	
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1954-72				E	
LAUREL FK NR CAMP DIX, KY	03237246	57.00	1975-81				E	
SALT LICK CR NR VANCEBURG, KY	03237285	47.50	1954-62					
INDIAN RUN TRIB NR TOLLESBORO, KY	03237895	.23	1975-86					
CABIN CR NR TOLLESBORO, KY	03237900	22.40	1972-91	E	E	E	E	
CABIN CR NR PLUMVILLE, KY	03237985	57.60	1975-78				E	
			1980-81					
OHIO R AT MAYSVILLE, KY	03238000	70130.00	1939-80		E	E		
LAWRENCE CR NR MAYSVILLE, KY	03238030	1.90	1975-86			E		
BRACKEN CR NR AUGUSTA, KY	03238620	28.80	1975-78				E	
			1980-81					

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	1975-78				E	
			1980-81					
TWELVEMILE CR NR CALIFORNIA, KY	03238750	44.30	1975-81				E	
DUCK CR AT COLD SPRING, KY	03238795	.49	1975-78			E		
LICKING R AT FREDVILLE, KY	03248170	40.30	1973-76				E	
LICKING R AT ROYALTON, KY	03248250	76.70	1973-76				E	
LICKING R NR SALYERSVILLE, KY	03248500	140	1939-92	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				E	
			1981					
BLACKWATER CR NR EZEL, KY	03248815	38.30	1974-81					
N FK LICKING R NR WRIGLEY, KY	03248855	33.70	1974-81			E		
LICKING R AT YALE, KY	03249000	714.00	1937-42		E			
LICKING R AT FARMERS, KY	03249500	827	1915-20		E			
			1928-31	E	E			
			1936-87	E	E			
			1938-94	E	E	E	E	
TRIPLETT CR AT MOREHEAD, KY	03250000	47.5	1941-82	E		E	E	
			1989-92					
JACKS BRANCH NR MOREHEAD, KY	03250080	.19	1976-86			E		
SLATE CR NR JEFFERSNVILLE, KY	03250185	56.70	1973-81				E	
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1954-72				E	
ROSE RUN TRIB NR OLYMPIA, KY	03250243	.70	1975-86			E		
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1973-82		E			
FOX CR NR HILLSBORO, KY	03250330	110.00	1953-72			E	E	
FLEMING CR NR HILL TOP, KY	03250470	77.20	1954-72				E	
LICKING R AT BLUE LICK SPRINGS, KY	03250500	1785.00	1938-59*	E	E	E		
JOHNSON CR TRIB NR FAIRVIEW, KY	03250620	.33	1976-86			E		
JOHNSON CR AT PIQUA, KY	03250640	72.40	1973-74				E	
N FK LICKING R NR LEWISBURG, KY	03251000	119.00	1946-91	E	E	E	E	
WELLS CR TRIB NR WASHINGTON, KY	03251008	.96	1977-86		E			
LEES CR TRIB AT MAYS LICK, KY	03251015	.45	1975-86		E			
N FK LICKING R NR MILFORD, KY	03251400	286.00	1954-72		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		
RAVEN CR NR BERRY, KY	03252770	46.60	1973-81			E		
FK LICK CR AT MORGAN, KY	03252940	50.20	1973-81			E		
SF LICKING R AT HAYES, KY	03253000	920.00	1915-31		E			
LICKING R AT BUTLER, KY	03254000	3385.00	1938-42			E		C
N FK GRASSY CR NR PINER, KY	03254400	13.60	1967-83		E			
GRASSY CR AT DEMOSSVILLE, KY	03254460	119.00	1950-72				E	
LICKING R AT MORNING VIEW, KY	03254500	3539.00	1914-16		E			
BANKLICK CR NR S FT MITCHELL, KY	03254680	54.60	1974-81			E		
OHIO R AT CINCINNATI, OH	03255000	76580.00	1936-76		E	E		
PLEASANT RUN CR AT CRESENT SPRINGS, KY	03260010	.68	1973-86			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 BLACKEY, KY	03277340	131.00	1965-65				E	
			1972-81					
ROCKHOUSE CR NR FLETCHER, KY	03277360	51.60	1958-67				E	
LINE FK AT DEFEATED CR, KY	03277370	40.80	1958-76				E	
N FK KENTUCKY R AT 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		

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
TROUBLESOME CR AT NOBLE, KY	03278500	177.00	1950-81		E			
TROUBLESOME CR NR CLAYHOLE, KY	03279000	187.00	1928-31		E			
QUICKSAND CR AT LUNAH, KY	03279400	101.00	1958-72				E	
QUICKSAND CR NR JACKSON, KY	03279500	153.00	1928-31		E			
N FK KENTUCKY R NR AIRDALE, KY	03280500	1294.00	1928-42		E			
MIDDLE FK KENTUCKY R AT ASHER, KY	03280551	70.60	1958-76				E	
GREASY CR AT NAPIER, KY	03280570	37.70	1975-81				E	
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1958-67				E	
MIDDLE FK KENTUCKY R NR HYDEN, KY	03280600	202	1957-92	E		E	E	
BULL CR NR HYDEN, KY	03280728	1.84	1976-86			E		
MIDDLE FK KENTUCKY R AT BUCKHORN, KY	03280900	420.00	1957-75*	E	E	E		
STAMPER FK AT CANOE, KY	03280935	1.57	1975-87			E		
RED BIRD R NR SPRING CR, KY	03281016	52.70	1976-81				E	
RED BIRD R AT BIG CR, KY	03281030	125.00	1954-72			E	E	
GOOSE CR AT GOOSEROCK, KY	03281065	49.60	1976-81				E	
COLLINS FK AT BLUEHOLE, KY	03281080	67.40	1958-76				E	
PACES CR NR GARRARD, KY	03281090	.47	1976-85			E		
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1958-82			E		
SEXTON CR AT TAFT, KY	03281350	71.00	1959-64				E	
			1967					
			1975-77					
			1979-81					
STURGEON CR NR HEIDELBERG, KY	03282045	96.40	1942-72				E	
BIG SINKING CR NR CRYSTAL, KY	03282075	23.4	1988-89*	E	E			
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1988-89*	E	E			
S FK STATION CAMP CR NR DRIP ROCK, KY	03282135	41.40	1959-76				E	
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1954-72				E	
REDLICK CR NR STATION CAMP, KY	03282190	69.50	1959-76				E	
CLEAR CR TRIB NR WEST IRVINE, KY	03282198	.59	1975-86			E		
STILLWATER CR AT STILLWATER, KY	03283000	24.00	1954-73*	E	E	E		
RED R NR PINE RIDGE, KY	03283100	142.00	1969-76					
M FK RED R AT ZACHARIAH, KY	03283305	.58	1975-86			E		
CAT CR NR STANTON, KY	03283370	8.30	1987-89*	E	E			
LULBEGRUD CR TRIB AT WESTBEND, KY	03283610	.33	1975-86					
LULBEGRUD CR AT LOG LICK, KY	03283630	49.30	1973-81				E	
MUDDY CR AT DOYLESVILLE, KY	03283830	63.80	1973-77				E	
			1979-81					
OTTER CR NR FORD, KY	03283995	63.50	1973-77				E	
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-74				E	
SILVER CR NR KINGSTON, KY	03284300	28.60	1967-83		E			
SILVER CR NR BEREA, KY	03284310	53.40	1975-83			E	E	
OLD TOWN BR TR NR RICHMOND, KY	03284340	1.83	1976-85			E		
SILVER CR NR RICHMOND, KY	03284350	98.50	1972-77				E	
			1979-81					
PAINT LICK CR AT PAINT LICK, KY	03284415	54.40	1973-74				E	
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1954-74				E	
SUGAR CR NR BUCKEYE, KY	03284495	41.50	1975-77				E	
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1910-71*	E	E	E		
W HICKMAN CR AT JONESTOWN, KY	03284550	11.00	1975-84		E			
KENTUCKY R AT CAMP NELSON, KY	03284600	4528.00	1940-71		E	E		
DIX R AB COPPER CR NR CRAB ORCHARD, KY	03284720	44.40	1973-76				E	
DIX R BL COPPER CR NR CRAB ORCHARD, KY	03284750	70.60	1973-76				E	
DIX R NR STANFORD, KY	03284800	160.00	1973-76				E	
HANGING FK CR NR STANFORD, KY	03284935	46.90	1973-74				E	
HANGING FK CR NR HUBBLE, KY	03284995	91.10	1973-74				E	
BALLS BR TRIB NR DANVILLE, KY	03285100	.13	1976-86			E		
DIX R NR BURGIN, KY	03285500	395.00	1909-22		E			
KENTUCKY R AT L7 AT HIGHBRIDGE, KY	03286500	5036.00	1901-27		E			
CLEAR CR NR MORTONSVILLE, KY	03287130	61.60	1973-77				E	
GILBERT CR TR NR SALVISA, KY	03287160	.81	1975-78			E		
S BENSON CR NR FRANKFORT, KY	03287534	4.47	1976-86			E		
BENSON CR NR FRANKFORT, KY	03287550	107.00	1943-72				E	
CANE RUN NR GEORGETOWN, KY	03288260	45.40	1973-74				E	
N ELKHORN CR AT SWITZER, KY	03288450	265.00	1972-77				E	
CAVE CR NR FORT SPRING, KY	03288500	2.53	1953-72*	E	E	E	E	
S ELKHORN CR AT FORT SPRING, KY	03289000	24.0	1950-92	E		E	E	
WOLF RUN AT CAMBRIDGE DR AT LEXINGTON, KY	03289190	5.30	1976-88			E		

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
S ELKHORN CR NR WOODLAKE, KY	03289410	156.00	1972-81				E	
FLAT CR NR FRANKFORT, KY	03290000	5.63	1952-71		E	E		
SIX MILE NR DEFOE, KY	03290420	42.60	1973-74				E	
SIX MILE CR NR LOCKPORT, KY	03290490	76.50	1973-74				E	
TOWN CR AT NEW CASTLE, KY	03290580	5.62	1976-86			E		
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74				E	
EAGLE CR AT SADIEVILLE, KY	03291000	42.90	1941-75*	E	E	E	E	
S RAYS FK TRIB NR CORINTH, KY	03291050	0.58	1976-86			E		
EAGLE CR NR NEW COLUMBUS, KY	03291110	124.00	1972-74				E	
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1954				E	
			1957					
			1962					
			1972-81					
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973-76				E	
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1950-72				E	
CORN CR NR BEDFORD, KY	03292100	27.50	1975-81				E	
JEFF BR NR SLIGO, KY	03292200	.87	1976-86			E		
HARRODS CR NR LAGRANGE, KY	03292460	24.1	1967-94	E	E	E	E	
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1972-74				E	
S FK HARRODS CR NR CRESTWOOD, KY	03292472	.97	1975-88			E		
SALT R NR HARRODSBURG, KY	03295000	41.40	1953-73*	E	E	E		
SALT R AT FOX CR, KY	03295290	131.00	1972-76					
SALT R NR VAN BUREN, KY	03295500	196.00	1938-82		E			
BEECH CR NR TAYOLORSVILLE, KY	03295580	53.20	1974-76				E	
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1937-75				E	
			1972-76					
BULLSKIN CR AT FINCHVILLE, KY	03295705		1974-75		E		E	
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1953-72				E	
BRADSHAW CR NR SHELBYVILLE, KY	03295845	1.36	1976-86			E		
SIMPSON CR NR TAYLORSVILLE, KY	03295985	57.30	1974-76			E		
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1955-64*		E			
PLUM CR NR WILSONVILLE, KY	03296500	19.10	1954-61*	E	E	E	E	
PLUM CR SWS N 15 NR WILSONVILLE, KY	03296700	1.03	1957-61*		E			
PLUM CR SWS N 17 NR WATERFORD, KY	03296800	.52	1957-61*		E			
LITTLE PLUM CR NR WATERFORD, KY	03297000	5.15	1954-61*	E	E	E		
PLUM CR AT WATERFORD, KY	03297500	31.80	1954-74*	E	E	E		
COX CR NR HIGHGROVE, KY	03297700	95.80	1968-72				E	
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-91	E	E	E	E	
LONG RUN NR EASTWOOD, KY	03297970	15.20	1974-77*	E	E	E		
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1972-76				E	
ELM LICK CR NR CLERMONT, KY	03298535	.68	1976-86			E		
N ROLLING FK NR GRAVEL SWITCH, KY	03298710	66.20	1974-81				E	
N ROLLING FK AT 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				E	
			1980-81					
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1953-72		E	E		
N PRONG NR WILLISBURG, KY	03300065	1.71	1975-89			E		
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1954-72				E	
CHAPLIN R NR CHAPLIN, KY	03300390	262.00	1972-77				E	
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1972-77				E	
BEECH FK AT FREDERICKTOWN, KY	03300500	542.00	1929-32		E			
HARDINS CR NR HOLY CROSS, KY	03300780	57.80	1975-78				E	
			1980-81					
TOWN CR TRIB AT BARDSTOWN, KY	03300990	.32	1975-86					
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1939-74	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	

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 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	
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	0330600	682	1930-32	E	E			
			1963-94	E	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				E	
			1980-81					
BIG PITMAN CR NR SUMMERSVILLE, KY	03307295	126.00	1953-72				E	
BIG BRUSH CR NR SUMMERSVILLE, KY	03307400	45.70	1974-78				E	
			1980-81					
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	
MCDOUGAL 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 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		
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1961-74			E	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	533.00	1939-63	E	E	E		
LITTLE BEAVER CR NR GLASGOW, KY	03312795	.89	1976-86			E		
BARREN R NR FINNEY, KY	03313000	942	1941-50	E	E	E	E	
			1960-94	E	E	E	E	
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	
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	
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	

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
GREEN R NR PARADISE, KY	03316500	6182.00	1940-81		E			
			1961-81					
MUD R NR HUNTSVILLE, KY	03316275	268	1974-80				E	
			1991-94	E	E	E	E	
ROUGH R NR MADRID, KY	03317000	225.00	1936-59	E	E	E		
N FK ROUGH T NR WESTVIEW, KY	03317500	42.00	1954-73*	E	E	E		
LONG LICK CR TRIB NR AXTEL, KY	03317965	.38	1975-86			E		
ROUGH R NR FALLS OF ROUGH, KY	03318000	454.00	1940-56		E			
ROCK LICK CR NR GLEN DEAN, KY	03318200	20.10	1955-71*	E	E		E	
ROUGH R AT FALLS OF ROUGH, KY	03318500	504	1939-94	E	E	E	E	
CANEY CR NR HORSE BRANCH, KY	03318800	124	1956-1992	E	E	E	E	
ROUGH R NR DUNDEE, KY	03319000	757	1939-1992	E		E	E	
W FK ADAMS FK NR FORDSVILLE, KY	03319520	.26	1976-86			E		
POND R NR WHITE PLAINS, KY	03321000	343.00	1927-40	E	E	E		
CYPRESS CR NR CALHOUN, KY	03321210	142	1979-81	E	E			
			1990-94	E	E	E	E	
CYPRESS CR NR RUMSEY, KY	03321215	149.00	1972-76				E	
E FK DEER CR TRIB NR ONTON, KY	03321275	.95	1976-86			E		
S FK PANTHER CR NR WHITESVILLE, KY	03321350	58.20	1968-83		E			
S FK PANTHER CR NR MASONVILLE, KY	03321370	109.00	1954-72				E	
N FK PANTHER CR NR MASONVILLE, KY	03321410	88.30	1954-72				E	
RHODES CR TRIB NR OWENSBORO, KY	03321465	.29	1975-86			E		
GREEN R AT LOCK AND DAM 1 AT SPOTTSVILLE, KY	03321500	9181.00	1928-31		E			
OHIO R AT MOUNT VERNON, KY	03322250		1977-80		E			
HIGHLAND CR NR WAVERLY, KY	03322350	62.30	1975-77				E	
HIGHLAND CR NR UNIONTOWN, KY	03322400	166.00	1953-77				E	
WARD CR AT LEWISTOWN, KY	03382975	.91	1975-86			E		
TRADEWATER R NR DALTON, KY	03383500	283.00	1927-40		E	E		
W FK DONALDSON CR NR FREDONIA, KY	03383605	2.52	1975-86			E		
CLEAR CR NR RICHLAND, KY	03383755	17.0	1966-80				E	
			1991-94		E			
ROSE CR AT NEBO, KY	03384000	2.10	1952-70*	E	E	E		
TRADEWATER R	03384180	861	1975-80					E
			1980-81	E	E			
OHIO R AT DAM 51 AT GOLCONDA, IL	03384500	143900.00	1941-52		C			
POOR FK AT HARLAN, KY	03400000	51.70	1940-43		E			
POOR FK AT CUMBERLAND, KY	03400500	82.3	1940-1992	E		C	E	
POOR FK AT ROSSPOINT, KY	03400585	142.00	1972-77				E	
WOOD CR NR LONDON, KY	03400600	3.89	1953-71			E		
			1972-87			E		
CLOVER FK AT EVARTS, KY	03400700	82.40	1959-83			E		
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1985-90*	E	E	E	E	
CRANE CR NR SMITH, KY	03400796	1.63	1976-77		E			
MARTINS FK AT HARLAN, KY	03400985	116.00	1960					E
CLOVER FK AT HARLAN, KY	03400990	222	1977-1992	E	E	E	E	
PEARL BR AT WALLINS CR, KY	03401040	1.40	1976-85			E		
LITTLE YELLOW CR AT MIDDLESBORO, KY	03401400	10.80	1959-66		E	E		
YELLOW CR BYPASS AT MIDDLESBORO, KY	03401500	35.30	1941-83			E		
SHILALAN CR NR PAGE, KY	03402020	2.96	1976-86			E		
YELLOW CR NR FERNDALE, KY	03402230	99.50	1972-81				E	
CLEAR CR AT CLEAR CR SPRINGS, KY	03402480	38.50	1975-81				E	
CUMBERLAND R AT PINEVILLE, KY	03402500	676.00	1928-31		E			
LEFT FK STRAIGHT CR AT CARY, KY	03402850	33.70	1958-76				E	
STRAIGHT CR AT STRAIGHT CR, KY	03402852	89.80	1953-67				E	
STINKING CR AT DEWITT, KY	03403180	49.10	1961-75				E	
ROAD E CR AT DEWITT, KY	03403255	25.20	1961-75				E	
RICHLAND CR NR BARBOURVILLE, KY	03403530	27.70	1961-76				E	
LITTLE RICHLAND CR NR HINKLE, KY	03403538	11.60	1974-83			E		
CLEAR FK AT SAXTON, KY	03403910	331.00	1968-90*	E	E	E	E	
JELLICO CR NR WILLIAMSBURG, KY	03404200	103.00	1953-72				E	
MARSH CR NR WHITELY CITY, KY	03404390	72.00	1960-61				E	
			1974-81					
CUMBERLAND R AT CUMBERLAND FALLS, KY	03404500	1,977	1907-11	E	E			
			1914-94	E	E	E	E	
LAUREL R NR LILY, KY	03404688	52.30	1974-81				E	
LITTLE LAUREL R NR LILY, KY	03404810	42.40	1975-81				E	
LAUREL R AT MUNICIPAL DAM NR CORBIN, KY	03404820	140	1973-1992	E		C	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
GOZEY HOLLOW NR CORBIN, KY	03404867	.31	1976-85			E		
LAUREL R AT CORBIN, KY	03405000	201.00	1910-73	E	E	E		
LAUREL R NR VOX, KY	03405500	245.00	1929-31		E			
S FK ROCKCASTLE R NR PEOPLES, KY	03405700	95.10	1961-72				E	
MIDDLE FK ROCKCASTLE R NR PARROT, KY	03405818	79.00	1975-81				E	
HORSE LICK CR NR LAMERO, KY	03405842	61.70	1975-81				E	
BIG HURRICANE BR AT CONWAY, KY	03405854	1.91	1976-85			E		
ROUNDSTONE CR AT HOMMEL, KY	03405868	52.90	1975-81				E	
ROUNDSTONE CR AT LIVINGSTON, KY	03405900	144.00	1953-76					
WOOD CR NR LONDON, KY	03406000	3.89	1954-71*	E	E	E	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			E		
OTTER CR NR SUSIE, KY	03413345	67.10	1953-66				E	
WILLIAMS CR TRIB NR CARTWRIGHT, KY	03413425	.76	1976-86			E		
CUMBERLAND R NR ROWENA, KY	03414000	5790	1939-1992	E	E	E	E	
CROCUS CR NR BAKERTON, KY	03414080	108.00	1972-76				E	
BEAR CR NR BURKESVILLE, KY	03414102	352.00	1976-87			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 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			
DRY CR NR LAMASCO, KY	03438167	34.60	1968-72			E	E	
EDDY CR NR LAMASCO, KY	03438170	71.70	1968-74				E	
KENTUCKY-BARKLEY CANAL NR GRAND RS, KY	03438191		1971-74		E			
CUMBERLAND R AT EUREKA, KY	03438200	17594.00	1939-64		E			
LIVINGSTON CR NR DYCUSBURG, KY	03438470	112.00	1954-74				E	
TENNESSEE R AT SHANNON DAM SITE NR MURRAY, KY	03608000	39780.00	1931-37		E			
TENNESSEE R AT AURORA LANDING, KY	03608500	40010.00	1930-32		E			
TENNESSEE R NR PADUCAH, KY	03609500	40200.00	1941-89			E		
CLARKS R AT MURRAY, KY	03610000	89.70	1952-71*	E	E	E		
CLARKS R NR BENTON, KY	03610500	227.00	1938-73*	E	E	E		
WEST FK CLARKS R NR BREWERS, KY	03610545	68.7	1968-83	E	E	E	E	
			1988-94	E	E	E	E	
CHESTNUT CR NR BENTON, KY	03610503	.82	1975-86			E		
CLARKS R TRIB NR REIDLAND, KY	03610820	.13	1975-86			E		
OHIO R AT PADUCAH, KY	03611000	202800.00	1873-75		C			
LITTLE BAYOU CR NR GRAHAMVILLE, KY	03611600	5.78	1990-91	E	E	E	E	
BAYOU CR NR HEATH, KY	03611800	6.55	1990-91	E	E	E	E	
BAYOU CR NR GRAHAMVILLE, KY	03611850	14.90	1990-91	E	E	E	E	
HUMPHREY CR AT LACENTER, KY	03613000	44.20	1953-72				E	
PERRY CR NR MAYFIELD, KY	07022500	1.72	1953-65*	E	E	E	E	
			1968-72					
MAYFIELD CR NR BLANDVILLE, KY	07023100	295	1938-72	E	E			
			1991-94		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
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	
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. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
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
SALTLICK 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 PRESTONBURG, 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. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
BIG SANDY R AT LOUISA, KY	03215000	3897	1950, 1966-72, 1974-92	N	N	N	N
LEFT FK BLAINE CR NR MARTHA, KY	03215250		1980-82		N	N	N
LOWER LAUREL CR NR FLATGAP, KY	03215320		1967		N		N
CAINES CR NR BLAINE, KY	03215367		1980-82		N	N	N
BLAINE CR AT HWY 32 BR AT BLAINE, KY	03215370	73.80	1978-80		N		N
HOOD CR AT BLAINE, KY	03215380		1980-82		N	N	N
BRUSHY CR NR CORDELL, KY	03215420		1980-82		N	N	N
BLAINE CR BELOW BRUSHY CR NR BLAINE, KY	03215430	151.00	1971-80		N		N
RICH CR NR ADAMS, KY	03215440		1971-72		N		N
LITTLE BLAINE CR NR EVERGREEN, KY	03215470		1980-82		N	N	N
LITTLE BLAINE CR AT EVERGREEN, KY	03215480	23.00	1971-80		N		N
BLAINE CR NR YATESVILLE, KY	03215490	206.00	1971-72		N		N
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1965-79		Y		N
CAT FK CR AT FALLSBURG, KY	03215550		1980-82		N	N	N
BIG SANDY R AT CATLETTSBURG, KY	03215700	4281.00	1955-75		N		N
LITTLE SANDY R AT SANDY HOOK, KY	03216180		1980-82		N	N	N
BIG CANEY CR NR STARK, KY	03216230		1980-82		N	N	N
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196.00	1966-79		N		N
BIG SINKING CR NR ADEN, KY	03216370		1980-82		N	N	N
LITTLE SANDY R AT LEON, KY	03216400	255.00	1978-80		N		
LITTLE SANDY R AT DOBBINS, KY	03216430		1980-82		N	N	N
DRY FK AT WILLARD, KY	03216450		1980-82		N	N	N
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1973-75		N		N
BERET CR NR GRAYSON, KY	03216520		1980-82		N	N	N
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1978-83		N		
E FK LITTLE SANDY R NR CANNONSBURG, KY	03216558		1980-82		N	N	N
WILLIAMS CR AT PRINCESS, KY	03216567		1980-82		N	N	N
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1970-72		N		N
OHIO R AT GREENUP DAM, KY	03216600	62000.00	1974-86	N	N	N	N
SOLDIER FK AT LAWTON, KY	03216770		1971-72		N		N
TYGARTS CR AT IRON HILL, KY	03216930		1971-72		N		N
BUFFALO CR NR GESLING, KY	03216960		1980-82		N	N	N
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1970-72		N		N
OHIO R AT MELDAHL DAM NR CHILO, OH	03238680	70800.00	1967-70		N		N
OHIO R AT RAW WATER INTAKE, CINCINNATI, OH	03238800		1970				N
LICKING R NR FREDVILLE, KY	03248165		1980-82		N	N	N
BURNING FK AT SAYLERSVILLE, KY	03248380		1980-82		N	N	N
LEFT FK NR HENDRICKS, KY	03248520		1980-82		N	N	N
RIGHT FK AT FRITZ, KY	03248530		1980-82		N	N	N
JOHNSON CR AT KERNIE, KY	03248560		1980-82		N	N	N
LICK CR NR BLOOMINGTON, KY	03248580		1980-82		N	N	N
WHITE OAK CR AT WHITE OAK, KY	03248610		1980-82		N	N	N
WILLIAMS CR NR ELAMTON, KY	03248670		1980-82		N	N	N
ELK FK NR LENOX, KY	03248685	59.40	1980-82		N	N	N
CANEY CR NR CANEY, KY	03248710		1980-82		N	N	N
GRASSY CR AT GRASSY CREEK, KY	03248750		1980-82		N	N	N
LICKING R AT FARMERS, KY	03249500	827.00	1948-79		N	N	N
TRIPLETT CR AT MOREHEAD, KY	03250000	47.50	1978-80		N		
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1970-71		N		N
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1978-83		N		
LICKING R AT SHERBURNE, KY	03250400		1981-83	N	N	N	N
N FK LICKING R NR MILFORD, KY	03251400	286.00	1970-72		N		N
LICKING R AT MCKINNEYSBURG, KY	03251500	2326.00	1951-79		N	N	N
STONER CR NR MIDDLETOWN, KY	03251665	51.60	1974		N		N
HINKSTON CR NR SHARPSBURG, KY	03252190	78.90	1973		N		N
HINKSTON CR NR CARLISLE, KY	03252300	154.00	1970-74		N		N
S FK LICKING R AT CYNTHIANA, KY	03252500	621.00	1949-83	N	N	N	N
LICKING R AT CATAWBA, KY	03253500	3300.00	1962-79		N		N
OHIO R AT MARKLAND DAM, KY	03277200	83170.00	1960-70	N	N	N	N
			1974-86	N	N	N	N
OHIO R AT LOCK AND DAM 39 NR FLORENCE, KY	03277205	82910.00	1953-75		N		

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI^2)	PERIOD OF RECORD	BIO. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
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 BLACKEY, 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 CORNETTSVILLE, 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	N	N	N	N
			1979-81				
			1987-91				
CANE CR NR JACKSON, KY	03280100		1980-82		N	N	N
ROCKHOUSE CR NR HYDEN, KY	03280360		1980-82		N	N	N
FROZEN CR NR TAULBEE, KY	03280400		1980-82		N	N	N
BOONE FK NR VANCLEAVE, KY	03280450		1980-82		N	N	N
MIDDLE FK KENTUCKY R NR WARBRANCH, KY	03280520		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT ASHER, KY	03280530		1971		N		N
BEECH FK NR HELTON, KY	03280540		1980-82		N	N	N
BEECH FK AT ASHER, KY	03280550	33.90	1971		N		N
GREASY CR NR NAPIER, KY	03280560		1980-82		N	N	N
LAUREL FK NR LEWIS CREEK, KY	03280575		1980-82		N	N	N
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1971		N		N
MIDDLE FK KENTUCKY R NR HAYDEN, KY	03280600	202.00	1975-82	N	N	N	N
			1988		N		N
CUTSHIN CR NR CINDA, KY	03280670		1980-82		N	N	N
HELL FOR CERTAIN CR NR KALIOPI, KY	03280750		1980-82		N	N	N
TURKEY CR NR TURKEY, KY	03280950		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT TALLEGA, KY	03281000	537.00	1950-75	N	N	N	N
			1978-83				
			1987-90				
RED BIRD R AT BIG CREEK, KY	03281030	125.00	1970-72		N		N
BIG CR NR BIG CREEK, KY	03281035		1980-82		N	N	N
HECTOR BRANCH NR ERILINE, KY	03281045		1980-82		N	N	N
GOOSE CR NR GOOSEROCK, KY	03281065	49.60	1979-82		N	N	N
COLLINS FK NR BLUEHOLE, KY	03281075		1980-82		N	N	N
HORSE CR NR HIMA, KY	03281097		1980-82		N	N	N
LITTLE GOOSE CR NR MANCHESTER, KY	03281133		1980-82		N	N	N
BULLSKIN CR NR BRUTUS, KY	03281175		1980-82		N	N	N
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1970-72		N		N
SEXTON CR NR CHESTNUTBURG, KY	03281340		1980-82		N	N	N
LOWER ALLEN CR NR CONKLING, KY	03281360		1980-82		N	N	N
S FK KENTUCKY R AT BOONEVILLE, KY	03281500	722.00	1950-75	N	N	N	N
			1979-83				
			1987-90				

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI^2)	PERIOD OF RECORD	BIO. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
BIG SINKING CR NR CRYSTAL, KY	03282075	23.40	1987-89		N	N	N
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1987-89		N	N	N
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1970-72		N		N
KENTUCKY R NR TRAPP, KY	03282300		1982-83		N	N	N
RED R AT DAYSBORO, KY	03282400		1980-82		N	N	N
RED R NR PINE RIDGE, KY	03283100	142.00	1968-76		N		N
CAT CR NR STANTON, KY	03283370	8.30	1987-89		N	N	N
KENTUCKY R AT LOCK 10 NR WINCHESTER, KY	03284000	3955.00	1987-91	N	N	N	N
BAUGHMAN FK AT GENTRY ROAD NR ATHENS, KY	03284090	7.18	1967-68		N		N
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-68		N		N
KENTUCKY R NR LEXINGTON, KY	03284105		1970				N
SILVER CR NR KINGSTON, KY	03284300	28.60	1978-83		N		
SILVER CR NR RICHMOND, KY	03284350		1973-75		N		N
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1970-72		N		N
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1948-75		N		N
DIX R NR STANFORD, KY	03284800	160.00	1973-75		N		N
HANGING F CR NR STANFORD, KY	03284935	46.90	1974		N		N
DIX R NR DANVILLE, KY	03285000	318.00	1988		N		N
DIX R AT DIX DAM NR BURGIN, KY	03286200	439.00	1961-79		N		N
KENTUCKY R AT LOCK 4 AT FRANKFORT, KY	03287500	5411.00	1949-73	N	N	N	N
			1987-90				
BENSON CR AT FRANKFORT, KY	03287530	71.20	1973		N		N
BENSON CR NR FRANKFORT, KY	03287550	107.00	1970-72		N		N
N ELKHORN CR AT BRYAN STATION RD AT MONTROSE, KY	03287600	21.50	1967-68		N		N
N ELKHORN CR UNNAMED TR AT MUIR STA RD NR MUI, KY	03287620	15.80	1967-68		N		N
N ELKHORN CR AT HUFFMAN MILL RD NR MATTOXTOWN, KY	03287700	62.70	1967-68		N		N
GOOSE CR AT MT HOREB RD NR NEWTOWN, KY	03287800	14.20	1967-68		N		N
GOOSE CR AT NEWTOWN RD, NR NEW ZION, KY	03287810		1967		N		N
N ELKHORN CR NR GEORGETOWN, KY	03288000	119.00	1988-89		N		N
CANE RUN AT BEREA 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
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74		N		N
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1973-75		N		N
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973		N		N
EAGLE CR AT GLENCOE, KY	03291500	437.00	1948-79		N	N	N
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1970-72		N		N
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1974-75		N		N
OHIO R AT WATER SUPPLY INTAKE AT LOUISVILLE, KY	03292494		1970				N
S FK BEARGRASS CR AT LOUISVILLE, KY	03292500	17.2	1988-92		N		
MIDDLE FK BEARGRASS CR AT LOUISVILLE, KY	03293000	18.9	1988-92		N		
OHIO R AT LOUISVILLE, KY	03294500	91170.00	1968-83		N	N	N
MILL CR CUTOFF NR LOUISVILLE, KY	03294550	24.4	1988-92		N		
OHIO R AT KOSMOSDALE, KY	03294600	91200.00	1970				N
SALT R NR HARRODSBURG, KY	03295000	41.40	1970-72		N		N
SALT R NR VAN BUREN, KY	03295500	196.00	1970-79		N		N
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1970-72		N		N
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1970-72		N		N
BRASHEARS CR AT TAYLORSVILLE, KY	03295900	262.00	1973-75		N		N
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1953-64			N	
PLUM CR AT WATERFORD, KY	03297500	31.80	1953-61		N	N	N
COX CR NR HIGHGROVE, KY	03297700	95.80	1970-72		N		N
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-83	N	N	N	N
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1973-75		N		N
SALT R AT SHEPHERDSVILLE, KY	03298500	1197	1948-75	N	N	N	N
			1979-92				
N ROLLING FK AT BRADSFORDVILLE, KY	03298760	95.70	1973-75		N		N
ROLLING FK NR LEBANON, KY	03299000	239.00	1970-80		N		N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI^2)	PERIOD OF RECORD	BIO. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1970-72		N		N
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1970-72		N		N
BEECH FK AT MAUD, KY	03300400	436.00	1979-83	N	N	N	N
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1973-75		N		N
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1962-72		N		N
ROLLING FK NR BOSTON, KY	03301500	1299.00	1948-79		N		N
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-92		N		
POND CR NR LOUISVILLE, KY	03302000	64.0	1988-92		N		
SALT R AT MOUTH NR LOUISVILLE, KY	03302060		1970				N
OTTER CR NR VINE GROVE, KY	03302080		1970-71		N		N
OTTER CR AT GRAHAMTON, KY	03302100	88.40	1970-72		N		N
DOE RUN NR BRANDENBURG STATION, KY	03302150	52.70	1970-72		N		N
SINKING CR NR LODIBURG, KY	03303205	125.00	1971		N		N
SINKING CR AT SAMPLE, KY	03303210	222.00	1970		N		N
BEECH FK NR CLOVERPORT, KY	03303220		1980-82		N	N	N
TAR FK NR CLOVERPORT, KY	03303230		1980-82		N	N	N
OHIO R AT CANNELTON DAM, KY	03303280	97000.00	1975-86	N	N	N	N
BLACKFORD CR NR MACEO, KY	03303447		1980-82		N	N	N
BLACKFORD CR NR MACEO, KY	03303450	111.00	1973-75		N		N
PUP CR NR MACEO, KY	03303490		1980-82		N	N	N
OHIO R AT OWENSBORO, KY	03303500	97200.00	1970				N
GREEN R NR MCKINNEY, KY	03305000	22.40	1970-72		N		N
GREEN R NR DUNNVILLE, KY	03305660	221.00	1973-75		N		N
GREEN R AT NEATSVILLE, KY	03305800	399.00	1959-72		N	N	N
CASEY CR AT CASEY CR, KY	03305865	74.70	1973-75		N		N
GREEN R AT GREENSBURG, KY	03306500	736.00	1948-59		N		
BIG PITMAN CR NR GREENSBURG, KY	03307300		1966		N		N
LITTLE BARREN R NR MONROE, KY	03307800	244.00	1960-72		N		N
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
MCDOUGAL CR AT HODGENVILLE, KY	03309600		1970		N		N
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1970-72		N		N
N FK NOLIN R NR EAGLE MILLS, KY	03310030		1970-79		N		N
NOLIN R AT EAGLE MILLS, KY	03310100		1970-72		N		N
MIDDLE CR AT NEELY BRANCH, KY	03310117		1971		N		N
MIDDLE CR NR TONIEVILLE, KY	03310120		1970-72		N		N
MIDDLE CR AT EAGLE MILLS, KY	03310130		1971-72		N		N
NOLIN R NR GLENDALE, KY	03310160	185.00	1971-75		N		N
VALLEY CR AT ELIZABETHTOWN, KY	03310210		1970-73		N		N
VALLEY CR AT GAITHERS, KY	03310225		1971-73		N		N
W RHUDES CR NR CECILIA, KY	03310250		1970-72		N		N
VALLEY CR NR GLENDALE, KY	03310270	90.10	1960-75		N		N
NOLIN R NR STAR MILLS, KY	03310273		1971-72		N		N
NOLIN R AT WAX, KY	03310500	600.00	1949-61		N	N	N
ROCK CR NR CLARKSON, KY	03310550		1980-82		N	N	N
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74		N		N
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1965-74		N		N
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762.00	1978-82		N		
BEAVERDAM CR AT RHODA, KY	03311600	10.90	1965-79		N		N
BEAR CR NR BEE SPRING, KY	03312040		1980-82		N	N	N
SUNFISH CR NR BEE SPRING, KY	03312070		1980-82		N	N	N
BEAR CR NR ROUNDHILL, KY	03312100	137.00	1960-72		N		N
BIG REEDY CR NR ROUNDHILL, KY	03312120		1980-82		N	N	N
LITTLE REEDY CR NR ROUNDHILL, KY	03312130		1980-82		N	N	N
BARREN R AT ACKERSVILLE, KY	03312400	298.00	1970-72		N		N
SKAGGS CR NR GLASGOW, KY	03312680	141.00	1970-72		N		N
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

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI^2)	PERIOD OF RECORD	BIO. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
JENNINGS CR AT US 231 AT BOWLING GREEN, KY	03314650		1968		N		N
JENNINGS CR BELOW LOST R OUTLET AT BOWLING GREEN, KY	03314680		1968		N		N
JENNINGS CR AT BARREN R RD NR BOWLING GREEN, KY	03314700		1968		N		N
GASPER R AT HADLEY, KY	03315300	190.00	1960-72		N		N
WELCH CR NR ABERDEEN, KY	03315510		1980-82		N	N	N
INDIAN CAMP CR NR MORGANTOWN, KY	03315590		1980-82		N	N	N
E PRONG INDIAN CAMP CR NR MORGANTOWN, KY	03315600		1980-82		N	N	N
MUDDY CR AT DUNBAR, KY	03315810	94.30	1960-82		N	N	N
PANTHER CR NR ROCHESTER, KY	03315830		1980-82		N	N	N
MUD R NR LEWISBURG, KY	03316000	90.50	1960-72		N		N
WOLFLICK CR NR LEWISBURG, KY	03316200	116.00	1970-72		N		N
ROCKY CR NR PENROD, KY	03316300		1980-82		N	N	N
GREEN R AT PARADISE, KY	03316500	6183.00	1978-82		N		
POND CR NR MARTWICK, KY	03316640	125.00	1972-82		N	N	N
LEWIS CR AT ROCKPORT, KY	03316660		1980-82		N	N	N
MEETING CR NR BIG CLIFTY, KY	03316885		1980-82		N	N	N
N FK ROUGH R NR WESTVIEW, KY	03317500	42.00	1970-72		N		N
ROUGH R AT ROUGH R DAM NR FALLS OF ROUGH, KY	03318010	454.00	1962-83		N		
ROCK LICK CR NR FALLS OF ROUGH, KY	03318300		1980-82		N	N	N
SHORT CR NR FALLS OF ROUGH, KY	03318600		1980-82		N	N	N
S FK CANEY CR AT CANEYVILLE, KY	03318700		1980-82		N	N	N
ADAMS FK NR FORDSVILLE, KY	03319510		1980-82		N	N	N
W FK ADAMS FK NR FORDSVILLE, KY	03319530		1980-82		N	N	N
HALLS CR NR DUNDEE, KY	03319570		1980-82		N	N	N
ROUGH R AT HARTFORD, KY	03319600		1966-72		N		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

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
COPPERAS CR AT HWY BRIDGE NR ILSLEY, KY	03382835		1966-67		N		N
CANY CR AT MOUTH NR DAWSON SPRINGS, KY	03382855		1965-67		N		N
TRADEWATER R AT ST HWY 109 AT DAWSON SPRINGS, KY	03382870	143.00	1966-67		N		N
PINY CR BL LK BESHEAR D NR DAWSON SPRINGS, KY	03382890		1966-67		N		N
TRADEWATER R AT OLNEY, KY	03383000	255.00	1949-83	N	N	N	N
TRADEWATER R NR DALTON, KY	03383500	283.00	1965-66		N		N
DONALDSON CR NR FRYER, KY	03383650		1980-82		N	N	N
DONALDSON CR AT BR ON HWY 293 NR DALTON, KY	03383700		1966		N		N
TRADEWATER R AT ST HWY 293 NR DALTON, KY	03383710		1965-66		N		N
CLEAR CR AT HWY 70 BR NR RICHLAND, KY	03383755	17.00	1966-82		N	N	N
RICHLAND CR ABOVE TRIBUTARY NO 1 NR ILSLEY, KY	03383770		1966-67		N		N
UNNAMED TRIB NO 1 TO RICHLAND CR NR ILSLEY, KY	03383775		1966-67		N		N
UNNAMED TRIB NO 2 TO RICHLAND CR NR ILSLEY, KY	03383780		1966-67		N		N
RICHLAND CR AT RICHLAND, KY	03383800		1966		N		
UNNAMED TRIB TO CLEAR CR NR BEULAH, KY	03383901		1966		N		N
LICK CR NR RABBIT RIDGE, KY	03384035		1980-82		N	N	N
CLEAR CR AT BRIDGE ON ST HWY 293 NR PROVIDENCE, KY	03384050	197.00	1966-67		N		N
TRADEWATER R AT DAM NR PROVIDENCE, KY	03384060		1965-66		N		N
TRADEWATER R AT BRIDGE BELOW DAM NR PROVIDENCE, KY	03384072		1966-67		N		N
TRADEWATER R NR PROVIDENCE, KY	03384100	605.00	1965-72		N		N
TRADEWATER R NR BLACKFORD, KY	03384103		1980		N	N	N
PINEY CR NR SHADY GROVE, KY	03384106		1980-82		N	N	N
UNNAMED TRIB TO SLOVER CR NR PROVIDENCE, KY	03384133		1968				N
SLOVER CR NR CLAY, KY	03384136		1969		N		N
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384138		1969		N		N
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384140		1969-79		N		N
FREDRICKS DITCH NR CLAY, KY	03384145		1969		N		N
CRABORCHARD CR NR CLAY, KY	03384150		1965-82		N	N	N
CRABORCHARD CR NR CLAY, KY	03384151		1969		N		N
CRABORCHARD CR AT CLAY, KY	03384152		1966		N		N
CRABORCHARD CR AT CLAY, KY	03384154	86.60	1969-72		N	N	N
CANEY FK NR CLAY, KY	03384158		1980-82		N	N	N
TRADEWATER R NR SULLIVAN, KY	03384180	861.19	1975-77		N	N	N
SMITH DITCH NR STURGIS, KY	03384200		1980-82		N	N	N
LOONEY CR NR CLUTTS, KY	03400480		1980-82		N	N	N
CLOVER FK NR SHIELDS, KY	03400650		1980-82		N	N	N
CLOVER FK AT EVARTS, KY	03400700	82.40	1960-72		N		N
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1986-88			N	
CRANE CR NR SMITH, KY	03400796	1.63	1978-80		N		
BROWNICE CR NR OAKS, KY	03401290		1980-82		N	N	N
CLEAR CR NR PINEVILLE, KY	03402400		1980-82		N	N	N
LITTLE CLEAR CR NR PINEVILLE, KY	03402450		1980-82		N	N	N
STRAIGHT CR NR KETTLE ISLAND, KY	03402800		1980-82		N	N	N
LEFT FK STRAIGHT CR NR CARY, KY	03402830		1980-82		N	N	N
MIDDLE FK STINKING CR NR WALKER, KY	03403100		1980-82		N	N	N
ROAD FK CR NR BARNYARD, KY	03403150		1980-82		N	N	N
LITTLE INDIAN CR NR PERMON, KY	03403550		1980-82		N	N	N
FOURMILE BRANCH NR BRYANTS STORE, KY	03403590		1980-82		N	N	N
WATTS CR NR WOFFORD, KY	03404100		1980-82		N	N	N
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

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI^2)	PERIOD OF RECORD	BIO. ACTIVE STATUS	PHY. ACTIVE STATUS	SED. ACTIVE STATUS	CHEMICAL ACTIVE STATUS
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	Y	N
HELTON BRANCH AT GREENWOOD, KY	03407300	.85	1955-73		N	N	N
BUCK CR AT DYKES, KY	03407640	253.00	1973-75		N		N
ROARING PAUNCH CR NR BARTHELL, KY	03410530		1980-82		N	N	N
ROCK CR AT WHITE OAK JUNCTION, KY	03410560		1980-82		N	N	N
S FK CUMBERLAND R NR YAMACRAW, KY	03410600	1083.00	1948-76		N		
WOLF CR AT WOLF CREEK, KY	03410700		1980-82		N	N	N
LITTLE S FK CUMBERLAND R NR OIL VALLEY, KY	03410900	98.20	1970-72		N		N
S FK CUMBERLAND R AT NEVELSVILLE, KY	03411000	1271.00	1960-75		N		
SINKING CR NR GREGORY, KY	03411100		1980-82		N	N	N
PUCKETT CR NR PATHFORK, KY	03411250		1980-82		N	N	N
PITMAN CR AT SOMERSET, KY	03412500	31.30	1970-72		N		N
FISHING CR NR HOGUE, KY	03412700	59.80	1970-72		N		N
CUMBERLAND R NR ROWENA, KY	03414000	5790.00	1965-79		N		N
CROCUS CR NR BAKERTON, KY	03414080	108.00	1973-75		N		N
CUMBERLAND R NR BURKESVILLE, KY	03414110	6050.00	1948-79		N		N
RED R NR ADAIRVILLE, KY	03435100	229.00	1970-72		N		N
WHIPPOORWILL CR NR CLAYMOUR, KY	03435140	20.80	1978-82		N		
WHIPPOORWILL CR AT DOT, KY	03435265	115.00	1973-75		N		N
ELK FK NR HADENSVILLE, KY	03435380	88.50	1973-75		N		N
W FK RED R NR SAINT ELMO, KY	03436190	162.00	1973-75		N		N
S FK LITTLE R AT HOPKINSVILLE, KY	03437500	46.50	1949-75		N		
LITTLE R NR CADIZ, KY	03438000	244.00	1958-73		N	N	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
375958085575401	Hardin	Hart #1	1980-92
380308085533501	Jefferson	79-4	1979-92
380434085525101	Jefferson	E-1-d	1980-92
380616085532801	Jefferson	Lou. Ext. Water District	1962-92
380637085521301	Jefferson	D-1-d	1980-92
380718085515802	Jefferson	C-3-s	1984-92
380718085524202	Jefferson	C-4-m	1983-92
380843085522801	Jefferson	B-2-d	1980-92
380846085520101	Jefferson	B-1-d	1980-92
380852085515901	Jefferson	Waller	1943-92
381011085491601*	Jefferson	86-1	1986-93
381102085512102	Jefferson	Kaufman	1944-92
381108085511301	Jefferson	Baugh	1945-92
381155085483401	Jefferson	Mathis	1944-92
381157085510201	Jefferson	RR-39	1945-92
381212085473801	Jefferson	C-6	1935-92
381221085475001	Jefferson	C-5	1935-92
381224085474001	Jefferson	Early Times	1947-92
381229085510201	Jefferson	Triangle Refinery	1978-92
381250085484901	Jefferson	C-2	1935-92
381256085471501	Jefferson	National Distillery TW-2	1941-92
381259085471502	Jefferson	National Distillery TW-1	1941-92
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
381316085502101	Jefferson	Airco TW-12	1956-92
381324085460401*	Jefferson	American Standard	1978-93
381338085481601	Jefferson	CP-8	1977-92
381355085465901	Jefferson	Louisville Cooperage	1948-92
381406085463001	Jefferson	United Catalyst	1978-92
381424085454602	Jefferson	CP12A	1980-92
381430085452602	Jefferson	Conna	1943-92
381500085445501	Jefferson	89-2	1989-92
381500085454701	Jefferson	78-5	1978-92
381503085452601	Jefferson	Stewarts	1981-92
381505085475701	Jefferson	CP-5	1977-92
381514085453502	Jefferson	CP11A	1984-92
381517085455501	Jefferson	86-6	1986-92
381524085452301	Jefferson	86-8	1986-92
381528085454201	Jefferson	86-9	1986-92
381536085492801	Jefferson	CP-2	1977-92
381538085434401*	Jefferson	78-7	1978-92
381613085421901	Jefferson	WC-14	1946-92
381628085473101	Jefferson	CP-13	1978-92
381701085414002	Jefferson	WC-8A	1979-92
381722085405801	Jefferson	WC-11	1946-92
381742085402001	Jefferson	WC-13	1946-92
381827085392401	Jefferson	WC-26	1946-92
371033082374301*	Letcher	C&ORR	1962-92

* destroyed

INDEX

	Page
Access to WATSTORE Data	21,22
Acre-foot, definition of	22
Adenosine triphosphate, definition of	22
Algae, definition of	22
Algal growth potential, definition of	22
Almo, Clarks River at	216,244
Annual seven-day minimum	22
Apex, Pond River near	172,241
Aquifer, definition of	22
Artesian, definition of	22
Ash mass, definition of	23
Bacon Creek near Priceville	155,240
Bacteria, definition of	22
Barkley-Kentucky Canal near Grand Rivers	214
Barren River, at Bowling Green	165,241
near Finney	161-163,240
Bayou Creek Basin,	
gaging-station records in	220-222
miscellaneous temperature and field determinations	245
Bayou Creek, near Grahamville	221,245
near Heath	220,245
Little, near Grahamville	222,245
Bayou de Chien Basin,	
gaging-station records in	226
miscellaneous temperatures and field determinations	245
Bayou de Chien near Clinton	226,245
Beargrass Creek Basin,	
gaging-station records in	94-100
miscellaneous temperatures and field determinations	237
Beargrass Creek, Middle Fork, at Beals Branch Road at Louisville	99
Middle Fork, at Louisville	97,98
near Middletown	237
South Fork, at Louisville	94,95
South Fork, at Winter Avenue at Louisville	96
Beaver Creek (tributary to Green River) at Hwy 31 E near Glasgow	160,240
Beaver Creek near Monticello	212,244
Beaverdam Creek (tributary to Highland Creek) near Corydon	176,242
Beaverdam Creek (tributary to Green River), at Rhoda	159,240
Bed load, definition of	28
Bed load discharge, definition of	28
Bed material, definition of	23
Beech Fork (tributary to Salt River) at Maud	119,238
Big Creek, Red Bird River near	66,234
Big Sandy River Basin,	
crest-stage partial-record stations in	227,228
gaging-station records in	39-41
miscellaneous temperatures and field determinations	231
special study and miscellaneous sites	229
Billows, Rockcastle River at	208,243
Biochemical Oxygen, definition of	23
Biomass, definition of	23
Blandville, Mayfield Creek near	225
Blue-green Algae, definition of	27
Booneville, South Fork Kentucky River at	68,234
Boston, Rolling Fork near	120,238
Bottom material, definition of	23
Bowling Green, Barren River at	165,241
Brashears Creek at Taylorsville	106,237
Brewers, West Fork Clarks River near	217,244
Butler, Licking River at	58,59
Cadiz, Little River near	213,244
Calhoun, Cypress Creek near	174,242
Green River at lock 2, at	171,241
Calloway County, ground-water levels	249
Campbellsville, Green River near	144-146,239
Little Pitman Creek near	148,239
Cannelton Dam, Ohio River at	143
Carlisle, Hinkston Creek near	55,233
Carr Fork near Sassafras	62,233
Catawba, Licking River at	57,233
Cedar Creek (tributary to Floyds Fork) at Fairmount Road near Mount Washington	114
at Thixton Road near Louisville	115
Cells/volume, definition of	23
Chemical Oxygen Demand, definition of	23
Chenoweth Run, at Gelhaus Lane near Fern Creek	112
Chlorophyll, definition of	23
Christian County, ground-water levels	249
Clarks River, at Almo	216,244
West Fork, near Brewers	217,244
Clarks Run near Danville	75,76,235
Clay City, Red River at	72,235
Clear Creek near Richland	178
Clermont, Long Lick near	118,238
Clinton, Bayou de Chien near	226,245
Color Unit, definition of	24
Columbia, Russell Creek near	147,239
Contents, definition of	24
Control, definition of	24
Control Structure, definition of	24
Cooperation	1,2
Corbin, Laurel River at Municipal Dam near.	228
Lynn Camp Creek at	207,243
Corydon, Beaverdam Creek near	176,242
Crab Orchard, Dix River near	230
Cressmont, Sturgeon Creek at	70,234
Cubic feet per second, definition of	24
Cubic feet per second per square mile, definition of	24
Cumberland Falls, Cumberland River at	206,243
Cumberland, Poor Fork at	228
at Cumberland Falls	206,243
at Williamsburg	205,243
near Grand Rivers	215
near Harlan	202,242
at Pine Street Bridge at Pineville	204,243
South Fork, near Stearns	209-211
Cumberland River Basin,	
crest-stage partial-record stations in	228
gaging-station records in	180-215
miscellaneous temperatures and field determinations	242-244
Cutshin Creek at Wooton	64,234
Cynthiana, South Fork Licking River at	56,233
Cypress Creek near Calhoun	174,242
Daisy, Leatherwood Creek at	61,233
Danville, Clarks River near	75,76,235
Danville, Dix River near	74,235
Davies County, ground-water levels	249
Deatsville, Harts Run at mouth near	238
Wilson Creek at Harrison Fork Road near	121
Wilson Creek near	122-131,239
Definition of terms	22-31
Diatoms, definition of	27
Discharge, definition of	24
7-day 10-year low flow	28
Discontinued records, gaging station	292-307
surface-water	292-299
water-quality	300-307
Discontinued records, ground water	308
Dissolved, definition of	24
Dissolved-solids concentration, definition of	24
Dix River near Crab Orchard	230
near Danville	74,230,235
Downstream order system	8,9
Drainage area, definition of	24
Drainage basin, definition of	24
Dry mass, definition of	23
Eagle Creek, at Glencoe	88,237
Elkhorn City, Russell Fork at	227
Elkhorn Creek, near Frankfort	84,236
North Elkhorn, at Georgetown	80,81,236
North Elkhorn, near Georgetown	79,236
South Elkhorn, near Midway	83,236
Elliott County, ground-water levels	250
Evansville, IN, Ohio River at	175
Explanation of ground-water level records	19,20
of precipitation quality records	20,21
of stage and water discharge records	9-15
of surface water-quality records	15-18
Explanation of the records	8-21
Falls of Rough, Rough River at	168,241
Farmers, Licking River at	49-51,232
Fayette County, ground-water levels	250
Fecal-coliform bacteria, definition of	23
Fecal-streptococcal bacteria, definition of	23

	Page
Fern Creek, at Old Bardstown Road at Louisville	136
Chenoweth Run at Gelhaus Lane near	112
Finney, Barren River near	161-163,240
Fisherville, Floyds Fork at	109,110
Long Run near	108
Floyds Fork, at Fisherville	109,110
near Mount Washington	113
near Pee Wee Valley	107,238
Frankfort, Elkhorn Creek near	84,236
Kentucky River at lock 4, at	78,236
Franklin County, ground-water levels	250
Franklin, West Fork Drakes Creek near	164,240
Gage height, definition of	24
Gaging station, definition of	24
Gaging-station records,	
crest-stage partial-records stations	227,228
discontinued	292-299
special study and miscellaneous sites	229,230
surface-water stations	39-226
Georgetown, North Elkhorn Creek at	80,81,236
North Elkhorn Creek near	79,236
Royal Springs at	82,236
Glasgow, Beaver Creek (tributary to Green River) at Hwy 31 E near	160,240
Glencoe, Eagle Creek at	88,237
Glensboro, Salt River at	105,237
Glenview Acres, Goose Creek at U.S. Hwy 42 near	92
Goose Creek Basin, (tributary to the Ohio River) gaging-station records in.	91-93
Goose Creek,	
(tributary to Ohio River) at Old Westport Road near St. Matthews	91
near Glenview Acres	92
Goose Creek (tributary to South Fork Kentucky River) at Manchester	67,234
Grahamville, Bayou Creek near	221,245
Little Bayou Creek near	222,245
Grand Chain, IL, Ohio River at lock and dam 53, near	223,224
Grand Rivers, Barkley-Kentucky Canal near	214
Cumberland River near	215
Grapevine Creek near Phyllis	229,231
Graves County, ground-water levels	251
Grayson County, ground-water levels	252
Grayson, Little Sandy River at	42,231
Green algae, definition of	27
Green River, at lock 2, at Calhoun	171,241
at Munfordville	149-153
at Paradise	167,241
near Campbellsville	144-146,239
Green River Basin,	
gaging-station records in	144-174
miscellaneous temperatures and field determinations	239-242
special study and miscellaneous sites	230
Greenup Dam, Ohio River at	43
Greenup, Tygarts Creek near	45,231
Ground-water levels by county	249-287
explanation of	19,20
Ground-water, summary of hydrologic conditions	2,6,7
Hardin County, ground-water levels	253-256
Hardness of water, definition of	24
Harlan, Cumberland River near	202,242
Harrods Creek Basin,	
gaging-station records in	89,90
miscellaneous temperatures and field determinations	237
Harrods Creek, near LaGrange	89,237
near Prospect	90
Harrods Creek, Little Goose Creek near	93
Hartford, Rough River at	169,170,241
Harts Run at Mouth near Deatsville	239
Haysi, VA, Russell Fork at	39
Hazel Green, Red River near	71,234
Heath, Bayou Creek near	220,245
Heidelberg, Kentucky River at lock 14, at	69
Henderson County, ground-water levels	257
Highbridge, Kentucky River at lock 7, at	235
Highland Creek Basin,	
gaging-station records in	176
miscellaneous temperatures and field determinations	242
Hinkston Creek, near Carlisle	55,233
Huntsville, Mud River near	166,230
Hyden, Middle Fork Kentucky River near	230,233
Hydrologic Bench-Mark Network	6
definition of	25
Hydrologic conditions, summary of	2-7
Hydrologic unit, definition of	25
Index	309-312
Instantaneous discharge, definition of	24
Introduction	1
Jackson, North Fork Kentucky River at	63,233
Jefferson County,	
ground-water level	257-285
Johns Creek, near Meta	229,231
near Van Lear	228
Kentucky River at lock 2, at Lockport	85-87
at lock 4, at Frankfort	78,236
at lock 6, near Salvisa	77,235
at lock 7, at Highbridge	235
at lock 10, near Winchester	73,235
at lock 14, at Heidelberg	69
Middle Fork, at Tallega	65,234
Middle Fork, near Hyden	230,233
North Fork, at Jackson	63,233
South Fork, at Booneville	68,234
Kentucky River Basin,	
gaging-station records in	61-88
miscellaneous temperatures and field determinations	233-237
special study and miscellaneous sites	230
Kinniconick at Tannery	46-48,232
Kinniconick Creek Basin,	
gaging-station records in	46-48
miscellaneous temperatures and field determinations	232
Kyrock, Nolin River at	156-158
LaGrange, Harrods Creek near	89,237
Lakes:	
Martins Fork Lake at Martins Fork Dam near Smith	180-194
Land-surface datum, definition of	25
Larue County, ground-water levels	285
Latitude-Longitude System	9
Laurel County, ground-water levels	286
Laurel River, at Municipal Dam, near Corbin	228
Leatherwood Creek at Daisy	61,233
Lebanon Junction, Rolling Fork near	132,133
Leon, Little Sandy River below Grayson Dam, near	228
Levels, ground-water	249-287
Levisa Fork, at Paintsville	41,231
at Pikeville	40,231
below Fishtrap Dam, near Millard	227
Lewisburg, Mud River near	230,241
Licking River, at Butler	58,59
at Catawba	57,233
at Farmers	49-51,232
at McKinneysburg	54,232
near Salyersville	229,232
North Fork, near Mount Olivet	53,232
South Fork, at Cynthiana	56,233
Licking River Basin,	
gaging-station records in	49-59
miscellaneous temperatures and field determinations	232,233
special study and miscellaneous sites	229
Lincoln County, ground-water levels	286
Little Goose Creek near Harrods Creek	93
Little Pitman Creek near Campbellsville	148,239
Little River near Cadiz	213,244
Little Sandy, River at Grayson	42,231
below Grayson Dam, near Leon	228
Little Sandy River Basin,	
crest-stage partial-record stations in	228
gaging-station records in	42
miscellaneous temperature and field determinations	231
Lockport, Kentucky River at lock 2, at	85-87
Logan County, ground-water levels	286
Long Lick near Clermont	118,238
Long Run near Fisherville	108
Louisville and Jefferson County Metropolitan Sewer District (MSD) Sampling Network	6

Page

Louisville, Cedar Creek at Thixton Road near..... 115
Fern Creek at Old Bardstown Road at..... 136
Middle Fork Beargrass Creek at..... 97,98
Beals Branch Road at..... 99
Mill Creek (tributary to Ohio River) at Orell Road near..... 104
Mill Creek Cutoff near..... 102,103
Muddy Fork at Mockingbird Valley Road at..... 100
Ohio River at..... 101
Pennsylvania Run at Mount Washington Road near..... 116
Pond Creek at Pendleton Road near..... 141
Pond Creek near..... 139,140,239
South Fork Beargrass Creek at..... 94,95
at Winter Avenue..... 96
Lsd, definition of..... 25
Lynn Camp Creek at Corbin..... 207,243

Madisonville, Pond River near..... 173,242
Manchester, Goose Creek at..... 67,234
Map:
location of gaging stations in Kentucky.. 36
location of observation wells in downtown area in Louisville..... 248
location of observation wells in Jefferson County..... 247
location of observation wells in Kentucky..... 246
location of surface-water quality stations in Jefferson County for the MSD Sampling Network..... 38
location of surface water-quality stations in Kentucky..... 37
Markland Dam, Ohio River at..... 60
Martins Fork,
Lake at Martins Fork Dam near Smith..... 180-194
near Smith..... 195-201,242
Massac Creek Basin,
gaging-station records in..... 218
miscellaneous temperature and field determinations..... 244
Massac Creek near Paducah..... 218,244
Maud, Beech Fork at..... 119,238
Mayfield Creek near Blandville..... 225
Mayfield Creek Basin,
gaging-station records in..... 225
McCracken County, ground-water levels..... 287
McKinneysburg, Licking River at..... 54,232
Mean concentration, sediment, definition of 28
Mean discharge, definition of..... 24
Measuring point, definition of..... 25
Meta, Johns Creek near..... 229,231
Metamorphic stage, definition of..... 25
Metcalfe County, ground-water levels..... 287
Methylene blue active substances, definition of..... 25
Metropolis, IL, Ohio River at..... 219,244
Micrograms per gram, definition of..... 25
Micrograms per liter, definition of..... 25
Middlesboro, Yellow Creek, near..... 203,243
Middletown, Pope Lick at Pope Lick Road near..... 111
Unnamed Tributary to Middle Fork Beargrass, near..... 237
Midway, South Elkhorn Creek near..... 83,236
Mill Creek Basin,
gaging-station records in..... 102-104
Mill Creek Cutoff near Louisville..... 102,103
Mill Creek (tributary to Ohio River) at Orell Road near Louisville..... 104
Millard, Levisa Fork below Fishtrap Dam, near..... 227
Milligrams of carbon per area or volume per unit time..... 27
Milligrams of oxygen per area or volume per unit time..... 27
Milligrams per liter, definition of..... 25
Monticello, Beaver Creek near..... 212,244
Morehead, North Fork Triplett Creek near... 52,232
Mount Olivet, North Fork Licking River..... 53,232
Mount Washington,
Cedar Creek at Fairmount Road, near..... 114
Floyds Fork near..... 113
Mud River, near Huntsville..... 166,230
near Lewisburg..... 230,241

Page

Muddy Fork at Mockingbird Valley Road at Louisville..... 100
Munfordville, Green River at..... 149-153

National Geodetic Vertical Datum of 1929, definition of..... 25
National stream-quality accounting network, (NASQAN), definition of..... 6,25
National Water-Quality Assessment Network (NAWQA)..... 6,8
definition of..... 25,26
National trends network, definition of..... 6,26
Nolin River, at Kyrock..... 156-158
at White Mills..... 154,240
Northern Ditch at Okolona..... 137
North Fork Triplett Creek near Morehead.... 52,232
Numbering system for wells and miscellaneous sites..... 10

Ohio River, at Cannelton Dam..... 143
at Evansville, IN..... 175
at Greenup Dam..... 43
at lock and dam 53, near Grand Chain, IL. 223,224
at Louisville..... 101
at Markland Dam..... 60
at Metropolis, IL..... 219,244
Ohio River Main Stem,
gaging-station records in..... 43,60
101,143,175
219,223,224
miscellaneous temperature and field determinations..... 244
Olive Hill, Tygarts Creek at..... 44,231
Olney, Tradewater River at..... 177,242
Okolona, Northern Ditch at..... 137
Slop Ditch near..... 135
Southern Ditch at Minors Lane near..... 134
Spring Ditch at Private Drive near..... 138
Order, downstream, of listing stations..... 8,9
Organic mass, definition of..... 23
Organism, definition of..... 26
count/area..... 26
count/volume..... 26
Otter Creek at Otter Creek Park near Rock Haven..... 142

Paducah, Massac Creek near..... 218,244
Paintsville, Levisa Fork at..... 41,231
Parameter code, definition of..... 26
Paradise, Green River at..... 167,241
Partial-record station, definition of..... 26
discharge at..... 227-230
Particle size classification, definition of 26
Particle size, definition of..... 26
Pee Wee Valley, Floyds Fork..... 107,238
Pennsylvania Run at Mount Washington Road near Louisville..... 116
Percent composition, definition of..... 26
Periphyton, definition of..... 26
Pesticides, definition of..... 27
Phyllis, Grapevine Creek near..... 229,231
Phytoplankton, definition of..... 27
Pikeville, Levisa Fork at..... 40,231
Pineville, Cumberland River at Pinestreet Bridge at..... 204,243
Plankton, definition of..... 27
Pond Creek (tributary to Salt River), at Pendleton Road near Louisville..... 141
near Louisville..... 139,140,239
Pond River, near Apex..... 172,241
near Madisonville..... 173,242
Poor Fork at Cumberland..... 228
Pope Lick at Pope Lick Road near Middletown..... 111
Precipitation quality, records of..... 288-291
Priceville, Bacon Creek near..... 155,240
Primary Productivity, definition of..... 27
Prospect, Harrods Creek near..... 90
Publications of techniques of water resources investigations..... 32-35

Quality of Water, Summary of Hydrologic Conditions..... 2

Radiochemical Program..... 8
definition of..... 27

	Page
Records of	
Data Table of daily mean values	12
Ground-Water Levels	18,20
Data Collection and Computation	19
Data Presentation	19,20
Precipitation Quality	20,21
On-site Measurements and Sample Collection	20
Data Presentation	21
Station Manuscript	11,12
Stage and Water Discharge	9-11
Accuracy of the Records	14,15
Data Collection and Computation	9,10
Data Presentation	11
Identifying Estimated Daily Discharge	14
Other Records Available	15
Statistics of Monthly Mean Data	12,13
Summary Statistics	13-15
Surface-Water Quality	15-18
Arrangements of Records	15
Change in National Trends Network procedures	18
Classification of Records	15
Data Presentation	17,18
Dissolved Trace-Element Concentrations	18
Laboratory Measurements	17
On-site Measurements and Sample Collection	16
Remarks Codes	18
Sediment	16,17
Water Temperature	16
Recoverable from bottom material, definition of	27
Red Bird River near Big Creek	66,234
Red River, at Clay City	72,235
near Hazel Green	71,234
Return period, definition of	28
Rhoda, Beaverdam Creek at	159,240
Richland, Clear Creek near	178
Rockcastle River, at Billows	208,243
Rock Haven, Otter Creek at Otter Creek Park near	142
Rolling Fork, near Boston	120,238
near Lebanon Junction	132,133
Rough River, at Falls of Rough	168,241
at Hartford	169,170,241
Rowan County, chemical quality of precipitation, records in	288-291
Royal Springs at Georgetown	82,236
Runoff in inches, definition of	28
Russell Creek, near Columbia	147,239
Russell Fork, at Elkhorn City	227
at Haysi, VA	39
Salt River, at Glensboro	105,237
at Shepherdsville	117,238
Salt River Basin, gaging-station records in	105-142
miscellaneous temperature and field determinations	237-239
Salvisa, Kentucky River at lock 6, near	77,235
Salyersville, Licking River near	229,232
Sassafras, Carr Fork near	62,233
Sediment, definition of	28
Shepherdsville, Salt River at	117,238
Slop Ditch near Okolona	135
Smith, Martins Fork Lake at Martins Fork Dam near	180-194
Martins Fork near	195-201,242
Sodium-adsorption-ratio, definition of	28
Solute, definition of	28
South Elkhorn Creek near Midway	83
Southern Ditch at Minors Lane near Okolona	134
Special networks and programs	6,8
Specific conductance, definition of	28,29
Spring Ditch at Private Drive near Okolona	138
St. Matthews, Goose Creek near	91
Stage and water-discharge records, explanation of	9-11
Stage-discharge relation, definition of	29
Station Identification Numbers	8
Stearns, South Fork Cumberland River near	209-211
Streamflow, definition of	29
Sturgeon Creek, at Cressmont	70,234
Substrate, definition of	29
artificial, definition of	29
natural, definition of	29
Sullivan, Tradewater River near	179
Surface area of a lake, definition of	29
Surface-water, summary of hydrologic conditions	2
Surficial bed material, definition of	29
Suspended, definition of	29
recoverable, definition of	29
Total, definition of	29
Suspended-sediment, definition of	28
concentration, definition of	28
discharge, definition of	28
load, definition of	28
mean concentration, definition of	28
System, Downstream Order	8,9
Tallega, Middle Fork Kentucky River at	65,234
Tannery, Kinniconick Creek at	46-48,232
Taxonomy, definition of	30
Taylorsville, Brashears Creek at	106,237
Temperature, measurements and field determinations, miscellaneous	231-245
Tennessee River Basin, gaging-station records in	216,217
Thermograph, definition of	30
Time-weighted average, definition of	30
Tons per acre-foot, definition of	30
Tons per day, definition of	30
Total, definition of	30
coliform bacteria, definition of	23
organism count, definition of	26
recoverable, definition of	30
Total discharge, definition of	30
Total sediment discharge, definition of	28
Total sediment load, definition of	28
Tradewater River, at Olney	177,242
near Sullivan	179
Tradewater River Basin, gaging-station records in	177-179
miscellaneous temperature and field determinations	242
Tritium Network	8
definition of	30
Tygarts Creek, at Olive Hill	44,231
near Greenup	45,231
Tygarts Creek Basin, gaging-station records in	44,45
miscellaneous temperature and field determinations	231
Van Lear, Johns Creek near	228
Warren County, ground-water levels	287
Water-quality records, discontinued	300-307
explanation of	15-18
Water-resources investigations, Publications on techniques of	32-35
Water year, definition of	31
WATSTORE data, access to	21,22
WDR, definition of	31
Weighted average, definition of	31
West Fork Drakes Creek near Franklin	164,240
Wet mass, definition of	23
White Mills, Nolin River at	154,240
Williamsburg, Cumberland River at	205,243
Wilson Creek, at Harrison Fork Road	121
near Deatsville	122-131,239
Winchester, Kentucky River at lock 10, near	73,235
Wooton, Cutshin Creek at	64,234
WSP, definition of	31
Yellow Creek near Middlesboro	203,243
Zooplankton, definition of	27

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

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